MITSUBISHI ELECTRIC

2020

Product Catalogue

Market leading solutions to **cool**, **heat**,
ventilate & **control** the nation's buildings

Welcome to **Mitsubishi Electric**

Mitsubishi Electric is a market leader in providing solutions to cool, heat, ventilate and control our buildings.

As a major manufacturer of some of these pivotal technologies, we hold the UK's energy challenges close to our heart. We want to help the nation achieve its climate goals; we want to help individuals and businesses reduce the energy consumption of their buildings, whilst also helping to reduce their annual running costs.

At Mitsubishi Electric, we are constantly evolving and today our areas of expertise go way beyond the advanced air conditioning systems that formed the foundation of our business. Here in the UK, we provide advanced solutions that cool, heat, ventilate and control buildings in the most energy efficient and cost-effective ways possible. Through technical expertise, experience and an innovative product range, we enable buildings everywhere to significantly improve energy efficiency, reduce running costs and adhere to increasingly tough legislation. **We also provide a variety of additional services and benefits to our customers which include:**

- **Product training and technical support**
- **CPD guides and presentations**
- **Apps and tools**
- **Contractor Partner Programme**
- **Design and consultancy services**
- **Finance initiatives**

Working towards a better use of energy in buildings

Mitsubishi Electric's global framework for realising a sustainable planet - **Environmental Vision 2021** - is translated in the UK into our **Green Gateway philosophy**, which is central to the way we do business. With this initiative, we are seeking to use our position as a manufacturer of key technologies to increase awareness and improve energy use in the built environment.

By constantly challenging everyone involved to combat the issues we all face and encouraging constructive dialogue throughout the industry, we aim to help everyone address their energy use and to work towards a more sustainable future. Working within the construction industry in this way we are continually developing energy efficient cooling, heating and ventilation solutions - all managed by the most advanced control systems available.

ENVIRONMENTAL VISION 2021 TECHNOLOGY & ACTION

Green Gateway



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MITSUBISHI ELECTRIC

Air Conditioning

Designed to reduce energy consumption
and running costs in the built environment





The need for **Air Conditioning**

Today's commercial buildings are increasingly air tight and filled with heat generating office equipment and lighting, which presents a problem for anyone trying to maintain a stable and comfortable internal environment. With buildings accounting for around half of all UK greenhouse emissions, legislation is demanding increased energy efficiency and higher standards of air quality.

To reduce the impact of the built environment, the challenge is to find cooling, heating, ventilation and control solutions that match energy efficiency with complete flexibility of design and control.

Our innovative and pioneering air conditioning systems offer more than double the efficiency levels of 10-15 year old systems and can also be far more efficient than traditional methods of cooling and heating buildings, resulting in reduced running costs and lower carbon emissions. Today's systems can simultaneously heat and cool different spaces to balance energy use across a building and sanitary hot water can even be supplied from the same system.



The benefits of our Air Conditioning Systems

As a market leader, we pride ourselves in providing high performance and competitive systems with low running costs.

By utilising heat pump technology, our air conditioning units not only provide cooling, but also heating and often sanitary hot water. Heat pump technology requires only a small amount of electricity to harvest, upgrade and move heat from one location to another, and providing heating and hot water as part of an integrated air conditioning system is far more efficient than traditional heating methods such as gas.

The 2014 F-Gas Regulations will bring about significant changes to the air conditioning industry however, affecting end users, facilities managers, specifiers and installers alike. This landmark ruling has one key objective: to reduce F-Gas emissions by 79% between 2015 and 2030, by cutting the availability of hydrofluorocarbons (HFCs) with a high Global Warming Potential (GWP).

It's time therefore to look at alternative, lower GWP refrigerants such as R32.



Outstanding Air Conditioning Benefits:

- Full range of air conditioning systems (now including VRF and Hybrid VRF) utilising **lower GWP R32 refrigerant**
- Efficient and **extensive product range** ideal for a variety of buildings, from small retail outlets, up to vast multi-storey office complexes
- Air conditioning units which can upgrade **'free' energy** from a range of natural sources including air, ground and water
- Our **pioneering technology** has led the way over the last decade with advances in energy efficiency through inverter technology, refrigerant and compressor design and control solutions
- **Reliable technical support and training** at every step of the way

Ideal products that make a world of difference

There are two main types of air conditioning systems; **Split-Systems** which include the M Series and Mr Slim ranges, and **Variable Refrigerant Flow (VRF) Systems** which incorporate the City Multi range.

Split-Systems

Mitsubishi Electric Split-Systems were the first products in our range to begin the switch to the lower GWP refrigerant, R32. Consisting of our M Series and Mr Slim ranges of air conditioning, these systems are an ideal option for all medium sized premises such as offices, retail establishments or leisure facilities that have a heating or cooling requirement.

Currently our newest state-of-the-art products utilise R32 refrigerant - these are made up of our M Series wall and floor mounted ranges, which also contain our first ever red unit, our MXZ Multi-Split range of products, and our Mr Slim Power Inverter, Standard Inverter and Inverter systems.

Split-Systems are also able to operate with up to eleven indoor units connected to a single outdoor unit, so with a full range of indoor units available in ceiling cassettes, ceiling concealed ducted, wall mounted, ceiling suspended or floor mounted types, the application options are considerable.



MR SLIM
Power Inverter,
Standard Inverter
and **Inverter**
models are now
available using

R32
REFRIGERANT



Energy Efficient Air Conditioning Systems

Ideal products that make a world of difference

VRF & Hybrid VRF Systems

First developed 30 years ago, City Multi is the market leader in VRF (Variable Refrigerant Flow) technology and now utilises R32 refrigerant. Specifically designed to deliver comfort and control for today's building requirements, it addresses all the key market issues.

VRF is a multi and direct expansion type air conditioning system where one outdoor unit is connected with multiple indoor units, intelligently modulating the flow of refrigerant depending upon the capacity requirements of each zone within a building. Its ultimate purpose is to regulate the internal air temperature and comfort levels in the most effective and efficient manner possible.

The Hybrid VRF (HVRF) system delivers optimum comfort and efficiency, using an innovative combination of unique 2-pipe VRF technology and water to provide simultaneous heating and cooling with heat recovery.

Providing a complete modern solution for a variety of applications, Hybrid VRF is quick, easy & flexible to design and install using the same control and network as VRF systems. With water at the indoor units, Hybrid VRF provides comfortable and stable air temperature control with no refrigerant in occupied spaces, meaning simple compliance to BS EN378 and removing the need for leak detection.

100% WATER IN OCCUPIED SPACES







It’s time to look at alternatives, like R32

The 2014 F-Gas Regulations have one key objective: to reduce F-Gas emissions by 79% between 2015 and 2030, by cutting the availability of hydrofluorocarbons (HFCs) with a high Global Warming Potential (GWP).

Already making up 50% of the existing R410A refrigerant found in many current air conditioning systems, R32 has a GWP of 675 (one third that of R410A), is highly energy efficient and is easy to recycle. Plus, the volumetric capacity of R32 is around 20% higher than that of R410A, which means system refrigerant volumes are lower.

Benefits of R32

- Lower GWP of 675
- High efficiency refrigerant
- F-Gas phase down compliant
- Less refrigerant volume requirement compared to R410A
- Affordable & readily available
- A single component refrigerant
- Easy to handle, reuse and recycle

TIME FOR R32



Lower GWP R32 refrigerant is now being utilised in our newest, state-of-the-art products:

The M Series R32 Range

The entire range of M Series units are now available utilising R32 refrigerant, from the designer MSZ-LN units to the cost-effective MSZ-HR range.

The Mr Slim R32 Range

The Mr Slim range blends a host of outstanding features with a premium quality, sophisticated design. Power Inverter, Standard Inverter and Inverter systems utilising R32 refrigerant are now available up to 22kW capacity.

The Multi-Split R32 Range

The MXZ Multi-Split range allows up to six indoor units to be connected to a single outdoor unit. Indoor units can be wall mounted, ceiling cassette, ceiling concealed ducted, floor mounted or ceiling suspended.

The City Multi VRF R32 Range

The new VRF range is available in both heat recovery and heat pump variants and offers customers the ability to use one single lower GWP refrigerant across a complete building or an entire network.

The City Multi Hybrid VRF R32 Range

The Hybrid VRF (HVRF) range is a two pipe heat recovery VRF with water between the Hybrid Branch Controller (HBC) and indoor units. You can install and design it as VRF, whilst enjoying the features of a chiller system.

Contents

M Series 1.2



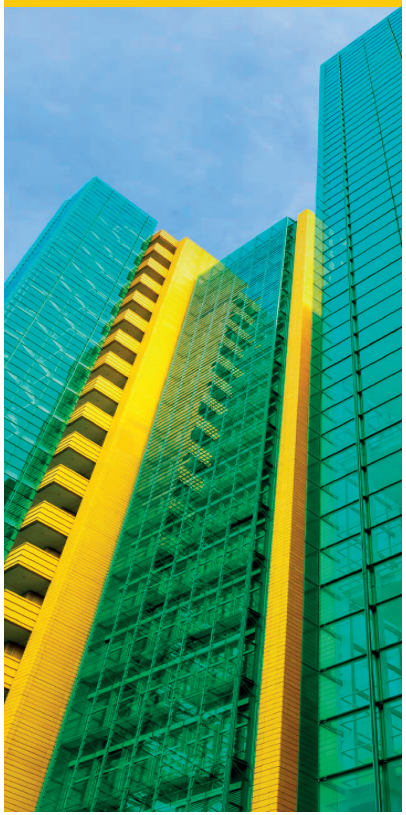
Mr Slim 1.3



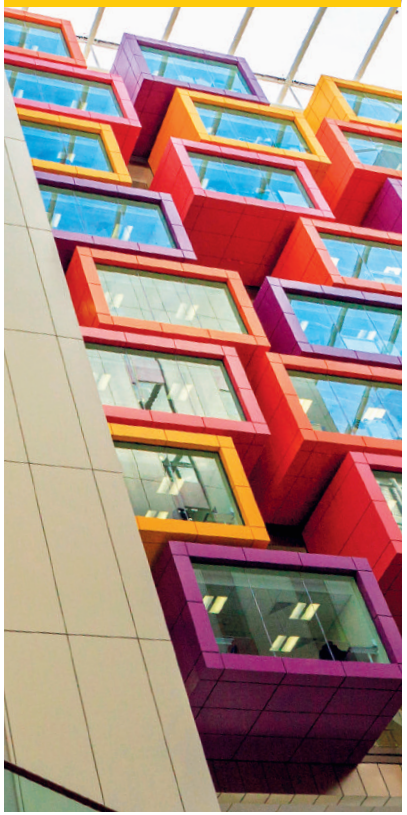
Multi-Splits 1.4



City Multi VRF 1.5



City Multi Hybrid VRF 1.6



MITSUBISHI ELECTRIC

M Series

Room Air Conditioning





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M series | Room Air Conditioning

The Adaptable **M Series Range**

R32

Designed to cool or heat small to medium sized spaces, such as retail units and small offices, the M Series splits range provides a versatile, yet affordable air conditioning solution.

Quick to install, the range includes some of the quietest units on the market. Available in a variety of options, the M Series range fits in wherever it's needed, with a choice of wall or floor mounted indoor units.



Wall Mounted Systems

- Top of the range designer Inverter series, available in red, black or white
- Stylish Zen Inverter series, available in black, silver or white
- Mid-range Inverter series designed to suit popular demand
- Cost effective Classic Inverter series



Floor Mounted Systems

- Extremely versatile
- Designed for wall installation at floor level
- Compact design makes installation easy
- 3 models available from 2.5 - 5.0kW

Key Features

- The entire M Series range is available using lower GWP R32 refrigerant
- Wi-Fi enabled, allowing control and monitoring via the MELCloud app (now compatible with Alexa)
- Stylish indoor units, available in a variety of colours





Ecodesign and Seasonal Efficiency

With buildings accounting for around half of all UK greenhouse emissions, legislation is demanding increased energy efficiency in this sector.

The Ecodesign Directive for Energy Related Products (ErP) is focusing on this area in a bid to reduce overall energy consumption, and to accelerate market transformation to more energy efficient products.

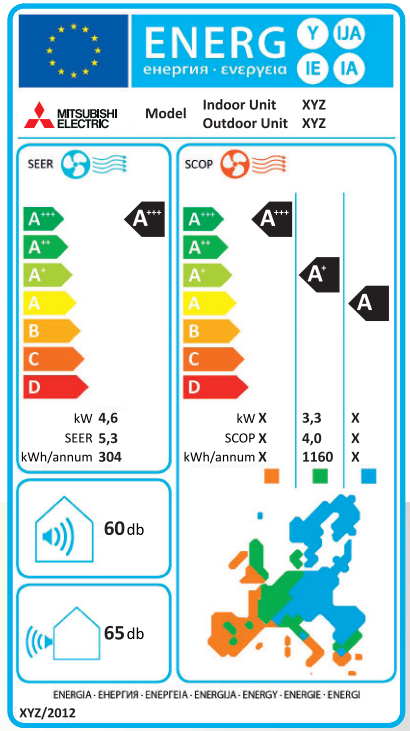
An air conditioner will vary performance over changing seasons, which means calculating seasonal performance is important to ascertain the true performance of an air conditioning system. The Ecodesign Directive reflects this by setting minimum efficiency requirement and a new method of measuring performance that has been introduced across Europe.

The European Standard BS EN14825 sets the seasonal performance calculation for an air conditioning system under 12kW, of which the energy efficiency class for each product specification is shown.

For more information visit the website **erp.mitsubishielectric.eu/erp**

Example:

SCOP / SEER (BS EN14825)	**4.0 / 5.3**
ErP ENERGY EFFICIENCY CLASS Heating/Cooling	**A+ / A+++**





The Adaptable M Series Range

Operational Range

Mode	MUZ-HR / SUZ-M*1	MUZ-LN/EF/AP
Cooling	-10°C to +46°C	-10°C to +46°C
Heating	-10°C to +24°C	-15°C to +24°C

*1 SUZ-M50VAR2 = -15°C to +46°C in cooling.

Setpoint Range

Mode	Minimum	Maximum
Cooling	19°C	30°C
Heating	17°C	28°C
Auto	19°C	28°C



Nominal Conditions: Cooling; indoor 27°C DB, 19°C WB; outdoor 35°C DB, 24°C WB.
Nominal Conditions: Heating; indoor 20°C DB; outdoor 7°C DB, 6°C WB.
UK Conditions: Cooling; indoor 21°C DB, 15°C WB; outdoor 27°C DB.
UK Conditions: Heating; indoor 21°C DB; outdoor 0°C DB, -1°C WB.





Indoor Model	Range		kW	1.5*1	1.8*1	2.0	2.5	3.5	4.2	5.0	6.1	7.1
Wall Mounted	MSZ-LN*2 R32				●		●	●		●	●	
	MSZ-EF*3 R32						●	●		●		
	MSZ-AP R32			●		●	●	●	●	●	●	●
	MSZ-HR R32						●	●		●	●	●
	MSY-TP R32							●		●		
Floor Mounted	MFZ-KT R32						●	●		●		

*1 Multi-split only *2 Also available in pearl white, onyx black and natural white *3 Also available in silver and white

MSZ-LN R32
Wall Mounted System

Inverter Heat Pump


Ruby Red (R)


Onyx Black (B)


Pearl White (V)


Natural White (W)







The MSZ-LN range is a wall mounted system that blends energy efficiency with a sophisticated streamlined design. Finished with a choice of deep, rich colours and a premium quality feel, this range features the latest product innovations, all designed to enhance the user experience.

Key Features

- 3D i-see sensor provides customised comfort by automatically monitoring room occupancy, position and body temperatures
- Plasma Quad Plus filter uses powerful plasma technology to filter out even microscopic particles
- Dual-Barrier Coating to the heat exchanger, fan and air duct prevents dust and grease accumulation
- Built-in Wi-Fi interface enabling control and monitoring via the MELCloud app - now compatible with Alexa
- New backlit controllers

GOOD DESIGN AWARD

R32

MSZ-LN - INDOOR UNITS		MSZ-LN18VG2 R/B/V/W	MSZ-LN25VG2 R/B/V/W	MSZ-LN35VG2 R/B/V/W	MSZ-LN50VG2 R/B/V/W	MSZ-LN60VG2 R/B/V/W
CAPACITY (KW)	Heating (nominal)	2.0 (0.9 - 4.0)	3.2 (0.8 - 5.4)	4.0 (1.0 - 6.3)	6.0 (1.0 - 8.2)	6.8 (1.8 - 9.3)
	Cooling (nominal)	1.8 (0.9 - 3.0)	2.5 (1.0 - 3.5)	3.5 (0.8 - 4.0)	5.0 (1.0 - 6.0)	6.1 (1.4 - 6.9)
	Heating (UK)	-	2.64 (0.66 - 4.45)	3.3 (0.83 - 5.2)	4.94 (0.82 - 6.75)	5.6 (1.48 - 7.66)
	Cooling (UK)	-	2.48 (0.99 - 3.47)	3.47 (0.79 - 3.96)	4.95 (0.99 - 5.94)	6.05 (1.38 - 6.84)
SHF (nominal)		-	0.97	0.90	0.77	0.75
COP / EER (nominal)		-	5.52 / 5.15	5.00 / 4.27	4.05 / 3.62	3.76 / 3.41
SCOP / SEER (BS EN14825)		-	5.2 / 10.5	5.1 / 9.5	4.6 / 8.5	4.6 / 7.5
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	-	A+++ / A+++	A+++ / A+++	A++ / A+++	A++ / A++
AIRFLOW (l/s)	Heating (SLo-Lo-Mi-Hi-SHi)	67-95-118-142-240	67-95-118-142-240	71-97-118-142-228	90-107-142-178-262	110-158-192-227-262
	Cooling (SLo-Lo-Mi-Hi-SHi)	71-97-118-147-198	71-97-118-147-198	71-97-118-147-213	95-127-148-177-232	118-147-177-212-262
PIPE SIZE MM (in)	Gas	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")
	Liquid	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
SOUND PRESSURE LEVEL (dBA)	Heating (SLo-Lo-Mi-Hi-SHi)	19-24-29-36-45	19-24-29-36-45	19-24-29-36-45	25-29-34-39-47	29-37-41-45-49
	Cooling (SLo-Lo-Mi-Hi-SHi)	19-23-29-36-42	19-23-29-36-42	19-24-29-36-43	27-31-35-39-46	29-37-41-45-49
SOUND POWER LEVEL (dBA)		58	58	58	60	65
DIMENSIONS (mm)	Width x Depth x Height	890 x 233 x 307	890 x 233 x 307	890 x 233 x 307	890 x 233 x 307	890 x 233 x 307
WEIGHT (kg)		15.5	15.5	15.5	15.5	15.5
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6
INTERCONNECTING CABLE No. CORES		4	4	4	4	4

Notes: MSZ-LN18VG only available with R32 MXZ Multi-Split outdoor units. Ruby Red (R), Onyx Black (B), Pearl White (V), Natural White (W).

MUZ-LN - OUTDOOR UNITS		N/A MULTI-SPLIT ONLY	MUZ-LN25VG2	MUZ-LN35VG2	MUZ-LN50VG2	MUZ-LN60VG2
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	-	49 / 46	50 / 49	54 / 51	55 / 55
SOUND POWER LEVEL (dBA)	Cooling	-	60	61	64	65
WEIGHT (kg)		-	35	35	40	55
DIMENSIONS (mm)	Width x Depth x Height	-	800 x 285 x 550	800 x 285 x 550	800 x 285 x 714	840 x 330 x 880
ELECTRICAL SUPPLY		-	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		-	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	-	0.580 / 0.485	0.800 / 0.820	1.480 / 1.380	1.810 / 1.790
	Heating/Cooling (UK)	-	0.523 / 0.406	0.722 / 0.686	1.335 / 1.151	1.632 / 1.494
STARTING CURRENT (A)		-	3.0	4.0	6.8	7.9
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	-	3.0 / 2.5 [7.1]	4.0 / 3.9 [9.9]	6.8 / 6.3 [13.9]	7.9 / 7.9 [15.2]
FUSE RATING (BS88) – HRC (A)		-	10	10	16	16
MAINS CABLE No. CORES		-	3	3	3	3
MAX PIPE LENGTH (m)		-	20	20	30	30
MAX HEIGHT DIFFERENCE (m)		-	12	12	12	15
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675) - 7m		-	1.0 / 0.68	1.0 / 0.68	1.25 / 0.85	1.45 / 0.98
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675)		-	0.26 / 0.18	0.26 / 0.18	0.26 / 0.18	0.46 / 0.32

Accessories

Outdoor Units

MAC-889SG

Air outlet guide for MUZ-LN25/35VG2

MAC-882SG

Air outlet guide for MUZ-LN50VG2

MAC-886SG

Air outlet guide for MUZ-LN60VG2

System Control Units

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB = Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-334F

Interface for M-NET, MA remote controller
(PAR-40MAA / PAR-CT01MAA),
on/off input and run/fault output

MAC-397IF

Interface for MA remote controller
(PAR-40MAA / PAR-CT01MAA),
on/off input and run or fault output

MELCOBEMS MINI

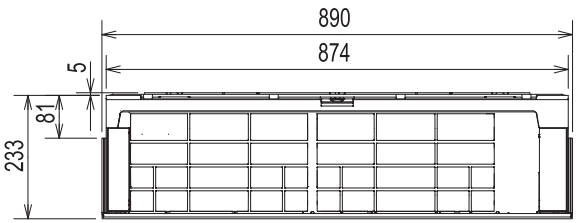
Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

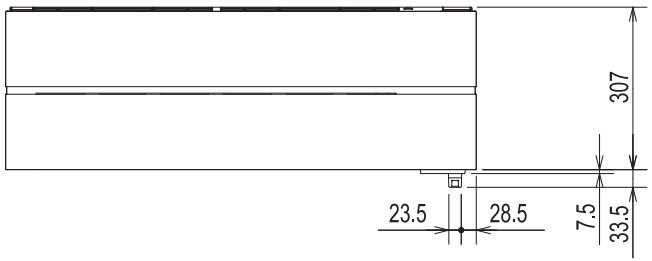
Retail control and input / output interface

Product Dimensions MSZ-LN25/35/50/60VG2 R/B/V/W

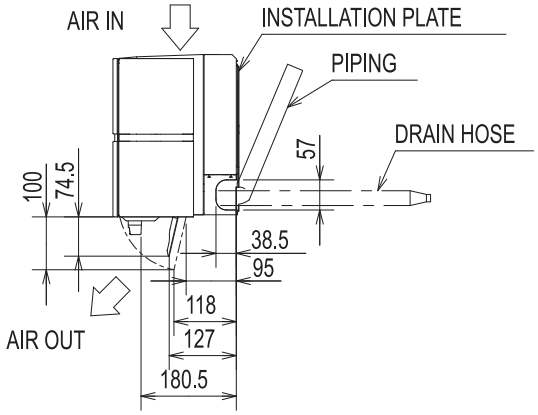
Upper View



Front View



Side View



MSZ-EF R32

Zen Wall Mounted System

Inverter Heat Pump



Black (B)



Silver (S)



White (W)





The Zen Series is a wall mounted system that blends energy efficiency with a sophisticated, streamlined design.

Combining an impressively low power consumption with a quiet, yet powerful performance, units have a distinctively styled front panel that not only looks appealing, but also helps to make cleaning of the unit easier.

Designed to complement modern interior décor and suitable for a wide range of applications, Zen units blend in naturally wherever they are installed and are available in three colours; black, silver and white. To aid control and energy saving, the universal controller has an inbuilt 7 day timeclock.

Key Features

- Stylish design in a range of three distinct colours
- Energy efficient operation with a powerful performance
- Built-in Wi-Fi interface enabling control and monitoring via the MELCloud app - now compatible with Alexa
- New backlit controllers

R32

MSZ-EF B/S/W - INDOOR UNITS		MSZ-EF25VGK B/S/W	MSZ-EF35VGK B/S/W	MSZ-EF50VGK B/S/W
CAPACITY (kW)	Heating (nominal)	3.2 (1.0-4.2)	4.0 (1.3-5.1)	5.8 (1.4-7.5)
	Cooling (nominal)	2.5 (0.9-3.4)	3.5 (1.1-4.0)	5.0 (1.4-5.4)
	Heating (UK)	2.65 (0.91-3.49)	3.32 (1.08-4.23)	4.82 (1.16-6.23)
	Cooling (UK)	2.48 (0.89-3.37)	3.47 (1.09-3.96)	4.96 (1.39-5.36)
SHF (nominal)		0.97	0.80	0.70
COP / EER (nominal)		4.57 / 4.63	4.21 / 3.85	3.72 / 3.25
SCOP / SEER (BS EN14825)		4.7 / 9.1	4.6 / 8.8	4.5 / 7.5
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A++ / A+++	A++ / A+++	A+ / A++
AIRFLOW (l/s)	Heating/Cooling - SLo-Lo-Mi-Hi-SHi	67-77-103-148-198 / 67-77-105-138-175	67-77-103-148-212 / 67-77-105-138-175	107-120-150-185-243 / 97-113-132-153-188
PIPE SIZE mm (in)	Gas	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
	Liquid	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling - SLo-Lo-Mi-Hi-SHi	21-24-29-37-45 / 19-23-29-36-42	21-24-30-38-46 / 21-24-30-36-42	30-33-37-43-49 / 30-33-36-40-43
SOUND POWER LEVEL (dBA)		60	60	60
DIMENSIONS (mm)	Width x Depth x Height	885 x 195 x 299	885 x 195 x 299	885 x 195 x 299
WEIGHT (kg)		11.5	11.5	11.5
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) – HRC (A)		6	6	6
INTERCONNECTING CABLE No. CORES		4	4	4

Notes: Black (B), Silver (S), White (W)

MUZ-EF - OUTDOOR UNITS		MUZ-EF25VG	MUZ-EF35VG	MUZ-EF50VG
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	48 / 47	50 / 49	52 / 52
SOUND POWER LEVEL (dBA)	Cooling	58	62	65
WEIGHT (kg)		31	34	40
DIMENSIONS (mm)	Width x Depth x Height	800 x 285 x 550	800 x 285 x 550	800 x 285 x 714
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	0.70 / 0.54	0.95 / 0.91	1.56 / 1.54
	Heating/Cooling (UK)	0.64 / 0.44	0.87 / 0.73	1.42 / 1.24
STARTING CURRENT (A)		3.6	4.4	7.1
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	3.6 / 3.0 [6.8]	4.4 / 4.2 [6.8]	7.1 / 6.9 [13.6]
FUSE RATING (BS88) – HRC (A)		10	10	16
MAINS CABLE No. CORES		3	3	3
MAX PIPE LENGTH (m)		20	20	30
MAX HEIGHT DIFFERENCE (m)		12	12	15
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675) - 7m		0.62 / 0.42	0.74 / 0.50	1.05 / 0.71
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675)		0.26 / 0.18	0.26 / 0.18	0.46 / 0.31

Accessories

Outdoor Units

MAC-889SG

Air outlet guides for MUZ-EF25/35VG

MAC-882SG

Air outlet guides for MUZ-EF50VG

System Control Units

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB = Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-334F

Interface for M-NET, MA remote controller
(PAR-40MAA / PAR-CT01MAA),
on/off input and run/fault output

MAC-397IF

Interface for MA remote controller
(PAR-40MAA / PAR-CT01MAA),
on/off input and run or fault output

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

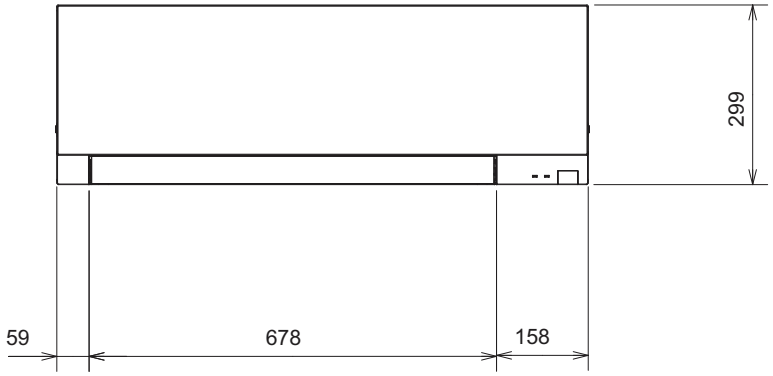
Retail control and input / output interface

Product Dimensions MSZ-EF25/35/50VGK B/S/W

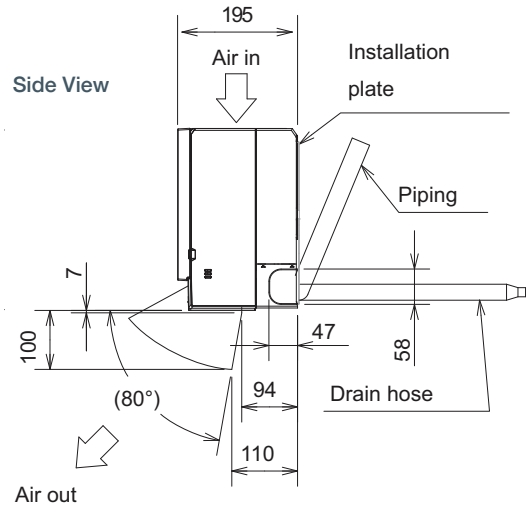
Upper View



Front View



Side View



MSZ-AP R32
Wall Mounted System

Inverter Heat Pump

The MSZ–AP range is a wall mounted system that blends energy efficiency with a modern white design. Boasting outstanding benefits, this mid-range unit includes state-of-the-art Wi-Fi control as standard.

Key Features

- Compact and stylish white design
- Quiet operation with industry leading low noise levels
- Built in Wi-Fi interface enabling control and monitoring via the MELCloud app - now compatible with Alexa (MSZ-AP-VGK models)
- Double vanes to distribute airflow evenly throughout the room
- Weekly timer provides greater control of scheduling
- New backlit controller
- Incorporates Replace Technology, allowing the upgrade of systems utilising existing piping















MSZ-AP - INDOOR UNITS		MSZ-AP15VG	MSZ-AP20VG	MSZ-AP25VG(K)	MSZ-AP35VG(K)	MSZ-AP42VG	MSZ-AP50VG(K)	MSZ-AP60VG(K)	MSZ-AP71VG(K)
CAPACITY (KW)	Heating (nominal)	1.7 (1.2-3.0)	2.5 (1.2-3.9)	3.2 (1.0-4.1)	4.0 (1.3-4.6)	5.4 (1.3-6.0)	5.8 (1.4-7.3)	6.8 (2.0-8.6)	8.1 (2.2-10.3)
	Cooling (nominal)	1.5 (0.9-2.7)	2.0 (0.9-3.0)	2.5 (0.9-3.4)	3.5 (1.1-3.8)	4.2 (0.9-4.5)	5.0 (1.4-5.4)	6.1 (1.4-7.3)	7.1 (2.0-8.7)
	Heating (UK)	-	2.05 (0.98-3.2)	2.62 (0.8-3.4)	3.28 (1.1-3.77)	4.4 (1.1-4.9)	4.76 (1.2-6.0)	5.58 (1.64-7.05)	6.64 (1.8-7.13)
	Cooling (UK)	-	1.86 (0.84-2.79)	2.33 (0.8-3.2)	3.26 (1.0-3.5)	3.9 (0.8-4.2)	4.65 (1.3-5.0)	5.67 (1.3-6.79)	6.6 (1.86-8.09)
SHF (nominal)		-	0.80	0.92	0.88	0.77	0.74	0.83	0.77
COP / EER (nominal)		-	4.17 / 4.34	4.10 / 4.17	3.88 / 3.54	3.62 / 3.23	3.63 / 3.23	4.07 / 3.84	3.82 / 3.53
SCOP / SEER (BS EN14825)		-	4.10 / 8.60	4.80 / 8.60	4.70 / 8.60	4.70 / 7.80	4.70 / 7.40	4.60 / 7.40	4.40 / 7.20
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	-	A+ / A+++	A++ / A+++	A++ / A+++	A++ / A++	A++ / A++	A++ / A++	A+ / A++
AIRFLOW (l/s)	Heating (SLo-Lo-Mid-Hi-SHi)	62-73-83-100-113	62-73-83-100-122	82-98-122-148-215	82-98-122-148-215	88-102-128-157-233	93-108-137-167-233	163-188-223-260-305	170-192-222-257-297
	Cooling (SLo-Lo-Mid-Hi-SHi)	58-65-77-92-107	58-65-77-92-115	82-98-118-145-190	82-98-118-145-190	90-108-128-155-190	100-120-140-167-210	163-188-223-260-305	162-192-222-257-297
PIPE SIZE MM (in)	Gas	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")	12.7 (1/2")
	Liquid	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
SOUND PRESSURE LEVEL (dBA)	Heating (SLo-Lo-Mid-Hi-SHi)	21-26-30-35-40	21-26-30-35-42	19-24-34-39-45	19-24-31-38-45	21-29-35-40-45	28-33-38-43-48	29-37-41-45-49	30-37-41-45-49
	Cooling (SLo-Lo-Mid-Hi-SHi)	21-26-30-35-40	21-26-30-35-42	19-24-30-36-42	19-24-30-36-42	21-29-34-38-42	28-33-36-40-44	29-37-41-45-49	30-37-41-45-49
SOUND POWER LEVEL (dBA)		59	60	57	57	57	58	65	65
DIMENSIONS (mm)	Width x Depth x Height	760 x 178 x 250	760 x 178 x 250	798 x 219 x 299	798 x 219 x 299	798 x 219 x 299	798 x 219 x 299	1100 x 257 x 325	1100 x 257 x 325
WEIGHT (kg)		8.2	8.2	10.5	10.5	10.5	10.5	16	17
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6	6
INTERCONNECTING CABLE No. CORES		4	4	4	4	4	4	4	4

Notes: MSZ-AP15VG only available with R32 MXZ Multi-Split outdoor units. MSZ-AP-VGK indoor units include built-in Wi-Fi adaptor.

MUZ-AP - OUTDOOR UNITS		MULTI-SPLIT ONLY	MUZ-AP20VG	MUZ-AP25VG	MUZ-AP35VG	MUZ-AP42VG	MUZ-AP50VG	MUZ-AP60VG	MUZ-AP71VG
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	-	47 / 46	48 / 47	50 / 49	51 / 50	52 / 52	55 / 55	55 / 55
SOUND POWER LEVEL (dBA)	Cooling	-	59	59	61	61	64	65	65
WEIGHT (kg)		-	31	31	31	35	40	40	55
DIMENSIONS (mm)	Width x Depth x Height	-	800 x 285 x 550	800 x 285 x 550	800 x 285 x 550	800 x 285 x 550	800 x 285 x 714	800 x 285 x 714	840 x 330 x 880
ELECTRICAL SUPPLY		-	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		-	Single	Single	Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	-	0.60 / 0.46	0.78 / 0.60	1.03 / 0.99	1.49 / 1.30	1.60 / 1.55	1.67 / 1.59	2.12 / 2.01
	Heating/Cooling (UK)	-	0.54 / 0.43	0.70 / 0.56	0.93 / 0.93	1.38 / 1.21	1.44 / 1.46	1.50 / 1.50	1.91 / 1.89
STARTING CURRENT (A)		-	3.2	3.6	4.7	6.6	7.0	7.4	9.3
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	-	3.2 / 2.6 [7.0]	3.6 / 2.9 [7.06]	4.7 / 4.5 [8.46]	6.6 / 5.8 [9.6]	7.0 / 6.9 [13.6]	7.4 / 7.1 [14.0]	9.3 / 8.8 [16.4]
FUSE RATING (BS88) – HRC (A)		-	10	10	10	10	16	16	20
MAINS CABLE No. CORES		-	3	3	3	3	3	3	3
MAX PIPE LENGTH (m)		-	20	20	20	20	20	30	30
MAX HEIGHT DIFFERENCE (m)		-	12	12	12	12	12	15	15
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675) - 7m		-	0.55 / 0.38	0.55 / 0.37	0.55 / 0.37	0.70 / 0.47	1.00 / 0.68	1.05 / 0.71	1.50 / 1.02
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675)		-	0.26 / 0.18	0.26 / 0.18	0.26 / 0.18	0.26 / 0.18	0.26 / 0.18	0.30 / 0.21	0.30 / 0.21

Accessories

Outdoor Units

MAC-889SG

Air outlet guide for MUZ-AP20/25/35/42VG

MAC-882SG

Air outlet guide for MUZ-AP50/60VG

MAC-886SG

Air outlet guide for MUZ-AP71VG

System Control Units

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB = Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-334IF

Interface for M-NET, MA remote controller
(PAR-40MAA / PAR-CT01MAA),
on/off input and run/fault output

MAC-397IF

Interface for MA remote controller
(PAR-40MAA / PAR-CT01MAA),
on/off input and run or fault output

MELCOBEMS MINI

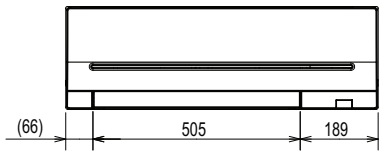
Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

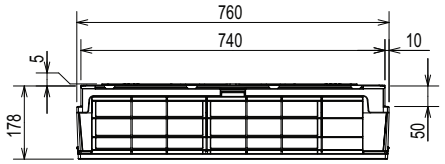
Retail control and input / output interface

Product Dimensions MSZ-AP15-20VG

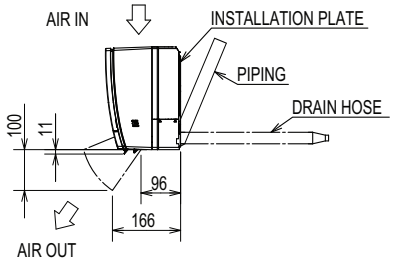
Front View



Upper View

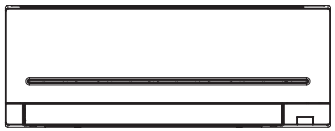


Side View

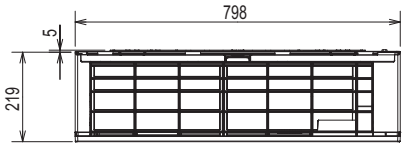


Product Dimensions MSZ-AP25-50VG(K)

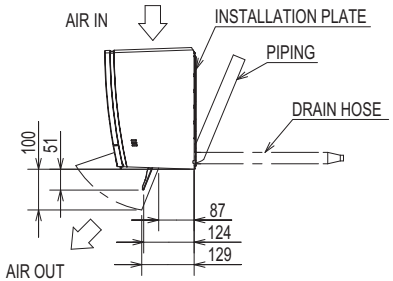
Front View



Upper View

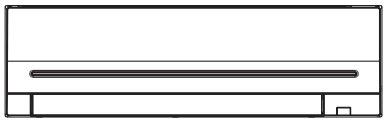


Side View

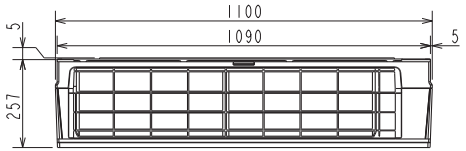


Product Dimensions MSZ-AP60-71VG(K)

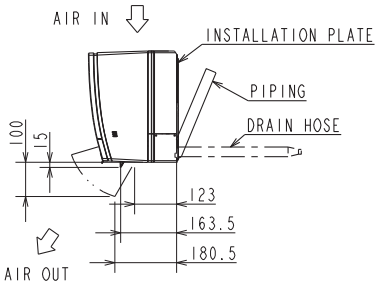
Front View



Upper View



Side View



MSZ-HR R32

Classic Wall Mounted System

Inverter Heat Pump

Mitsubishi Electric's range of classic, flat panel wall mounted models make use of inverter technology, whilst providing extremely good value for money, costing approximately 20% less than the MSZ-AP equivalent.

Key Features

- Compact and stylish white design, including new 6.0kW and 7.1kW models
- Optional Wi-Fi interface available with this range
- Extremely quiet sound levels, whilst also delivering economical air conditioning with improved SCOP / SEER figures

R32













MSZ-HR - INDOOR UNITS		MSZ-HR25VF	MSZ-HR35VF	MSZ-HR50VF	MSZ-HR60VF	MSZ-HR71VF
CAPACITY (kW)	Heating (nominal)	3.15 (0.7-3.5)	3.6 (0.9-3.7)	5.4 (1.4-6.5)	6.8 (1.5-9.0)	8.1 (1.5-9.0)
	Cooling (nominal)	2.5 (0.5-2.9)	3.4 (0.9-3.4)	5.0 (1.3-5.0)	6.1 (1.7-7.4)	7.1 (1.8-7.4)
	Heating (UK)	2.61 (0.6-2.9)	2.99 (0.75-3.1)	4.48 (1.16-5.39)	5.64 (1.25-7.47)	6.72 (1.25-7.47)
	Cooling (UK)	2.48 (0.5-2.8)	3.37 (0.89-3.4)	4.96 (1.29-4.96)	5.98 (1.67-7.25)	6.96 (1.76-7.25)
SHF (nominal)		0.78	0.78	0.73	0.79	0.74
COP / EER (nominal)		3.71 / 3.13	3.69 / 2.81	3.48 / 2.44	3.76 / 3.37	3.32 / 3.05
SCOP / SEER (BS EN14825)		4.30 / 6.20	4.30 / 6.20	4.30 / 6.50	4.50 / 7.20	4.30 / 7.00
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A++	A+ / A++	A+ / A++	A+ / A++	A+ / A++
AIRFLOW (l/s)	Heating/Cooling - Lo-Mi-Hi-SHi	55-90-123-168 / 60-90-120-162	55-90-123-175 / 60-93-130-195	102-138-187-242 / 107-153-187-218	178-218-278-327 / 173-210-257-327	178-218-278-327 / 173-210-257-327
PIPE SIZE mm (in)	Gas	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")	12.7 (1/2")
	Liquid	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling - Lo-Mi-Hi-SHi	21-30-37-43 / 21-30-37-43	21-30-37-44 / 22-31-38-46	27-34-41-47 / 28-36-40-45	33-38-44-50 / 33-38-44-50	33-38-44-50 / 33-38-44-50
SOUND POWER LEVEL (dBA)		57	60	60	65	65
DIMENSIONS (mm)	Width x Depth x Height	838 x 228 x 280	838 x 228 x 280	838 x 228 x 280	923 x 263 x 305	923 x 263 x 305
WEIGHT (kg)		8.5	8.5	9	12.5	12.5
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6
INTERCONNECTING CABLE No. CORES		4	4	4	4	4

MUZ-HR - OUTDOOR UNITS		MUZ-HR25VF	MUZ-HR35VF	MUZ-HR50VF	MUZ-HR60VF	MUZ-HR71VF
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	50 / 50	51 / 51	51 / 50	57 / 53	57 / 53
SOUND POWER LEVEL (dBA)	Cooling	63	64	64	65	66
WEIGHT (kg)		23	24	35	40	40
DIMENSIONS (mm)	Width x Depth x Height	699 x 249 x 538	699 x 249 x 538	800 x 285 x 550	800 x 285 x 714	800 x 285 x 714
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	0.85 / 0.80	0.98 / 1.21	1.55 / 2.05	1.81 / 1.81	2.44 / 2.33
	Heating/Cooling (UK)	0.77 / 0.63	0.89 / 0.96	1.40 / 1.62	1.63 / 1.52	2.20 / 1.96
STARTING CURRENT (A)		4.1	5.9	9.0	8.0	10.8
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	4.1 / 3.8 [4.8]	4.6 / 5.9 [6.4]	6.9 / 9.0 [9.6]	8.0 / 8.0 [14.1]	11.8 / 10.3 [14.1]
FUSE RATING (BS88) - HRC (A)		10	10	16	16	16
MAINS CABLE No. CORES		3	3	3	3	3
MAX PIPE LENGTH (m)		20	20	20	20	20
MAX HEIGHT DIFFERENCE (m)		12	12	12	12	12
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675)		0.40 / 0.27	0.45 / 0.30	0.80 / 0.54	1.05 / 0.71	1.05 / 0.71
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675)		0.26 / 0.18	0.26 / 0.18	0.26 / 0.18	0.46 / 0.32	0.46 / 0.32

Accessories

Outdoor Units

MAC-883SG

Air outlet guide for MUZ-HR25/35VF

MAC-889SG

Air outlet guide for MUZ-HR50VF

MAC-882SG

Air outlet guide for MUZ-HR60/71VF

System Control Units

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB = Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-334IF

Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output

MAC-397IF

Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

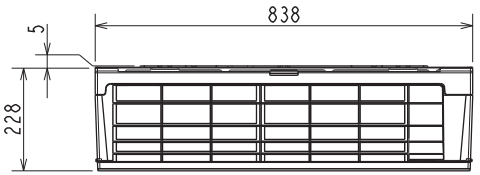
Retail control and input / output interface

Product Dimensions MSZ-HR25/35/50VF

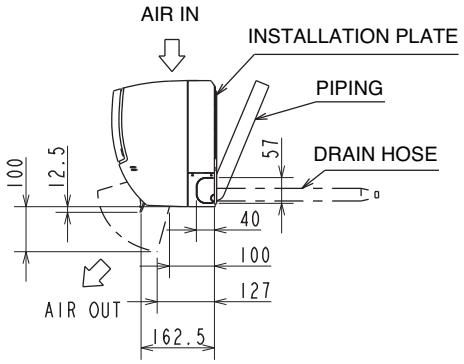
Front View



Upper View

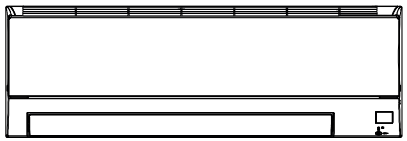


Side View

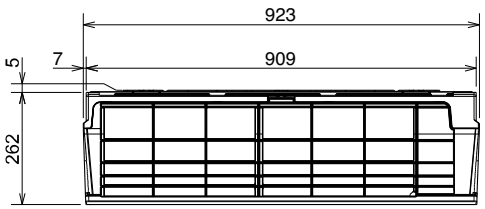


Product Dimensions MSZ-HR60/71VF

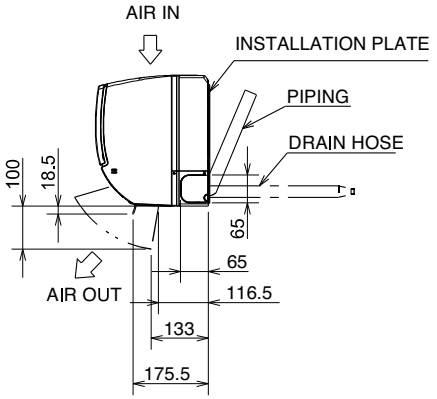
Front View



Upper View



Side View



MSY-TP R32

High SHF Wall Mounted System

Inverter Heat Pump (Cooling Only)

The M Series **MSY-TP R32** High SHF wall mounted system blends energy efficiency with a modern white design.

This cooling only unit has a high sensible cooling capacity, making it ideal for small computer rooms or areas that require a greater degree of sensible cooling. The MSY-TP also utilises lower GWP R32 refrigerant.

Key Features

- Compact and stylish white design
- High sensible cooling ability
- Weekly timer provides greater control of scheduling
- Cooling down to -25ºC outdoor air temperature

R32







MSY-TP - INDOOR UNITS		**MSY-TP35VF**	**MSY-TP50VF**
CAPACITY (kW)	Cooling (nominal)	3.5 (1.5-4.0)	5.0 (1.5-5.7)
	Cooling (UK)	3.47 (1.48-3.96)	4.96 (1.48-5.65)
SHF (nominal)		0.98	0.82
EER (nominal)		4.61	3.45
SEER (BS EN14825)		9.00	8.00
ErP ENERGY EFFICIENCY CLASS	Cooling	A+++	A++
AIRFLOW (l/s)	Cooling - Lo-Mi-Hi-SHi	168-193-228-273	168-193-228-273
PIPE SIZE mm (in)	Gas	9.52 (3/8")	9.52 (3/8")
	Liquid	6.35 (1/4")	6.35 (1/4")
SOUND PRESSURE LEVEL (dBA)	Cooling - Lo-Mi-Hi-SHi	31-36-40-45	31-36-40-45
SOUND POWER LEVEL (dBA)		60	60
DIMENSIONS (mm)	Width x Depth x Height	923 x 250 x 305	923 x 250 x 305
WEIGHT (kg)		12.5	12.5
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
FUSE RATING (BS88) – HRC (A)		10	10
INTERCONNECTING CABLE No. CORES		4	4

MUY-TP - OUTDOOR UNITS		**MUY-TP35VF**	**MUY-TP50VF**
SOUND PRESSURE LEVEL (dBA)	Cooling	45	47
SOUND POWER LEVEL (dBA)	Cooling	58	61
WEIGHT (kg)		34	34
DIMENSIONS (mm)	Width x Depth x Height	800 x 285 x 550	800 x 285 x 550
ELECTRICAL SUPPLY		Fed by Indoor Unit	Fed by Indoor Unit
PHASE		Single	Single
SYSTEM POWER INPUT (kW)	Cooling (nominal)	0.76	1.45
	Cooling (UK)	0.64	1.12
STARTING CURRENT (A)		3.6	6.4
SYSTEM RUNNING CURRENT (A)	Cooling [MAX]	3.6 [9.2]	6.4 [9.2]
FUSE RATING (BS88) – HRC (A)		10	10
MAINS CABLE No. CORES		3	3
MAX PIPE LENGTH (m)		20	20
MAX HEIGHT DIFFERENCE (m)		12	12
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675)		0.85 / 0.57	0.85 / 0.57
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675)		0.13 / 0.09	0.13 / 0.09

Notes: The SHF figures are based on nominal conditions. Requires an additional MAC-334IF-E interface and PAR-40MAA wired remote controller

Accessories

Outdoor Units

MAC-889SG

Air outlet guide for MUY-TP35/50VF

System Control Units

PAR-40MAA

Standard wired remote controller

MAC-334IF

Interface for M-NET, MA remote controller (PAR-40MAA), on/off input and run/fault output

MAC-397IF

Interface for MA remote controller (PAR-40MAA), on/off input and run or fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

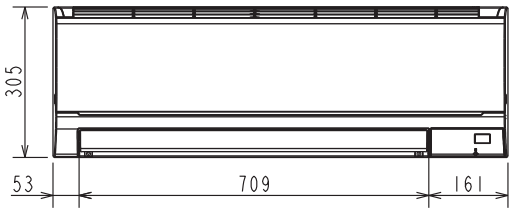
Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

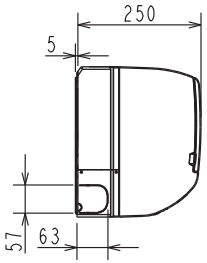
Retail control and input / output interface

Product Dimensions MSY-TP35/50VF

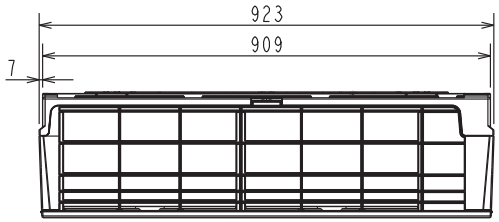
Front View



Side View



Upper View



MFZ-KT R32
Floor Mounted System

Inverter Heat Pump









The MFZ-KT series is extremely versatile and is designed for wall attached installation at floor level.

The auto swing vane provides a more natural and comfortable airflow throughout the room and the lightweight, compact design makes installation easy. To aid control and energy saving, the controller has an inbuilt 7 day timeclock.

Key Features

- Simple flat asymmetrical design that harmonises with all types of interiors
- Swing vane mode with autovane shutter
- Optimum air distribution through the use of three uniquely shaped vanes

R32

MFZ-KT - INDOOR UNITS		MFZ-KT25VG	MFZ-KT35VG	MFZ-KT50VG
CAPACITY (kW)	Heating (nominal)	3.4 (1.3-4.2)	4.3 (1.1-5.0)	6.0 (1.5-7.2)
	Cooling (nominal)	2.5 (1.6-3.2)	3.5 (0.9-3.9)	5.0 (1.2-5.6)
	Heating (UK)	2.79 (1.07-3.44)	3.53 (0.9-4.10)	4.92 (1.23-5.90)
	Cooling (UK)	2.45 (1.57-3.14)	3.43 (0.88-3.82)	4.90 (1.18-5.49)
SHF (nominal)		0.79	0.70	0.72
COP / EER (nominal)		3.74 / 4.03	3.41 / 3.30	3.23 / 3.23
SCOP / SEER (BS EN14825)		4.2 / 6.5	4.4 / 6.6	4.2 / 6.8
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A++	A+ / A++	A+ / A++
AIRFLOW (l/s)	Heating - Silent-Lo-Mi-Hi-SHi	58-67-93-122-162	58-67-93-122-162	100-128-157-193-233
	Cooling - Silent-Lo-Mi-Hi-SHi	65-80-108-130-148	65-80-108-130-148	93-112-143-173-205
PIPE SIZE mm (in)	Gas	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")
	Liquid	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling - Silent-Lo-Mi-Hi-SHi	19-23-30-37-44 / 19-24-31-37-41	19-23-30-37-44 / 19-24-31-37-41	29-35-40-44-49 / 28-32-37-42-48
SOUND POWER LEVEL (dBA)		54	54	60
DIMENSIONS (mm)	Width x Depth x Height	750 x 215 x 600	750 x 215 x 600	750 x 215 x 600
WEIGHT (kg)		14.5	14.5	15
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) – HRC (A)		6	6	6
INTERCONNECTING CABLE No. CORES		4	4	4

SUZ-M - OUTDOOR UNITS		SUZ-M25VAR2	SUZ-M35VAR2	SUZ-M50VAR2
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	46 / 45	48 / 48	49 / 48
SOUND POWER LEVEL (dBA)	Cooling	59	59	64
WEIGHT (kg)		30	35	41
DIMENSIONS (mm)	Width x Depth x Height	800 x 285 x 550	800 x 285 x 550	800 x 285 x 714
ELECTRICAL SUPPLY		220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz
PHASE		Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	0.80 / 0.71	1.07 / 1.00	1.61 / 1.54
	Heating/Cooling (UK)	0.68 / 0.61	0.91 / 0.86	1.37 / 1.32
STARTING CURRENT (A)		3.7	5.0	8.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	3.7 / 3.0 [6.8]	5.0 / 4.1 [8.5]	8.0 / 7.1 [13.5]
FUSE RATING (BS88) – HRC (A)		10	10	20
MAINS CABLE No. CORES		3	3	3
MAX PIPE LENGTH (m)		20	20	30
MAX HEIGHT DIFFERENCE (m)		12	12	30
CHARGE REFRIGERANT (KG) / CO_2 EQUIVALENT (T) - R32 (GWP 675) - 7M		0.65 / 0.44	0.90 / 0.61	1.20 / 0.81
MAX ADDITIONAL REFRIGERANT (KG) / CO_2 EQUIVALENT (T) - R32 (GWP 675)		0.26 / 0.18	0.26 / 0.18	0.46 / 0.31

Accessories

Outdoor Units

MAC-889SG

Air outlet guide for SUZ-M25/35VAR2

MAC-882SG

Air outlet guide for SUZ-M50VAR2

System Control Units

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB = Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-334IF

Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output

MAC-397IF

Interface for MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run or fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

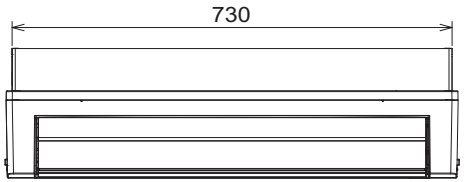
Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

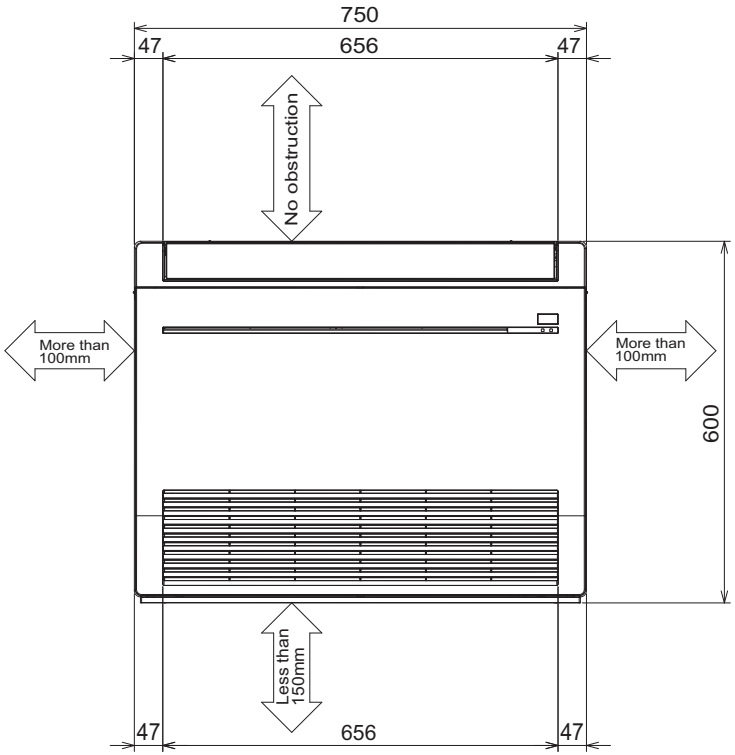
Retail control and input / output interface

Product Dimensions MFZ-KT25/35/50VG

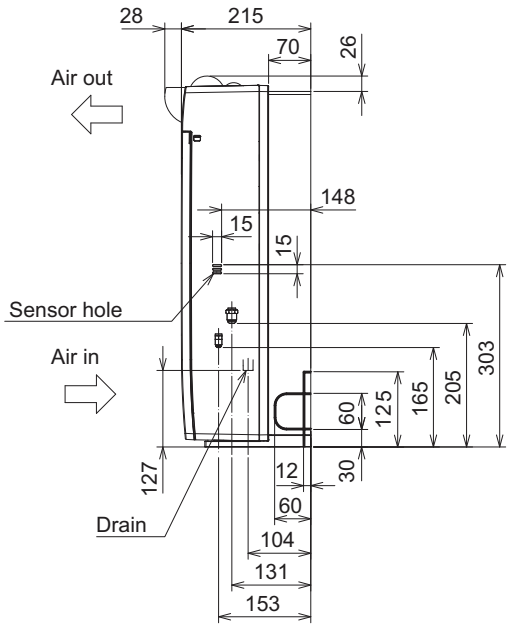
Upper View



Front View



Side View

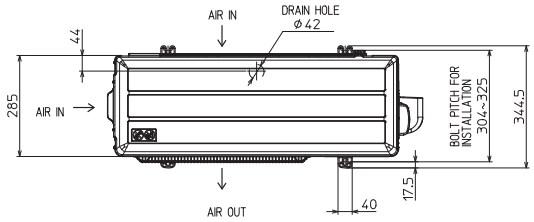


Outdoor Units

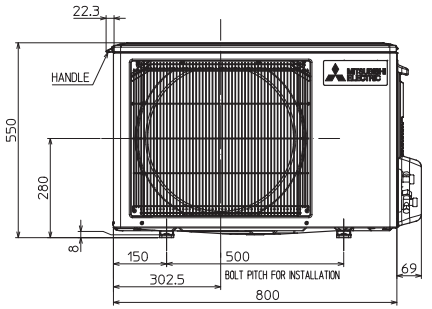


Product Dimensions MUZ-LN25/35VG2, MUZ-AP20/25/35/42VG, MUZ-HR50VF, MUY-TP35/50VF

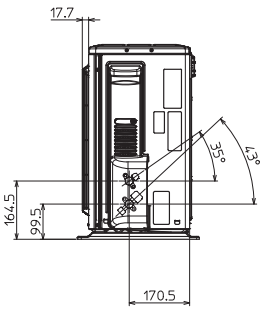
Upper View



Front View



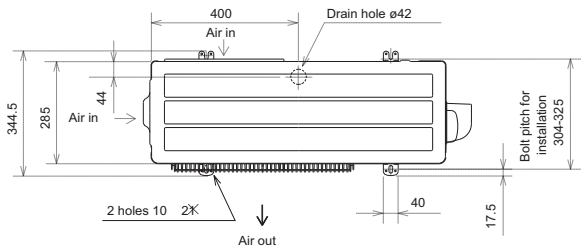
Side View



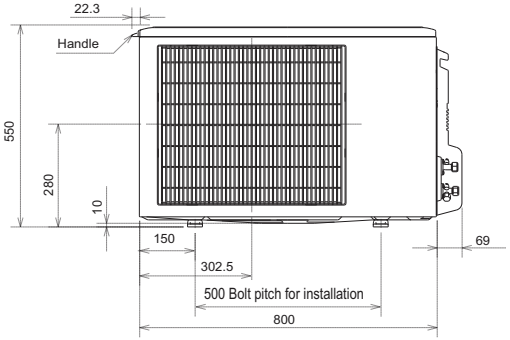


Product Dimensions MUZ-EF25/35VG, SUZ-M25/35VAR2

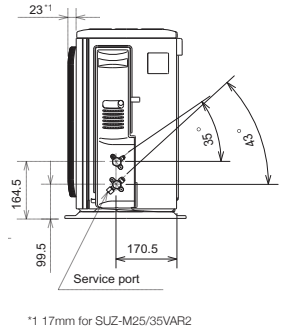
Upper View



Front View



Side View

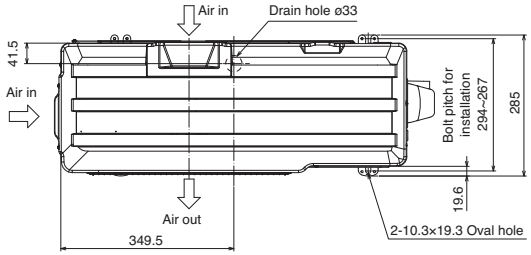


*1 17mm for SUZ-M25/35VAR2

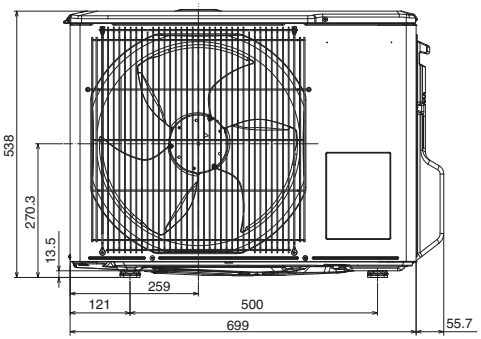


Product Dimensions MUZ-HR25/35VF

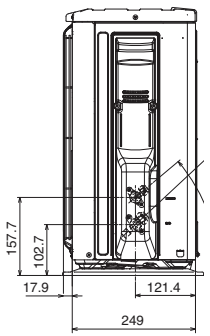
Upper View



Front View



Side View



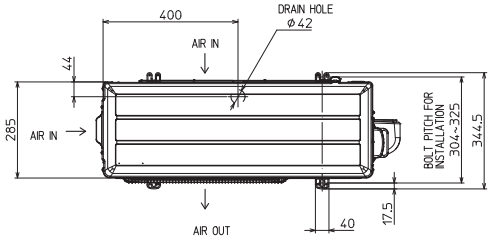
Outdoor Units



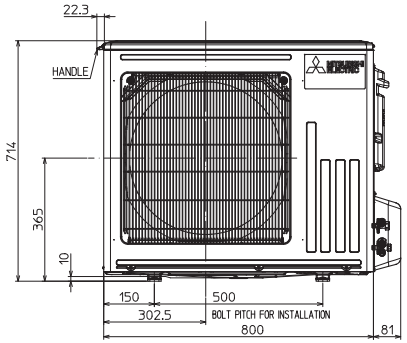


Product Dimensions MUZ-LN50VG2, MUZ-EF50VG, MUZ-AP50/60VG, MUZ-HR60/71VF, SUZ-M50VAR2

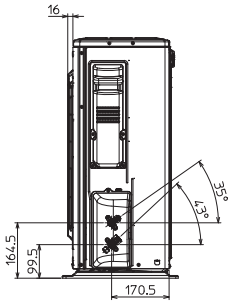
Upper View



Front View

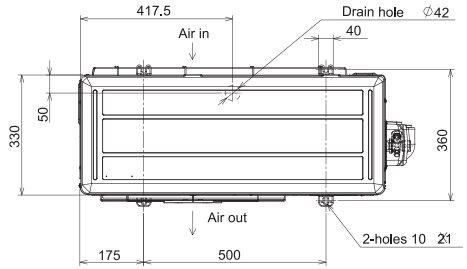


Side View

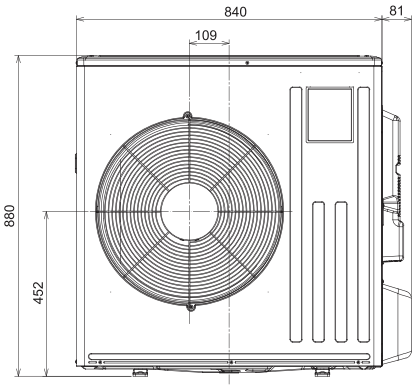


Product Dimensions MUZ-LN60VG2, MUZ-AP71VG

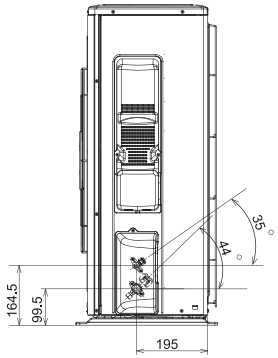
Upper View



Front View



Side View



M Series Accessories / Optional Extras

OUTDOOR UNITS	DESCRIPTION
MAC-889SG	Air outlet guide for MUZ-LN25/35VG2, MUZ-EF25/35VG, MUZ-AP20/25/35/42VG, MUZ-HR50VF, MUY-TP35/50VF, SUZ-M25/35VAR2
MAC-883SG	Air outlet guide for MUZ-HR25/35VF
MAC-882SG	Air outlet guide for MUZ-LN50VG2, MUZ-EF50VG, MUZ-AP50/60VG, MUZ-HR60/71VF, SUZ-M50VAR2
MAC-886SG	Air outlet guide for MUZ-LN60VG2, MUZ-AP71VG

SYSTEM CONTROL UNITS	DESCRIPTION
PAR-40MAA	Standard wired remote controller for MSZ-LN, MSZ-EF, MSZ-AP, MSZ-HR, MSY-TP, MFZ-KT
MAC-334IF	Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output. Now includes a heating interlock mode
MAC-397IF	Interface for MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run or fault output
MAC-567IF	Interface for connection to Wi-Fi MELCloud service (Included as standard on MSZ-LN, MSZ-EF and MSZ-AP-VGK models)
PAR-CT01MAA-SB	Touch screen wired remote controller
PAR-CT01MAA-PB	Touch screen wired remote controller (Premium finish)
MELCOBEMS MINI	Modbus/BACnet MSTP CN105 adaptor
MELCORETAIL MINI	Retail control and input/output interface

MITSUBISHI ELECTRIC

Mr Slim

Packaged Split-System Air Conditioning





Contents

PLA-ZM	R32 4-Way Blow Ceiling Cassette System, Power Inverter Heat Pump	**1.3.8**
PLA-M	R32 4-Way Blow Ceiling Cassette System, Standard Inverter Heat Pump	**1.3.12**
PLA-SM	R32 4-Way Blow Ceiling Cassette System, Inverter Heat Pump	**1.3.16**
SLZ-M	R32 600x600 4-Way Blow Ceiling Cassette System, Standard Inverter Heat Pump	**1.3.18**
PKA-M	R32 Wall Mounted System, Power Inverter Heat Pump.	**1.3.20**
PKA-M	R32 Wall Mounted System, Standard Inverter Heat Pump	**1.3.22**
PEAD-M	R32 Ceiling Concealed Ducted System, Power Inverter Heat Pump	**1.3.24**
PEAD-M	R32 Ceiling Concealed Ducted System, Standard Inverter Heat Pump	**1.3.28**
SEZ-M	R32 Ceiling Concealed Ducted System, Standard Inverter Heat Pump	**1.3.32**
PCA-M	R32 Ceiling Suspended System, Power Inverter Heat Pump	**1.3.34**
PCA-M	R32 Ceiling Suspended System, Standard Inverter Heat Pump	**1.3.38**
PCA-M-HA	R32 Stainless Steel Ceiling Suspended System, Power Inverter Heat Pump	**1.3.42**
PEA-RP	R410A Large Capacity Ceiling Concealed Ducted System, Power Inverter Heat Pump	**1.3.44**
PEA-RP	R410A Large Capacity Ceiling Concealed Ducted System, Standard Inverter Heat Pump	**1.3.46**
PSA-RP	R410A Floor Standing System, Power Inverter Heat Pump	**1.3.48**
HP DXE	R410A Air Curtain System, Power Inverter Heat Pump	**1.3.50**
PAC-IF	R32 / R410A Air Handling Unit Controller	**1.3.52**
R32 Mr Slim Twin, Triple & Quadruple Multi-Split Systems		**1.3.54**
Outdoor Units	Product Dimensions	**1.3.60**
Accessories / Optional Extras		**1.3.62**

Mr.SLIM Packaged Split-System Air Conditioning

The Versatile **Mr Slim Range**

Suitable to cool or heat a huge variety of applications, such as offices and retail units, our Mr Slim range is one of Britain's best selling air conditioning split-systems. Now available utilising lower GWP R32 refrigerant - combine the efficiency with the complete versatility that this range has to offer and the possibilities are virtually infinite.

R32



R32 Power Inverter

POWER INVERTER

- Top of the range Power Inverter technology optimised for high seasonal efficiencies
- Available with single and three phase outdoor units
- 12 sizes available from 3.5-22kW
- Available with four way blow cassettes, ceiling concealed ducted, wall mounted or ceiling suspended indoor units

R32 Standard Inverter

INVERTER

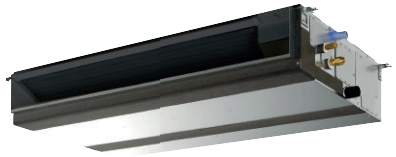
- High quality cost effective Standard Inverter
- Available with single and three phase outdoor units
- 13 sizes available from 2.5-22kW
- Available with four way blow cassettes, ceiling concealed ducted, wall mounted or ceiling suspended indoor units

R32 Inverter

INVERTER

- Cost effective
- Available with single and three phase outdoor units
- Available with four way blow cassettes from 7.1-14kW





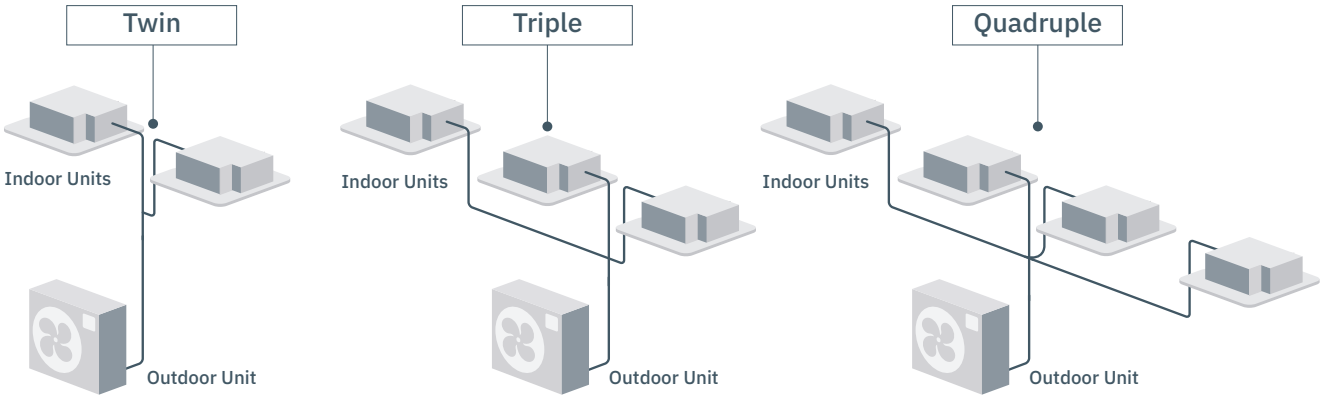




Twin, Triple and Quadruple Combinations

R32

The Mr Slim Multi-Split system is an ideal option for open plan spaces in medium sized premises such as offices or shops, where two, three or four indoor units are required to be working with one outdoor unit.







Ecodesign and Seasonal Efficiency

With buildings accounting for around half of all UK greenhouse emissions, legislation is demanding increased energy efficiency in this sector.

The Ecodesign Directive for Energy Related Products (ErP) is focusing on this area in a bid to reduce overall energy consumption, and to accelerate market transformation to more energy efficient products.

An air conditioner will vary performance over changing seasons, which means calculating seasonal performance is important to ascertain the true performance of an air conditioning system. The Ecodesign Directive reflects this by setting minimum efficiency requirement and a new method of measuring performance that has been introduced across Europe.

The European Standard BS EN14825 sets the seasonal performance calculation for an air conditioning system under 12kW of which the energy efficiency class for each product specification is shown. For more information visit the website **erp.mitsubishielectric.eu/erp**

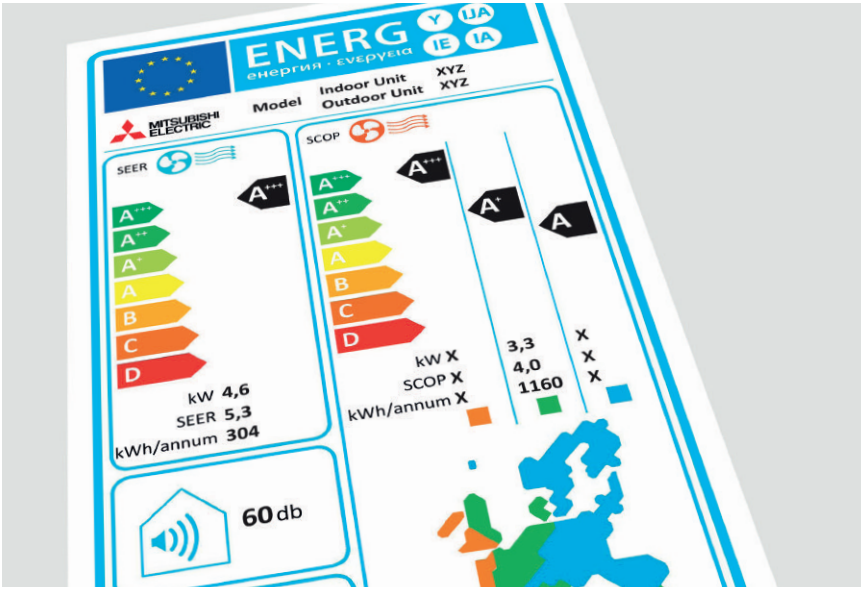
Operational Range

Mode	Size	PUZ-ZM / PUHZ-ZRP	PUZ-M / PUZ-SM / PUHZ-P	SUZ-M / SUZ-SM
Cooling	35	-15°C to +46°C	N/A	-10°C to +46°C
	50 or more	-15°C to +46°C	-15°C to +46°C	-15°C to +46°C
Heating	50 or less	-11°C to +21°C	N/A	-10°C to +24°C
	60 or more	-20°C to +21°C	-15°C to +21°C	-10°C to +24°C

Setpoint Range

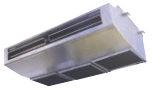
Mode	Minimum	Maximum
Cooling	19ºC	30ºC
Heating	17ºC	28ºC
Auto	19ºC	28ºC

Nominal Conditions: Cooling; indoor 27ºC DB, 19ºC WB; outdoor 35ºC DB, 24ºC WB.
Nominal Conditions: Heating; indoor 20ºC DB; outdoor 7ºC DB, 6ºC WB.
UK Conditions: Cooling; indoor 21ºC DB, 15ºC WB; outdoor 27ºC DB.
UK Conditions: Heating; indoor 21ºC DB; outdoor 0°C DB, -1ºC WB.





Mr.SLIM Packaged Split-System Air Conditioning

Indoor Model	Range		kW	1.5*1	2.5	3.5	5.0	6.0	7.1	10.0	12.5	14.0	19.0	22.0
4-Way Blow Ceiling Cassette	PLA-ZM/M R32					●	●	●	●	●	●	●		
	PLA-SM R32								●	●	●	●		
	SLZ-M (600x600) R32			●	●	●	●	●						
Wall Mounted	PKA-M R32					●	●	●	●	●				
Ceiling Concealed Ducted	PEAD-M R32					●	●	●	●	●	●	●		
	SEZ-M R32				●	●	●	●	●					
	PEA-RP R410A												●	●
Ceiling Suspended	PCA-M R32						●	●	●	●	●	●		
	PCA-M-HA R32								●					
Floor Standing	PSA-RP R410A								●	●	●	●		
Air Curtain	HP DXE*2 R410A								●		●	●	●	

*1 Multi-Split only. *2 Available as recessed or exposed versions.

PLA-ZM R32 4-Way Blow Ceiling Cassette System

Power Inverter Heat Pump
(Single Phase)

The **PLA-ZM Power Inverter** range is a ceiling cassette system that blends a host of outstanding features with a sophisticated streamlined design. Offering high seasonal efficiency, advanced control options and extended pipe runs, this range is extremely flexible.

Key Features

- Improved airflow control, including horizontal airflow for greater comfort
- Optional 3D i-see sensor grille (PLP-6EAE) provides customised comfort by automatically monitoring room occupancy, position and body temperatures
- Optional filter lowering operation down to 4m (PLP-6EAJ)
- Full heating capacity down to -3°C
- 100m pipe run (Size 100-140)
- Replace Technology available

R32













POWER INVERTER

PLA-ZM - INDOOR UNITS		PLA-ZM35EA	PLA-ZM50EA	PLA-ZM60EA	PLA-ZM71EA	PLA-ZM100EA	PLA-ZM125EA	PLA-ZM140EA
CAPACITY (kW)	Heating (nominal)	4.1 (1.6-5.2)	6.0 (2.5-7.3)	7.0 (2.8-8.2)	8.0 (3.5-10.2)	11.2 (4.5-14.0)	14.0 (5.0-16.0)	16.0 (5.7-18.0)
	Cooling (nominal)	3.6 (1.6-4.5)	5.0 (2.3-5.6)	6.1 (2.7-6.5)	7.1 (3.3-8.1)	9.5 (4.9-11.4)	12.5 (5.5-14.0)	13.4 (6.2-15.0)
	Heating (UK)	3.5 (1.35-4.4)	5.1 (2.15-6.2)	6.0 (2.38-6.97)	6.8 (3.0-8.65)	9.5 (3.85-11.9)	11.9 (4.25-13.6)	13.6 (4.85-15.3)
	Cooling (UK)	3.3 (1.45-4.15)	4.6 (2.1-5.15)	5.6 (2.48-5.98)	6.55 (3.05-7.45)	9.2 (4.5-10.5)	11.5 (5.05-12.9)	12.9 (5.7-14.1)
SHF (nominal)		0.95	0.85	0.77	0.72	0.77	0.70	0.70
COP / EER (nominal)		5.00 / 5.10	4.40 / 4.52	4.10 / 4.20	4.40 / 4.30	4.30 / 4.60	3.81 / 3.70	3.71 / 3.55
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.70 / 7.50	4.90 / 7.60	4.60 / 7.20	4.80 / 7.60	4.80 / 7.70	4.70 (185.1%) / 7.40 (303.3%)	4.60 (181.1%) / 7.00 (285.7%)
ERP ENERGY EFFICIENCY CLASS	Heating/Cooling	A++ / A++	A++ / A++	A++ / A++	A++ / A++	A++ / A++	-	-
AIRFLOW (l/s)	Lo-Mi-Mi2-Hi	183-217-250-267	200-233-267-300	200-233-267-300	283-317-350-383	317-367-417-467	350-400-433-483	400-433-483-533
PIPE SIZE MM (in)	Gas/Liquid	12.7 (1/2") / 6.35 (1/4")	12.7 (1/2") / 6.35 (1/4")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Mi2-Hi	26-28-29-31	27-29-31-32	27-29-31-32	28-30-33-36	31-34-37-40	33-36-39-41	36-39-42-44
SOUND POWER LEVEL (dBA)		51	54	54	57	61	62	65
DIMENSIONS (mm)	Width x Depth x Height (Grille)	840 (950) x 840 (950) x 258 (40)	840 (950) x 840 (950) x 258 (40)	840 (950) x 840 (950) x 258 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)
WEIGHT (kg)	Unit / Grille	21 / 5	21 / 5	21 / 5	24 / 5	26 / 5	26 /5	26 / 5
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6
INTERCONNECTING CABLE NO. CORES		4	4	4	4	4	4	4
GRILLE REFERENCE		PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E

PUZ-ZM - OUTDOOR UNITS		PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHAR1	PUZ-ZM100VKAR1	PUZ-ZM125VKAR2	PUZ-ZM140VKAR2
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	46 / 44	46 / 44	49 / 47	49 / 47	51 / 49	52 / 50	52 / 50
SOUND POWER LEVEL (dBA)	Cooling	65	65	67	67	69	70	70
WEIGHT (kg)		46	46	70	70	116	116	118
DIMENSIONS (mm)	Width x Depth x Height	809 x 300 x 630	809 x 300 x 630	950 x 330 + 25 x 943	950 x 330 + 25 x 943	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	0.820 / 0.705	1.363 / 1.106	1.707 / 1.452	1.818 / 1.651	2.604 / 2.065	3.674 / 3.378	4.312 / 3.772
	Heating/Cooling (UK)	0.73 / 0.59	1.21/ 0.94	1.43 / 1.15	1.61 / 1.39	2.09 / 1.77	3.27 / 2.87	3.83 / 3.15
STARTING CURRENT (A)		5.0	5.0	6.0	6.0	13.0	13.0	13.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	3.89 / 3.51 [13.2]	6.05 / 5.00 [13.2]	7.39 / 6.31 [19.2]	7.79 / 7.06 [19.3]	11.25 / 8.97 [27.0]	15.77 / 14.53 [27.0]	18.41 / 15.88 [28.7]
FUSE RATING (BS88) - HRC (A)		16	16	25	25	32	32	40
MAINS CABLE NO. CORES		3	3	3	3	3	3	3
MAX PIPE LENGTH (m)		50	50	55	55	100	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) - 30m	2.0 / 1.35	2.00 / 1.35	2.80 / 1.89	2.80 / 1.89	4.00 / 2.70	4.00 / 2.70	4.00 / 2.70
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	0.30 / 0.20	0.30 / 0.20	0.80 / 0.54	0.80 / 0.54	2.80 / 1.89	2.80 / 1.89	2.80 / 1.89

Accessories

Indoor Units

PLP-6EA
Grille for PLA-ZM35-140EA

PLP-6EAE
3D i-see sensor grille for PLA-ZM35-140EA

PLP-6EAJ
Self elevating grille for PLA-ZM35-140EA

PAC-SE1ME-E
Corner panel with i-see sensor for PLA-ZM35-140EA

PAR-SE9FA-E
Corner panel with signal receiver for PLA-ZM35-140EA

PAC-SJ37SP-E
Shutter plate for PLA-ZM35-140EA

PAC-SJ41TME
Multi-function casement for PLA-ZM35-140EA

PAC-SJ39HR-E
Power supply kit for PLA-ZM35-140EA

PAR-SL100A-E
Wireless remote controller for PLA-ZM35-140EA

Outdoor Units

PAC-SJ07SG
Air outlet guide for PUZ-ZM35-50VKA

PAC-SG59SG
Air outlet guide for PUZ-ZM60VHA / PUZ-ZM71VHAR1

PAC-SH96SG
Air outlet guide for PUZ-ZM100VKAR1 / PUZ-ZM125-140VKAR2

PAC-SJ71FM-E
30Pa outdoor fan motor for PUZ-ZM100VKAR1 / PUZ-ZM125-140VKAR2

System Control Units

PAC-SA89TA
Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA
Run/fault adaptor (5 wire adaptor)

PAC-SE41TS
Remote sensor

PAR-CT01MAA-SB/PB
Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA
Standard wired remote controller

MAC-567IF
Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI
Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI
Retail control and input / output interface

PAC-SJ96MA
M-NET adaptor for size 35 and 50

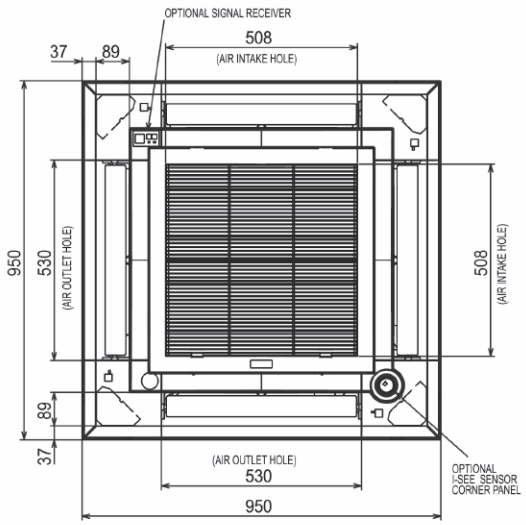
PAC-SJ95MA
M-NET adaptor for size 60 to 140

Note: Please see page 1.3.62 for the full range of accessories.

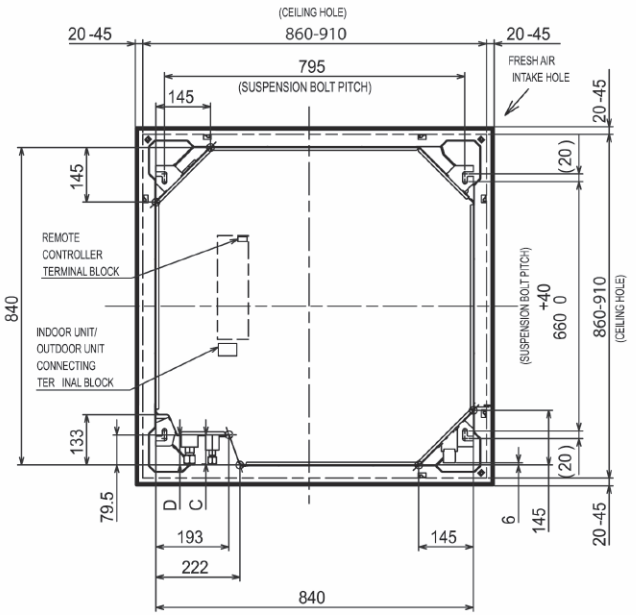
Product Dimensions

PLA-ZM35/50/60/71/100/125/140EA

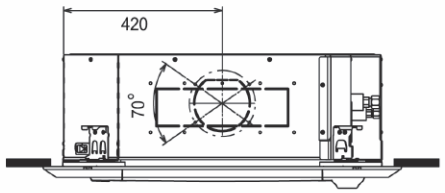
Lower View



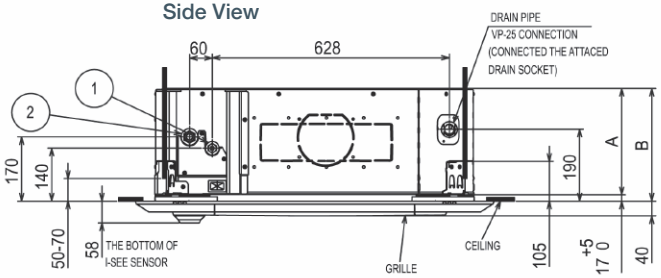
Upper View



Front View



Side View



PLA-ZM-EA*:35/50/60/71/100/125/140

ZM	①	②	A	B	C	D
35/50	REFRIGERANT PIPE Φ 6.35 FLARED CONNECTION 1/4F	REFRIGERANT PIPE Φ 12.7 FLARED CONNECTION 1/2F	241	258	76	76.5
60	FLARED CONNECTION 3/8F REFRIGERANT PIPE Φ 9.52	REFRIGERANT PIPE Φ 15.88 FLARED CONNECTION 5/8F			79.5	79.5
71			281	298		
100-140						

PLA-ZM R32 4-Way Blow Ceiling Cassette System

Power Inverter Heat Pump
(Three Phase)

The **PLA-ZM Power Inverter** range is a ceiling cassette system that blends a host of outstanding features with a sophisticated streamlined design. Offering high seasonal efficiency, advanced control options and extended pipe runs, this range is extremely flexible.

Key Features

- Improved airflow control, including horizontal airflow for greater comfort
- Optional 3D i-see sensor grille (PLP-6EAE) provides customised comfort by automatically monitoring room occupancy, position and body temperatures
- Optional filter lowering operation down to 4m (PLP-6EAJ)
- Full heating capacity down to -3°C
- 100m pipe run
- Replace Technology available

R32









POWER INVERTER

PLA-ZM - INDOOR UNITS		PLA-ZM100EA	PLA-ZM125EA	PLA-ZM140EA
CAPACITY (kW)	Heating (nominal)	11.2 (4.5-14.0)	14.0 (5.0-16.0)	16.0 (5.7-18.0)
	Cooling (nominal)	9.5 (4.9-11.4)	12.5 (5.5-14.0)	13.4 (6.2-15.0)
	Heating (UK)	9.5 (3.85-11.9)	11.9 (4.25-13.6)	13.6 (4.85-15.3)
	Cooling (UK)	9.2 (4.5-10.5)	11.5 (5.05-12.9)	12.9 (5.7-14.1)
SHF (nominal)		0.77	0.70	0.70
COP / EER (nominal)		4.30 / 4.60	3.81 / 3.70	3.71 / 3.55
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.80 / 7.50	4.70 (185.1%) / 7.20 (301.1%)	4.60 (181.1%) / 6.90 (283.9%)
ERP ENERGY EFFICIENCY CLASS	Heating/Cooling	A++ / A++	-	-
AIRFLOW (l/s)	Lo-Mi-Mi2-Hi	317-367-417-467	350-400-433-483	400-433-483-533
PIPE SIZE MM (in)	Gas/Liquid	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Mi2-Hi	31-34-37-40	33-36-39-41	36-39-42-44
SOUND POWER LEVEL (dBA)		61	62	65
DIMENSIONS (mm)	Width x Depth x Height (Grille)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)
WEIGHT (kg)	Unit / Grille	26 / 5	26 /5	26 / 5
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6
INTERCONNECTING CABLE NO. CORES		4	4	4
GRILLE REFERENCE		PLP-6EA	PLP-6EA	PLP-6EA
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E

PUZ-ZM - OUTDOOR UNITS		PUZ-ZM100YKAR1 [3]	PUZ-ZM125YKAR2 [3]	PUZ-ZM140YKAR2 [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	51 / 49	52 / 50	52 / 50
SOUND POWER LEVEL (dBA)	Cooling	69	70	70
WEIGHT (kg)		123	125	131
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	2.604 / 2.065	3.674 / 3.378	4.312 / 3.772
	Heating/Cooling (UK)	2.09 / 1.77	3.27 / 2.87	3.83 / 3.15
STARTING CURRENT (A)		6.0	6.0	6.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	3.75 / 2.96 [8.5]	5.32 / 4.89 [10.0]	6.23 / 5.37 [13.7]
FUSE RATING (BS88) - HRC (A)		16	16	16
MAINS CABLE NO. CORES		5	5	5
MAX PIPE LENGTH (m)		100	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) - 30m	4.00 / 2.70	4.00 / 2.70	4.00 / 2.70
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	2.80 / 1.89	2.80 / 1.89	2.80 / 1.89

[3] Three Phase

Accessories

Indoor Units

PLP-6EA
Grille for PLA-ZM35-140EA

PLP-6EAE
3D i-see sensor grille for PLA-ZM35-140EA

PLP-6EAJ
Self elevating grille for PLA-ZM35-140EA

PAC-SE1ME-E
Corner panel with i-see sensor for PLA-ZM35-140EA

PAR-SE9FA-E
Corner panel with signal receiver for PLA-ZM35-140EA

PAC-SJ37SP-E
Shutter plate for PLA-ZM35-140EA

PAC-SJ41TME
Multi-function casement for PLA-ZM35-140EA

PAC-SJ39HR-E
Power supply kit for PLA-ZM35-140EA

PAR-SL100A-E
Wireless remote controller for PLA-ZM35-140EA

Outdoor Units

PAC-SH96SG
Air outlet guide for PUZ-ZM100YKAR1 / PUZ-ZM125-140YKAR2

System Control Units

PAC-SA89TA
Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA
Run/fault adaptor (5 wire adaptor)

PAC-SE41TS
Remote sensor

PAR-CT01MAA-SB/PB
Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA
Standard wired remote controller

MAC-567IF
Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI
Retail control and input / output interface

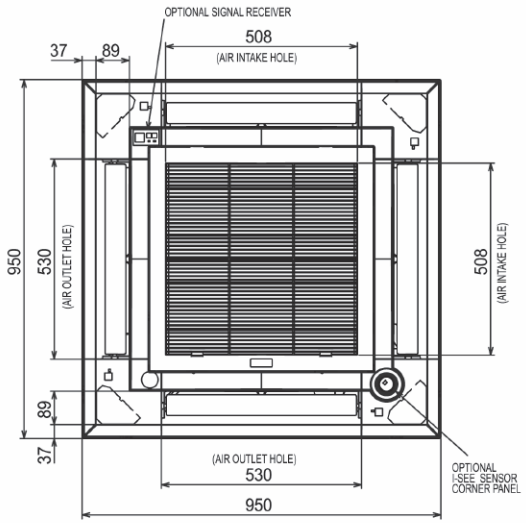
MELCORETAIL MINI
Retail control and input / output interface

PAC-SJ95MA
M-NET adaptor for size 100 to 140

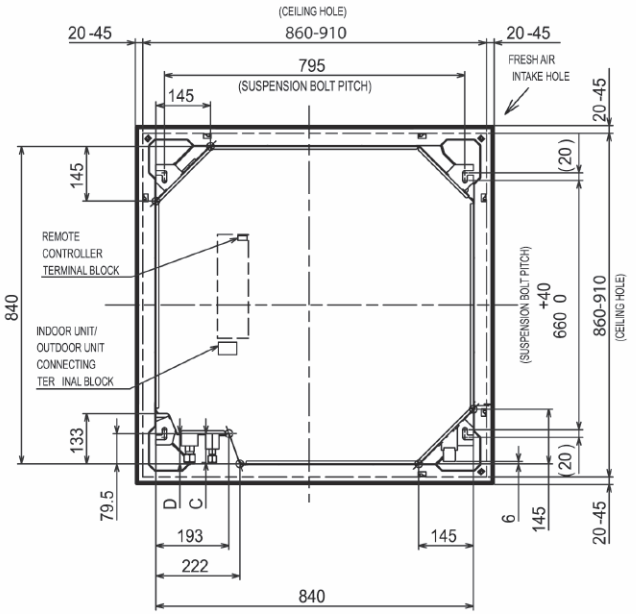
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PLA-ZM100/125/140EA

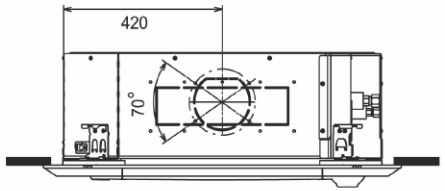
Lower View



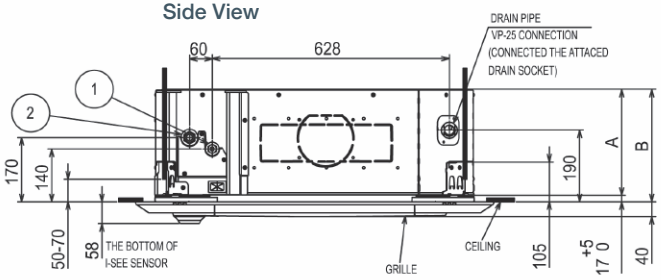
Upper View



Front View



Side View



PLA-ZM-EA*:100/125/140

ZM	①	②	A	B	C	D
100-140	FLARED CONNECTION 3/8F REFRIGERANT PIPE Φ 9.52	REFRIGERANT PIPE Φ 15.88 FLARED CONNECTION 5/8F	281	298	79.5	79.5

PLA-M R32
4-Way Blow Ceiling Cassette System

Standard Inverter Heat Pump
(Single Phase)

The **PLA-M Standard Inverter** range is a ceiling cassette system that blends a host of outstanding features with a sophisticated streamlined design. Offering advanced control options and quiet operation, this range provides extreme flexibility and ease of installation whilst being cost effective.

Key Features

- Improved airflow control, including horizontal airflow for greater comfort
- Optional 3D i-see sensor grille (PLP-6EAE) provides customised comfort by automatically monitoring room occupancy, position and body temperatures
- Optional filter lowering operation down to 4m (PLP-6EAJ)
- Replace Technology available
- Single fan chassis across entire outdoor unit range

R32















PLA-M - INDOOR UNITS		PLA-M35EA	PLA-M50EA	PLA-M60EA	PLA-M71EA	PLA-M100EA	PLA-M125EA	PLA-M140EA
CAPACITY (kW)	Heating (nominal)	4.1 (1.0-5.0)	6.0 (1.5-7.2)	7.0 (1.6-8.0)	8.0 (2.0-10.2)	11.2 (2.8-12.5)	13.5 (4.1-15.0)	15.0 (4.2-15.8)
	Cooling (nominal)	3.6 (0.8-3.9)	5.5 (1.2-5.6)	6.1 (1.6-6.3)	7.1 (2.2-8.1)	9.5 (4.0-10.6)	12.1 (5.8-13.0)	13.4 (5.8-14.1)
	Heating (UK)	3.49 (0.85-4.26)	5.11 (1.28-6.13)	6.13 (1.36-6.81)	6.81 (1.70-8.68)	9.63 (2.41-10.75)	11.49 (3.49-12.77)	12.77 (3.57-13.45)
	Cooling (UK)	3.31 (0.74-3.60)	5.06 (1.10-5.15)	5.61 (1.47-5.80)	6.53 (2.02-7.45)	8.65 (3.64 - 9.65)	11.01 (5.28-11.83)	12.19 (5.28-12.83)
SHF (nominal)		0.91	0.77	0.79	0.74	0.77	0.72	0.70
COP / EER (nominal)		4.20 / 4.00	3.46 / 3.40	3.80 / 3.30	3.61 / 3.70	3.71 / 3.50	3.71 / 3.01	3.41 / 2.70
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.70 / 7.40	4.10 / 6.70	4.40 / 6.60	4.50 / 7.50	4.60 / 7.00	4.1 (162%) / 5.6 (231.9%)	4.1 (161.3%) / 5.7 (232.7%)
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A++ / A++	A+ / A++	A+ / A++	A+ / A++	A++ / A++	A+ / A+	A+ / A+
AIRFLOW (l/s)	Lo-Mi-Mi2-Hi	183-217-250-267	200-233-317-350	200-233-317-350	233-283-317-350	317-383-433-483	350-417-467-517	400-433-483-533
PIPE SIZE mm (in)	Gas/Liquid	9.52 (3/8") / 6.35 (1/4")	12.7 (1/2") / 6.35 (1/4")	15.88 (5/8") / 6.35 (1/4")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Mi2-Hi	26-28-29-31	27-29-31-32	27-29-31-32	28-30-32-34	31-34-37-40	33-37-41-44	36-39-42-44
SOUND POWER LEVEL (dBA)		51	54	54	56	61	65	65
DIMENSIONS (mm)	Width x Depth x Height (Grille)	840 (950) x 840 (950) x 258 (40)	840 (950) x 840 (950) x 258 (40)	840 (950) x 840 (950) x 258 (40)	840 (950) x 840 (950) x 258 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)
WEIGHT (kg)	Unit / Panel	19 / 5	19 / 5	21 / 5	21 / 5	24 / 5	26 / 5	26 / 5
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6
INTERCONNECTING CABLE No. Cores		4	4	4	4	4	4	4
GRILLE REFERENCE		PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E

SUZ-M / PUZ-M - OUTDOOR UNITS		SUZ-M35VAR2	SUZ-M50VAR2	SUZ-M60VAR2	SUZ-M71VAR1	PUZ-M100VAR1	PUZ-M125VAR1	PUZ-M140VAR1
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	48 / 48	48 / 49	49 / 51	49 / 51	51 / 54	54 / 56	55 / 57
SOUND POWER LEVEL (dBA)	Cooling	59	64	65	66	70	72	73
WEIGHT (kg)		35	41	54	55	76	84	84
DIMENSIONS (mm)	Width x Depth x Height	800 x 285 x 550	800 x 285 x 714	840 x 330 x 880	840 x 330 x 880	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	0.97 / 0.90	1.73 / 1.61	1.84 / 1.84	2.21 / 1.91	3.01 / 2.71	3.63 / 4.01	4.39 / 4.96
	Heating/Cooling (UK)	0.83 / 0.77	1.47 / 1.39	1.56 / 1.58	1.88 / 1.64	2.71 / 2.50	3.27 / 3.33	3.59 / 4.12
STARTING CURRENT (A)		5.0	8.0	9.3	9.5	13.0	17.4	21.5
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	5.0 / 4.1 [8.5]	8.0 / 7.1 [13.5]	9.3 / 8.4 [14.8]	9.5 / 9.1 [14.8]	13.0 / 11.7 [20]	15.6 / 17.4 [26.5]	19.0 / 21.5 [30]
FUSE RATING (BS88) - HRC (A)		10	20	20	20	32	32	40
MAINS CABLE No. Cores		3	3	3	3	3	3	3
MAX PIPE LENGTH (m)		20	30	30	30	55	65	65
MAX HEIGHT DIFFERENCE (m)		12	30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	0.90 / 0.61	1.20 / 0.81	1.25 / 0.84	1.45 / 0.98	3.10 / 2.09	3.60 / 2.43	3.60 / 2.43
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	1.16 / 0.78	1.66 / 1.12	1.71 / 1.15	2.37 / 1.80	4.10 / 2.77	5.00 / 3.38	5.00 / 3.38

Note: No duty/standby operation on SUZ-M35/50/60/71VAR2/1.

Accessories

Indoor Units

PLP-6EA
Grille for PLA-M35-140EA

PLP-6EAE
3D i-see sensor grille for PLA-M35-140EA

PLP-6EAJ
Self elevating grille for PLA-M35-140EA

PAC-SE1ME-E
Corner panel with i-see sensor for PLA-M35-140EA

PAR-SE9FA-E
Corner panel with signal receiver for PLA-M35-140EA

PAC-SJ37SP-E
Shutter plate for PLA-M35-140EA

PAC-SJ41TME
Multi-function casement for PLA-M35-140EA

PAC-SJ39HR-E
Power supply kit for PLA-M35-140EA

PAR-SL100A-E
Wireless remote controller for PLA-M35-140EA

Outdoor Units

MAC-889SG
Air outlet guide for SUZ-M35VAR2

MAC-882SG
Air outlet guide for SUZ-M50VAR2

MAC-886SG
Air outlet guide for SUZ-M60VAR2 / SUZ-M71VAR1

PAC-SH96SG
Air outlet guide for PUZ-M100-140VAR1

System Control Units

PAC-SA89TA
Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA
Run/fault adaptor (5 wire adaptor)

PAC-SE41TS
Remote sensor

PAR-CT01MAA-SB/PB
Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA
Standard wired remote controller

MAC-334IF
Interface for M-NET, MA remote controller, on/off input and run/fault output

MAC-397IF
Interface for MA remote controller, on/off input and run or fault output

MAC-567IF
Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI
Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI
Retail control and input / output interface

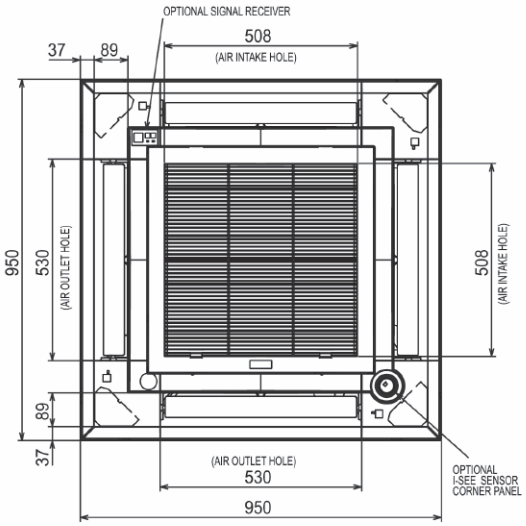
PAC-SJ95MA
M-NET adaptor for size 100 to 140

Note: Please see page 1.3.62 for the full range of accessories.

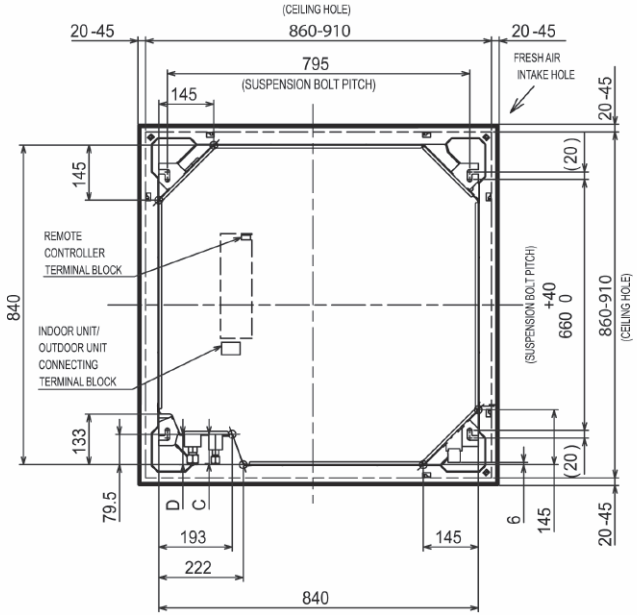
Product Dimensions

PLA-M35/50/60/71/100/125/140EA

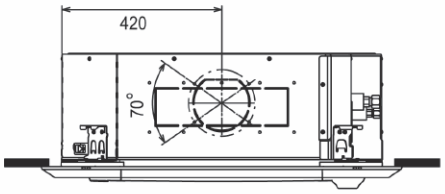
Lower View



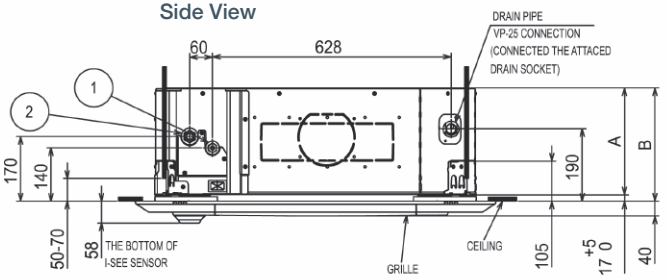
Upper View



Front View



Side View



PLA-M.EA*:35/50/60/71/100/125/140

M	①	②	A	B	C	D
35/50	REFRIGERANT PIPE Φ 6.35 FLARED CONNECTION 1/4F	REFRIGERANT PIPE Φ 12.7 FLARED CONNECTION 1/2F	241	258	76	76.5
60	REFRIGERANT PIPE Φ 6.35 / Φ 9.52 FLARED CONNECTION 1/4F / 3/8F (COMPATIBLE)	REFRIGERANT PIPE Φ 15.88 FLARED CONNECTION 5/8F			80.5	79.5
71	REFRIGERANT PIPE Φ 9.52 FLARED CONNECTION 3/8F				79.5	
100-140			281	298		

PLA-M R32
4-Way Blow Ceiling Cassette System

Standard Inverter Heat Pump
(Three Phase)

The **PLA-M Standard Inverter** range is a ceiling cassette system that blends a host of outstanding features with a sophisticated streamlined design. Offering advanced control options and quiet operation, this range provides extreme flexibility and ease of installation whilst being cost effective.

Key Features

- Improved airflow control, including horizontal airflow for greater comfort
- Optional 3D i-see sensor grille (PLP-6EAE) provides customised comfort by automatically monitoring room occupancy, position and body temperatures
- Optional filter lowering operation down to 4m (PLP-6EAJ)
- Replace Technology available
- Single fan chassis across entire outdoor unit range

R32







PLA-M - INDOOR UNITS		PLA-M100EA	PLA-M125EA	PLA-M140EA
CAPACITY (kW)	Heating (nominal)	11.2 (2.8-12.5)	13.5 (4.1-15.0)	15.0 (4.2-15.8)
	Cooling (nominal)	9.5 (4.0-10.6)	12.1 (5.8-13.0)	13.4 (5.8-14.1)
	Heating (UK)	9.63 (2.41-10.75)	11.49 (3.49-12.77)	12.77 (3.57-13.45)
	Cooling (UK)	8.65 (3.64-9.65)	11.01 (5.28-11.83)	12.19 (5.28-12.83)
SHF (nominal)		0.77	0.72	0.70
COP / EER (nominal)		3.71 / 3.50	3.71 / 3.01	3.41 / 2.70
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.60 / 7.00	4.1 (162%) / 5.6 (231.9%)	4.1 (161.3%) / 5.7 (232.7%)
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A++ / A++	A+ / A+	A+ / A+
AIRFLOW (l/s)	Lo-Mi-Mi2-Hi	317-383-433-483	350-417-467-517	400-433-483-533
PIPE SIZE mm (in)	Gas/Liquid	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Mi2-Hi	31-34-37-40	33-37-41-44	36-39-42-44
SOUND POWER LEVEL (dBA)		61	65	65
DIMENSIONS (mm)	Width x Depth x Height (Grille)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)
WEIGHT (kg)	Unit / Panel	24 / 5	26 / 5	26 / 5
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6
INTERCONNECTING CABLE No. Cores		4	4	4
GRILLE REFERENCE		PLP-6EA	PLP-6EA	PLP-6EA
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E

PUZ-M - OUTDOOR UNITS		PUZ-M100YAR1 [3]	PUZ-M125YAR1 [3]	PUZ-M140YAR1 [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	51 / 54	54 / 56	55 / 57
SOUND POWER LEVEL (dBA)	Cooling	70	72	73
WEIGHT (kg)		78	85	85
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	3.01 / 2.71	3.63 / 4.01	4.39 / 4.96
	Heating/Cooling (UK)	2.71 / 2.50	3.27 / 3.33	3.59 / 4.12
STARTING CURRENT (A)		4.7	6.3	7.8
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	4.7 / 4.2 [11.5]	5.6 / 6.3 [11.5]	6.9 / 7.8 [11.5]
FUSE RATING (BS88) - HRC (A)		16	16	16
MAINS CABLE No. Cores		5	5	5
MAX PIPE LENGTH (m)		55	65	65
MAX HEIGHT DIFFERENCE (m)		30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	3.10 / 2.09	3.60 / 2.43	3.60 / 2.43
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	4.10 / 2.77	5.00 / 3.38	5.00 / 3.38

[3] Three Phase

Accessories

Indoor Units

PLP-6EA
Grille for PLA-M35-140EA

PLP-6EAE
3D i-see sensor grille for PLA-M35-140EA

PLP-6EAJ
Self elevating grille for PLA-M35-140EA

PAC-SE1ME-E
Corner panel with i-see sensor for PLA-M35-140EA

PAR-SE9FA-E
Corner panel with signal receiver for PLA-M35-140EA

PAC-SJ37SP-E
Shutter plate for PLA-M35-140EA

PAC-SJ41TME
Multi-function casement for PLA-M35-140EA

PAC-SJ39HR-E
Power supply kit for PLA-M35-140EA

PAR-SL100A-E
Wireless remote controller for PLA-M35-140EA

Outdoor Units

PAC-SH96SG
Air outlet guide for PUZ-M100-140YAR1

System Control Units

PAC-SA89TA
Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA
Run/fault adaptor (5 wire adaptor)

PAC-SE41TS
Remote sensor

PAR-CT01MAA-SB/PB
Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA
Standard wired remote controller

MAC-567IF
Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI
Modbus and BACnet MSTP CN105 adaptor

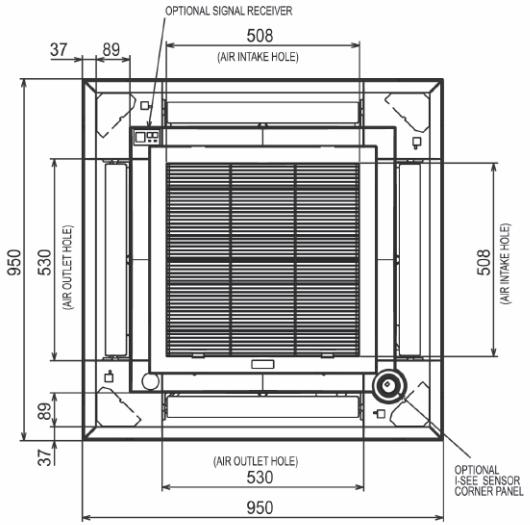
MELCORETAIL MINI
Retail control and input / output interface

PAC-SJ95MA
M-NET adaptor for size 100 to 140

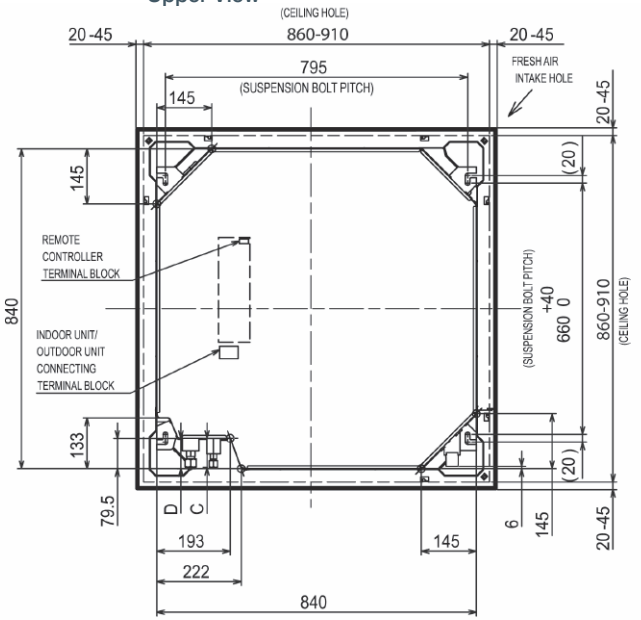
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PLA-M100/125/140EA

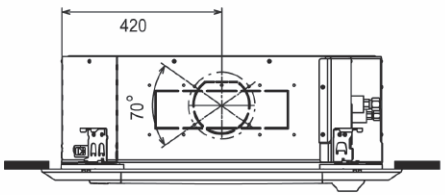
Lower View



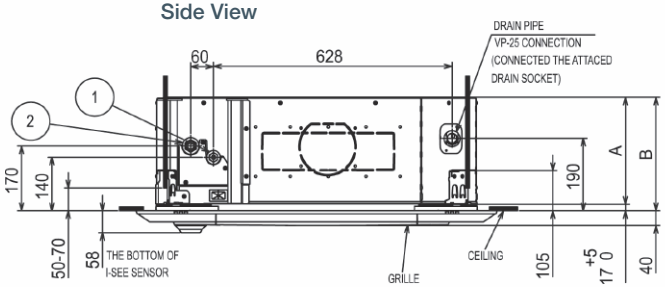
Upper View



Front View



Side View



PLA-M.EA*:100/125/140

M	①	②	A	B	C	D
100-140	REFRIGERANT PIPE Φ 9.52 FLARED CONNECTION 3/8F	REFRIGERANT PIPE Φ 15.88 FLARED CONNECTION 5/8F	281	298	79.5	79.5

PLA-SM R32
4-Way Blow Ceiling Cassette System

Inverter Heat Pump

Our **PLA-SM Inverter** range offers customers all the features and benefits of inverter technology whilst being cost effective.

Key Features

- Inverter cassette range only
- Single combination only
- Up to 40m pipe run
- Cost effective with the benefits and features of inverter technology
- **Filter lowering operation down to 4m** (optional PLP-6EAJ grille required)

R32









PLA-SM INDOOR UNITS	PLA-SM71EA	PLA-SM100EA	PLA-SM100EA	PLA-SM125EA	PLA-SM125EA	PLA-SM140EA	PLA-SM140EA
CAPACITY (kW) Heating (nominal)	8.0 (2.2-8.1)	11.2 (2.8-12.5)	11.2 (2.8-12.5)	13.5 (4.1-15.0)	13.5 (4.1-15.0)	15.0 (4.2-15.8)	15.0 (4.2-15.8)
Cooling (nominal)	7.1 (2.2-8.1)	9.5 (4.0-10.6)	9.5 (4.0-10.6)	12.1 (5.8-13.0)	12.1 (5.8-13.0)	13.4 (5.8-14.1)	13.4 (5.8-14.1)
Heating (UK)	6.80 (1.87-6.89)	9.63 (2.41-10.75)	9.63 (2.41-10.75)	11.61 (3.53-12.90)	11.61 (3.53-12.90)	12.90 (3.61-13.59)	12.90 (3.61-13.59)
Cooling (UK)	6.53 (2.03-7.45)	8.55 (3.60-11.25)	8.55 (3.60-11.25)	10.89 (5.22-11.70)	10.89 (5.22-11.70)	11.61 (5.22-12.69)	11.61 (5.22-12.69)
SHF (nominal)	0.75	0.77	0.77	0.73	0.73	0.70	0.70
COP / EER (nominal)	3.50 / 3.60	3.61 / 3.40	3.61 / 3.40	3.61 / 2.90	3.61 / 2.90	3.30 / 2.61	3.30 / 2.61
SCOP (ηsh) / SEER (ηsc) (BS EN14825)	3.90 / 6.00	4.50 / 6.00	4.50 / 6.00	3.9 (154.1%) / 5.5 (225.2%)	3.9 (154.1%) / 5.5 (225.2%)	3.9 (153.3%) / 5.5 (224.9%)	3.9 (153.3%) / 5.5 (224.9%)
ErP ENERGY EFFICIENCY CLASS Heating/Cooling	A / A+	A+ / A+	A+ / A+	A / A	A / A	A / A	A / A
AIRFLOW (l/s) Lo-Mi1-Mi2-Hi	233-283-317-350	317-383-433-483	317-383-433-483	350-417-467-517	350-417-467-517	400-433-483-533	400-433-483-533
PIPE SIZE mm (in) Gas/Liquid	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA) Lo-Mi1-Mi2-Hi	28-30-32-34	31-34-37-40	31-34-37-40	33-37-41-44	33-37-41-44	36-39-42-44	36-39-42-44
SOUND POWER LEVEL (dBA)	56	61	61	65	65	65	65
DIMENSIONS (mm) Width x Depth x Height (Grille)	840 (950) x 840 (950) x 258 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)	840 (950) x 840 (950) x 298 (40)
WEIGHT (kg) Unit / Panel	21 (5)	24 (5)	24 (5)	26 (5)	26 (5)	26 (5)	26 (5)
ELECTRICAL SUPPLY	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)	6	6	6	6	6	6	6
INTERCONNECTING CABLE No. Cores	4	4	4	4	4	4	4
GRILLE REFERENCE	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA
WIRED REMOTE CONTROLLER REFERENCE	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E	PAR-SL100A-E

SUZ-SM / PUZ-SM OUTDOOR UNITS	SUZ-SM71VA	PUZ-SM100VKA	PUZ-SM100YKA	PUZ-SM125VKA	PUZ-SM125YKA	PUZ-SM140VKA	PUZ-SM140YKA
SOUND PRESSURE LEVEL (dBA) Heating/Cooling	51 / 49	54 / 51	54 / 51	56 / 54	56 / 54	57 / 55	57 / 55
SOUND POWER LEVEL (dBA) Cooling	66	70	70	72	72	73	73
WEIGHT (kg)	55	76	78	84	85	84	85
DIMENSIONS (mm) Width x Depth x Height	840 x 330 x 880	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981
ELECTRICAL SUPPLY	220-240v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz
PHASE	Single	Single	Three	Single	Three	Single	Three
SYSTEM POWER INPUT (kW) Heating/Cooling (nominal)	2.28 / 1.97	3.10 / 2.79	3.10 / 2.79	3.73 / 4.17	3.73 / 4.17	4.54 / 5.13	4.54 / 5.13
Heating/Cooling (UK)	1.94 / 1.70	2.64 / 2.40	2.64 / 2.40	3.17 / 3.59	3.17 / 3.59	3.87 / 4.14	3.87 / 4.14
STARTING CURRENT (A)	9.7	13.4	4.8	17.4	6.3	22.3	8.1
SYSTEM RUNNING CURRENT (A) Heating/Cooling [MAX]	9.7 / 8.3 [14.8]	13.4 / 12.1 [20.0]	4.8 / 4.3 [11.5]	15.6 / 17.4 [26.5]	5.6 / 6.3 [11.5]	19.0 / 22.3 [30.0]	6.9 / 8.1 [11.5]
FUSE RATING (BS88) - HRC (A)	20	32	16	32	16	40	16
MAINS CABLE No. Cores	3	3	5	3	5	3	5
MAX PIPE LENGTH (m)	30	30	30	40	40	40	40
MAX HEIGHT DIFFERENCE (m)	30	30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R32 (GWP 675)	1.45 / 0.98 (7m)	3.10 / 2.09 (30m)	3.10 / 2.09 (30m)	3.60 / 2.43 (30m)	3.60 / 2.43 (30m)	3.60 / 2.43 (30m)	3.60 / 2.43 (30m)
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R32 (GWP 675)	2.37 / 1.80	N/A	3.50 / 2.36	4.00 / 2.70	4.00 / 2.70	4.00 / 2.70	4.00 / 2.70

Note: The PLP-6EAE 3D i-See sensor grille or PAC-SE1ME-E corner panel will NOT operate with this model.

Accessories

Indoor Units

PLP-6EA
Grille for PLA-SM71-140EA

PLP-6EAJ
Self elevating grille for PLA-SM71-140EA

PAR-SE9FA-E
Corner panel with signal receiver for PLA-SM71-140EA

PAC-SJ37SP-E
Shutter plate for PLA-SM71-140EA

PAC-SJ41TME
Multi-function casement for PLA-SM71-140EA

PAC-SJ39HR-E
Power supply kit for PLA-SM71-140EA

PAR-SL100A-E
Wireless remote controller for PLA-SM71-140EA

Outdoor Units

MAC-886SG
Air outlet guide for SUZ-SM71VA

PAC-SH96SG
Air outlet guide for PUZ-SM100-140VKA/YKA

System Control Units

PAC-SA89TA
Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA
Run/fault adaptor (5 wire adaptor)

PAC-SE41TS
Remote sensor

PAR-CT01MAA-SB/PB
Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA
Standard wired remote controller

MAC-567IF
Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI
Modbus and BACnet MSTP CN105 adaptor

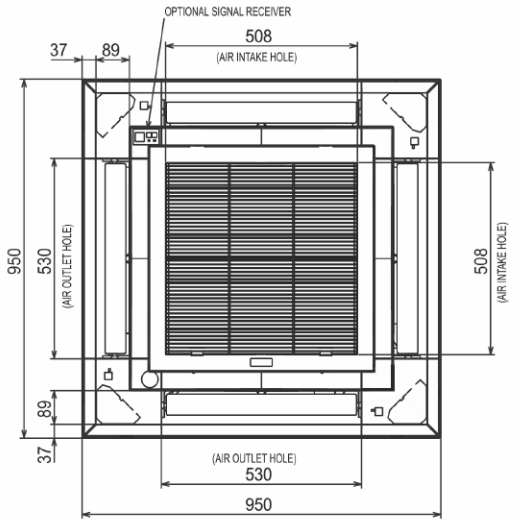
MELCORETAIL MINI
Retail control and input / output interface

PAC-SJ95MA
M-NET adaptor for size 100 to 140

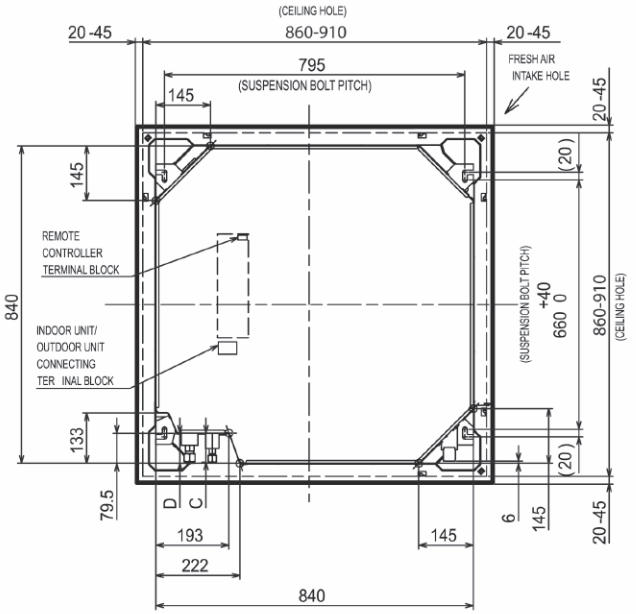
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PLA-SM71/100/125/140EA

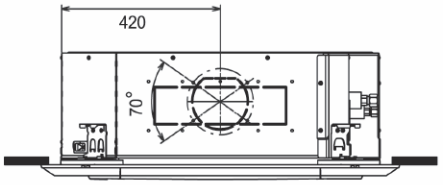
Lower View



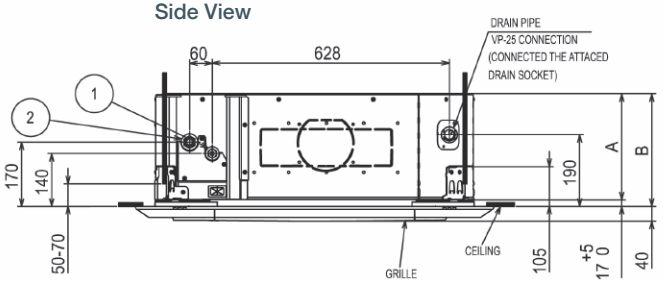
Upper View



Front View



Side View



PLA-SM71/100/125/140

SM	①	②	A	B	C	D
71	FLARED CONNECTION 3/8"REFRIGERANT PIPE Φ 9.52	REFRIGERANT PIPE Φ 15.88 FLARED CONNECTION 5/8"F	241	258	79.5	79.5
100-140			281	298		

SLZ-M R32
600x600 4-Way Blow Ceiling Cassette System

Standard Inverter Heat Pump
(Single Phase)

The **SLZ-M Standard Inverter** ceiling cassette unit provides the smart solution to comfortable and efficient air conditioning. It combines a stylish square design slimline grille with the latest energy-saving technologies and is designed to fit snugly in narrow ceilings, making it ideal in both offices and retail.

Key Features

- New Design - Fits into narrow ceiling spaces with height of only 245mm
- Optional 3D i-see sensor grille provides customised comfort by automatically monitoring room occupancy, position and body temperatures
- Horizontal Airflow - eliminating uncomfortable draughts and improving airflow control

R32











SLZ-M - INDOOR UNITS		SLZ-M15FA	SLZ-M25FA	SLZ-M35FA	SLZ-M50FA	SLZ-M60FA
CAPACITY (kW)	Heating (nominal)	1.7 (0.9-3.1)	3.2 (1.3-4.2)	4.0 (1.0-5.0)	5.0 (1.3-5.5)	6.4 (1.6-7.3)
	Cooling (nominal)	1.5 (0.9-2.4)	2.5 (1.4-3.2)	3.5 (0.7-3.9)	4.6 (1.0-5.2)	5.7 (1.5-6.3)
	Heating (UK)	-	2.72 (1.11-3.57)	3.40 (0.85-4.25)	4.25 (1.11-4.68)	5.44 (1.36-6.21)
	Cooling (UK)	-	2.30 (1.29-2.94)	3.22 (0.64-3.59)	4.42 (0.92-4.79)	5.25 (1.38-5.80)
SHF (nominal)		-	0.78	0.72	0.68	0.68
COP / EER (nominal)		-	3.61 / 3.80	3.71 / 3.20	3.20 / 3.40	3.00 / 3.40
SCOP / SEER (BS EN14825)		-	4.30 / 6.30	4.30 / 6.70	4.20 / 6.30	4.10 / 6.20
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	-	A+ / A++	A+ / A++	A+ / A++	A+ / A++
AIRFLOW (l/s)	Lo-Mi-Hi	100-108-117	108-125-142	108-133-158	117-150-192	125-192-217
PIPE SIZE mm (in)	Gas	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")	15.88 (5/8")
	Liquid	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	24-26-28	24-26-28	25-28-31	25-30-34	27-34-39
SOUND POWER LEVEL (dBA)		45	45	48	51	56
DIMENSIONS (mm)	Width x Depth x Height	570 (650) x 570 (650) x 245 (10)	570 (650) x 570 (650) x 245 (10)	570 (650) x 570 (650) x 245 (10)	570 (650) x 570 (650) x 245 (10)	570 (650) x 570 (650) x 245 (10)
WEIGHT (kg)	Unit / Grille	15 / 3	15 / 3	15 / 3	15 / 3	15 / 3
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6
INTERCONNECTING CABLE No. Cores		4	4	4	4	4
GRILLE REFERENCE		SLP-2FA	SLP-2FA	SLP-2FA	SLP-2FA	SLP-2FA
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA

Note: SLZ-M15FA only available with R32 MXZ Multi-Split outdoor units.

SUZ-M - OUTDOOR UNITS		N/A MULTI-SPLIT ONLY	SUZ-M25VAR2	SUZ-M35VAR2	SUZ-M50VAR2	SUZ-M60VAR2
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	-	45 / 46	48 / 48	48 / 49	49 / 51
SOUND POWER LEVEL (dBA)	Cooling	-	59	59	64	65
WEIGHT (kg)		-	30	35	41	54
DIMENSIONS (mm)	Width x Depth x Height	-	800 x 285 x 550	800 x 285 x 550	800 x 285 x 714	840 x 330 x 880
ELECTRICAL SUPPLY		-	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		-	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	-	0.88 / 0.65	1.07 / 1.09	1.56 / 1.35	2.13 / 1.67
	Heating/Cooling (UK)	-	0.75 / 0.56	0.91 / 0.94	1.33 / 1.16	1.81 / 1.44
STARTING CURRENT (A)		-	3.7	5.0	8.0	9.3
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	-	3.7 / 3.0 [6.8]	5.0 / 4.1 [8.5]	8.0 / 7.1 [13.5]	9.3 / 8.4 [14.9]
FUSE RATING (BS88) - HRC (A)		-	10	10	20	20
MAINS CABLE No. Cores		-	3	3	3	3
MAX PIPE LENGTH (m)		-	20	20	30	30
MAX HEIGHT DIFFERENCE (m)		-	12	12	30	30
CHARGE REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	-	0.65 / 0.44	0.90 / 0.61	1.20 / 0.81	1.25 / 0.84
MAX ADDITIONAL REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	-	0.91 / 0.61	1.16 / 0.78	1.66 / 1.12	1.71 / 1.15

Accessories

Indoor Units

SLP-2FA

Grille for SLZ-M15-60FA

SLP-2FAE

3D i-see sensor grille for SLZ-M15-60FA

Outdoor Units

MAC-889SG

Air outlet guide for SUZ-M25-35VAR2

MAC-882SG

Air outlet guide for SUZ-M50VAR2

MAC-886SG

Air outlet guide for SUZ-M60VAR2

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-334IF

Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output

MAC-397IF

Interface for MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run or fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

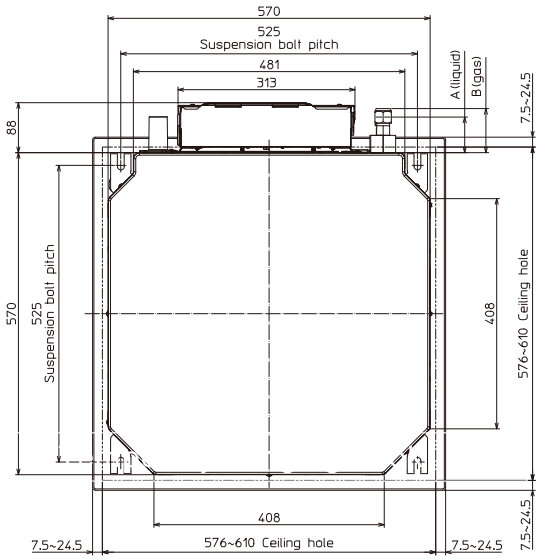
MELCORETAIL MINI

Retail control and input / output interface

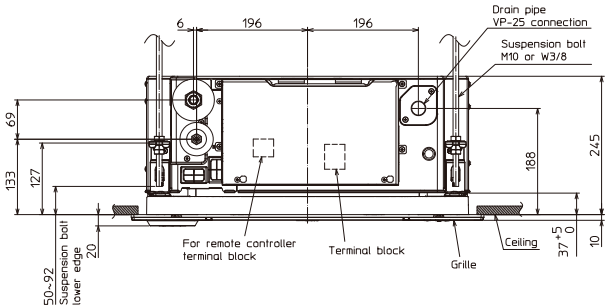
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions SLZ-M15/25/35/50/60FA

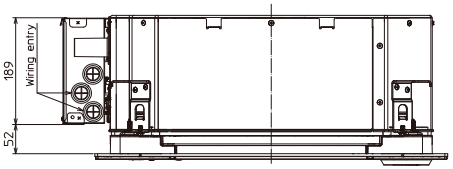
Upper View



Side View



Front View



PKA-M R32 Wall Mounted System

Power Inverter Heat Pump















POWER INVERTER

The **PKA-M Power Inverter** range is a wall mounted system that blends a host of outstanding features with a sophisticated, streamlined design. Offering high seasonal efficiency, advanced control options and extended pipe runs, this range is extremely flexible.

Key Features

- Improved airflow control, including adjustable louvres for uniform air distribution
- Internal pipe connection to wall mounted unit for easy and neat installation
- CN22 connector as standard for connection to PAR-40MAA hard wired controller
- Full heating capacity down to -3°C
- 100m pipe run (Size 100)
- Replace Technology available

R32

PKA-M - INDOOR UNITS		PKA-M35HA	PKA-M50HA	PKA-M60KA	PKA-M71KA	PKA-M100KA	PKA-M100KA
CAPACITY (kW)	Heating (nominal)	4.1 (1.6-5.2)	5.0 (2.5-7.3)	7.0 (2.8-8.2)	8.0 (3.5-10.2)	11.2 (4.5-14.0)	11.2 (4.5-14.0)
	Cooling (nominal)	3.6 (1.6-4.5)	4.6 (2.3-5.6)	6.1 (2.7-6.7)	7.1 (3.3-8.1)	9.5 (4.9-11.4)	9.5 (4.9-11.4)
	Heating (UK)	3.5 (1.35-4.4)	4.25 (2.15-6.2)	5.95 (2.4-6.95)	6.8 (3.0-8.65)	9.5 (3.85-11.9)	9.5 (3.85-11.9)
	Cooling (UK)	3.3 (1.45-4.15)	4.23 (2.1-5.15)	5.5 (2.5-6.15)	6.55 (3.05-7.45)	9.2 (4.5-10.5)	9.2 (4.5-10.5)
SHF (nominal)		0.81	0.72	0.86	0.78	0.73	0.73
COP / EER (nominal)		3.94 / 4.14	3.71 / 3.71	4.04 / 3.91	3.78 / 3.81	3.61 / 3.95	3.61 / 3.95
SCOP / SEER (BS EN14825)		4.0 / 6.3	4.1 / 6.4	4.2 / 6.8	4.3 / 6.8	4.4/ 6.5	4.4 / 6.4
ERP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A++	A+ / A++	A+ / A++	A+ / A++	A+ / A++	A+ / A++
AIRFLOW (l/s)	Lo-Mi-Hi	150-175-200	150-175-200	300-333-367	300-333-367	333-383-433	333-383-433
PIPE SIZE MM (in)	Gas	12.7 (1/2")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	36-40-43	36-40-43	39-42-45	39-42-45	41-45-49	41-45-49
SOUND POWER LEVEL (dBA)		60	60	64	64	65	65
DIMENSIONS (mm)	Width x Depth x Height	898 x 249 x 295	898 x 249 x 295	1170 x 295 x 365	1170 x 295 x 365	1170 x 295 x 365	1170 x 295 x 365
WEIGHT (kg)		13	13	21	21	21	21
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6
INTERCONNECTING CABLE NO. CORES		4	4	4	4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-FL32MA	PAR-FL32MA	PAR-FL32MA	PAR-FL32MA	PAR-FL32MA	PAR-FL32MA

PUZ-ZM - OUTDOOR UNITS		PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHAR1	PUZ-ZM100VKAR1	PUZ-ZM100YKAR1 [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	46 / 44	46 / 44	49 / 47	49 / 47	51 / 49	51 / 49
SOUND POWER LEVEL (dBA)	Cooling	65	65	67	67	69	69
WEIGHT (kg)		46	46	70	70	116	123
DIMENSIONS (mm)	Width x Depth x Height	809 x 300 x 630	809 x 300 x 630	950 x 330 + 25 x 943	950 x 330 + 25 x 943	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	380-415v, 50Hz
PHASE		Single	Single	Single	Single	Single	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	1.040 / 0.869	1.347 / 1.239	1.732 / 1.560	2.116 / 1.863	3.102 / 2.405	3.102 / 2.405
	Heating/Cooling (UK)	0.81 / 0.84	1.12 / 1.12	1.25 / 1.65	1.54 / 1.92	2.47 / 2.06	2.47 / 2.06
STARTING CURRENT (A)		5.0	5.0	6.0	6.0	13.0	6.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	4.97 / 4.31 [13.4]	5.98 / 5.57 [13.4]	7.41 / 6.65 [19.4]	9.10 / 7.96 [19.4]	13.46 / 10.45 [27.1]	4.49 / 5.45 [8.6]
FUSE RATING (BS88) - HRC (A)		16	16	25	25	32	16
MAINS CABLE NO. CORES		3	3	3	3	3	5
MAX PIPE LENGTH (m)		50	50	55	55	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) - 30m	2.0 / 1.35	2.00 / 1.35	2.80 / 1.89	2.80 / 1.89	4.00 / 2.70	4.00 / 2.70
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	0.30 / 0.20	0.30 / 0.20	0.80 / 0.54	0.80 / 0.54	2.80 / 1.89	2.80 / 1.89

[3] Three Phase

Accessories

Indoor Units

PAR-FL32MA

Wireless remote controller for PKA-M35-100HA/KA

Outdoor Units

PAC-SJ07SG

Air outlet guide for PUZ-ZM35-50VKA

PAC-SG59SG

Air outlet guide for PUZ-ZM60VHA / PUZ-ZM71VHAR1

PAC-SH96SG

Air outlet guide for PUZ-ZM100VKAR1/YKAR1

PAC-SJ71FM-E

30Pa outdoor fan motor for PUZ-ZM100VKAR1/YKAR1

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

PAC-SJ96MA

M-NET adaptor for size 35 and 50

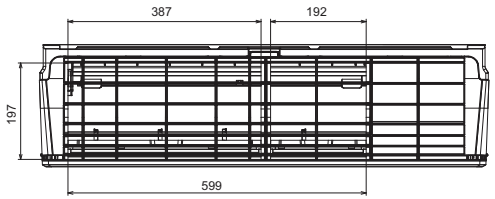
PAC-SJ95MA

M-NET adaptor for size 60 to 100

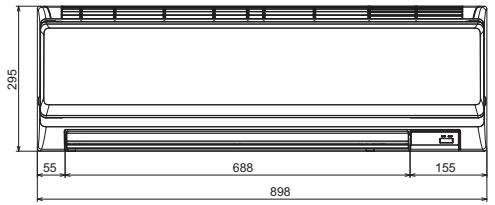
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PKA-M35/50HA

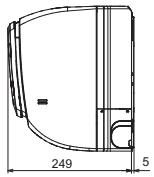
Upper View



Front View

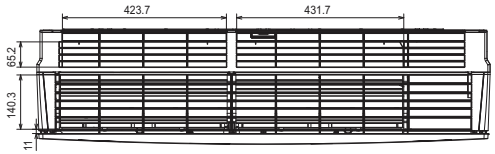


Side View

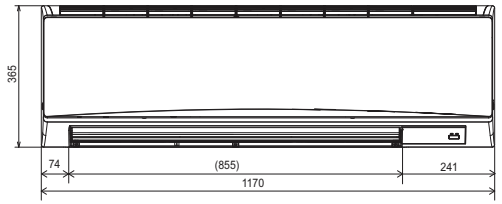


Product Dimensions PKA-M60/71/100KA

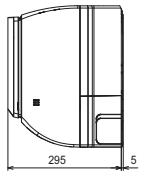
Upper View



Front View



Side View



PKA-M R32 Wall Mounted System

Standard Inverter Heat Pump

The **PKA-M Standard Inverter** range is a wall mounted system that blends a host of outstanding features with a sophisticated, streamlined design. Offering advanced control options and quiet operation, this range provides extreme flexibility and ease of installation whilst being cost effective.

Key Features

- Improved airflow control, including adjustable louvres for uniform air distribution
- Internal pipe connection to wall mounted unit for easy and neat installation
- CN22 connector as standard for connection to PAR-40MAA hard wired controller
- Replace Technology available







PKA-M - INDOOR UNITS		**PKA-M100KA**	**PKA-M100KA**
CAPACITY (kW)	Heating (nominal)	11.2 (2.8-12.5)	11.2 (2.8-12.5)
	Cooling (nominal)	9.5 (4.0-10.6)	9.5 (4.0-10.6)
	Heating (UK)	9.63 (2.41-10.75)	9.63 (2.41 - 10.75)
	Cooling (UK)	8.65 (3.64-9.65)	8.65 (3.64 - 9.65)
SHF (nominal)		0.73	0.73
COP / EER (nominal)		3.41 / 3.23	3.41 / 3.23
SCOP / SEER (BS EN14825)		4.00 / 5.80	4.00 / 5.80
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A+	A+ / A+
AIRFLOW (l/s)	Lo-Mi-Hi	333-383-433	333-383-433
PIPE SIZE mm (in)	Gas	15.88 (5/8")	15.88 (5/8")
	Liquid	9.52 (3/8")	9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	41-45-49	41-45-49
SOUND POWER LEVEL (dBA)		65	65
DIMENSIONS (mm)	Width x Depth x Height	1170 x 295 x 365	1170 x 295 x 365
WEIGHT (kg)		21	21
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6
INTERCONNECTING CABLE No. Cores		4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-FL32MA	PAR-FL32MA

PUZ-M - OUTDOOR UNITS		**PUZ-M100VAR1**	**PUZ-M100YAR1** [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	51 / 54	51 / 54
SOUND POWER LEVEL (dBA)	Cooling	70	70
WEIGHT (kg)		76	78
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330 x 981	1050 x 330 x 981
ELECTRICAL SUPPLY		220-240v, 50Hz	380-415v, 50Hz
PHASE		Single	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	3.28 / 2.94	3.28 / 2.94
	Heating/Cooling (UK)	2.95 / 2.44	2.95 / 2.44
STARTING CURRENT (A)		14.2	5.1
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	14.2 / 12.7 [20]	5.1 / 4.6 [11.5]
FUSE RATING (BS88) - HRC (A)		32	16
MAINS CABLE No. Cores		3	5
MAX PIPE LENGTH (m)		55	55
MAX HEIGHT DIFFERENCE (m)		30	30
CHARGE REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	3.10 / 2.09	3.10 / 2.09
MAX ADDITIONAL REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	4.10 / 2.77	4.10 / 2.77

[3] Three Phase

Accessories

Indoor Units

PAR-FL32MA

Wireless remote controller for PKA-M100KA

Outdoor Units

PAC-SH96SG

Air outlet guide for PUZ-M100VAR1/YAR1

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

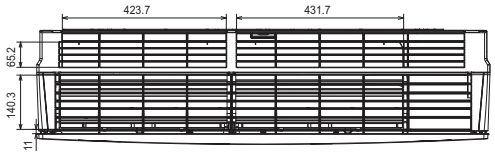
PAC-SJ95MA

M-NET adaptor for size 100

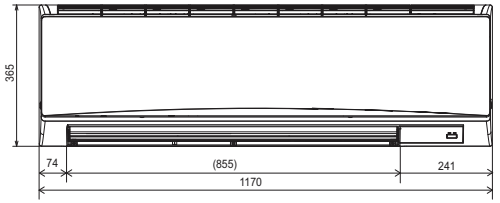
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PKA-M100KA

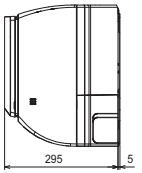
Upper View



Front View



Side View



PEAD-M R32 Ceiling Concealed Ducted System

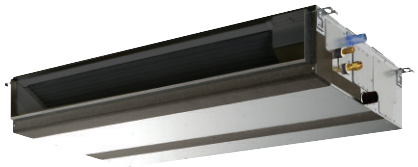
Power Inverter Heat Pump
(Single Phase)

The **PEAD-M Power Inverter** range is a ceiling concealed ducted system that blends a host of outstanding features with an unobtrusive design for easy installation and maintenance. Offering high seasonal efficiency, advanced control options and extended pipe runs, this range is extremely flexible.

Key Features

- Entire range only 250mm in height
- Wider range of external static pressure settings
- Drain pump included as standard
- Full heating capacity down to -3°C
- 100m pipe run (Size 100-140)
- Replace Technology available

R32











POWER INVERTER

PEAD-M - INDOOR UNITS		PEAD-M35JA	PEAD-M50JA	PEAD-M60JA	PEAD-M71JA	PEAD-M100JA	PEAD-M125JA	PEAD-M140JA
CAPACITY (kW)	Heating (nominal)	4.1 (1.6-5.2)	6.0 (2.5-7.3)	7.0 (2.8-8.2)	8.0 (3.5-10.2)	11.2 (4.5-14.0)	14.0 (5.0-16.0)	16.0 (5.7-18.0)
	Cooling (nominal)	3.6 (1.6-4.5)	5.0 (2.3-5.6)	6.1 (2.7-6.7)	7.1 (3.3-8.1)	9.5 (4.9-11.4)	12.5 (5.5-14.0)	13.4 (6.2-15.3)
	Heating (UK)	3.5 (1.35-4.4)	5.1 (2.15-6.2)	5.95 (2.4-6.95)	6.8 (3.0-8.65)	9.5 (3.85-11.9)	11.9 (4.25-13.6)	13.6 (4.85-15.3)
	Cooling (UK)	3.3 (1.45-4.15)	4.6 (2.1-5.15)	5.5 (2.5-6.15)	6.55 (3.05-7.45)	9.2 (4.5-10.5)	11.5 (5.05-12.9)	12.9 (5.7-14.1)
SHF (nominal)		0.85	0.84	0.83	0.83	0.82	0.84	0.84
COP / EER (nominal)		4.47 / 4.30	4.57 / 4.16	4.33 / 4.04	4.14 / 3.82	4.31 / 4.18	4.18 / 3.75	4.03 / 3.69
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		3.9 / 5.8	4.3 / 6.2	4.0 / 6.1	3.9 / 5.8	4.1 / 6.2	3.9 (153.2%) / 5.8 (235.8%)	4.0 (157.4%) / 5.7 (231.1%)
ERP ENERGY EFFICIENCY CLASS	Heating/Cooling	A / A+	A+ / A++	A+ / A++	A / A+	A+ / A++	-	-
AIRFLOW (l/s)	Lo-Mi-Hi	167-200-233	200-242-283	242-300-350	292-350-417	400-483-567	492-592-700	533-650-767
PIPE SIZE MM (in)	Gas	12.7 (1/2")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
EXTERNAL STATIC PRESSURE (Pa)		35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	23-27-30	26-31-35	25-29-33	26-30-34	29-34-38	33-36-40	34-38-43
SOUND POWER LEVEL (dBA)		54	59	55	58	62	66	67
DIMENSIONS (mm)	Width x Depth x Height	900 x 732 x 250	900 x 732 x 250	1100 x 732 x 250	1100 x 732 x 250	1400 x 732 x 250	1400 x 732 x 250	1600 x 732 x 250
WEIGHT (kg)		26	27	30	30	39	40	44
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6
INTERCONNECTING CABLE NO. CORES		4	4	4	4	4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA

PUZ-ZM - OUTDOOR UNITS		PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHAR1	PUZ-ZM100VKAR1	PUZ-ZM125VKAR2	PUZ-ZM140VKAR2
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	46 / 44	46 / 44	49 / 47	49 / 47	51 / 49	52 / 50	52 / 50
SOUND POWER LEVEL (dBA)	Cooling	65	65	67	67	69	70	70
WEIGHT (kg)		46	46	70	70	116	116	118
DIMENSIONS (mm)	Width x Depth x Height	809 x 300 x 630	809 x 300 x 630	950 x 330 + 25 x 943	950 x 330 + 25 x 943	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	0.917 / 0.837	1.312 / 1.201	1.616 / 1.509	1.932 / 1.858	2.598 / 2.272	3.349 / 3.333	3.970 / 3.631
	Heating/Cooling (UK)	0.76 / 0.76	1.11 / 1.06	1.32 / 1.39	1.7 / 1.59	2.07 / 1.95	2.68 / 2.86	3.16 / 3.11
STARTING CURRENT (A)		5.0	5.0	6.0	6.0	13.0	13.0	13.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	4.17 / 3.89 [4.1]	5.55 / 5.07 [14.4]	6.68 / 6.16 [20.5]	7.85 / 7.45 [21]	10.54 / 9.07 [29.2]	13.21/ 13.10 [29.3]	15.74 / 14.21 [30.8]
FUSE RATING (BS88) - HRC (A)		16	16	25	25	32	32	40
MAINS CABLE NO. CORES		3	3	3	3	3	3	3
MAX PIPE LENGTH (m)		50	50	55	55	100	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) - 30m	2.0 / 1.35	2.00 / 1.35	2.80 / 1.89	2.80 / 1.89	4.00 / 2.70	4.00 / 2.70	4.00 / 2.70
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	0.30 / 0.20	0.30 / 0.20	0.80 / 0.54	0.80 / 0.54	2.80 / 1.89	2.80 / 1.89	2.80 / 1.89

Accessories

Outdoor Units

PAC-SJ07SG

Air outlet guide for PUZ-ZM35-50VKA

PAC-SG59SG

Air outlet guide for PUZ-ZM60VHA / PUZ-ZM71VHAR1

PAC-SH96SG

Air outlet guide for PUZ-ZM100VKAR1 / PUZ-ZM125-140VKAR2

PAC-SJ71FM-E

30Pa outdoor fan motor for PUZ-ZM100VKAR1 / PUZ-ZM125-140VKAR2

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

PAC-SJ96MA

M-NET adaptor for size 35 and 50

PAC-SJ95MA

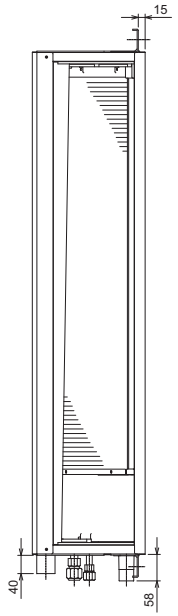
M-NET adaptor for size 60 to 140

Note: Please see page 1.3.62 for the full range of accessories.

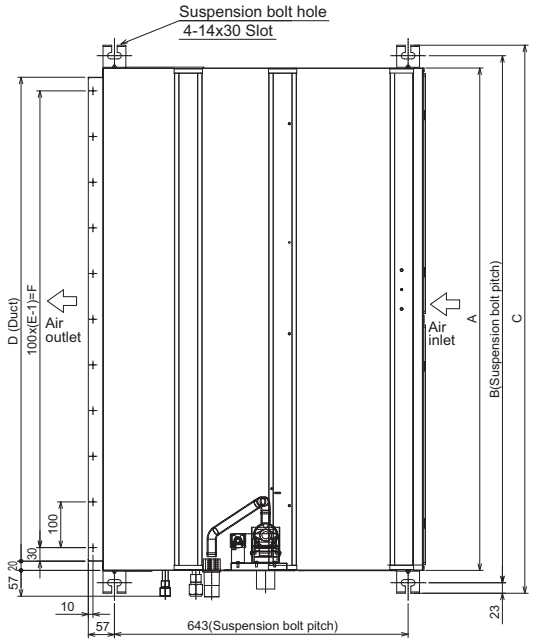
Product Dimensions

PEAD-M35/50/60/71/100/125/140JA

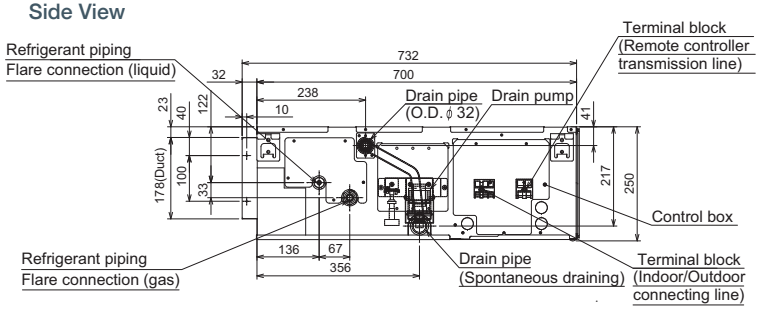
Front View



Upper View



Side View



Model	A	B	C	D	E	F
PEAD-M35,50JA	900	954	1000	860	9	800
PEAD-M60,71JA	1100	1154	1200	1060	11	1000
PEAD-M100,125JA	1400	1454	1500	1360	14	1300
PEAD-M140JA	1600	1654	1700	1560	16	1500

PEAD-M R32 Ceiling Concealed Ducted System

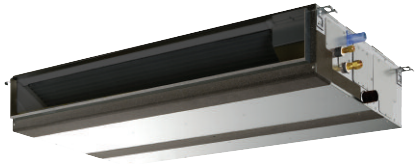
Power Inverter Heat Pump
(Three Phase)

The **PEAD-M Power Inverter** range is a ceiling concealed ducted system that blends a host of outstanding features with an unobtrusive design for easy installation and maintenance. Offering high seasonal efficiency, advanced control options and extended pipe runs, this range is extremely flexible.

Key Features

- Entire range only 250mm in height
- Wider range of external static pressure settings
- Drain pump included as standard
- Full heating capacity down to -3°C
- 100m pipe run
- Replace Technology available

R32







POWER INVERTER

PEAD-M - INDOOR UNITS		PEAD-M100JA	PEAD-M125JA	PEAD-M140JA
CAPACITY (kW)	Heating (nominal)	11.2 (4.5-14.0)	14.0 (5.0-16.0)	16.0 (5.7-18.0)
	Cooling (nominal)	9.5 (4.9-11.4)	12.5 (5.5-14.0)	13.4 (6.2-15.3)
	Heating (UK)	9.5 (3.85-11.9)	11.9 (4.25-13.6)	13.6 (4.85-15.3)
	Cooling (UK)	9.2 (4.5-10.5)	11.5 (5.05-12.9)	12.9 (5.7-14.1)
SHF (nominal)		0.82	0.84	0.84
COP / EER (nominal)		4.31 / 4.18	4.18 / 3.75	4.03 / 3.69
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.1 / 6.1	3.9 (153.2%) / 5.7 (234.5%)	4.0 (157.4%) / 5.6 (229.9%)
ERP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A++	-	-
AIRFLOW (l/s)	Lo-Mi-Hi	400-483-567	492-592-700	533-650-767
PIPE SIZE MM (in)	Gas	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
EXTERNAL STATIC PRESSURE (Pa)		35-50-70-100-150	35-50-70-100-150	35-50-70-100-150
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	29-34-38	33-36-40	34-38-43
SOUND POWER LEVEL (dBA)		62	66	67
DIMENSIONS (mm)	Width x Depth x Height	1400 x 732 x 250	1400 x 732 x 250	1600 x 732 x 250
WEIGHT (kg)		39	40	44
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6
INTERCONNECTING CABLE NO. CORES		4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA

PUZ-ZM - OUTDOOR UNITS		PUZ-ZM100YKAR1 [3]	PUZ-ZM125YKAR2 [3]	PUZ-ZM140YKAR2 [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	51 / 49	52 / 50	52 / 50
SOUND POWER LEVEL (dBA)	Cooling	69	70	70
WEIGHT (kg)		123	125	131
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		380-415v,50Hz	380-415v,50Hz	380-415v,50Hz
PHASE		Three	Three	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	2.598 / 2.272	3.349 / 3.333	3.970 / 3.631
	Heating/Cooling (UK)	2.07 / 1.95	2.68 / 2.86	3.16 / 3.11
STARTING CURRENT (A)		6.0	6.0	6.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	3.51 / 3.01 [10.7]	4.45 / 4.41 [12.3]	5.58 / 4.87 [15.8]
FUSE RATING (BS88) - HRC (A)		16	16	16
MAINS CABLE NO. CORES		5	5	5
MAX PIPE LENGTH (m)		100	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) - 30m	4.00 / 2.70	4.00 / 2.70	4.00 / 2.70
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	2.80 / 1.89	2.80 / 1.89	2.80 / 1.89

[3] Three Phase

Accessories

Outdoor Units

PAC-SH96SG

Air outlet guide for PUZ-ZM100YKAR1 / PUZ-ZM125-140YKAR2

PAC-SJ71FM-E

30Pa outdoor fan motor for PUZ-ZM100YKAR1 / PUZ-ZM125-140YKAR2

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

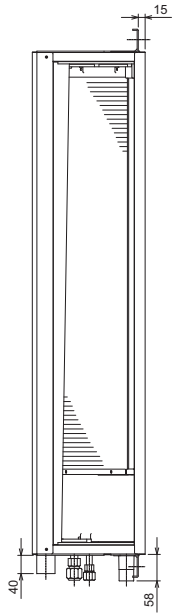
PAC-SJ95MA

M-NET adaptor for size 100 to 140

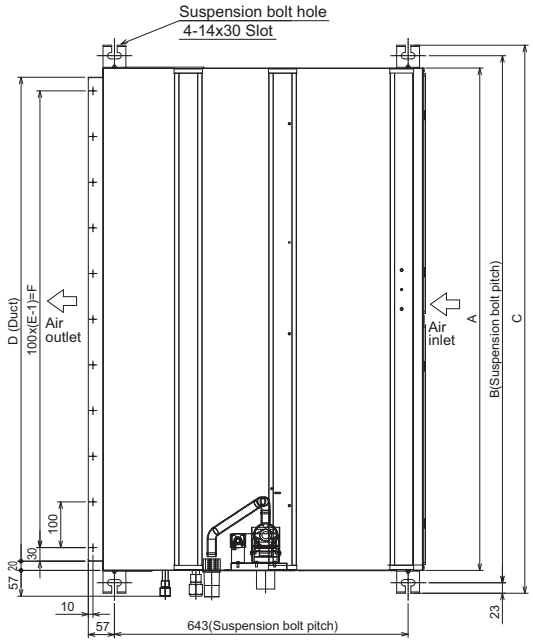
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PEAD-M100/125/140JA

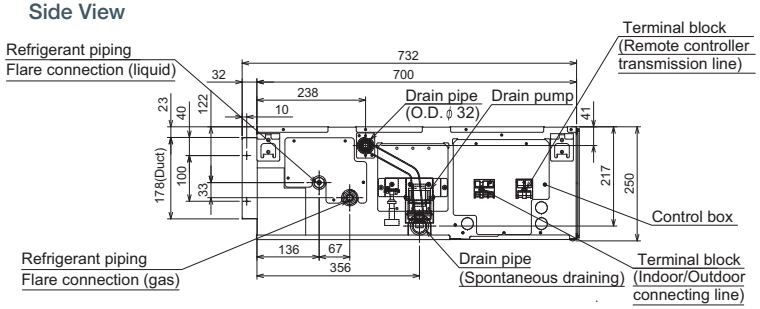
Front View



Upper View



Side View



Model	A	B	C	D	E	F
PEAD-M100,125JA	1400	1454	1500	1360	14	1300
PEAD-M140JA	1600	1654	1700	1560	16	1500

PEAD-M R32 Ceiling Concealed Ducted System

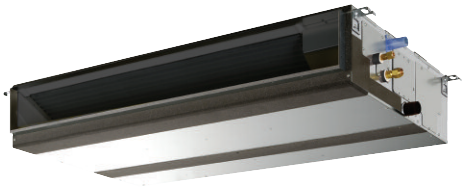
Standard Inverter Heat Pump
(Single Phase)

The **PEAD-M Standard Inverter** range is a ceiling concealed ducted system that blends a host of outstanding features with an unobtrusive design for easy installation and maintenance. Offering advanced control options and quiet operation, this range provides extreme flexibility and ease of installation whilst being cost effective.

Key Features

- Entire range only 250mm in height
- Wider range of external static pressure settings
- Drain pump included as standard
- Replace Technology available
- Single fan chassis across entire outdoor unit range

R32













PEAD-M - INDOOR UNITS		PEAD-M35JA	PEAD-M50JA	PEAD-M60JA	PEAD-M71JA	PEAD-M100JA	PEAD-M125JA	PEAD-M140JA
CAPACITY (kW)	Heating (nominal)	4.1 (1.1-5.0)	6.0 (1.5-7.2)	7.0 (1.6-8.0)	8.0 (2.0-10.2)	11.2 (2.8-12.5)	13.5 (4.1-15.0)	15.0 (4.2-15.8)
	Cooling (nominal)	3.6 (0.8-3.9)	5.0 (1.7-5.6)	6.1 (1.6-6.3)	7.1 (2.2-8.1)	9.5 (4.0-10.6)	12.1 (6.0-13.0)	13.4 (6.1-14.1)
	Heating (UK)	3.49 (0.94-4.25)	5.10 (1.28-6.12)	5.96 (1.36-6.8)	6.80 (1.70-8.67)	9.63 (2.41-10.75)	11.61 (3.53-12.90)	12.90 (3.61-13.59)
	Cooling (UK)	3.31 (0.74-3.59)	4.60 (1.56-5.15)	5.16 (1.47-5.80)	6.53 (2.02-7.45)	8.65 (3.64-9.65)	11.01 (5.46-11.83)	12.19 (5.55-12.83)
SHF (nominal)		0.85	0.84	0.83	0.83	0.82	0.84	0.84
COP / EER (nominal)		4.00 / 3.90	4.10 / 3.70	3.80 / 3.60	3.71 / 3.50	3.80 / 3.30	3.61 / 3.01	3.61 / 2.81
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		3.90 / 5.80	4.20 / 6.10	4.00 / 6.00	3.90 / 5.80	4.00 / 5.40	3.8 (152.7%) / 4.7 (193.1%)	3.7 (145.4%) / 4.7 (192.6%)
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A / A+	A+ / A++	A+ / A+	A / A+	A+ / A	A / B	A / B
AIRFLOW (l/s)	Lo-Mi-Hi	167-200-233	200-242-283	242-300-350	292-350-417	400-483-567	492-592-700	533-650-767
PIPE SIZE mm (in)	Gas	9.52 (3/8")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
EXTERNAL STATIC PRESSURE (Pa)		35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	23-27-30	26-31-35	25-29-33	26-30-34	29-34-38	33-36-40	34-38-43
SOUND POWER LEVEL (dBA)		54	59	55	58	62	66	67
DIMENSIONS (mm)	Width x Depth x Height	900 x 732 x 250	900 x 732 x 250	1100 x 732 x 250	1100 x 732 x 250	1400 x 732 x 250	1400 x 732 x 250	1600 x 732 x 250
WEIGHT (kg)		26	27	30	30	39	40	44
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6
INTERCONNECTING CABLE No. Cores		4	4	4	4	4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA

SUZ-M / PUZ-M - OUTDOOR UNITS		SUZ-M35VAR2	SUZ-M50VAR2	SUZ-M60VAR2	SUZ-M71VAR1	PUZ-M100VAR1	PUZ-M125VAR1	PUZ-M140VAR1
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	48 / 48	48 / 49	49 / 51	49 / 51	51 / 54	54 / 56	55 / 57
SOUND POWER LEVEL (dBA)	Cooling	59	64	65	66	70	72	73
WEIGHT (kg)		35	41	54	56	76	84	84
DIMENSIONS (mm)	Width x Depth x Height	800 x 285 x 550	800 x 285 x 714	840 x 330 x 880	840 x 330 x 880	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	1.02 / 0.92	1.46 / 1.35	1.84 / 1.69	2.15 / 2.02	2.94 / 2.87	3.73 / 4.01	4.15 / 4.76
	Heating/Cooling (UK)	0.87 / 0.79	1.26 / 1.16	1.56 / 1.45	1.83 / 1.73	2.65 / 2.38	3.36 / 3.33	3.74 / 3.95
STARTING CURRENT (A)		5.0	8.0	9.3	9.5	12.0	16.2	19.3
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	5.0 / 4.1 [8.5]	8.0 / 7.1 [13.5]	9.3 / 8.4 [14.8]	9.5 / 9.1 [14.8]	12.0 / 11.6 [20.0]	15.0 / 16.2 [26.5]	16.8 / 19.3 [30.0]
FUSE RATING (BS88) - HRC (A)		10	20	20	20	32	32	40
MAINS CABLE No. Cores		3	3	3	3	3	3	3
MAX PIPE LENGTH (m)		20	30	30	30	55	65	65
MAX HEIGHT DIFFERENCE (m)		12	30	30	30	30	30	30
CHARGE REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	0.90 / 0.61 (7m)	1.20 / 0.81 (7m)	1.25 / 0.84 (7m)	1.45 / 0.98 (7m)	3.10 / 2.09 (30m)	3.60 / 2.43 (30m)	3.60 / 2.43 (30m)
MAX ADDITIONAL REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	1.16 / 0.78	1.66 / 1.12	1.71 / 1.15	2.37 / 1.80	4.10 / 2.77	5.00 / 3.38	5.00 / 3.38

Note: No duty/standby operation on SUZ-M35/50/60/71VAR2/1.

Accessories

Outdoor Units

MAC-889SG

Air outlet guide for SUZ-M35VAR2

MAC-882SG

Air outlet guide for SUZ-M50VAR2

MAC-886SG

Air outlet guide for SUZ-M60VAR2 / SUZ-M71VAR1

PAC-SH96SG

Air outlet guide for PUZ-M100-140VAR1

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-334IF

Interface for M-NET, MA remote controller
(PAR-40MAA / PAR-CT01MAA),
on/off input and run/fault output

MAC-397IF

Interface for MA remote controller
(PAR-40MAA / PAR-CT01MAA),
on/off input and run or fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

PAC-SJ95MA

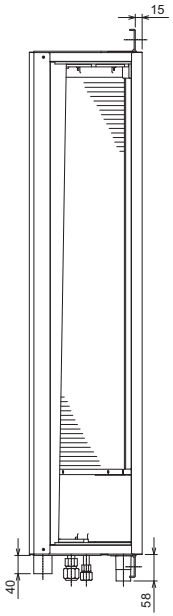
M-NET adaptor for size 100 to 140

Note: Please see page 1.3.62 for the full range of accessories.

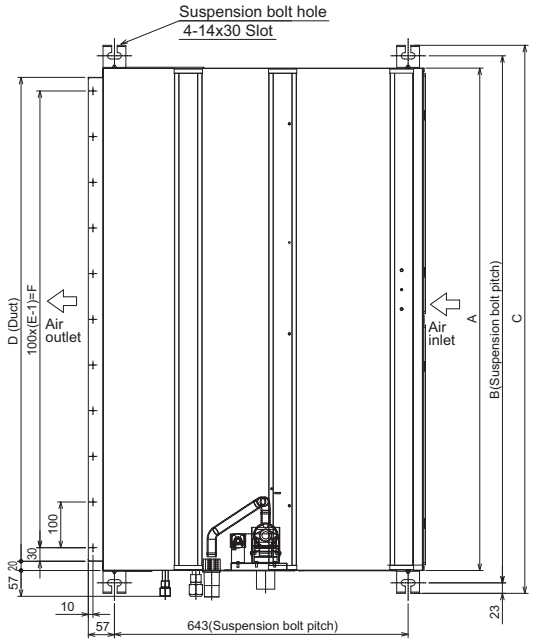
Product Dimensions

PEAD-M35/50/60/71/100/125/140JA

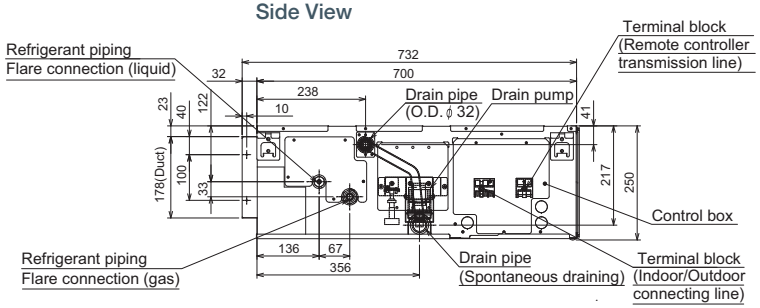
Front View



Upper View



Side View



Model	A	B	C	D	E	F
PEAD-M35,50JA	900	954	1000	860	9	800
PEAD-M60,71JA	1100	1154	1200	1060	11	1000
PEAD-M100,125JA	1400	1454	1500	1360	14	1300
PEAD-M140JA	1600	1654	1700	1560	16	1500

PEAD-M R32 Ceiling Concealed Ducted System

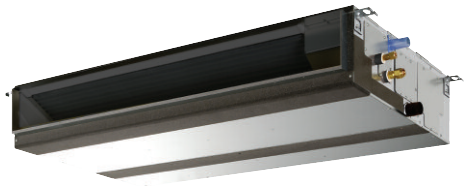
Standard Inverter Heat Pump
(Three Phase)

The **PEAD-M Standard Inverter** range is a ceiling concealed ducted system that blends a host of outstanding features with an unobtrusive design for easy installation and maintenance. Offering advanced control options and quiet operation, this range provides extreme flexibility and ease of installation whilst being cost effective.

Key Features

- Entire range only 250mm in height
- Wider range of external static pressure settings
- Drain pump included as standard
- Replace Technology available
- Single fan chassis across entire outdoor unit range

R32







PEAD-M - INDOOR UNITS		**PEAD-M100JA**	**PEAD-M125JA**	**PEAD-M140JA**
CAPACITY (kW)	Heating (nominal)	11.2 (2.8-12.5)	13.5 (4.1-15.0)	15.0 (4.2-15.8)
	Cooling (nominal)	9.5 (4.0-10.6)	12.1 (6.0-13.0)	13.4 (6.1-14.1)
	Heating (UK)	9.63 (2.41-10.75)	11.61 (3.53-12.90)	12.90 (3.61-13.59)
	Cooling (UK)	8.65 (3.64-9.65)	11.01 (5.46-11.83)	12.19 (5.55-12.83)
SHF (nominal)		0.82	0.84	0.84
COP / EER (nominal)		3.80 / 3.30	3.61 / 3.01	3.61 / 2.81
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.00 / 5.40	3.8 (152.7%) / 4.7 (193.1%)	3.7 (145.4%) / 4.7 (192.6%)
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A	A / B	A / B
AIRFLOW (l/s)	Lo-Mi-Hi	400-483-567	492-592-700	533-650-767
PIPE SIZE mm (in)	Gas	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
EXTERNAL STATIC PRESSURE (Pa)		35-50-70-100-150	35-50-70-100-150	35-50-70-100-150
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	29-34-38	33-36-40	34-38-43
SOUND POWER LEVEL (dBA)		62	66	67
DIMENSIONS (mm)	Width x Depth x Height	1400 x 732 x 250	1400 x 732 x 250	1600 x 732 x 250
WEIGHT (kg)		39	40	44
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6
INTERCONNECTING CABLE No. Cores		4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA

PUZ-M - OUTDOOR UNITS		**PUZ-M100YAR1** [3]	**PUZ-M125YAR1** [3]	**PUZ-M140YAR1** [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	51 / 54	54 / 56	55 / 57
SOUND POWER LEVEL (dBA)	Cooling	70	72	73
WEIGHT (kg)		78	85	85
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	2.94 / 2.87	3.73 / 4.01	4.15 / 4.76
	Heating/Cooling (UK)	2.65 / 2.38	3.36 / 3.33	3.74 / 3.95
STARTING CURRENT (A)		4.3	5.8	7.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	4.3 / 4.2 [11.5]	5.4 / 5.8 [11.5]	6.0 / 7.0 [11.5]
FUSE RATING (BS88) - HRC (A)		16	16	16
MAINS CABLE No. Cores		3	3	3
MAX PIPE LENGTH (m)		55	65	65
MAX HEIGHT DIFFERENCE (m)		30	30	30
CHARGE REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	3.10 / 2.09	3.60 / 2.43	3.60 / 2.43
MAX ADDITIONAL REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	4.10 / 2.77	5.00 / 3.38	5.00 / 3.38

[3] Three Phase

Accessories

Outdoor Units

PAC-SH96SG

Air outlet guide for PUZ-M100-140YAR1

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

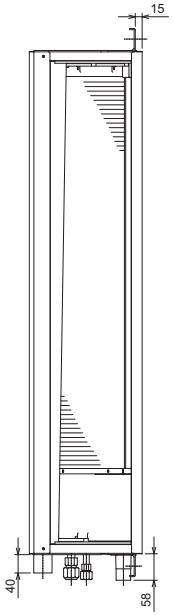
PAC-SJ95MA

M-NET adaptor for size 100 to 140

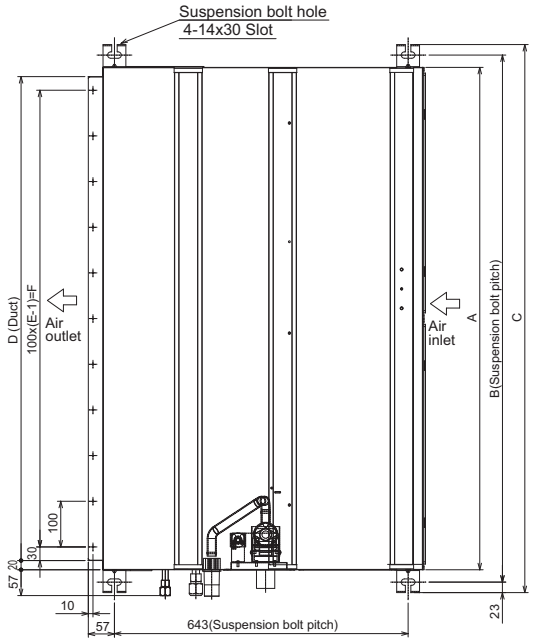
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PEAD-M100/125/140JA

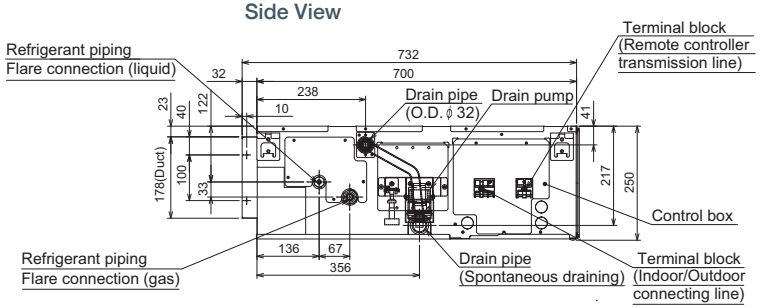
Front View



Upper View



Side View



Model	A	B	C	D	E	F
PEAD-M100,125JA	1400	1454	1500	1360	14	1300
PEAD-M140JA	1600	1654	1700	1560	16	1500

SEZ-M R32 Ceiling Concealed Ducted System

Standard Inverter Heat Pump
(Single Phase)

Designed for offices, restaurants and shops, the **SEZ-M** series operates at low noise levels. Its low unit height and lightweight design also help to make installation easier and more convenient.

Key Features

- Compact ceiling concealed ducted unit with an unobtrusive design
- Low Static Pressure Level - resulting in noise reduction
- Low Unit Height - minimal intrusion into occupied space

R32











SEZ-M - INDOOR UNITS		SEZ-M25DA	SEZ-M35DA	SEZ-M50DA	SEZ-M60DA	SEZ-M71DA
CAPACITY (kW)	Heating (nominal)	2.9 (1.3-4.2)	4.2 (1.1-5.0)	6.0 (1.5-7.2)	7.4 (1.6-8.0)	8.0 (2.0-10.2)
	Cooling (nominal)	2.5 (1.4-3.2)	3.5 (0.7-3.9)	5.0 (1.1-5.6)	6.1 (1.6-6.3)	7.1 (2.2-8.1)
	Heating (UK)	2.47 (1.11-3.57)	3.57 (0.94-4.25)	5.10 (1.28-6.12)	6.29 (1.36-6.80)	6.80 (1.70-8.67)
	Cooling (UK)	2.30 (1.29-2.94)	3.22 (0.64-3.59)	4.60 (1.01-5.15)	5.61 (1.47-5.80)	6.53 (2.02-7.45)
SHF (nominal)		0.78	0.76	0.76	0.79	0.74
COP / EER (nominal)		3.61 / 3.50	3.90 / 3.50	3.71 / 3.23	3.61 / 3.30	3.50 / 3.30
SCOP / SEER (BS EN14825)		3.80 / 5.30	4.10 / 5.90	4.00 / 6.00	4.20 / 5.50	3.90 / 5.50
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A / A	A+ / A+	A+ / A+	A+ / A	A / A
AIRFLOW (l/s)	Lo-Mi-Hi	100-117-150	117-150-183	167-217-250	200-250-300	200-267-333
PIPE SIZE mm (in)	Gas	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")
	Liquid	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")
EXTERNAL STATIC PRESSURE (Pa)		5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	22-25-29	23-28-33	29-33-36	29-33-37	29-34-39
SOUND POWER LEVEL (dBA)		50	53	57	58	60
DIMENSIONS (mm)	Width x Depth x Height	790 x 700 x 200	990 x 700 x 200	990 x 700 x 200	1190 x 700 x 200	1190 x 700 x 200
WEIGHT (kg)		18	21	23	27	27
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6
INTERCONNECTING CABLE No. Cores		4	4	4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA

SUZ-M - OUTDOOR UNITS		SUZ-M25VAR2	SUZ-M35VAR2	SUZ-M50VAR2	SUZ-M60VAR2	SUZ-M71VAR1
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	45 / 46	48 / 48	48 / 49	49 / 51	49 / 51
SOUND POWER LEVEL (dBA)	Heating/Cooling	59	59	64	65	66
WEIGHT (kg)		30	35	41	54	55
DIMENSIONS (mm)	Width x Depth x Height	800 x 285 x 550	800 x 285 x 550	800 x 285 x 714	840 x 330 x 880	840 x 330 x 880
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	0.80 / 0.71	1.07 / 1.00	1.61 / 1.54	2.04 / 1.84	2.28 / 2.15
	Heating/Cooling (UK)	0.68 / 0.61	0.91 / 0.86	1.37 / 1.32	1.73 / 1.58	1.94 / 1.85
STARTING CURRENT (A)		3.7	5.0	8.0	9.3	9.5
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	3.7 / 3.0 [6.8]	5.0 / 4.1 [8.5]	8.0 / 7.1 [13.5]	9.3 / 8.4 [14.8]	9.5 / 9.1 [14.8]
FUSE RATING (BS88) - HRC (A)		10	10	20	20	20
MAINS CABLE No. Cores		3	3	3	3	3
MAX PIPE LENGTH (m)		20	20	30	30	30
MAX HEIGHT DIFFERENCE (m)		12	12	30	30	30
CHARGE REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	0.65 / 0.44	0.90 / 0.61	1.20 / 0.81	1.25 / 0.84	1.45 / 0.98
MAX ADDITIONAL REFRIGERANT (KG) / CO_2EQUIVALENT (T)	R32 (GWP 675)	0.91 / 0.61	1.16 / 0.78	1.66 / 1.12	1.71 / 1.15	2.37 / 1.60

Accessories

Outdoor Units

MAC-889SG

Air outlet guide for SUZ-M25-35VAR2

MAC-882SG

Air outlet guide for SUZ-M50VAR2

MAC-886SG

Air outlet guide for SUZ-M60VAR2 / SUZ-M71VAR1

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

PAR-334IF

Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output

MAC-397IF

Interface for MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run or fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

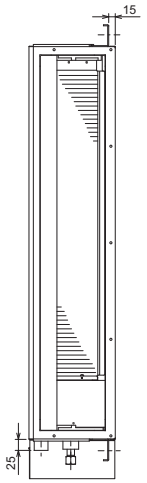
MELCORETAIL MINI

Retail control and input / output interface

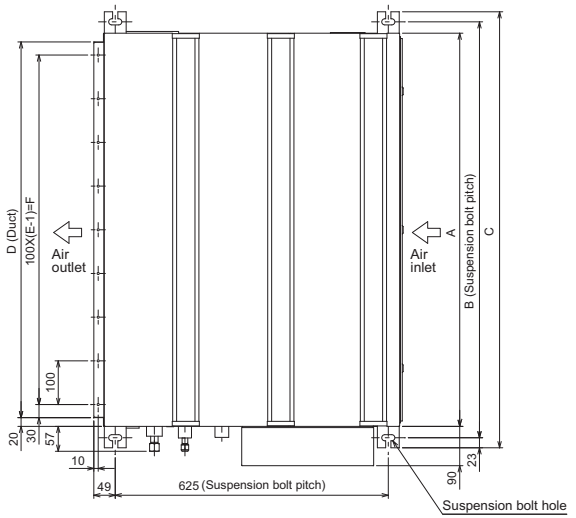
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions SEZ-M25/35/50/60/71DA

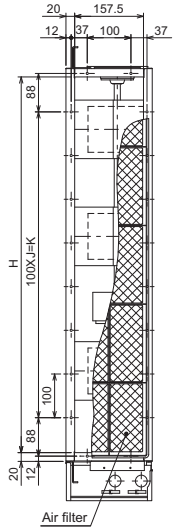
Front View



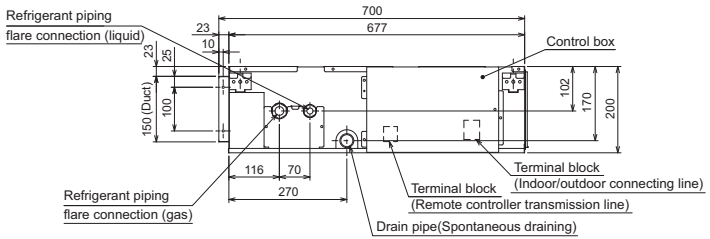
Upper View



Back View



Side View



Model	A	B	C	D	E	F	G	H	J	K	L
SEZ-M25DA	700	752	798	660	7	600	800	660	5	500	16
SEZ-M35DA	900	952	998	860	9	800	1000	860	7	700	20
SEZ-M50DA											
SEZ-M60DA	1100	1152	1198	1060	11	1000	1200	1060	9	900	24
SEZ-M71DA											

PCA-M R32 Ceiling Suspended System

Power Inverter Heat Pump
(Single Phase)

The **PCA-M Power Inverter** range is a ceiling suspended system that blends a host of outstanding features with a sophisticated streamlined design. Offering high seasonal efficiency, advanced control options and extended pipe runs, this range is extremely flexible.

Key Features

- Flush to wall installation for concealment of service connections
- High / Low ceiling height modes
- Improved airflow control, including automatic air speed adjustment for greater comfort
- Full heating capacity down to -3°C
- 100m pipe run (Size 100-140)
- Replace Technology available

R32













POWER INVERTER

PCA-M - INDOOR UNITS		PCA-M50KA	PCA-M60KA	PCA-M71KA	PCA-M100KA	PCA-M125KA	PCA-M140KA
CAPACITY (kW)	Heating (nominal)	5.5 (2.5-6.6)	7.0 (2.8-8.2)	8.0 (3.5-10.2)	11.2 (4.5-14.0)	14.0 (5.0-16.0)	16.0 (5.7-18.0)
	Cooling (nominal)	5.0 (2.3-5.6)	6.1 (2.7-6.7)	7.1 (3.3-8.1)	9.5 (4.9-11.4)	12.5 (5.5-14.0)	13.4 (6.2-15.0)
	Heating (UK)	4.7 (2.15-5.6)	5.95 (2.4-6.95)	6.8 (3.0-8.65)	9.5 (3.85-11.9)	11.9 (4.25-13.6)	13.6 (4.85-15.3)
	Cooling (UK)	4.6 (2.1-5.15)	5.5 (2.5-6.15)	6.55 (3.05-7.45)	9.2 (4.5-10.5)	11.5 (5.05-12.9)	12.9 (5.7-13.8)
SHF (nominal)		0.79	0.81	0.76	0.77	0.72	0.72
COP / EER (nominal)		4.04 / 4.00	4.01 / 4.01	3.71 / 3.88	3.71 / 4.10	3.54 / 3.25	3.61 / 3.40
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.2 / 6.7	4.1 / 6.5	4.2 / 6.7	4.3 / 6.4	4.3 (168.8%) / 6.2 (251.0%)	4.4 (173.5%) / 6.2 (248.9%)
ERP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A++	A+ / A++	A+ / A++	A+ / A++	-	-
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	167-183-217-250	250-267-283-317	267-283-300-333	367-400-433-467	383-417-450-483	400-433-483-533
PIPE SIZE MM (in)	Gas/Liquid	12.7 (1/2") / 6.35 (1/4")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	32-34-37-40	33-35-37-40	35-37-39-41	37-39-41-43	39-41-43-45	41-43-45-48
SOUND POWER LEVEL (dBA)		60	60	62	63	65	68
DIMENSIONS (mm)	Width x Depth x Height	960 x 680 x 230	1280 x 680 x 230	1280 x 680 x 230	1600 x 680 x 230	1600 x 680 x 230	1600 x 680 x 230
WEIGHT (kg)		26	32	32	37	38	40
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6
INTERCONNECTING CABLE	No. Cores	4	4	4	4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-SL94B	PAR-SL94B	PAR-SL94B	PAR-SL94B	PAR-SL94B	PAR-SL94B

PUZ-ZM - OUTDOOR UNITS		PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHAR1	PUZ-ZM100VKAR1	PUZ-ZM125VKAR2	PUZ-ZM140VKAR2
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	46 / 44	49 / 47	49 / 47	51 / 49	52 / 50	52 / 50
SOUND POWER LEVEL (dBA)	Cooling	65	67	67	69	70	70
WEIGHT (kg)		46	70	70	116	116	118
DIMENSIONS (mm)	Width x Depth x Height	809 x 300 x 630	950 x 330 + 25 x 943	950 x 330 + 25 x 943	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	1.361 / 1.25	1.745 / 1.521	2.156 / 1.829	3.018 / 2.317	3.954 / 3.846	4.432 / 3.941
	Heating/Cooling (UK)	1.21 / 1.06	1.55 / 1.29	1.92 / 1.55	2.41 / 1.99	3.51 / 3.26	3.94 / 3.35
STARTING CURRENT (A)		5.0	6.0	6.0	13.0	13.0	13.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	5.95 / 5.37 [13.4]	7.43 / 6.48 [19.4]	9.23 / 7.81 [19.4]	12.97 / 9.97 [27.2]	16.87/ 16.46 [27.3]	18.76 / 16.66 [28.9]
FUSE RATING (BS88) - HRC (A)		16	25	25	32	32	40
MAINS CABLE NO. CORES		3	3	3	3	3	3
MAX PIPE LENGTH (m)		50	55	55	100	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) - 30m	2.00 / 1.35	2.80 / 1.89	2.80 / 1.89	4.00 / 2.70	4.00 / 2.70	4.00 / 2.70
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	0.30 / 0.20	0.80 / 0.54	0.80 / 0.54	2.80 / 1.89	2.80 / 1.89	2.80 / 1.89

Accessories

Indoor Units

PAR-SL94B

Wireless remote controller and adaptor for PCA-M50-140KA

Outdoor Units

PAC-SJ07SG

Air outlet guide for PUZ-ZM50VKA

PAC-SG59SG

Air outlet guide for PUZ-ZM60VHA / PUZ-ZM71VHAR1

PAC-SH96SG

Air outlet guide for PUZ-ZM100VKAR1 / PUZ-ZM125-140VKAR2

PAC-SJ71FM-E

30Pa outdoor fan motor for PUZ-ZM100VKAR1 / PUZ-ZM125-140VKAR2

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

PAC-SJ96MA

M-NET adaptor for size 50

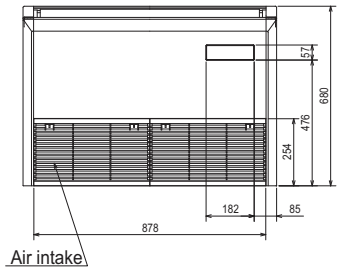
PAC-SJ95MA

M-NET adaptor for size 60 to 140

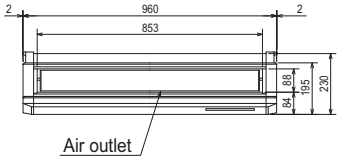
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PCA-M50KA

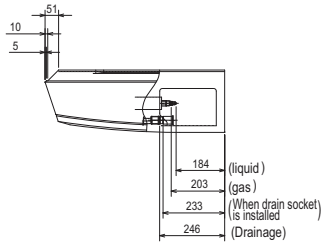
Lower View



Front View

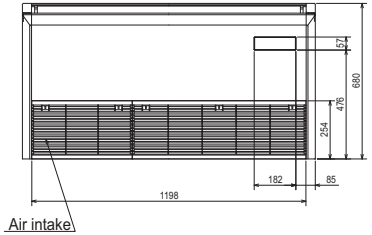


Side View

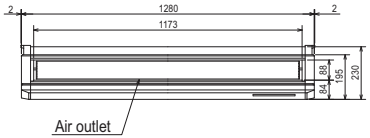


Product Dimensions PCA-M60/71KA

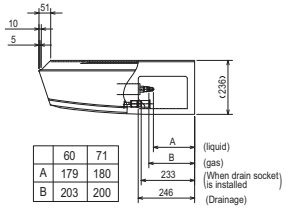
Lower View



Front View



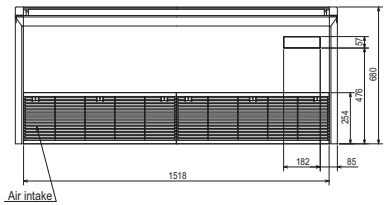
Side View



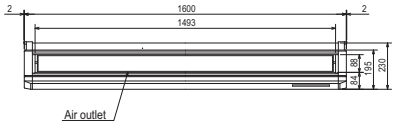
	60	71
A	179	180
B	203	200

Product Dimensions PCA-M100/125/140KA

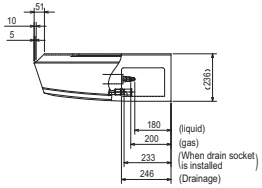
Lower View



Front View



Side View



PCA-M R32 Ceiling Suspended System

Power Inverter Heat Pump
(Three Phase)

The **PCA-M Power Inverter** range is a ceiling suspended system that blends a host of outstanding features with a sophisticated streamlined design. Offering high seasonal efficiency, advanced control options and extended pipe runs, this range is extremely flexible.

Key Features

- Flush to wall installation for concealment of service connections
- High / Low ceiling height modes
- Improved airflow control, including automatic air speed adjustment for greater comfort
- Full heating capacity down to -3°C
- 100m pipe run
- Replace Technology available









PCA-M - INDOOR UNITS		PCA-M100KA	PCA-M125KA	PCA-M140KA
CAPACITY (kW)	Heating (nominal)	11.2 (4.5-14.0)	14.0 (5.0-16.0)	16.0 (5.7-18.0)
	Cooling (nominal)	9.5 (4.9-11.4)	12.5 (5.5-14.0)	13.4 (6.2-15.0)
	Heating (UK)	9.5 (3.85-11.9)	11.9 (4.25-13.6)	13.6 (4.85-15.3)
	Cooling (UK)	9.2 (4.5-10.5)	11.5 (5.05-12.9)	12.9 (5.7-13.8)
SHF (nominal)		0.77	0.72	0.72
COP / EER (nominal)		3.71 / 4.10	3.54 / 3.25	3.61 / 3.40
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.3 / 6.3	4.3 (168.8%) / 6.1 (249.5%)	4.4 (173.5%) / 6.1 (247.6%)
ERP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+/ A++	-	-
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	367-400-433-467	383-417-450-483	400-433-483-533
PIPE SIZE MM (in)	Gas/Liquid	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	37-39-41-43	39-41-43-45	41-43-45-48
SOUND POWER LEVEL (dBA)		63	65	68
DIMENSIONS (mm)	Width x Depth x Height	1600 x 680 x 230	1600 x 680 x 230	1600 x 680 x 230
WEIGHT (kg)		37	38	40
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6
INTERCONNECTING CABLE	No. Cores	4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-SL94B	PAR-SL94B	PAR-SL94B

PUZ-ZM - OUTDOOR UNITS		PUZ-ZM100YKAR1 [3]	PUZ-ZM125YKAR2 [3]	PUZ-ZM140YKAR2 [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	51 / 49	52 / 50	52 / 50
SOUND POWER LEVEL (dBA)	Cooling	69	70	70
WEIGHT (kg)		123	125	131
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		380-415v,50Hz	380-415v,50Hz	380-415v,50Hz
PHASE		Three	Three	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	3.018 / 2.317	3.954/ 3.846	4.432 / 3.941
	Heating/Cooling (UK)	2.41 / 1.99	3.51 / 3.26	3.94 / 3.35
STARTING CURRENT (A)		6.0	6.0	6.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	4.34 / 3.31 [8.7]	5.69 / 5.54 [10.3]	6.42 / 5.71 [13.9]
FUSE RATING (BS88) - HRC (A)		16	16	16
MAINS CABLE NO. CORES		5	5	5
MAX PIPE LENGTH (m)		100	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) - 30m	4.00 / 2.70	4.00 / 2.70	4.00 / 2.70
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	2.80 / 1.89	2.80 / 1.89	2.80 / 1.89

[3] Three Phase

Accessories

Indoor Units

PAR-SL94B

Wireless remote controller and adaptor for PCA-M100-140KA

Outdoor Units

PAC-SH96SG

Air outlet guide for PUZ-ZM100YKAR1 / PUZ-ZM125-140YKAR2

PAC-SJ71FM-E

30Pa outdoor fan motor for PUZ-ZM100YKAR1 / PUZ-ZM125-140YKAR2

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

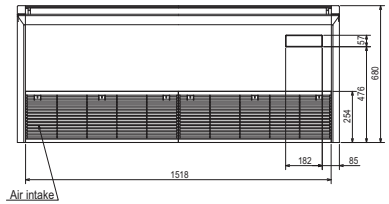
PAC-SJ95MA

M-NET adaptor for size 100 to 140

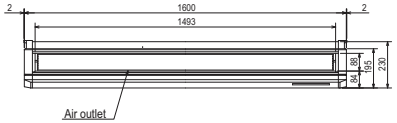
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PCA-M100/125/140KA

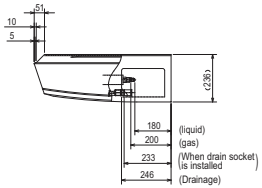
Lower View



Front View



Side View



PCA-M R32 Ceiling Suspended System

Standard Inverter Heat Pump
(Single Phase)

The **PCA-M Standard Inverter** range is a ceiling suspended system that blends a host of outstanding features with a sophisticated streamlined design. Offering advanced control options and quiet operation, this range provides extreme flexibility and ease of installation whilst being cost effective.

Key Features

- Flush to wall installation for concealment of service connections
- High / Low ceiling height modes
- Improved airflow control, including automatic air speed adjustment for greater comfort
- Replace Technology available
- Single fan chassis across entire outdoor unit range

R32











PCA-M - INDOOR UNITS		PCA-M50KA	PCA-M60KA	PCA-M71KA	PCA-M100KA	PCA-M125KA	PCA-M140KA
CAPACITY (kW)	Heating (nominal)	6.0 (1.5-7.2)	7.0 (1.6-8.0)	8.0 (2.0-10.2)	11.2 (2.8-12.5)	13.5 (4.1-15.0)	15.0 (4.2-15.8)
	Cooling (nominal)	5.0 (1.5-5.6)	6.1 (1.6-6.3)	7.1 (2.2-8.1)	9.5 (4.0-10.6)	12.1 (5.7-13.0)	13.4 (5.7-14.1)
	Heating (UK)	5.10 (1.28-6.12)	5.95 (1.36-6.80)	6.80 (1.70-8.67)	9.63 (2.41-10.75)	11.61 (3.53-12.90)	12.90 (3.61-13.59)
	Cooling (UK)	4.60 (1.38-5.15)	5.61 (1.47-5.80)	6.53 (1.56-7.45)	8.65 (3.64-9.65)	11.01 (5.19-11.83)	12.19 (5.19-12.83)
SHF (nominal)		0.79	0.81	0.76	0.77	0.72	0.72
COP / EER (nominal)		3.71 / 3.30	4.00 / 3.70	3.61 / 3.60	3.41 / 3.23	3.41 / 3.01	3.50 / 2.50
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.10 / 6.00	4.10 / 6.40	4.10 / 6.50	4.10 / 6.00	4.1 (162.7%) / 5.2 (213%)	4.0 (158.7%) / 5.1 (208%)
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A+	A+ / A++	A+ / A++	A+ / A+	A+ / A	A+ / A
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	167-183-217-250	250-267-283-317	267-283-300-333	367-400-433-467	383-417-450-483	400-433-483-533
PIPE SIZE mm (in)	Gas/Liquid	12.7 (1/2") / 6.35 (1/4")	15.88 (5/8") / 6.35 (1/4")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	32-34-37-40	33-35-37-40	35-37-39-41	37-39-41-43	39-41-43-45	41-43-45-48
SOUND POWER LEVEL (dBA)		60	60	62	63	65	68
DIMENSIONS (mm)	Width x Depth x Height	960 x 680 x 230	1280 x 680 x 230	1280 x 680 x 230	1600 x 680 x 230	1600 x 680 x 230	1600 x 680 x 230
WEIGHT (kg)		26	32	32	37	38	40
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6
INTERCONNECTING CABLE No. Cores		4	4	4	4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-SL94B	PAR-SL94B	PAR-SL94B	PAR-SL94B	PAR-SL94B	PAR-SL94B

SUZ-M / PUZ-M - OUTDOOR UNITS		SUZ-M50VAR2	SUZ-M60VAR2	SUZ-M71VAR1	PUZ-M100VAR1	PUZ-M125VAR1	PUZ-M140VAR1
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	48 / 49	49 / 51	49 / 51	51 / 54	54 / 56	55 / 57
SOUND POWER LEVEL (dBA	Cooling	64	65	66	70	72	73
WEIGHT (kg)		41	54	55	76	84	84
DIMENSIONS (mm)	Width x Depth x Height	800 x 285 x 714	840 x 330 x 880	840 x 330 x 880	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	1.61 / 1.51	1.75 / 1.64	2.21 / 1.97	3.28 / 2.94	3.95 / 4.01	4.28 / 5.36
	Heating/Cooling (UK)	1.37 / 1.30	1.49 / 1.41	1.88 / 1.69	2.95 / 2.44	3.56 / 3.33	3.85 / 4.45
STARTING CURRENT (A)		8.0	9.3	9.5	14.2	17.3	23.2
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	8.0 / 7.1 [13.5]	9.3 / 8.4 [14.8]	9.5 / 9.1 [14.8]	14.2 / 12.6 [20.0]	17.0 / 17.3 [26.5]	18.4 / 23.2 [30.0]
FUSE RATING (BS88) - HRC (A)		20	20	20	32	32	40
MAINS CABLE No. Cores		3	3	3	3	3	3
MAX PIPE LENGTH (m)		30	30	30	55	65	65
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30
CHARGE REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	1.20 / 0.81 (7m)	1.25 / 0.84 (7m)	1.45 / 0.98 (7m)	3.10 / 2.09 (30m)	3.60 / 2.43 (30m)	3.60 / 2.43 (30m)
MAX ADDITIONAL REFRIGERANT (KG) / CO_2EQUIVALENT (T)	R32 (GWP 675)	1.66 / 1.12	1.71 / 1.15	2.37 / 1.80	4.10 / 2.77	5.00 / 3.38	5.00 / 3.38

Note: Duty/standby not available on SUZ-M50/60/71VAR2/1.

Accessories

Indoor Units

PAR-SL94B

Wireless remote controller and adaptor for PCA-M100-140KA

Outdoor Units

MAC-882SG

Air outlet guide for SUZ-M50VAR2

MAC-886SG

Air outlet guide for SUZ-M60VAR2 / SUZ-M71VAR1

PAC-SH96SG

Air outlet guide for PUZ-M100-140VAR1

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-334IF

Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output

MAC-397IF

Interface for MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run or fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

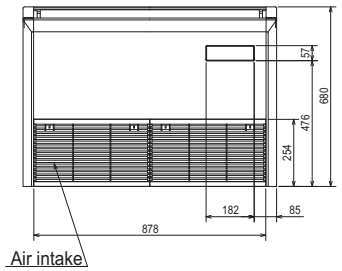
PAC-SJ95MA

M-NET adaptor for size 100 to 140

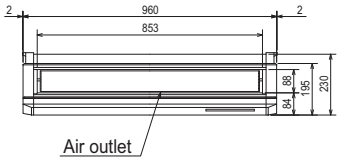
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PCA-M50KA

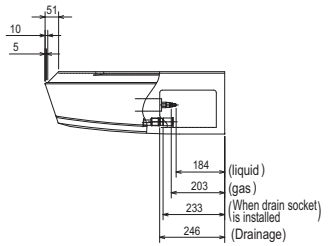
Lower View



Front View

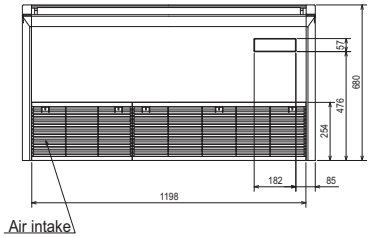


Side View

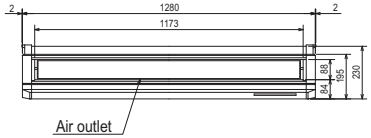


Product Dimensions PCA-M60/71KA

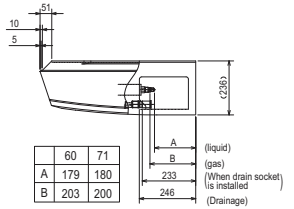
Lower View



Front View



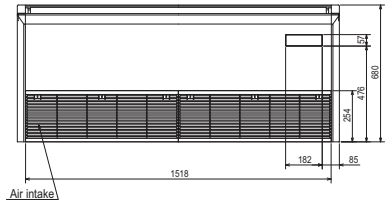
Side View



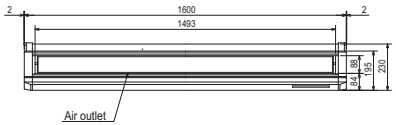
	60	71
A	179	180
B	203	200

Product Dimensions PCA-M100/125/140KA

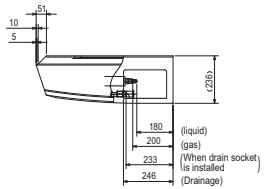
Lower View



Front View



Side View



PCA-M R32 Ceiling Suspended System

Standard Inverter Heat Pump
(Three Phase)

The **PCA-M Standard Inverter** range is a ceiling suspended system that blends a host of outstanding features with a sophisticated streamlined design. Offering advanced control options and quiet operation, this range provides extreme flexibility and ease of installation whilst being cost effective.

Key Features

- Flush to wall installation for concealment of service connections
- High / Low ceiling height modes
- Improved airflow control, including automatic air speed adjustment for greater comfort
- Replace Technology available
- Single fan chassis across entire outdoor unit range







PCA-M - INDOOR UNITS		PCA-M100KA	PCA-M125KA	PCA-M140KA
CAPACITY (kW)	Heating (nominal)	11.2 (2.8-12.5)	13.5 (4.1-15.0)	15.0 (4.2-15.8)
	Cooling (nominal)	9.5 (4.0-10.6)	12.1 (5.7-13.0)	13.4 (5.7-14.1)
	Heating (UK)	9.63 (2.41-10.75)	11.61 (3.53-12.90)	12.90 (3.61-13.59)
	Cooling (UK)	8.65 (3.64-9.65)	11.01 (5.19-11.83)	12.19 (5.19-12.83)
SHF (nominal)		0.77	0.72	0.72
COP / EER (nominal)		3.41 / 3.23	3.41 / 3.01	3.50 / 2.50
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.10 / 6.00	4.1 (162.7%) / 5.2 (213%)	4.0 (158.7%) / 5.1 (208%)
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A+	A+ / A	A+ / A
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	367-400-433-467	383-417-450-483	400-433-483-533
PIPE SIZE mm (in)	Gas/Liquid	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	37-39-41-43	39-41-43-45	41-43-45-48
SOUND POWER LEVEL (dBA)		63	65	68
DIMENSIONS (mm)	Width x Depth x Height	1600 x 680 x 230	1600 x 680 x 230	1600 x 680 x 230
WEIGHT (kg)		37	38	40
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6
INTERCONNECTING CABLE No. Cores		4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-SL94B	PAR-SL94B	PAR-SL94B

PUZ-M - OUTDOOR UNITS		PUZ-M100YAR1 [3]	PUZ-M125YAR1 [3]	PUZ-M140YAR1 [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	51 / 54	54 / 56	55 / 57
SOUND POWER LEVEL (dBA)	Cooling	70	72	73
WEIGHT (kg)		76	84	84
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330 x 981	1050 x 330 x 981	1050 x 330 x 981
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	3.28 / 2.94	3.95 / 4.01	4.28 / 5.36
	Heating/Cooling (UK)	2.95 / 2.44	3.56 / 3.33	3.85 / 4.45
STARTING CURRENT (A)		5.1	6.2	8.3
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	5.1 / 4.5 [11.5]	6.1 / 6.2 [11.5]	6.6 / 8.3 [11.5]
FUSE RATING (BS88) - HRC (A)		16	16	16
MAINS CABLE No. Cores		5	5	5
MAX PIPE LENGTH (m)		55	65	65
MAX HEIGHT DIFFERENCE (m)		30	30	30
CHARGE REFRIGERANT (KG) / CO_2 EQUIVALENT (T)	R32 (GWP 675)	3.10 / 2.09	3.60 / 2.43	3.60 / 2.43
MAX ADDITIONAL REFRIGERANT (KG) / CO_2EQUIVALENT (T)	R32 (GWP 675)	4.10 / 2.77	5.00 / 3.38	5.00 / 3.38

[3] Three Phase

Accessories

Indoor Units

PAR-SL94B

Wireless remote controller and adaptor for PCA-M100-140KA

Outdoor Units

PAC-SH96SG

Air outlet guide for PUZ-M100-140YAR1

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

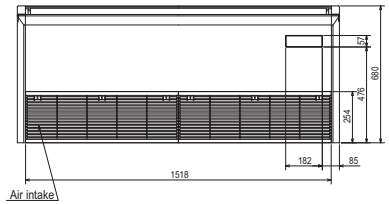
PAC-SJ95MA

M-NET adaptor for size 100 to 140

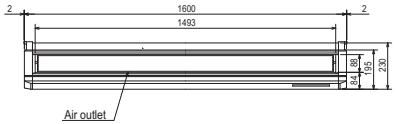
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PCA-M100/125/140KA

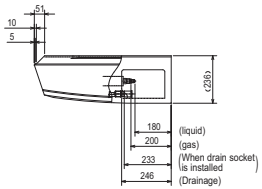
Lower View



Front View



Side View



PCA-M-HA R32 Stainless Steel Ceiling Suspended System

Power Inverter Heat Pump
(Single Phase)

The **PCA-M-HA** series is a ceiling suspended unit ideal for use in kitchen environments. The external casing is made of durable stainless steel that is resistant to oil and smoke, ensuring that the unit can be easily cleaned at all times. Our Power Inverter Heat Pump offers customers high seasonal efficiency, advanced control options and quiet operation, whilst providing greater flexibility and ease of installation.

Key Features

- High performance oil mist filter
- Easy maintenance - fan casing can be separated into different sections allowing easy cleaning and the drain pan can also be cleaned easily on-site as the pipe connector can be quickly removed
- Optional decoration covers
- Durable stainless steel casing

R32









POWER INVERTER

PCA-M-HA - INDOOR UNIT		PCA-M71HA
CAPACITY (kW)	Heating (nominal)	7.6 (3.5-10.2)
	Cooling (nominal)	7.1 (3.3-8.1)
	Heating (UK)	6.8 (3.0-8.65)
	Cooling (UK)	6.55 (3.05-7.45)
SHF (nominal)		0.74
COP / EER (nominal)		3.50 / 3.51
SCOP / SEER		3.9 / 5.6
ENERGY EFFICIENCY CLASS	Heating/Cooling	A / A+
AIRFLOW (l/s)	Lo-Hi	267-300
PIPE SIZE mm (in)	Gas/Liquid	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Hi	37-39
SOUND POWER LEVEL (dBA)		57
DIMENSIONS (mm)	Width x Depth x Height	1136 x 650 x 280
WEIGHT (kg)		42
ELECTRICAL SUPPLY		Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6
INTERCONNECTING CABLE No. Cores		4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-SL94B

PUZ-ZM - OUTDOOR UNIT		PUZ-ZM71VHAR1
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	49 / 47
SOUND POWER LEVEL (dBA)	Cooling	67
WEIGHT (kg)		70
DIMENSIONS (mm)	Width x Depth x Height	950 x 330 + 30 x 943
ELECTRICAL SUPPLY		220-240v, 50Hz
PHASE		Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	1.82 / 1.65
	Heating/Cooling (UK)	1.69 / 1.39
STARTING CURRENT (A)		6.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	7.5 / 6.7 [19.4]
FUSE RATING (BS88) - HRC (A)		25
MAINS CABLE No. Cores		3
MAX PIPE LENGTH (m)		55
MAX HEIGHT DIFFERENCE (m)		30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R32 (GWP 675) - 30m		2.80 / 1.89
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R32 (GWP 675)		0.80 / 0.54

Accessories

Indoor Units

PAR-SL94B

Wireless remote controller and adaptor for PCA-M71HA

PAC-SG38KF

Oil mist filter for PCA-M71HA (12 pack)

PAC-SF81KC

Decoration covers (front cover & suspending bracket) for PCA-M71HA

Outdoor Units

PAC-SG59SG

Air outlet guide for PUZ-ZM71VHAR1

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

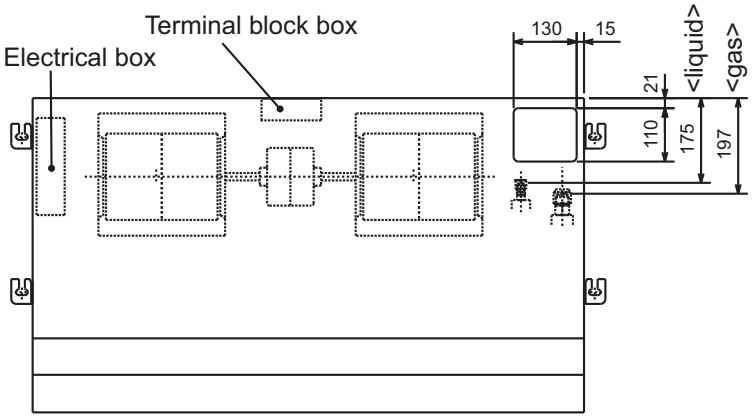
PAC-SJ95MA

M-NET adaptor for size 71

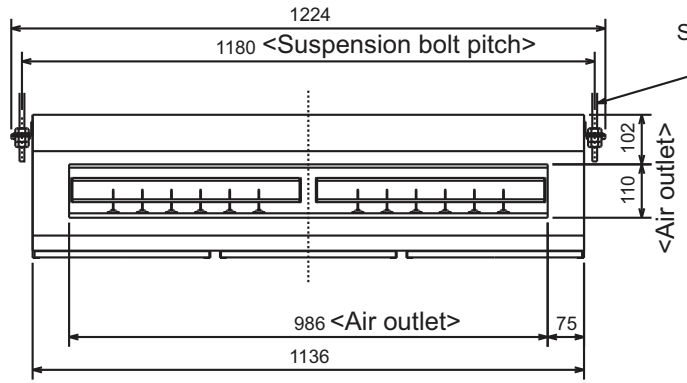
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PCA-M71HA

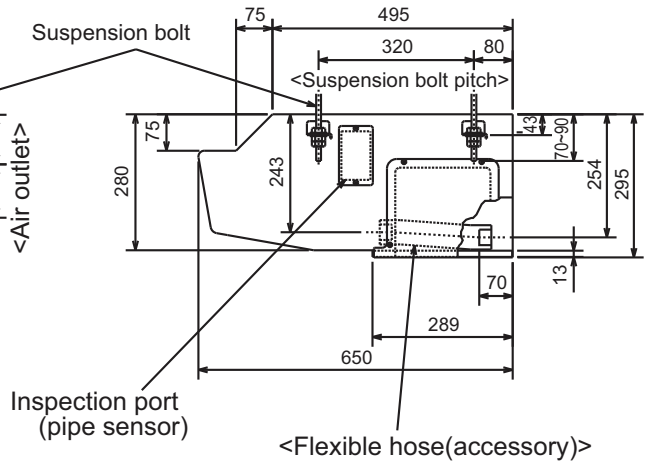
Upper View



Front View



Side View



PEA-RP R410A Large Capacity Ceiling Concealed Ducted System

Power Inverter Heat Pump
(Three Phase)







POWER INVERTER

The **PEA-RP Power Inverter** range is a ceiling concealed ducted system that blends a host of outstanding features with an unobtrusive design for easy installation and maintenance. Offering high seasonal efficiency, advanced control options and quiet operation, this range provides extreme flexibility and ease of installation.

Key Features

- Single phase indoor unit
- DC Fan Motor
- Reduced indoor power input (compared to PEA-RP-GAQ)
- Three fan speeds as standard
- Four static pressure settings of up to 150Pa
- Reduced indoor noise level (compared to PEA-RP-GAQ)
- ErP lot 6 and 30 compliant
- Long pipe runs of up to 100m
- Flexible ducting design

R410A

PEA-RP - INDOOR UNITS		**PEA-RP200WKA**	**PEA-RP250WKA**
CAPACITY (kW)	Heating (nominal)	22.4 (9.5-25.0)	27.0 (12.5-31.0)
	Cooling (nominal)	19.0 (9.0-22.4)	22.0 (11.2-27.0)
	Heating (UK)	19.05 (8.1-21.25)	22.95 (10.65-26.35)
	Cooling (UK)	17.5 (8.3-20.6)	20.25 (10.3-24.85)
SHF (nominal)		0.81	0.86
COP / EER (nominal)		3.40 / 3.15	3.20 / 2.73
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		3.43 (137.2%) / 5.06 (202.2%)	3.40 (136.0%) / 4.71 (188.2%)
AIRFLOW (l/s)	Lo-Mi-Hi	833-1017-1200	967-1183-1400
PIPE SIZE mm (in)	Gas	28.58 (1 1/8")	28.58 (1 1/8")
	Liquid	9.52 (3/8")	12.7 (1/2")
EXTERNAL STATIC PRESSURE (Pa)		60 / 75 / 100 / 150	60 / 75 / 100 / 150
SOUND PRESSURE LEVEL (dBA) (60Pa)	Lo-Mi-Hi	38-41-44	40-43-46
SOUND POWER LEVEL (dBA) (60Pa)	Lo-Mi-Hi	65-66-67	70-71-72
DIMENSIONS (mm)	Width x Depth x Height	1370 x 1120 x 470	1370 x 1120 x 470
WEIGHT (kg)		108	108
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (kW)	Nominal / UK	0.66 / 0.59	0.80 / 0.71
STARTING CURRENT (A)		7.1	7.1
RUNNING CURRENT (A) [MAX]		3.57 [4.3]	4.34 [5.5]
FUSE RATING (BS88) - HRC (A)		16	16
MAINS CABLE No. Cores		3	3
INTERCONNECTING CABLE No. Cores		3	3
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA

PUHZ-ZRP - OUTDOOR UNITS		**PUHZ-ZRP200YKA3** [3]	**PUHZ-ZRP250YKA3** [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	62 / 59	62 / 59
WEIGHT (kg)		135	135
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three
SYSTEM POWER	Heating/Cooling (nominal)	6.58 / 6.03	8.43 / 8.05
INPUT (kW)	Heating/Cooling (UK)	5.92 / 5.01	7.59 / 6.68
STARTING CURRENT (A)		5	5
RUNNING CURRENT (A)	Heating/Cooling [MAX]	10.20 / 10.51 [19]	13.05 / 13.27 [21]
FUSE RATING (BS88) - HRC (A)		32	32
MAINS CABLE No. Cores		5	5
MAX PIPE LENGTH (m)		100	100
MAX HEIGHT DIFFERENCE (m)		30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088) - 30m		7.10 / 14.82	7.70 / 16.08
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		3.60 / 7.52 (up to 75m*1)	4.80 / 10.02 (up to 75m*1)

[3] Three Phase Note: *1 For 75-100m please consult the Service Handbook.

Accessories

Outdoor Units

PAC-SH96SG

Air outlet guide for PUHZ-ZRP200-250YKA3

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

PAC-SJ95MA

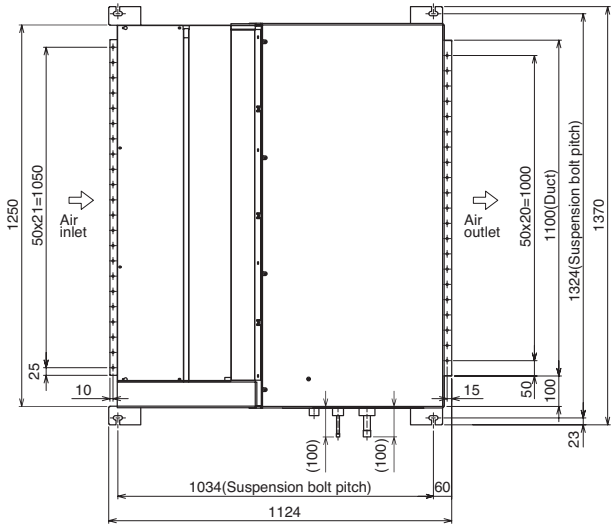
M-NET adaptor for size 200 to 250

Note: Please see page 1.3.62 for the full range of accessories.

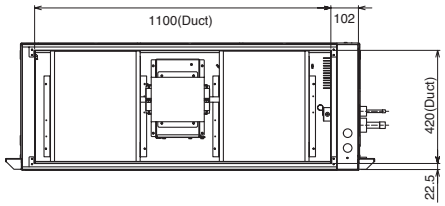
Product Dimensions

PEA-RP200/250WKA

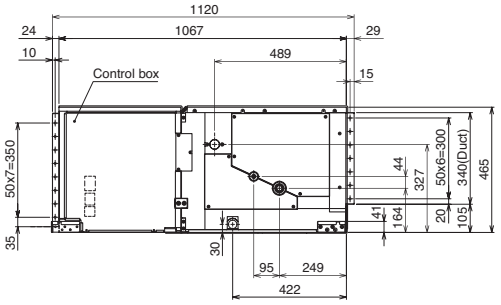
Upper View



Right Side View



Left Side View



PEA-RP R410A Large Capacity Ceiling Concealed Ducted System

Standard Inverter Heat Pump
(Three Phase)

The **PEA-RP Standard Inverter** range is a ceiling concealed ducted system that blends a host of outstanding features with an unobtrusive design for easy installation and maintenance. Offering advanced control options and quiet operation, this range provides extreme flexibility and ease of installation whilst being cost effective.

Key Features

- Single phase indoor unit
- DC Fan Motor
- Reduced indoor power input (compared to PEA-RP-GAQ)
- Three fan speeds as standard
- Four static pressure settings of up to 150Pa
- Reduced indoor noise level (compared to PEA-RP-GAQ)
- ErP lot 6 and 30 compliant
- Long pipe runs of up to 70m
- Flexible ducting design







PEA-RP - INDOOR UNITS		PEA-RP200WKA	PEA-RP250WKA
CAPACITY (kW)	Heating (nominal)	22.4 (9.5-25.0)	27.0 (12.5-31.0)
	Cooling (nominal)	19.0 (9.0-22.4)	22.0 (11.2-27.0)
	Heating (UK)	19.05 (8.1-21.25)	22.95 (10.65-26.35)
	Cooling (UK)	17.5 (8.3-20.6)	20.25 (10.3-24.85)
SHF (nominal)		0.81	0.86
COP / EER (nominal)		3.30 / 3.02	3.10 / 2.70
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		3.36 (134.4%) / 4.86 (194.5%)	3.35 (133.9%) / 4.59 (183.7%)
AIRFLOW (l/s)	Lo-Mi-Hi	833-1017-1200	967-1183-1400
PIPE SIZE mm (in)	Gas	28.58 (1 1/8")	28.58 (1 1/8")
	Liquid	9.52 (3/8")	12.7 (1/2")
EXTERNAL STATIC PRESSURE (Pa)		60 / 75 / 100 / 150	60 / 75 / 100 / 150
SOUND PRESSURE LEVEL (dBA) (60Pa)	Lo-Mi-Hi	38-41-44	40-43-46
SOUND POWER LEVEL (dBA) (60Pa)	Lo-Mi-Hi	65-66-67	70-71-72
DIMENSIONS (mm)	Width x Depth x Height	1370 x 1120 x 470	1370 x 1120 x 470
WEIGHT (kg)		108	108
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (kW)	Nominal / UK	0.66 / 0.59	0.80 / 0.71
STARTING CURRENT (A)		7.1	7.1
RUNNING CURRENT (A) [MAX]		3.57 [4.3]	4.34 [5.5]
FUSE RATING (BS88) - HRC (A)		16	16
MAINS CABLE No. Cores		3	3
INTERCONNECTING CABLE No. Cores		3	3
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA

PUHZ-P - OUTDOOR UNITS		PUHZ-P200YKA3 [3]	PUHZ-P250YKA3 [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	60 / 58	62 / 59
WEIGHT (kg)		127	135
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330+40 x 1338	1050 x 330+40 x 1338
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three
SYSTEM POWER	Heating/Cooling (nominal)	6.78 / 6.29	8.70 / 8.14
INPUT (kW)	Heating/Cooling (UK)	6.10 / 5.22	7.83 / 6.75
STARTING CURRENT (A)		5	5
RUNNING CURRENT (A)	Heating/Cooling [MAX]	11.45 / 11.04 [19]	14.04 / 13.04 [21]
FUSE RATING (BS88) - HRC (A)		32	32
MAINS CABLE No. Cores		5	5
MAX PIPE LENGTH (m)		70	70
MAX HEIGHT DIFFERENCE (m)		30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088) - 30m		6.50 / 13.57	7.70 / 16.08
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		3.60 / 7.52 (70m)	4.80 / 10.02 (70m)

[3] Three Phase

Accessories

Outdoor Units

PAC-SH96SG

Air outlet guide for PUHZ-P200-250YKA3

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

PAR-40MAA

Standard wired remote controller

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

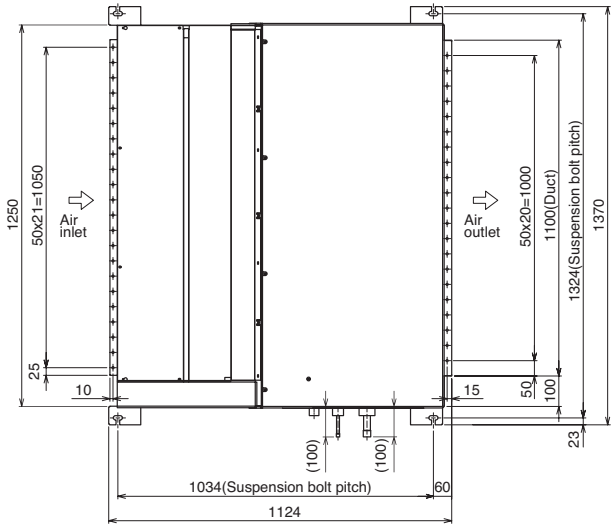
PAC-SJ95MA

M-NET adaptor for size 200 to 250

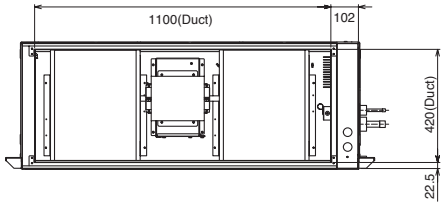
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions PEA-RP200/250WKA

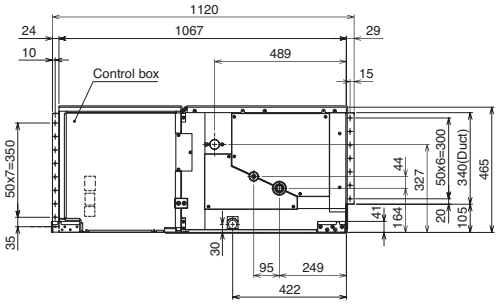
Upper View



Right Side View



Left Side View



PSA-RP R410A Floor Standing System

Power Inverter Heat Pump

The **PSA-RP Power Inverter** range is a floor standing system that blends a host of outstanding features with a sophisticated streamlined design. Offering high seasonal efficiency, advanced control options and quiet operation, this range provides extreme flexibility and ease of installation.

Key Features

- Built in controller
- Space saving
- Quick and easy installation
- Compact body / minimal footprint







POWER INVERTER

PSA-RP - INDOOR UNITS		PSA-RP71KA	PSA-RP100KA	PSA-RP100KA	PSA-RP125KA	PSA-RP125KA	PSA-RP140KA	PSA-RP140KA
CAPACITY (kW)	Heating (nominal)	7.6 (3.5-10.2)	11.2 (4.5-14.0)	11.2 (4.5-14.0)	14.0 (5.0-16.0)	14.0 (5.0-16.0)	16.0 (5.7-18.0)	16.0 (5.7-18.0)
	Cooling (nominal)	7.1 (3.3-8.1)	9.5 (4.9-11.4)	9.5 (4.9-11.4)	12.5 (5.5-14.0)	12.5 (5.5-14.0)	13.4 (6.2-15.0)	13.4 (6.2-15.0)
	Heating (UK)	6.45 (3.0-8.65)	9.5 (3.85-11.9)	9.5 (3.85-11.9)	11.9 (4.25-13.6)	11.9 (4.25-13.6)	13.6 (4.84-15.3)	13.6 (4.84-15.3)
	Cooling (UK)	6.55 (3.05-7.45)	9.2 (4.5-10.5)	9.2 (4.5-10.5)	11.4 (5.05-12.9)	11.4 (5.05-12.9)	12.3 (5.7-13.8)	12.3 (5.7-13.8)
SHF (nominal)		0.75	0.73	0.73	0.72	0.72	0.71	0.71
COP / EER (nominal)		3.44 / 3.76	3.64 / 3.80	3.64 / 3.80	3.30 / 3.06	3.30 / 3.06	3.34 / 3.30	3.34 / 3.30
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.0 / 6.3	4.0 / 5.6	4.0 / 5.5	4.0 (155.5%) / 5.0 (198.1%)	4.0 (155.5%) / 4.9 (197.1%)	4.4 (175.2%) / 5.3 (212.7%)	4.4 (175.2%) / 5.3 (211.7%)
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A++	A+ / A+	A+ / A	N/A	N/A	N/A	N/A
AIRFLOW (l/s)	Lo-Mi-Hi	333-367-400	417-467-500	417-467-500	417-467-517	417-467-517	417-467-517	417-467-517
PIPE SIZE mm (in)	Gas/Liquid	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")	15.88 (5/8") / 9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	40-42-44	45-49-51	45-49-51	45-49-51	45-49-51	45-49-51	45-49-51
SOUND POWER LEVEL (dBA)		60	65	65	66	66	66	66
DIMENSIONS (mm)	Width x Depth x Height (Grille)	600 x 360 x 1900	600 x 360 x 1900	600 x 360 x 1900	600 x 360 x 1900	600 x 360 x 1900	600 x 360 x 1900	600 x 360 x 1900
WEIGHT (kg)	Unit / Panel	46	46	46	46	46	48	48
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6
INTERCONNECTING CABLE No. Cores		4	4	4	4	4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-21MAA	PAR-21MAA	PAR-21MAA	PAR-21MAA	PAR-21MAA	PAR-21MAA	PAR-21MAA

PUHZ-ZRP - OUTDOOR UNITS		PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3 [3]	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3 [3]	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3 [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	48 / 47	51 / 49	51 / 49	52 / 50	52 / 50	52 / 50	52 / 50
SOUND POWER LEVEL (dBA)	Cooling	67	69	69	70	70	70	70
WEIGHT (kg)		70	116	123	116	125	118	131
DIMENSIONS (mm)	Width x Depth x Height	950 x 330 + 30 x 943	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz
PHASE		Single	Single	Three	Single	Three	Single	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	2.21 / 1.89	3.08 / 2.50	3.08 / 2.50	4.24 / 4.09	4.24 / 4.09	4.79 / 4.06	4.79 / 4.06
	Heating/Cooling (UK)	1.86 / 1.61	2.59 / 2.13	2.59 / 2.13	3.56 / 3.48	3.56 / 3.48	4.02 / 3.45	4.02 / 3.45
STARTING CURRENT (A)		6.0	12.0	4.0	12.0	4.0	12.0	4.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	8.79 / 7.76 [19.4]	11.58 / 11.62 [27.2]	4.54 / 4.55 [8.7]	16.39 / 17.23 [27.2]	6.27 / 6.57 [10.2]	20.92 / 19.41 [28.7]	7.87 / 7.34 [13.7]
FUSE RATING (BS88) - HRC (A)		25	32	16	32	16	40	16
MAINS CABLE No. Cores		3	3	5	3	5	3	3
MAX PIPE LENGTH (m)		50	75	75	75	75	75	75
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088) - 30m		3.50 / 7.31	5.00 / 10.44	5.00 / 10.44	5.00 / 10.44	5.00 / 10.44	5.00 / 10.44	5.00 / 10.44
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		1.20 / 2.51	2.40 / 5.01	2.40 / 5.01	2.40 / 5.01	2.40 / 5.01	2.40 / 5.01	2.40 / 5.01

[3] Three Phase **Note:** Includes built in PAR-21MAA wired remote controller.

Accessories

Outdoor Units

PAC-SG59SG

Air outlet guide for PUHZ-ZRP71VHA2

PAC-SH96SG

Air outlet guide for PUHZ-ZRP100-140VKA3/YKA3

PAC-SJ71FM-E

30Pa outdoor fan motor for PUHZ-ZRP100-140VKA3

System Control Units

PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

PAC-SE41TS

Remote sensor

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

Retail control and input / output interface

PAC-SJ95MA

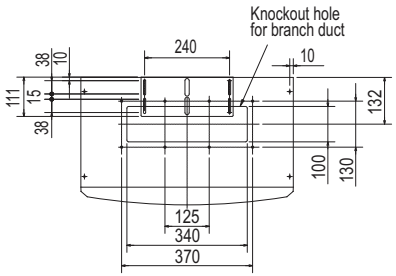
M-NET adaptor for size 71 to 140

Note: Please see page 1.3.62 for the full range of accessories.

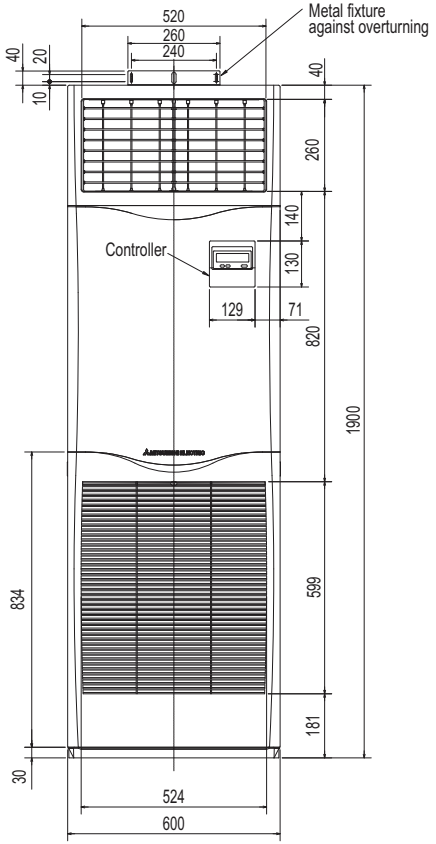
Product Dimensions

PSA-RP71/100/125/140KA

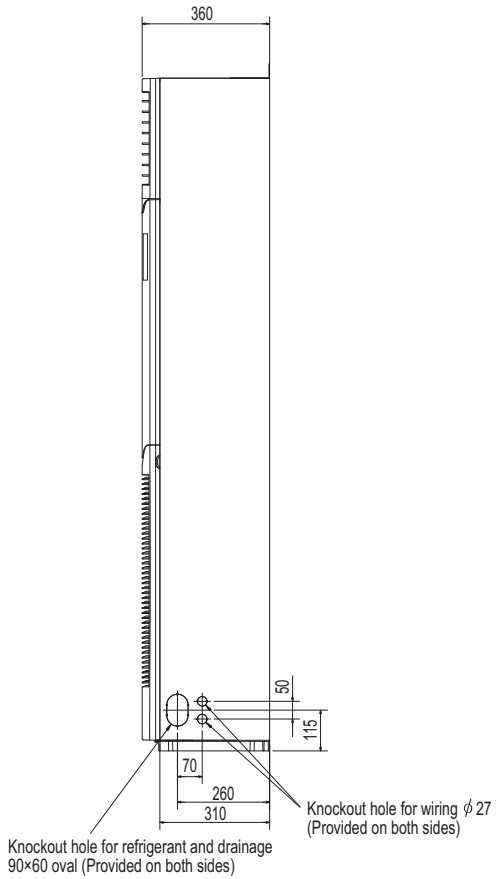
Upper View



Front View



Side View



HP DXE R410A Air Curtain System

Power Inverter Heat Pump

In collaboration with Thermoscreens®, Mitsubishi Electric has developed a range of air curtains that can be connected to our Power Inverter heat pumps, as opposed to the more traditional direct electric method associated with air curtains.

Key Features

- Reduced CO_2 emissions and run costs (up to 67%)
- 2.5 year payback period against equivalent electric systems
- Allows open door policy in retail outlets whilst being energy efficient
- Clean indoor environment - protection from external dust, fumes etc.
- Weather compensation option for further energy efficiency
- R32 models coming Summer 2020







HP DXE - RECESSED		HP1000R DXE	HP1500R DXE	HP1500R DXE	HP2000R DXE	HP2000R DXE	HP2000R DXE
CAPACITY (kW)	Heating (nominal)	8.3	13.8	13.8	15.9	15.9	21.0
	Cooling (nominal)	7.4	12.3	12.3	14.2	14.2	18.7
AIRFLOW MAX (l/s)		364	575	575	720	720	720
SOUND PRESSURE LEVEL AT 3m (dBA)	Lo-Mi1-Hi	50-55-58	49-54-58	49-54-58	50-55-58	50-55-58	50-55-58
WEIGHT (kg)		52	75	75	93	93	93
DIMENSIONS (mm)	Width x Depth x Height	1250 x 539 x 348	1750 x 539 x 348	1750 x 539 x 348	2340 x 539 x 348	2340 x 539 x 348	2340 x 539 x 348
ELECTRICAL SUPPLY*1		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE*1		Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)*1		0.8	1.2	1.2	1.4	1.4	1.4
MAINS CABLE No. Cores*1		3	3	3	3	3	3
UNIFORMITY AT OUTLET (%)*2		90	92	92	90	90	90
MAX MOUNTING HEIGHT (m)		3.3	3.3	3.3	3.3	3.3	3.3

HP DXE - FREE STANDING		HP1000 DXE	HP1500 DXE	HP1500 DXE	HP2000 DXE	HP2000 DXE	HP2000 DXE
CAPACITY (kW)	Heating (nominal)	8.3	13.2	13.2	15.7	15.7	21.0
	Cooling (nominal)	7.4	11.8	11.8	14.0	14.0	18.7
AIRFLOW MAX (l/s)		364	575	575	720	720	720
SOUND PRESSURE LEVEL AT 3m (dBA)	Lo-Mi1-Hi	50-55-58	49-54-58	49-54-58	50-55-58	50-55-58	50-55-58
WEIGHT (kg)		46	67	67	84	84	93
DIMENSIONS (mm)	Width x Depth x Height	1300 x 468 x 306	1825 x 468 x 306	1825 x 468 x 306	2350 x 468 x 306	2350 x 468 x 306	2350 x 468 x 306
ELECTRICAL SUPPLY*1		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE*1		Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)*1		0.8	1.2	1.2	1.4	1.4	1.4
MAINS CABLE No. Cores*1		3	3	3	3	3	3
UNIFORMITY AT OUTLET (%)*2		90	92	92	90	90	90
MAX MOUNTING HEIGHT (m)		3.3	3.3	3.3	3.3	3.3	3.3

HEAT PUMP OUTDOOR UNITS		PUHZ-ZRP71VHA2	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3 [3]	PUHZ-ZRP140VKA3	PUHZ-ZRP140YKA3 [3]	PUHZ-ZRP200YKA3 [3]
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	48 / 47	52 / 50	52 / 50	52 / 50	52 / 50	62 / 59
SOUND POWER LEVEL (dBA)	Cooling	67	70	70	70	70	-
WEIGHT (kg)		70	116	125	118	131	135
DIMENSIONS (mm)	Width x Depth x Height	950 x 330 +30 x 943	1050 x 330 +40 x 1338	1050 x 330 +40 x 1338	1050 x 330 +40 x 1338	1050 x 330 +40 x 1338	1050 x 330 +40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Single	Single	Three	Single	Three	Three
STARTING CURRENT (A)		5	5	5	5	5	5
FUSE RATING (BS88) - HRC (A)		25	32	16	40	16	20
INTERCONNECTING CABLE		2 Core	2 Core	2 Core	2 Core	2 Core	2 Core
MAX PIPE LENGTH (m)		50	75	75	75	75	100
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088) - 30m		3.50 / 7.31	5.00 / 10.44	5.00 / 10.44	5.00 / 10.44	5.00 / 10.44	7.10 / 14.82
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		1.20 / 2.51	2.40 / 5.01	2.40 / 5.01	2.40 / 5.01	2.40 / 5.01	3.60 / 7.52 (up to 75m*3)

[3] Three Phase

Notes: *1 For indoor units with electric heaters enabled, 380-415V 3ph power supply (7.3A HP1000, 12.1A HP1500, 14.4A HP2000). *2 Tested to ISO 27327. *3 For 75-100m please consult the Service Handbook.

Thermoscreens

Accessories

Outdoor Units

PAC-SG59SG

Air outlet guide for PUHZ-ZRP71VHA2

PAC-SH96SG

Air outlet guide for PUHZ-ZRP125-140VKA3/YKA3

PAC-SJ71FM-E

30Pa outdoor fan motor for PUHZ-ZRP100-140VKA3/YKA3

System Control Units

PAC-SJ95MA

M-NET adaptor for size 71 to 200

PAR-40MAA

Standard wired remote controller

PAR-W21MAA

Wired remote controller

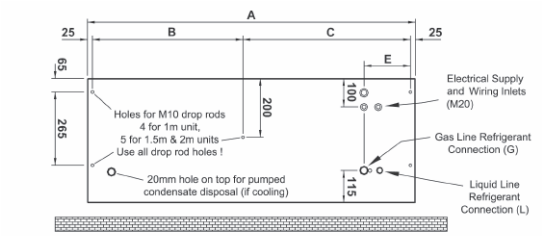
MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

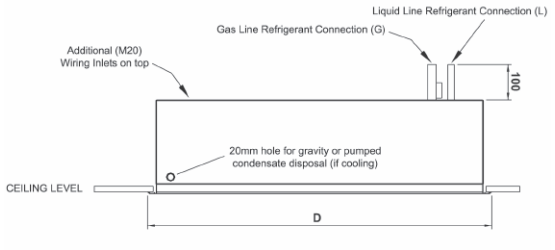
Note: Please see page 1.3.62 for the full range of accessories.

Product Dimensions HP1000/1500/2000R DXE

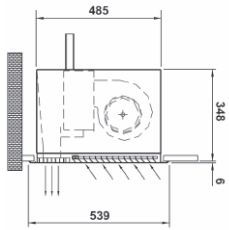
Front View



Upper View



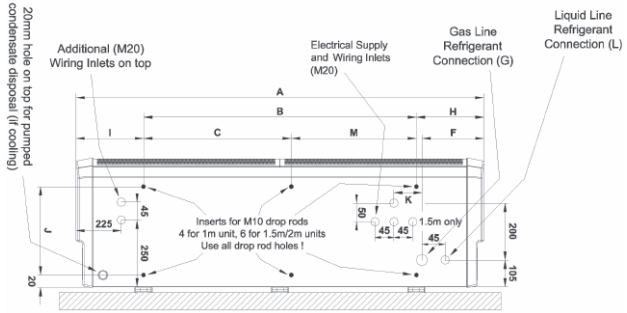
Side View



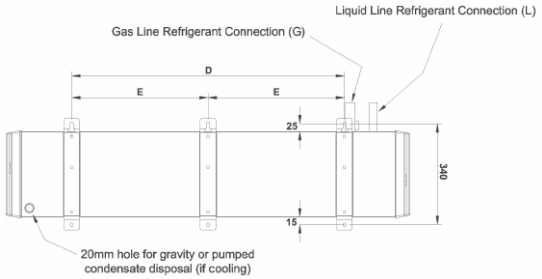
		HP1000R DXE	HP1500R DXE	HP2000R DXE
A (mm)		1250	1750	2340
B (mm)		-	724	1129
C (mm)		-	976	1161
D (mm)		1303	1803	2393
E (mm)		170	166	189
G		5/8 in.	5/8 in.	7/8 in.
L		1/2 in.	1/2 in.	5/8 in.
Cut-Out in Ceiling	Length (mm)	1250	1750	2340
	Width (mm)	485	485	485

Product Dimensions HP1000/1500/2000 DXE

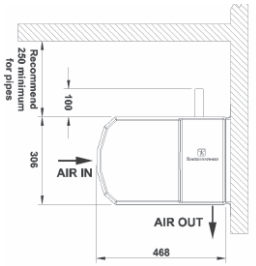
Front View



Upper View



Side View



	HP1000DXE	HP1500DXE	HP2000DXE
A (mm)	1300	1825	2350
B (mm)	605	1225	1793
C (mm)	-	655	918
D (mm)	898	1398	1904
E (mm)	-	699	952
F (mm)	182	222	204
G	5/8 in.	5/8 in.	7/8 in.
H (mm)	442	333	299
I (mm)	253	267	258
J (mm)	359	359	334
K (mm)	80	45	80
L	1/2 in.	1/2 in.	5/8 in.
M (mm)	-	570	875

PAC-IF013B-E R32 & R410A

Air Handling Unit Controller



The Air Handling Unit Controller can interface Mitsubishi Electric Mr Slim outdoor units to third party air handing units. Up to six Mr Slim outdoor units can be used on a single air handling unit providing a wide range of heating and cooling capacities.

Key Features

- Simpler installation with Mr Slim being a single source of heating and cooling
- BEMS external monitoring and control can be achieved through direct Modbus, digital switches or analogue input
- Intelligent Multiple Outdoor Unit Control (IMOUC) of up to six Mr Slim outdoor units when operated in external manual control, this can include two different capacities or a series of Mr Slim outdoor units
- Anti-cycling measures incorporated into the design to extend the life of the outdoor units
- Capacity control of up to 11 individual steps ensures high comfort levels
- SD card installed to record history and facilitate software upgrades
- Maximum airflow of up to 5 x standard Mr Slim specification
- Complete AHU systems incorporating this pre-installed controller are also available

R32 R410A

PAC-IF013B-E			SIZE 35	SIZE 50	SIZE 60	SIZE 71	SIZE 100	SIZE 125	SIZE 140	SIZE 200	SIZE 250
CAPACITY (kW)	Heating (nominal)		4.1	6.0	7.0	8.0	11.2	14.0	16.0	22.4	27.0
	Cooling (nominal)		3.5	5.0	6.0	7.1	10.0	12.5	14.0	20.0	25.0
COMPATIBLE O.U	PUZ-ZM	(R32)	PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHAR1	PUZ-ZM100VKAR1/YKAR1	PUZ-ZM125VKAR2/YKAR2	PUZ-ZM140VKAR2/YKAR2	PUZ-ZM200YKA	PUZ-ZM250YKA
	PUZ-M	(R32)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PUZ-M200YKA	PUZ-M250YKA
	PUHZ-ZRP	(R410A)	PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP60VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3/YKA3	PUHZ-ZRP125VKA3/YKA3	PUHZ-ZRP140VKA3/YKA3	PUHZ-ZRP200YKA3	PUHZ-ZRP250YKA3
	PUHZ-P	(R410A)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PUHZ-P200YKA3	PUHZ-P250YKA3
PIPE SIZE mm (in)	PUZ-ZM/M (R32)	Gas	12.7 (1/2")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	28.58 (1 1/8")	28.58 (1 1/8")
		Liquid	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")
	PUHZ-ZRP/P (R410A)	Gas	12.7 (1/2")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	28.58 (1 1/8")	28.58 (1 1/8")
		Liquid	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	12.7 (1/2")
HEAT EXCHANGER (cm^3)	Max Volume	>30m	1.05	1.5	1.8	2.13	3.0	3.75	4.2	6.0	7.5
		20m	1.35	1.8	2.7	3.03	3.9	4.65	5.1	7.8	9.3
		10m	1.65	2.1	3.6	3.93	4.8	5.55	6.0	9.6	11.1
	Min Volume		0.35	0.5	0.6	0.71	1.0	1.25	1.4	2.0	2.5
DIMENSIONS (mm)	Width x Depth x Height		336 x 69 x 278	336 x 69 x 278	336 x 69 x 278	336 x 69 x 278	336 x 69 x 278	336 x 69 x 278	336 x 69 x 278	336 x 69 x 278	336 x 69 x 278
WEIGHT (No Accessories) (kg)			2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Notes: One air handling unit controller is required per outdoor unit. Cooling: Indoor 27ºC DB/19ºC WB, Outdoor 35ºC DB/24ºC WB. Heating: Indoor 20ºC DB, Outdoor 7ºC DB/6ºC WB.

Notes:

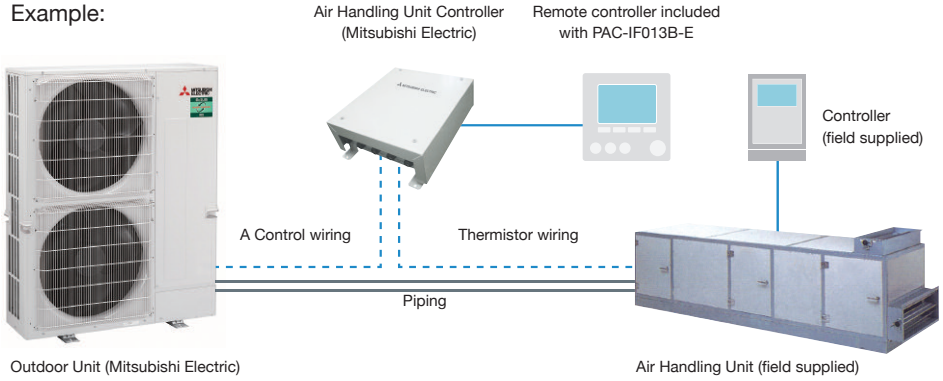
One air handling unit controller is required per heat exchanger.

If using more than one air handling unit controller on a single AHU, there are two options:

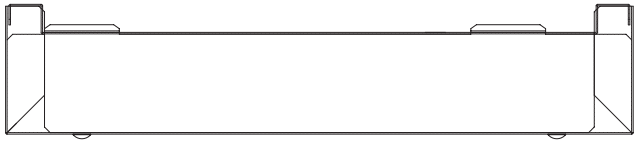
1. Connect 1 x PAC-IF013B-E unit per heat exchanger - these will operate as separate circuits with a controller on each which is included.
2. Connect 1 x PAC-IF013B-E for the first heat exchanger, then up to 5 additional slave PAC-SIF013B-E units. The included controller with the PAC-IF013B-E will additionally control the slave units

For further information of this feature please consult your local sales office.

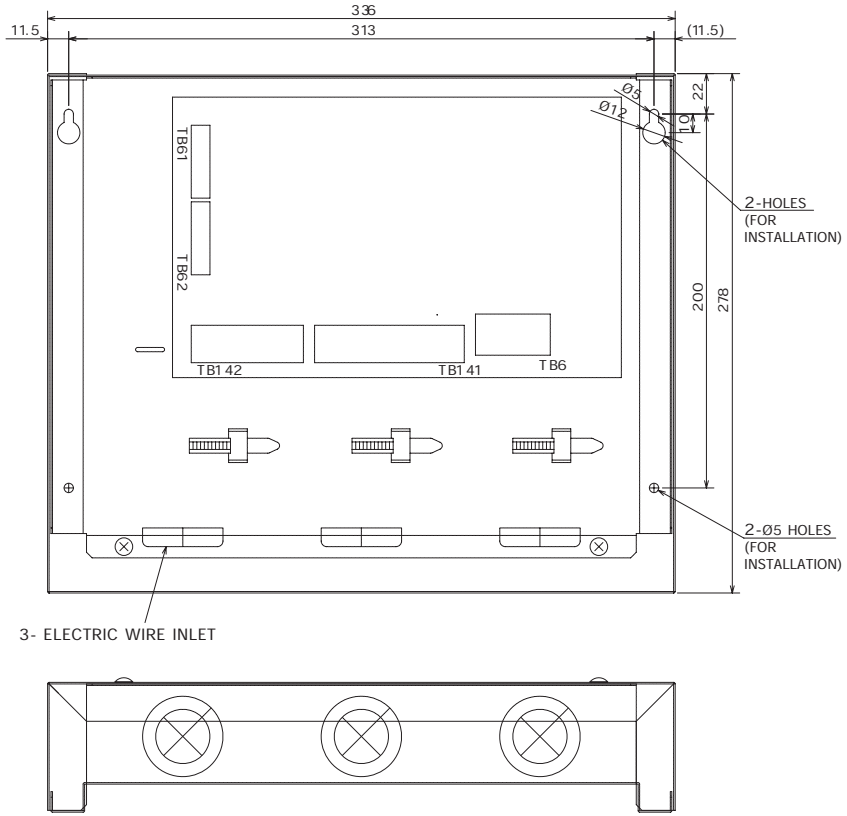
Example:



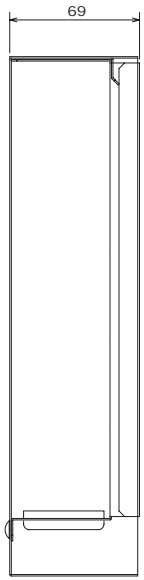
Upper View



Front View



Side View



R32 Mr Slim Twin / Triple / Quadruple Multi-Split Systems

Inverter Heat Pump Units

The Mr Slim Multi-Split system is an ideal option for open plan spaces in medium sized premises such as offices or shops, where two, three or four units are required. These can be Mr Slim ceiling cassettes (PLA-ZM/M & SLZ-M), ceiling suspended (PCA-M), ducted (PEAD-M) or wall mounted (PKA-M) models and can be connected to a single outdoor unit using twin, triple or quadruple multi distributor pipes.

Key Features

- Twin, triple or quadruple indoor heat pump units can be operated in Multi-Split configuration from a single outdoor unit
- Heat pumps must operate in same heating or cooling mode
- Cooling capacity range 3.3 to 27kW
- Heating capacity range 3.5 to 31kW

PIPE RUN PARAMETERS

OUTDOOR MODEL	REFRIGERANT	PIPE RUNS	MAX. PIPE RUN (M)
PUZ-ZM71VHAR1	R32	A+B+C twin	55
PUZ-ZM100VKAR1/YKAR1 / PUZ-ZM125-140VKAR2/YKAR2	R32	A+B+C twin	100
PUZ-ZM200/250YKA	R32	A+B+C twin	100
PUZ-M100VAR1/YAR1	R32	A+B+C twin	55
PUZ-M125-140VAR1/YAR1	R32	A+B+C twin	65
PUZ-M200/250YKA	R32	A+B+C twin	70
PUZ-ZM140VKAR2/YKAR2	R32	A+B+C+D triple	100
PUZ-ZM200/250YKA	R32	A+B+C+D triple	100
PUZ-M140VAR1/YAR1	R32	A+B+C+D triple	65
PUZ-M200/250YKA	R32	A+B+C+D triple	70
PUZ-ZM200/250YKA	R32	A+B+C+D+E quadruple	100
PUZ-M200/250YKA	R32	A+B+C+D+E quadruple	70
PUZ-ZM71VHAR1 / PUZ-ZM100VKAR1/YKAR1 / PUZ-ZM125-140VKAR2/YKAR2	R32	B – C or C – D or B – D	≤ 8
PUZ-ZM200/250YKA	R32	B - C or B - D or B - E or C - D or C - E or D - E	≤ 8
PUZ-M100-140VAR1/YAR1	R32	B – C or C – D or B – D	≤ 8
PUZ-M200/250YKA	R32	B - C or B - D or B - E or C - D or C - E or D - E	≤ 8

Notes: SEZ-M & PSA-RP indoor units cannot be used as part of an R32 Mr Slim Multi-Split system.

R32 Mr Slim Twin / Triple / Quadruple Multi-Split Systems

Inverter Heat Pump Units

R32

The Mr Slim Multi-Split Indoor Unit Range

Ceiling Cassette

- **PLA-ZM / PLA-M**



- **SLZ-M**



Wall Mounted

- **PKA-M**



Ceiling Concealed Ducted

- **PEAD-M**



Ceiling Suspended

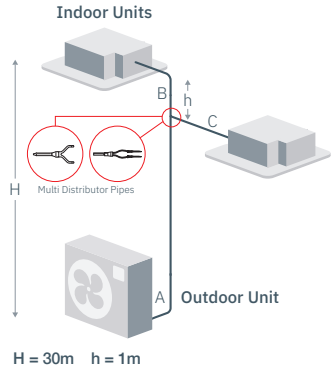
- **PCA-M**



- **PCA-M-HA**

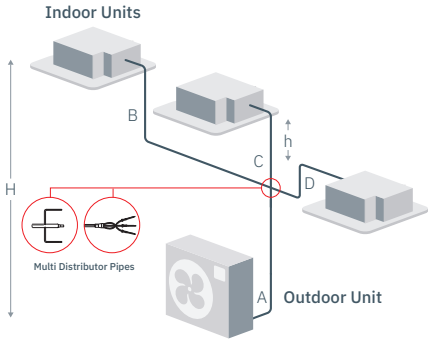


TWIN



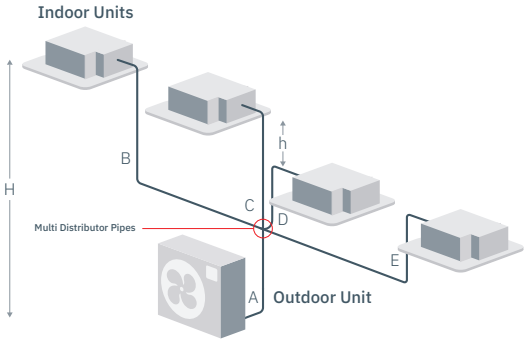
H = 30m h = 1m

TRIPLE



H = 30m h = 1m

QUADRUPLE



H = 30m h = 1m

R32 Mr Slim Twin / Triple / Quadruple Multi-Split Systems

Inverter Heat Pump Units

R32 Mr Slim outdoor units can be configured in twin, triple and quadruple combinations giving added flexibility.

TWIN SYSTEMS	DESCRIPTION
(2) PLA-ZM35EA / (1) PUZ-ZM71VHAR1	R32 Power Inverter Cassette, Twin System, Single Phase
(2) PLA-ZM50EA / (1) PUZ-ZM100VKAR1	R32 Power Inverter Cassette, Twin System, Single Phase
(2) PLA-ZM60EA / (1) PUZ-ZM125VKAR2	R32 Power Inverter Cassette, Twin System, Single Phase
(2) PLA-ZM71EA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Cassette, Twin System, Single Phase
(2) PLA-ZM50EA / (1) PUZ-ZM100YKAR1	R32 Power Inverter Cassette, Twin System, Three Phase
(2) PLA-ZM60EA / (1) PUZ-ZM125YKAR2	R32 Power Inverter Cassette, Twin System, Three Phase
(2) PLA-ZM71EA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Cassette, Twin System, Three Phase
(2) PLA-ZM100EA / (1) PUZ-ZM200YKA	R32 Power Inverter Cassette, Twin System, Three Phase
(2) PLA-ZM125EA / (1) PUZ-ZM250YKA	R32 Power Inverter Cassette, Twin System, Three Phase
(2) SLZ-M35FA / (1) PUZ-ZM71VHAR1	R32 Power Inverter Cassette, Twin System, Single Phase
(2) SLZ-M50FA / (1) PUZ-ZM100VKAR1	R32 Power Inverter Cassette, Twin System, Single Phase
(2) SLZ-M60FA / (1) PUZ-ZM125VKAR2	R32 Power Inverter Cassette, Twin System, Single Phase
(2) SLZ-M50FA / (1) PUZ-ZM100YKAR1	R32 Power Inverter Cassette, Twin System, Three Phase
(2) SLZ-M60FA / (1) PUZ-ZM125YKAR2	R32 Power Inverter Cassette, Twin System, Three Phase
(2) PLA-M50EA / (1) PUZ-M100VAR1	R32 Standard Inverter Cassette, Twin System, Single Phase
(2) PLA-M60EA / (1) PUZ-M125VAR1	R32 Standard Inverter Cassette, Twin System, Single Phase
(2) PLA-M71EA / (1) PUZ-M140VAR1	R32 Standard Inverter Cassette, Twin System, Single Phase
(2) PLA-M50EA / (1) PUZ-M100YAR1	R32 Standard Inverter Cassette, Twin System, Three Phase
(2) PLA-M60EA / (1) PUZ-M125YAR1	R32 Standard Inverter Cassette, Twin System, Three Phase
(2) PLA-M71EA / (1) PUZ-M140YAR1	R32 Standard Inverter Cassette, Twin System, Three Phase
(2) PLA-M100EA / (1) PUZ-M200YKA	R32 Standard Inverter Cassette, Twin System, Three Phase
(2) PLA-M125EA / (1) PUZ-M250YKA	R32 Standard Inverter Cassette, Twin System, Three Phase
(2) PKA-M35HA / (1) PUZ-ZM71VHAR1	R32 Power Inverter Wall Mounted, Twin System, Single Phase
(2) PKA-M50HA / (1) PUZ-ZM100VKAR1	R32 Power Inverter Wall Mounted, Twin System, Single Phase
(2) PKA-M60KA / (1) PUZ-ZM125VKAR2	R32 Power Inverter Wall Mounted, Twin System, Single Phase
(2) PKA-M71KA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Wall Mounted, Twin System, Single Phase
(2) PKA-M50HA / (1) PUZ-ZM100YKAR1	R32 Power Inverter Wall Mounted, Twin System, Three Phase
(2) PKA-M60KA / (1) PUZ-ZM125YKAR2	R32 Power Inverter Wall Mounted, Twin System, Three Phase
(2) PKA-M71KA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Wall Mounted, Twin System, Three Phase
(2) PKA-M100KA / (1) PUZ-ZM200YKA	R32 Power Inverter Wall Mounted, Twin System, Three Phase
(2) PKA-M50HA / (1) PUZ-M100VAR1	R32 Standard Inverter Wall Mounted, Twin System, Single Phase
(2) PKA-M60KA / (1) PUZ-M125VAR1	R32 Standard Inverter Wall Mounted, Twin System, Single Phase
(2) PKA-M71KA / (1) PUZ-M140VAR1	R32 Standard Inverter Wall Mounted, Twin System, Single Phase
(2) PKA-M50HA / (1) PUZ-M100YAR1	R32 Standard Inverter Wall Mounted, Twin System, Three Phase
(2) PKA-M60KA / (1) PUZ-M125YAR1	R32 Standard Inverter Wall Mounted, Twin System, Three Phase
(2) PKA-M71KA / (1) PUZ-M140YAR1	R32 Standard Inverter Wall Mounted, Twin System, Three Phase
(2) PKA-M100KA / (1) PUZ-M200YKA	R32 Standard Inverter Wall Mounted, Twin System, Three Phase

R32 Mr Slim Twin / Triple / Quadruple Multi-Split Systems

Inverter Heat Pump Units

R32

TWIN SYSTEMS	DESCRIPTION
(2) PEAD-M35JA / (1) PUZ-ZM71VHAR1	R32 Power Inverter Ceiling Concealed Ducted, Twin System, Single Phase
(2) PEAD-M50JA / (1) PUZ-ZM100VKAR1	R32 Power Inverter Ceiling Concealed Ducted, Twin System, Single Phase
(2) PEAD-M60JA / (1) PUZ-ZM125VKAR2	R32 Power Inverter Ceiling Concealed Ducted, Twin System, Single Phase
(2) PEAD-M71JA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Ceiling Concealed Ducted, Twin System, Single Phase
(2) PEAD-M50JA / (1) PUZ-ZM100YKAR1	R32 Power Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PEAD-M60JA / (1) PUZ-ZM125YKAR2	R32 Power Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PEAD-M71JA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PEAD-M100JA / (1) PUZ-ZM200YKA	R32 Power Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PEAD-M125JA / (1) PUZ-ZM250YKA	R32 Power Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PEAD-M50JA / (1) PUZ-M100VAR1	R32 Standard Inverter Ceiling Concealed Ducted, Twin System, Single Phase
(2) PEAD-M60JA / (1) PUZ-M125VAR1	R32 Standard Inverter Ceiling Concealed Ducted, Twin System, Single Phase
(2) PEAD-M71JA / (1) PUZ-M140VAR1	R32 Standard Inverter Ceiling Concealed Ducted, Twin System, Single Phase
(2) PEAD-M50JA / (1) PUZ-M100YAR1	R32 Standard Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PEAD-M60JA / (1) PUZ-M125YAR1	R32 Standard Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PEAD-M71JA / (1) PUZ-M140YAR1	R32 Standard Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PEAD-M100JA / (1) PUZ-M200YKA	R32 Standard Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PEAD-M125JA / (1) PUZ-M250YKA	R32 Standard Inverter Ceiling Concealed Ducted, Twin System, Three Phase
(2) PCA-M50KA / (1) PUZ-ZM100VKAR1	R32 Power Inverter Ceiling Suspended, Twin System, Single Phase
(2) PCA-M60KA / (1) PUZ-ZM125VKAR2	R32 Power Inverter Ceiling Suspended, Twin System, Single Phase
(2) PCA-M71KA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Ceiling Suspended, Twin System, Single Phase
(2) PCA-M50KA / (1) PUZ-ZM100YKAR1	R32 Power Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M60KA / (1) PUZ-ZM125YKAR2	R32 Power Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M71KA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M100KA / (1) PUZ-ZM200YKA	R32 Power Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M125KA / (1) PUZ-ZM250YKA	R32 Power Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M50KA / (1) PUZ-M100VAR1	R32 Standard Inverter Ceiling Suspended, Twin System, Single Phase
(2) PCA-M60KA / (1) PUZ-M125VAR1	R32 Standard Inverter Ceiling Suspended, Twin System, Single Phase
(2) PCA-M71KA / (1) PUZ-M140VAR1	R32 Standard Inverter Ceiling Suspended, Twin System, Single Phase
(2) PCA-M50KA / (1) PUZ-M100YAR1	R32 Standard Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M60KA / (1) PUZ-M125YAR1	R32 Standard Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M71KA / (1) PUZ-M140YAR1	R32 Standard Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M100KA / (1) PUZ-M200YKA	R32 Standard Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M125KA / (1) PUZ-M250YKA	R32 Standard Inverter Ceiling Suspended, Twin System, Three Phase
(2) PCA-M71HA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Stainless Steel Ceiling Suspended, Twin System, Single Phase
(2) PCA-M71HA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Stainless Steel Ceiling Suspended, Twin System, Three Phase

R32 Mr Slim Twin / Triple / Quadruple Multi-Split Systems

Inverter Heat Pump Units

R32

TRIPLE SYSTEMS	DESCRIPTION
(3) PLA-ZM50EA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Cassette, Triple System, Single Phase
(3) PLA-ZM50EA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Cassette, Triple System, Three Phase
(3) PLA-ZM60EA / (1) PUZ-ZM200YKA	R32 Power Inverter Cassette, Triple System, Three Phase
(3) PLA-ZM71EA / (1) PUZ-ZM250YKA	R32 Power Inverter Cassette, Triple System, Three Phase
(3) SLZ-M35FA / (1) PUZ-ZM100VKAR1	R32 Power Inverter Cassette, Triple System, Single Phase
(3) SLZ-M50FA / (1) PUZ-ZM125VKAR2	R32 Power Inverter Cassette, Triple System, Single Phase
(3) SLZ-M50FA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Cassette, Triple System, Single Phase
(3) SLZ-M35FA / (1) PUZ-ZM100YKAR1	R32 Power Inverter Cassette, Triple System, Three Phase
(3) SLZ-M50FA / (1) PUZ-ZM125YKAR2	R32 Power Inverter Cassette, Triple System, Three Phase
(3) SLZ-M50FA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Cassette, Triple System, Three Phase
(3) PLA-M50EA / (1) PUZ-M140VAR1	R32 Standard Inverter Cassette, Triple System, Single Phase
(3) PLA-M50EA / (1) PUZ-M140YAR1	R32 Standard Inverter Cassette, Triple System, Three Phase
(3) PLA-M60EA / (1) PUZ-M200YKA	R32 Standard Inverter Cassette, Triple System, Three Phase
(3) PLA-M71EA / (1) PUZ-M250YKA	R32 Standard Inverter Cassette, Triple System, Three Phase
(3) PKA-M50HA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Wall Mounted, Triple System, Single Phase
(3) PKA-M50HA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Wall Mounted, Triple System, Three Phase
(3) PKA-M60KA / (1) PUZ-ZM200YKA	R32 Power Inverter Wall Mounted, Triple System, Three Phase
(3) PKA-M71KA / (1) PUZ-ZM250YKA	R32 Power Inverter Wall Mounted, Triple System, Three Phase
(3) PKA-M50HA / (1) PUZ-M140VAR1	R32 Standard Inverter Wall Mounted, Triple System, Single Phase
(3) PKA-M50HA / (1) PUZ-M140YAR1	R32 Standard Inverter Wall Mounted, Triple System, Three Phase
(3) PKA-M60KA / (1) PUZ-M200YKA	R32 Standard Inverter Wall Mounted, Triple System, Three Phase
(3) PKA-M71KA / (1) PUZ-M250YKA	R32 Standard Inverter Wall Mounted, Triple System, Three Phase
(3) PEAD-M50JA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Ceiling Concealed Ducted, Triple System, Single Phase
(3) PEAD-M50JA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Ceiling Concealed Ducted, Triple System, Three Phase
(3) PEAD-M60JA / (1) PUZ-ZM200YKA	R32 Power Inverter Ceiling Concealed Ducted, Triple System, Three Phase
(3) PEAD-M71JA / (1) PUZ-ZM250YKA	R32 Power Inverter Ceiling Concealed Ducted, Triple System, Three Phase
(3) PEAD-M50JA / (1) PUZ-M140VAR1	R32 Standard Inverter Ceiling Concealed Ducted, Triple System, Single Phase
(3) PEAD-M50JA / (1) PUZ-M140YAR1	R32 Standard Inverter Ceiling Concealed Ducted, Triple System, Three Phase
(3) PEAD-M60JA / (1) PUZ-M200YKA	R32 Standard Inverter Ceiling Concealed Ducted, Triple System, Three Phase
(3) PEAD-M71JA / (1) PUZ-M250YKA	R32 Standard Inverter Ceiling Concealed Ducted, Triple System, Three Phase
(3) PCA-M50KA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Ceiling Suspended, Triple System, Single Phase
(3) PCA-M50KA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Ceiling Suspended, Triple System, Three Phase
(3) PCA-M60KA / (1) PUZ-ZM200YKA	R32 Power Inverter Ceiling Suspended, Triple System, Three Phase
(3) PCA-M71KA / (1) PUZ-ZM250YKA	R32 Power Inverter Ceiling Suspended, Triple System, Three Phase
(3) PCA-M50KA / (1) PUZ-M140VAR1	R32 Standard Inverter Ceiling Suspended, Triple System, Single Phase
(3) PCA-M50KA / (1) PUZ-M140YAR1	R32 Standard Inverter Ceiling Suspended, Triple System, Three Phase
(3) PCA-M60KA / (1) PUZ-M200YKA	R32 Standard Inverter Ceiling Suspended, Triple System, Three Phase
(3) PCA-M71KA / (1) PUZ-M250YKA	R32 Standard Inverter Ceiling Suspended, Triple System, Three Phase
(3) PCA-M71HA / (1) PUZ-ZM250YKA	R32 Power Inverter Stainless Steel Ceiling Suspended, Triple System, Three Phase
(3) PCA-M71HA / (1) PUZ-M250YKA	R32 Standard Inverter Stainless Steel Ceiling Suspended, Triple System, Three Phase

R32 Mr Slim Twin / Triple / Quadruple Multi-Split Systems

Inverter Heat Pump Units

R32

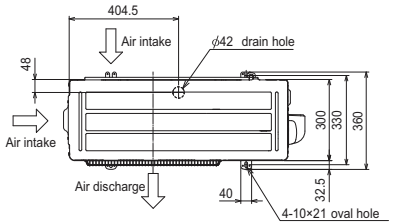
QUADRUPLE SYSTEMS	DESCRIPTION
(4) PLA-ZM50EA / (1) PUZ-ZM200YKA	R32 Power Inverter Cassette, Quadruple System, Three phase
(4) PLA-ZM60EA / (1) PUZ-ZM250YKA	R32 Power Inverter Cassette, Quadruple System, Three phase
(4) SLZ-M35FA / (1) PUZ-ZM125VKAR2	R32 Power Inverter Cassette, Quadruple System, Single phase
(4) SLZ-M35FA / (1) PUZ-ZM140VKAR2	R32 Power Inverter Cassette, Quadruple System, Single phase
(4) SLZ-M35FA / (1) PUZ-ZM125YKAR2	R32 Power Inverter Cassette, Quadruple System, Three phase
(4) SLZ-M35FA / (1) PUZ-ZM140YKAR2	R32 Power Inverter Cassette, Quadruple System, Three phase
(4) PLA-M50EA / (1) PUZ-M200YKA	R32 Standard Inverter Cassette, Quadruple System, Three phase
(4) PLA-M60EA / (1) PUZ-M250YKA	R32 Standard Inverter Cassette, Quadruple System, Three phase
(4) PKA-M50HA / (1) PUZ-ZM200YKA	R32 Power Inverter Wall Mounted, Quadruple System, Three Phase
(4) PKA-M60KA / (1) PUZ-ZM250YKA	R32 Power Inverter Wall Mounted, Quadruple System, Three Phase
(4) PKA-M50HA / (1) PUZ-M200YKA	R32 Standard Inverter Wall Mounted, Quadruple System, Three Phase
(4) PKA-M60KA / (1) PUZ-M250YKA	R32 Standard Inverter Wall Mounted, Quadruple System, Three Phase
(4) PEAD-M50JA / (1) PUZ-ZM200YKA	R32 Power Inverter Ceiling Concealed Ducted, Quadruple System, Three Phase
(4) PEAD-M60JA / (1) PUZ-ZM250YKA	R32 Power Inverter Ceiling Concealed Ducted, Quadruple System, Three Phase
(4) PEAD-M50JA / (1) PUZ-M200YKA	R32 Standard Inverter Ceiling Concealed Ducted, Quadruple System, Three Phase
(4) PEAD-M60JA / (1) PUZ-M250YKA	R32 Standard Inverter Ceiling Concealed Ducted, Quadruple System, Three Phase
(4) PCA-M50KA / (1) PUZ-ZM200YKA	R32 Power Inverter Ceiling Suspended, Quadruple System, Three Phase
(4) PCA-M60KA / (1) PUZ-ZM250YKA	R32 Power Inverter Ceiling Suspended, Quadruple System, Three Phase
(4) PCA-M50KA / (1) PUZ-M200YKA	R32 Standard Inverter Ceiling Suspended, Quadruple System, Three Phase
(4) PCA-M60KA / (1) PUZ-M250YKA	R32 Standard Inverter Ceiling Suspended, Quadruple System, Three Phase

PIPE KITS	DESCRIPTION
MSDD-50TR2-E	R32 Multi distribution pipe twin units - 50:50 - sizes 71/100/125/140
MSDD-50WR2-E	R32 Multi distribution pipe twin units - 50:50 - sizes 200/250
MSDT-111R3-E	R32 Multi distribution pipe triple units - 33:33:33 - sizes 100/125/140/200/250
MSDF-1111R2-E	R32 Multi distribution pipe quadruple units - 25:25:25:25 - sizes 125/140/200/250

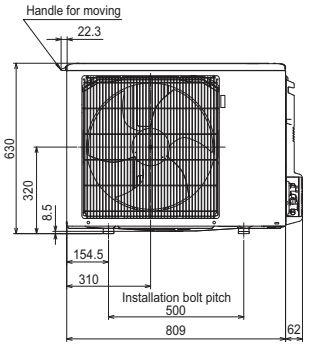
Power Inverter Outdoor Units

Product Dimensions — PUZ-ZM35/50VKA

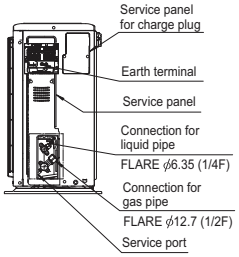
Upper View



Front View

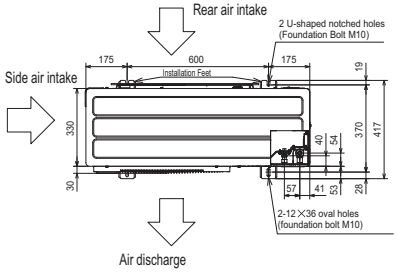


Side View

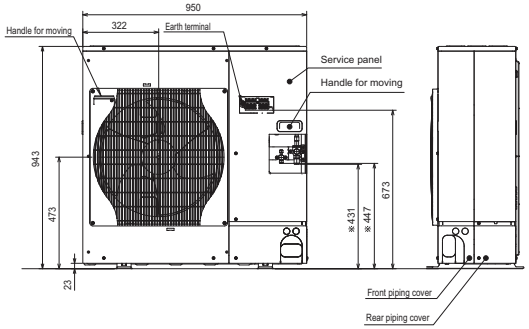


Product Dimensions — PUZ-ZM60VHA, PUZ-ZM71VHAR1, PUHZ-ZRP71VHA2

Upper View

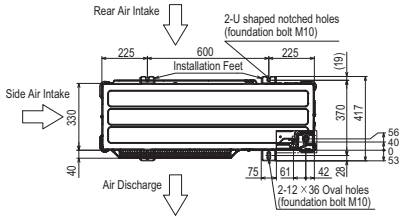


Front View



Product Dimensions — PUZ-ZM100/125/140VKAR1/R2, PUZ-ZM100/125/140YKAR1/R2 PUHZ-ZRP100/125/140VKA3, PUHZ-ZRP100/125/140YKA3

Upper View

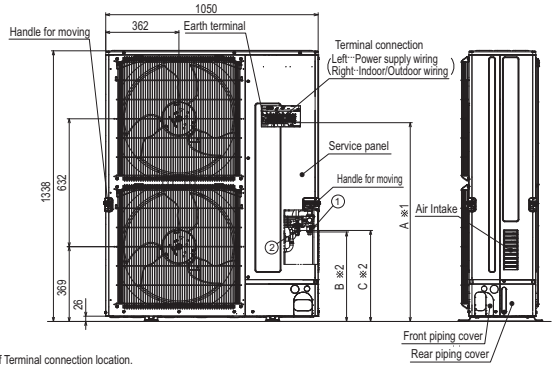


① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
ø15.88 (5/8F)	ø9.52 (3/8F)

MODEL	A	B	C
PUZ-ZM100-140VKAR1/R2 PUHZ-ZRP100-140VKA3	1067	442	450
PUZ-ZM100-140YKAR1/R2 PUHZ-ZRP100-140YKA3	919	442	450

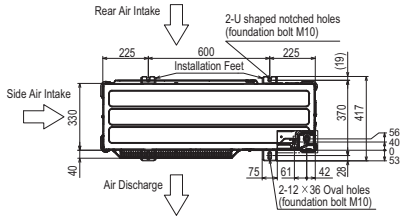
※1···Indication of Terminal connection location.
※2···Indication of STOP VALVE connection location.

Front View



Product Dimensions — PUZ-ZM200/250YKA, PUHZ-ZRP200/250YKA3

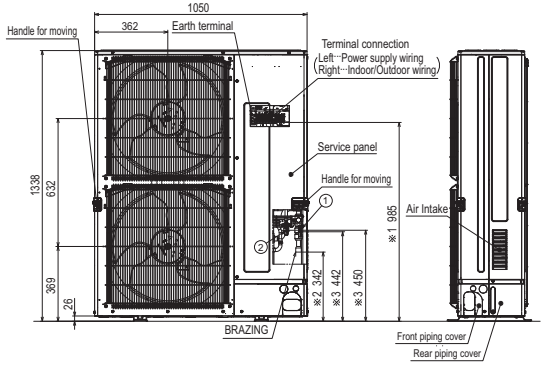
Upper View



Model	① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
PUZ-ZM200YKA	ø19.05 (3/4F)	ø9.52 (3/8F)
PUZ-ZM250YKA	ø19.05 (3/4F)	ø12.7 (1/2F)
PUHZ-ZRP200YKA.UK	ø19.05 (3/4F)	ø9.52 (3/8F)
PUHZ-ZRP250YKA.UK	ø19.05 (3/4F)	ø12.7 (1/2F)

※1···Indication of Terminal connection location.
※2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.
※3···Indication of STOP VALVE connection location.

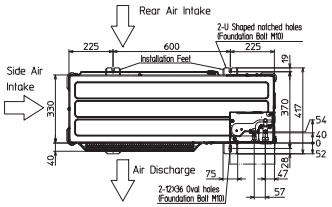
Front View



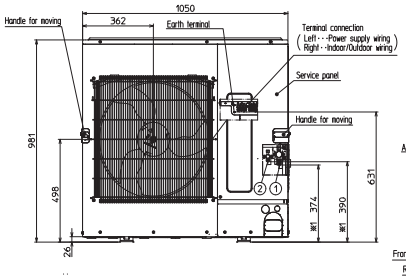
Standard Inverter / Inverter Outdoor Units

Product Dimensions — PUZ-M100/125/140VAR1, PUZ-M100/125/140YAR1, PUZ-SM100/125/140VKA, PUZ-SM100/125/140YKA

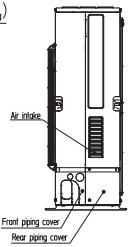
Upper View



Front View

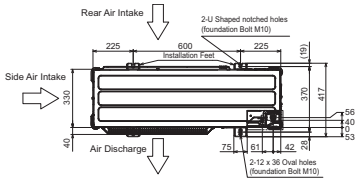


Side View



Product Dimensions — PUZ-M200/250YKA, PUHZ-P200/250YKA3

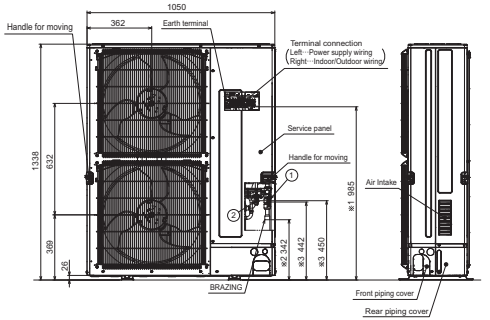
Upper View



Model	① Refrigerant GAS pipe connection	② Refrigerant LIQUID pipe connection
PUZ-M200YKA	ø19.05 (3/4F)	ø9.52 (3/8F)
PUZ-M250YKA	ø19.05 (3/4F)	ø12.7 (1/2F)
PUHZ-P200YKA3.UK	ø19.05 (3/4F)	ø9.52 (3/8F)
PUHZ-P250YKA3.UK	ø19.05 (3/4F)	ø12.7 (1/2F)

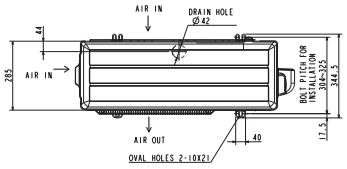
※1···Indication of Terminal connection location.
※2···Refrigerant GAS pipe connection (BRAZING) O.Dø25.4.
※3···Indication of STOP VALVE connection location.

Front View

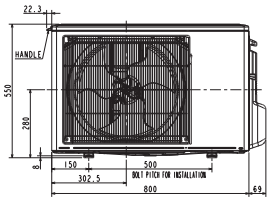


Product Dimensions — SUZ-M25/35VAR2

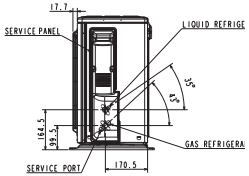
Upper View



Front View

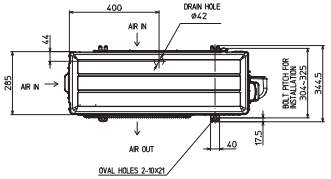


Side View

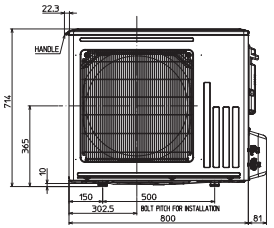


Product Dimensions — SUZ-M50VAR2

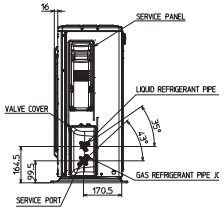
Upper View



Front View

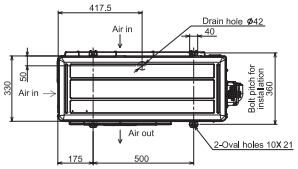


Side View

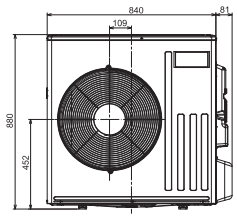


Product Dimensions — SUZ-M60VAR2, SUZ-M71VAR1, SUZ-SM71VA

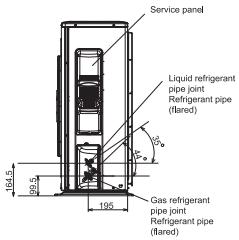
Upper View



Front View



Side View



Mr Slim Accessories / Optional Extras

Indoor Units

WALL MOUNTED UNITS	DESCRIPTION
PAR-FL32MA	Wireless remote controller

4-WAY BLOW CASSETTE UNITS	DESCRIPTION
SLP-2FA	Grille for SLZ-M15-60FA
SLP-2FAE	3D i-see sensor grille for SLZ-M15-60FA
PLP-6EA	Grille for PLA-ZM/M35-140EA / PLA-SM71-140EA
PLP-6EAE	3D i-see sensor grille for PLA-ZM/M35-140EA
PLP-6EAJ	Self elevating grille for PLA-ZM/M35-140EA / PLA-SM71-140EA
PAC-SE1ME-E	Corner panel with 3D i-see sensor for PLA-ZM/M35-140EA
PAR-SE9FA-E	Corner panel with signal receiver for PLA-ZM/M35-140EA / PLA-SM71-140EA
PAC-SJ37SP-E	Shutter plate for PLA-ZM/M35-140EA / PLA-SM71-140EA
PAC-SJ41TME	Multi-function casement for PLA-ZM/M35-140EA / PLA-SM71-140EA
PAC-SJ39HR-E	Power supply kit for PLA-ZM/M35-140EA / PLA-SM71-140EA
PAR-SL100A-E	Wireless remote controller for PLA-ZM/M35-140EA / PLA-SM71-140EA

CEILING SUSPENDED UNITS	DESCRIPTION
PAR-SL94B	Wireless remote controller and adaptor
PAC-SG38KF	Oil mist filter for PCA-M71HA (12 pack)
PAC-SF81KC	Decoration covers (front cover & suspending bracket) for PCA-M71HA

Mr Slim Accessories / Optional Extras

Outdoor Units / System Control Units / Power Supply Terminal Kits

OUTDOOR UNITS	DESCRIPTION
PAC-SJ08DS	Drain socket set for PUZ-ZM35-50
PAC-SG61DS	Drain socket set for PUZ-ZM60-250 / PUZ-(S)M100-250 / PUHZ-ZRP71-250 / PUHZ-P200-250
PAC-SJ07SG	Air outlet guide for PUZ-ZM35-50
PAC-SG59SG	Air outlet guide for PUZ-ZM60-71 / PUHZ-ZRP71
PAC-SH96SG	Air outlet guide for PUZ-ZM100-250 / PUZ-(S)M100-250 / PUHZ-ZRP100-250 / PUHZ-P200-250
PAC-SJ06SG	Air protect guide (allows cooling at -15ºC) for PUZ-ZM35-50
PAC-SH63AG	Air protect guide (allows cooling at -15ºC) for PUZ-ZM60-71 / PUHZ-ZRP71
PAC-SH95AG	Air protect guide (allows cooling at -15ºC) for PUZ-ZM100-250 / PUZ-(S)M100-250 / PUHZ-ZRP100-250 / PUHZ-P200-250
MAC-889SG	Air outlet guide for SUZ-M35
MAC-882SG	Air outlet guide for SUZ-M50
MAC-886SG	Air outlet guide for SUZ-M60-71 / SUZ-SM71
PAC-SJ71FM-E	30Pa outdoor fan motor for PUZ-ZM100-140 / PUHZ-ZRP100-140

SYSTEM CONTROL UNITS	DESCRIPTION
PAC-SA89TA	Remote on/off adaptor (3 wire adaptor)
PAC-SA88HA	Run/fault adaptor (5 wire adaptor)
PAC-SF40RM	Run/fault interface
MAC-334IF	Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output. Now includes a heating interlock mode - when SUZ or MXZ
MAC-397IF	Interface for MA remote controller (PAR-40MAA), on/off input and run or fault output - when SUZ or MXZ
PAC-SE41TS	Remote sensor
MAC-567IF	Interface for connection to Wi-Fi MELCloud service
PAC-SJ96MA	M-NET adaptor for PUZ-ZM35-50
PAC-SJ95MA	M-NET adaptor for PUZ-ZM60-250 / PUZ-(S)M100-250 / PUHZ-ZRP71-250 / PUHZ-P200-250
PAR-CT01MAA-SB	Touch screen wired remote controller
PAR-CT01MAA-PB	Touch screen wired remote controller (Premium Finish)
PAR-40MAA	Standard wired remote controller
MELCOBEMS MINI	Modbus and BACnet MSTP CN105 adaptor
MELCORETAIL MINI	Retail control and input/output interface

POWER SUPPLY TERMINAL KITS	DESCRIPTION
PAC-SJ39HR	Power supply terminal kit for PLA-ZM and PLA-M
PAC-SG94HR	Power supply terminal kit for PKA-M
PAC-SG96HR	Power supply terminal kit for PCA-M / PSA-RP
PAC-SG97HR	Power supply terminal kit for PEAD-M / PCA-M-HA

MITSUBISHI ELECTRIC

Multi-Splits

Split-System Air Conditioning





Contents

MXZ-F R32 Inverter Heat Pump Multi-Split Units **1.4.10**

PUMY-SP R410A Inverter Heat Pump Multi-Split Units (Single Fan) **1.4.12**

PUMY-P R410A Inverter Heat Pump Multi-Split Units (Twin Fan) **1.4.14**

Multi-Split Accessories / Optional Extras **1.4.16**

The Flexible & Efficient **Multi-Split Range**

R32

Ideal for shops and small commercial buildings that require air conditioning in more than one room, the Mitsubishi Electric Multi-Split systems combine flexibility and performance while lowering CO_2 emissions and running costs.

Using both R32 and R410A refrigerant, and flexible enough to suit a number of applications, the range includes models that will run up to eleven indoor units per single outdoor unit, between 3.3 and 22.4kW.

With vastly reduced power consumption and inverter technology, alongside increased pipe lengths and advanced controls, the Multi-Split range is extremely efficient and versatile, helping to make system application easier. A variety of indoor units can be connected to a single outdoor unit, including cassettes, ducted, wall, floor or ceiling mounted units. The range is one of the most efficient in the industry with an energy efficiency class of up to A+++.

Example of a **6-way MXZ R32 Multi-Split System**



Exceptional Features

Inverter Technology

Multi-Split outdoor units utilise inverter technology to save energy and running costs for two main reasons:

- The compressor varies its speed to match the cooling or heating load and therefore consumes only the power necessary to match the exact requirement of the room.
- When an inverter driven air conditioner is operating at partial load, the energy efficiency of the system is higher than at full load.





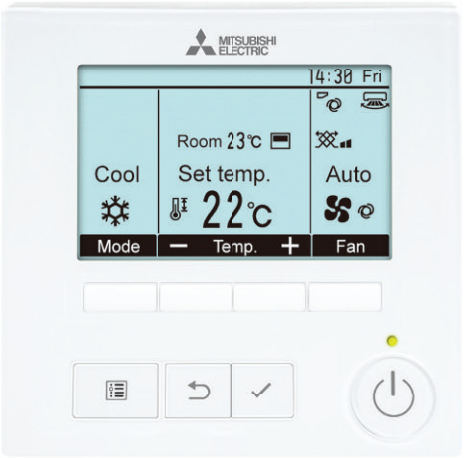
Individual Control of Units

All indoor units that form part of a Multi-Split system can be individually controlled (On/Off and Setpoint) according to the need of the room or location it is installed.

This **saves energy** when rooms are out of use, as well as allowing for individual preference on room temperature.







Operational Range

Mode	MXZ	PUMY
Cooling	-10°C to +46°C	-5°C to +52°C
Heating	-15°C to +24°C	-20°C to +15°C

Setpoint Range

Mode	Minimum	Maximum
Cooling	19°C	30°C
Heating	17°C	28°C
Auto	19°C	28°C

Nominal Conditions: Cooling; indoor 27°C DB, 19°C WB; outdoor 35°C DB, 24°C WB.
Nominal Conditions: Heating; indoor 20°C DB; outdoor 7°C DB, 6°C WB.
UK Conditions: Cooling; indoor 21°C DB, 15°C WB; outdoor 27°C DB.
UK Conditions: Heating; indoor 21°C DB; outdoor 0°C DB, -1°C WB.

Versatile Applications

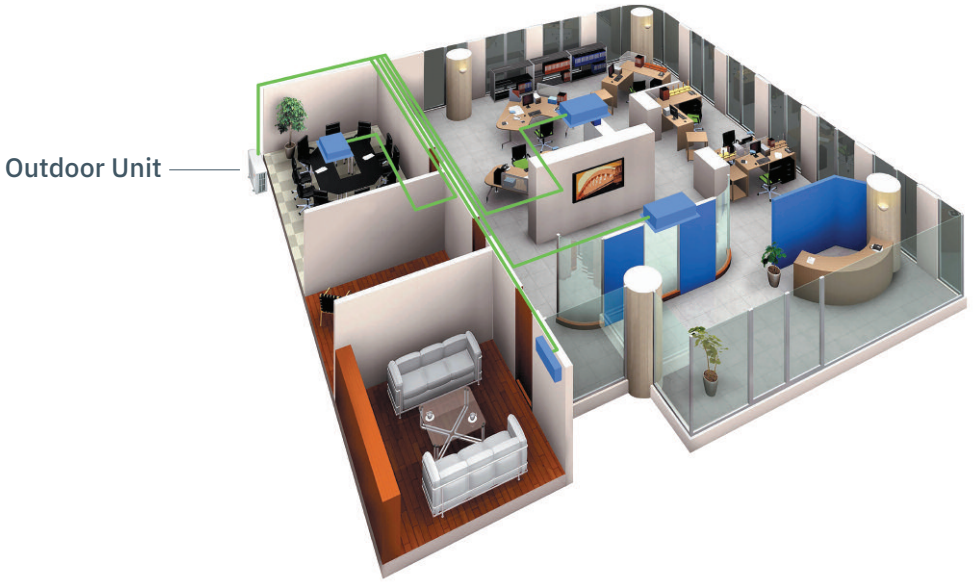
The Multi-Split system is an ideal choice for small commercial properties desiring a flexible and effective solution with regards to system design.

The MXZ Multi-Split systems allow up to six indoor units to be connected to an outdoor unit. With flexible piping design, the total piping length ranges from 20 to 80m with a maximum height difference of up to 15m.

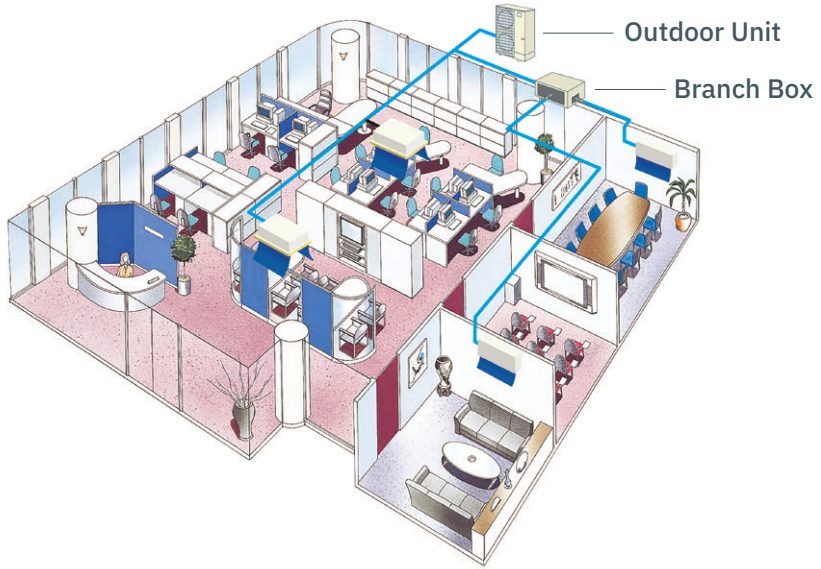
The City Multi PUMY series allows the connection of up to eleven indoor units on a single outdoor unit, utilising a wide range of indoor unit types. Total piping length is configurable up to 300m with a maximum height difference of up to 15m.



MXZ Multi-Split Office Application



PUMY Multi-Split Office Application



The Flexible & Efficient **Multi-Split Range**

Outdoor Units

R32



MXZ-2F33VF3
- 2 indoor units
- Nominal cooling capacity 3.3kW

MXZ-2F42VF3
- 2 indoor units
- Nominal cooling capacity 4.2kW

R32



MXZ-3F54VF3
- 2-3 indoor units
- Nominal cooling capacity 5.4kW

MXZ-3F68VF3
- 2-3 indoor units
- Nominal cooling capacity 6.8kW

MXZ-4F72VF3
- 2-4 indoor units
- Nominal cooling capacity 7.2kW

R32



MXZ-4F83VF
- 2-4 indoor units
- Nominal cooling capacity 8.3kW

MXZ-5F102VF
- 2-5 indoor units
- Nominal cooling capacity 10.2kW

R32



MXZ-6F122VF
- 2-6 indoor units
- Nominal cooling capacity 12.2kW

R410A



PUMY-SP112-140V/YKM
- 2-10 indoor units
- Nominal cooling capacity 12.5 - 15.5kW

R410A



PUMY-P112-140VKM5/YKM4 / PUMY-P200YKM2
- 2-11 indoor units
- Nominal cooling capacity 12.5 - 22.4kW

The Flexible & Efficient **Multi-Split Range**

Indoor Units

Wall Mounted

MSZ-LN



MSZ-EF



MSZ-AP



PKFY-P-VLM-E / PKFY-P-VKM-E



Floor Mounted

MFZ-KT



PFFY-P-VCM-E



PFFY-P-VLEM-E



PFFY-P-VKM-E



Ceiling Cassette

SLZ-M / PLFY-P-VFM-E

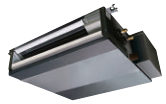


PLA-M / PLFY-M-VEM-E



Ceiling Concealed Ducted

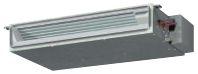
SEZ-M



PEAD-M / PEFY-M-VMA-A



PEFY-P-VMS1-E



PEFY-P-VMHS-E



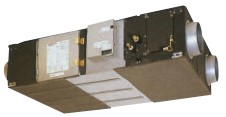
Ceiling Suspended

PCA-M / PCFY-P-VKM-E



Lossnay Outdoor Air Processing Unit

GUF-RD4



Compatibility Table

Model	MXZ-2F33VF3	MXZ-2F42VF3	MXZ-3F54VF3	MXZ-3F68VF3	MXZ-4F72VF3	MXZ-4F83VF	MXZ-5F102VF	MXZ-6F122VF	PUMY-SP112/125/140		PUMY-P112/125/140/200		PUMY-(S)P112/125/140/200
									Branch Box	LEV Kit	Branch Box	LEV Kit	VRF
Wall Mounted													
MSZ-LN18VG2	●	●	●	●	●	●	●	●			●	●	
MSZ-LN25VG2	●	●	●	●	●	●	●	●			●	●	
MSZ-LN35VG2		●	●	●	●	●	●	●			●	●	
MSZ-LN50VG2			●	●	●	●	●	●			●	●	
MSZ-EF25VGK	●	●	●	●	●	●	●	●	●	●	●	●	
MSZ-EF35VGK		●	●	●	●	●	●	●	●	●	●	●	
MSZ-EF50VGK			●	●	●	●	●	●	●	●	●	●	
MSZ-AP15VG	●	●	●	●	●	●	●	●	●	●	●	●	
MSZ-AP20VG	●	●	●	●	●	●	●	●	●	●	●	●	
MSZ-AP25VG(K)	●	●	●	●	●	●	●	●	●	●	●	●	
MSZ-AP35VG(K)		●	●	●	●	●	●	●	●	●	●	●	
MSZ-AP42VG			●	●	●	●	●	●	●	●	●	●	
MSZ-AP50VG(K)			●	●	●	●	●	●	●	●	●	●	
MSZ-AP60VG(K)				●	●	●	●	●					
PKFY-P10/15/20/25/32/40/50VLM-E													●
PKFY-P63VKM-E													●
Floor Mounted													
MFZ-KT25VG	●	●	●	●	●	●	●	●			●	●	
MFZ-KT35VG		●	●	●	●	●	●	●			●	●	
MFZ-KT50VG			●	●	●	●	●	●			●	●	
PFFY-P20/25/32/40/50/63VCM-E													●
PFFY-P20/25/32/40/50/63VLEM-E													●
PFFY-P20/25/32/40VKM-E													●
Ceiling Cassette													
SLZ-M15FA	●	●	●	●	●	●	●	●	●		●*1		
SLZ-M25FA	●	●	●	●	●	●	●	●	●		●		
SLZ-M35FA		●	●	●	●	●	●	●	●		●		
SLZ-M50FA			●	●	●	●	●	●	●		●		
PLA-M35EA									●		●		
PLA-M50EA									●		●		
PLA-M60EA									●		●		
PLA-M71EA									●		●		
PLA-M100EA									●		●		
PLFY-M32/40/50/63/80/100/125VEM-E													●
PLFY-P15/20/25/32/40/50VFM-E													●
Ceiling Concealed Ducted													
SEZ-M25DA	●	●	●	●	●	●	●	●	●		●		
SEZ-M35DA		●	●	●	●	●	●	●	●		●		
SEZ-M50DA			●	●	●	●	●	●	●		●		
SEZ-M60DA				●	●	●	●	●	●		●		
SEZ-M71DA									●		●		
PEAD-M50JA			●	●	●	●	●	●	●		●		
PEAD-M60JA						●	●	●	●		●		
PEAD-M71JA						●	●	●	●		●		
PEAD-M100JA									●		●		
PEFY-P15/20/25/32/40/50/63VMS1-E													●
PEFY-M20/25/32/40/50/63/80/100/125VMA-A													●
PEFY-P80/100/125/140VMHS-E													●
Ceiling Suspended													
PCA-M50KA			●	●	●	●	●	●	●		●		
PCA-M60KA				●	●	●	●	●	●		●		
PCA-M71KA						●	●	●	●		●		
PCA-M100KA									●		●		
PCFY-P40/63/100/125VKM-E													●
Lossnay Outdoor Air Processing Unit													
GUF-50/100RD4													●

Note: For MXZ Multi-Split capacity combination tables please refer to databook. *1 PUMY-P200YKM2 not connectable.

MXZ-F R32 Inverter Heat Pump

(3.3-12.2kW)

Multi-Split Units

The R32 Multi-Split system allows up to six M Series or Mr Slim wall mounted, cassette, ducted, floor mounted or ceiling suspended indoor units of different capacities to be operated from a single outdoor unit. This makes it an economic and efficient answer for multi-room applications, whilst also offering space saving benefits.

Key Features

- Up to six indoor units may be connected to a single outdoor unit
- Energy saving inverter controlled outdoor unit adjusts compressor performance to economically match the demand for heating and cooling
- Units may be added within the capacity of the system as requirements change
- Capacities of indoor units may be mixed to suit individual rooms

R32



MXZ-F - OUTDOOR UNITS		MXZ-2F33VF3	MXZ-2F42VF3	MXZ-3F54VF3	MXZ-3F68VF3	MXZ-4F72VF3	MXZ-4F83VF	MXZ-5F102VF	MXZ-6F122VF
NUMBER OF CONNECTABLE INDOOR UNITS		2	2	2 - 3	2 - 3	2 - 4	2 - 4	2 - 5	2 - 6
CAPACITY (kW)	Heating (nominal)	4.0 (1.0-4.1)	4.5 (1.0-4.8)	7.0 (2.6-9.0)	8.6 (2.6-10.6)	8.6 (3.4-10.7)	9.3 (3.4-11.6)	10.5 (4.1-14.0)	14.0 (3.5-16.5)
	Cooling (nominal)	3.3 (1.1-3.8)	4.2 (1.1-4.4)	5.4 (2.9-6.8)	6.8 (2.9-8.4)	7.2 (3.7-8.8)	8.3 (3.7-9.2)	10.2 (3.9-11.0)	12.2 (3.5-13.5)
	Heating (UK)	3.32 (0.83-3.40)	3.74 (0.84-3.99)	5.81 (2.16-7.47)	7.14 (2.16-8.80)	7.14 (2.82-8.89)	7.8 (2.82-9.63)	8.7 (3.40-11.63)	11.6 (2.90-13.71)
	Cooling (UK)	3.23 (1.07-3.72)	4.12 (1.08-4.32)	5.3 (2.85-6.67)	6.66 (2.84-8.23)	7.0 (3.59-8.56)	8.2 (3.67-9.12)	10.1 (3.86-10.90)	12.1 (3.47-13.39)
COP / EER (nominal)*1		4.40 / 3.90	5.10 / 4.30	4.60 / 4.10	4.50 / 3.70	4.60 / 3.90	4.65 / 4.21	4.60 / 3.64	4.23 / 3.33
SCOP (ηsh) / SEER (ηsc) (BS EN14825)		4.16 / 6.13	4.60 / 8.69	4.61 / 8.52	4.12 / 7.96	4.07 / 8.13	4.72 (185.8%) / 8.51 (337.4%)	4.65 (183%) / 8.21 (325.4%)	4.65 (183.1%) / 7.65 (303%)
ErP ENERGY EFFICIENCY CLASS	Heating/Cooling	A+ / A++	A++ / A+++	A++ / A+++	A+ / A++	A+ / A++	A++ / A+++	A++ / A++	A++ / A++
MAX AIRFLOW (m^3/min)	Heating/Cooling	33.7 / 32.9	33.3 / 27.7	43.0 / 42.1	43.0 / 42.1	43.0 / 42.1	71 / 55	74 / 62	77 / 63
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	50 / 49	50 / 44	50 / 46	53 / 48	54 / 48	51 / 49	56 / 52	57 / 55
SOUND POWER LEVEL (dBA)	Cooling	60	59	59	63	63	61	65	69
DIMENSIONS (mm)	Width x Depth x Height	800 x 285 x 550	800 x 285 x 550	840 x 330 x 710	840 x 330 x 710	840 x 330 x 710	950 x 330 x 796	950 x 330 x 796	950 x 330 x 1048
WEIGHT (kg)		33	37	58	58	59	62	62	87
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single	Single
POWER INPUT (kW)	Heating/Cooling (nominal)	0.909 / 0.846	0.88 / 0.98	1.52 / 1.32	1.91 / 1.84	1.87 / 1.85	2.00 / 1.97	2.28 / 2.80	3.31 / 3.66
	Heating/Cooling (UK)	0.82 / 0.68	0.90 / 0.78	1.38 / 1.06	1.73 / 1.47	1.69 / 1.48	1.80 / 1.57	2.09 / 2.66	3.04 / 3.44
STARTING CURRENT (A)		4.6	4.2	7.0	10.5	10.0	8.8	12.3	16.1
RUNNING CURRENT (A)	Heating/Cooling [MAX]	4.6 / 4.3 [10.0]	4.2 / 4.5 [12.2]	7.0 / 5.9 [18.0]	10.5 / 9.6 [18.0]	10.0 / 9.5 [18.0]	8.8 / 8.7 [21.4]	10.0 / 12.3 [21.4]	14.5 / 16.1 [29.8]
INTERCONNECTING CABLE No. CORES		4 Core	4 Core	4 Core	4 Core	4 Core	4 Core	4 Core	4 Core
TOTAL PIPE LENGTH (m)		20	30	50	60	60	70	80	80
MAX PIPE LENGTH PER INDOOR UNIT (m)		15	20	25	25	25	25	25	25
MAX HEIGHT DIFFERENCE (m)		10	15 (10 if OU higher than IU)	15 (10 if OU higher than IU)	15 (10 if OU higher than IU)	15 (10 if OU higher than IU)	15	15	15
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) - R32 (GWP 675)		1.00 / 0.68 (20m)	1.20 / 0.81 (30m)	1.40 / 0.95 (50m)	1.40 / 0.95 (60m)	1.40 / 0.95 (60m)	2.4 / 1.62 (70m)	2.4 / 1.62 (80m)	2.4 / 1.62 (80m)
FUSE RATING (BS88) – HRC (A)		16	16	25	25	25	25	25	32

Notes: *1 System COP / EER when connected to MSZ-LN / MSZ-AP x indoor unit connections.
Combined max running current of all indoors on system must not exceed 3A.
The SEZ-M25DA cannot be used when the total indoor capacity is equal to the outdoor capacity, i.e. when the capacity ratio is 1.

Accessories

Outdoor Units

MAC-889SG

Air outlet guide for MXZ-2F33VF3, MXZ-2F42VF3

MAC-856SG

Air outlet guide for MXZ-3F54VF3, MXZ-3F68VF3, MXZ-4F72VF3, MXZ-4F83VF, MXZ-5F102VF

MAC-857SG

Air outlet guide for MXZ-6F122VF

System Control Units

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB = Premium finish)

MAC-334IF

Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output

MAC-397IF

Interface for MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run or fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

PAR-40MAA

Standard wired remote controller

MELCOBEMS MINI

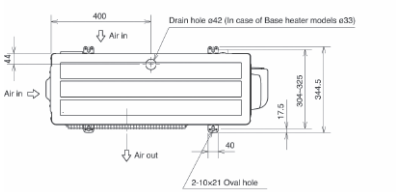
Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

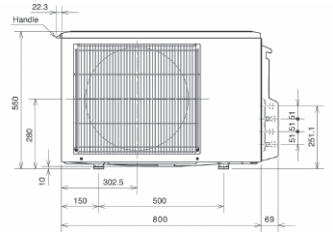
Retail control and input / output interface

Product Dimensions MXZ-2F33VF3, MXZ-2F42VF3

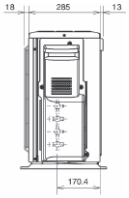
Upper View



Front View

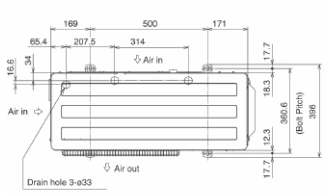


Side View

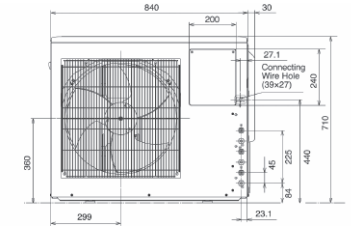


Product Dimensions MXZ-3F54VF3, MXZ-3F68VF3, MXZ-4F72VF3

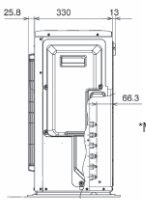
Upper View



Front View



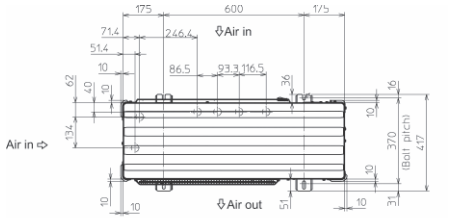
Side View



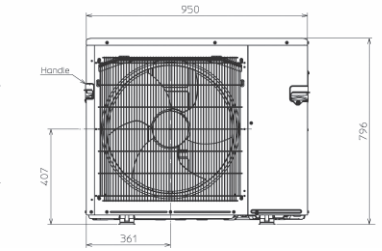
*MXZ-4F72VF3 has 4 pipe connections

Product Dimensions MXZ-4F83VF, MXZ-5F102VF

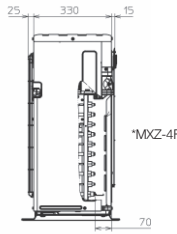
Upper View



Front View



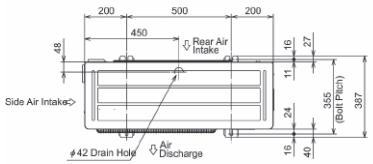
Side View



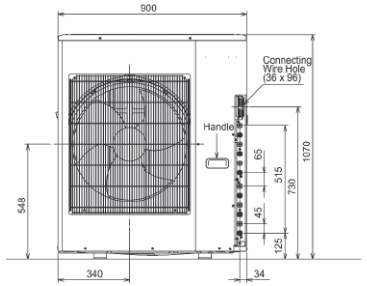
*MXZ-4F83VF has 4 pipe connections

Product Dimensions MXZ-6F122VF

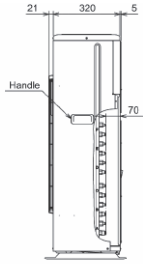
Upper View



Front View



Side View



PUMY-SP R410A Inverter Heat Pump

(12.5-15.5kW)

Multi-Split Units



The **PUMY-SP** series allow up to 10 indoor units to be connected to a single outdoor unit, using the standard City Multi branch pipework system or via branch boxes and/or LEV kits to connect M Series or Mr Slim indoor units. This makes it an economic and efficient answer for multi-room applications, whilst also offering space saving benefits.

Key Features

- The condensing unit is extremely slimline which allows easy location and application of the system
- Connect stylish M Series wall mounted and floor mounted indoor units to the system via the LEV kit interface **PAC-LV11M**
- Connect M Series and Mr Slim indoor units via the **PAC-MK-BC** boxes alongside VRF indoor units to the same system

PUMY-SP - OUTDOOR UNITS		PUMY-SP112VKM	PUMY-SP112YKM	PUMY-SP125VKM	PUMY-SP125YKM	PUMY-SP140VKM	PUMY-SP140YKM
NUMBER OF CONNECTABLE INDOOR UNITS	Branch box / Mixed*1	8 / 10	8 / 10	8 / 10	8 / 10	8 / 10	8 / 10
CAPACITY (kW)	Heating (nominal)	14.0	14.0	16.0	16.0	16.5	16.5
	Cooling (nominal)	12.5	12.5	14.0	14.0	15.5	15.5
	Heating (UK)	13.9	13.9	15.8	15.8	16.3	16.3
	Cooling (UK)	10.0	10.0	11.2	11.2	12.4	12.4
COP / EER (nominal)		4.42 / 4.03	4.42 / 4.03	4.10 / 3.65	4.10 / 3.65	4.10 / 3.30	4.10 / 3.30
SCOP / SEER*3		-	-	-	-	-	-
MAX AIRFLOW (m^3/min)	Heating / Cooling	77	77	83	83	83	83
SOUND PRESSURE LEVEL (dBA)		52	52	53	53	54	54
SOUND POWER LEVEL (dBA)	Cooling	72	72	73	73	74	74
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330+40 x 981	1050 x 330+40 x 981	1050 x 330+40 x 981	1050 x 330+40 x 981	1050 x 330+40 x 981	1050 x 330+40 x 981
WEIGHT (kg)		93	94	93	94	93	94
ELECTRICAL SUPPLY		220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz
PHASE		Single	Three	Single	Three	Single	Three
POWER INPUT (kW)	Heating/Cooling (nominal)	3.17 / 3.10	3.17 / 3.10	3.90 / 3.84	3.90 / 3.84	4.02 / 4.70	4.02 / 4.70
	Heating/Cooling (UK)	4.18 / 1.61	4.18 / 1.61	5.15 / 2.00	5.15 / 2.00	5.31 / 2.44	5.31 / 2.44
STARTING CURRENT (A)		14	7	14	7	14	7
RUNNING CURRENT (A)	Heating/Cooling [MAX]	13.48 / 13.18 [30.5]	4.82 / 4.71 [13.0]	16.58 / 16.33 [30.5]	5.93 / 5.83 [13.0]	17.09 / 19.98 [30.5]	6.11 / 7.14 [13.0]
FUSE RATING (BS88) - HRC (A)		1 x 32	1 x 16	1 x 32	1 x 16	1 x 32	1 x 16
PIPE SIZE MM (in)	Gas	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
TOTAL PIPING LENGTH (M)	Branch box / Mixed*1	120	120	120	120	120	120
FURTHEST PIPING LENGTH (M)	(with no branch boxes)	80 (70)	80 (70)	80 (70)	80 (70)	80 (70)	80 (70)
BETWEEN BRANCH BOX AND OUTDOOR UNIT - LENGTH (m)		55	55	55	55	55	55
BETWEEN BRANCH BOX AND INDOOR UNIT - LENGTH (m)		25	25	25	25	25	25
BETWEEN INDOOR AND OUTDOOR UNIT - HEIGHT (m)		50m max*2	50m max*2	50m max*2	50m max*2	50m max*2	50m max*2
BETWEEN INDOOR AND INDOOR UNITS - HEIGHT (m)	Branch box / Mixed*1	12	12	12	12	12	12
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (T)	R410A (GWP 2088)	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (T)	R410A (GWP 2088)	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79

Notes: *1 **Branch box** - only using branch boxes (PAC-MK) on the system. **Mixed** - using a mix of branch boxes (PAC-MK) and City Multi indoor units on the same system. *2 40m max if outdoor installed below. 30m if mixed system.
*3 SCOP / SEER available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 6 to EN14825 standard.

PAC-MK - BRANCH BOX		PAC-MK34BC	PAC-MK54BC
NUMBER OF CONNECTABLE INDOOR UNITS		3	5
COMPATIBLE INDOOR UNITS		M Series, Mr Slim	M Series, Mr Slim
WEIGHT (kg)		7.2	7.9
DIMENSIONS (mm)	Width x Depth x Height	450 x 280 x 170	450 x 280 x 170
POWER SUPPLY TO BRANCH BOX*1	From outdoor unit	3 core + earth	3 core + earth
	Separate supply	220-240v, 50Hz / Single Phase	220-240v, 50Hz / Single Phase
	Separate supply fuse rating (BS88) - HRC (A)	6	6
POWER SUPPLY TO INDOOR UNITS	From branch box	3 core + earth	3 core + earth

Note: *1 Either option is available for power supply from outdoor unit OR from a separate supply.

PAC-LV - LEV KIT INTERFACE		PAC-LV11M
NUMBER OF CONNECTABLE INDOOR UNITS		1
COMPATIBLE INDOOR UNITS		M Series
CAPACITY INDEX OF INDOOR UNITS		15 to 50
WEIGHT (kg)		3.5
DIMENSIONS (mm)	Width x Depth x Height	355 x 142 x 138
ELECTRICAL SUPPLY		220-240v, 50Hz / Single Phase
FUSE RATING (BS88) - HRC (A)		6

Note: The indoor unit connected to the PAC-LV11 cannot be grouped with other City Multi indoor units. Group control with other M Series indoor units + PAC-LV11 is possible via ME controller or system controller only. Group control is not possible via an MA controller, IT terminal or wireless remote controller. ME control functions energy management, charge apportioning, interlock and free contact are not available.

Accessories

Outdoor Units

CMY-Y62-G-E

Branch pipe (2 branches) for PUMY

System Control Units

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB = Premium finish)

MAC-334IF

Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output

MAC-397IF

Interface for MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run or fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

PAR-40MAA

Standard wired remote controller

MELCOBEMS MINI

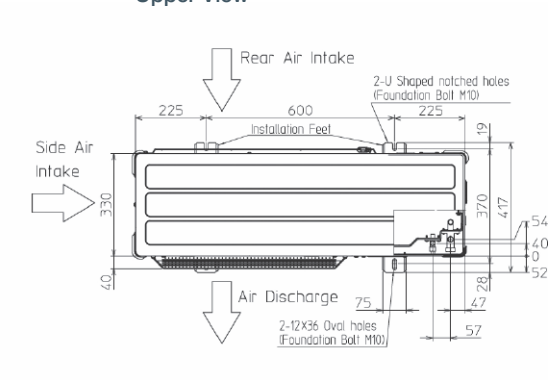
Modbus and BACnet MSTP CN105 adaptor

MELCORETAIL MINI

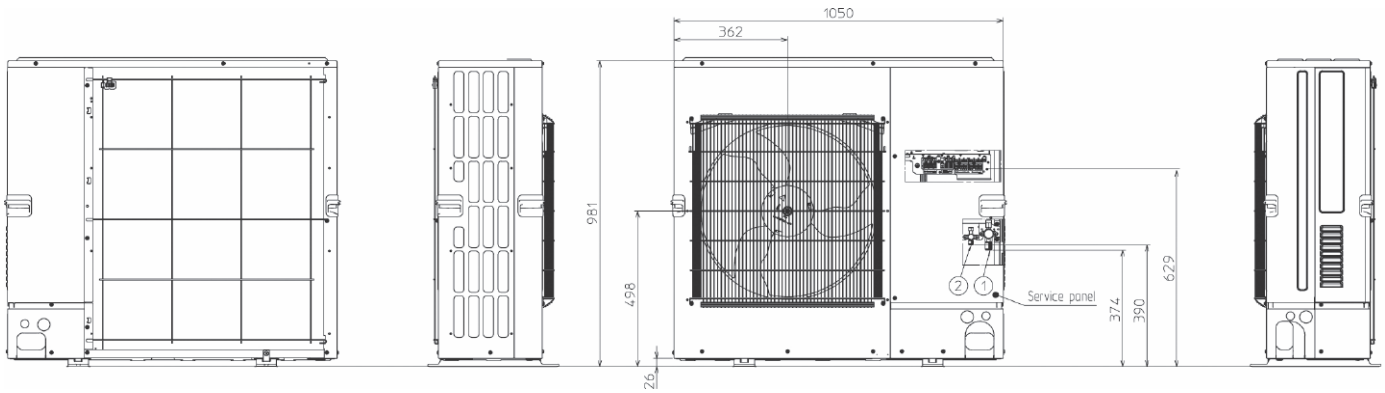
Retail control and input / output interface

Product Dimensions PUMY-SP112/125/140(V)(Y)KM

Upper View



Rear View | Side View | Front View | Side View



PUMY-P R410A Inverter Heat Pump

(12.5-22.4kW)

Multi-Split Units



The **PUMY-P** series allow up to 11 indoor units to be connected to a single outdoor unit, using the standard City Multi branch pipework system or via branch boxes and/or LEV kits to connect M Series or Mr Slim indoor units. This makes it an economic and efficient answer for multi-room applications, whilst also offering space saving benefits.

Key Features

- The condensing unit is extremely slimline which allows easy location and application of the system
- Connect stylish M Series wall mounted and floor mounted indoor units to the system via the LEV kit interface **PAC-LV11M**
- Connect M Series and Mr Slim indoor units via the **PAC-MK-BC** boxes alongside VRF indoor units to the same system

PUMY-P OUTDOOR UNITS		PUMY-P112VKM5	PUMY-P112YKM4	PUMY-P125VKM5	PUMY-P125YKM4	PUMY-P140VKM5	PUMY-P140YKM4	PUMY-P200YKM2
NUMBER OF CONNECTABLE INDOOR UNITS	Branch box / Mixed*1	8 / 10	8 / 10	8 / 10	8 / 10	8 / 10	8 / 10	8 / 11
CAPACITY (kW)	Heating (nominal)	14.0	14.0	16.0	16.0	18.0	18.0	25.0
	Cooling (nominal)	12.5	12.5	14.0	14.0	15.5	15.5	22.4
	Heating (UK)	13.9	13.9	15.8	15.8	17.8	17.8	24.8
	Cooling (UK)	10.0	10.0	11.2	11.2	12.4	12.4	17.9
COP / EER (NOMINAL)		4.61 / 4.48	4.61 / 4.48	4.28 / 4.05	4.28 / 4.05	4.03 / 3.43	4.03 / 3.43	4.28 / 3.70
SCOP / SEER*4		-	-	-	-	-	-	-
MAX AIRFLOW (m^3/min)	Heating / Cooling	110	110	110	110	110	110	141
SOUND PRESSURE LEVEL (dBA)		49	49	50	50	51	51	56
SOUND POWER LEVEL (dBA)	Cooling	69	69	70	70	71	71	75
DIMENSIONS (mm)	Width x Depth x Height	1050 x 330+40 x 1338	1050 x 330+40 x 1338	1050 x 330+40 x 1338	1050 x 330+40 x 1338	1050 x 330+40 x 1338	1050 x 330+40 x 1338	1050 x 330+40 x 1338
WEIGHT (kg)		122	125	122	125	122	125	141
ELECTRICAL SUPPLY		220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Single	Three	Single	Three	Single	Three	Three
POWER INPUT (kW)	Heating/Cooling (nominal)	3.04 / 2.79	3.04 / 2.79	3.74 / 3.46	3.74 / 3.46	4.47 / 4.52	4.47 / 4.52	5.84 / 6.05
	Heating/Cooling (UK)	4.01 / 1.56	4.01 / 1.56	4.94 / 1.94	4.94 / 1.94	5.90 / 2.53	5.90 / 2.53	7.71 / 3.39
STARTING CURRENT (A)		14	7	14	7	14	7	7
RUNNING CURRENT (A)	Heating/Cooling [MAX]	12.86 / 11.80 [29.5]	4.98 / 4.57 [13.0]	15.82 / 14.64 [29.5]	5.78 / 5.35 [13.0]	18.91/ 19.12 [29.5]	6.55 / 6.62 [13.0]	8.74 / 9.05 [19.0]
FUSE RATING (BS88) - HRC (A)		1 x 32	1 x 16	1 x 32	1 x 16	1 x 32	1 x 16	1 x 20
PIPE SIZE MM (in)	Gas	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	19.05 (3/4")
	Liquid	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")*2
TOTAL PIPING LENGTH (m)	Branch box / Mixed*1	150 / 300 (240)	150 / 300 (240)	150 / 300 (240)	150 / 300 (240)	150 / 300 (240)	150 / 300 (240)	150 / 150 (150)
FURTHEST PIPING LENGTH (m)	(With no branch boxes)	80 (85)	80 (85)	80 (85)	80 (85)	80 (85)	80 (85)	80
BETWEEN BRANCH BOX AND OUTDOOR UNIT - LENGTH (m)		55	55	55	55	55	55	55
BETWEEN BRANCH BOX AND INDOOR UNIT - LENGTH (m)		25	25	25	25	25	25	25
BETWEEN INDOOR AND OUTDOOR UNIT - HEIGHT (m)		50m max*3	50m max*3	50m max*3	50m max*3	50m max*3	50m max*3	50m max*3
BETWEEN INDOOR AND INDOOR UNITS - HEIGHT (m)	Branch box / Mixed*1	12	12	12	12	12	12	12
CHARGE REFRIGERANT (kg) /CO_2 EQUIVALENT (t) - R410A (GWP 2088)		4.8 / 10.0	4.8 / 10.0	4.8 / 10.0	4.8 / 10.0	4.8 / 10.0	4.8 / 10.0	7.3 / 15.2
MAX ADDITIONAL REFRIGERANT (kg) /CO_2 EQUIVALENT (t) - R410A (GWP 2088)		13.7 / 28.6	13.7 / 28.6	13.7 / 28.6	13.7 / 28.6	13.7 / 28.6	13.7 / 28.6	13.5 / 28.2

Notes: *1 **Branch box** - only using branch boxes (PAC-MK) on the system. **Mixed** - using a mix of branch boxes (PAC-MK) and City Multi indoor units on the same system. Figure in brackets - when using 2 branch boxes.
*2 12.7mm (1/2") if furthest length ≥ 60m. *3 40m max if outdoor installed below. *4 SCOP / SEER available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 6 to EN14825 standard.

PAC-MK - BRANCH BOX		PAC-MK34BC	PAC-MK54BC
NUMBER OF CONNECTABLE INDOOR UNITS		3	5
COMPATIBLE INDOOR UNITS		M Series, Mr Slim	M Series, Mr Slim
WEIGHT (kg)		7.2	7.9
DIMENSIONS (mm)	Width x Depth x Height	450 x 280 x 170	450 x 280 x 170
POWER SUPPLY TO BRANCH BOX*1	From outdoor unit	3 core + earth	3 core + earth
	Separate supply	220-240v, 50Hz / Single Phase	220-240v, 50Hz / Single Phase
	Separate supply fuse rating (BS88) - HRC (A)	6	6
POWER SUPPLY TO INDOOR UNITS	From branch box	3 core + earth	3 core + earth

Note: *1 Either option is available for power supply from outdoor unit OR from a separate supply.

PAC-LV - LEV KIT INTERFACE		PAC-LV11M
NUMBER OF CONNECTABLE INDOOR UNITS		1
COMPATIBLE INDOOR UNITS		M Series
CAPACITY INDEX OF INDOOR UNITS		15 to 50
WEIGHT (kg)		3.5
DIMENSIONS (mm)	Width x Depth x Height	355 x 142 x 138
ELECTRICAL SUPPLY		220-240v, 50Hz / Single Phase
FUSE RATING (BS88) - HRC (A)		6

Note: The indoor unit connected to the PAC-LV11 cannot be grouped with other City Multi indoor units. Group control with other M Series indoor units + PAC-LV11 is possible via ME controller or system controller only. Group control is not possible via an MA controller, IT terminal or wireless remote controller. ME control functions energy management, charge apportioning, interlock and free contact are not available.

Accessories

Outdoor Units

CMY-Y62-G-E

Branch pipe (2 branches) for PUMY

System Control Units

PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB = Premium finish)

MAC-334IF

Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output

MAC-397IF

Interface for MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run or fault output

MAC-567IF

Interface for connection to Wi-Fi MELCloud service

PAR-40MAA

Standard wired remote controller

MELCOBEMS MINI

Modbus and BACnet MSTP CN105 adaptor

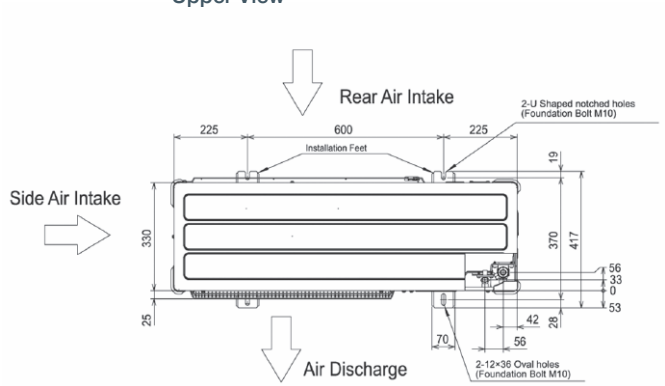
MELCORETAIL MINI

Retail control and input / output interface

Product Dimensions

PUMY-P112/125/140VKM5/YKM4, PUMY-P200YKM2

Upper View

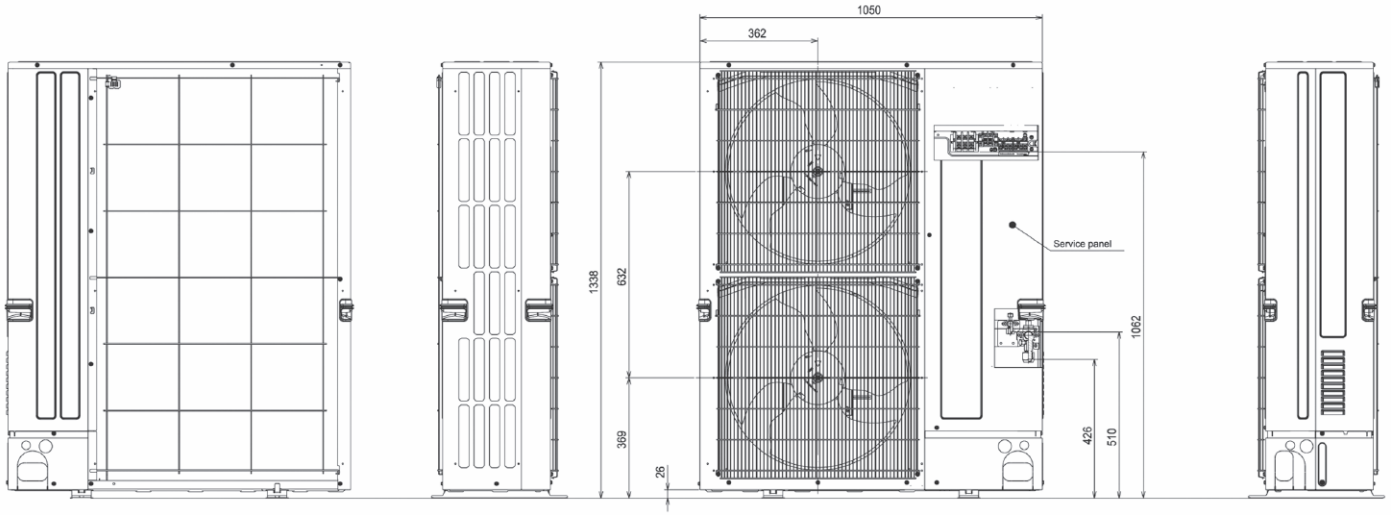


Rear View

Side View

Front View

Side View



Multi-Split Accessories / Optional Extras

OUTDOOR UNITS	DESCRIPTION
MAC-889SG	Air outlet guides for MXZ-2F33VF3, MXZ-2F42VF3
MAC-856SG	Air outlet guides for MXZ-3F54VF3, MXZ-3F68VF3, MXZ-4F72VF3, MXZ-4F83VF, MXZ-5F102VF
MAC-857SG	Air outlet guides for MXZ-6F122VF
CMY-Y62-G-E	Branch pipe (2 branches) for PUMY-(S)P

SYSTEM CONTROL UNITS	DESCRIPTION
PAR-40MAA	Standard wired remote controller
MAC-334IF	Interface for M-NET, MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run/fault output. Now includes a heating interlock mode
MAC-397IF	Interface for MA remote controller (PAR-40MAA / PAR-CT01MAA), on/off input and run or fault output
MAC-567IF	Interface for connection to Wi-Fi MELCloud service
PAR-CT01MAA-SB	Touch screen wired remote controller
PAR-CT01MAA-PB	Touch screen wired remote controller (premium finish)
MELCOBEMS MINI	Modbus/BACnet MSTP CN105 adaptor
MELCORETAIL MINI	Retail control and input/output interface

MITSUBISHI ELECTRIC

City Multi VRF

Energy Efficient VRF Systems





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CITY MULTI | Energy Efficient VRF Systems

Our answer to large scale VRF - **City Multi Air Conditioning**

First developed 30 years ago, City Multi is the market leader in VRF technology. Specifically designed to deliver comfort and control for today's building requirements, it addresses all the key market issues

VRF (Variable Refrigerant Flow) is a direct expansion type air conditioning system where one outdoor unit is connected with multiple indoor units, intelligently modulating the flow of refrigerant or water depending upon the capacity requirements of each zone within the building. Its ultimate purpose is to regulate the internal room air temperature and comfort levels in the most effective and efficient manner possible.

Today's commercial buildings are increasingly air tight and filled with heat-generating office equipment and lighting, which presents a challenge for anyone trying to maintain a stable and comfortable internal environment. Buildings account for around half of all UK greenhouse emissions, so legislation is demanding higher standards of air quality and increased energy efficiency in this sector.

The ideal solution

City Multi has constantly evolved and is packed with innovation that makes it eminently suitable for almost any building.

Designed from day one to work effectively in real applications in the UK market, City Multi delivers the best possible performance, combined with total flexibility of design and operation.

Available in heat recovery and heat pump variants, with up to 50 indoor units connectable, **City Multi provides the ultimate solution in comfort and efficiency**.





Lower GWP R32 VRF air conditioning systems - now available from Mitsubishi Electric

With the launch of the new YNW R32 VRF systems, Mitsubishi Electric is the first manufacturer to offer the UK market a complete range of lower Global Warming Potential (GWP) solutions.

Under the growing pressure of the F-Gas phase down regulations, the market is demanding viable and positive solutions which are future proof for businesses and last the full lifecycle of the product.

R32 is now the norm for room and split air conditioning systems offering a lower GWP (675) than R410A (2088). At the same time, the use of VRF systems has grown intensively over the past decade due to the core benefits of flexibility, energy saving and automated control.

The unique Hybrid VRF system has been the only viable R32 solution available to the UK market - until now. Utilising the innovative City Multi YNW outdoor unit, our new R32 VRF solution is able to offer complete design flexibility, high efficiency and low noise.

R32 makes up 50% of the existing R410A refrigerant already found in many current VRF systems; it is highly energy efficient and easy to recycle. A GWP of one third of R410A, plus reduced overall system refrigerant volumes, means a lower refrigerant total and lower global warming impact.

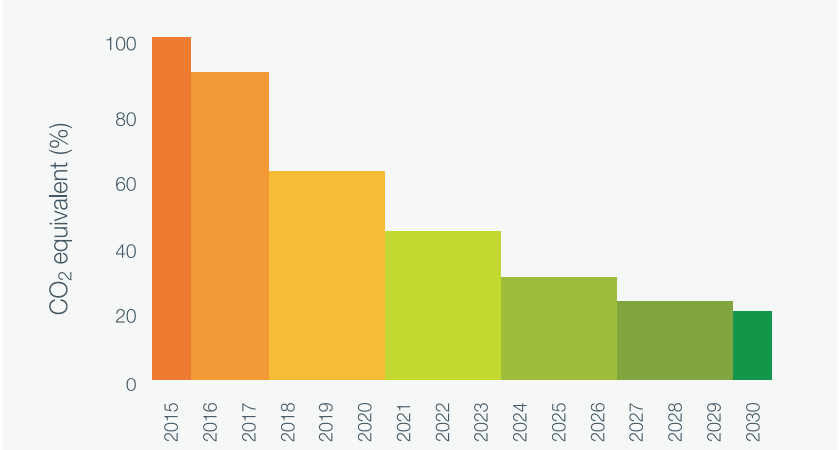
No matter which stage of the supply chain you or your customers occupy and whatever the core drivers, the solutions available from our complete range of VRF products can meet the tough demands of today's buildings. Whether CSR is high on the agenda, or lifecycle cost or capital cost, **there is a choice available from Mitsubishi Electric**.

R32

Heat Recovery | R2 VRF R32 | R2 VRF R410A | R2 HVRF R32

Heat Pump | Y VRF R32 | Y VRF R410A

F-Gas - HFC phase down programme*



Customers need a manufacturer that is ahead of the curve and developing products that meet both current and future legislation.

Options to reduce the CO_2 equivalent include:

- **Decreasing kW on the market**
- **Reducing the amount of refrigerant**
- **Lowering the GWP of refrigerant**

VRF now utilises lower GWP R32 refrigerant.

* F-Gas 2015 phase down programme: http://ec.europa.eu/clima/policies/f-gas/legislation/index_en.htm

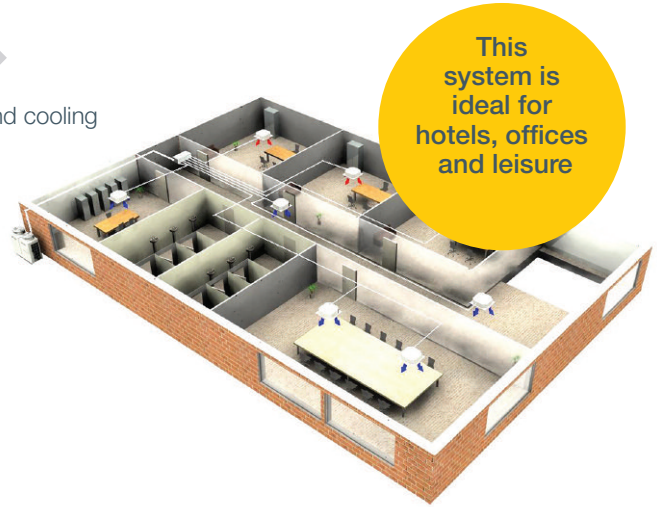
CITY MULTI | Energy Efficient VRF Systems

Constant development and innovation mean that City Multi VRF systems can be applied into any building through **heat recovery** and **heat pump** systems.

Heat Recovery

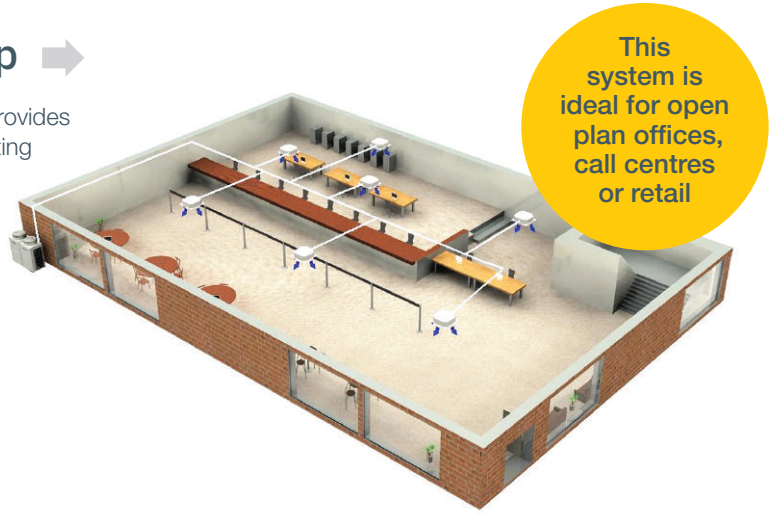
Provides simultaneous heating and cooling with the benefit of heat recovery.

By moving energy where it's needed, input is reduced by up to 30%. Offering flexibility, operability, comfort and control.



Heat Pump

One outdoor unit provides all indoor units heating or cooling at a given time.



The Options

Air conditioning systems need to extract or reject energy to enable the heating and cooling process to operate. Regardless of source, using either air, water or the ground as a medium to transfer this energy, our wide range of products are designed to maximise efficiency.

		Capacity (kW)	Ambient Operating Range	Heat Recovery	Heat Pump
Air Source	Side blow small capacity	12.5-22	-20 to 46°C		●
	Medium to large capacity	22-150	-20 to 52°C	●	●
	Specific R22/R407C Replace	22-33.5	-20 to 46°C	●	●
	Combination of refrigerant and water	22-56	-20 to 52°C	●	
Water / Ground Source	Applicable to water and ground source	22-101	-5 to 45°C	●	●
	Combination of refrigerant and water	22-56	-5 to 45°C	●	

NEXT GENERATION VRF

City Multi YNW - The next generation VRF

Air source VRF is the most popular and widely used air conditioning system in commercial buildings. City Multi YNW as the market leading product has been designed to address some of the most fundamental challenges facing building designers today:

Location | **Sound** | **Design Flexibility** | **Efficiency**

Anyone involved in specifying, installing or operating building services is looking for air conditioning systems that meet the specific needs of individual projects, whilst meeting energy efficiency legislation. At the same time, our towns and cities are becoming denser as we look to maximise the use of space in our built environments. **This is resulting in more multi-use buildings with office, retail and leisure spaces in close proximity to both residential and hotel accommodation**.

City Multi YNW has answered that need



These models are available in capacities from **22 to 150kW** and offer some of the highest levels of efficiency, coupled with smaller footprints, reduced noise levels and increased design options.

CITY MULTI | Energy Efficient VRF Systems

Location

Reduced footprint achieved by a unique, new 4-sided heat exchange

Greater flexibility for location of outdoor units

- **51kW/m²**
- **80Pa static fan**



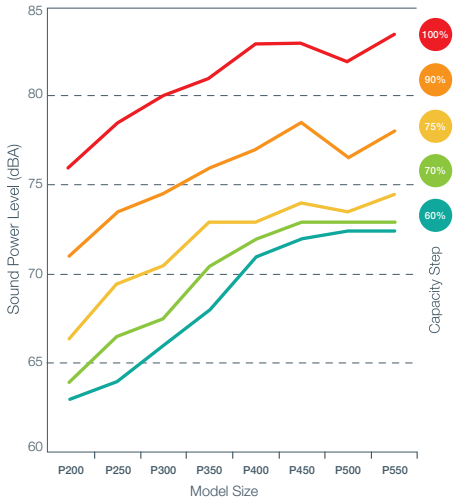
Sound

Ultra-quiet noise levels

Greater flexibility to cope with different noise criteria for multiple applications

YNW Sound power levels

Cooling (PURY-P)



Night time operation

Demand is generally lower and noise sensitivity is increased - select capacity step to meet needs

Acoustic enclosures

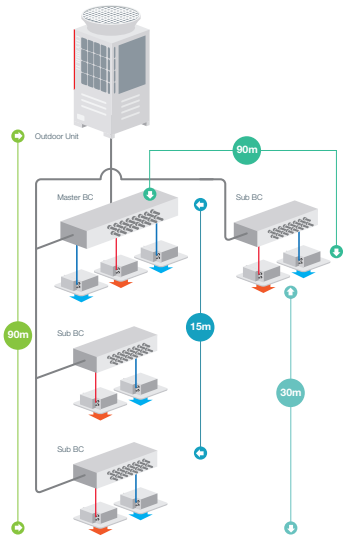
Costs can be saved by reducing the amount of attenuation required

Design Flexibility

Reducing installation and maintenance time

Next generation design

- Up to **11** Sub BCs connectable
- Capacity index increased to **350** per sub BC
- BC height reduced by **14%**
- **20%** overall reduction on system refrigerant volume

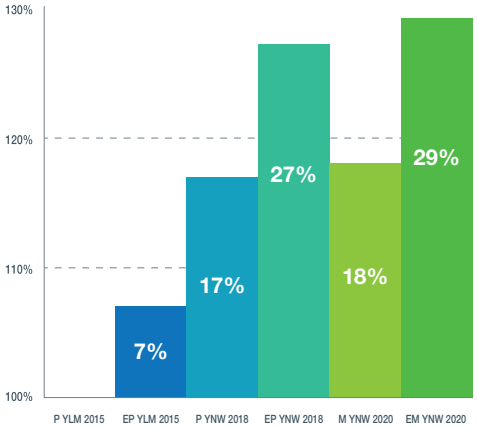


*For guidance on applying Sub BC controllers, please consult your sales office.

Efficiency

Highest ever levels of efficiency

Seasonal efficiency increase (%)



M/P = Standard Variant EM/EP = High Efficiency Variant

City Multi YNW

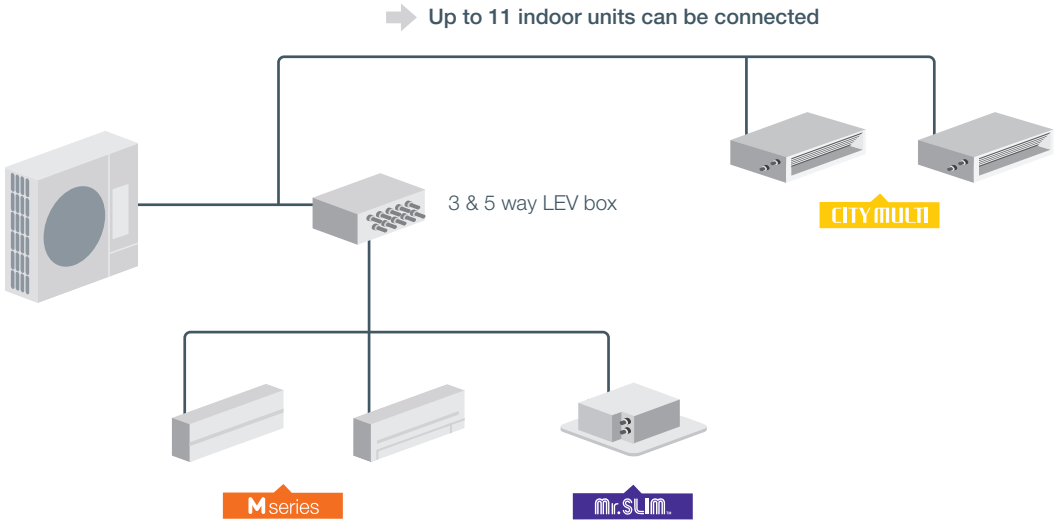
Designed to help meet the tough challenges set by planners and designers looking for heating and cooling solutions in all comfort applications.

VRF technology in small capacity

Utilising all the benefits of VRF technology, the low capacity Mini VRF PUMY models (12.5-22kW) have been designed with a focus on seasonal efficiency making them ideal for discreet application environments.

City Multi PUMY units are designed to tackle the challenges of our modern urban environment, offering low noise levels and a range that enables outdoor units to be discretely installed out of the line of sight. PUMY units will heat or cool a wide variety of applications such as hotels, offices, retail outlets and mixed-use buildings incorporating high-end residential. These units provide additional flexibility when used as a Multi-Split with stylish M Series indoor units.

Typical Multi-Split layout:







Depending on your application, there are two solutions available:

Single Fan

- Small footprint and height make this ideal for discreet location
- Standard 30Pa static fan allows outdoor units to be housed without affecting performance
- Cost effective and low refrigerant charge

Twin Fan

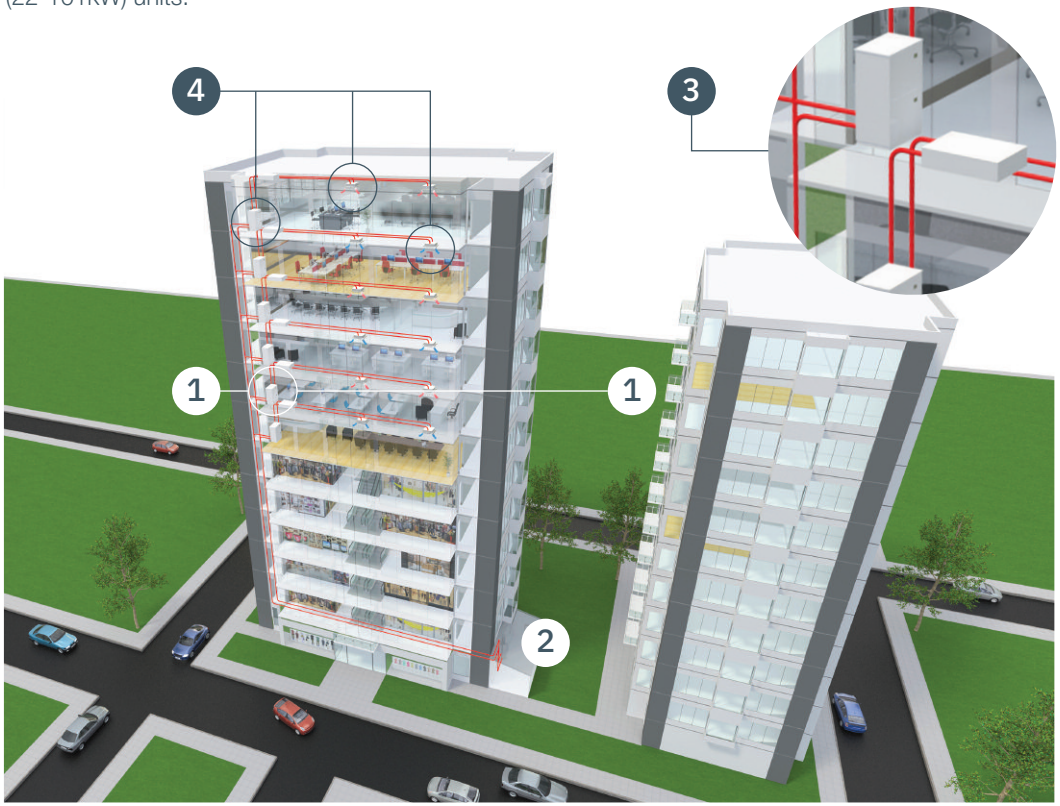
- High efficiency with longer pipe runs up to 300m total
- Optional 30Pa static fan
- Low noise with best heating capacity available
- 22kW from low impact chassis

CITY MULTI | Energy Efficient VRF Systems

City Multi - Water Cooled VRF Solution

Ideal where outdoor space is limited, building heat recovery and efficiency is demanded and a water loop is available, City Multi water cooled models provide the ultimate solution.

First developed 25 years ago, the City Multi water cooled system utilises water instead of air as an energy transfer medium, but benefits from all the same technology and flexibility of an air sourced VRF. Available in heat pump (22-101kW) and heat recovery (22-101kW) units.





P200-300 (22-34kW)

P350-600 (40-69kW)

A sustainable and flexible solution for tall buildings:

1. Apply and network the energy through a water loop, within the building and between buildings - optimising efficiency.
2. Utilise geothermal, rivers or lakes, landlord loops, waste heat from server cooling or other processes.
3. Unit located indoors on each floor, ensuring design flexibility with pipework. Compact and quiet unit minimising outdoor plant space and maximising occupied space.
4. City Multi water cooled models offer double heat recovery through refrigerant and water, no defrost and a refrigerant cooled inverter with no heat rejection to the internal space.

Ecodesign and Seasonal Efficiency

With buildings accounting for around half of all UK greenhouse emissions, legislation is demanding increased energy efficiency in this sector.

The Ecodesign Directive for Energy Related Products (ErP) is focusing on this area in a bid to reduce overall energy consumption and to accelerate market transformation to more energy efficient products.

An air conditioner will vary performance over changing seasons, which means calculating seasonal performance is important to ascertain the true performance of an air conditioning system. The Ecodesign Directive reflects this by setting minimum efficiency requirements and a new method of measuring performance that has been introduced across Europe.

The European Standard BS EN14825 sets the seasonal performance calculation for an air conditioning system.

For more information visit the website: **erp.mitsubishielectric.eu/erp**

SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document.



Capacity and efficiency conditions

Nominal Conditions: Cooling; indoor 27ºC DB, 19ºC WB; outdoor 35ºC DB, 24ºC WB.
Nominal Conditions: Heating; indoor 20ºC DB; outdoor 7ºC DB, 6ºC WB.
UK Conditions: Cooling; indoor 21ºC DB, 15ºC WB; outdoor 27ºC DB.
UK Conditions: Heating; indoor 20ºC DB; outdoor 0°C DB, -1ºC WB.





CITY MULTI | Energy Efficient VRF Systems

Outdoor / Condensing Unit Range

Air Cooled

Water Cooled

Heat Recovery - R2 Series	P	112	125	140	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350
	(kW)	12	14	16	22	28	34	40	45	50	56	63	69	73	80	85	90	96	101	108	113	118	124	130	136	140	146	150
High Efficiency PURY-EM (YNW)	R32				S	S	S																					
Standard Efficiency PURY-M (YNW)	R32				S	S	S																					
High Efficiency PURY-EP (YNW)	R410A				S	S	S	L	L	L	XL	XL	S S	S L	L L	L L	L L	L L	L L	XL L	XL XL	XL XL	XL XL					
Standard Efficiency PURY-P (YNW)	R410A				S	S	S	L	L	L	XL	XL	S L	S L	L L	L L	L L	L L	L L	XL L	XL XL	XL XL	XL XL					
Replace PURY-RP	R410A				L	L	L																					

Heat Pump - Y Series	P	112	125	140	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350
	(kW)	12	14	16	22	28	34	40	45	50	56	63	69	73	80	85	90	96	101	108	113	118	124	130	136	140	146	150
PUHY-M (YNW)	R32				S	S	S																					
PUHY-P (YNW)	R410A				S	S	S	L	L	L	XL	S S	S S	L S	L L	L L	L L	L L	L L	L L S	L L S	L L S	L L L	L L L	L L L	L L L	L L L	L L L
Mini VRF PUMY-(S)P	R410A	●	●	●	● Twin Fan																							
Replace PUHY-RP	R410A				S	S	S																					

Heat Recovery - WR2 Series	P	112	125	140	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
	(kW)	12	14	16	22	28	34	40	45	50	56	63	69	73	80	85	90	96	101
PQRY-P (YLM)	R410A				●	●	●	●	●	●	●	●	●	● ●	● ●	● ●	● ●	● ●	● ●

Heat Pump - WY Series	P	112	125	140	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
	(kW)	12	14	16	22	28	34	40	45	50	56	63	69	73	80	85	90	96	101
PQHY-P (YLM)	R410A				●	●	●	●	●	●	●	●	●	● ●	● ●	● ●	● ●	● ●	● ●

S Small chassis R32 & R410A

L Large chassis R410A

XL Extra Large chassis R410A

Indoor Unit Range

Model	Range	P (kW)	10 1.2	15 1.7	20 2.2	25 2.8	32 3.6	40 4.5	50 5.6	63 7.1	80 9.0	100 11.2	125 14.0	140 16.0	200 22.4	250 28.0
Ceiling Concealed Ducted	**PEFY-P-VMS1-E** (Ultra Thin)			●	●	●	●	●	●	●						
	PEFY-M-VMA-A R32				●	●	●	●	●	●	●	●	●			
	PEFY-P-VMHS-E (High Static Pressure)										●	●	●	●	●	●
4-Way Blow Ceiling Cassette	**PLFY-M-VEM-E** R32						●	●	●	●	●	●	●			
	PLFY-P-VFM-E (600x600)			●	●	●	●	●	●							
Floor Standing	**PFFY-P-VCM-E** (Concealed)				●	●	●	●	●	●						
	PFFY-P-VLEM-E (Exposed)				●	●	●	●	●	●						
	PFFY-P-VKM-E (Exposed)				●	●	●	●								
Wall Mounted	**PKFY-P-VLM-E**		●	●	●	●	●									
	PKFY-P-VLM-E							●	●							
	PKFY-P-VKM-E									●						
Ceiling Suspended	**PCFY-P-VKM-E**							●		●		●	●			
VRF Sanitary Water Heater	**PWFY-P-VM-E-BU**											●				
Air Curtain	**VRF HP DXE**[*1]									●		●	●	●		

*1. Available as recessed or exposed versions.

Note: All kW capacity ratings may change on connected system, please contact your local sales office for confirmation.

R2 Series VRF High Efficiency (22.4-33.5kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- Highest specification, highest efficiency heat recovery system available
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance
- Utilises lower GWP R32 refrigerant

NEXT GENERATION VRF

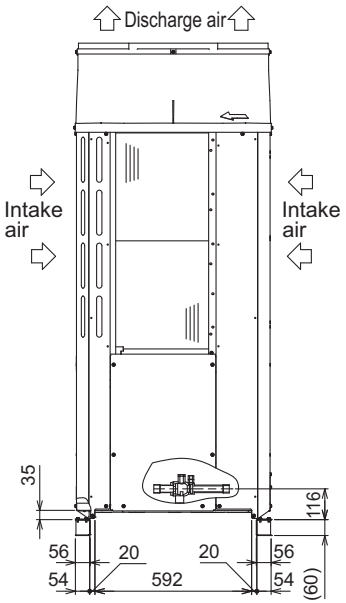
R32



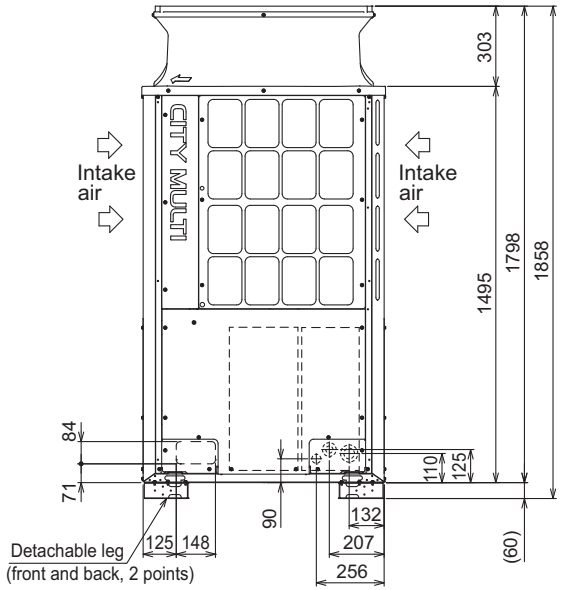
OUTDOOR UNITS		PURY-EM200YNW-A1	PURY-EM250YNW-A1	PURY-EM300YNW-A1
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5
	Cooling (nominal)	22.4	28.0	33.5
	High Performance Heating (UK)	25.0	31.5	35.6
	COP Priority Heating (UK)	22.8	28.7	34.1
	Cooling (UK)	20.1	25.1	30.0
POWER INPUT (kW)	Heating (nominal)	5.23	7.30	9.37
	Cooling (nominal)	4.43	6.68	7.82
	High Performance Heating (UK)	6.59	9.20	12.46
	COP Priority Heating (UK)	5.23	7.30	9.37
	Cooling (UK)	2.57	3.87	4.54
COP / EER (nominal)		4.78 / 5.05	4.31 / 4.19	4.00 / 4.28
MAX No. OF CONNECTABLE INDOOR UNITS		9 (8*1)	11 (10*1)	14 (12*1)
MAX CONNECTABLE CAPACITY		50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High	170	185	240
PIPE SIZE mm (in)	Gas	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")
	Liquid	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
SOUND PRESSURE LEVEL (dBA) @ 1m	Heating / Cooling	59.0 / 59.0	61.0 / 60.5	67.0 / 61.0
SOUND POWER LEVEL (dBA) @ 100% Capacity	Heating / Cooling	78.0 / 76.0	80.0 / 78.5	86.5 / 80.0
WEIGHT (kg)		231	231	231
DIMENSIONS (mm)	Width	920	920	920
	Depth	740	740	740
(1798mm without legs)	Height	1858	1858	1858
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three	Three
STARTING CURRENT (A)		8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)	Heating / Cooling [MAX]	8.3 / 7.1 [16.1]	11.7 / 10.7 [21.8]	15.0 / 12.5 [23.9]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)		1 x 20	1 x 25	1 x 25
MAINS CABLE No. Cores		4	4	4
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	5.2 / 3.5	5.2 / 3.5	5.2 / 3.5
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	21.3 / 14.4	22.3 / 15.1	22.8 / 15.4

Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 If a model PEFY-M 20 or 25 indoor unit is connected.

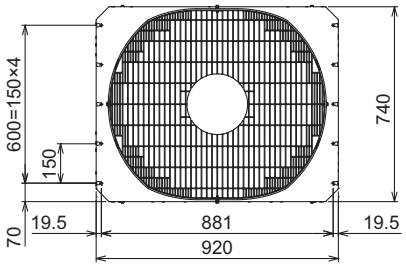
Side View



Front View



Upper View



R2 Series VRF Standard Efficiency (22.4-33.5kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

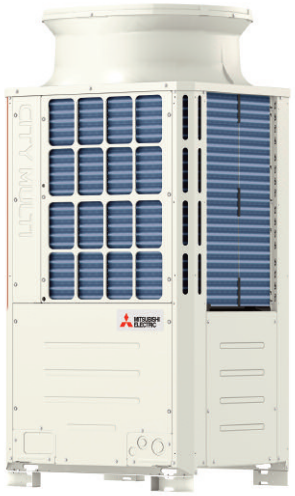
Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- High efficiency heat recovery system
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance
- Utilises lower GWP R32 refrigerant

NEXT GENERATION VRF

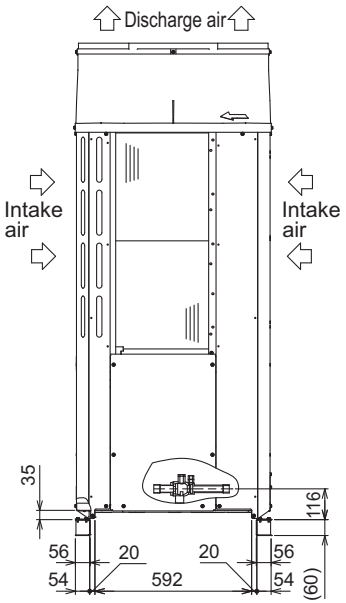
R32



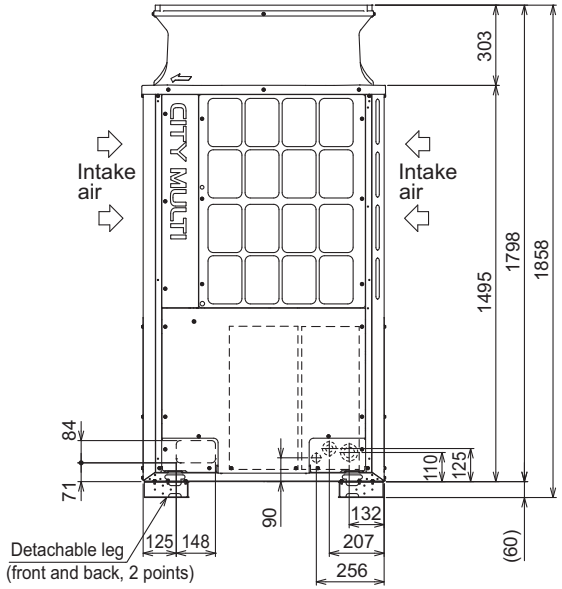
OUTDOOR UNITS		PURY-M200YNW-A1	PURY-M250YNW-A1	PURY-M300YNW-A1
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5
	Cooling (nominal)	22.4	28.0	33.5
	High Performance Heating (UK)	25.0	31.5	35.6
	COP Priority Heating (UK)	22.8	28.7	34.1
	Cooling (UK)	20.1	25.1	30.0
POWER INPUT (kW)	Heating (nominal)	5.27	7.32	9.35
	Cooling (nominal)	4.85	7.10	8.67
	High Performance Heating (UK)	6.64	9.22	12.44
	COP Priority Heating (UK)	5.27	7.32	9.35
	Cooling (UK)	2.81	4.12	5.03
COP / EER (nominal)		4.74 / 4.61	4.30 / 3.94	4.01 / 3.86
MAX No. OF CONNECTABLE INDOOR UNITS		9 (8*1)	11 (10*1)	14 (12*1)
MAX CONNECTABLE CAPACITY		50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High	170	185	240
PIPE SIZE mm (in)	Gas	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")
	Liquid	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
SOUND PRESSURE LEVEL (dBA) @ 1m	Heating / Cooling	59.0 / 59.0	61.0 / 60.5	67.0 / 61.0
SOUND POWER LEVEL (dBA) @ 100% Capacity	Heating / Cooling	78.0 / 76.0	80.0 / 78.5	86.5 / 80.0
WEIGHT (kg)		227	227	227
DIMENSIONS (mm)	Width	920	920	920
	Depth	740	740	740
(1798mm without legs)	Height	1858	1858	1858
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three	Three
STARTING CURRENT (A)		8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)	Heating / Cooling [MAX]	8.4 / 7.7 [16.1]	11.7 / 11.3 [22.5]	14.9 / 13.9 [25.6]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)		1 x 20	1 x 25	1 x 32
MAINS CABLE No. Cores		4	4	4
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	5.2 / 3.5	5.2 / 3.5	5.2 / 3.5
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	21.3 / 14.4	22.3 / 15.1	22.8 / 15.4

Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 If a PEFY-M 20 or 25 indoor unit is connected.

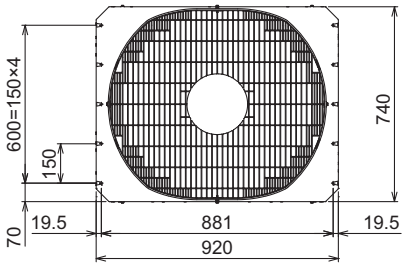
Side View



Front View



Upper View



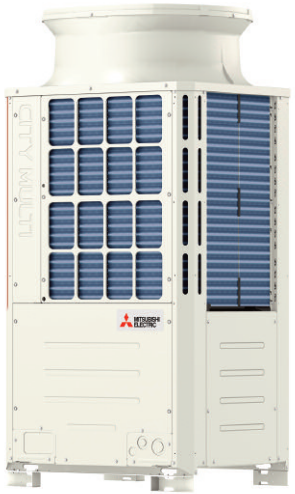
Y Series VRF (22.4-33.5kW)

Heat Pump Outdoor Unit (Heating or Cooling)

VRF technology provides a simple and flexible solution where there is a demand for a changeover capability between heating and cooling for all indoor units, helping to ensure a constant and comfortable indoor climate.

Key Features

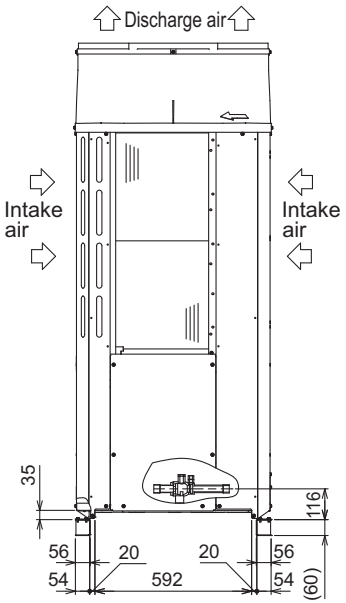
- Effective, efficient solution meeting all the market needs
- Delivers the highest levels of comfort, both thermally and acoustically
- Utilises lower GWP R32 refrigerant



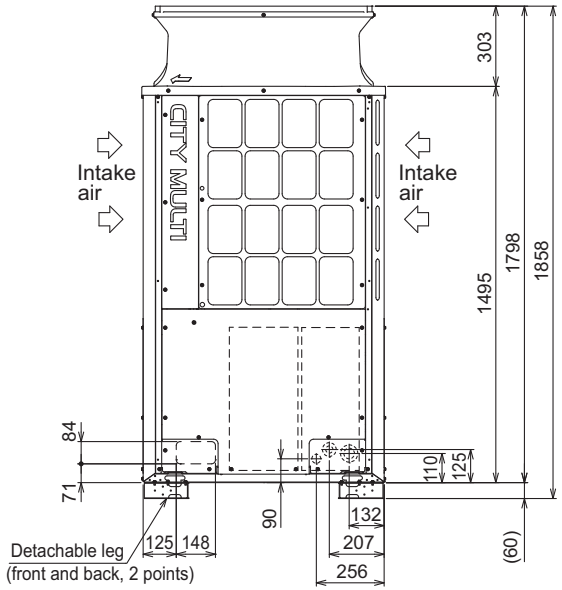
OUTDOOR UNITS		PUHY-M200YNW-A1	PUHY-M250YNW-A1	PUHY-M300YNW-A1
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5
	Cooling (nominal)	22.4	28.0	33.5
	High Performance Heating (UK)	25.0	31.5	35.6
	COP Priority Heating (UK)	22.8	28.7	34.1
	Cooling (UK)	20.0	25.1	30.0
POWER INPUT (kW)	Heating (nominal)	5.08	7.14	8.33
	Cooling (nominal)	4.72	6.96	8.54
	High Performance Heating (UK)	6.40	9.00	11.08
	COP Priority Heating (UK)	5.08	7.14	8.33
	Cooling (UK)	2.74	4.04	4.05
COP / EER (nominal)		4.92 / 4.74	4.41 / 4.02	4.50 / 3.92
MAX No. OF CONNECTABLE INDOOR UNITS		8	10	12
MAX CONNECTABLE CAPACITY		50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity
AIRFLOW (m^3/min)	High	170	185	240
PIPE SIZE mm (in)	Gas	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")
	Liquid	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
SOUND PRESSURE LEVEL (dBA) @ 1m	Heating / Cooling	59.0 / 58.0	61.0 / 60.0	64.5 / 61.0
SOUND POWER LEVEL (dBA) @ 100% Capacity	Heating / Cooling	78.0 / 75.0	80.0 / 78.0	83.5 / 80.0
WEIGHT (kg)		222	222	223
DIMENSIONS (mm)	Width	920	920	920
	Depth	740	740	740
(1798mm without legs)	Height	1858	1858	1858
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three	Three
STARTING CURRENT (A)		8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)	Heating / Cooling [MAX]	8.1 / 7.5 [16.1]	11.4 / 11.1 [21.8]	13.3 / 13.6 [25.6]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)		1 x 20	1 x 25	1 x 32
MAINS CABLE No. Cores		4 + earth	4 + earth	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	6.5 / 4.4	6.5 / 4.4	6.5 / 4.4
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	18.0 / 12.2	18.5 / 12.5	19.5 / 13.2

Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.

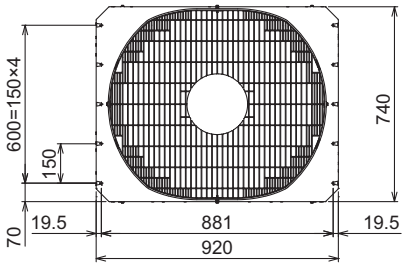
Side View



Front View



Upper View



R2 Series VRF High Efficiency (22.4-45kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- Highest specification, highest efficiency heat recovery system available
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance

NEXT GENERATION VRF



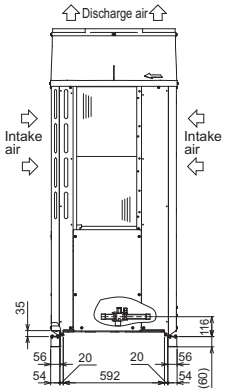


OUTDOOR UNITS			PURY-EP200YNW-A1	PURY-EP250YNW-A1	PURY-EP300YNW-A1	PURY-EP350YNW-A1	PURY-EP400YNW-A1	PURY-EP400YSNW-A1
CAPACITY (kW)	Heating (nominal)		25.0	31.5	37.5	45.0	50.0	50.0
	Cooling (nominal)		22.4	28.0	33.5	40.0	45.0	45.0
	High Performance Heating (UK)		25.0	31.5	35.6	42.8	45.0	50.0
	COP Priority Heating (UK)		22.8	28.7	34.1	41.0	43.0	45.5
	Cooling (UK)		20.1	25.1	30.0	35.8	40.3	40.3
POWER INPUT (kW)	Heating (nominal)		5.25	7.37	9.51	11.08	13.58	10.82
	Cooling (nominal)		4.74	6.89	8.17	9.97	13.04	9.82
	High Performance Heating (UK)		6.62	9.29	12.65	14.74	15.35	13.85
	COP Priority Heating (UK)		5.25	7.37	9.51	11.08	13.17	10.82
	Cooling (UK)		2.75	4.00	4.74	5.78	8.35	5.70
COP / EER (nominal)			4.76 / 4.72	4.27 / 4.06	3.94 / 4.10	4.06 / 4.01	3.68 / 3.45	4.62 / 4.58
MAX No. OF CONNECTABLE INDOOR UNITS			20	25	30	35	40	40
MAX CONNECTABLE CAPACITY			50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High		170	185	240	250	315	170 / 170
PIPE SIZE mm (in)	Gas		19.05 (3/4")	22.2 (7/8")	22.2 (7/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid		15.88 (5/8")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")
SOUND PRESSURE LEVEL (dBA) @ 1m		Heating / Cooling	59.0 / 59.0	61.0 / 60.5	67.0 / 61.0	64.0 / 62.5	69.0 / 65.0	62.0 / 62.0
SOUND POWER LEVEL (dBA) @ 100% Capacity		Heating / Cooling	78.0 / 76.0	80.0 / 78.0	86.0 / 80.0	83.0 / 81.0	88.0 / 83.0	81.0 / 79.0
SOUND POWER LEVEL (DBA) @ 90% Capacity		Heating / Cooling	74.5 / 71.0	76.0 / 73.5	78.5 / 74.5	81.0 / 76.0	81.0 / 77.0	77.5 / 74.0
SOUND POWER LEVEL (DBA) @ 75% Capacity		Heating / Cooling	71.5 / 66.5	74.5 / 69.5	74.5 / 70.5	77.0 / 73.0	75.0 / 73.0	74.5 / 69.5
WEIGHT (kg)			219	228	230	275	276	219 + 219
DIMENSIONS (mm)	Width		920	920	920	1240	1240	920 + 920
	Depth		740	740	740	740	740	740
(1798mm without legs)	Height		1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1			380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1			Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*1			8	8	8	8	8	8 / 8
NOMINAL SYSTEM RUNNING CURRENT (A)*1		Heating / Cooling [MAX]	8.4 / 7.6 [16.1]	11.8 / 11.0 [17.0]	15.2 / 13.1 [20.3]	17.7 / 15.9 [24.4]	21.7 / 20.9 [30.7]	17.3 / 15.7 [16.1 + 16.1]
GUARANTEED OPERATING RANGE (°C)		Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1			1 x 20	1 x 20	1 x 25	1 x 25	1 x 32	1 x 20 / 1 x 20
MAINS CABLE No. Cores*1			4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		5.2 / 10.9	5.2 / 10.9	5.2 / 10.9	8 / 16.7	8 / 16.7	10.4 / 21.7
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		28.3 / 59.1	34.3 / 71.6	34.3 / 71.6	39 / 81.4	39 / 81.4	53.6 / 111.9

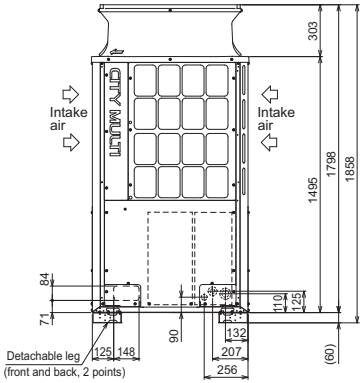
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PURY-EP200/250/300YNW-A1

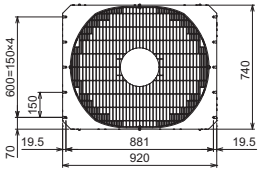
Side View



Front View

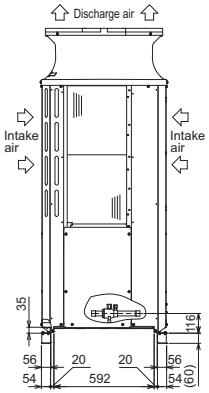


Upper View

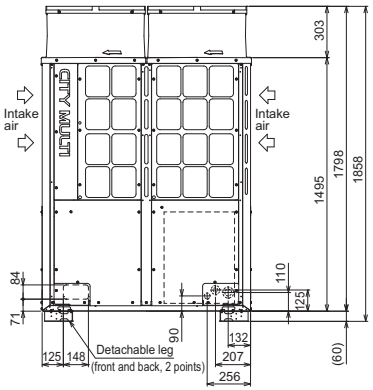


Product Dimensions PURY-EP350/400YNW-A1

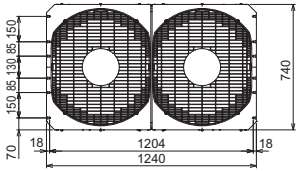
Side View



Front View

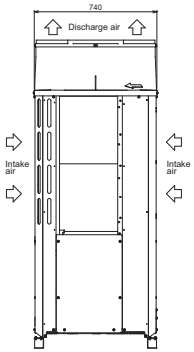


Upper View

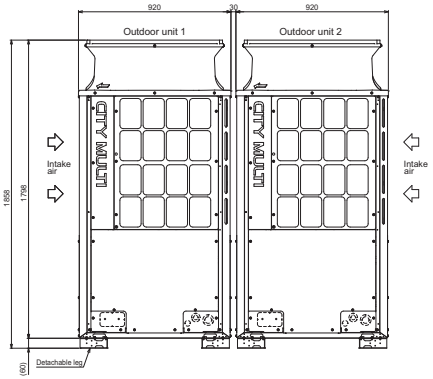


Product Dimensions PURY-EP400YSNW-A1

Side View



Front View



R2 Series VRF High Efficiency (50-63kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- Highest specification, highest efficiency heat recovery system available
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance

NEXT GENERATION VRF

R410A



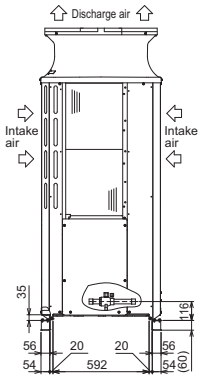


OUTDOOR UNITS		PURY-EP450YNW-A1	PURY-EP450YSNW-A1	PURY-EP500YNW-A1	PURY-EP500YSNW-A1	PURY-EP550YNW-A1	PURY-EP550YSNW-A1
CAPACITY (kW)	Heating (nominal)	56.0	56.0	63.0	63.0	69.0	69.0
	Cooling (nominal)	50.0	50.0	56.0	56.0	63.0	63.0
	High Performance Heating (UK)	50.4	56.0	56.7	63.0	62.1	65.6
	COP Priority Heating (UK)	48.2	51.0	54.2	57.3	59.3	62.8
	Cooling (UK)	44.8	44.8	50.1	50.1	56.4	56.4
POWER INPUT (kW)	Heating (nominal)	14.62	12.78	17.35	15.21	19.71	17.33
	Cooling (nominal)	13.85	11.73	18.12	14.21	22.00	15.90
	High Performance Heating (UK)	16.52	20.19	19.61	19.47	22.27	23.05
	COP Priority Heating (UK)	14.18	12.78	16.83	15.21	19.12	17.33
	Cooling (UK)	8.86	6.80	11.60	8.24	14.08	9.22
COP / EER (nominal)		3.83 / 3.61	4.38 / 4.26	3.63 / 3.09	4.14 / 3.94	3.50 / 2.86	3.98 / 3.96
MAX No. OF CONNECTABLE INDOOR UNITS		45	45	50	50	50	50
MAX CONNECTABLE CAPACITY		50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High	315	170 / 185	295	185 / 185	410	185 / 240
PIPE SIZE mm (in)	Gas	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8") / 28.58 (1-1/8")*1	22.2 (7/8") / 28.58 (1-1/8")*1
SOUND PRESSURE LEVEL (dBA) @ 1m	Heating / Cooling	70.0 / 65.5	63.5 / 63.0	64.5 / 63.5	64.0 / 63.5	70.0 / 66.0	68.0 / 64.0
SOUND POWER LEVEL (dBA) @ 100% Capacity	Heating / Cooling	89.0 / 83.0	83.0 / 81.0	84.0 / 82.0	83.0 / 81.0	89.0 / 83.0	87.5 / 83.0
SOUND POWER LEVEL (dBA) @ 90% Capacity	Heating / Cooling	83.0 / 78.5	78.5 / 75.5	81.0 / 76.5	79.0 / 76.5	82.5 / 78.0	81.5 / 77.0
SOUND POWER LEVEL (dBA) @ 75% Capacity	Heating / Cooling	76.5 / 74.0	76.5 / 71.5	77.5 / 73.5	75.5 / 72.5	78.5 / 74.5	77.5 / 73.0
WEIGHT (kg)		301	219 + 228	346	228 + 228	346	228 + 230
DIMENSIONS (mm)	Width	1240	920 + 920	1750	920 + 920	1750	920 + 920
	Depth	740	740	740	740	740	740
(1798mm without legs)	Height	1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*2		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*2		Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*2		8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*2	Heating / Cooling [MAX]	23.4 / 22.2 [34.6]	20.4 / 18.8 [16.1 + 17.0]	27.8 / 29.0 [40.3]	24.3 / 22.7 [17.0 +17.0]	31.6 / 35.2 [44.3]	27.7 / 25.4 [17.0 + 20.3]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*2		1 x 40	1 x 20 / 1 x 20	1 x 50	1 x 20 / 1 x 20	1 x 50	1 x 20 / 1 x 25
MAINS CABLE No. Cores*2		4 + earth	4 + earth / 4 + earth	4 + earth	4 + earth / 4 + earth	4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	10.8 / 22.5	10.4 / 21.7	10.8 / 22.6	10.4 / 21.7	10.8 / 22.6	10.4 / 21.7
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	44.7 / 93.3	53.6 / 111.9	45.2 / 94.4	53.6 / 111.9	45.2 / 94.4	53.6 / 111.9

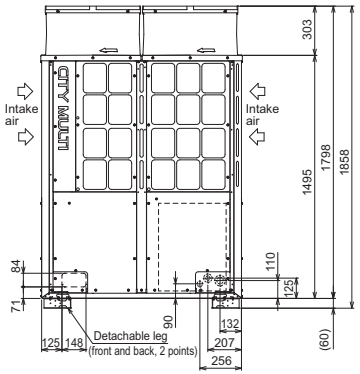
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 If distance from OU to BC controller is greater than 65m. *2 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PURY-EP450YNW-A1

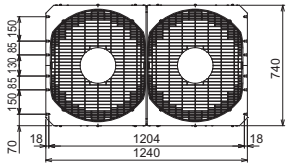
Side View



Front View

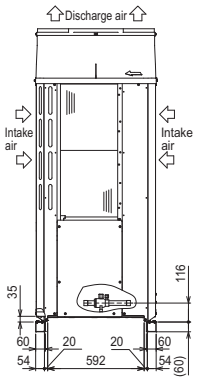


Upper View

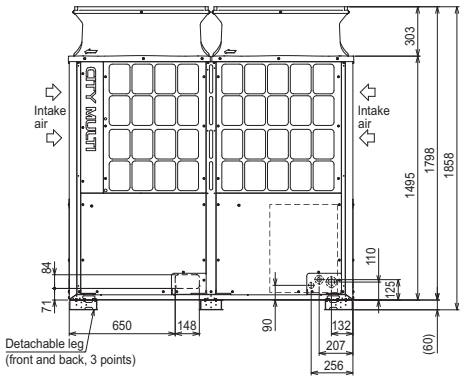


Product Dimensions PURY-EP500/550YNW-A1

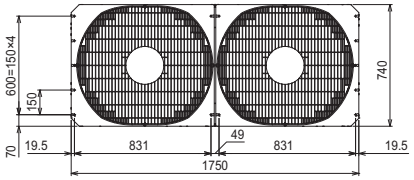
Side View



Front View

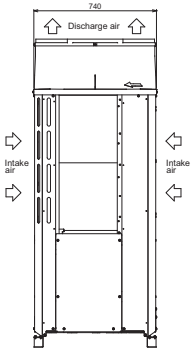


Upper View

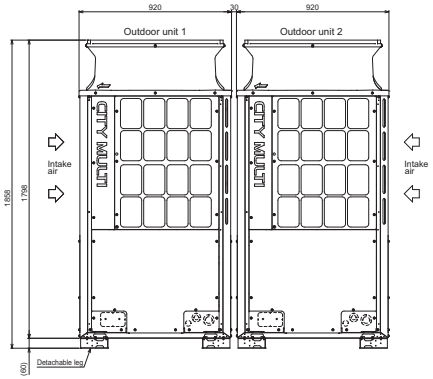


Product Dimensions PURY-EP450/500/550YSNW-A1

Side View



Front View



R2 Series VRF High Efficiency (69-96kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- Highest specification, highest efficiency heat recovery system available
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance



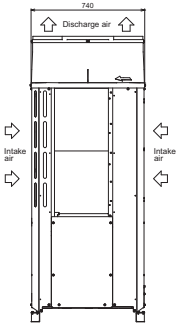


OUTDOOR UNITS			PURY-EP600YSNW-A1	PURY-EP650YSNW-A1	PURY-EP700YSNW-A1	PURY-EP750YSNW-A1	PURY-EP800YSNW-A1	PURY-EP850YSNW-A1
CAPACITY (kW)	Heating (nominal)		76.5	81.5	88.0	95.0	100.0	108.0
	Cooling (nominal)		69.0	73.0	80.0	85.0	90.0	96.0
	High Performance Heating (UK)		72.7	77.4	83.6	85.5	90.0	97.2
	COP Priority Heating (UK)		69.6	74.2	80.1	81.7	86.0	92.9
	Cooling (UK)		61.8	65.3	71.6	76.1	80.6	85.9
POWER INPUT (kW)	Heating (nominal)		20.02	21.00	22.33	25.33	28.01	29.67
	Cooling (nominal)		17.33	18.57	20.56	23.48	26.86	28.07
	High Performance Heating (UK)		26.63	27.93	29.70	28.62	31.65	33.53
	COP Priority Heating (UK)		20.02	21.00	22.33	24.57	27.17	28.78
	Cooling (UK)		10.05	10.77	11.92	13.62	17.19	17.96
COP / EER (nominal)			3.82 / 3.98	3.88 / 3.93	3.94 / 3.89	3.75 / 3.62	3.57 / 3.35	3.64 / 3.42
MAX No. OF CONNECTABLE INDOOR UNITS			50	50	50	50	50	50
MAX CONNECTABLE CAPACITY			50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High		240 / 240	240 / 250	250 / 250	250 / 315	315 / 315	315 / 315
PIPE SIZE mm (in)	Gas		28.58 (1-1/8")	28.58 (1-1/8")	34.93 (1-3/8")	34.93 (1-3/8")	34.93 (1-3/8")	41.28 (1-5/8")
	Liquid		22.2 (7/8") / 28.58 (1-1/8")*1	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
SOUND PRESSURE LEVEL (dBA) @ 1m		Heating / Cooling	70.0 / 64.0	69.0 / 65.0	67.0 / 65.5	70.5 / 67.0	72.0 / 68.0	72.5 / 68.5
SOUND POWER LEVEL (dBA) @ 100% Capacity		Heating / Cooling	89.0 / 83.0	88.0 / 84.0	86.0 / 84.0	90.0 / 86.0	91.0 / 86.0	92.0 / 86.0
SOUND POWER LEVEL (dBA) @ 90% Capacity		Heating / Cooling	81.5 / 77.5	83.0 / 78.5	84.0 / 79.0	83.5 / 79.5	83.0 / 80.0	85.0 / 81.0
SOUND POWER LEVEL (dBA) @ 75% Capacity		Heating / Cooling	77.5 / 73.5	79.0 / 75.0	80.0 / 76.0	79.5 / 76.0	78.0 / 76.0	79.0 / 76.5
WEIGHT (kg)			230 + 230	230 + 275	275 + 275	275 + 275	276 + 276	276 + 301
DIMENSIONS (mm)	Width		920 + 920	920 + 1240	1240 + 1240	1240 + 1240	1240 + 1240	1240 + 1240
	Depth		740	740	740	740	740	740
(1798mm without legs)	Height		1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*2			380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*2			Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*2			8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*2		Heating / Cooling [MAX]	32.1 / 27.7 [20.3 + 20.3]	33.6 / 29.7 [20.3 + 24.4]	35.8 / 32.9 [24.4 + 24.4]	40.6 / 37.6 [24.4 + 30.7]	44.9 / 43.0 [30.7 + 30.7]	47.5 / 45.0 [30.7 + 34.6]
GUARANTEED OPERATING RANGE (°C)		Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*2			1 x 25 / 1 x 25	1 x 25 / 1 x 25	1 x 25 / 1 x 25	1 x 25 / 1 x 32	1 x 32 / 1 x 32	1 x 32 / 1 x 40
MAINS CABLE No. Cores*2			4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		10.4 / 21.7	13.2 / 27.6	16 / 33.4	16 / 33.4	16 / 33.4	18.8 / 39.3
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		53.6 / 111.9	59.8 / 124.9	78 / 162.9	80.5 / 168.1	83 / 173.3	80.2 / 167.5

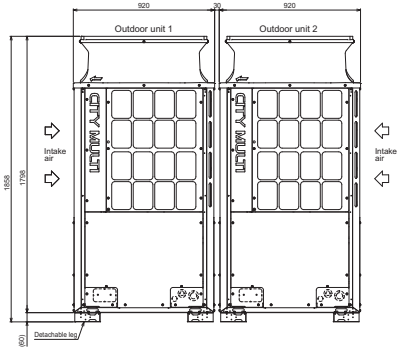
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 If distance from OU to BC controller is greater than 65m. *2 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PURY-EP600YSNW-A1

Side View

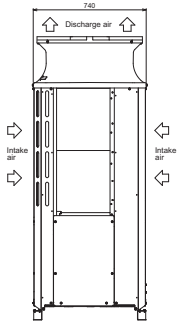


Front View

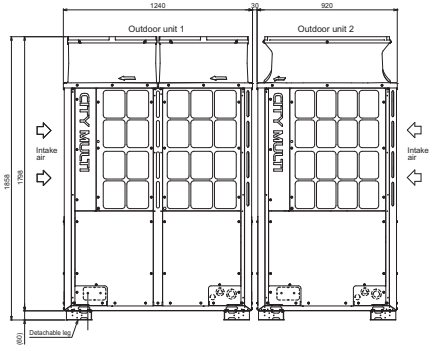


Product Dimensions PURY-EP650YSNW-A1

Side View

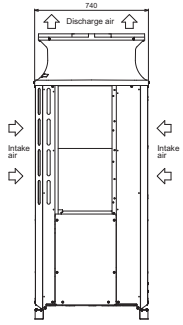


Front View

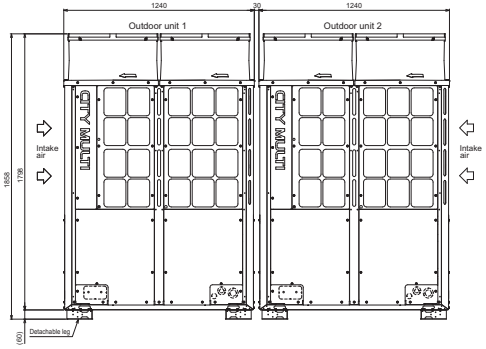


Product Dimensions PURY-EP700/750/800/850YSNW-A1

Side View



Front View



R2 Series VRF High Efficiency (101-124kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- Highest specification, highest efficiency heat recovery system available
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance

R410A



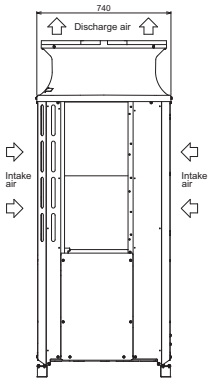


OUTDOOR UNITS			PURY-EP900YSNW-A1	PURY-EP950YSNW-A1	PURY-EP1000YSNW-A1	PURY-EP1050YSNW-A1	PURY-EP1100YSNW-A1
CAPACITY (kW)	Heating (nominal)		113.0	119.5	127.0	132.0	140.0
	Cooling (nominal)		101.0	108.0	113.0	118.0	124.0
	High Performance Heating (UK)		101.7	107.6	114.3	118.8	126.0
	COP Priority Heating (UK)		97.2	102.8	109.2	113.5	120.4
	Cooling (UK)		90.4	96.7	101.1	105.6	111.0
POWER INPUT (kW)	Heating (nominal)		30.37	33.01	36.07	38.15	41.17
	Cooling (nominal)		28.85	33.23	37.66	40.83	44.76
	High Performance Heating (UK)		34.32	37.30	40.76	43.11	46.52
	COP Priority Heating (UK)		29.46	32.02	34.99	37.01	39.93
	Cooling (UK)		18.46	21.27	24.10	26.13	28.65
COP / EER (nominal)			3.72 / 3.50	3.62 / 3.25	3.52 / 3.00	3.46 / 2.89	3.40 / 2.77
MAX No. OF CONNECTABLE INDOOR UNITS			50	50	50	50	50
MAX CONNECTABLE CAPACITY			50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High		315 / 315	315 / 295	295 / 295	295 / 410	410 / 410
PIPE SIZE mm (in)	Gas		41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")
	Liquid		28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	34.93 (1-3/8")	34.93 (1-3/8")
SOUND PRESSURE LEVEL (dBA) @ 1m		Heating / Cooling	73.0 / 68.5	71.5 / 68.0	67.5 / 66.5	73.0 / 68.0	73.0 / 69.0
SOUND POWER LEVEL (dBA) @ 100% Capacity		Heating / Cooling	92.0 / 86.0	91.0 / 86.0	87.0 / 85.0	91.0 / 86.0	92.0 / 86.0
SOUND POWER LEVEL (dBA) @ 90% Capacity		Heating / Cooling	86.0 / 81.5	85.5 / 81.0	84.0 / 79.5	85.0 / 80.5	85.5 / 81.0
SOUND POWER LEVEL (dBA) @ 75% Capacity		Heating / Cooling	79.5 / 77.0	80.0 / 77.0	80.5 / 76.5	81.0 / 77.0	81.5 / 77.5
WEIGHT (kg)			301 + 301	301 + 346	346 + 346	346 + 346	346 + 346
DIMENSIONS (mm)	Width		1240 + 1240	1240 + 1750	1750 + 1750	1750 + 1750	1750 + 1750
	Depth		740	740	740	740	740
(1798mm without legs)	Height		1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1			380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1			Three	Three	Three	Three	Three
STARTING CURRENT (A)*1			8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1		Heating / Cooling [MAX]	48.7 / 46.2 [34.6 + 34.6]	52.9 / 53.2 [34.6 + 40.3]	57.8 / 60.3 [40.3 + 40.3]	61.1 / 65.4 [40.3 + 44.3]	66.0 / 71.7 [44.3 + 44.3]
GUARANTEED OPERATING RANGE (°C)		Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1			1 x 40 / 1 x 40	1 x 40 / 1 x 50	1 x 50 / 1 x 50	1 x 50 / 1 x 50	1 x 50 / 1 x 50
MAINS CABLE No. Cores*1			4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		21.6 / 45.1	21.6 / 45.1	21.6 / 45.1	21.6 / 45.1	21.6 / 45.1
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		77.4 / 161.6	77.4 / 161.6	77.4 / 161.6	77.4 / 161.6	77.4 / 161.6

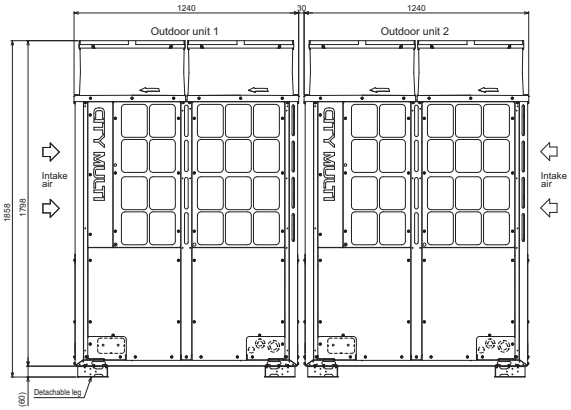
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PURY-EP900YSNW-A1

Side View

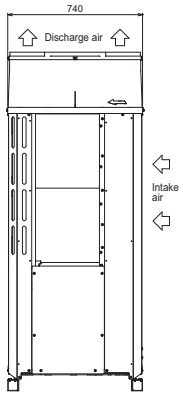


Front View

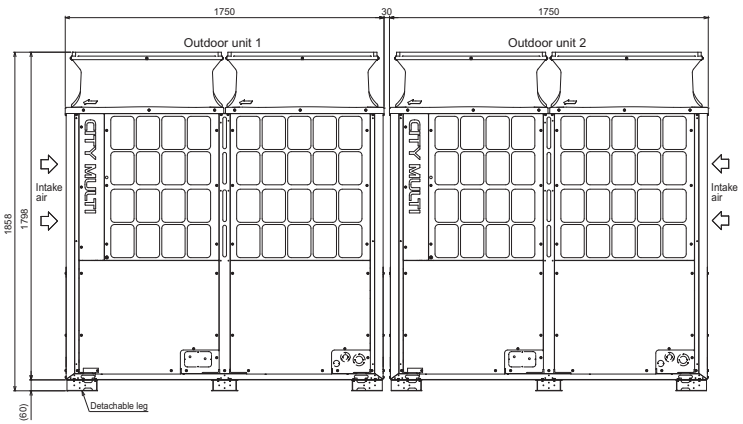


Product Dimensions PURY-EP1100YSNW-A1

Side View

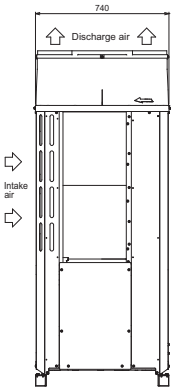


Front View

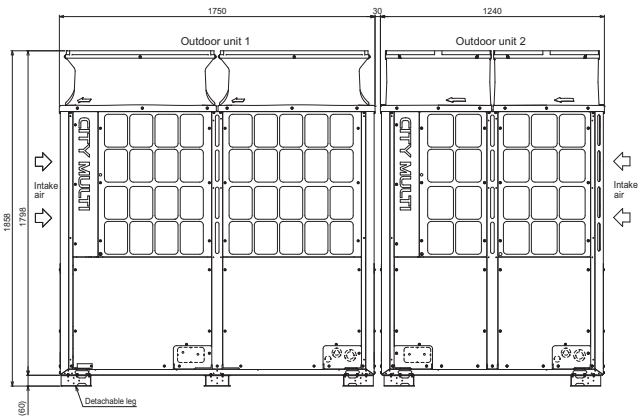


Product Dimensions PURY-EP950/1000/1050YSNW-A1

Side View



Front View



R2 Series VRF Standard Efficiency (22.4-45kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- High efficiency heat recovery system
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance



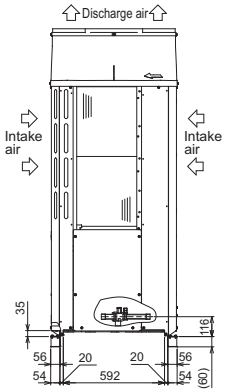


OUTDOOR UNITS		PURY-P200YNW-A1	PURY-P250YNW-A1	PURY-P300YNW-A1	PURY-P350YNW-A1	PURY-P400YNW-A1	PURY-P400YSNW-A1
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5	45.0	50.0	50.0
	Cooling (nominal)	22.4	28.0	33.5	40.0	45.0	45.0
	High Performance Heating (UK)	25.0	31.5	35.6	42.8	45.0	50.0
	COP Priority Heating (UK)	22.8	28.7	34.1	41.0	43.0	45.5
	Cooling (UK)	20.1	25.1	30.0	35.8	40.3	40.3
POWER INPUT (kW)	Heating (nominal)	5.33	7.42	9.54	11.13	13.77	10.98
	Cooling (nominal)	5.27	7.25	8.98	10.98	14.61	10.92
	High Performance Heating (UK)	6.72	9.35	12.69	14.80	15.56	14.05
	COP Priority Heating (UK)	5.33	7.42	9.54	11.13	13.36	10.98
	Cooling (UK)	3.06	4.21	5.21	6.37	9.35	6.33
COP / EER (nominal)		4.69 / 4.25	4.24 / 3.86	3.93 / 3.73	4.04 / 3.64	3.63 / 3.08	4.55 / 4.12
MAX No. OF CONNECTABLE INDOOR UNITS		20	25	30	35	40	40
MAX CONNECTABLE CAPACITY		50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High	170	185	240	250	315	170 / 170
PIPE SIZE mm (in)	Gas	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")
SOUND PRESSURE LEVEL (dBA) @ 1m	Heating / Cooling	59.0 / 59.0	61.0 / 60.5	67.0 / 61.0	64.0 / 62.5	69.0 / 65.0	62.0 / 62.0
SOUND POWER LEVEL (dBA) @ 100% Capacity	Heating / Cooling	78.0 / 76.0	80.0 / 78.0	86.0 / 80.0	83.0 / 81.0	88.0 / 83.0	81.0 / 79.0
SOUND POWER LEVEL (dBA) @ 90% Capacity	Heating / Cooling	74.5 / 71.0	76.0 / 73.5	78.5 / 74.5	81.0 / 76.0	81.0 / 77.0	77.5 / 74.0
SOUND POWER LEVEL (dBA) @ 75% Capacity	Heating / Cooling	71.5 / 66.5	74.5 / 69.5	74.5 / 70.5	77.0 / 73.0	75.0 / 73.0	74.5 / 69.5
WEIGHT (kg)		214	223	225	269	269	214 + 214
DIMENSIONS (mm)	Width	920	920	920	1240	1240	920 + 920
	Depth	740	740	740	740	740	740
(1798mm without legs)	Height	1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*1		8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	8.5 / 8.4 [16.1]	11.8 / 11.6 [17.8]	15.2 / 14.4 [22.7]	17.8 / 17.6 [27.6]	22.0 / 23.4 [35.1]	17.6 / 17.5 [16.1 + 16.1]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1		1 x 20	1 x 20	1 x 25	1 x 32	1 x 40	1 x 20 / 1 x 20
MAINS CABLE No. Cores*1		4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	5.2 / 10.9	5.2 / 10.9	5.2 / 10.9	8 / 16.7	8 / 16.7	10.4 / 21.7
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	31.8 / 66.4	37.8 / 78.9	37.8 / 78.9	41.3 / 86.2	47.3 / 98.8	60.6 / 126.5

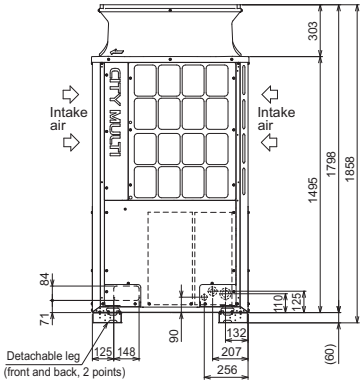
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PURY-P200/250/300YNW-A1

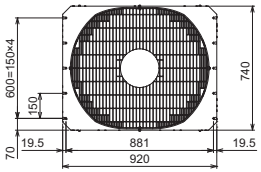
Side View



Front View

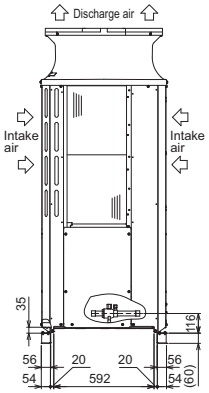


Upper View

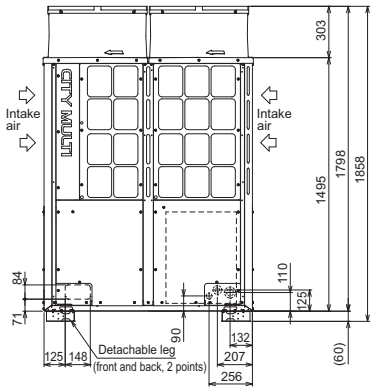


Product Dimensions PURY-P350/400YNW-A1

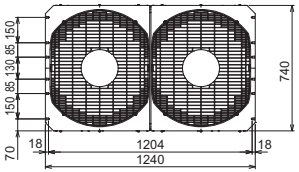
Side View



Front View

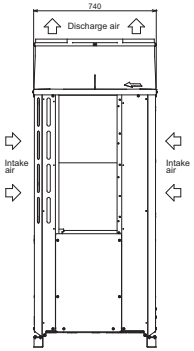


Upper View

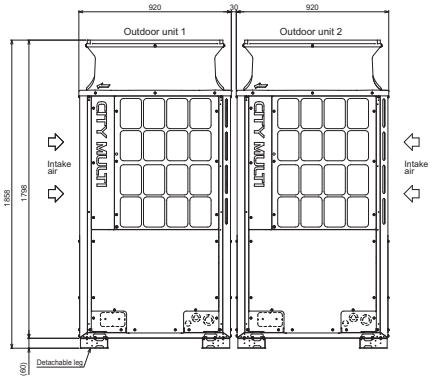


Product Dimensions PURY-P400YSNW-A1

Side View



Front View



R2 Series VRF Standard Efficiency (50-63kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- High efficiency heat recovery system
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance

NEXT GENERATION VRF

R410A



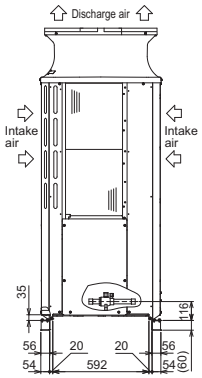


OUTDOOR UNITS		PURY-P450YNW-A1	PURY-P450YSNW-A1	PURY-P500YNW-A1	PURY-P500YSNW-A1	PURY-P550YNW-A1	PURY-P550YSNW-A1
CAPACITY (kW)	Heating (nominal)	56.0	56.0	63.0	63.0	69.0	69.0
	Cooling (nominal)	50.0	50.0	56.0	56.0	63.0	63.0
	High Performance Heating (UK)	50.4	56.0	56.7	63.0	62.1	65.6
	COP Priority Heating (UK)	48.2	51.0	54.2	57.3	59.3	62.8
	Cooling (UK)	44.8	44.8	50.1	50.1	56.4	56.4
POWER INPUT (kW)	Heating (nominal)	15.42	12.93	17.50	15.32	20.29	17.42
	Cooling (nominal)	14.83	12.72	18.54	14.97	22.18	17.11
	High Performance Heating (UK)	17.42	16.55	19.78	19.61	22.93	23.17
	COP Priority Heating (UK)	14.96	12.93	16.98	15.32	19.68	17.42
	Cooling (UK)	9.49	7.38	11.87	8.68	14.20	9.92
COP / EER (nominal)		3.63 / 3.37	4.33 / 3.93	3.60 / 3.02	4.11 / 3.74	3.40 / 2.84	3.96 / 3.68
MAX No. OF CONNECTABLE INDOOR UNITS		45	45	50	50	50	50
MAX CONNECTABLE CAPACITY		50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High	315	170 / 185	295	185 / 185	410	185 / 240
PIPE SIZE mm (in)	Gas	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8") / 28.58 (1-1/8")*1	22.2 (7/8") / 28.58 (1-1/8")*1
SOUND PRESSURE LEVEL (dBA) @ 1m	Heating / Cooling	70.0 / 65.5	63.5 / 63.0	64.5 / 63.5	64.0 / 63.5	70.0 / 66.0	68.0 / 64.0
SOUND POWER LEVEL (dBA) @ 100% Capacity	Heating / Cooling	89.0 / 83.0	83.0 / 81.0	84.0 / 82.0	83.0 / 81.0	89.0 / 83.0	87.0 / 83.0
SOUND POWER LEVEL (dBA) @ 90% Capacity	Heating / Cooling	83.0 / 78.5	78.5 / 75.5	81.0 / 76.5	79.0 / 76.5	82.5 / 78.0	81.5 / 77.0
SOUND POWER LEVEL (dBA) @ 75% Capacity	Heating / Cooling	76.5 / 74.0	76.5 / 71.5	77.5 / 73.5	75.5 / 72.5	78.5 / 74.5	77.5 / 73.0
WEIGHT (kg)		289	214 + 214	335	223 + 223	335	223 + 225
DIMENSIONS (mm)	Width	1240	920 + 920	1750	920 + 920	1750	920 + 920
	Depth	740	740	740	740	740	740
(1798mm without legs)	Height	1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*2		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*2		Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*2		8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*2	Heating / Cooling [MAX]	24.7 / 23.7 [37.1]	20.7 / 20.3 [16.1 + 17.8]	28.0 / 29.7 [43.2]	24.5 / 24.0 [17.8 + 17.8]	32.5 / 35.5 [47.5]	27.9 / 27.4 [17.8 + 22.7]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*2		1 x 40	1 x 20 / 1 x 20	1 x 50	1 x 20 / 1 x 20	1 x 50	1 x 20 / 1 x 25
MAINS CABLE No. Cores*2		4 + earth	4 + earth / 4 + earth	4 + earth	4 + earth / 4 + earth	4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	10.8 / 22.5	10.4 / 21.7	10.8 / 22.6	10.4 / 21.7	10.8 / 22.6	10.4 / 21.7
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	44.5 / 92.9	60.6 / 126.5	45.2 / 94.4	60.6 / 126.5	45.2 / 94.4	60.6 / 126.5

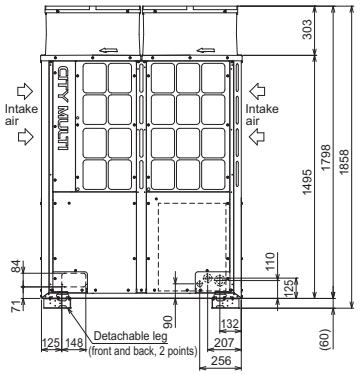
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 If distance from OU to BC controller is greater than 65m. *2 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PURY-P450YNW-A1

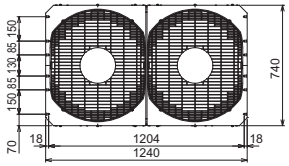
Side View



Front View

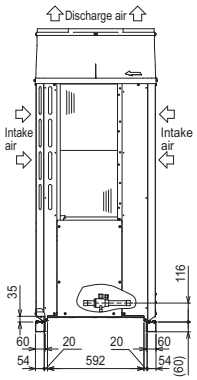


Upper View

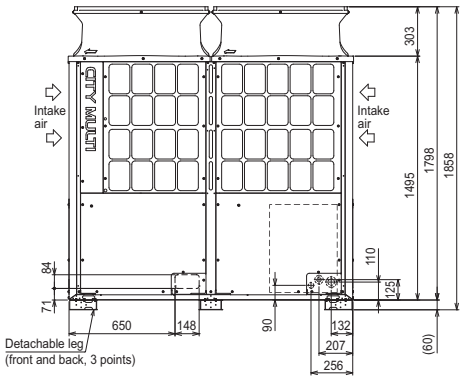


Product Dimensions PURY-P500/550YNW-A1

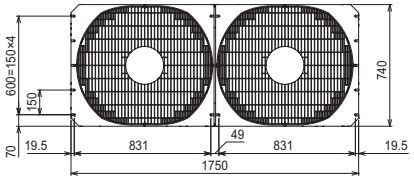
Side View



Front View

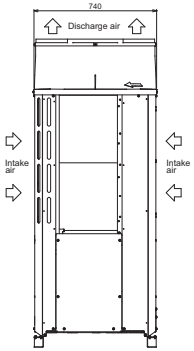


Upper View

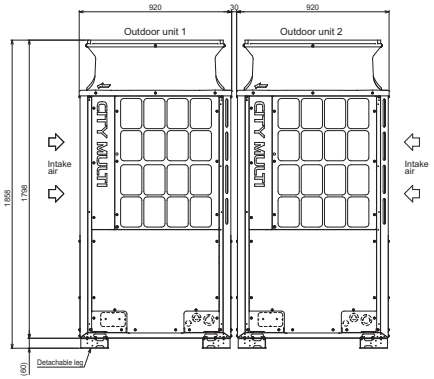


Product Dimensions PURY-P450/500/550YSNW-A1

Side View



Front View



R2 Series VRF Standard Efficiency (69-96kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- High efficiency heat recovery system
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance

R410A



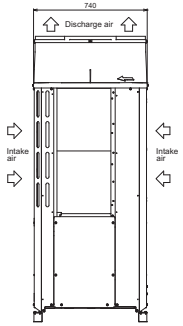


OUTDOOR UNITS			PURY-P600YSNW-A1	PURY-P650YSNW-A1	PURY-P700YSNW-A1	PURY-P750YSNW-A1	PURY-P800YSNW-A1	PURY-P850YSNW-A1
CAPACITY (kW)	Heating (nominal)		76.5	81.5	88.0	95.0	100.0	108.0
	Cooling (nominal)		69.0	73.0	80.0	85.0	90.0	96.0
	High Performance Heating (UK)		72.7	77.4	83.6	85.5	90.0	97.2
	COP Priority Heating (UK)		69.6	74.2	80.1	81.7	86.0	92.9
	Cooling (UK)		61.8	65.3	71.6	76.1	80.6	85.9
POWER INPUT (kW)	Heating (nominal)		20.07	21.05	22.44	25.53	28.40	30.68
	Cooling (nominal)		19.06	20.44	22.66	26.07	30.10	30.67
	High Performance Heating (UK)		26.69	28.00	29.85	28.85	32.09	34.67
	COP Priority Heating (UK)		20.07	21.05	22.44	24.76	27.55	29.76
	Cooling (UK)		11.05	11.86	13.14	15.12	19.26	19.63
COP / EER (nominal)			3.81 / 3.62	3.87 / 3.57	3.92 / 3.53	3.72 / 3.26	3.52 / 2.99	3.52 / 3.13
MAX No. OF CONNECTABLE INDOOR UNITS			50	50	50	50	50	50
MAX CONNECTABLE CAPACITY			50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High		240 / 240	240 / 250	250 / 250	250 / 315	315 / 315	315 / 315
PIPE SIZE mm (in)	Gas		28.58 (1-1/8")	28.58 (1-1/8")	34.93 (1-3/8")	34.93 (1-3/8")	34.93 (1-3/8")	41.28 (1-5/8")
	Liquid		22.2 (7/8") / 28.58 (1-1/8")*1	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
SOUND PRESSURE LEVEL (dBA) @ 1m		Heating / Cooling	70.0 / 64.0	69.0 / 65.0	67.0 / 65.5	70.5 / 67.0	72.0 / 68.0	72.5 / 68.5
SOUND POWER LEVEL (dBA) @ 100% Capacity		Heating / Cooling	89.0 / 83.0	88.5 / 84.0	86.0 / 84.0	90.0 / 86.0	91.0 / 86.0	92.0 / 86.0
SOUND POWER LEVEL (dBA) @ 90% Capacity		Heating / Cooling	81.5 / 77.5	83.0 / 78.5	84.0 / 79.0	83.5 / 79.5	83.0 / 80.0	85.0 / 81.0
SOUND POWER LEVEL (dBA) @ 75% Capacity		Heating / Cooling	77.5 / 73.5	79.0 / 75.0	80.0 / 76.0	79.5 / 76.0	78.0 / 76.0	79.0 / 76.5
WEIGHT (kg)			225 + 225	225 + 269	269 + 269	269 + 269	269 + 269	269 + 289
DIMENSIONS (mm)	Width		920 + 920	920 + 1240	1240 + 1240	1240 + 1240	1240 + 1240	1240 + 1240
	Depth		740	740	740	740	740	740
(1798mm without legs)	Height		1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*2			380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*2			Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*2			8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*2		Heating / Cooling [MAX]	32.1 / 30.5 [22.7 + 22.7]	33.7 / 32.7 [22.7 + 27.6]	35.9 / 36.3 [27.6 + 27.6]	40.9 / 41.8 [27.6 + 35.1]	45.5 / 48.2 [35.1 + 35.1]	49.2 / 49.1 [35.1 + 37.1]
GUARANTEED OPERATING RANGE (°C)		Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*2			1 x 25 / 1 x 25	1 x 25 / 1 x 32	1 x 32 / 1 x 32	1 x 32 / 1 x 40	1 x 40 / 1 x 40	1 x 40 / 1 x 40
MAINS CABLE No. Cores*2			4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		10.4 / 21.7	13.2 / 27.6	16 / 33.4	16 / 33.4	16 / 33.4	18.8 / 39.3
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		60.6 / 126.5	65.6 / 137.0	79.6 / 166.2	79.6 / 166.2	83 / 173.3	80.2 / 167.5

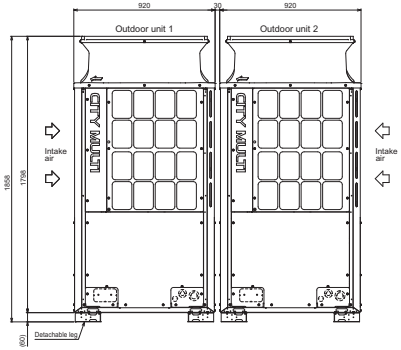
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard
*1 If distance from OU to BC controller is greater than 65m. *2 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PURY-P600YSNW-A1

Side View

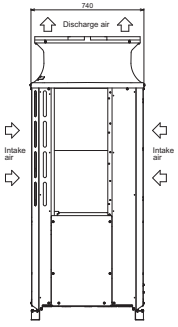


Front View

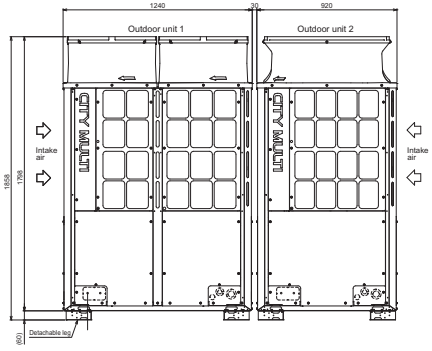


Product Dimensions PURY-P650YSNW-A1

Side View

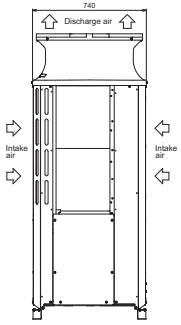


Front View

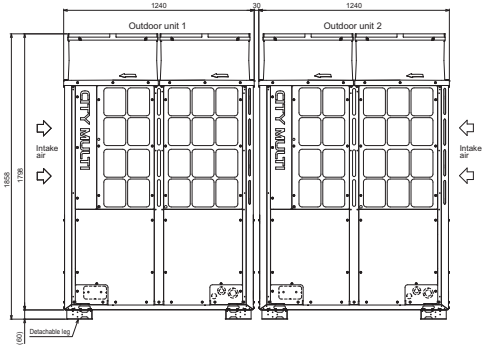


Product Dimensions PURY-P700/750/800/850YSNW-A1

Side View



Front View



R2 Series VRF Standard Efficiency (101-124kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- High efficiency heat recovery system
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance

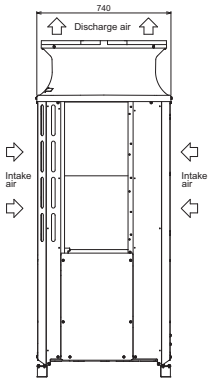


OUTDOOR UNITS			PURY-P900YSNW-A1	PURY-P950YSNW-A1	PURY-P1000YSNW-A1	PURY-P1050YSNW-A1	PURY-P1100YSNW-A1
CAPACITY (kW)	Heating (nominal)		113.0	119.5	127.0	132.0	140.0
	Cooling (nominal)		101.0	108.0	113.0	118.0	124.0
	High Performance Heating (UK)		101.7	107.6	114.3	118.8	126.0
	COP Priority Heating (UK)		97.2	102.8	109.2	113.5	120.4
	Cooling (UK)		90.4	96.7	101.1	105.6	111.0
POWER INPUT (kW)	Heating (nominal)		32.10	34.04	36.38	38.82	42.42
	Cooling (nominal)		30.88	34.83	38.56	41.54	45.09
	High Performance Heating (UK)		36.27	38.47	41.09	43.87	47.93
	COP Priority Heating (UK)		31.14	33.02	35.27	37.66	41.15
	Cooling (UK)		19.76	22.29	24.68	27.00	29.31
COP / EER (nominal)			3.52 / 3.27	3.51 / 3.10	3.49 / 2.93	3.40 / 2.84	3.30 / 2.75
MAX No. OF CONNECTABLE INDOOR UNITS			50	50	50	50	50
MAX CONNECTABLE CAPACITY			50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High		315 / 315	315 / 295	295 / 295	295 / 410	410 / 410
PIPE SIZE mm (in)	Gas		41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")
	Liquid		28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	34.93 (1-3/8")	34.93 (1-3/8")
SOUND PRESSURE LEVEL (dBA) @ 1m		Heating / Cooling	73.0 / 68.5	71.5 / 68.0	67.5 / 66.5	73.0 / 68.0	73.0 / 69.0
SOUND POWER LEVEL (dBA) @ 100% Capacity		Heating / Cooling	92.0 / 86.0	91.0 / 86.0	87.0 / 85.0	91.0 / 86.0	92.0 / 86.0
SOUND POWER LEVEL (dBA) @ 90% Capacity		Heating / Cooling	86.0 / 81.5	85.5 / 81.0	84.0 / 79.5	85.0 / 80.5	85.5 / 81.0
SOUND POWER LEVEL (dBA) @ 75% Capacity		Heating / Cooling	79.5 / 77.0	80.0 / 77.0	80.5 / 76.5	81.0 / 77.0	81.5 / 77.5
WEIGHT (kg)			289 + 289	289 + 335	335 + 335	335 + 335	335 + 335
DIMENSIONS (mm)	Width		1240 + 1240	1240 + 1750	1750 + 1750	1750 + 1750	1750 + 1750
	Depth		740	740	740	740	740
(1798mm without legs)	Height		1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1			380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1			Three	Three	Three	Three	Three
STARTING CURRENT (A)*1			8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1		Heating / Cooling [MAX]	51.4 / 49.5 [37.1 + 37.1]	54.5 / 55.8 [37.1 + 43.2]	58.3 / 61.8 [43.2 + 43.2]	62.2 / 66.6 [43.2 + 47.5]	68.0 / 72.3 [47.5 + 47.5]
GUARANTEED OPERATING RANGE (°C)		Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1			1 x 40 / 1 x 40	1 x 40 / 1 x 50	1 x 50 / 1 x 50	1 x 50 / 1 x 50	1 x 50 / 1 x 50
MAINS CABLE No. Cores*1			4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		21.6 / 45.1	21.6 / 45.1	21.6 / 45.1	21.6 / 45.1	21.6 / 45.1
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)		77.4 / 161.6	77.4 / 161.6	77.4 / 161.6	77.4 / 161.6	77.4 / 161.6

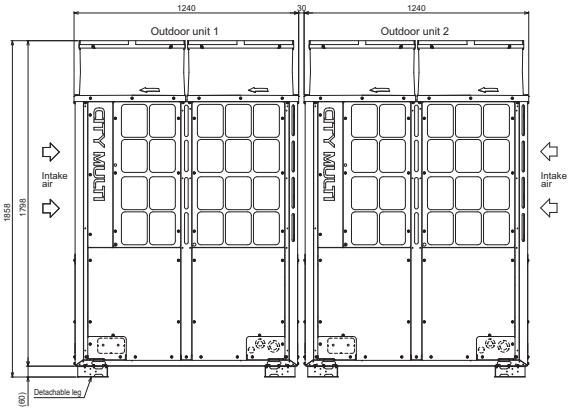
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PURY-P900YSNW-A1

Side View

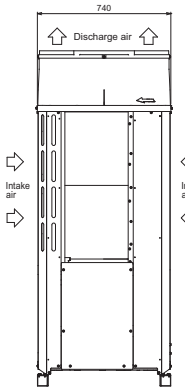


Front View

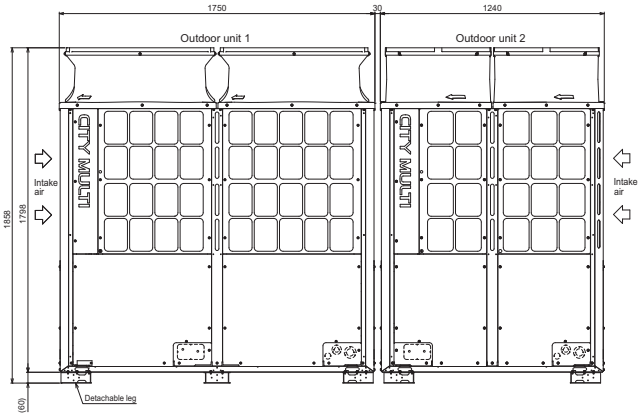


Product Dimensions PURY-P950YSNW-A1

Side View

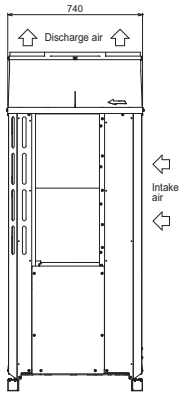


Front View

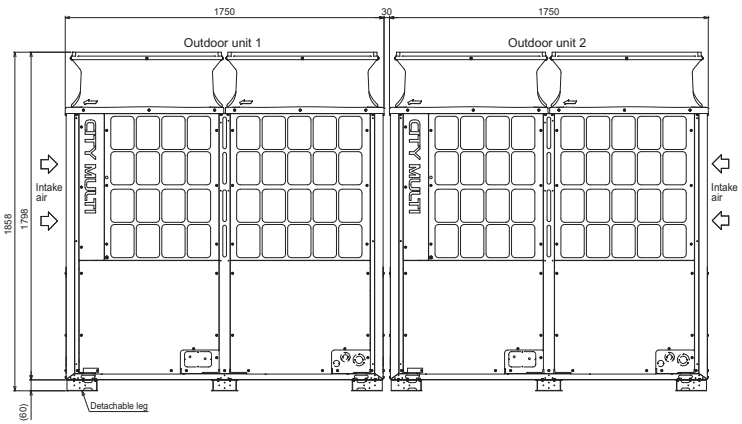


Product Dimensions PURY-P-1000/1050/1100YSNW-A1

Side View

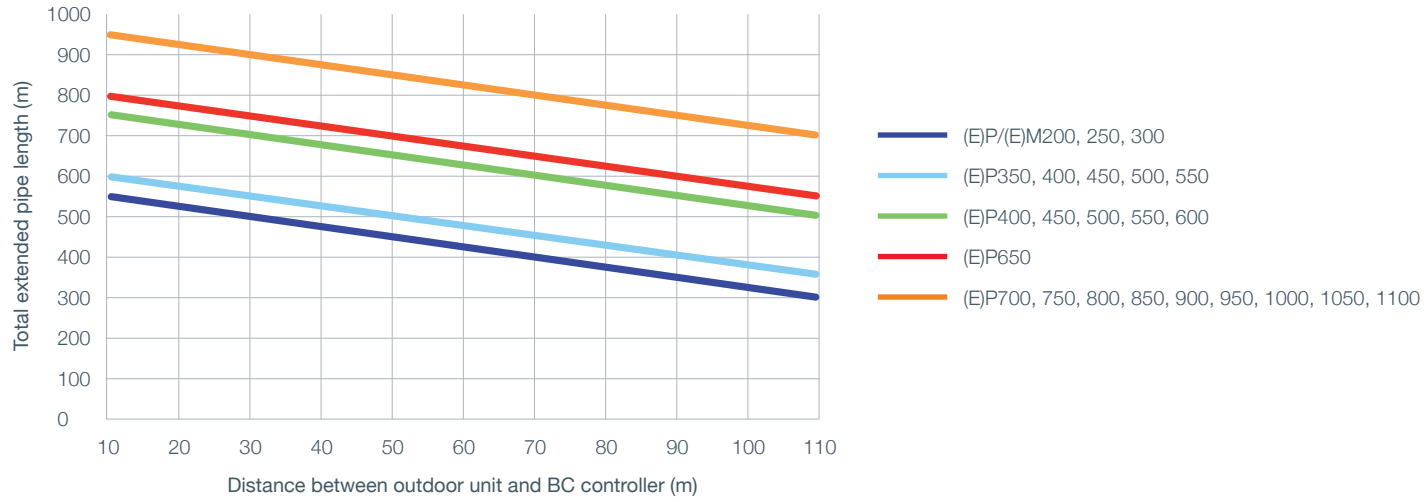


Front View

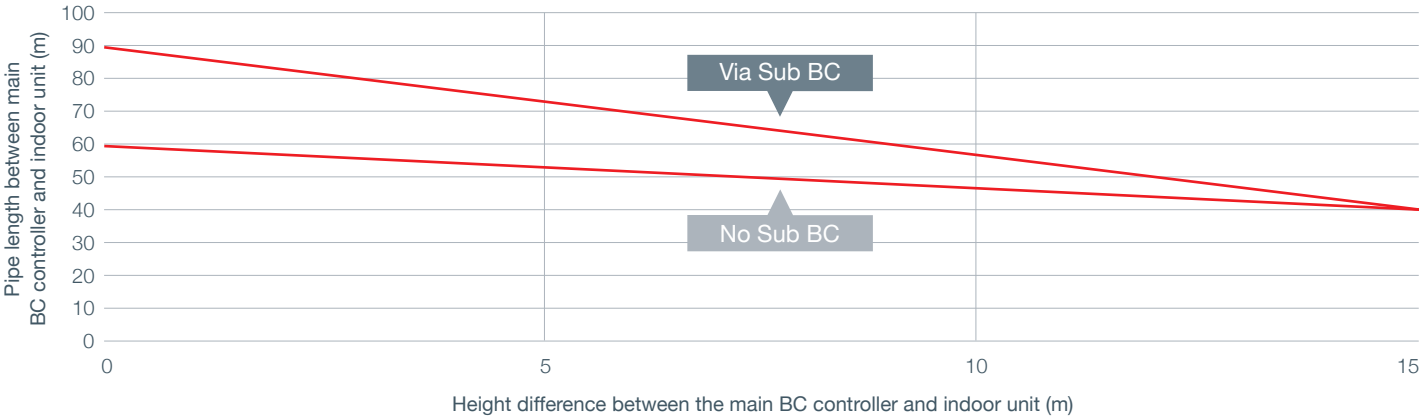


R2 Series Piping Design (R32 & R410A)

GRAPH 1: TOTAL PIPING LENGTH RESTRICTIONS



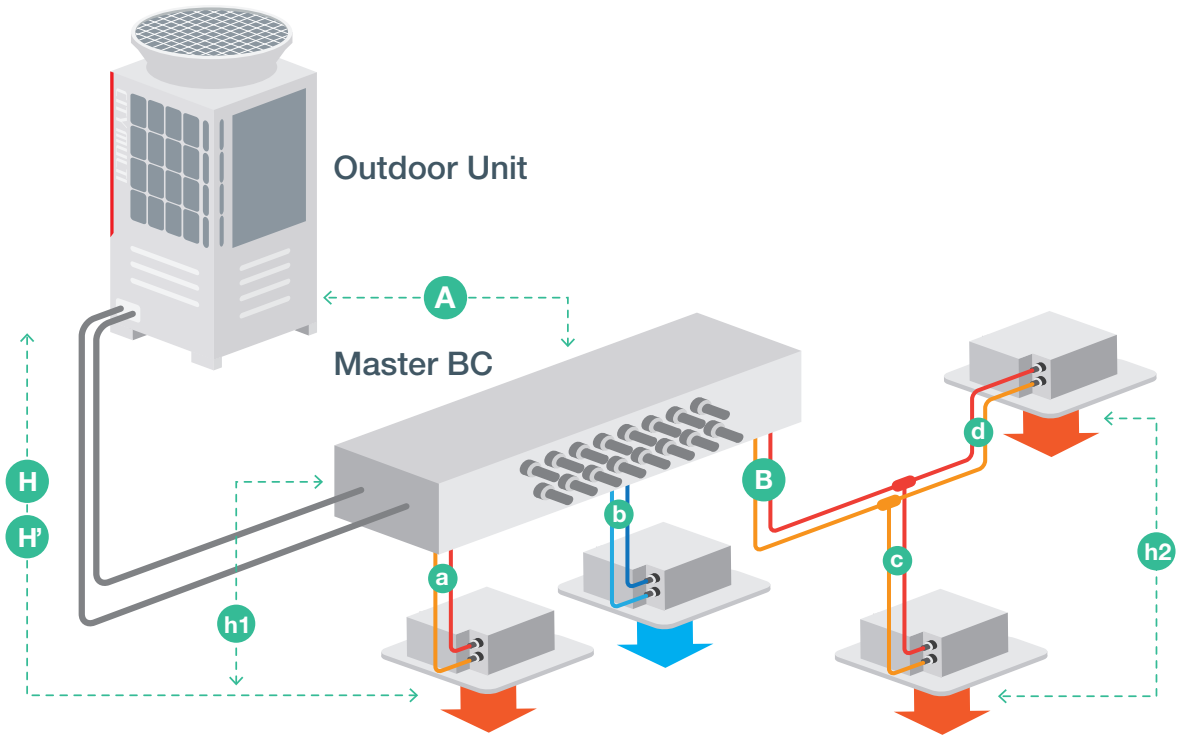
GRAPH 2: PIPE LENGTH BETWEEN BC CONTROLLER & INDOOR UNIT



Note: For all other piping restrictions please refer to the City Multi Databook

R2 Series Piping Design (R32 & R410A)

1 BC CONTROLLER, NO SUB BC CONTROLLER



PIPE LENGTH	PIPE SECTION	MAX LENGTH
Total Piping Length	A+B+a+b+c+d	(See Graph 1)
Furthest Piping Length	A+B+d	165m
Length Between OU and BC	A	110m*1
Length Between Furthest IU and BC	B+d	60m*2 (40m)*3
Height Between OU and IU (OU above IU)	H	90m*4
Height Between OU and IU (OU below IU)	H'	60m*2
Height Between IU and BC	h1	15m
Height Between IU and IU	h2	30m

Notes: *1 Please refer to Graph 1. *2 Height difference between BC controller and furthest indoor unit is zero. Please refer to graph 2. *3 If P200 or P250 indoor unit connected on system. *4 Please contact your sales office for guidance.

Please Note: this does not apply to PURY-RP models.

For guidance on applying Sub BC controllers, please contact your sales office.

Y Series VRF (22.4-45kW)

Heat Pump Outdoor Unit (Heating or Cooling)

VRF technology provides a simple and flexible solution where there is a demand for a changeover capability between heating and cooling for all indoor units, helping to ensure a constant and comfortable indoor climate.

Key Features

- Effective, efficient solution meeting all the market needs
- Delivers the highest levels of comfort, both thermally and acoustically
- Cost effective delivery



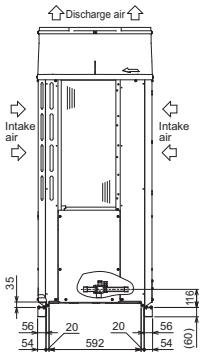


OUTDOOR UNITS		PUHY-P200YNW-A1	PUHY-P250YNW-A1	PUHY-P300YNW-A1	PUHY-P350YNW-A1	PUHY-P400YNW-A1	PUHY-P400YSNW-A1
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5	45.0	50.0	50.0
	Cooling (nominal)	22.4	28.0	33.5	40.0	45.0	45.0
	High Performance Heating (UK)	25.0	31.5	35.6	42.8	45.0	50.0
	COP Priority Heating (UK)	22.8	28.7	34.1	41.0	43.0	45.5
	Cooling (UK)	20.1	25.1	30.0	35.8	40.3	40.3
POWER INPUT (kW)	Heating (nominal)	5.10	7.20	8.46	10.39	12.37	10.52
	Cooling (nominal)	4.81	7.14	8.79	10.95	14.19	9.97
	High Performance Heating (UK)	6.43	9.07	11.25	13.82	13.98	13.47
	COP Priority Heating (UK)	5.10	7.20	8.46	10.39	12.00	10.52
	Cooling (UK)	2.79	4.14	5.10	6.35	9.08	5.78
COP / EER (nominal)		4.90 / 4.65	4.37 / 3.92	4.43 / 3.81	4.33 / 3.65	4.04 / 3.17	4.75 / 4.51
MAX No. OF CONNECTABLE INDOOR UNITS		17	21	26	30	34	34
MAX CONNECTABLE CAPACITY		50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity
AIRFLOW (m^3/min)	High	170	185	240	270	300	170 / 170
PIPE SIZE mm (in)	Gas	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid	9.52 (3/8")	9.52 (3/8")*1	9.52 (3/8")*1	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
SOUND PRESSURE LEVEL (dBA)	Heating / Cooling	59.0 / 58.0	61.0 / 60.0	64.5 / 61.0	64.0 / 62.0	67.0 / 65.0	62.0 / 61.0
SOUND POWER LEVEL (dBA)	Heating / Cooling	77.0 / 75.0	80.0 / 78.0	84.0 / 80.0	83.0 / 80.0	86.0 / 82.0	80.0 / 78.0
WEIGHT (kg)		213	213	226	277	277	213 + 213
DIMENSIONS (mm)	Width	920	920	920	1240	1240	920 + 920
	Depth	740	740	740	740	740	740
(1650mm without legs)	Height	1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*2		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*2		Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*2		8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*2	Heating / Cooling [MAX]	8.1 / 7.7 [16.1]	11.5 / 11.4 [17.8]	13.5 / 14.0 [22.7]	16.6 / 17.5 [26.4]	19.8 / 22.7 [31.9]	16.8 / 15.9 [16.1]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*2		1 x 20	1 x 20	1 x 25	1 x 32	1 x 32	1 x 20 / 1 x 20
MAINS CABLE No. Cores*2		4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	6.5 / 13.6	6.5 / 13.6	6.5 / 13.6	9.8 / 20.5	9.8 / 20.5	13 / 27.1
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	15.9 / 33.2	22.9 / 47.8	23.4 / 48.9	24 / 50.1	24.4 / 51.0	32 / 66.8

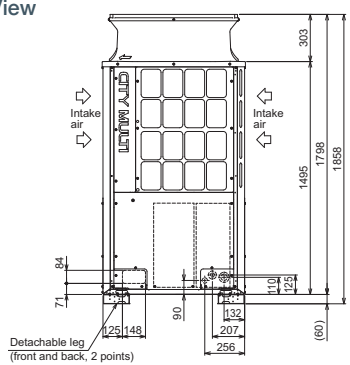
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 12.7mm(1/2") if P250 furthest length ≥ 90m, P300 furthest length ≥ 40m. *2 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PUHY-P200/250/300YNW-A1

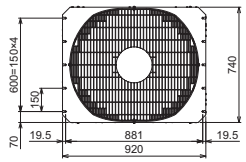
Side View



Front View

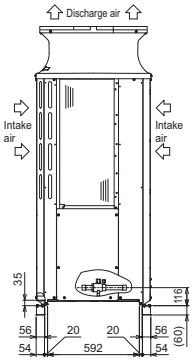


Upper View

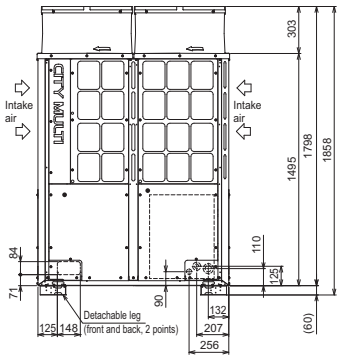


Product Dimensions PUHY-P350/400YNW-A1

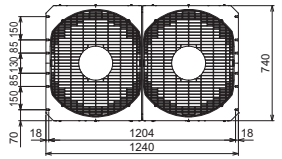
Side View



Front View

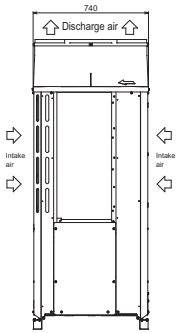


Upper View

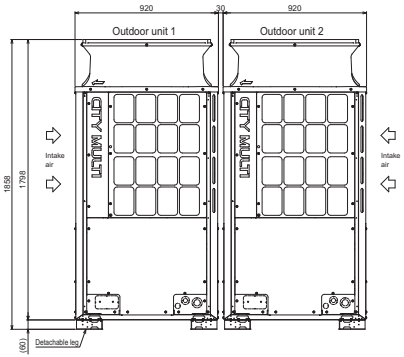


Product Dimensions PUHY-P400YSNW-A1

Side View



Front View



Y Series VRF (50-63kW)

Heat Pump Outdoor Unit (Heating or Cooling)

VRF technology provides a simple and flexible solution where there is a demand for a changeover capability between heating and cooling for all indoor units, helping to ensure a constant and comfortable indoor climate.

Key Features

- Effective, efficient solution meeting all the market needs
- Delivers the highest levels of comfort, both thermally and acoustically
- Cost effective delivery

R410A



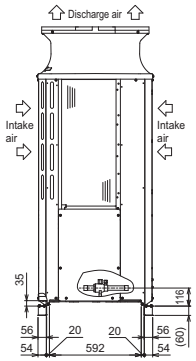


OUTDOOR UNITS		PUHY-P450YNW-A1	PUHY-P450YSNW-A1	PUHY-P500YNW-A1	PUHY-P500YSNW-A1	PUHY-P550YSNW-A1
CAPACITY (kW)	Heating (nominal)	56.0	56.0	63.0	63.0	69.0
	Cooling (nominal)	50.0	50.0	56.0	56.0	63.0
	High Performance Heating (UK)	50.4	56.0	56.7	63.0	65.6
	COP Priority Heating (UK)	48.2	51.0	54.2	57.3	62.8
	Cooling (UK)	44.8	44.8	50.1	50.1	56.4
POWER INPUT (kW)	Heating (nominal)	14.00	12.55	15.98	14.89	16.15
	Cooling (nominal)	14.57	12.16	17.55	14.73	16.84
	High Performance Heating (UK)	15.82	16.06	18.06	19.09	21.48
	COP Priority Heating (UK)	13.58	12.55	15.50	14.89	16.15
	Cooling (UK)	9.32	7.05	11.23	8.54	9.77
COP / EER (nominal)		4.00 / 3.43	4.46 / 4.11	3.94 / 3.19	4.23 / 3.80	4.27 / 3.74
MAX No. OF CONNECTABLE INDOOR UNITS		39	39	43	43	47
MAX CONNECTABLE CAPACITY		50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity
AIRFLOW (m^3/min)	High	305	170 / 185	365	185 / 185	185 / 240
PIPE SIZE mm (in)	Gas	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
SOUND PRESSURE LEVEL (dBA)	Heating / Cooling	69.5 / 65.5	63.0 / 62.0	66.5 / 63.5	64.0 / 63.0	66.0 / 63.5
SOUND POWER LEVEL (dBA)	Heating / Cooling	89.0 / 84.0	82.0 / 80.0	85.0 / 82.0	83.0 / 81.0	85.0 / 82.0
WEIGHT (kg)		293	213 + 213	334	213 + 213	213 + 226
DIMENSIONS (mm)	Width	1240	920 + 920	1750	920 + 920	920 + 920
	Depth	740	740	740	740	740
(1798mm without legs)	Height	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three
STARTING CURRENT (A)*1		8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	22.4 / 23.3 [37.1]	20.1 / 19.5 [16.1 + 17.8]	25.6 / 28.1 [43.7]	23.8 / 23.6 [17.8 + 17.8]	25.9 / 27.0 [17.8 + 22.7]
GUARANTEED OPERATING RANGE (ºC)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1		1 x 40	1 x 20 / 1 x 20	1 x 50	1 x 20 / 1 x 20	1 x 20 / 1 x 25
MAINS CABLE No. Cores*1		4 + earth	4 + earth / 4 + earth	4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	10.8 / 22.6	13 / 27.1	10.8 / 22.6	13 / 27.1	13 / 27.1
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	32.2 / 67.2	32 / 66.8	33.1 / 69.1	32.9 / 68.7	34.7 / 72.5

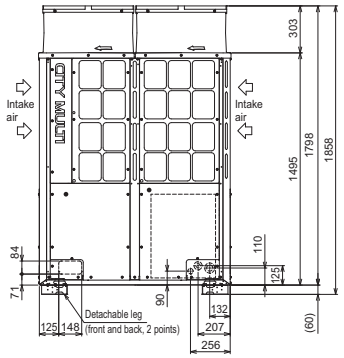
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PUHY-P450YNW-A1

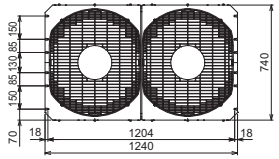
Side View



Front View

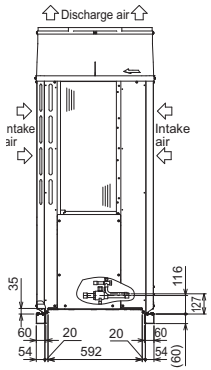


Upper View

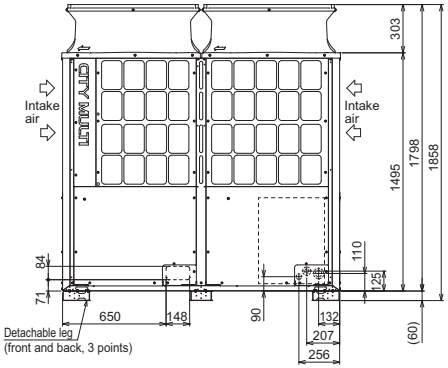


Product Dimensions PUHY-P500YNW-A1

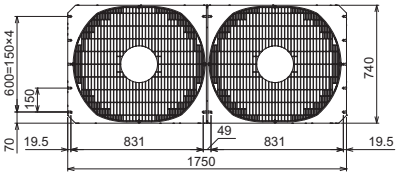
Side View



Front View

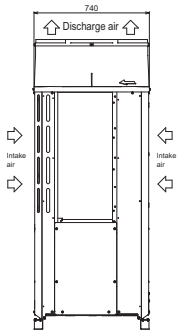


Upper View

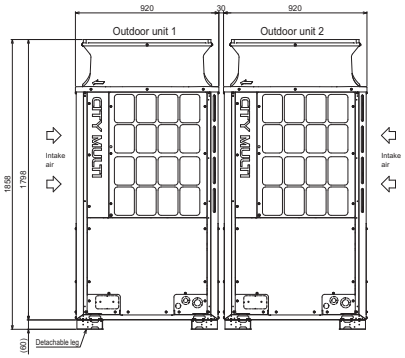


Product Dimensions PUHY-P450/500/550YSNW-A1

Side View



Front View



Y Series VRF (69-96kW)

Heat Pump Outdoor Unit (Heating or Cooling)

VRF technology provides a simple and flexible solution where there is a demand for a changeover capability between heating and cooling for all indoor units, helping to ensure a constant and comfortable indoor climate.

Key Features

- Effective, efficient solution meeting all the market needs
- Delivers the highest levels of comfort, both thermally and acoustically
- Cost effective delivery

R410A



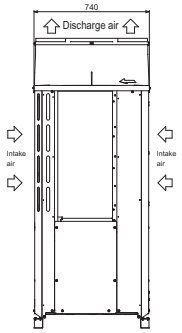


OUTDOOR UNITS		PUHY-P600YSNW-A1	PUHY-P650YSNW-A1	PUHY-P700YSNW-A1	PUHY-P750YSNW-A1	PUHY-P800YSNW-A1	PUHY-P850YSNW-A1
CAPACITY (kW)	Heating (nominal)	76.5	81.5	88.0	95.0	100.0	108.0
	Cooling (nominal)	69.0	73.0	80.0	85.0	90.0	96.0
	High Performance Heating (UK)	72.7	77.4	83.6	90.3	95.0	97.2
	COP Priority Heating (UK)	69.6	74.2	80.1	86.5	91.0	92.9
	Cooling (UK)	61.8	65.3	71.6	76.1	80.6	85.9
POWER INPUT (kW)	Heating (nominal)	17.83	20.17	20.95	23.45	24.87	27.76
	Cooling (nominal)	18.69	21.79	22.59	25.83	26.31	30.00
	High Performance Heating (UK)	23.71	26.83	27.86	31.19	33.08	31.37
	COP Priority Heating (UK)	17.83	20.17	20.95	23.45	24.87	26.93
	Cooling (UK)	10.84	12.64	13.10	14.98	15.26	19.20
COP / EER (nominal)		4.29 / 3.69	4.04 / 3.35	4.20 / 3.54	4.05 / 3.29	4.02 / 3.42	3.89 / 3.20
MAX No. OF CONNECTABLE INDOOR UNITS		50	50	50	50	50	50
MAX CONNECTABLE CAPACITY		50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity
AIRFLOW (m^3/min)	High	240 / 240	185 / 300	270 / 270	270 / 300	270 / 305	300 / 305
PIPE SIZE mm (in)	Gas	28.58 (1-1/8")	28.58 (1-1/8")	34.93 (1-3/8")	34.93 (1-3/8")	34.93 (1-3/8")	41.28 (1-5/8")
	Liquid	15.88 (5/8")	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
SOUND PRESSURE LEVEL (dBA)	Heating / Cooling	67.5 / 64.0	68.0 / 66.5	67.0 / 65.0	68.5 / 67.0	71.0 / 67.5	71.5 / 68.5
SOUND POWER LEVEL (dBA)	Heating / Cooling	87.0 / 83.0	87.0 / 83.0	86.0 / 83.0	88.0 / 84.0	90.0 / 85.0	91.0 / 86.0
WEIGHT (kg)		226 + 226	213 + 277	277 + 277	277 + 277	277 + 293	277 + 293
DIMENSIONS (mm)	Width	920 + 920	920 + 1240	1240 + 1240	1240 + 1240	1240 + 1240	1240 + 1240
	Depth	740	740	740	740	740	740
(1798mm without legs)	Height	1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*1		8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	28.5 / 29.9 [22.7 + 22.7]	32.3 / 34.9 [17.8 + 31.9]	33.5 / 36.2 [26.4 + 26.4]	37.6 / 41.4 [26.4 + 31.9]	39.8 / 42.1 [26.4 + 37.1]	44.5 / 48.1 [31.9 + 37.1]
GUARANTEED OPERATING RANGE (ºC)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1		1 x 25 / 1 x 25	1 x 20 / 1 x 32	1 x 32 / 1 x 32	1 x 32 / 1 x 32	1 x 32 / 1 x 40	1 x 32 / 1 x 40
MAINS CABLE No. Cores*1		4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	13 / 27.1	16.3 / 34.0	19.6 / 40.9	19.6 / 40.9	20.6 / 43.0	20.6 / 43.0
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	34.7 / 72.5	35.2 / 73.5	44.8 / 93.5	44.8 / 93.5	44.7 / 93.3	46.5 / 97.1

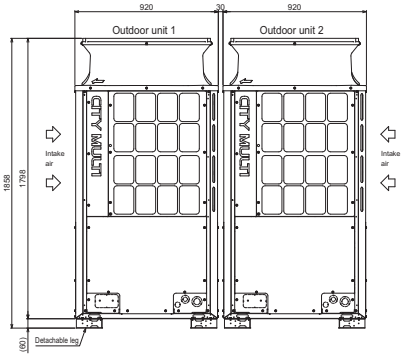
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PUHY-P600YSNW-A1

Side View

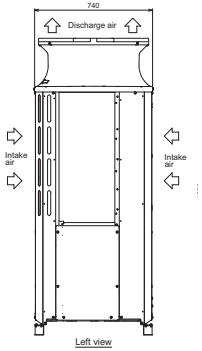


Front View

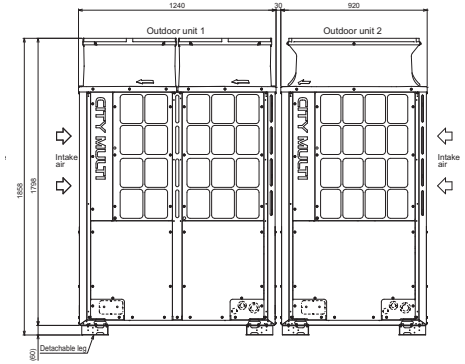


Product Dimensions PUHY-P650YSNW-A1

Side View

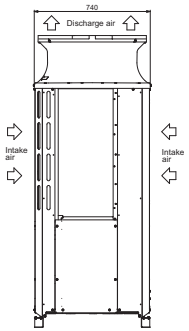


Front View

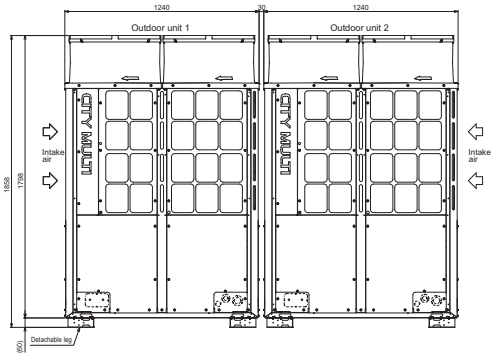


Product Dimensions PUHY-P700/750/800/850YSNW-A1

Side View



Front View



Y Series VRF (101-124kW)

Heat Pump Outdoor Unit (Heating or Cooling)

VRF technology provides a simple and flexible solution where there is a demand for a changeover capability between heating and cooling for all indoor units, helping to ensure a constant and comfortable indoor climate.

Key Features

- Effective, efficient solution meeting all the market needs
- Delivers the highest levels of comfort, both thermally and acoustically
- Cost effective delivery

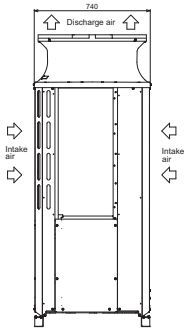


OUTDOOR UNITS		PUHY-P900YSNW-A1	PUHY-P950YSNW-A1	PUHY-P1000YSNW-A1	PUHY-P1050YSNW-A1	PUHY-P1100YSNW-A1
CAPACITY (kW)	Heating (nominal)	113.0	119.5	127.0	132.0	140.0
	Cooling (nominal)	101.0	108.0	113.0	118.0	124.0
	High Performance Heating (UK)	101.7	107.6	114.3	118.8	126.0
	COP Priority Heating (UK)	97.2	102.8	109.2	113.5	120.4
	Cooling (UK)	90.4	96.7	101.1	105.6	111.0
POWER INPUT (kW)	Heating (nominal)	29.12	28.38	31.05	33.08	34.22
	Cooling (nominal)	30.42	30.00	33.13	36.41	36.79
	High Performance Heating (UK)	32.91	32.07	35.09	37.38	38.67
	COP Priority Heating (UK)	28.25	27.53	30.12	32.09	33.19
	Cooling (UK)	19.47	19.20	21.20	23.30	23.55
COP / EER (nominal)		3.88 / 3.32	4.21 / 3.60	4.09 / 3.41	3.99 / 3.24	4.09 / 3.37
MAX No. OF CONNECTABLE INDOOR UNITS		50	50	50	50	50
MAX CONNECTABLE CAPACITY		50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity
AIRFLOW (m^3/min)	High	305 / 305	185 / 270 / 270	185 / 270 / 300	185 / 300 / 300	270 / 270 / 300
PIPE SIZE mm (in)	Gas	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")
	Liquid	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
SOUND PRESSURE LEVEL (dBA)	Heating / Cooling	72.5 / 68.5	68.0 / 66.0	69.5 / 68.0	70.5 / 68.5	70.0 / 68.5
SOUND POWER LEVEL (dBA)	Heating / Cooling	92.0 / 87.0	87.0 / 84.0	88.0 / 85.0	90.0 / 86.0	89.0 / 86.0
WEIGHT (kg)		293 + 293	213 + 277 + 277	213 + 277 + 277	213 + 277 + 277	277 + 277 + 277
DIMENSIONS (mm)	Width	1240 + 1240	920 + 1240 + 1240	920 + 1240 + 1240	920 + 1240 + 1240	1240 + 1240 + 1240
	Depth	740	740	740	740	740
(1798mm without legs)	Height	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three
STARTING CURRENT (A)*1		8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	46.7 / 48.7 [37.1 + 37.1]	45.5 / 48.1 [17.8 + 26.4 + 26.4]	49.7 / 53.1 [17.8 + 26.4 + 31.9]	53.0 / 58.3 [17.8 + 31.9 + 31.9]	54.8 / 59.0 [26.4 + 26.4 + 31.9]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1		1 x 40 / 1 x 40	1 x 20 / 1 x 32 / 1 x 32	1 x 20 / 1 x 32 / 1 x 32	1 x 20 / 1 x 32 / 1 x 32	1 x 32 / 1 x 32 / 1 x 32
MAINS CABLE No. Cores*1		4 + earth / 4 + earth	4 + earth / 4 + earth	4 + earth / 4 + earth / 4 + earth	4 + earth / 4 + earth / 4 + earth	4 + earth / 4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	21.6 / 45.1	26.1/ 54.5	26.1 / 54.5	26.1 / 54.5	29.4 / 61.4
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	46.4 / 96.9	45.9 / 95.8	45.9 / 95.8	45.9 / 95.8	45.6 / 95.2

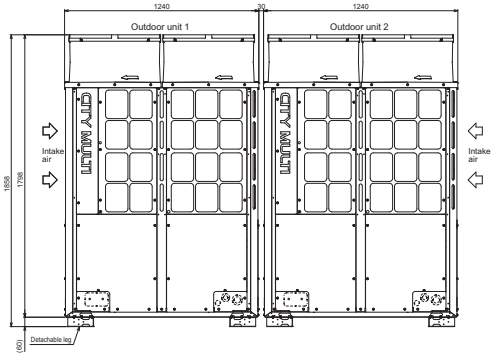
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PUHY-P900YSNW-A1

Side View

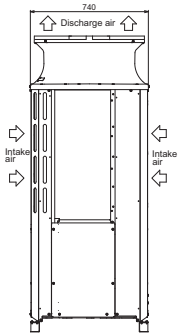


Front View

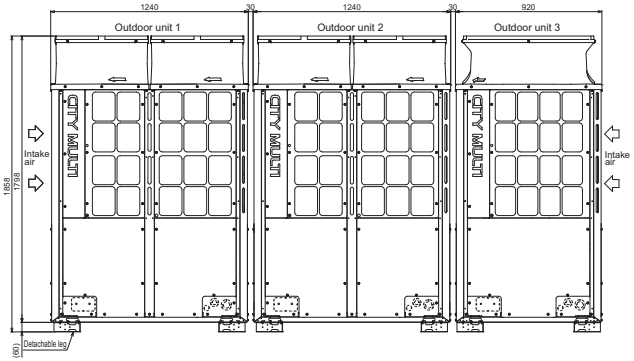


Product Dimensions PUHY-P950/1000/1050YSNW-A1

Side View

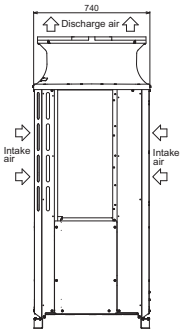


Front View

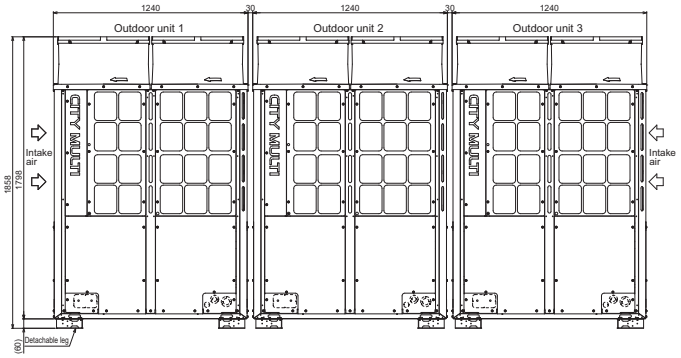


Product Dimensions PUHY-P1100YSNW-A1

Side View



Front View



Y Series VRF (130-150kW)

Heat Pump Outdoor Unit (Heating or Cooling)

VRF technology provides a simple and flexible solution where there is a demand for a changeover capability between heating and cooling for all indoor units, helping to ensure a constant and comfortable indoor climate.

Key Features

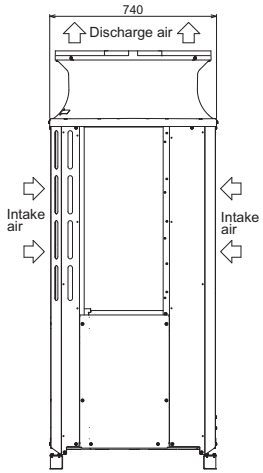
- Effective, efficient solution meeting all the market needs
- Delivers the highest levels of comfort, both thermally and acoustically
- Cost effective delivery



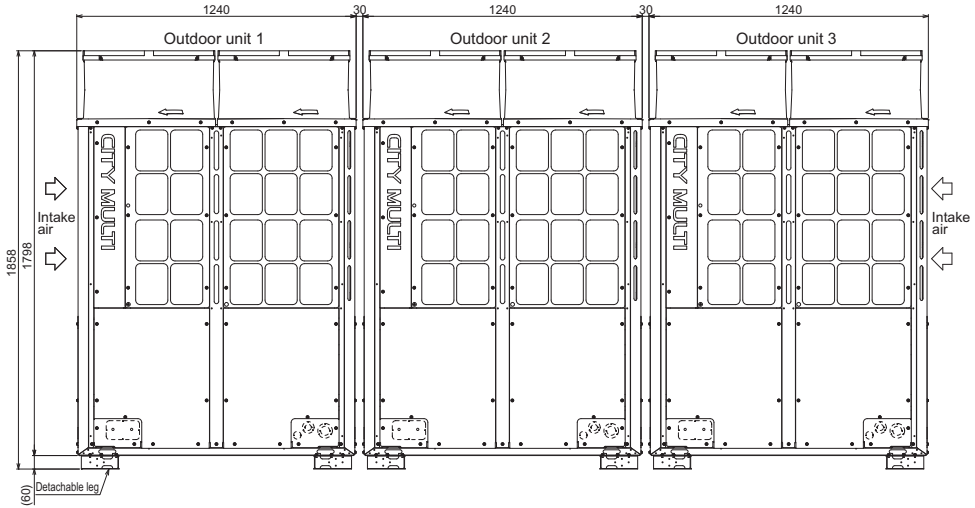
OUTDOOR UNITS		PUHY-P1150YSNW-A1	PUHY-P1200YSNW-A1	PUHY-P1250YSNW-A1	PUHY-P1300YSNW-A1	PUHY-P1350YSNW-A1
CAPACITY (kW)	Heating (nominal)	145.0	150.0	156.5	163.0	168.0
	Cooling (nominal)	130.0	136.0	140.0	146.0	150.0
	High Performance Heating (UK)	130.5	135.0	140.9	146.7	151.2
	COP Priority Heating (UK)	124.7	129.0	134.6	140.2	144.5
	Cooling (UK)	116.4	121.7	125.3	130.7	134.3
POWER INPUT (kW)	Heating (nominal)	36.25	38.36	40.12	41.90	43.29
	Cooling (nominal)	40.49	44.29	44.30	45.06	45.18
	High Performance Heating (UK)	40.96	43.35	45.34	47.35	48.92
	COP Priority Heating (UK)	35.16	37.21	38.92	40.64	41.99
	Cooling (UK)	25.91	28.35	28.35	28.84	28.92
COP / EER (nominal)		4.00 / 3.21	3.91 / 3.07	3.90 / 3.16	3.89 / 3.24	3.88 / 3.32
MAX No. OF CONNECTABLE INDOOR UNITS		50	50	50	50	50
MAX CONNECTABLE CAPACITY		50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity	50~130% OU Capacity
AIRFLOW (m^3/min)	High	270 / 300 / 300	300 / 300 / 300	300 / 300 / 305	300 / 305 / 305	305 / 305 / 305
PIPE SIZE mm (in)	Gas	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")	41.28 (1-5/8")
	Liquid	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
SOUND PRESSURE LEVEL (dBA)	Heating / Cooling	71.0 / 69.0	72.0 / 70.0	73.0 / 70.0	73.5 / 70.0	74.5 / 70.5
SOUND POWER LEVEL (dBA)	Heating / Cooling	90.0 / 86.0	91.0 / 87.0	92.0 / 88.0	93.0 / 88.0	94.0 / 89.0
WEIGHT (kg)		277 + 277 + 277	277 + 277 + 277	277 + 277 + 293	277 + 293 + 293	293 + 293 + 293
DIMENSIONS (mm)	Width	1240 + 1240 + 1240	1240 + 1240 + 1240	1240 + 1240 + 1240	1240 + 1240 + 1240	1240 + 1240 + 1240
	Depth	740	740	740	740	740
(1798mm without legs)	Height	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three
STARTING CURRENT (A)*1		8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	58.1 / 64.9 [26.4 + 31.9 + 31.9]	61.5 / 71.0 [31.9 + 31.9 + 31.9]	64.3 / 71.0 [31.9 + 31.9 + 37.1]	67.1 / 72.2 [31.9 + 37.1 + 37.1]	69.4 / 72.4 [37.1 + 37.1 + 37.1]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1		1 x 32 / 1 x 32 / 1 x 32	1 x 32 / 1 x 32 / 1 x 32	1 x 32 / 1 x 32 / 1 x 40	1 x 32 / 1 x 40 / 1 x 40	1 x 40 / 1 x 40 / 1 x 40
MAINS CABLE No. Cores*1		4 + earth / 4 + earth / 4 + earth	4 + earth / 4 + earth / 4 + earth	4 + earth / 4 + earth / 4 + earth	4 + earth / 4 + earth / 4 + earth	4 + earth / 4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	29.4 / 61.4	29.4 / 61.4	30.4 / 63.5	31.4 / 65.6	32.4 / 67.7
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	45.6 / 95.2	45.6 / 95.2	47.3 / 98.8	47.2 / 98.6	47.1 / 98.3

Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Side View



Front View



Y Series Single Fan (12.5-15.5kW)

Mini VRF Heat Pump Outdoor Unit

VRF technology and efficiency delivered in a small capacity, low footprint, single fan side blow system, where there is a demand for a changeover capability between heating and cooling for all indoor units.

Key Features

- VRF piping, control and connectivity for small systems requiring heating or cooling
- Low height profile and footprint making installation in built up areas easier
- 30Pa static pressure fan as standard if enclosures are required
- Compatible with M Series, Mr Slim and City Multi indoor units

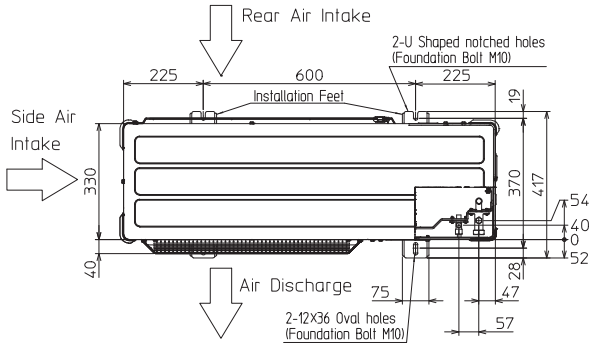


OUTDOOR UNITS		PUMY-SP112VKM	PUMY-SP112YKM [3]	PUMY-SP125VKM	PUMY-SP125YKM [3]	PUMY-SP140VKM	PUMY-SP140YKM [3]
CAPACITY (KW)	Heating (nominal)	14.0	14.0	16.0	16.0	16.5	16.5
	Cooling (nominal)	12.5	12.5	14.0	14.0	15.5	15.5
	Heating (UK)	13.9	13.9	15.8	15.8	16.3	16.3
	Cooling (UK)	10.0	10.0	11.2	11.2	12.4	12.4
POWER INPUT (KW)	Heating (nominal)	3.17	3.17	3.90	3.90	4.02	4.02
	Cooling (nominal)	3.10	3.10	3.84	3.84	4.70	4.70
	Heating (UK)	4.18	4.18	5.15	5.15	5.31	5.31
	Cooling (UK)	1.61	1.61	2.00	2.00	2.44	2.44
COP / EER (nominal)		4.42 / 4.03	4.42 / 4.03	4.10 / 3.65	4.10 / 3.65	4.10 / 3.30	4.10 / 3.30
MAX NO. OF CONNECTABLE INDOOR UNITS		9	9	10	10	12	12
MAX CONNECTABLE CAPACITY		50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity
AIRFLOW (m^3/min)		77	77	83	83	83	83
PIPE SIZE MM (in)	Gas	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)		52	52	53	53	54	54
SOUND POWER LEVEL (dBA)		72	72	73	73	74	74
WEIGHT (kg)		93	94	93	94	93	94
DIMENSIONS (mm)	Width	1050	1050	1050	1050	1050	1050
	Depth	330+40	330+40	330+40	330+40	330+40	330+40
	Height	981	981	981	981	981	981
ELECTRICAL SUPPLY		220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz
PHASE		Single	Three	Single	Three	Single	Three
STARTING CURRENT (A)		14	7	14	7	14	7
NOMINAL SYSTEM RUNNING CURRENT (A)	Heating / Cooling [MAX]	13.48 / 13.18 [30.5]	4.82 / 4.71 [13.0]	16.58 / 16.33 [30.5]	5.93 / 5.83 [13.0]	17.09 / 19.98 [30.5]	6.11 / 7.14 [13.0]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15 / -5~52	-20~15 / -5~52	-20~15 / -5~52	-20~15 / -5~52	-20~15 / -5~52	-20~15 / -5~52
FUSE RATING (BS88) - HRC (A)		1 x 32	1 x 16	1 x 32	1 x 16	1 x 32	1 x 16
MAINS CABLE NO. CORES		3	4 + earth	3	4 + earth	3	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (T) R410A (GWP 2088)		3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (T) R410A (GWP 2088)		9.0 / 18.79	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79	9.0 / 18.79

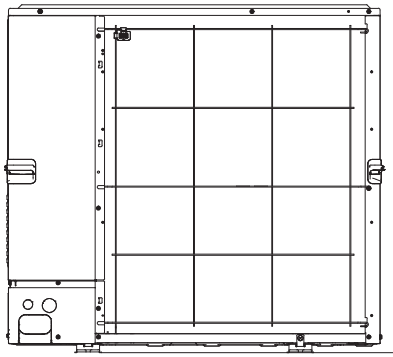
[3] Three Phase available May 2018. Note: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.

PIPING RESTRICTIONS	PUMY-SP112-140V(Y)KM
TOTAL PIPING LENGTH	120m max
FURTHEST PIPING LENGTH	70m max
FURTHEST PIPING LENGTH AFTER 1st BRANCH	50m max
BETWEEN INDOOR AND OUTDOOR UNITS - HEIGHT	50m max (30m max if outdoor installed below)
BETWEEN INDOOR AND INDOOR UNITS - HEIGHT	15m max

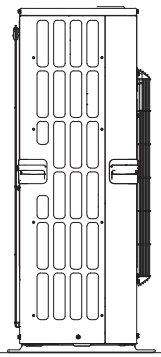
Upper View



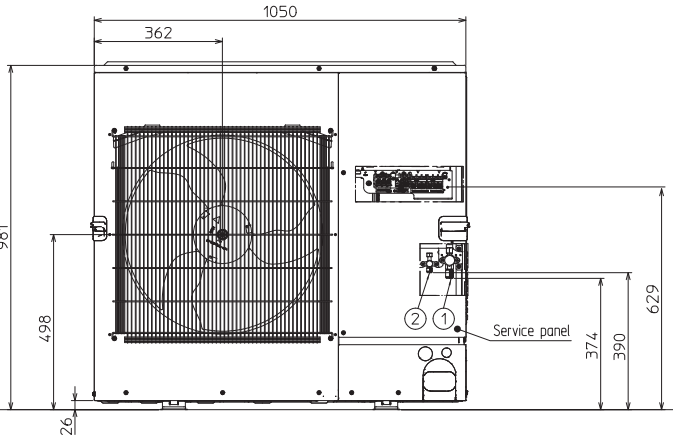
Rear View



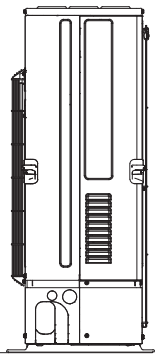
Side View



Front View



Side View



Y Series Twin Fan (12.5-22kW)

Mini VRF Heat Pump Outdoor Unit

VRF technology and efficiency delivered in a small capacity, low footprint, side blow system, where there is a demand for a changeover capability between heating and cooling for all indoor units.

Key Features

- VRF efficiency, control and piping benefits in a low footprint, low impact solution
- Ideal for areas of high occupancy, such as city centres and residential areas
- Compatible with M Series, Mr Slim and City Multi indoor units

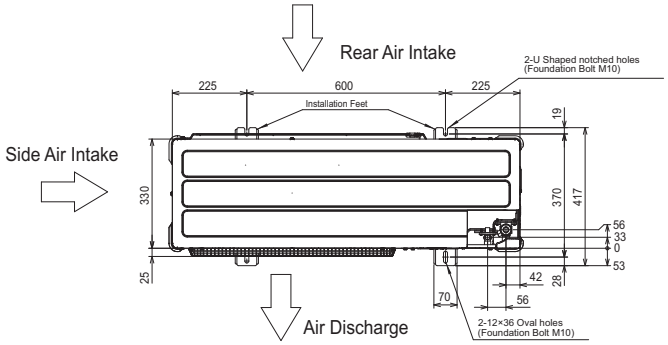


OUTDOOR UNITS		PUMY-P112VKM5	PUMY-P112YKM4 [3]	PUMY-P125VKM5	PUMY-P125YKM4 [3]	PUMY-P140VKM5	PUMY-P140YKM4 [3]	PUMY-P200YKM2 [3]
CAPACITY (KW)	Heating (nominal)	14.0	14.0	16.0	16.0	18.0	18.0	25.0
	Cooling (nominal)	12.5	12.5	14.0	14.0	15.5	15.5	22.4
	Heating (UK)	13.9	13.9	15.8	15.8	17.8	17.8	24.8
	Cooling (UK)	10.0	10.0	11.2	11.2	12.4	12.4	17.9
POWER INPUT (KW)	Heating (nominal)	3.04	3.04	3.74	3.74	4.47	4.47	5.84
	Cooling (nominal)	2.79	2.79	3.46	3.46	4.52	4.52	6.05
	Heating (UK)	4.01	4.01	4.94	4.94	5.90	5.90	7.71
	Cooling (UK)	1.56	1.56	1.94	1.94	2.53	2.53	3.39
COP / EER (nominal)		4.61 / 4.48	4.61 / 4.48	4.28 / 4.05	4.28 / 4.05	4.03 / 3.43	4.03 / 3.43	4.28 / 3.70
MAX NO. OF CONNECTABLE INDOOR UNITS		9	9	10	10	12	12	12
MAX CONNECTABLE CAPACITY		50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity
AIRFLOW (m^3/min)		110	110	110	110	110	110	139
PIPE SIZE MM (in)	Gas	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	19.05 (3/4")
	Liquid	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")*1
SOUND PRESSURE LEVEL (dBA)		49	49	50	50	51	51	56
SOUND POWER LEVEL (dBA)		69	69	70	70	71	71	75
WEIGHT (kg)		122	125	122	125	122	125	141
DIMENSIONS (mm)	Width	1050	1050	1050	1050	1050	1050	1050
	Depth	330+40	330+40	330+40	330+40	330+40	330+40	330+40
	Height	1338	1338	1338	1338	1338	1338	1338
ELECTRICAL SUPPLY		220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Single	Three	Single	Three	Single	Three	Three
STARTING CURRENT (A)		14	7	14	7	14	7	7
NOMINAL SYSTEM RUNNING CURRENT (A)	Heating / Cooling [MAX]	13.42 / 12.32 [29.5]	5.16 / 4.74 [13.0]	16.51 / 15.27 [29.5]	6.00 / 5.55 [13.0]	19.73 / 19.95 [29.5]	6.79 / 6.87 [13.0]	8.74 / 9.05 [19.0]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15 / -5~46	-20~15 / -5~46	-20~15 / -5~46	-20~15 / -5~46	-20~15 / -5~46	-20~15 / -5~46	-20~15 / -5~46
FUSE RATING (BS88) - HRC (A)		1 x 32	1 x 16	1 x 32	1 x 16	1 x 32	1 x 16	1 x 20
MAINS CABLE NO. CORES		3	4 + earth	3	4 + earth	3	4 + earth	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (T) R410A (GWP 2088)		4.8 / 10.0	4.8 / 10.0	4.8 / 10.0	4.8 / 10.0	4.8 / 10.0	4.8 / 10.0	7.3 / 15.2
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (T) R410A (GWP 2088)		13.7 / 28.6	13.7 / 28.6	13.7 / 28.6	13.7 / 28.6	13.7 / 28.6	13.7 / 28.6	13.5 / 28.2

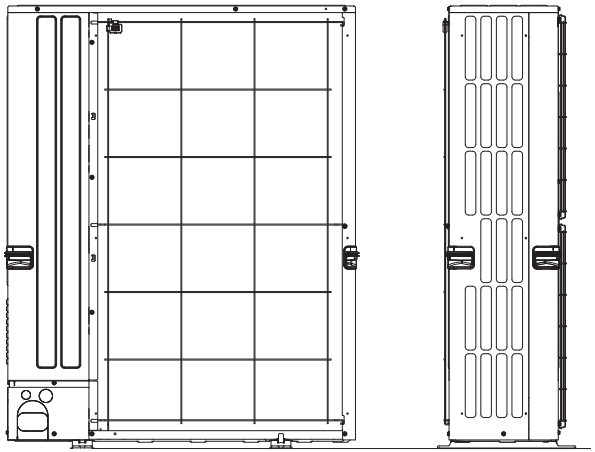
[3] Three Phase **Notes:** *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard. *1 12.7mm (1/2") if furthest length ≥ 60m.

PIPING RESTRICTIONS	PUMY-P112-140VKM/YKM4	PUMY-P200YKM2
TOTAL PIPING LENGTH	300m max	150m max
FURTHEST PIPING LENGTH	150m max	80m max
FURTHEST PIPING LENGTH AFTER 1st BRANCH	30m max	30m max
BETWEEN INDOOR AND OUTDOOR UNITS - HEIGHT	50m max (40m max if outdoor installed below)	50m max (40m max if outdoor installed below)
BETWEEN INDOOR AND INDOOR UNITS - HEIGHT	15m max	15m max

Upper View

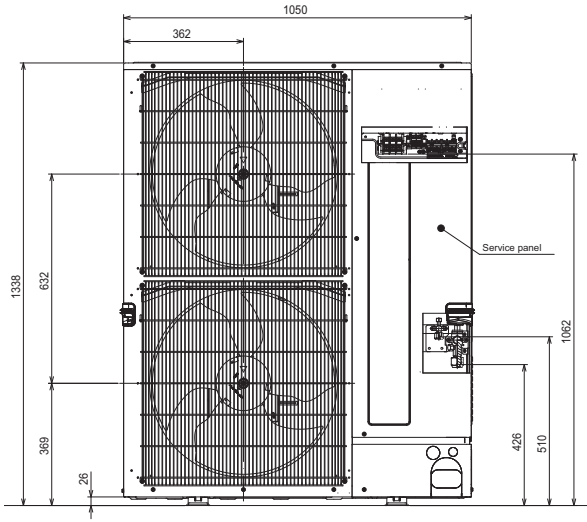


Rear View

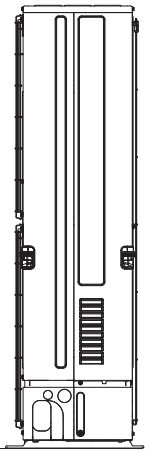


Side View

Front View



Side View



WR2 Series (22.4-56kW)

Simultaneous Heating and Cooling with Double Heat Recovery, Water Cooled Condensing Unit







Ideal where outdoor space is limited, building heat recovery and efficiency is demanded and a water loop is available, City Multi WR2 Water Cooled models provide the ultimate solution for the majority of applications including hotels, offices, leisure, retail and high end residential.

First developed 25 years ago, the City Multi Water Cooled system utilises water instead of air as an energy transfer medium, but benefits from all the same technology and flexibility of an air sourced VRF.

Key Features

- High efficiency, modular systems, with ability to recover energy on the refrigerant circuit and between units on the water circuit, in either a closed or open loop building, or ground source application
- Benefits from a wide indoor unit range and advanced control options
- Very low impact footprint and service space requirements, ideal for internal location

R410A

CONDENSING UNITS		PQRY-P200YLM-A1	PQRY-P250YLM-A1	PQRY-P300YLM-A1	PQRY-P350YLM-A1	PQRY-P400YLM-A1	PQRY-P400YSLM-A1	PQRY-P450YLM-A1	PQRY-P450YSLM-A1	PQRY-P500YLM-A1	PQRY-P500YSLM-A1
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5	45.0	50.0	50.0	56.0	56.0	63.0	63.0
	Cooling (nominal)	22.4	28.0	33.5	40.0	45.0	45.0	50.0	50.0	56.0	56.0
POWER INPUT (kW)	Heating (nominal)	3.97	5.08	6.25	7.53	8.37	7.94	9.79	6.24	11.43	10.16
	Cooling (nominal)	3.71	4.90	6.04	7.14	8.03	7.70	9.29	5.69	11.17	10.12
OPERATING WATER VOLUME (m^3/h)		3.0 ~ 7.2	3.0 ~ 7.2	3.0 ~ 7.2	4.5 ~ 11.6	4.5 ~ 11.6	3.0+3.0 ~ 7.2+7.2	4.5 ~ 11.6	3.0+3.0 ~ 7.2+7.2	4.5 ~ 11.6	3.0+3.0 ~ 7.2+7.2
GUARANTEED OPERATING RANGE (ºC)	Heating / Cooling	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45
COP / EER (nominal)		6.29 / 6.03	6.20 / 5.71	6.25 / 5.54	5.97 / 5.60	5.97 / 5.60	6.29 / 5.84	5.72 / 5.38	6.24 / 5.69	5.51 / 5.01	6.20 / 5.53
MAX NO. OF CONNECTABLE INDOOR UNITS		20	25	30	35	40	40	45	45	50	50
MAX CONNECTABLE CAPACITY		50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%
PIPE SIZE mm (in)	Gas	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")
	Liquid	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")
SOUND PRESSURE LEVEL (dBA)		46	48	54	52	52	49	54	50	54	51
SOUND POWER LEVEL (dBA)		60	62	68	66	66	63	70	64	70.5	65
WEIGHT (kg)		172	172	172	216	216	172 + 172	216	172 + 172	216	172 + 172
DIMENSIONS (mm)	Width	880	880	880	880	880	880 + 880	880	880 + 880	880	880 + 880
	Depth	550	550	550	550	550	550	550	550	550	550
	Height	1100	1100	1100	1450	1450	1100	1450	1100	1450	1100
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)		8	8	8	8	8	8 / 8	8	8 / 8	8	8 / 8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	6.1 / 5.7 [16.1]	7.8 / 7.5 [16.1]	9.6 / 9.3 [18.6]	11.6 / 11.0 [23.1]	12.9 / 12.4 [27.6]	12.2/11.9[16.1+16.1]	15.1 / 14.3 [32.9]	13.8/13.5[16.1+16.1]	17.6 / 17.2 [39.2]	15.7/15.6[16.1+16.1]
FUSE RATING (BS88) - HRC (A)[1]		1 x 20	1 x 20	1 x 20	1 x 25	1 x 32	1 x 20 / 1 x 20	1 x 40	1 x 20 / 1 x 20	1 x 40	1 x 20 / 1 x 20
MAINS CABLE No. Cores*1		4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		5.0 / 10.4	5.0 / 10.4	5.0 / 10.4	6.0 / 12.5	6.0 / 12.5	10.0 / 20.9	6.0 / 12.5	10.0 / 20.9	6.0 / 12.5	10.0 / 20.9
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		27.0 / 56.4	32.0 / 66.8	33.0 / 68.9	52.0 / 108.6	52.0 / 108.6	52.0 / 108.6	53.0 / 110.7	53.0 / 110.7	55.0 / 114.8	55.0 / 114.8

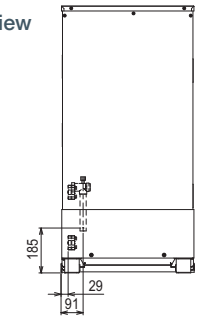
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard. *1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules. These products are made to order, please consult your local sales office for delivery schedule. PQRY-P200/250/300 are stock items.

PIPING RESTRICTIONS	PQRY-P200-500Y(S)LM-A1
TOTAL PIPING LENGTH	550m max*3 (300m) for sizes 200-300 / 750m max*3 (500m) for sizes 350-500
FURTHEST PIPING LENGTH	165m max
BETWEEN CONDENSING UNIT AND BC CONTROLLER (MASTER) - LENGTH	110m max*4
BETWEEN INDOOR AND BC CONTROLLER (MASTER/SLAVE) - LENGTH	60m max*5 (40m)
BETWEEN INDOOR AND CONDENSING UNIT - HEIGHT	50m max (40m*1)
BETWEEN INDOOR AND INDOOR - HEIGHT	30m max (20m*2)
BETWEEN INDOOR AND BC CONTROLLER (MASTER/SLAVE) - HEIGHT	15m max (10m*2)
BETWEEN BC CONTROLLER (MASTER) AND BC CONTROLLER (SLAVE) - HEIGHT	15m max (10m*6)

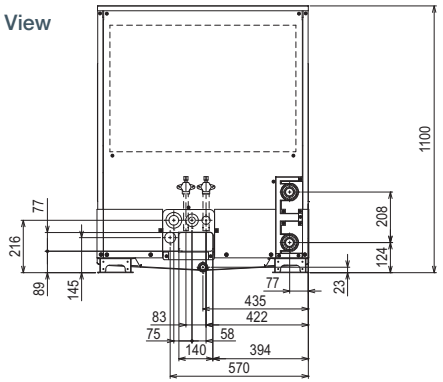
Notes: *1 When condensing unit is below indoor. *2 In case of P200, P250 indoor unit. *3 Distance between condensing unit and BC Controller is 10m or less. *4 Total piping length is 300m or less (500m for sizes 350-500). *5 Height difference between the Master BC Controller and furthest indoor unit is 0m and no size P200 or P250 indoor unit is used. *6 When using multiple sub BC Controllers, the height between them should be considered.

Product Dimensions PQRY-P200/250/300YLM-A1

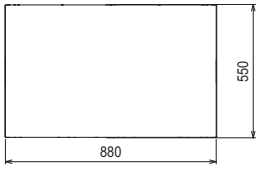
Side View



Front View

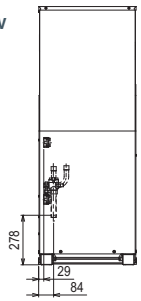


Upper View

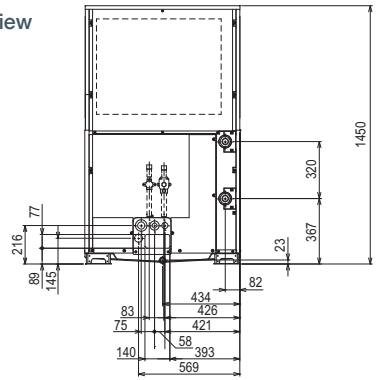


Product Dimensions PQRY-P350/400/450/500YLM-A1

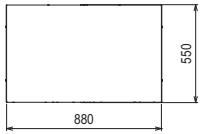
Side View



Front View

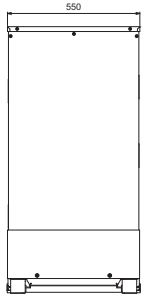


Upper View

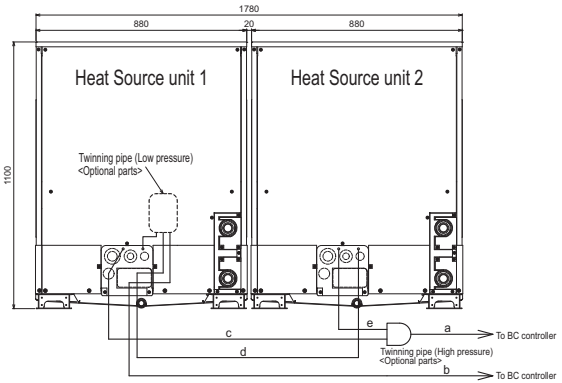


Product Dimensions PQRY-P400/450/500YSLM-A1

Side View



Front View



WR2 Series (63-101kW)

Simultaneous Heating and Cooling with Double Heat Recovery, Water Cooled Condensing Unit







Ideal where outdoor space is limited, building heat recovery and efficiency is demanded and a water loop is available, City Multi WR2 Water Cooled models provide the ultimate solution for the majority of applications including hotels, offices, leisure, retail and high end residential.

First developed 25 years ago, the City Multi Water Cooled system utilises water instead of air as an energy transfer medium, but benefits from all the same technology and flexibility of an air sourced VRF.

Key Features

- High efficiency, modular systems, with ability to recover energy on the refrigerant circuit and between units on the water circuit, in either a closed or open loop building, or ground source application
- Benefits from a wide indoor unit range and advanced control options
- Very low impact footprint and service space requirements, ideal for internal location

R410A

CONDENSING UNITS		PQRY-P550YLM-A1	PQRY-P550YSLM-A1	PQRY-P600YLM-A1	PQRY-P600YSLM-A1	PQRY-P700YSLM-A1	PQRY-P750YSLM-A1	PQRY-P800YSLM-A1	PQRY-P850YSLM-A1	PQRY-P900YSLM-A1
CAPACITY (kW)	Heating (nominal)	69.0	69.0	76.5	76.5	88.0	95.0	100.0	108.0	113.0
	Cooling (nominal)	63.0	63.0	69.0	69.0	80.0	85.0	90.0	96.0	101.0
POWER INPUT (kW)	Heating (nominal)	12.27	11.31	14.51	12.75	14.73	15.90	16.75	18.49	19.74
	Cooling (nominal)	12.54	11.55	14.49	12.84	14.73	15.64	16.57	18.03	19.38
OPERATING WATER VOLUME (m^3/h)		6.0 ~ 14.4	3.0 + 3.0 ~ 7.2 + 7.2	6.0 ~ 14.4	3.0 + 3.0 ~ 7.2 + 7.2	4.5 + 4.5 ~ 11.6 + 11.6	4.5 + 4.5 ~ 11.6 + 11.6	4.5 + 4.5 ~ 11.6 + 11.6	4.5 + 4.5 ~ 11.6 + 11.6	4.5 + 4.5 ~ 11.6 + 11.6
GUARANTEED OPERATING RANGE (ºC)	Heating / Cooling	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45
COP / EER (nominal)		5.62 / 5.02	6.10 / 5.45	5.27 / 4.76	6.00 / 5.37	5.97 / 5.43	5.97 / 5.43	5.97 / 5.43	5.84 / 5.32	5.72 / 5.21
MAX NO. OF CONNECTABLE INDOOR UNITS		50	50	50	50	50	50	50	50	50
MAX CONNECTABLE CAPACITY		50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%
PIPE SIZE mm (in)	Gas	28.58 (1 1/8")	28.58 (1 1/8")	34.93 (1 3/8")	34.93 (1 3/8")	34.93 (1 3/8")	34.93 (1 3/8")	34.93 (1 3/8")	41.28 (1 5/8")	41.28 (1 5/8")
	Liquid	22.2 (7/8")**	22.2 (7/8")**	22.2 (7/8")**	22.2 (7/8")**	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")
SOUND PRESSURE LEVEL (dBA)		56.5	55	56.5	57	55	55	55	56	57
SOUND POWER LEVEL (dBA)		71.5	69	73	71	69	69	69	71.5	73
WEIGHT (kg)		246	172 + 172	246	172 + 172	216 + 216	216 + 216	216 + 216	216 + 216	216 + 216
DIMENSIONS (mm)	Width	880	880 + 880	880	880 + 880	880 + 880	880 + 880	880 + 880	880 + 880	880 + 880
	Depth	550	550	550	550	550	550	550	550	550
	Height	1450	1100	1450	1100	1450	1450	1450	1450	1450
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)		8	8 / 8	8	8 / 8	8 / 8	8 / 8	8 / 8	8 / 8	8 / 8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	18.9 / 19.3 [40.5]	17.4 / 17.8 [18.6+16.1]	22.4 / 22.3 [40.5]	19.7 / 19.8 [18.6+18.6]	22.7 / 22.7 [23.1+23.1]	24.5 / 24.1 [27.6+23.1]	25.8 / 25.6 [27.6+27.6]	28.5 / 27.8 [32.9+27.6]	30.5 / 29.9 [32.9+32.9]
FUSE RATING (BS88) - HRC (A)*1		1 x 50	1 x 20 / 1 x 20	1 x 50	1 x 20 / 1 x 20	1 x 25 / 1 x 25	1 x 32 / 1 x 25	1 x 32 / 1 x 32	1 x 40 / 1 x 32	1 x 40 / 1 x 40
MAINS CABLE No. Cores*1		4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		11.7 / 24.4	10.0 / 20.9	11.7 / 24.4	10.0 / 20.9	12.0 / 25.1	12.0 / 25.1	12.0 / 25.1	12.0 / 25.1	12.0 / 25.1
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		57.0 / 119.0	61.5 / 128.4	58.0 / 121.1	64.5 / 134.7	72.0 / 150.3	74.0 / 154.5	74.0 / 154.5	76.0 / 158.7	76.0 / 158.7

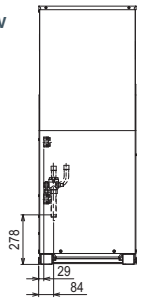
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard. *1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules. These products are made to order, please consult your local sales office for delivery schedule.

PIPING RESTRICTIONS	PQRY-P550-900Y(S)LM-A1
TOTAL PIPING LENGTH	750m max*2 (500m)
FURTHEST PIPING LENGTH	165m max
BETWEEN CONDENSING UNIT AND BC CONTROLLER (MASTER) - LENGTH	110m max*3
BETWEEN INDOOR AND BC CONTROLLER (MASTER/SLAVE) - LENGTH	60m max*4 (40m)
BETWEEN INDOOR AND CONDENSING UNIT - HEIGHT	50m max (40m*1)
BETWEEN INDOOR AND INDOOR - HEIGHT	30m max
BETWEEN INDOOR AND BC CONTROLLER (MASTER/SLAVE) - HEIGHT	15m max
BETWEEN BC CONTROLLER (MASTER) AND BC CONTROLLER (SLAVE) - HEIGHT	15m max (10m*5)

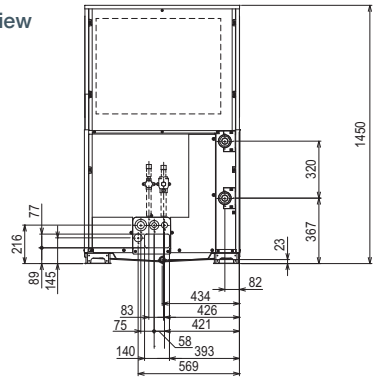
Notes: *1 When condensing unit is below indoor. *2 In case of P200, P250 indoor unit. *3 Distance between condensing unit and BC Controller is 10m or less. *4 Total piping length is 300m or less (500m for sizes 350-500). *5 Height difference between the Master BC Controller and furthest indoor unit is 0m and no size P200 or P250 indoor unit is used. *6 When using multiple sub BC Controllers, the height between them should be considered.

Product Dimensions PQRY-P550/600YLM-A1

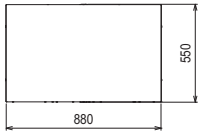
Side View



Front View

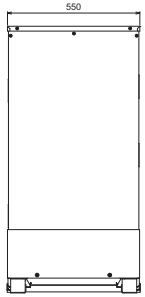


Upper View

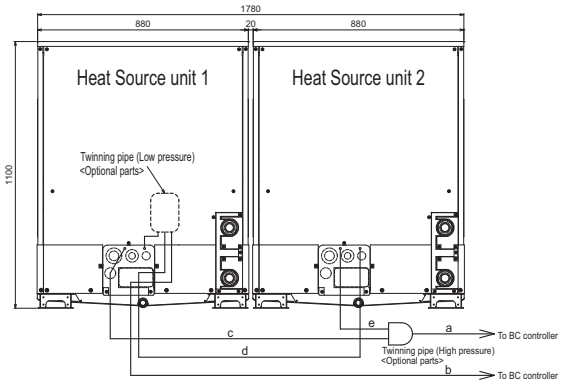


Product Dimensions PQRY-P550/600YSLM-A1

Side View

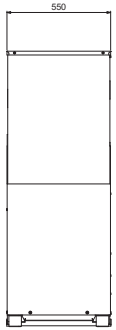


Front View

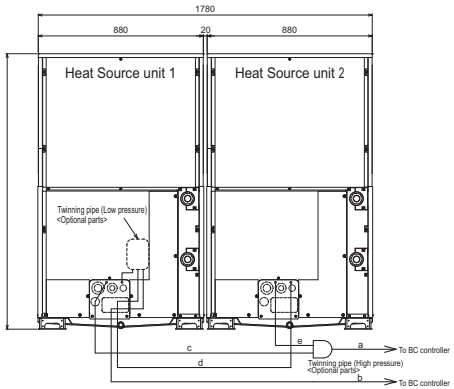


Product Dimensions PQRY-P700/750/800/850/900YSLM-A1

Side View



Front View



WY Series (22.4-56kW)

Heat Pump, Water Cooled Condensing Unit







Ideal where outdoor space is limited, building heat recovery and efficiency is demanded and a water loop is available, City Multi WY Water Cooled models provide the ultimate solution for open plan spaces.

First developed 25 years ago, the City Multi Water Cooled system utilises water instead of air as an energy transfer medium, but benefits from all the same technology and flexibility of an air sourced VRF.

Key Features

- High efficiency, modular systems, with ability to recover energy between units on the water circuit, in either a closed or open loop building, or ground source application
- Benefits from a wide indoor unit range and advanced control options
- Very low impact footprint and service space requirements, ideal for internal location

R410A

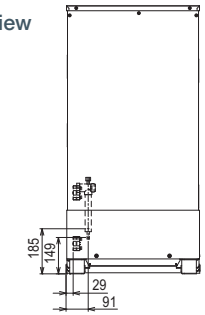
CONDENSING UNITS		PQHY-P200YLM-A1	PQHY-P250YLM-A1	PQHY-P300YLM-A1	PQHY-P350YLM-A1	PQHY-P400YLM-A1	PQHY-P400YSLM-A1	PQHY-P450YLM-A1	PQHY-P450YSLM-A1	PQHY-P500YLM-A1	PQHY-P500YSLM-A1
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5	45.0	50.0	50.0	56.0	56.0	63.0	63.0
	Cooling (nominal)	22.4	28.0	33.5	40.0	45.0	45.0	50.0	50.0	56.0	56.0
POWER INPUT (kW)	Heating (nominal)	3.97	5.08	6.25	7.53	8.37	7.94	9.79	6.24	11.43	10.16
	Cooling (nominal)	3.71	4.90	6.04	7.14	8.03	7.70	9.29	5.69	11.17	10.12
OPERATING WATER VOLUME (m^3/h)		3.0 ~ 7.2	3.0 ~ 7.2	3.0 ~ 7.2	4.5 ~ 11.6	4.5 ~ 11.6	3.0 + 3.0 ~ 7.2 + 7.2	4.5 ~ 11.6	3.0 + 3.0 ~ 7.2 + 7.2	4.5 ~ 11.6	3.0 + 3.0 ~ 7.2 + 7.2
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45
COP / EER (nominal)		6.29 / 6.03	6.20 / 5.71	6.25 / 5.54	5.97 / 5.60	5.97 / 5.60	6.29 / 5.84	5.72 / 5.38	6.24 / 5.69	5.51 / 5.01	6.20 / 5.53
MAX NO. OF CONNECTABLE INDOOR UNITS		17	21	26	30	34	36	39	39	43	43
MAX CONNECTABLE CAPACITY		50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%
PIPE SIZE mm (in)	Gas	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")
	Liquid	9.52 (3/8")	9.52 (3/8")**	9.52 (3/8")**	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
SOUND PRESSURE LEVEL (dBA)		46	48	54	52	52	49	54	50	54	51
SOUND POWER LEVEL (dBA)		60	62	68	66	66	63	70	64	70.5	65
WEIGHT (kg)		174	174	174	217	217	174 + 174	217	174 + 174	217	174 + 174
DIMENSIONS (mm)	Width	880	880	880	880	880	880 + 880	880	880 + 880	880	880 + 880
	Depth	550	550	550	550	550	550	550	550	550	550
	Height	1100	1100	1100	1450	1450	1100	1450	1100	1450	1100
ELECTRICAL SUPPLY*2		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*2		Three	Three	Three	Three	Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)		8	8	8	8	8	8 / 8	8	8 / 8	8	8 / 8
NOMINAL SYSTEM RUNNING CURRENT (A)*2	Heating / Cooling [MAX]	6.1 / 5.7 [16.1]	7.8 / 7.5 [16.1]	9.6 / 9.3 [18.6]	11.6 / 11.0 [23.1]	12.9 / 12.4 [27.6]	12.2 / 11.9 [16.1 + 16.1]	15.1 / 14.3 [32.9]	13.8 / 13.5 [16.1 + 16.1]	17.6 / 17.2 [39.2]	15.7 / 15.6 [16.1 + 16.1]
FUSE RATING (BS88) - HRC (A)*2		1 x 20	1 x 20	1 x 20	1 x 25	1 x 32	1 x 20 / 1 x 20	1 x 40	1 x 20 / 1 x 20	1 x 40	1 x 20 / 1 x 20
MAINS CABLE No. Cores*2		4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		5.0 / 10.4	5.0 / 10.4	5.0 / 10.4	6.0 / 12.5	6.0 / 12.5	10.0 / 20.9	6.0 / 12.5	10.0 / 20.9	6.0 / 12.5	10.0 / 20.9
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		21.0 / 43.8	28.0 / 58.5	29.5 / 61.6	41.5 / 86.7	50.0 / 104.4	50.0 / 104.4	51.5 / 107.5	51.5 / 107.5	53.5 / 111.7	53.5 / 111.7

Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard. *1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules. These products are made to order, please consult your local sales office for delivery schedule.

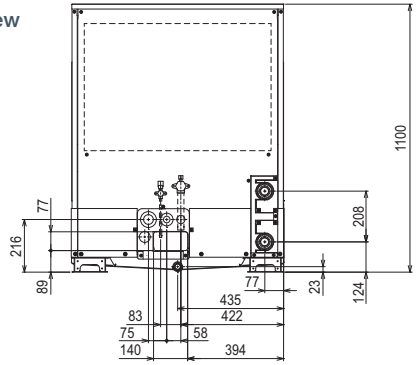
PIPING RESTRICTIONS	PQHY-P200-500Y(S)LM-A1
TOTAL PIPING LENGTH	300m max for sizes 200-300 / 500m for sizes 350-900
FURTHEST PIPING LENGTH	165m max
FURTHEST PIPING LENGTH AFTER 1ST BRANCH	40m max
BETWEEN INDOOR AND OUTDOOR UNITS - HEIGHT	50m max (40m max if outdoor installed below)
BETWEEN INDOOR AND INDOOR UNITS - HEIGHT	15m max

Product Dimensions PQHY-P200/250/300YLM-A1

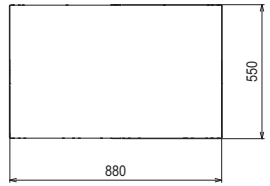
Side View



Front View

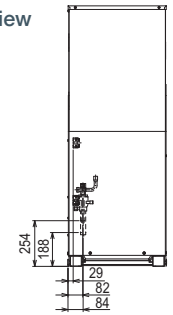


Upper View

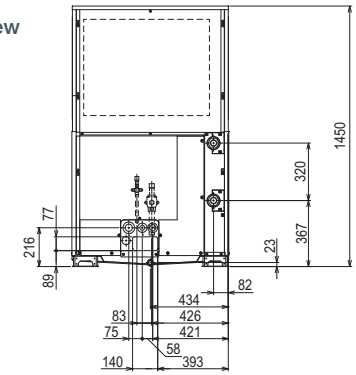


Product Dimensions PQHY-P350/400/450/500YLM-A1

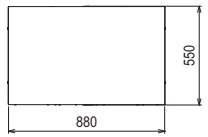
Side View



Front View

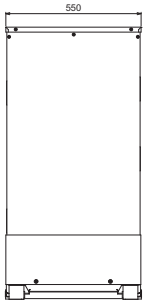


Upper View

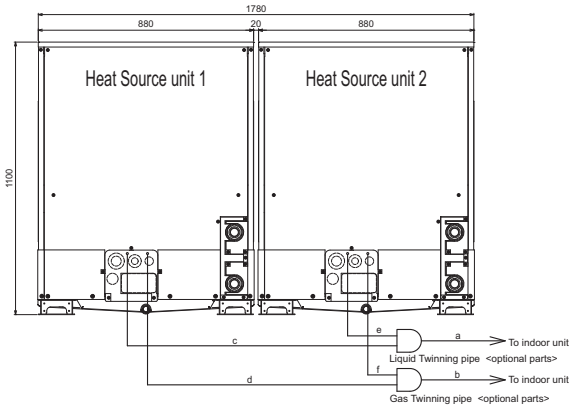


Product Dimensions PQHY-P400/450/500YSLM-A1

Side View



Front View



WY Series (63-101kW)

Heat Pump, Water Cooled Condensing Unit







Ideal where outdoor space is limited, building heat recovery and efficiency is demanded and a water loop is available, City Multi WY Water Cooled models provide the ultimate solution for open plan spaces.

First developed 25 years ago, the City Multi Water Cooled system utilises water instead of air as an energy transfer medium, but benefits from all the same technology and flexibility of an air sourced VRF.

Key Features

- High efficiency, modular systems, with ability to recover energy between units on the water circuit, in either a closed or open loop building, or ground source application
- Benefits from a wide indoor unit range and advanced control options
- Very low impact footprint and service space requirements, ideal for internal location

R410A

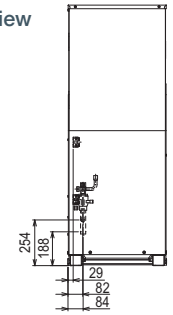
CONDENSING UNITS		PQHY-P550YLM-A1	PQHY-P550YSLM-A1	PQHY-P600YLM-A1	PQHY-P600YSLM-A1	PQHY-P700YSLM-A1	PQHY-P750YSLM-A1	PQHY-P800YSLM-A1	PQHY-P850YSLM-A1	PQHY-P900YSLM-A1
CAPACITY (kW)	Heating (nominal)	69.0	69.0	76.5	76.5	88.0	95.0	100.0	108.0	113.0
	Cooling (nominal)	63.0	63.0	69.0	69.0	80.0	85.0	90.0	96.0	101.0
POWER INPUT (kW)	Heating (nominal)	12.27	11.31	14.51	12.75	14.73	15.90	16.75	18.49	19.74
	Cooling (nominal)	12.54	11.55	14.49	12.84	14.73	15.64	16.57	18.03	19.38
OPERATING WATER VOLUME (m³/h)		6.0 ~ 14.4	3.0 + 3.0 ~ 7.2 + 7.2	6.0 ~ 14.4	3.0 + 3.0 ~ 7.2 + 7.2	4.5+4.5~11.6+11.6	4.5+4.5~11.6+11.6	4.5+4.5~11.6+11.6	4.5+4.5~11.6+11.6	4.5+4.5~11.6+11.6
GUARANTEED OPERATING RANGE (ºC)	Heating / Cooling	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45
COP / EER (nominal)		5.62 / 5.02	6.10 / 5.45	5.27 / 4.76	6.00 / 5.37	5.97 / 5.43	5.97 / 5.43	5.97 / 5.43	5.84 / 5.32	5.72 / 5.21
MAX NO. OF CONNECTABLE INDOOR UNITS		47	47	50	50	50	50	50	50	50
MAX CONNECTABLE CAPACITY		50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%	50 ~ 130%
PIPE SIZE mm (in)	Gas	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	34.93 (1 3/8")	34.93 (1 3/8")	34.93 (1 3/8")	41.28 (1 5/8")	41.28 (1 5/8")
	Liquid	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
SOUND PRESSURE LEVEL (dBA)		56.5	55	56.5	57	55	55	55	56	57
SOUND POWER LEVEL (dBA)		71.5	69	73	71	69	69	69	71.5	73
WEIGHT (kg)		246	174 + 174	246	174 + 174	217 + 217	217 + 217	217 + 217	217 + 217	217 + 217
DIMENSIONS (mm)	Width	880	880 + 880	880	880 + 880	880 + 880	880 + 880	880 + 880	880 + 880	880 + 880
	Depth	550	550	550	550	550	550	550	550	550
	Height	1450	1100	1450	1100	1450	1450	1450	1450	1450
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)		8	8 / 8	8	8 / 8	8 / 8	8 / 8	8 / 8	8 / 8	8 / 8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	18.9 / 19.3 [40.5]	17.4 / 17.8 [18.6 + 16.1]	22.4 / 22.3 [40.5]	19.7 / 19.8 [18.6 + 18.6]	22.7 / 22.7 [23.1 + 23.1]	24.5 / 24.1 [27.6 + 23.1]	25.8 / 25.6 [27.6 + 27.6]	28.5 / 27.8 [32.9 + 27.6]	30.5 / 29.9 [32.9 + 32.9]
FUSE RATING (BS88) - HRC (A)*1		1 x 50	1 x 20 / 1 x 20	1 x 50	1 x 20 / 1 x 20	1 x 25 / 1 x 25	1 x 32 / 1 x 25	1 x 32 / 1 x 32	1 x 40 / 1 x 32	1 x 40 / 1 x 40
MAINS CABLE No. Cores*1		4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		11.7 / 24.4	10.0 / 20.9	11.7 / 24.4	10.0 / 20.9	12.0 / 25.1	12.0 / 25.1	12.0 / 25.1	12.0 / 25.1	12.0 / 25.1
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		55.5 / 115.9	54.5 / 113.8	57.0 / 119.0	55.5 / 115.9	65.5 / 136.8	67.5 / 140.9	67.5 / 140.9	70.0 / 146.2	70.0 / 146.2

Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard. *1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules. These products are made to order, please consult your local sales office for delivery schedule.

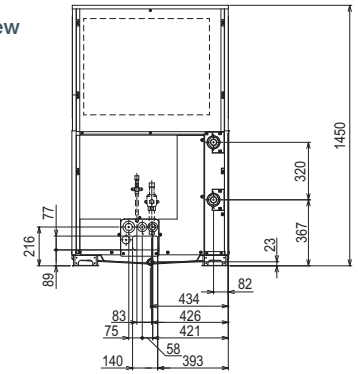
PIPING RESTRICTIONS	PQHY-P550-900Y(S)LM-A1
TOTAL PIPING LENGTH	500m max
FURTHEST PIPING LENGTH	165m max
FURTHEST PIPING LENGTH AFTER 1ST BRANCH	40m max
BETWEEN INDOOR AND OUTDOOR UNITS - HEIGHT	50m max (40m max if outdoor installed below)
BETWEEN INDOOR AND INDOOR UNITS - HEIGHT	15m max

Product Dimensions PQHY-P550/600YLM-A1

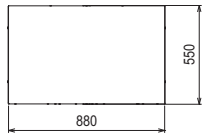
Side View



Front View

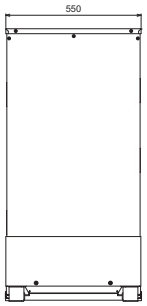


Upper View

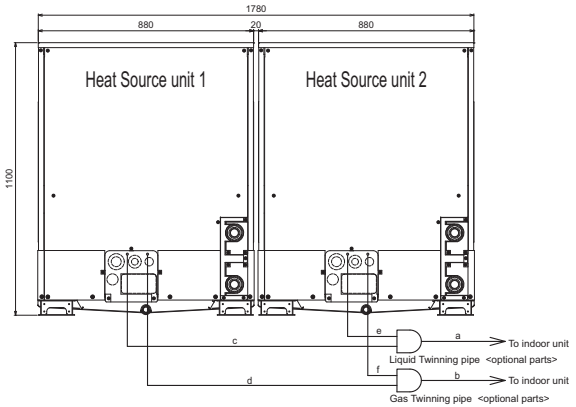


Product Dimensions PQHY-P550/600YSLM-A1

Side View

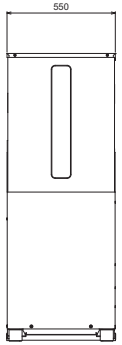


Front View

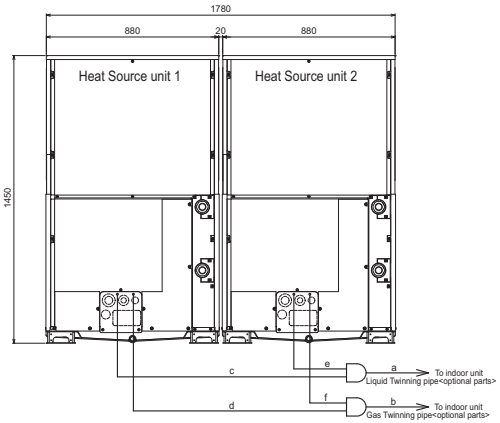


Product Dimensions PQHY-P700/750/800/850/900YSLM-A1

Side View



Front View



R2 Series Replace Multi (22.4-33.5kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit



REPLACE MULTI

Enables the replacement of VRF systems, whilst utilising existing R22 / R407C pipework

Designed for the maturing refurbishment sector, the tried and tested system enables the re-use of existing R22/R407C pipework, whilst allowing upgrading to an efficient, effective system. Replace Multi cleans existing pipework during commissioning, removing any deposits and R22 mineral oil that would have ordinarily required new pipework. This results in significant savings on cost and time, whilst also minimising any potential disruption.

Key Features

- Enables replacement of VRF systems including non-Mitsubishi Electric models
- Utilises existing R22/R407C pipework, control and power wiring, to reduce waste, installation time, CO_2 emissions and increase energy efficiency

R410A

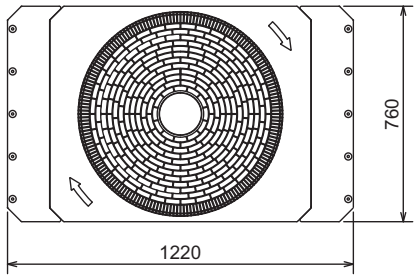
OUTDOOR UNITS		PURY-RP200YJM-B	PURY-RP250YJM-B	PURY-RP300YJM-B
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5
	Cooling (nominal)	22.4	28.0	33.5
	High Performance Heating (UK)	24.0	30.2	36.0
	COP Priority Heating (UK)	21.8	27.4	32.6
	Cooling (UK)	21.1	26.3	31.5
POWER INPUT (kW)	Heating (nominal)	5.50	7.22	8.70
	Cooling (nominal)	4.95	6.82	8.35
	High Performance Heating (UK)	7.26	9.53	11.48
	COP Priority Heating (UK)	5.34	7.00	8.44
	Cooling (UK)	3.61	4.98	6.10
COP / EER (nominal)		4.54 / 4.52	4.36 / 4.10	4.31 / 4.01
MAX No. OF CONNECTABLE INDOOR UNITS		20	25	30
MAX CONNECTABLE CAPACITY		50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High	225	225	225
PIPE SIZE mm (in)	Gas	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
SOUND PRESSURE LEVEL (dBA)		56	57	59
SOUND POWER LEVEL (dBA)		76	77	79
WEIGHT (kg)		275	290	290
DIMENSIONS (mm)	Width	1220	1220	1220
	Depth	760	760	760
(1650mm without legs)	Height	1710	1710	1710
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three	Three
STARTING CURRENT (A)		8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*	Heating / Cooling [MAX]	8.9 / 8.0 [11.8]	11.9 / 11.2 [16.4]	14.6 / 13.6 [20.0]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~46	-20~15.5 / -5~46	-20~15.5 / -5~46
FUSE RATING (MCB sizes BS EN 60947-2) - (A)		1 x 20	1 x 20	1 x 25
MAINS CABLE No. Cores		4 + earth	4 + earth	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	11.8 / 24.6	11.8 / 24.6	11.8 / 24.6
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	27.0 / 56.4	28.5 / 59.5	29.5 / 61.6

Note: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
These products are made to order, please consult your local sales office for delivery schedule.

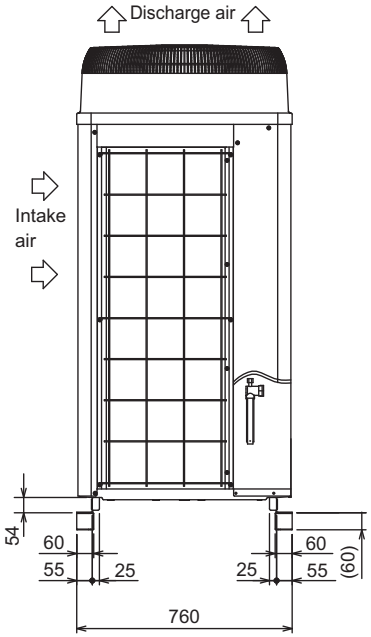
R2 SERIES REPLACE MULTI PIPING RESTRICTIONS	PURY-RP200-300YJM-B		
TOTAL PIPING LENGTH	220m max	HEIGHT BETWEEN OU AND IU (OU ABOVE IU)	50m max
FURTHEST PIPING LENGTH	100m max	HEIGHT BETWEEN OU AND IU (OU BELOW IU)	40m max
LENGTH BETWEEN OU AND BC	70m max	HEIGHT BETWEEN IU AND BC	15m max
LENGTH BETWEEN FURTHEST IU AND BC	30m max	HEIGHT BETWEEN IU AND IU	15m max

Note: For detailed piping design see databook.

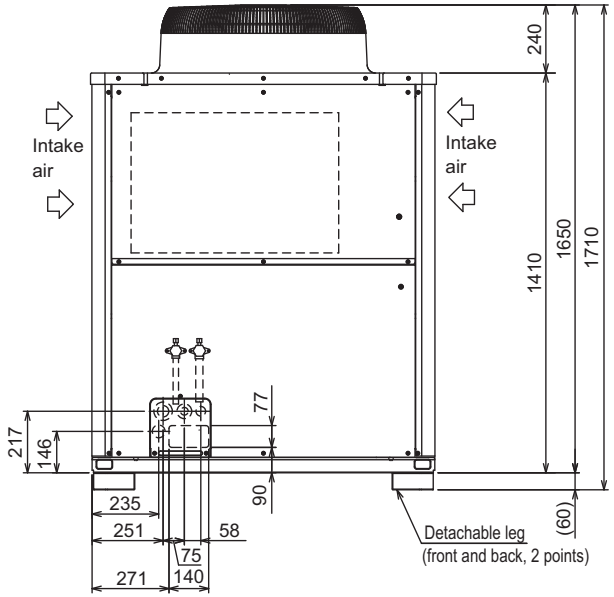
Upper View



Side View



Front View



Y Series Replace Multi (22.4-33.5kW)

Heat Pump Outdoor Unit



REPLACE MULTI

Enables the replacement of VRF systems, whilst utilising existing R22 / R407C pipework

Designed for the maturing refurbishment sector, the tried and tested system enables the re-use of existing R22/R407C pipework, whilst allowing upgrading to an efficient, effective system. Replace Multi cleans existing pipework during commissioning, removing any deposits and R22 mineral oil that would have ordinarily required new pipework. This results in significant savings on cost and time, whilst also minimising any potential disruption.

Key Features

- Enables replacement of VRF systems including non-Mitsubishi Electric models
- Utilises existing R22/R407C pipework, control and power wiring, to reduce waste, installation time, CO_2 emissions and increase energy efficiency

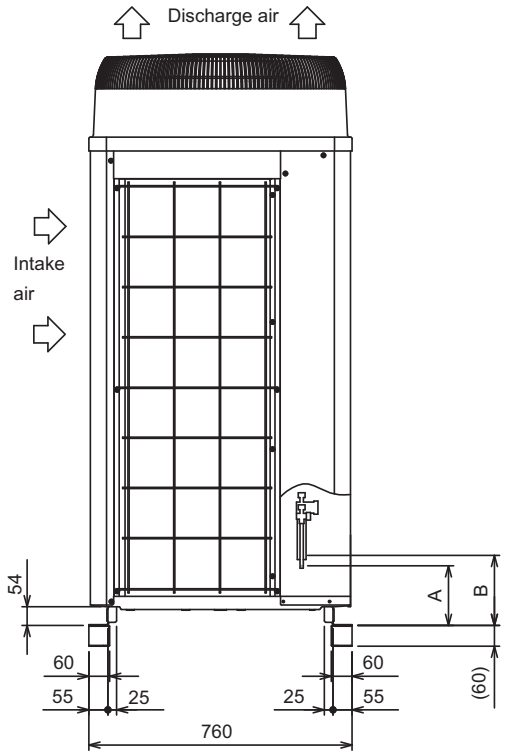
R410A

OUTDOOR UNITS		PUHY-RP200YJM-B	PUHY-RP250YJM-B	PUHY-RP300YJM-B
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5
	Cooling (nominal)	22.4	28.0	33.5
	High Performance Heating (UK)	25.0	31.5	36.0
	COP Priority Heating (UK)	22.8	28.7	32.6
	Cooling (UK)	21.2	26.6	31.5
POWER INPUT (kW)	Heating (nominal)	5.69	7.22	9.42
	Cooling (nominal)	5.68	7.62	8.98
	High Performance Heating (UK)	7.34	9.31	12.43
	COP Priority Heating (UK)	5.63	7.15	9.14
	Cooling (UK)	3.30	4.42	5.84
COP / EER (nominal)		4.39 / 3.94	4.36 / 3.67	3.98 / 3.73
MAX No. OF CONNECTABLE INDOOR UNITS		17	21	26
MAX CONNECTABLE CAPACITY		50-130% OU Capacity	50-130% OU Capacity	50-130% OU Capacity
AIRFLOW (m^3/min)	High	185	185	185
PIPE SIZE mm (in)	Gas	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
SOUND PRESSURE LEVEL (dBA)		56	57	59
SOUND POWER LEVEL (dBA)		76	77	79
WEIGHT (kg)		230	255	255
DIMENSIONS (mm)	Width	920	920	920
	Depth	760	760	760
(1650mm without legs)	Height	1710	1710	1710
ELECTRICAL SUPPLY		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Three	Three	Three
STARTING CURRENT (A)		8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*	Heating / Cooling [MAX]	8.7/8.7 [13.5]	12.1/12.7 [18.3]	15.2/14.4 [21.5]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~46	-20~15.5 / -5~46	-20~15.5 / -5~46
FUSE RATING (MCB sizes BS EN 60947-2) - (A)		1 x 20	1 x 20	1 x 25
MAINS CABLE No. Cores		4 + earth	4 + earth	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	6.5 / 13.6	9.0 / 18.8	9.0 / 18.8
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	21.0 / 43.8	21.0 / 43.8	28.0 / 58.5

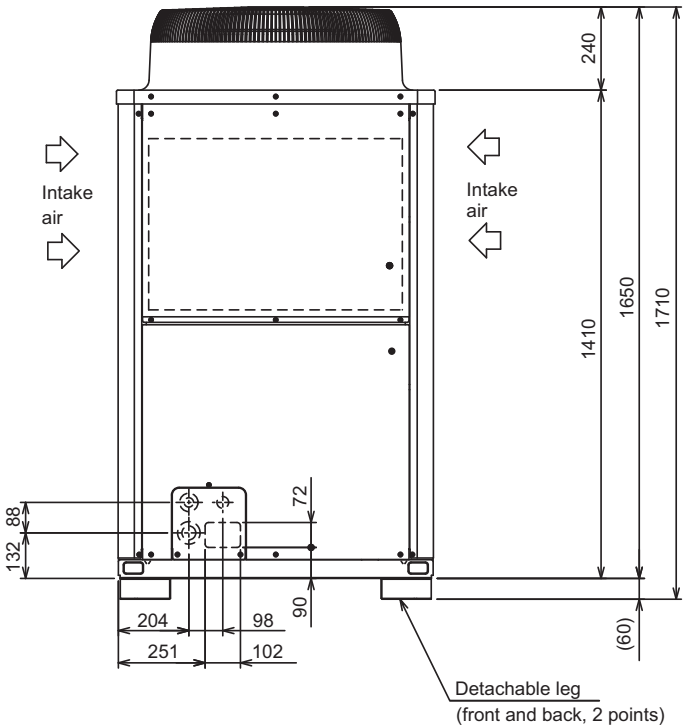
Notes: *SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
Larger combination models are also available, please ask your local sales office for further information. These products are made to order, please consult your local sales office for delivery schedule.

PIPING RESTRICTIONS	PUHY-RP200-300YJM-B
TOTAL PIPING LENGTH	300m max
FURTHEST PIPING LENGTH	120m max
FURTHEST PIPING LENGTH AFTER 1st BRANCH	40m max
BETWEEN INDOOR AND OUTDOOR UNITS - HEIGHT	50m max (40m max if outdoor installed below)
BETWEEN INDOOR AND INDOOR UNITS - HEIGHT	15m max

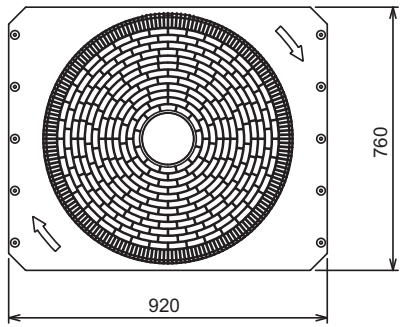
Side View



Front View



Upper View



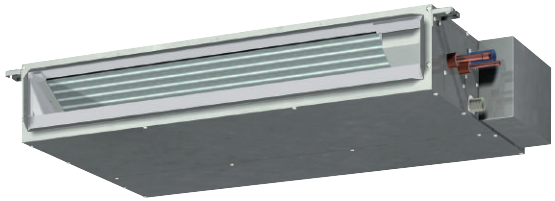
PEFY-P-VMS1-E

Ultra Thin Ceiling Concealed Ducted Indoor Unit

The ultra thin ceiling concealed ducted indoor unit offers increased flexibility and is particularly suitable for locations where low noise operation is desired from a slimline body, such as hotels.

Key Features

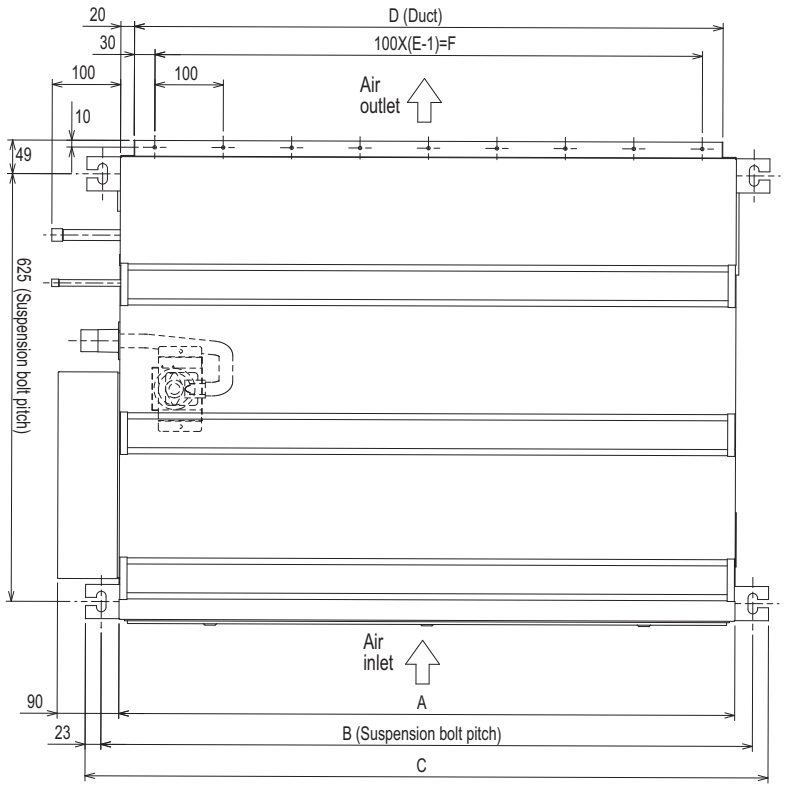
- Ultra thin body - height of only 200mm & width of only 790mm (size P15-32)
- Extremely quiet operation - as low as 22dBA (size P15-20)
- Static pressure of 5-50Pa
- Available in a 1.5kW size, ideal for hotel rooms



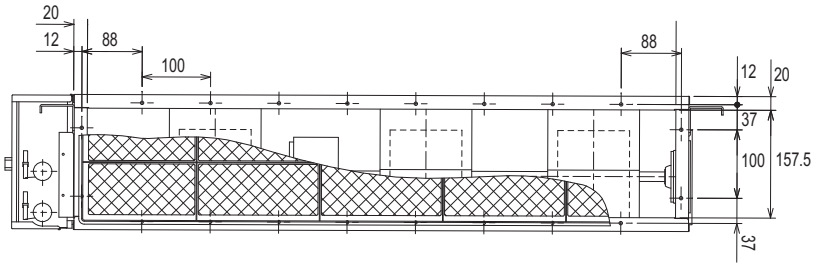
INDOOR UNITS		PEFY-P15VMS1-E	PEFY-P20VMS1-E	PEFY-P25VMS1-E	PEFY-P32VMS1-E	PEFY-P40VMS1-E	PEFY-P50VMS1-E	PEFY-P63VMS1-E
CAPACITY (kW)	Heating (nominal)	1.9	2.5	3.2	4.0	5.0	6.3	8.0
	Cooling (nominal)	1.7	2.2	2.8	3.6	4.5	5.6	7.1
	UK Heating	1.9	2.5	3.2	4.0	5.0	6.3	8.0
	UK Total Cooling - Hi (Sensible)	1.50 (1.40)	2.00 (1.70)	2.50 (2.10)	3.20 (2.50)	4.10 (3.00)	5.00 (3.70)	6.40 (4.70)
	UK Total Cooling - Mi	1.44	1.89	2.32	2.99	3.95	4.78	6.13
	UK Total Cooling - Lo	1.34	1.76	2.07	2.63	3.70	4.51	5.77
POWER INPUT (kW)	Heating (nominal)	0.03	0.03	0.04	0.05	0.05	0.07	0.07
	Cooling (nominal)	0.05	0.05	0.06	0.07	0.07	0.09	0.09
AIRFLOW (l/s)	Lo-Mi-Hi	83-100-117	91-108-133	91-117-150	100-133-167	133-158-183	158-183-217	200-233-275
EXTERNAL STATIC PRESSURE (Pa)		5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50
SOUND PRESSURE LEVEL (dBA)*1	Lo-Mi-Hi	22-24-28	22-25-29	24-26-30	24-27-32	28-30-33	30-32-35	30-33-36
WEIGHT (kg)		19	19	19	20	24	24	28
DIMENSIONS (mm)	Width	790	790	790	790	990	990	1190
	Depth	700	700	700	700	700	700	700
	Height	200	200	200	200	200	200	200
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.31 / 0.42	0.36 / 0.47	0.39 / 0.50	0.39 / 0.50	0.45 / 0.56	0.56 / 0.67	0.61 / 0.72
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3	3

Note: *1 Additional sound data is available for this model. Separated inlet and breakout sound power level and discharge sound power level data is available on request.

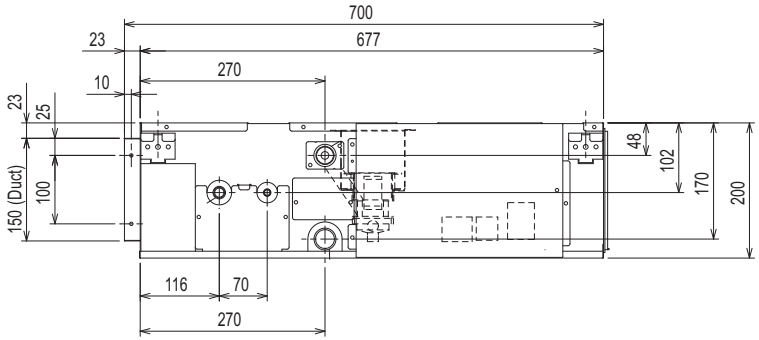
Upper View



Front View



Side View



Model	A	B	C	D	E	F
PEFY-P15-32VMS1-E	700	752	798	660	7	600
PEFY-P40-50VMS1-E	900	952	998	860	9	800
PEFY-P63VMS1-E	1100	1152	1198	1060	11	1000

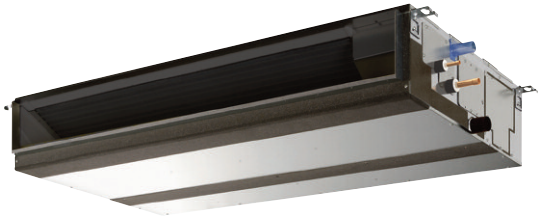
PEFY-M-VMA-A

Ceiling Concealed Ducted Indoor Unit

The PEFY-M-VMA-A ducted indoor unit is concealed within the ceiling space to allow unobtrusive air conditioning. The flexibility of duct layout allows air flow patterns to be arranged to suit any application.

Key Features

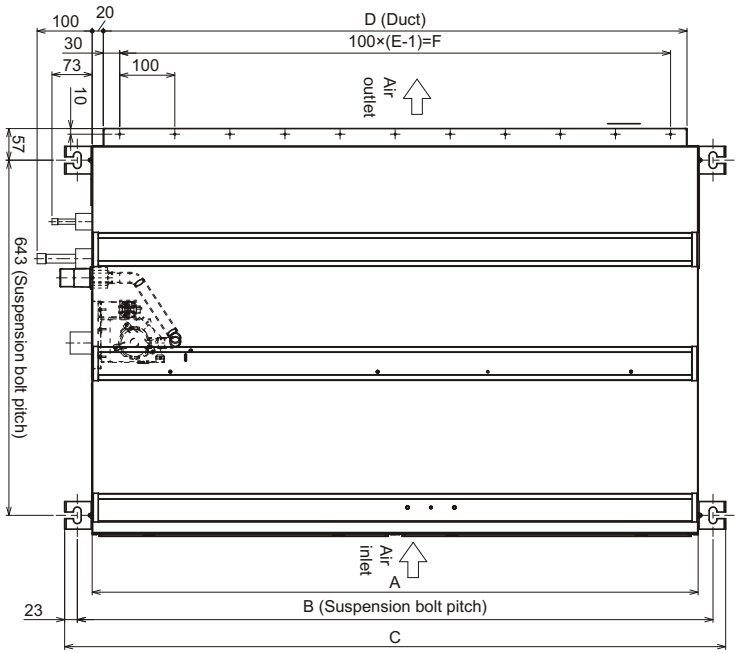
- Low height - only 250mm
- Wide range of external static pressure settings across entire range (35-150Pa)
- Low noise levels thanks to the use of a centrifugal fan
- Drain pump included as standard
- CN105 connector available - connect to MELCOBEMS MINI for simple BEMS interfacing



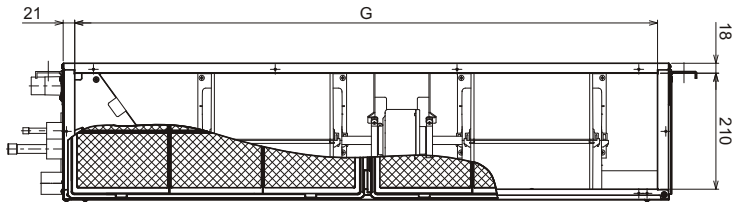
INDOOR UNITS		PEFY-M20VMA-A	PEFY-M25VMA-A	PEFY-M32VMA-A	PEFY-M40VMA-A	PEFY-M50VMA-A	PEFY-M63VMA-A	PEFY-M80VMA-A	PEFY-M100VMA-A	PEFY-M125VMA-A
CAPACITY (kW)	Heating (nominal)	2.5	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0
	Cooling (nominal)	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0
	UK Heating	2.5	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0
	UK Total Cooling - Hi (Sensible)	2.00 (1.80)	2.50 (2.00)	3.20 (2.50)	4.10 (3.30)	5.00 (4.10)	6.40 (5.10)	8.10 (5.90)	10.10 (8.10)	12.60 (9.90)
	UK Total Cooling - Mi	1.94	2.42	3.07	3.94	4.80	6.11	7.78	9.67	12.07
	UK Total Cooling - Lo	1.78	2.22	2.86	3.67	4.45	5.71	7.14	8.93	11.17
POWER INPUT (kW)	Heating (nominal)	0.03	0.03	0.042	0.045	0.064	0.085	0.078	0.14	0.197
	Cooling (nominal)	0.032	0.032	0.044	0.047	0.066	0.087	0.08	0.142	0.199
AIRFLOW (l/s)	Lo-Mi-Hi	100-125-142	100-125-142	125-150-175	167-200-233	200-242-283	225-267-317	242-300-350	383-467-533	467-567-617
EXTERNAL STATIC PRESSURE (Pa)		35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	40-50-70-100-150	40-50-70-100-150	40-50-70-100-150
SOUND PRESSURE LEVEL (dBA)*1	Lo-Mi-Hi	21-25-27	21-25-27	23-27-30	23-28-31	24-31-34	27-31-35	25-31-34	30-35-38	34-38-40
WEIGHT (kg)		21	21	21	25	25	24	30	37	38
DIMENSIONS (mm)	Width	700	700	700	900	900	900	1100	1400	1400
	Depth	732	732	732	732	732	732	732	732	732
	Height	250	250	250	250	250	250	250	250	250
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.25 / 0.25	0.25 / 0.25	0.34 / 0.34	0.37 / 0.37	0.51 / 0.51	0.66 / 0.66	0.57 / 0.57	0.97 / 0.97	1.23 / 1.23
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3	3	3	3

Note: *Measured in an anechoic chamber with a 1m inlet duct and 2m air outlet duct, 1.5m below unit

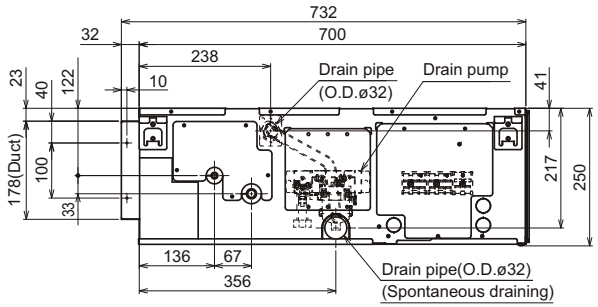
Upper View



Front View



Side View



Model	A	B	C	D	E	F	G
PEFY-M20,25,32VMA-A	700	754	800	660	7	600	658
PEFY-M40,50,63VMA-A	900	954	1000	860	9	800	858
PEFY-M80VMA-A	1100	1154	1200	1060	11	1000	1058
PEFY-M100,125VMA-A	1400	1454	1500	1360	14	1300	1358

PEFY-P-VMHS-E

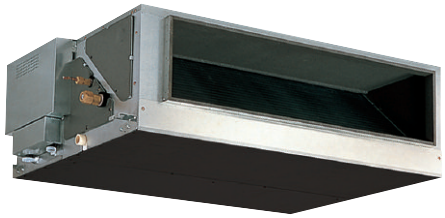
High Static Pressure Ceiling Concealed Ducted Indoor Unit

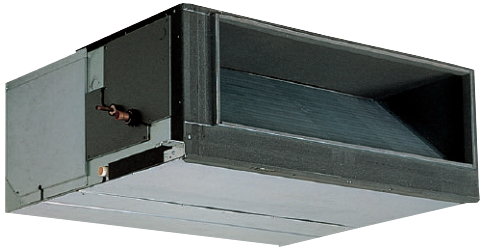
With improved design flexibility as a result of increased external static pressure, the PEFY-P-VMHS-E allows authentic duct air conditioning within the strictest aesthetic confines.

Key Features

- External static pressure of up to 250Pa
- Greater flexibility for duct extension, branching air outlet configuration
- Reduced noise levels due to the centrifugal fan
- Duct can be connected to intake side
- Drain lift-pump (option) 550mm of lift

R410A

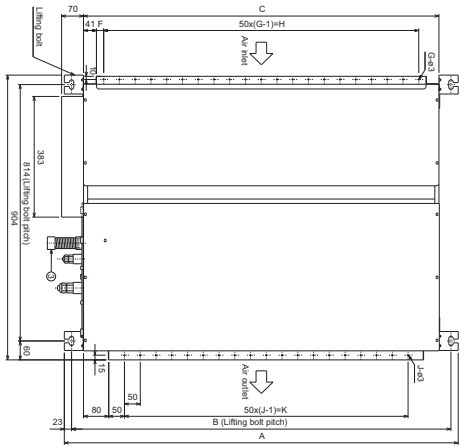




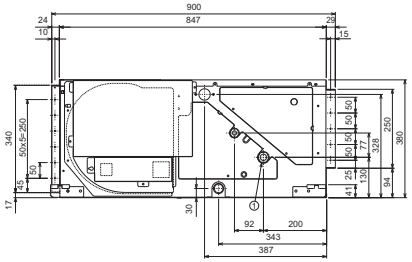
INDOOR UNITS		PEFY-P80VMHS-E	PEFY-P100VMHS-E	PEFY-P125VMHS-E	PEFY-P140VMHS-E	PEFY-P200VMHS-E	PEFY-P250VMHS-E
CAPACITY (kW)	Heating (nominal)	10.0	12.5	16.0	18.0	25.0	31.5
	Cooling (nominal)	9.0	11.2	14.0	16.0	22.4	28.0
	UK Heating	10.0	12.5	16.0	18.0	25.0	31.5
	UK Total Cooling - Hi (Sensible)	8.10 (6.10)	10.10 (8.30)	12.60 (9.50)	14.40 (10.80)	20.20 (15.60)	25.20 (19.30)
	UK Total Cooling - Mi	-	-	-	-	19.33	24.10
	UK Total Cooling - Lo	7.27	8.95	11.16	12.77	17.84	22.21
POWER INPUT (kW)	Heating (nominal)	0.09	0.16	0.16	0.19	0.63	0.82
	Cooling (nominal)	0.09	0.16	0.16	0.19	0.63	0.82
AIRFLOW (l/s)	Lo-Mi-Hi	300-358-417	442-533-633	442-533-633	467-567-667	833-1017-1200	967-1183-1400
EXTERNAL STATIC PRESSURE (Pa)		100-150-200	100-150-200	100-150-200	100-150-200	50-100-150-200-250	50-100-150-200-250
SOUND PRESSURE LEVEL (dBA) (150Pa) Lo-Mi-Hi		25-27-30	27-31-34	27-31-34	27-32-36	36-39-43	39-42-46
WEIGHT (kg)		45	51	51	53	97	100
DIMENSIONS (mm)	Width	1030	1195	1195	1195	1250	1250
	Depth	900	900	900	900	1120	1120
	Height	380	380	380	380	470	470
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.61 / 0.61	1.01 / 1.01	1.01 / 1.01	1.19 / 1.19	3.18 / 3.18	4.14 / 4.14
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3

Product Dimensions PEFY-P80/100/125/140VMHS-E

Upper View



Side View


900
847
24
10
28
15
340
50x(E-1)=250
50
45
17
30
92
200
343
387
95
65
65
65

PLFY-M-VEM-E

4-Way Blow Ceiling Cassette Indoor Unit

The PLFY-M-VEM-E offer 72 different airflow patterns, with the ability to handle a multitude of ceiling applications up to 4.2 metres in height. The easy to install, slim unit is ideal for maintaining constant temperatures, thanks to adjustable vanes that allow users to precisely direct air where it's needed.

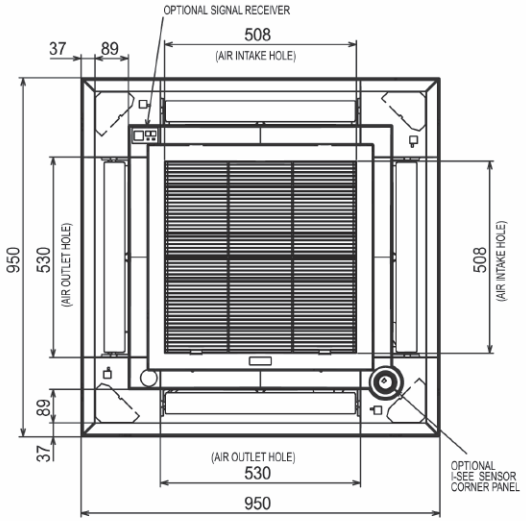
Key Features

- Improved airflow control, including horizontal airflow for greater comfort
- Optional 3D i-see sensor grille (PLP-6EAE) provides customised comfort by automatically monitoring room occupancy, position and body temperatures
- Optional filter lowering operation down to 4m (PLP-6EAJ)

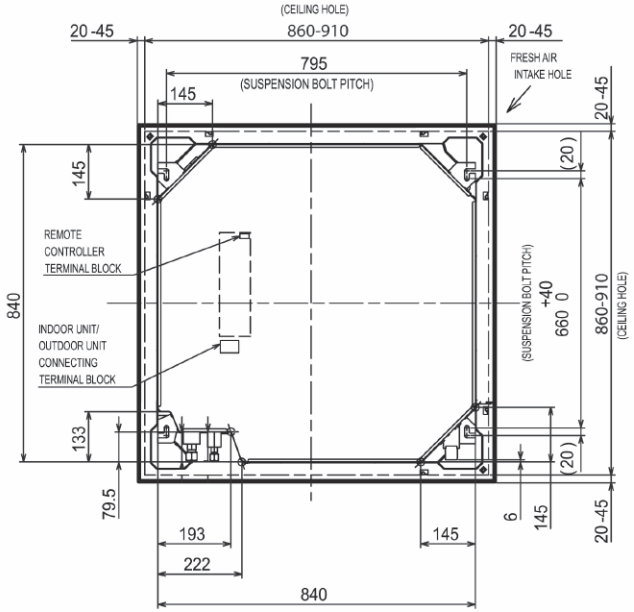


INDOOR UNITS		PLFY-M32VEM-E	PLFY-M40VEM-E	PLFY-M50VEM-E	PLFY-M63VEM-E	PLFY-M80VEM-E	PLFY-M100VEM-E	PLFY-M125VEM-E
CAPACITY (kW)	Heating (nominal)	4.0	5.0	6.3	8.0	10.0	12.5	16.0
	Cooling (nominal)	3.6	4.5	5.6	7.1	9.0	11.2	14.0
	UK Heating	4.0	5.0	6.3	8.0	10.0	12.5	16.0
	UK Total Cooling - Hi (Sensible)	3.20 (3.00)	4.00 (3.50)	5.00 (4.10)	6.40 (4.90)	8.10 (6.20)	10.00 (7.60)	12.50 (9.50)
	UK Total Cooling - Mi2	3.16	3.95	4.93	6.22	7.88	9.74	12.01
	UK Total Cooling - Mi1	3.09	3.87	4.83	6.09	7.71	9.34	11.37
	UK Total Cooling - Lo	3.02	3.77	4.72	5.93	7.51	8.81	10.54
POWER INPUT (kW)	Heating (nominal)	0.03	0.03	0.03	0.03	0.05	0.07	0.11
	Cooling (nominal)	0.03	0.03	0.03	0.03	0.05	0.07	0.11
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	217-233-250-267	217-233-250-283	217-233-267-300	233-250-267-300	233-283-333-383	333-383-433-483	367-433-500-583
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	26-27-29-31	26-27-29-31	26-27-29-31	28-29-30-32	28-31-34-37	34-37-39-41	35-39-42-45
WEIGHT (kg)	(Grille)	19(5)	19(5)	19(5)	21(5)	21(5)	24(5)	24(5)
DIMENSIONS (mm)	Width (Grille)	840 (950)	840 (950)	840 (950)	840 (950)	840 (950)	840 (950)	840 (950)
	Depth (Grille)	840 (950)	840 (950)	840 (950)	840 (950)	840 (950)	840 (950)	840 (950)
	Height (Grille)	258 (40)	258 (40)	258 (40)	258 (40)	258 (40)	298 (40)	298 (40)
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating	0.25	0.25	0.25	0.29	0.43	0.60	0.99
	Cooling	0.32	0.32	0.32	0.36	0.50	0.67	1.06
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3	3
GRILLE MODEL REFERENCE		PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA	PLP-6EA

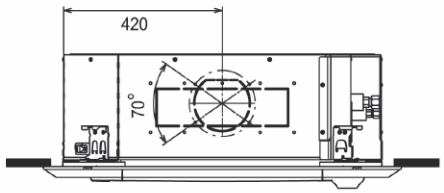
Lower View



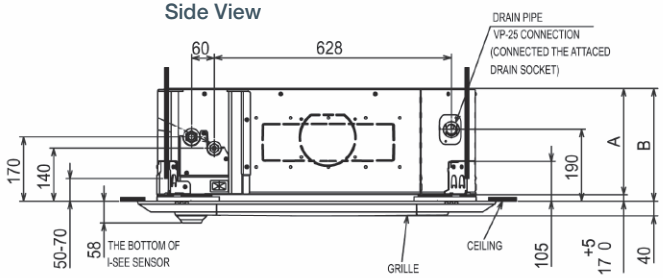
Upper View



Front View



Side View



	A	B
32/40	241	258
50		
63	281	298
80-125		

PLFY-P-VFM-E

600x600 4-Way Blow Ceiling Cassette Indoor Unit

The PLFY 600x600 cassette unit provides the smart solution to comfortable and efficient air conditioning. It combines a stylish square design slimline grille with the latest energy-saving technologies and is designed to fit snugly to ceilings, making it ideal in both offices and retail.

Key Features

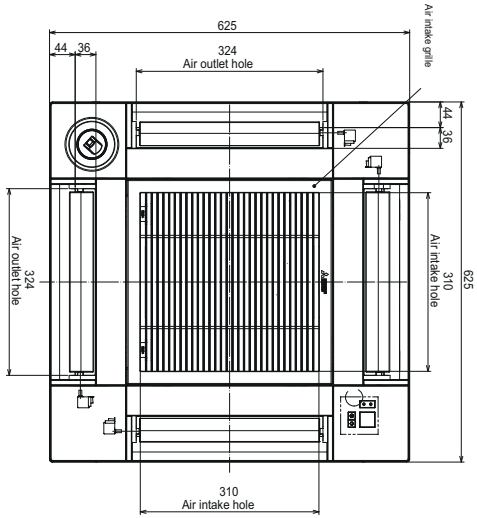
- New design - fits into narrow ceiling spaces with height of only 245mm
- Low noise levels - reduced noise value with 3D turbo fan
- Horizontal airflow - eliminating uncomfortable drafts and improved airflow control
- Easy installation - temporary hanging hook on grille and no screw removal for corner panel / control box
- 3D i-see Sensor Grille - optional 360º human body temperature, room occupancy and position sensor grille

R410A

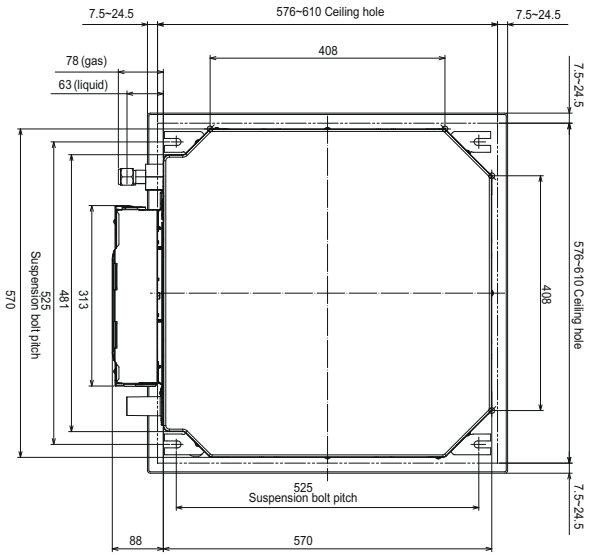


INDOOR UNITS		PLFY-P15VFM-E	PLFY-P20VFM-E	PLFY-P25VFM-E	PLFY-P32VFM-E	PLFY-P40VFM-E	PLFY-P50VFM-E
CAPACITY (kW)	Heating (nominal)	1.9	2.5	3.2	4.0	5.0	6.3
	Cooling (nominal)	1.7	2.2	2.8	3.6	4.5	5.6
	UK Heating	1.9	2.5	3.2	4.0	5.0	6.3
	UK Total Cooling - Hi (Sensible)	1.50 (1.30)	2.00 (1.60)	2.50 (2.00)	3.20 (2.40)	4.00 (2.90)	5.00 (3.60)
	UK Total Cooling - Mi	1.48	1.94	2.38	3.06	3.78	4.78
	UK Total Cooling - Lo	1.41	1.84	2.24	2.91	3.51	4.41
POWER INPUT (kW)	Heating (nominal)	0.02	0.02	0.02	0.02	0.03	0.03
	Cooling (nominal)	0.02	0.02	0.02	0.02	0.03	0.03
AIRFLOW (l/s)	Lo-Mi-Hi	108-125-133	108-125-142	108-133-150	117-133-158	125-150-183	150-183-217
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	26-28-30	26-29-31	26-30-33	26-30-34	28-33-39	33-39-43
WEIGHT (kg)	(Grille)	14 (3)	14 (3)	14 (3)	15 (3)	15 (3)	15 (3)
DIMENSIONS (mm)	Width (Grille)	570 (625)	570 (625)	570 (625)	570 (625)	570 (625)	570 (625)
	Depth (Grille)	570 (625)	570 (625)	570 (625)	570 (625)	570 (625)	570 (625)
	Height (Grille)	245 (10)	245 (10)	245 (10)	245 (10)	245 (10)	245 (10)
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.14 / 0.19	0.16 / 0.21	0.17 / 0.22	0.18 / 0.23	0.23 / 0.28	0.35 / 0.4
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3
GRILLE MODEL REFERENCE		SLP-2FA	SLP-2FA	SLP-2FA	SLP-2FA	SLP-2FA	SLP-2FA

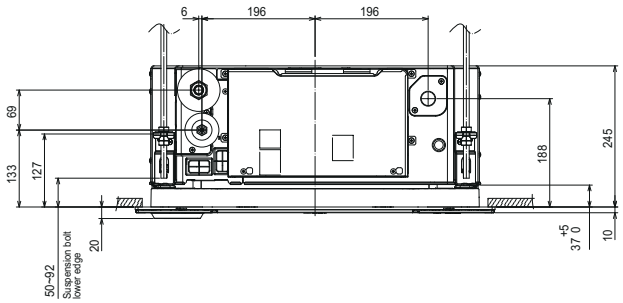
Upper View



Lower View



Side View



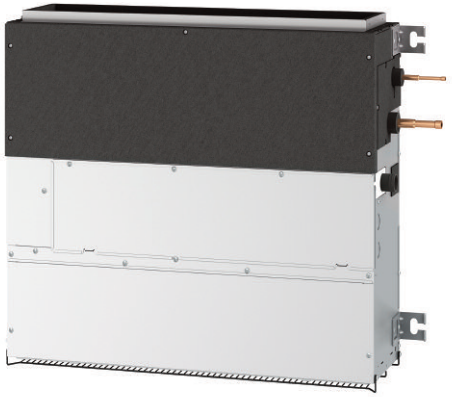
PFFY-P-VCM-E

Floor Standing Concealed Indoor Unit

A compact concealed unit providing simple, effective air conditioning in perimeter zones. The unit is easy to install and, at only 200mm deep, offers an unobtrusive method of delivering a highly efficient air conditioning performance.

Key Features

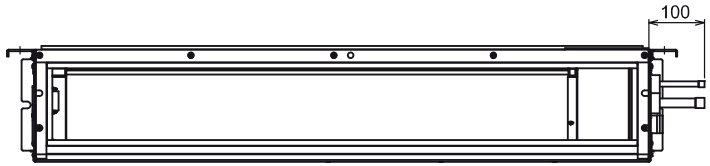
- Concealed unit for hidden installation
- Ideal for perimeter refurbishments
- 0-10-40-60Pa static pressure settings available
- Reduced noise levels



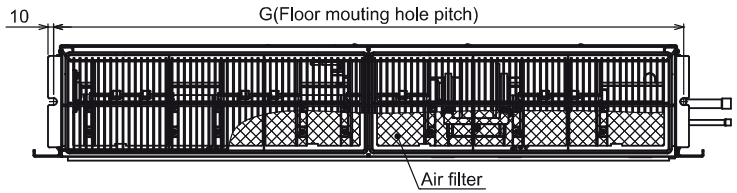
INDOOR UNITS		PFFY-P20VCM-E	PFFY-P25VCM-E	PFFY-P32VCM-E	PFFY-P40VCM-E	PFFY-P50VCM-E	PFFY-P63VCM-E
CAPACITY (kW)	Heating (nominal)	2.5	3.2	4.0	5.0	6.3	8.0
	Cooling (nominal)	2.2	2.8	3.6	4.5	5.6	7.1
	UK Heating	2.5	3.2	4.0	5.0	6.3	8.0
	UK Total Cooling - Hi (Sensible)	2.00 (1.60)	2.50 (1.90)	3.20 (2.40)	4.10 (3.00)	5.00 (3.80)	6.40 (4.70)
	UK Total Cooling - Mi	1.92	2.40	3.05	3.95	4.81	6.11
	UK Total Cooling - Lo	1.77	2.21	2.87	3.70	4.48	5.71
POWER INPUT (kW)	Heating (nominal)	0.022	0.026	0.031	0.038	0.052	0.058
	Cooling (nominal)	0.022	0.026	0.031	0.038	0.052	0.058
AIRFLOW (l/s)	Lo-Mi-Hi	83-100-117	92-108-133	92-117-142	133-158-183	167-192-225	200-233-275
EXTERNAL STATIC PRESSURE (Pa)		0-10-40-60	0-10-40-60	0-10-40-60	0-10-40-60	0-10-40-60	0-10-40-60
SOUND PRESSURE LEVEL*1 (dBA)	Lo-Mi-Hi	21-23-26	22-25-29	23-26-30	25-27-30	28-31-34	28-32-35
WEIGHT (kg)		18	18	18.5	22.5	22.5	25.5
DIMENSIONS (mm)	Width	700	700	700	900	900	1100
	Depth	200	200	200	200	200	200
	Height	690	690	690	690	690	690
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.25 / 0.25	0.30 / 0.30	0.34 / 0.34	0.38 / 0.38	0.50 / 0.50	0.49 / 0.49
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3

Note: *1 Additional sound data is available for this model. Separated inlet and breakout sound power level and discharge sound power level data is available on request.

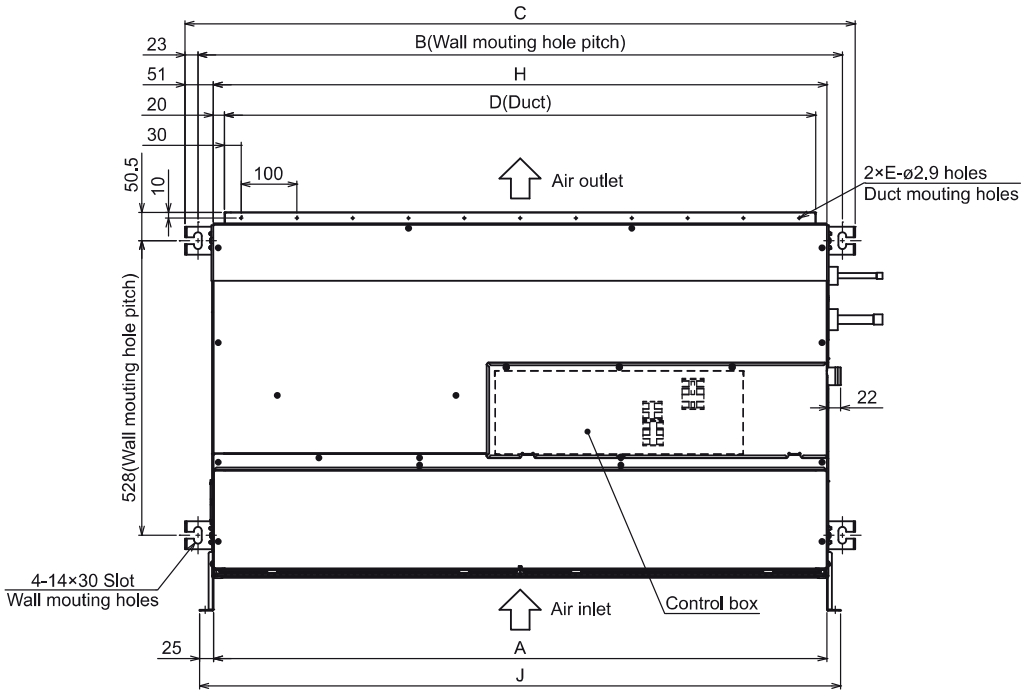
Upper View



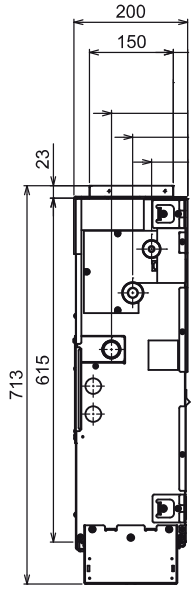
Lower View



Front View



Side View



Model	A	B	C	D	E	F	G	H	J
PFFY-P20・25・32VCM-E	700	756	802	660	7	600	730	700	750
PFFY-P40・50VCM-E	900	956	1002	860	9	800	930	900	950
PFFY-P63VCM-E	1100	1156	1202	1060	11	1000	1130	1100	1150

PFFY-P-VLEM-E

Floor Standing Exposed Indoor Unit

A compact cased unit providing simple, effective air conditioning in perimeter zones. The unit is easy to install and, at only 220mm deep, offers an unobtrusive method of delivering a highly efficient air conditioning performance.

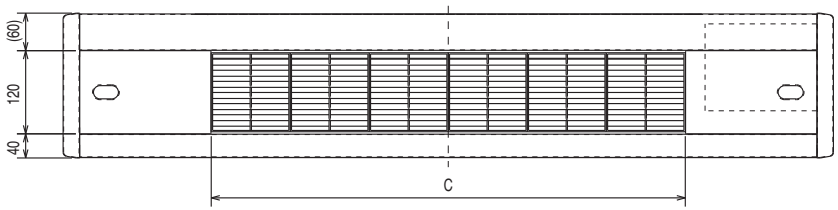
Key Features

- Remote controller can be incorporated into the main unit
- Perimeter air conditioning for retrofit applications with low ceiling void

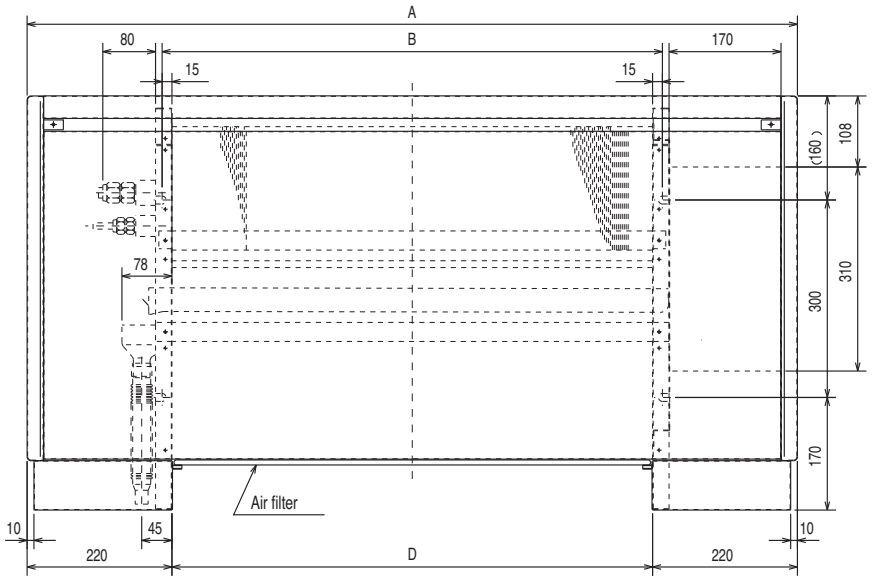


INDOOR UNTS		PFFY-P20VLEM-E	PFFY-P25VLEM-E	PFFY-P32VLEM-E	PFFY-P40VLEM-E	PFFY-P50VLEM-E	PFFY-P63VLEM-E
CAPACITY (kW)	Heating (nominal)	2.5	3.2	4.0	5.0	6.3	8.0
	Cooling (nominal)	2.2	2.8	3.6	4.5	5.6	7.1
	UK Heating	2.5	3.2	4.0	5.0	6.3	8.0
	UK Total Cooling - Hi (Sensible)	2.00 (1.60)	2.50 (1.90)	3.20 (2.40)	4.10 (3.00)	5.00 (3.80)	6.40 (4.70)
	UK Total Cooling - Lo	1.92	2.40	2.97	3.88	4.81	5.93
POWER INPUT (kW)	Heating (nominal)	0.04	0.04	0.06	0.065	0.085	0.10
	Cooling (nominal)	0.04	0.04	0.06	0.065	0.085	0.10
AIRFLOW (l/s)	Lo-Hi	92-108	92-108	117-150	150-183	200-233	200-258
SOUND PRESSURE LEVEL (dBA)	Lo-Hi	34-40	34-40	35-40	38-43	38-43	40-46
WEIGHT (kg)		23	23	25	26	30	32
DIMENSIONS (mm)	Width	1050	1050	1170	1170	1410	1410
	Depth	220	220	220	220	220	220
	Height	630	630	630	630	630	630
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.19 / 0.19	0.19 / 0.19	0.29 / 0.29	0.32 / 0.32	0.40 / 0.40	0.46 / 0.46
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3

Upper View



Front View



Model	A	B	C	D
PFFY-P20VLEM-E	1050	640	600	610
PFFY-P25VLEM-E	1050	640	600	610
PFFY-P32VLEM-E	1170	760	720	730
PFFY-P40VLEM-E	1170	760	720	730
PFFY-P50VLEM-E	1410	1000	960	970
PFFY-P63VLEM-E	1410	1000	960	970

PFFY-P-VKM-E

Floor Standing Exposed Indoor Unit

The PFFY-P-VKM-E series is extremely versatile and is designed for wall attached installation at floor level. The auto swing vane provides a more natural and comfortable airflow throughout the room and the lightweight, compact design makes installation easy.

Key Features

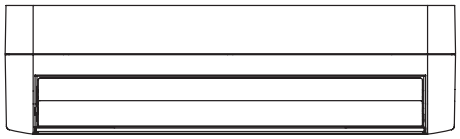
- Pure white, slimline design
- Upper and lower vanes for optimum, powerful and efficient air distribution



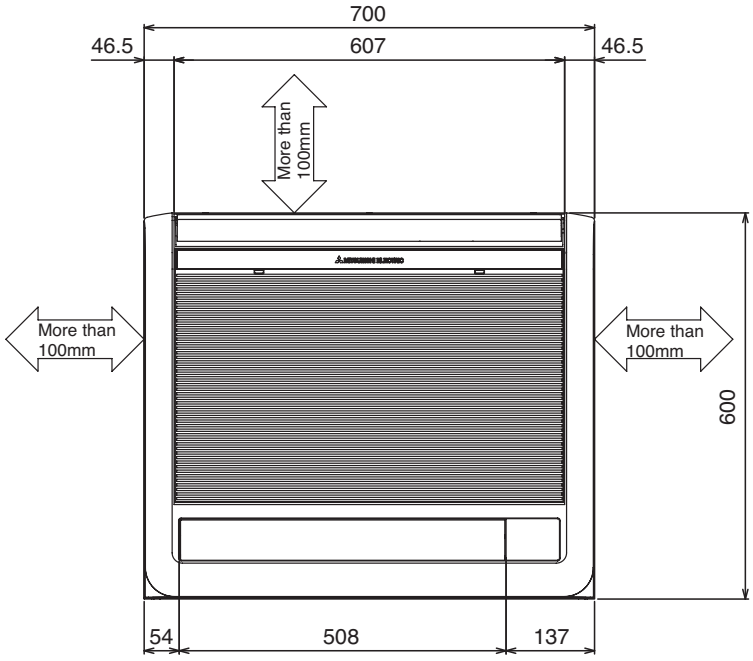
R410A

INDOOR UNITS		PFFY-P20VKM-E	PFFY-P25VKM-E	PFFY-P32VKM-E	PFFY-P40VKM-E
CAPACITY (kW)	Heating (nominal)	2.5	3.2	4.0	5.0
	Cooling (nominal)	2.2	2.8	3.6	4.5
	UK Heating	2.5	3.2	4.0	5.0
	UK Total Cooling - Hi (Sensible)	2.00 (1.60)	2.50 (1.90)	3.20 (2.30)	4.10 (2.90)
	UK Total Cooling - Mi2	1.94	2.42	3.10	3.98
	UK Total Cooling - Mi1	1.86	2.31	2.96	3.92
	UK Total Cooling - Lo	1.75	2.17	2.78	3.74
POWER INPUT (kW)	Heating (nominal)	0.025	0.025	0.025	0.028
	Cooling (nominal)	0.025	0.025	0.025	0.028
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	98-113-127-145	102-117-133-152	102-117-133-152	133-150-158-178
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	27-31-34-37	28-32-35-38	28-32-35-38	35-38-42-44
WEIGHT (kg)		15	15	15	15
DIMENSIONS (mm)	Width	700	700	700	700
	Depth	200	200	200	200
	Height	600	600	600	600
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.20 / 0.20	0.20 / 0.20	0.20 / 0.20	0.24 / 0.24
FUSE RATING (BS88) - HRC (A)		6	6	6	6
MAINS CABLE No. Cores		3	3	3	3

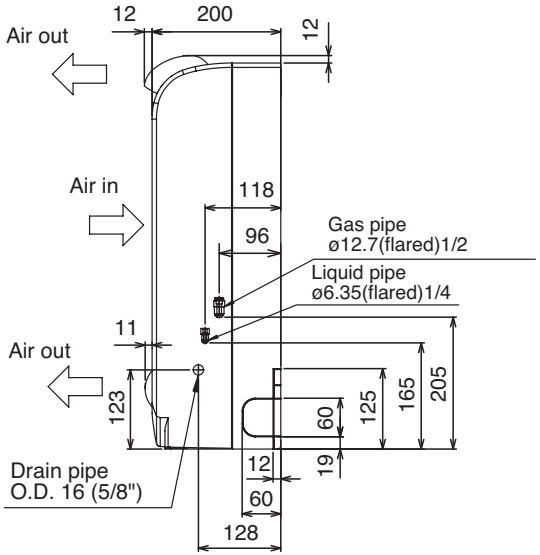
Upper View



Front View



Side View



PKFY-P-VLM-E / VKM-E

Wall Mounted Indoor Unit

An elegant design combined with compact dimensions and quiet operation make the PKFY-P an ideal unit choice. Noise levels are significantly lower than previous models.

Key Features

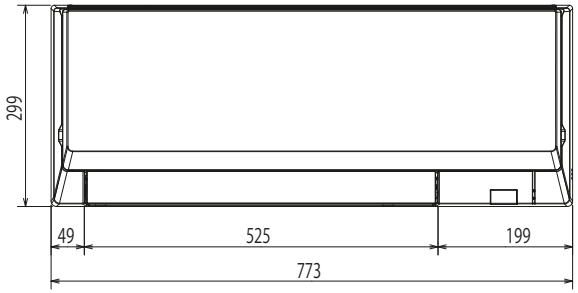
- Compact flat panel design - only 773mm wide (sizes 10-32)
- Widened vane control for improved air distribution and comfort
- Reduced noise levels of 22dB(A) (sizes 10-25)



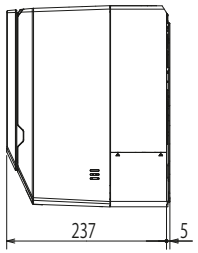
INDOOR UNITS		PKFY-P10VLM-E	PKFY-P15VLM-E	PKFY-P20VLM-E	PKFY-P25VLM-E	PKFY-P32VLM-E	PKFY-P40VLM-E	PKFY-P50VLM-E	PKFY-P63VKM-E
CAPACITY (kW)	Heating (nominal)	1.4	1.9	2.5	3.2	4.0	5.0	6.3	8.0
	Cooling (nominal)	1.2	1.7	2.2	2.8	3.6	4.5	5.6	7.1
	UK Heating	1.4	1.9	2.5	3.2	4.0	5.0	6.3	8.0
	UK Total Cooling - Hi (Sensible)	1.10 (1.00)	1.50 (1.10)	2.00 (1.40)	2.50 (1.80)	3.20 (2.50)	4.10 (3.10)	5.00 (3.60)	6.40 (5.00)
	UK Total Cooling - Mi2	1.08	1.50	1.98	2.47	3.16	4.04	4.89	-
	UK Total Cooling - Mi1	1.07	1.48	1.94	2.43	3.13	4.01	4.84	-
	UK Total Cooling - Lo	1.03	1.48	1.91	2.38	3.03	3.81	4.57	6.01
POWER INPUT (kW)	Heating (nominal)	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.04
	Cooling (nominal)	0.02	0.02	0.02	0.03	0.04	0.04	0.05	0.05
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	55-58-63-70	67-70-73-78	67-73-82-90	67-77-90-112	72-90-115-140	105-123-143-167	113-138-170-207	267-333
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	22-24-26-28	22-24-26-28	22-26-29-31	22-27-31-35	24-31-37-41	29-34-37-40	31-36-41-46	39-45
WEIGHT (kg)		11	11	11	11	11	13	13	21
DIMENSIONS (mm)	Width	773	773	773	773	773	898	898	1170
	Depth	237	237	237	237	237	237	237	295
	Height	299	299	299	299	299	299	299	365
ELECTRICAL SUPPLY		220-240v, 50hz	220-240v, 50hz	220-240v, 50hz	220-240v, 50hz	220-240v, 50hz	220-240v, 50hz	220-240v, 50hz	220-240v, 50hz
PHASE		Single	Single	Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.15 / 0.20	0.15 / 0.20	0.15 / 0.20	0.20 / 0.25	0.30 / 0.35	0.30 / 0.35	0.40 / 0.45	0.30 / 0.37
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3	3	3

Product Dimensions PKFY-P10/15/20/25/32VLM-E

Front View

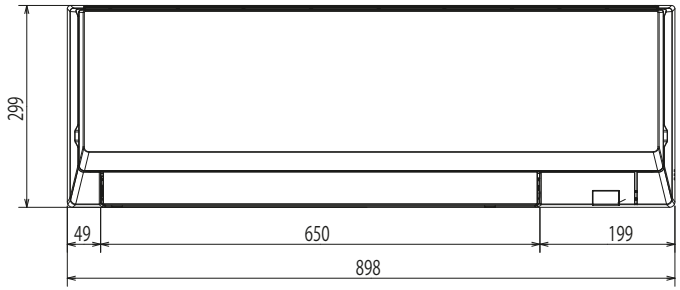


Side View

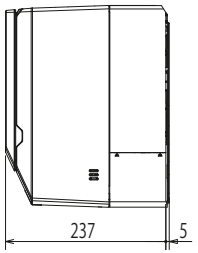


Product Dimensions PKFY-P40/50VLM-E

Front View

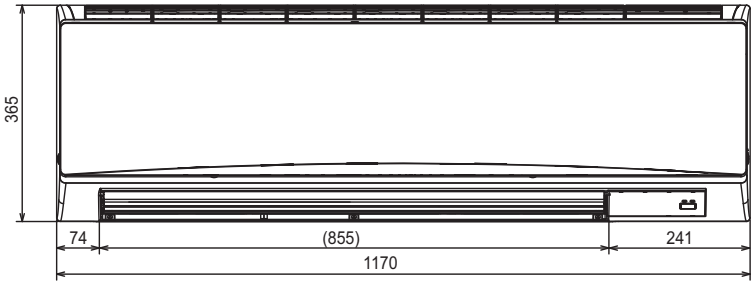


Side View

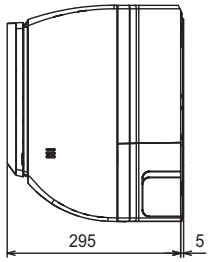


Product Dimensions PKFY-P63VKM-E

Front View



Side View



PCFY-P-VKM-E

Ceiling Suspended Indoor Unit

Designed for ultra-quiet operation and easy maintenance, the unit provides comfortable air conditioning for a wide range of applications where floor or wall space cannot be used practically.

Key Features

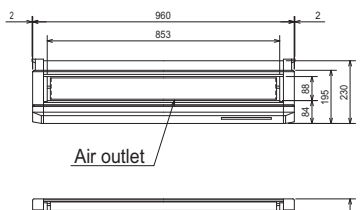
- Indoor unit designed for direct ceiling suspension
- Flush to wall installation for concealment of service connections
- Drain piping can be connected from left or right



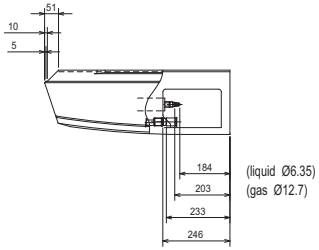
INDOOR UNITS		PCFY-P40VKM-E	PCFY-P63VKM-E	PCFY-P100VKM-E	PCFY-P125VKM-E
CAPACITY (kW)	Heating (nominal)	5.0	8.0	12.5	16.0
	Cooling (nominal)	4.5	7.1	11.2	14.0
	UK Heating	5.0	8.0	12.5	16.0
	UK Total Cooling - Hi (Sensible)	4.10 (3.00)	6.40 (4.60)	10.10 (7.10)	12.60 (8.90)
	UK Total Cooling - Mi2	4.03	6.22	9.94	12.17
	UK Total Cooling - Mi1	3.92	6.09	9.70	11.66
	UK Total Cooling - Lo	3.79	5.93	9.23	11.00
POWER INPUT (kW)	Heating (nominal)	0.04	0.05	0.09	0.11
	Cooling (nominal)	0.04	0.05	0.09	0.11
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	167-183-200-217	233-250-267-300	350-400-433-467	350-400-450-517
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44
WEIGHT (kg)		24	32	36	38
DIMENSIONS (mm)	Width	960	1280	1600	1600
	Depth	680	680	680	680
	Height	230	230	230	230
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.28 / 0.28	0.33 / 0.33	0.65 / 0.65	0.76 / 0.76
FUSE RATING (BS88) - HRC (A)		6	6	6	6
MAINS CABLE No. Cores		3	3	3	3

Product Dimensions PCFY-P40VKM-E

Front View



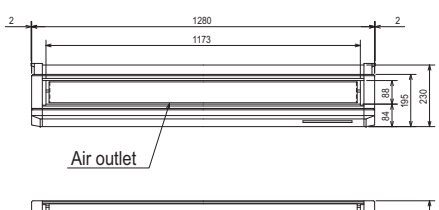
Side View



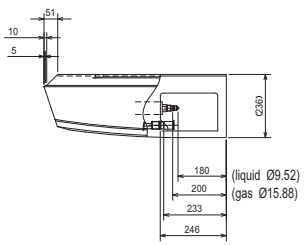
Lower View

Product Dimensions PCFY-P63VKM-E

Front View



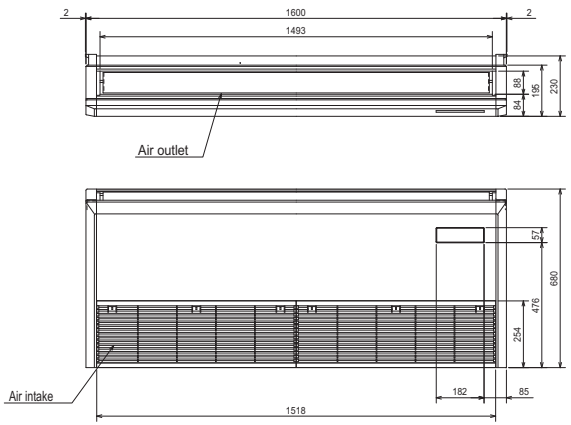
Side View



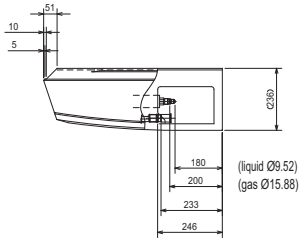
Lower View

Product Dimensions PCFY-P100/125VKM-E

Front View



Side View



Lower View

PWFY-P-VM-E-BU

VRF Sanitary Water Heater

Taking full advantage of heat recovery technology, the Mitsubishi Electric booster unit (PWFY-P100VM-E-BU) can achieve a flow temperature of up to **70ºC** and is an ideal solution for providing a hot water supply to commercial buildings in an energy efficient manner.

Key Features

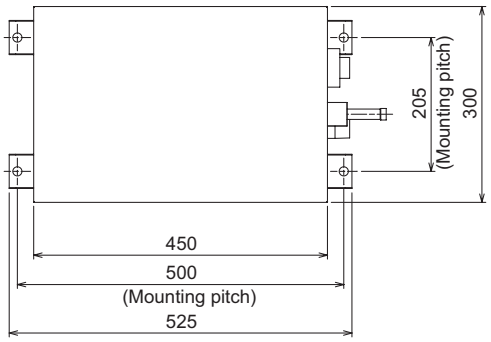
- The benefit of having air conditioning as well as a hot water supply from a single system means that the unit is suitable for a variety of applications
- Simple addition of the booster unit to the existing air conditioning system
- Perfect solution that eliminates the inconveniences of gas boiler installation, such as gas grid connection costs, meter installation and maintenance costs
- Uses the PAR-W21MAA controller



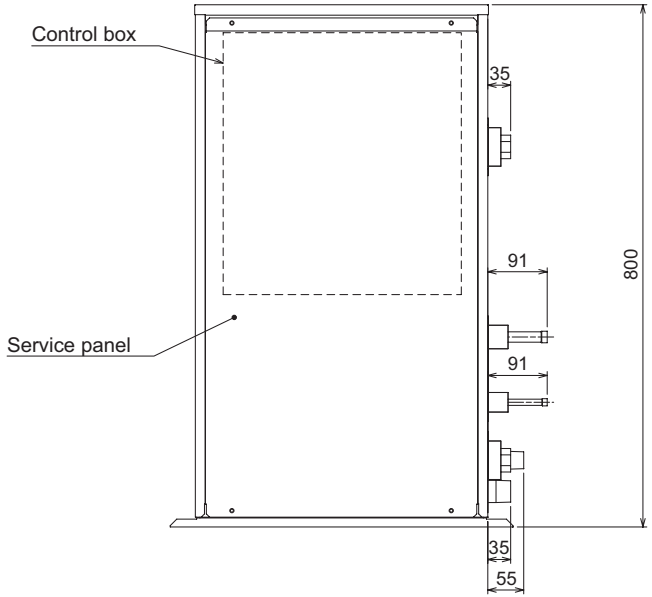
SANITARY WATER HEATER		PWFY-P100VM-E-BU
CAPACITY (kW)	Hot water (nominal)*1	12.5
	Hot water (UK)*2	8.0
POWER INPUT (kW)		2.48
COMPATIBLE OUTDOOR / CONDENSING UNITS		PURY / PQRY
PIPE SIZE mm (in)	Gas	15.88 (5/8")
	Liquid	9.52 (3/8")
	Water Connection	PT 3/4 Screw
	Water pipe size	28
SOUND PRESSURE LEVEL (dBA)		44
MAX WATER TEMPERATURE (ºC)		70
OPTIMUM WATER FLOW RATE (m^3/h)		1.5
WATER PRESSURE DROP AT OPTIMUM FLOW RATE (kPa)		22.5
WEIGHT (kg)		60
DIMENSIONS (mm)	Width	450
	Depth	300
	Height	785 (800)
ELECTRICAL SUPPLY		220-240v, 50Hz
PHASE		Single
RUNNING CURRENT (A)		10.66
FUSE RATING (BS88) - HRC (A)		25
MAINS CABLE No. Cores		3
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R134a (GWP 1430)		1.1 / 1.6

Notes:
*1 Nominal conditions: Outdoor 7/6ºC , 65ºC inlet water temperature, 1.5m^3/h water flow rate, 7.5m refrigerant pipe. (Please note this is a spot condition and not capacity over tank heat up).
*2 Typical capacity at -10ºCWB outdoor temperature for tank heat up.

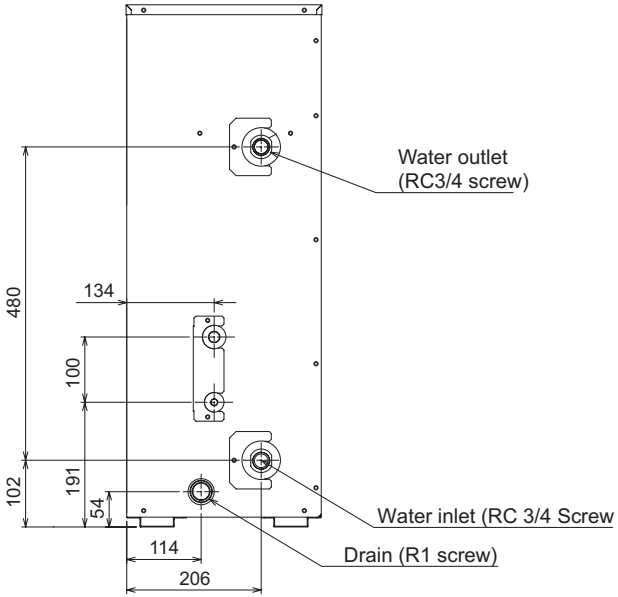
Upper View



Front View



Side View



VRF HP DXE

Heat Pump Air Curtain

In collaboration with Thermoscreens®, Mitsubishi Electric have developed a range of heat pump air curtains that are able to be connected to our City Multi VRF systems, as opposed to the more traditional direct electric method associated with air curtains.

Key Features

- Reduced CO_2 emissions and run costs
- Allows open door policy in retail outlets whilst being energy efficient
- Clean indoor environment - protection from external dust, fumes etc.
- Heat recovery possible, optimising energy use

R410A



VRF HP DXE - RECESSED		VRF HP1000R DXE	VRF HP1500R DXE	VRF HP2000R DXE	VRF HP2000R DXE HO*3
CAPACITY (kW)	Heating (nominal)	8.3	13.2	15.7	21.0
	Cooling (nominal)	7.4	11.8	14.0	16.8
AIRFLOW MAX (l/s)		364	575	720	720
SOUND PRESSURE LEVEL AT 3m (dBA)	Lo-Mi1-Hi	50-55-58	49-54-58	50-55-58	50-55-58
WEIGHT (kg)		52	75	93	93
DIMENSIONS (mm)	Width	1250	1750	2340	2340
	Depth	348	348	348	348
	Height	539	539	539	539
ELECTRICAL SUPPLY*1		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE*1		Single	Single	Single	Single
RUNNING CURRENT (A)*1		0.8	1.2	1.4	1.4
MAINS CABLE No. Cores*1		3	3	3	3
UNIFORMITY AT OUTLET (%)*2		90	92	90	90
UNIT SIZE (Index)		P71	P125	P140	P200
MAX MOUNTING HEIGHT (m)		3.2	3.2	3.2	3.2
COMPATIBLE OUTDOOR UNITS		PUHY / PURY / PQHY / PQRY	PUHY / PURY / PQHY / PQRY	PUHY / PURY / PQHY / PQRY	PUHY / PURY / PQHY / PQRY



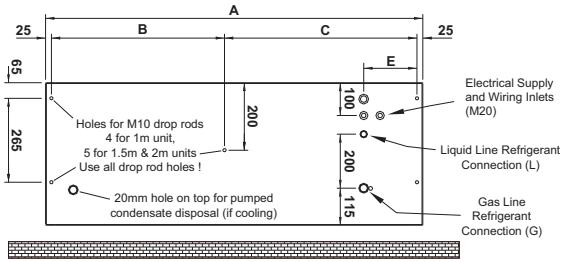
VRF HP DXE - FREE STANDING		VRF HP1000 DXE	VRF HP1500 DXE	VRF HP2000 DXE	VRF HP2000 DXE HO*3
CAPACITY (kW)	Heating (nominal)	8.3	13.2	15.7	21.0
	Cooling (nominal)	7.4	11.8	14.0	16.8
AIRFLOW MAX (l/s)		364	575	720	720
SOUND PRESSURE LEVEL AT 3m (dBA)	Lo-Mi1-Hi	50-55-58	49-54-58	50-55-58	50-55-58
WEIGHT (kg)		46	67	84	84
DIMENSIONS (mm)	Width	1300	1825	2350	2350
	Depth	468	468	468	468
	Height	306	306	306	306
ELECTRICAL SUPPLY*1		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE*1		Single	Single	Single	Single
RUNNING CURRENT (A)*1		0.8	1.2	1.4	1.4
MAINS CABLE No. Cores*1		3	3	3	3
UNIFORMITY AT OUTLET (%)*2		90	92	90	90
UNIT SIZE (Index)		P71	P125	P140	P200
MAX MOUNTING HEIGHT (m)		3.2	3.2	3.2	3.2
COMPATIBLE OUTDOOR UNITS		PUHY / PURY / PQHY / PQRY	PUHY / PURY / PQHY / PQRY	PUHY / PURY / PQHY / PQRY	PUHY / PURY / PQHY / PQRY

Thermoscreens

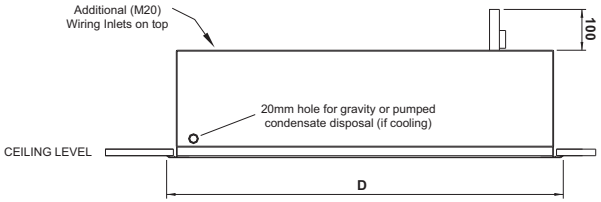
Notes: *1 For indoor units with electric defrost heaters enabled, 3ph, 380-415V power supply (7.3A HP1000, 12.1A HP1500, 14.4A HP2000). *2 Tested to ISO27327. *3 Includes twin LEV kit for installation with the air curtain. This model size is made to order.

Product Dimensions VRF HP1000/1500/2000R DXE (HO)

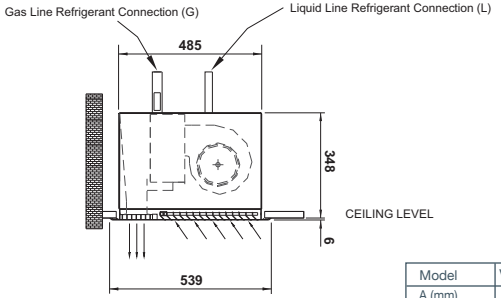
Front View



Upper View



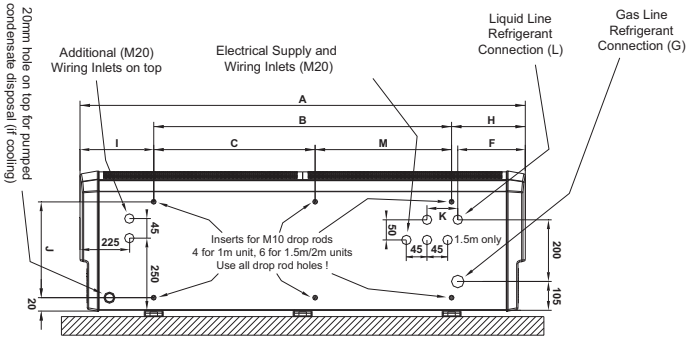
Side View



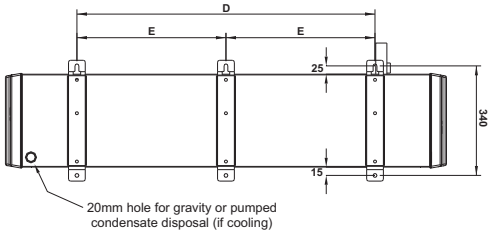
	Model	VRF HP1000R DXE	VRF HP1500R DXE	VRF HP2000R DXE
	A (mm)	1250	1750	2340
	B (mm)	-	724	1129
	C (mm)	-	976	1161
	D (mm)	1303	1803	2393
	E (mm)	170	166	189
	G	⅝ in.	⅝ in.	⅞ in.
	L	½ in.	½ in.	⅝ in.
Cut-Out in Ceiling	Length (mm)	1250	1750	2340
	Width (mm)	485	485	485

Product Dimensions VRF HP1000/1500/2000 DXE (HO)

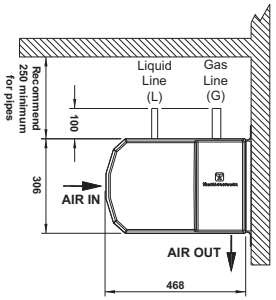
Front View



Upper View



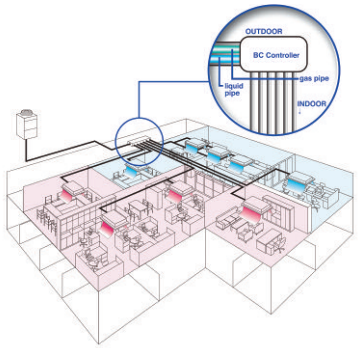
Side View



Model	VRF HP1000DXE	VRF HP1500DXE	VRF HP2000DXE
A (mm)	1300	1825	2350
B (mm)	605	1225	1793
C (mm)	-	655	918
D (mm)	898	1398	1904
E (mm)	-	699	952
F (mm)	182	222	204
G	⅝ in.	⅝ in.	⅞ in.
H (mm)	442	333	299
I (mm)	253	267	258
J (mm)	359	359	334
K (mm)	80	45	80
L	½ in.	½ in.	⅝ in.
M	-	570	875

BC Controllers

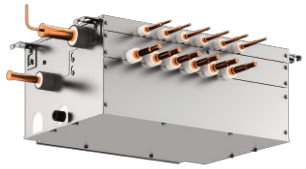
At the heart of both the R2 and WR2 Series, the BC controller makes simultaneous heating and cooling possible. Improved system efficiency is achieved when energy is transferred intelligently around the building.

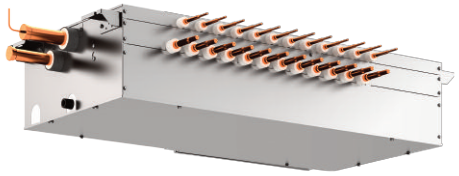


Key Features

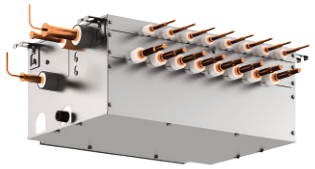
- Allows unique 2-pipe heat recovery application
- Simultaneous heating and cooling
- Instructs the heat source unit/outdoor unit on the amount of refrigerant (liquid or gas) that is required to achieve the requested cooling or heating requirements
- Slim profile for more flexible installation
- Easy servicing and maintenance access through underside drain pan
- Brazed connections

R32 R410A









BC CONTROLLERS		CMB-M104V-J1	CMB-M106V-J1
NUMBER OF CONNECTIONS		4	6
WEIGHT (KG)		26	29
DIMENSIONS (MM)	Width	596	596
	Depth	476	476
	Height	250	250
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (kW)		0.076	0.11
RUNNING CURRENT (A)		0.34	0.48
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE NO. CORES		3	3

Note: CMB-M-V-J1 units are for use with PURY-EM200-300YNW-A1, PURY-M200-300YNW-A1, PURY-EP200-350YNW-A1, PURY-P200-350YNW-A1 & PQRY-P200-300YLM-A1 units only.

MASTER BC CONTROLLERS		CMB-M108V-JA1	CMB-M1012V-JA1	CMB-M1016V-JA1	CMB-P1016V-KA1
NUMBER OF CONNECTIONS		8	12	16	16
WEIGHT (kg)		48	60	68	69
DIMENSIONS (mm)	Width	911	1135	1135	1135
	Depth	622	622	622	622
	Height	252	252	252	250
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single
POWER INPUT (kW)		0.144	0.211	0.279	0.279
RUNNING CURRENT (A)		0.63	0.92	1.22	1.22
FUSE RATING (BS88) – HRC (A)		6	6	6	6
MAINS CABLE No. Cores		3	3	3	3

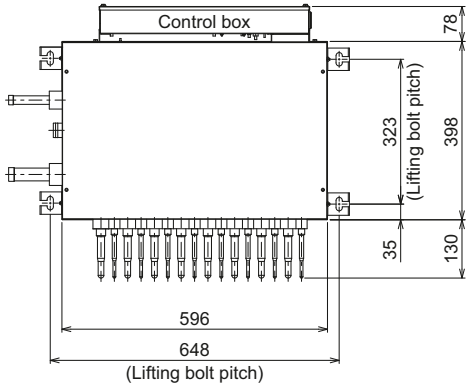
Notes: CMB-M-V-JA1 units are for use with PURY-EM200-300YNW-A1, PURY-M200-300YNW-A1, PURY-EP200-900Y(S)NW-A1, PURY-P200-900Y(S)NW-A1 & PQRY-P200-900Y(S)LM-A1 units only.
CMB-P1016V-KA1 unit is for use with PURY-P950-1100YSNW-A1 and PURY-EP950-1100YSNW-A1 units only.

SUB BC CONTROLLERS		CMB-M104V-KB1	CMB-M108V-KB1
NUMBER OF CONNECTIONS		4	8
WEIGHT (KG)		23	31
DIMENSIONS (MM)	Width	596	596
	Depth	476	476
	Height	250	250
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (kW)		0.068	0.135
RUNNING CURRENT (A)		0.30	0.59
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE NO. CORES		3	3

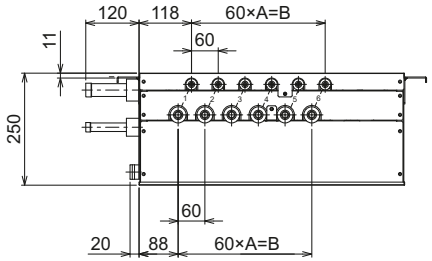
Notes: Maximum index of 350 allowable on each Sub BC controller. Up to 11 Sub BC controllers connectable to one system.

Product Dimensions CMB-M104/106V-J1

Upper View



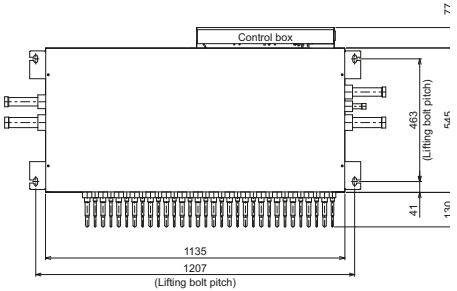
Side View



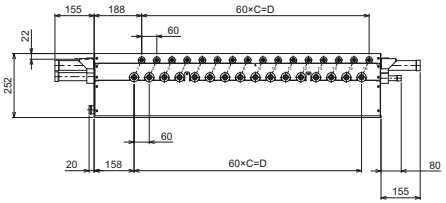
	A	B
CMB-M104V-J1	3	180
CMB-M106V-J1	5	300

Product Dimensions CMB-M108/1012/1016V-JA1

Upper View



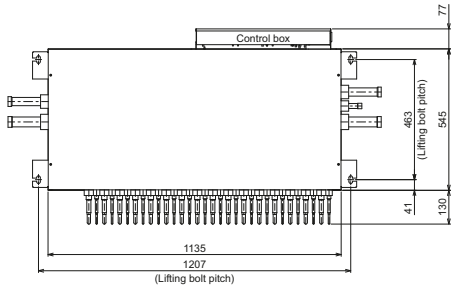
Side View



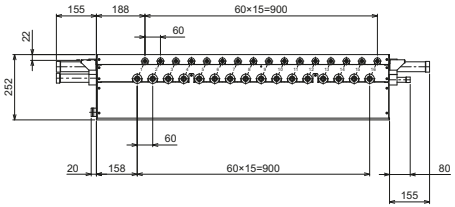
	A	B	C	D
CMB-M108V-JA1	911	983	7	420
CMB-M1012V-JA1	1135	1207	11	660
CMB-M1016V-JA1	1135	1207	15	900

Product Dimensions CMB-P1016V-KA1

Upper View

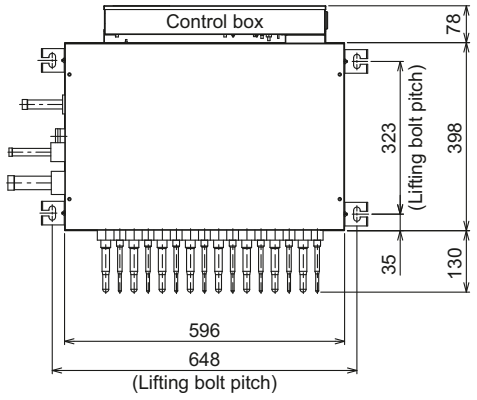


Side View

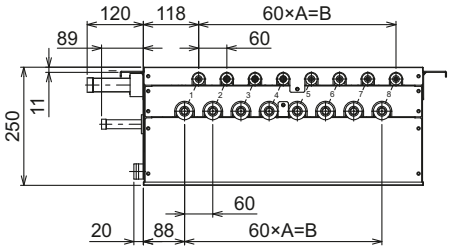


Product Dimensions CMB-M104/108V-KB1

Upper View



Side View



	A	B
CMB-M104V-KB1	3	180
CMB-M108V-KB1	7	420

BC Controllers With Port Isolation Valves

At the heart of both the R2 and WR2 Series, the BC controller makes simultaneous heating and cooling possible. Improved system efficiency is achieved when energy is transferred intelligently around the building.

Key Features

- Allows unique 2-pipe heat recovery application
- Heating and cooling at the same time on smaller systems
- Instructs the heat source unit/outdoor unit on the amount of refrigerant (liquid or gas) that is required to achieve the requested cooling or heating requirements
- Slim profile for more flexible installation
- Easy servicing and maintenance access through underside drain pan
- Brazed connections
- Isolation valves factory-fitted on each port



BC CONTROLLERS with Port Isolation Valves		KS8-CMB-P104V-J	KS8-CMB-P106V-J
NUMBER OF CONNECTIONS		4	6
WEIGHT (KG)		23 + 4.2	27 + 5.9
DIMENSIONS (MM)	Width	596	596
	Depth	495 + 280	495 + 280
	Height	246	246
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (KW)		0.085	0.123
RUNNING CURRENT (A)		0.36	0.52
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE NO. CORES		3	3
BC BOX		CMB-P104V-J	CMB-P106V-J

Note: KS8-CMB-P-V-J units are for use with PURY-P200-350YNW-A1, PURY-EP200-350YNW-A1 & PQRY-P200-300YLM-A1 units only.

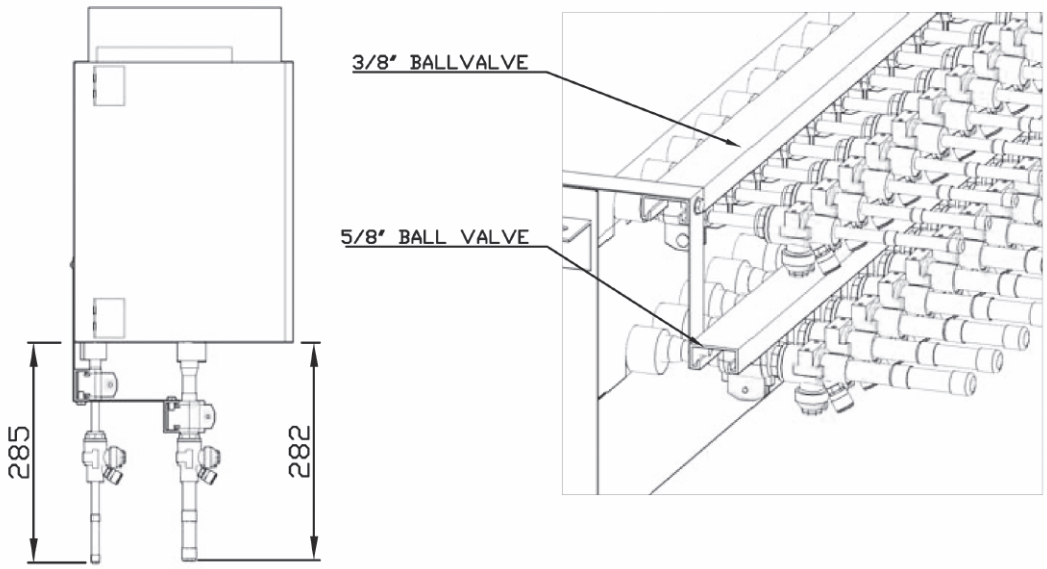
MASTER BC CONTROLLERS with Port Isolation Valves		KS8-CMB-P108V-JA	KS8-CMB-P1012V-JA	KS8-CMB-P1016V-JA	KS8-CMB-P1016V-KA
NUMBER OF CONNECTIONS		8	12	16	16
WEIGHT (KG)		45 + 7.9	55 + 12	63 + 14.5	65 + 14.5
DIMENSIONS (MM)	Width	911	1135	1135	1135
	Depth	639 + 280	639 + 280	639 + 280	639 + 280
	Height	246	246	246	246
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single
POWER INPUT (KW)		0.161	0.236	0.312	0.312
RUNNING CURRENT (A)		0.68	0.99	1.30	1.30
FUSE RATING (BS88) – HRC (A)		6	6	6	6
MAINS CABLE NO. CORES		3	3	3	3
BC BOX		CMB-P108V-JA	CMB-P1012V-JA	CMB-P1016V-JA	CMB-P1016V-KA

Notes: KS8-CMB-P-V-JA units are for use with PURY-P200-900Y(S)NW-A1, PURY-EP200-900Y(S)NW-A1 & PQRY-P200-900Y(S)LM-A1 units only. KS8-CMB-P1016V-KA unit is for use with PURY-P950-1100YNW-A1 & PURY-EP950-1100YSNW-A1 units only.

SUB BC CONTROLLERS with Port Isolation Valves		KS8-CMB-P104V-KB	KS8-CMB-P108V-KB
NUMBER OF CONNECTIONS		4	8
WEIGHT (KG)		21 + 4.2	28 + 7.5
DIMENSIONS (MM)	Width	596	596
	Depth	495 + 280	495 + 280
	Height	246	246
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (KW)		0.076	0.135
RUNNING CURRENT (A)		0.32	0.59
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE NO. CORES		3	3
BC BOX		CMB-P104V-KB	CMB-P108V-KB

Notes: Maximum index of 350 allowable on each Sub BC controller. Up to 11 Sub BC controllers connectable to one system.

Side View



BC Controllers With Port Isolation Valves & Acoustic Jacket

At the heart of both the R2 and WR2 Series, the BC controller makes simultaneous heating and cooling possible. Improved system efficiency is achieved when energy is transferred intelligently around the building.

Key Features

- Allows unique 2-pipe heat recovery application
- Heating and cooling at the same time on smaller systems
- Instructs the heat source unit/outdoor unit on the amount of refrigerant (liquid or gas) that is required to achieve the requested cooling or heating requirements
- Slim profile for more flexible installation
- Easy servicing and maintenance access through underside drain pan
- Brazed connections
- Isolation valves factory-fitted on each port
- Up to 5dBA reduction in sound pressure level with acoustic jacket



BC CONTROLLERS		KS8-KS5-SBCAJ-A-CMB-P104V-J	KS8-KS5-SBCAJ-A-CMB-P106V-J
NUMBER OF CONNECTIONS		4	6
WEIGHT (KG)		38.5	44.2
DIMENSIONS (MM)	Width	596	596
	Depth	495 + 280	495 + 280
	Height	246	246
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (KW)		0.085	0.123
RUNNING CURRENT (A)		0.36	0.52
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE NO. CORES		3	3
BC BOX		CMB-P104V-J	CMB-P106V-J

Note: For use with PURY-P200-350YNW-A1, PURY-EP200-350YNW-A1 & PQRY-P200-300YLM-A1 units only. These products are made to order, please consult your local sales office for delivery schedule.

MASTER BC CONTROLLERS		KS8-KS5-MBCAJ-A-CMB-P108V-JA	KS8-KS5-LBCAJ-A-CMB-P1012V-JA	KS8-KS5-LBCAJ-A-CMB-P1016V-JA	KS8-KS5-LBCAJ-A-CMB-P1016V-KA
NUMBER OF CONNECTIONS		8	12	16	16
WEIGHT (KG)		66	93.1	104.5	106.5
DIMENSIONS (MM)	Width	911	1135	1135	1135
	Depth	639 + 280	639 + 280	639 + 280	639 + 280
	Height	246	246	246	246
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single
POWER INPUT (KW)		0.161	0.236	0.312	0.312
RUNNING CURRENT (A)		0.68	0.99	1.30	1.30
FUSE RATING (BS88) – HRC (A)		6	6	6	6
MAINS CABLE NO. CORES		3	3	3	3
BC BOX		CMB-P108V-JA	CMB-P1012V-JA	CMB-P1016V-JA	CMB-P1016V-KA

Notes: V-JA units are for use with PURY-P200-900Y(S)NW-A1, PURY-EP200-900Y(S)NW-A1 & PQRY-P200-900Y(S)LM-A1 units only. V-KA unit is for use with PURY-P950-1100YNW-A1 & PURY-EP950-1100YSNW-A1 units only. These products are made to order, please consult your local sales office for delivery schedule.

SUB BC CONTROLLERS		KS8-KS5-SBCAJ-A-CMB-P104V-KB	KS8-KS5-SBCAJ-A-CMB-P108V-KB
NUMBER OF CONNECTIONS		4	8
WEIGHT (KG)		36.5	50.2
DIMENSIONS (MM)	Width	596	596
	Depth	495 + 280	495 + 280
	Height	246	246
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (KW)		0.076	0.135
RUNNING CURRENT (A)		0.32	0.59
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE NO. CORES		3	3
BC BOX		CMB-P104V-KB	CMB-P108V-KB

Notes: Maximum index of 350 allowable on each Sub BC controller. Up to 11 Sub BC controllers connectable to one system. These products are made to order, please consult your local sales office for delivery schedule.

BC Controllers With Acoustic Jacket

At the heart of both the R2 and WR2 Series, the BC controller makes simultaneous heating and cooling possible. Improved system efficiency is achieved when energy is transferred intelligently around the building.

Key Features

- Allows unique 2-pipe heat recovery application
- Heating and cooling at the same time on smaller systems
- Instructs the heat source unit/outdoor unit on the amount of refrigerant (liquid or gas) that is required to achieve the requested cooling or heating requirements
- Slim profile for more flexible installation
- Easy servicing and maintenance access through underside drain pan
- Brazed connections
- Isolation valves factory-fitted on each port
- Up to 5dBA reduction in sound pressure level with acoustic jacket



BC CONTROLLERS		KS5-CMB-P104V-J-AL	KS5-CMB-P108V-J-AL
NUMBER OF CONNECTIONS		4	6
WEIGHT (KG)		34.4	38.3
DIMENSIONS (MM)	Width	596	596
	Depth	495	495
	Height	246	246
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (KW)		0.085	0.123
RUNNING CURRENT (A)		0.36	0.52
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE NO. CORES		3	3

Notes: For use with PURY-P200-350YNW-A1, PURY-EP200-350YNW-A1 & PQRY-P200-300YLM-A1 units only. These products are made to order, please consult your local sales office for delivery schedule.

MASTER BC CONTROLLERS		KS5-CMB-P108V-JA-AL	KS5-CMB-P1012V-JA-AL	KS5-CMB-P1016V-JA-AL	KS5-CMB-P1016V-KA-AL
NUMBER OF CONNECTIONS		8	12	16	16
WEIGHT (KG)		58.1	82	90	92
DIMENSIONS (MM)	Width	911	1135	1135	1135
	Depth	639	639	639	639
	Height	246	246	246	246
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single
POWER INPUT (KW)		0.161	0.236	0.312	0.312
RUNNING CURRENT (A)		0.68	0.99	1.30	1.30
FUSE RATING (BS88) – HRC (A)		6	6	6	6
MAINS CABLE NO. CORES		3	3	3	3

Notes: V-JA-AL units are for use with PURY-P200-900Y(S)NW-A1, PURY-EP200-900Y(S)NW-A1 & PQRY-P200-900Y(S)LM-A1 units only. V-KA-AL unit is for use with PURY-P950-1100YNW-A1 & PURY-EP950-1100YSNW-A1 units only. These products are made to order, please consult your local sales office for delivery schedule.

SUB BC CONTROLLERS		KS5-CMB-P104V-KB-AL	KS5-CMB-P108V-KB-AL
NUMBER OF CONNECTIONS		4	8
WEIGHT (KG)		34.4	42.3
DIMENSIONS (MM)	Width	596	596
	Depth	495	495
	Height	246	246
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (KW)		0.076	0.135
RUNNING CURRENT (A)		0.32	0.59
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE NO. CORES		3	3

Notes: Maximum index of 350 allowable on each Sub BC controller. Up to 11 Sub BC controllers connectable to one system. These products are made to order, please consult your local sales office for delivery schedule.

Refrigerant Detection Systems

The refrigerant detection systems are designed to detect air conditioning leaks, with the option of providing pump down of City Multi VRF R2 systems.

These systems help safeguard against refrigerant levels exceeding permitted concentration levels and react effectively in the event of leaks.

Key Features

- Enables compliance with BS EN378 – Safety of Building Occupants, critical in hotel applications
- Can help achieve recognition within BREEAM Pollution Prevention Assessment, ideal for assisting in the design of modern, sustainable buildings
- Robust and tested leak detection with pump down option
- Flexible refrigerant gas detection systems - semiconductor or infrared, in standalone or cost effective aspirated panel options
- Pump down panel incorporating all elements required for safety and environmental protection along with ease of installation
- Actuated ball valves to isolate refrigerant on pump down
- Alarm system to alert occupants and staff of any leakages



KSGD-01S-B



KSGD-01W-B White



KS8-IR16CIF-A



KS8-SSFPA



KSIR-SP01

Semiconductor Refrigerant Leak Detection

	DESCRIPTION	MODEL REF.
Semiconductor Sensor	Semiconductor Stand Alone Refrigerant Detector White	KSGD-01W-B
	Semiconductor Stand Alone Refrigerant Detector Silver	KSGD-01S-B
	Semiconductor Sensor Polished Brass Lacquered	KSGD-01PB-B
	Semiconductor Sensor Forbes & Lomax Painted	KSGD-01FLP-B
	Semiconductor Sensor Forbes & Lomax Antique	KSGD-01FLA-B
	Semiconductor Sensor Forbes & Lomax Polished Nickel	KSGD-01FLPN-B
	Semiconductor Sensor White Inc. 5 Wire	KSGD-01W-B-5W
	Semiconductor Sensor Silver Inc. 5 Wire	KSGD-01S-B-5W
	Transformer 12Vdc Power Supply	KSTR12
	Transformer 24Vdc Power Supply	KSTR24
Semiconductor Sensor Panel	32 Channel System	KS8 RAD32-C
	64 Channel System	KS8 RAD64-B
Room Alarm Indicator	Room Alarm Indicator Satin Stainless Steel	KSRA-SS
	Room Alarm Indicator White Steel	KSRA-WS
	Room Alarm Indicator Polished Brass	KSRA-PB
Semiconductor Large System	KS8-RMI Smart32 Input Card 32 Semiconductor Sensors	KS8-RMI SMART32
	KS8-RMI Smart64 Input Card 64 Semiconductor Sensors	KS8-RMI SMART64
	Semiconductor Sensor Remote Display 256 Sensors	KS8-RMD
Semiconductor Test Kit	Semiconductor Leak Detector Test Kit	KSGD01-ATK

Infrared Refrigerant Leak Detection

	DESCRIPTION	MODEL REF.
Infrared Stand Alone Sensor	R410A Infrared Stand Alone Refrigerant Detector with Remote Sensor	KSIR-SP01 R410A
	R32 Infrared Stand Alone Refrigerant Detector with Remote Sensor	KSIR-SP01 R32
	Infrared Stand Alone Refrigerant Detector Remote Display	KS8-SP-RDU
Infrared Faceplate	Stainless Steel Room Faceplate with Alarm for Aspirated Panel	KS8-SSFPA
Infrared Tubing Ancillaries	100M Drum Sampling Tube for Aspirated Panel (Black)	KS8-BST100
	250M Drum Sampling Tube for Aspirated Panel (Black)	KS8-BST250
	Sampling Tube Straight Connector for Aspirated Panel	KS8-STSC
	Sampling Tube Two Way Manifold for Aspirated Panel	KS8-ST2M
	Inline Filter for Aspirated Panel	KS8-IF
	End Of Line Filter for Aspirated Panel (Calibration)	KS8-EF
	End Of Line Filter for Aspirated Panel (Calibration) C/W Bracket	KS8-EF C/W BRACKET
Infrared Aspirated Panel	Infrared Aspirated 8 Channel Refrigerant Detector Panel	KS8-IR8CIF-A
	Infrared Aspirated 16 Channel Refrigerant Detector Panel	KS8-IR16CIF-A
	Infrared Aspirated 32 Channel Refrigerant Detector Panel	KS8-IR32CIF-A
	8/16/32 Remote Display Unit	KS8-RDU

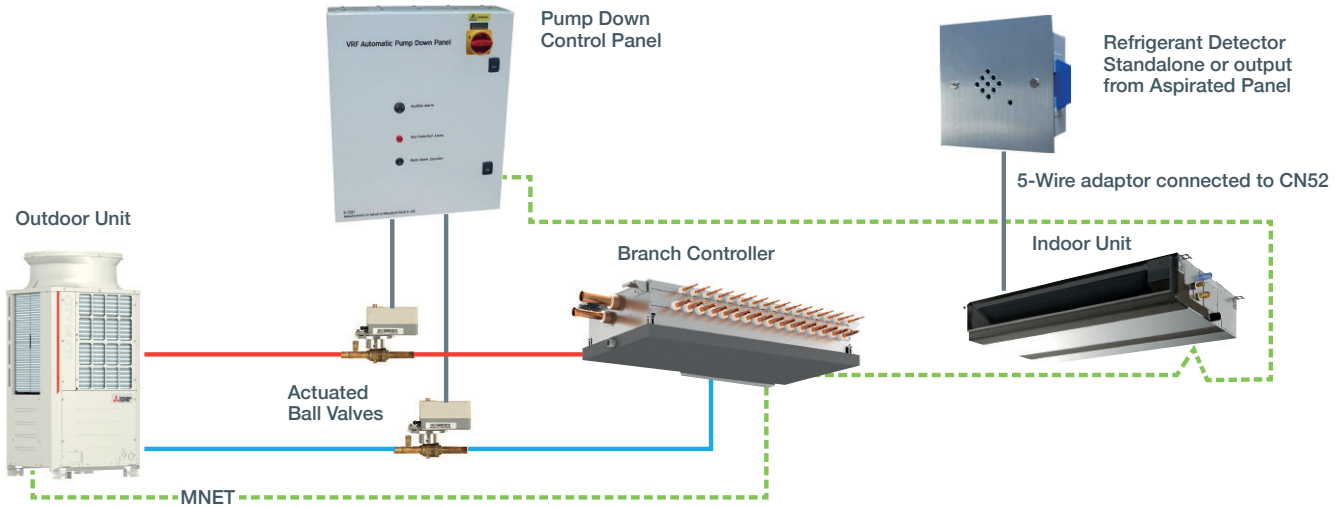


KS8-OC1

Pump Down Systems

	DESCRIPTION	MODEL REF.
City Multi Pump Down Control Panels	City Multi R2 Automatic Pump Down Control Panel 1 Outdoor Unit	KS8-OC1
	City Multi R2 Automatic Pump Down Control Panel 2 Outdoor Units	KS8-OC2
	City Multi R2 Automatic Pump Down Control Panel 3 Outdoor Units	KS8-OC3
	City Multi R2 Automatic Pump Down Control Panel 4 Outdoor Units	KS8-OC4
	City Multi R2 Automatic Pump Down Control Panel 5 Outdoor Units	KS8-OC5
	City Multi R2 Automatic Pump Down Control Panel 6 Outdoor Units	KS8-OC6
	City Multi R2 Automatic Pump Down Control Panel 7 Outdoor Units	KS8-OC7
	City Multi R2 Automatic Pump Down Control Panel 8 Outdoor Units	KS8-OC8
Actuated Ball Valves for Pump Down Operation	5/8" Actuated Ball Valve	KS8-5/8 ABV
	3/4" Actuated Ball Valve	KS8-3/4 ABV
	7/8" Actuated Ball Valve	KS8-7/8 ABV
	1 1/8" Actuated Ball Valve	KS8-1.1/8 ABV
	1 3/8" Actuated Ball Valve	KS8-1.3/8 ABV
	1 5/8" Actuated Ball Valve	KS8-1.5/8 ABV

Installation Example City Multi Pump Down System



It is recommended that system design is completed with your local Mitsubishi Electric Sales Office

Please Note: commissioning is required on pump down systems

The Energy Efficient

City Multi

VRF Range

Accessories / Optional Extras

DESCRIPTION	MODEL REF.
Outdoor Units	
Twinning Kit for PURY-EP/P400-650YSNW-A1	CMY-R100VBK4
Twinning Kit for PURY-EP/P700-1100YSNW-A1	CMY-R200VBK4
Twinning Kit for PUHY-P400-650YSNW-A1 / PQHY-P400-600YSLM-A1	CMY-Y100VBK3
Twinning Kit for PUHY-P700-900YSNW-A1 / PQHY-P650-900YSLM-A1	CMY-Y200VBK2
Twinning Kit for PUHY-P950-1350YSNW-A1	CMY-Y300VBK3
Twinning Kit for PUHY-RP400-650YSJM-B	CMY-RP100VBK
Twinning Kit for PUHY-RP700-900YSJM-B	CMY-RP200VBK
Twinning Kit for PQRY-P400-600YSLM-A1	CMY-Q100CBK2
Twinning Kit for PQRY-P700-900YSLM-A1	CMY-Q200CBK
Fin Guard Side surfaces S / L modules (2pc) (P200-P450)	PAC-FG01S-E
Fin Guard Side surfaces XL module (2 pc) (P500/P550)	PAC-FG02S-E
Fin Guard Rear surface S module (P200-P300)	PAC-FG01B-E
Fin Guard Rear surface L module (P350-P450)	PAC-FG02B-E
Fin Guard Rear surface XL module (P500/P550)	PAC-FG03B-E
Branch Pipe (Joint) for size 200 or below - total capacity of indoor units	CMY-Y102SS-G2
Branch Pipe (Joint) for size 201-400 - total capacity of indoor units	CMY-Y102LS-G2
Branch Pipe (Joint) for size 401-650 - total capacity of indoor units or first branch of P400-P650 / EP400-EP600	CMY-Y202S-G2
Branch Pipe (Joint) for size 651 or above - total capacity of indoor units or first branch of P700-P1250 / EP650-EP900	CMY-Y302S-G2
Branch Pipe for 2 branches (PUMY)	CMY-Y62-G-E
4-Way Blow Cassette Units	
Grille for PLFY-P-VFM-E	SLP-2FA
3D i-see sensor grille for PLFY-P-VFM-E	SLP-2FAE
Grille for PLFY-M-VEM-E	PLP-6EA
3D i-see sensor grille for PLFY-M-VEM-E	PLP-6EAE
Self elevating grille for PLFY-M-VEM-E	PLP-6EAJ
Corner panel with i-see sensor for PLFY-M-VEM-E	PAC-SE1ME-E
Corner panel with signal receiver for PLFY-M-VEM-E	PAR-SE9FA-E
Shutter plate for PLFY-M-VEM-E	PAC-SJ37SP-E
Multi-function casement for PLFY-M-VEM-E	PAC-SJ41TME

DESCRIPTION	MODEL REF.
Ceiling Concealed Ducted Units	
Long life filter for PEFY-P80VMHS-E	PAC-KE88LAF
Long life filter for PEFY-P100-140VMHS-E	PAC-KE89LAF
Long life filter for PEFY-P200-250VMHS-E	PAC-KE85LAF
Filter box for PEFY-P80VMHS-E (necessary when long life filter is used)	PAC-KE99TB
Filter box for PEFY-P100-140VMHS-E (necessary when long life filter is used)	PAC-KE140TB-F
Filter box for PEFY-P200-250VMHS-E (necessary when long life filter is used)	PAC-KE250TB-F
BC Controllers	
Joint Pipe	CMY-R160-J1
Joint and Reducer for connection to Slave BC Controllers (P200-P650 OU)	CMY-R101S-G
Joint and Reducer for connection to Slave BC Controllers (P700-P1100 OU)	CMY-R102S-G
Indoor Units	
Remote Temperature Sensor	PAC-SE41TS-E
Discreet Remote Temperature Sensor	KS9-BS1-A
LEV Kit Interface	PAC-LV11M
VRF Sanitary Water Heater	
Controller	PAR-W21MAA-J
Thermistor (5m cable)	THERM-10M

City Multi Hybrid VRF

The Modern Alternative







Contents

R32 Heat Recovery Outdoor Units

R2 Series High Efficiency (22.4-56kW) 1.6.12
R2 Series Standard (22.4-56kW) 1.6.14

R410A Water Cooled Condensing Units

WR2 Series Heat Recovery (22.4-56kW) 1.6.16

Indoor Units

PEFY-WP-VMS1-E Ultra Thin Ceiling Concealed Ducted 1.6.18
PEFY-WP-VMA-E Ceiling Concealed Ducted 1.6.20
PLFY-WL-VEM-E 4-Way Blow Ceiling Cassette 1.6.22
PLFY-WL-VFM-E 600x600 4-Way Blow Ceiling Cassette 1.6.24
PKFY-WL-VLM-E Wall Mounted 1.6.26
PFFY-WP-VLRMM-E Floor Standing Concealed 1.6.28

HBC Controllers 1.6.30

Accessories / Optional Extras 1.6.32

CITY MULTI | Energy Efficient HVRF Systems

R32 | HybridVRF

Hybrid VRF (HVRF) - The Modern Alternative

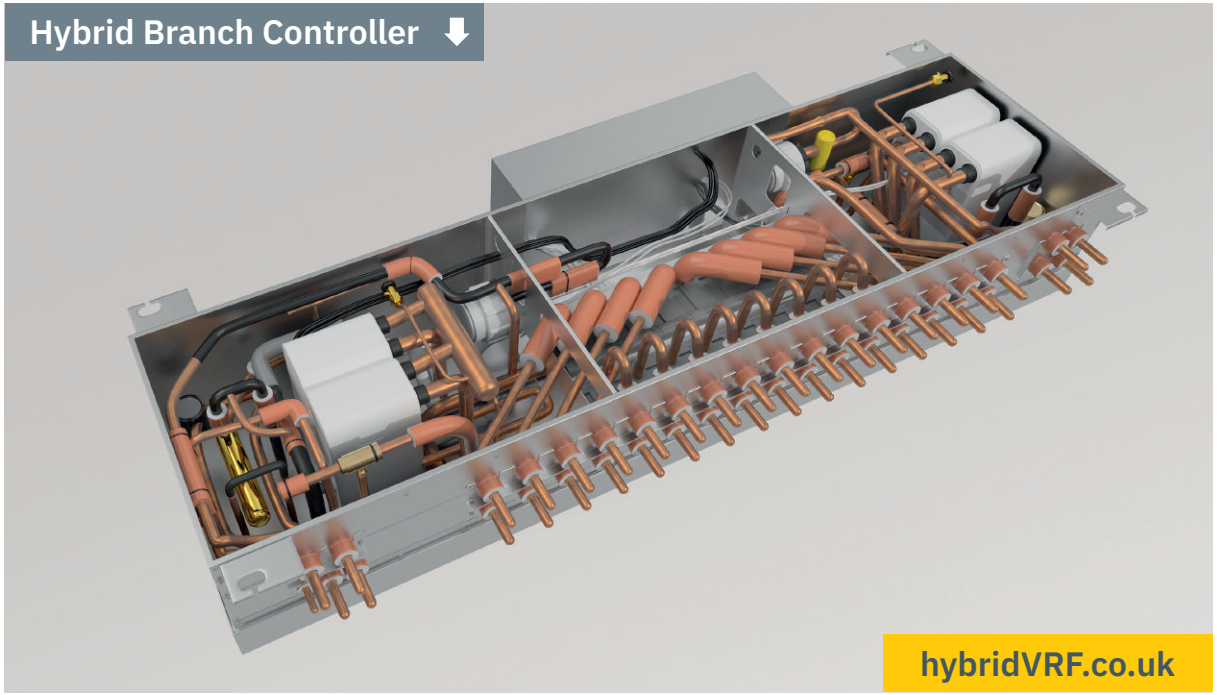
Hybrid VRF is a 2-pipe heat recovery VRF with water between the Hybrid Branch Controller (HBC) and indoor units.

You can install and design it as VRF whilst enjoying the features of a Chiller system, providing a complete modern solution for office buildings, hotels, medical centres, schools, high rise buildings, shopping centres and other commercial premises. Built and assembled in the same factory as our VRF units, it therefore carries City Multi's distinctive DNA in terms of technology, efficiency and reliability.

Hybrid VRF is quick, easy & flexible to design and install using the same control and network as VRF systems. The decentralised system means phased installation is possible with the same high levels of seasonal efficiency expected with VRF.

With water pipework connecting the indoor units, Hybrid VRF provides comfortable and stable air temperature control with no refrigerant in occupied spaces, meaning simple compliance to BS EN378 and removing the need for leak detection.

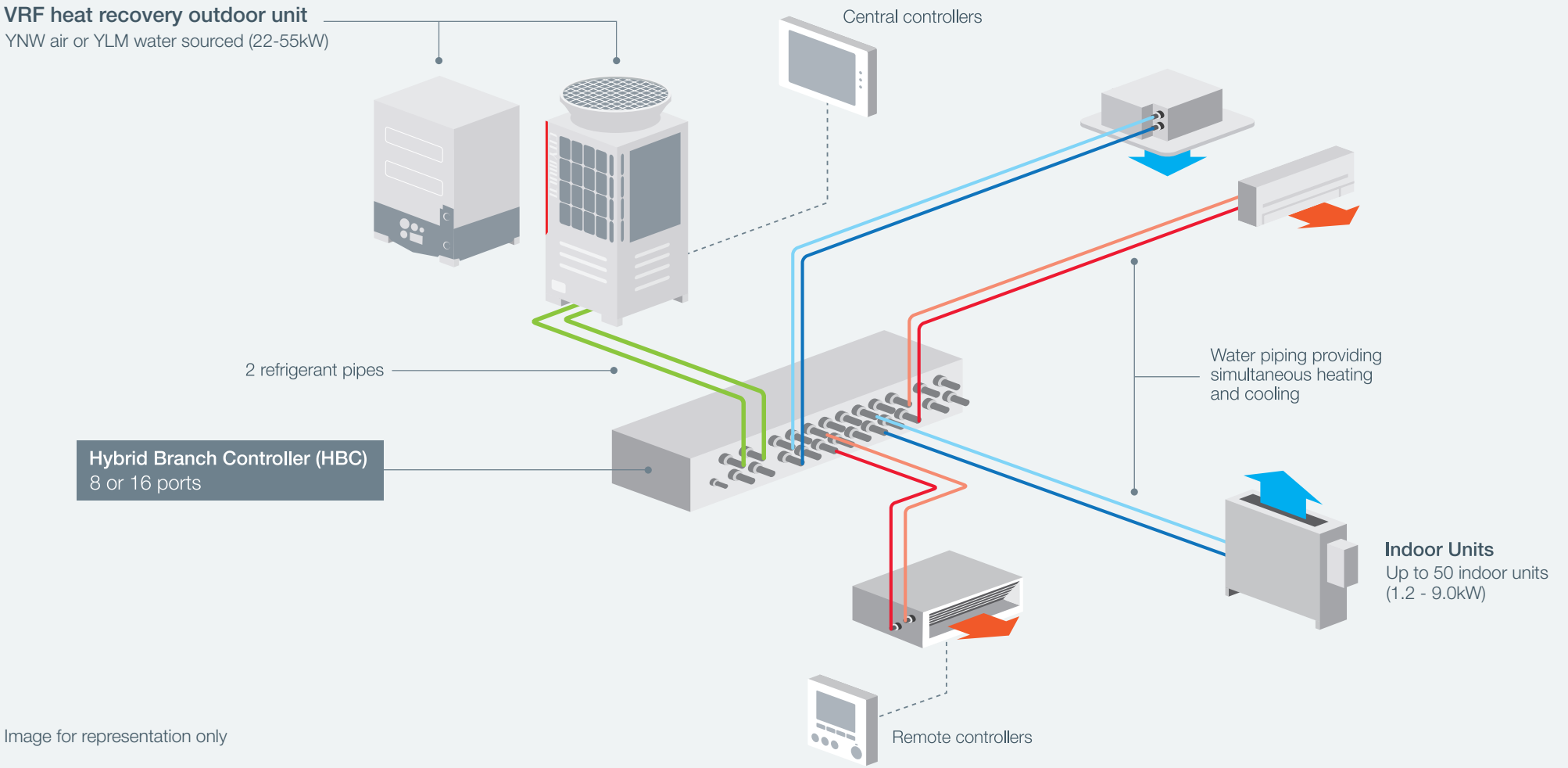
Hybrid Branch Controller ⬇



hybridVRF.co.uk



Hybrid VRF System Example



CITY MULTI | Energy Efficient HVRF Systems

R32 | HybridVRF

Hybrid VRF Features and Benefits

Flexible application options

- **Air Source YNW (22-56kW)** - using the latest City Multi VRF YNW technology, including an aluminium heat exchanger, reduced weight and improved seasonal efficiency
- **Water Source YLM (22-56kW)** - ideal where outdoor space is limited, building heat recovery and efficiency is demanded and a water loop is available

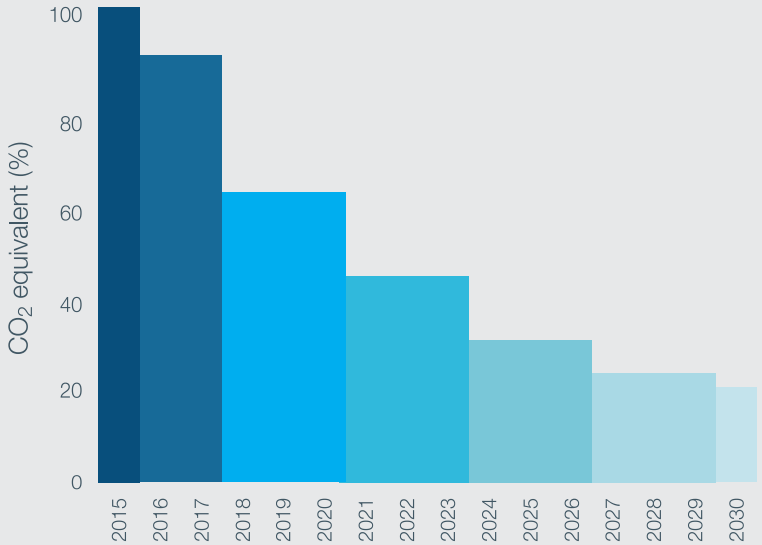
Meeting future requirements

- Energy and refrigerant legislation
- F-Gas phase down - HVRF is a viable option as we move towards 2030 and a lower GWP future





F-Gas - HFC phase down programme*



It is the requirement of manufacturers to reduce the CO_2 equivalent with options of:

- **Decreased kW on the market**
- **Lowering the GWP of refrigerant**
- **Reducing the amount of refrigerant**

Hybrid VRF offers the potential for both reducing the amount of refrigerant and changing to a lower GWP refrigerant.

* F-Gas 2015 phase down programme: http://ec.europa.eu/clima/policies/f-gas/legislation/index_en.htm

Fully packaged solution

- Valves, pumps and heat exchangers all contained within the HBC
- Commissioning is simple, using standard pipe sizes alongside common third party components
- Uses the same controls and M-NET network as VRF

No refrigerant in occupied spaces

- No need for leak detection according to BS EN378 refrigerant safety guidance
- Ideal for hotel bedrooms, hospitals, nursing homes, meeting rooms and living spaces where leak detection may traditionally be required

High sensible cooling and stable room temperatures

- Typically 10% increase in sensible cooling vs standard VRF
- Provides a gradual rate of change of temperature within the air conditioned space, delivering a comfortable and stable environment

Manageable phased installation

- Modular, smaller footprint and low weight outdoor units
- Flexible range of HVRF options - Air or Water source





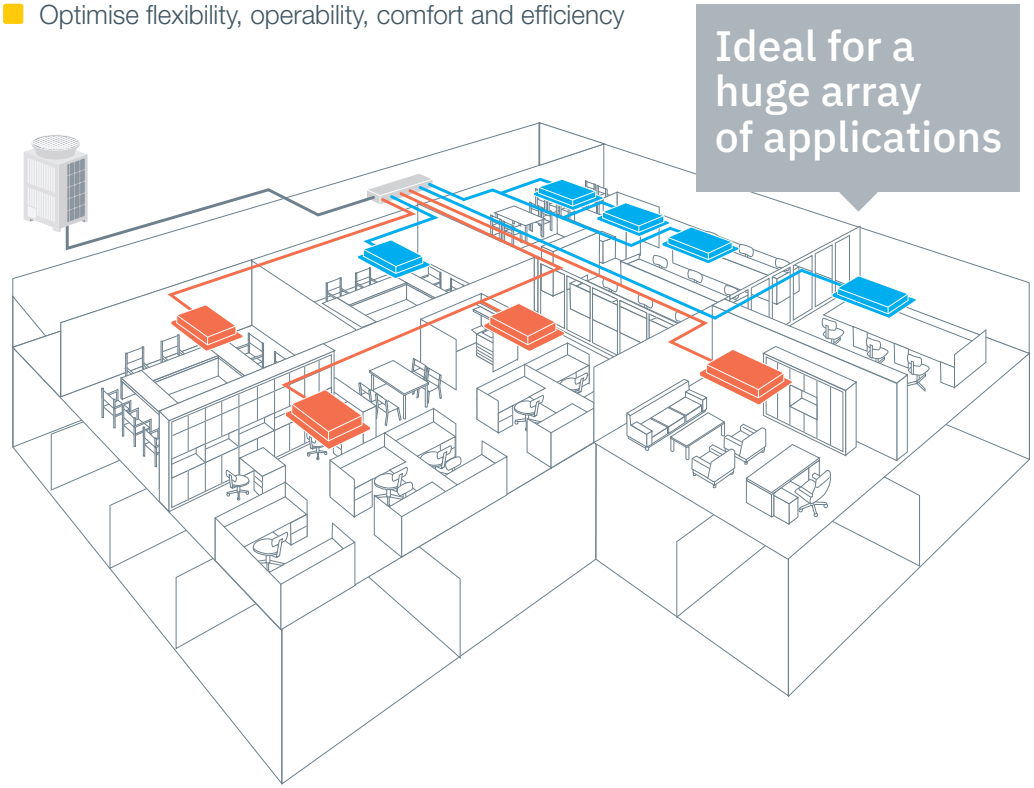
Hybrid VRF Features and Benefits

Simplified 2-pipe design and installation

- 2-pipes throughout the system - no complex 4-pipe design
- Flexible design using up to 50 fan coils per system over 4 HBCs
- Copper or MLC plastic pipe on water side

Simultaneous heating and cooling with full heat recovery

- Between fan coils and building zones
- Optimise flexibility, operability, comfort and efficiency



Cat A to Cat B is simple

- Ideal for office fit outs
- Water piping between HBC and indoor units
- Easier to isolate and decommission, reducing installation costs

Heat recovery defrost method

- Typical defrost times of 5 minutes with immediate return to heating
- Improved comfort throughout the heating season, ideal for office applications
- No defrost on Water Source VRF models

Intuitive load adjusting

- The latest YNW VRF refrigerant control plus water side optimisation using flow control valves, inverter driven pumps and simultaneous heat recovery
- Provides only the capacity required, therefore improving efficiency and comfort

Quiet operation

- Water based fan coils: ducted, cassette, wall and floor mount chassis units - based on Mitsubishi Electric VRF indoor units
- Low noise levels, variable air flow



Where can Hybrid VRF be applied

There is a high priority for buildings around the UK to combine energy efficiency, internal comfort and an easy control solution. Hybrid VRF meets all of these needs across multiple applications.

Hotels

Customer comfort is paramount with legislation focusing attention on energy use and seeking to limit the use of refrigerant in occupied spaces. Hybrid VRF removes the need for leak detection, thereby reducing the total cost of the system and on-going maintenance of the leak detection systems itself.

Offices

Modern offices and commercial buildings need air conditioning systems that provide the highest levels of comfort, as energy efficiently as possible. Furthermore, an office can be transformed simply from a CAT A to a CAT B fit out, as water pipes can easily be isolated from the Hybrid Branch Controller box, making building layout changes straight forward.

Hospitals

Hybrid VRF can deliver mild off-coil temperatures through the water based indoor units, without the need for refrigerant in occupied spaces, making these systems perfect for use in medical environments.

Mixed use buildings

As we look for ways to manage crowded city centres, more mixed use properties are being developed, often combining retail, office, leisure and living spaces in the same building. Hybrid VRF provides a fully adaptable solution benefitting from air or water source options and using an extensive range of controls to ensure optimum performance.

Education

Providing comfort through temperature stability, removal of refrigerant from the occupied space and reduced noise - Hybrid VRF provides a truly integrated solution to aid study.





CITY MULTI | Energy Efficient HVRF Systems

R32 | HybridVRF

Ecodesign and Seasonal Efficiency

With buildings accounting for around half of all UK greenhouse emissions, legislation is demanding increased energy efficiency in this sector.

The Ecodesign Directive for Energy Related Products (ErP) is focusing on this area in a bid to reduce overall energy consumption and to accelerate market transformation to more energy efficient products.

An air conditioner will vary performance over changing seasons, which means calculating seasonal performance is important to ascertain the true performance of an air conditioning system. The Ecodesign Directive reflects this by setting minimum efficiency requirements and a new method of measuring performance that has been introduced across Europe.

The European Standard BS EN14825 sets the seasonal performance calculation for an air conditioning system.

For more information visit the website: **erp.mitsubishielectric.eu/erp**

SEER/SCOP available separately in the 'City Multi HVRF Seasonal Efficiency' document.





Capacity and efficiency conditions

Nominal Conditions: Cooling; indoor 27ºC DB, 19ºC WB; outdoor 35ºC DB, 24ºC WB.
Nominal Conditions: Heating; indoor 20ºC DB; outdoor 7ºC DB, 6ºC WB.
UK Conditions: Cooling; indoor 21ºC DB, 15ºC WB; outdoor 27ºC DB.
UK Conditions: Heating; indoor 20ºC DB; outdoor 0°C DB, -1ºC WB.





Outdoor / Condensing Unit Range

Air Cooled

Heat Recovery - R2 Series	P	200	250	300	350	400	450	500
	(kW)	22	28	34	40	45	50	56
High Efficiency PURY-EM (YNW) R32 		S	S	S	L	L	L	XL
Standard Efficiency PURY-M (YNW) R32 		S	S	S	L	L	L	XL

Water Cooled

Heat Recovery - WR2 Series	P	200	250	300	350	400	450	500
	(kW)	22	28	34	40	45	50	56
PQRY-P (YLM) R410A 		●	●	●	●	●	●	●

S Small chassis L Large chassis XL Extra Large chassis

Indoor Unit Range

Model	Range	P	10	15	20	25	32	40	50	63	80
		(kW)	1.2	1.7	2.2	2.8	3.6	4.5	5.6	7.1	9.0
Ceiling Concealed Ducted	PEFY-WP-VMS1-E (Ultra Thin) R32 R410A 		●	●	●	●	●	●	●		
	PEFY-WP-VMA-E R32 R410A 				●	●	●	●	●	●	●
4-Way Blow Ceiling Cassette	PLFY-WL-VEM-E R32 R410A 						●	●	●		
	PLFY-WL-VFM-E (600 x 600) R32 R410A 			●	●	●	●				
Wall Mounted	PKFY-WL-VLM-E R32 R410A 		●	●	●	●	●	●			
Floor Standing	PFFY-WP-VLRMM-E R32 R410A 				●	●	●	●	●		

R2 Series HVRF High Efficiency (22.4-56kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- Highest specification, highest efficiency heat recovery system available
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance

R32





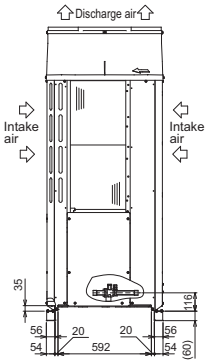
R32 | HybridVRF

OUTDOOR UNITS			PURY-EM200YNW-A1	PURY-EM250YNW-A1	PURY-EM300YNW-A1	PURY-EM300YNW-A1 X 2HBC	PURY-EM350YNW-A1	PURY-EM350YNW-A1 X 2HBC	PURY-EM400YNW-A1	PURY-EM450YNW-A1	PURY-EM500YNW-A1
CAPACITY (kW)	Heating (nominal)		25.0	31.5	37.5	37.5	45.0	45.0	50.0	56.0	58.0
	Cooling (nominal)		22.4	28.0	33.5	33.5	40.0	40.0	45.0	50.0	56.0
	High Performance Heating (UK)		25.0	31.5	37.5	37.5	42.8	42.8	47.5	50.4	52.2
	COP Priority Heating (UK)		22.8	28.7	32.3	32.3	38.7	38.7	43.0	49.3	51.0
	Cooling (UK)		20.1	25.1	30.0	30.0	35.8	35.8	40.3	44.8	50.1
POWER INPUT (kW)	Heating (nominal)		6.23	8.84	10.46	9.93	13.10	12.16	13.88	15.77	17.45
	Cooling (nominal)		5.13	7.69	10.03	8.52	13.91	11.33	13.84	15.24	18.06
	High Performance Heating (UK)		7.54	10.70	14.33	13.60	17.95	16.66	16.10	18.29	20.24
	COP Priority Heating (UK)		6.23	8.84	10.46	9.93	13.10	12.16	13.46	15.30	16.93
	Cooling (UK)		2.98	4.46	5.82	4.94	8.07	6.57	9.00	9.91	11.74
COP / EER (nominal)			4.01 / 4.36	3.56 / 3.64	3.58 / 3.33	3.77 / 3.93	3.43 / 2.87	3.70 / 3.53	3.60 / 3.25	3.55 / 3.28	3.61 / 3.10
MAX No. OF CONNECTABLE INDOOR UNITS			30	37	45	45	35	35	40	45	50
MAX CONNECTABLE CAPACITY			50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High		170	185	240	240	250	250	315	315	295
PIPE SIZE mm (in)	Gas		19.05 (3/4")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid		15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
SOUND PRESSURE LEVEL (dBA)	Heating / Cooling		59.0 / 59.0	61.0 / 60.5	67.0 / 61.0	67.0 / 61.0	64.0 / 62.5	64.0 / 62.5	69.0 / 65.0	70.0 / 65.5	64.5 / 63.5
SOUND POWER LEVEL (dBA)	Heating / Cooling		78.0 / 76.0	80.0 / 78.5	86.5 / 80.0	86.5 / 80.0	83.0 / 81.0	83.0 / 81.0	88.0 / 83.0	89.0 / 83.0	84.0 / 82.0
WEIGHT (kg)			231	231	231	231	276	276	280	305	348
DIMENSIONS (mm)	Width		920	920	920	920	1240	1240	1240	1240	1750
	Depth		740	740	740	740	740	740	740	740	740
(1798mm without legs)	Height		1858	1858	1858	1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1			380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1			Three	Three	Three	Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*1			8	8	8	8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1 Heating/Cooling [MAX]			9.9 / 8.2 [16.1]	14.1 / 12.3 [21.8]	16.7 / 16.0 [23.9]	15.9 / 13.6 [23.9]	21.0 / 22.3 [30.0]	19.5 / 18.1 [30.0]	22.2 / 22.1 [35.9]	25.2 / 24.4 [36.9]	27.9 / 28.9 [46.9]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling		-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1			1 x 20	1 x 25	1 x 25	1 x 25	1 x 32	1 x 32	1 x 40	1 x 40	1 x 50
MAINS CABLE No. Cores*1			4	4	4	4	4	4	4	4	4
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R32 (GWP 675)			5.2 / 3.5	5.2 / 3.5	5.2 / 3.5	5.2 / 3.5	8 / 5.4	8 / 5.4	8 / 5.4	10.8 / 7.3	10.8 / 7.3
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R32 (GWP 675)			13.5 / 9.1	13.5 / 9.1	15.5 / 10.5	15.5 / 10.5	15.5 / 10.5	15.5 / 10.5	19.5 / 13.2	19.5 / 13.2	19.5 / 13.2

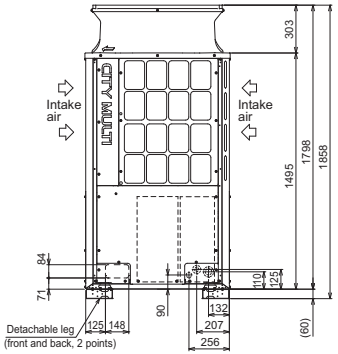
Notes: *SEER/SCOP available separately in the 'City Multi HVRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules. Specification subject to change.
R410A equivalent systems are also available - please contact your local sales office for further information.

Product Dimensions PURY-EM200/250/300YNW-A1

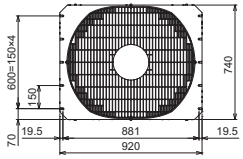
Side View



Front View

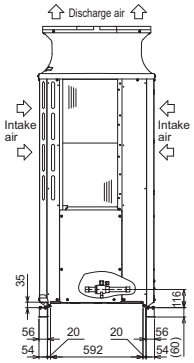


Upper View

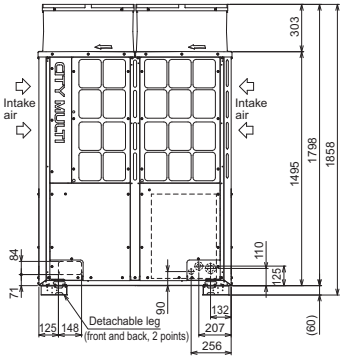


Product Dimensions PURY-EM350/400/450YNW-A1

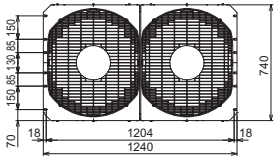
Side View



Front View

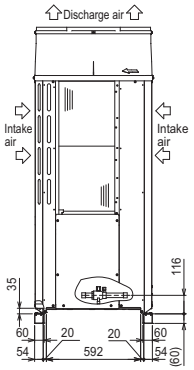


Upper View

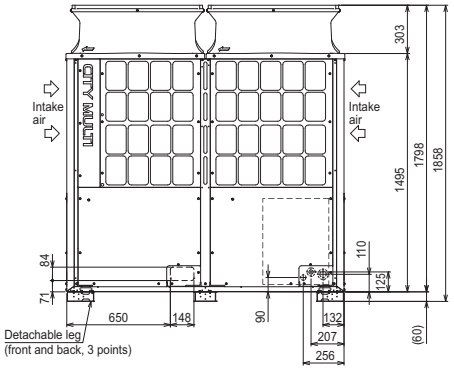


Product Dimensions PURY-EM500YNW-A1

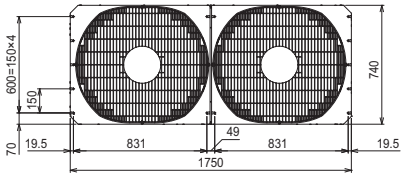
Side View



Front View



Upper View



R2 Series HVRF Standard Efficiency (22.4-56kW)

Simultaneous Heating and Cooling with Heat Recovery Outdoor Unit

Throughout the year, many buildings require cooling in some areas and heating in others - even in adjacent rooms. The outstanding City Multi R2 system meets these requirements by distributing surplus heat from cooling operations (and vice versa) to rooms where it is needed. This efficiency can result in energy savings up to 30% over conventional systems.

Key Features

- High efficiency heat recovery system
- Delivers the highest levels of comfort, both thermally and acoustically
- Flexible design, installation and maintenance

R32





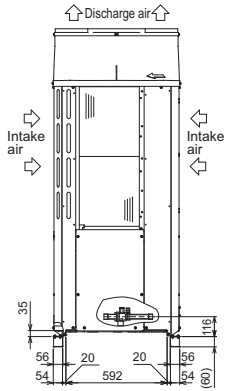
R32 | HybridVRF

OUTDOOR UNITS		PURY-M200YNW-A1	PURY-M250YNW-A1	PURY-M300YNW-A1	PURY-M300YNW-A1 X 2HBC	PURY-M350YNW-A1	PURY-M350YNW-A1 X 2HBC	PURY-M400YNW-A1	PURY-M450YNW-A1	PURY-M500YNW-A1
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5	37.5	45.0	45.0	45.0	56.0	58.0
	Cooling (nominal)	22.4	28.0	33.5	33.5	40.0	40.0	45.0	50.0	56.0
	High Performance Heating (UK)	25.0	31.5	37.5	37.5	42.8	42.8	42.8	50.4	52.2
	COP Priority Heating (UK)	22.8	28.7	32.3	32.3	38.7	38.7	38.7	49.3	51.0
	Cooling (UK)	20.1	25.1	30.0	30.0	35.8	35.8	40.3	44.8	50.1
POWER INPUT (kW)	Heating (nominal)	6.39	9.15	11.00	10.33	13.14	12.16	14.08	16.18	18.26
	Cooling (nominal)	5.53	8.40	11.65	9.88	14.93	12.15	15.15	15.47	22.25
	High Performance Heating (UK)	7.73	11.07	15.07	14.15	18.00	16.66	16.33	18.77	21.18
	COP Priority Heating (UK)	6.39	9.15	11.00	10.33	13.14	12.16	13.66	15.69	17.71
	Cooling (UK)	3.21	4.87	6.76	5.73	8.66	7.05	9.85	10.06	14.46
COP / EER (nominal)		3.91 / 4.05	3.44 / 3.33	3.40 / 2.87	3.63 / 3.39	3.42 / 2.67	3.70 / 3.29	3.55 / 2.97	3.46 / 3.23	3.45 / 2.51
MAX No. OF CONNECTABLE INDOOR UNITS		30	37	45	45	35	35	40	45	50
MAX CONNECTABLE CAPACITY		50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m^3/min)	High	170	185	240	240	250	250	315	315	295
PIPE SIZE mm (in)	Gas	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
	Liquid	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")
SOUND PRESSURE LEVEL (dBA)	Heating / Cooling	59.0 / 59.0	61.0 / 60.5	67.0 / 61.0	67.0 / 61.0	64.0 / 62.5	64.0 / 62.5	69.0 / 65.0	70.0 / 65.5	64.5 / 63.5
SOUND POWER LEVEL (dBA)	Heating / Cooling	78.0 / 76.0	80.0 / 78.5	86.5 / 80.0	86.5 / 80.0	83.0 / 81.0	83.0 / 81.0	88.0 / 83.0	89.0 / 83.0	84.0 / 82.0
WEIGHT (kg)		227	227	227	227	270	270	273	293	337
DIMENSIONS (mm)	Width	920	920	920	920	1240	1240	1240	1240	1750
	Depth	740	740	740	740	740	740	740	740	740
(1798mm without legs)	Height	1858	1858	1858	1858	1858	1858	1858	1858	1858
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)*1		8	8	8	8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	10.2 / 8.8 [16.1]	14.6 / 13.4 [22.5]	17.6 / 18.6 [25.6]	16.5 / 15.8 [25.6]	21.0 / 23.9 [31.6]	19.5 / 19.4 [31.6]	22.5 / 24.2 [39.3]	25.9 / 24.8 [40.2]	29.2 / 35.6 [56.6]
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52	-20~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A)*1		1 x 20	1 x 25	1 x 32	1 x 32	1 x 32	1 x 32	1 x 40	1 x 50	1 x 63
MAINS CABLE No. Cores*1		4	4	4	4	4	4	4	4	4
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R32 (GWP 675)		5.2 / 3.5	5.2 / 3.5	5.2 / 3.5	5.2 / 3.5	8 / 5.4	8 / 5.4	8 / 5.4	10.8 / 7.3	10.8 / 7.3
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R32 (GWP 675)		13.5 / 9.1	13.5 / 9.1	15.5 / 10.5	15.5 / 10.5	15.5 / 10.5	15.5 / 10.5	19.5 / 13.2	19.5 / 13.2	19.5 / 13.2

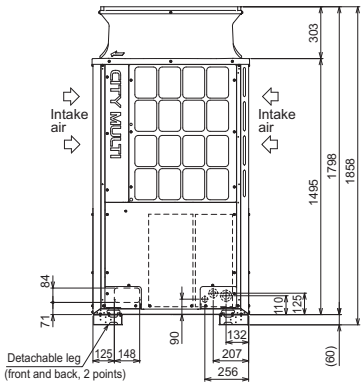
Notes: *SEER/SCOP available separately in the 'City Multi HVRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules. Specification subject to change.
R410A equivalent systems are also available - please contact your local sales office for further information.

Product Dimensions PURY-M200/250/300YNW-A1

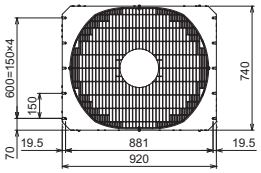
Side View



Front View

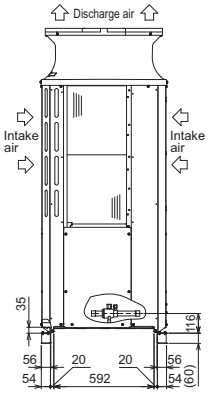


Upper View

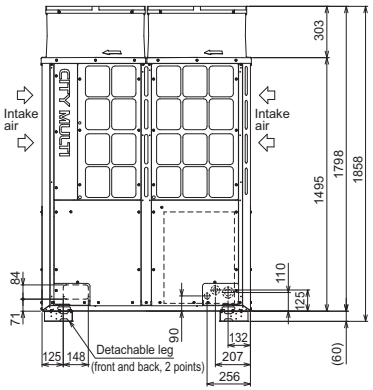


Product Dimensions PURY-M350/400/450YNW-A1

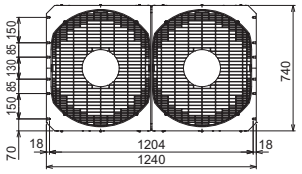
Side View



Front View

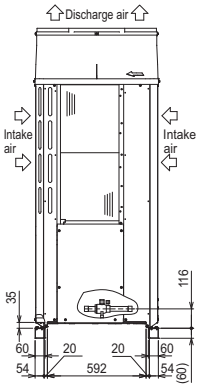


Upper View

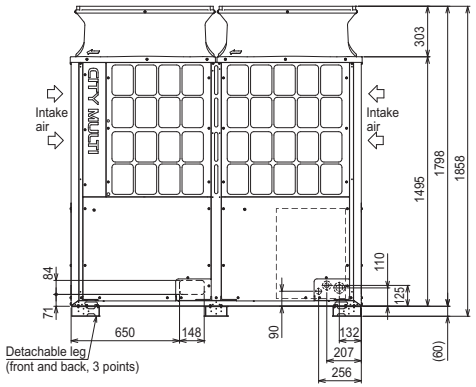


Product Dimensions PURY-M500YNW-A1

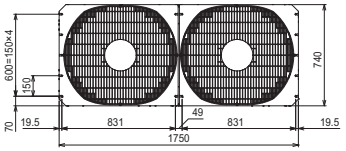
Side View



Front View



Upper View



WR2 Series HVRF (22.4-56kW)

Simultaneous Heating and Cooling with Double Heat Recovery, Water Cooled Condensing Unit

Ideal where outdoor space is limited, building heat recovery and efficiency is demanded and a water loop is available, City Multi WR2 Water Cooled models provide the ultimate solution for the majority of applications including hotels, offices, leisure, retail and high end residential.

First developed 25 years ago, the City Multi Water Cooled system utilises water instead of air as an energy transfer medium, but benefits from all the same technology and flexibility of an air sourced VRF.

Key Features

- High efficiency, modular systems, with ability to recover energy between units on the water circuit, in either a closed or open loop building, or ground source application
- Benefits from a wide indoor unit range and advanced control options
- Very low impact footprint and service space requirements, ideal for internal location

R410A



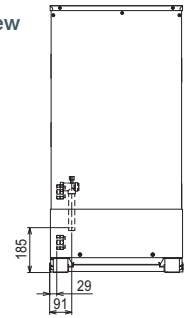


CONDENSING UNITS		PQRY-P 200YLM-A1	PQRY-P250YLM-A1	PQRY-P300YLM-A1	PQRY-P300YLM-A1 (2 X MAIN)	PQRY-P350YLM-A1	PQRY-P350YLM-A1 (2 X MAIN)	PQRY-P400YLM-A1	PQRY-P450YLM-A1	PQRY-P500YLM-A1
CAPACITY (kW)	Heating (nominal)	25.0	31.5	37.5	37.5	45.0	45.0	50.0	56.0	63.0
	Cooling (nominal)	22.4	28.0	33.5	33.5	40.0	40.0	45.0	50.0	56.0
POWER INPUT (kW)	Heating (nominal)	4.04	5.41	7.13	6.79	8.87	8.25	9.45	11.11	13.07
	Cooling (nominal)	3.97	5.44	7.55	6.71	9.98	8.72	10.05	12.05	14.58
OPERATING WATER VOLUME (m^3/h)		3.0 ~ 7.2	3.0 ~ 7.2	3.0 ~ 7.2	3.0 ~ 7.2	4.5 ~ 11.6	4.5 ~ 11.6	4.5 ~ 11.6	4.5 ~ 11.6	4.5 ~ 11.6
GUARANTEED OPERATING RANGE (°C)	Heating / Cooling	-5~45 / -5~45	10~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45	-5~45 / -5~45
COP / EER (nominal)		6.18 / 5.64	5.82 / 5.14	5.25 / 4.43	5.52 / 4.99	5.07 / 4.00	5.45 / 4.58	5.29 / 4.47	5.04 / 4.14	4.82 / 3.84
MAX NO. OF CONNECTABLE INDOOR UNITS		20	25	30	30	35	35	40	45	50
MAX CONNECTABLE CAPACITY		50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%	50 ~ 150%
PIPE SIZE mm (in)	Gas	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")	28.58 (1 1/8")
	Liquid	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")	19.05 (3/4")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")
SOUND PRESSURE LEVEL (dBA)		46	48	54	54	52	52	52	54	54
SOUND POWER LEVEL (dBA)		60	62	68	68	66	66	66	70	70.5
WEIGHT (kg)		172	172	172	172	216	216	216	216	216
DIMENSIONS (mm)	Width	880	880	880	880	880	880	880	880	880
	Depth	550	550	550	550	550	550	550	550	550
	Height	1100	1100	1100	1100	1450	1450	1450	1450	1450
ELECTRICAL SUPPLY*1		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE*1		Three	Three	Three	Three	Three	Three	Three	Three	Three
STARTING CURRENT (A)		8	8	8	8	8	8	8	8	8
NOMINAL SYSTEM RUNNING CURRENT (A)*1	Heating / Cooling [MAX]	6.1 / 5.7 [16.1]	7.8 / 7.5 [16.1]	9.6 / 9.3 [18.6]	9.6 / 9.3 [18.6]	11.6 / 11.0 [23.1]	11.6 / 11.0 [23.1]	12.9 / 12.4 [27.6]	15.1 / 14.3 [32.9]	17.6 / 17.2 [39.2]
FUSE RATING (BS88) - HRC (A)*1		1 x 20	1 x 20	1 x 20	1 x 20	1 x 25	1 x 25	1 x 32	1 x 40	1 x 40
MAINS CABLE No. Cores*1		4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth	4 + earth
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		5.0 / 10.4	5.0 / 10.4	5.0 / 10.4	5.0 / 10.4	6.0 / 12.5	6.0 / 12.5	6.0 / 12.5	6.0 / 12.5	6.0 / 12.5
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t) R410A (GWP 2088)		27.0 / 56.4	32.0 / 66.8	33.0 / 68.9	33.0 / 68.9	52.0 / 108.6	52.0 / 108.6	52.0 / 108.6	53.0 / 110.7	55.0 / 114.8

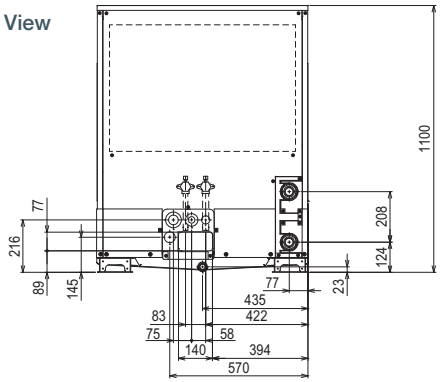
Notes: *SEER/SCOP available separately in the 'City Multi HVRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.
*1 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

Product Dimensions PQRY-P200/250/300YLM-A1

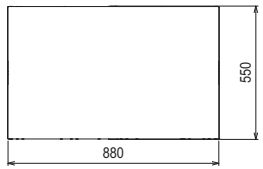
Side View



Front View

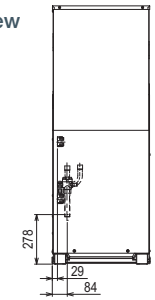


Upper View

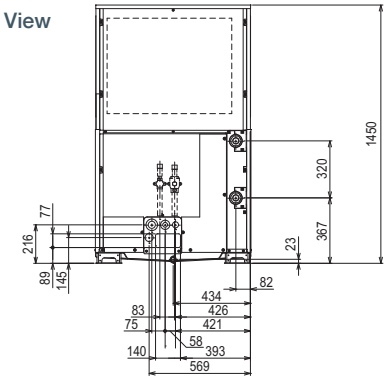


Product Dimensions PQRY-P350/400/450/500YLM-A1

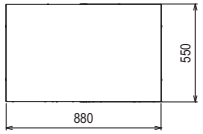
Side View



Front View



Upper View



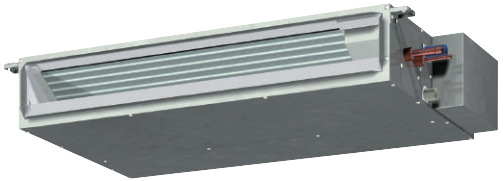
PEFY-WP-VMS1-E

Ultra Thin Ceiling Concealed Ducted Indoor Unit

The ultra thin ceiling concealed ducted indoor unit offers increased flexibility and is particularly suitable for locations where low noise operation is desired from a slimline body, such as hotels.

Key Features

- Ultra thin body - height of only 200mm & width of only 790mm (size WP10-25)
- Extremely quiet operation - as low as 22dBA (size WP10-20)
- Static pressure of 5-50Pa
- Available in 1.1 and 1.5kW sizes, which are ideal for hotel rooms

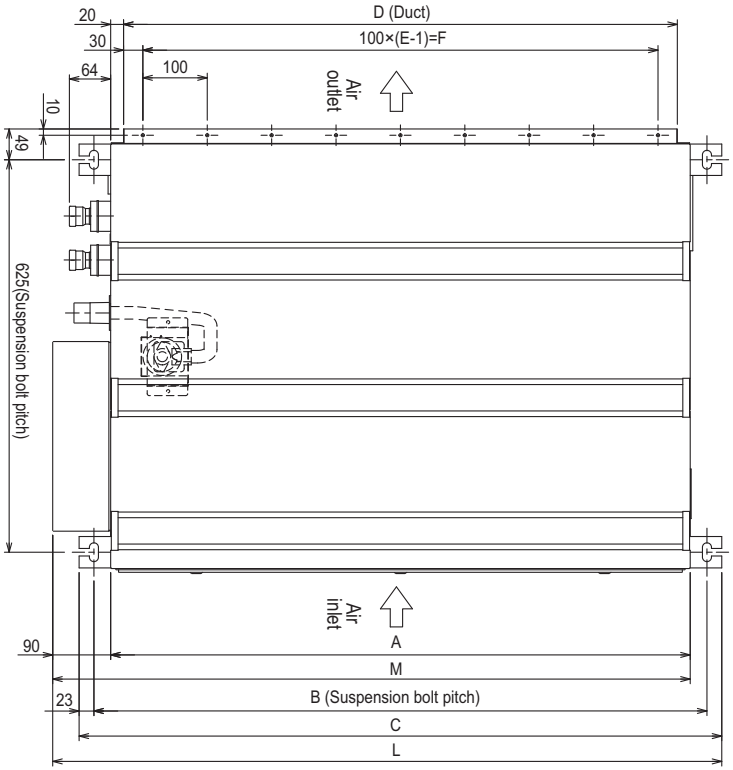


R32 R410A

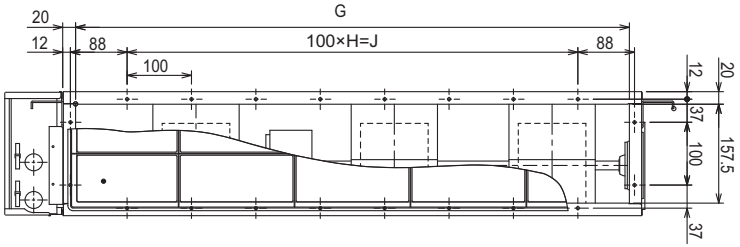
INDOOR UNITS		PEFY-WP10VMS1-E	PEFY-WP15VMS1-E	PEFY-WP20VMS1-E	PEFY-WP25VMS1-E	PEFY-WP32VMS1-E	PEFY-WP40VMS1-E	PEFY-WP50VMS1-E
CAPACITY (kW)	Heating (nominal)	1.4	1.9	2.5	3.2	4.0	5.0	6.3
	Cooling (nominal)	1.2	1.7	2.2	2.8	3.6	4.5	5.6
	UK Heating	1.4	1.9	2.5	3.2	4.0	5.0	6.3
	UK Total Cooling - Hi (Sensible)	1.10 (1.00)	1.50 (1.50)	2.00 (1.70)	2.50 (2.00)	3.20 (2.70)	4.00 (3.20)	5.00 (4.00)
	UK Total Cooling - Mi2	-	-	-	-	-	-	-
	UK Total Cooling - Mi1	1.07	1.44	1.89	2.32	3.03	3.82	4.78
	UK Total Cooling - Lo	1.03	1.34	1.76	2.08	2.88	3.61	4.51
POWER INPUT (kW)	Heating (nominal)	0.03	0.03	0.03	0.04	0.05	0.07	0.07
	Cooling (nominal)	0.03	0.05	0.05	0.06	0.07	0.09	0.09
AIRFLOW (l/s)	Lo-Mi-Hi	67-75-83	83-100-117	92-108-133	92-117-150	133-150-183	158-183-217	200-233-275
EXTERNAL STATIC PRESSURE (Pa)		5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50	5-15-35-50
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	22-23-25	22-24-28	22-25-29	23-26-30	28-30-33	30-32-35	30-33-36
WEIGHT (kg)		19	19	20	20	25	25	27
DIMENSIONS (mm)	Width	790	790	790	790	990	990	1190
	Depth	700	700	700	700	700	700	700
	Height	200	200	200	200	200	200	200
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.33 / 0.21	0.33 / 0.44	0.38 / 0.49	0.40 / 0.51	0.50 / 0.61	0.62 / 0.73	0.66 / 0.77
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3	3
WATER PIPE CONNECTION		3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW

Note: HVRF indoor units can only be configured with the CMB-WM HBC (HVRF) and PURY-(E)M YNW-A1 or PQRY-P YLM-A1 outdoor units.

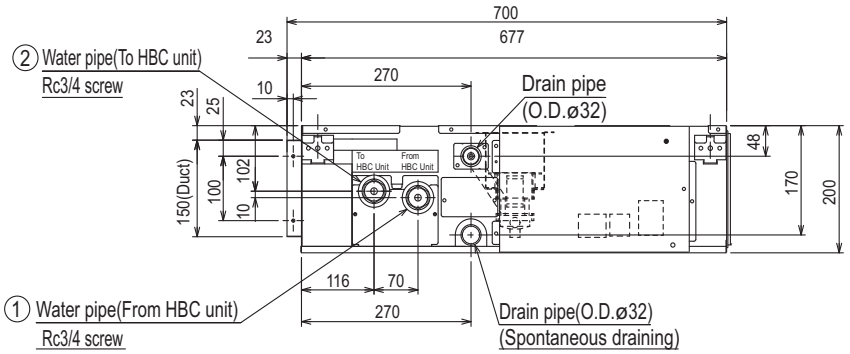
Upper View



Front View



Side View



Model	A	B	C	D	E	F	G	H	J	K	L	M	① Water pipe (From HBC unit)	② Water pipe (To HBC unit)
PEFY-WP10VMS1-E	700	752	798	660	7	600	660	5	500	16	839	790	Rc3/4 screw	
PEFY-WP15VMS1-E														
PEFY-WP20VMS1-E														
PEFY-WP25VMS1-E														
PEFY-WP32VMS1-E	900	952	998	860	9	800	860	7	700	20	1039	990		
PEFY-WP40VMS1-E														
PEFY-WP50VMS1-E	1100	1152	1198	1060	11	1000	1060	9	900	24	1239	1190		

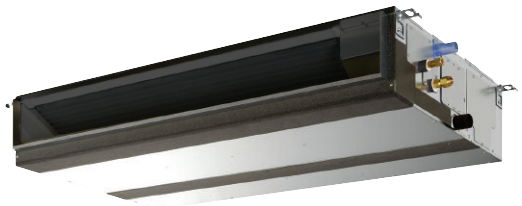
PEFY-WP-VMA-E

Ceiling Concealed Ducted Indoor Unit

The PEFY-WP-VMA-E ducted indoor unit is concealed within the ceiling space to allow unobtrusive air conditioning. Flexibility of duct layout allows air flow patterns to be arranged to suit any application.

Key Features

- Low height - only 250mm
- Wide range of external static pressure settings across entire range (35-150Pa)
- Low noise levels thanks to the use of a centrifugal fan - as low as 23dBA (size 20-25)
- Drain pump included as standard
- CN105 connector available - connect to MELCOBEMS MINI for simple BEMS interfacing

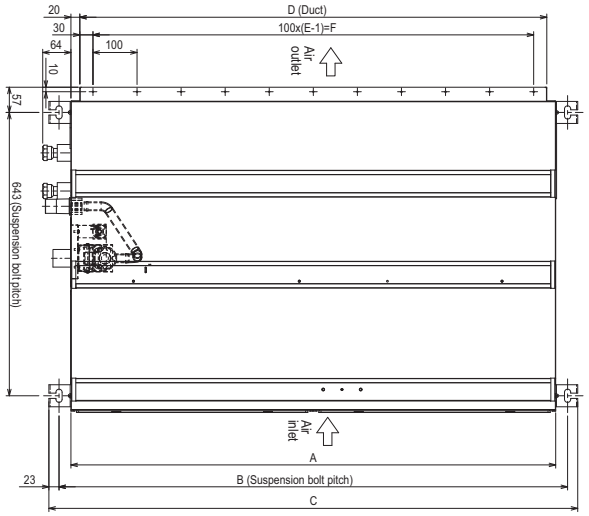


INDOOR UNITS		PEFY-WP20VMA-E	PEFY-WP25VMA-E	PEFY-WP32VMA-E	PEFY-WP40VMA-E	PEFY-WP50VMA-E	PEFY-WP63VMA-E	PEFY-WP80VMA-E
CAPACITY (kW)	Heating (nominal)	2.5	3.2	4.0	5.0	6.3	8.0	10.0
	Cooling (nominal)	2.2	2.8	3.6	4.5	5.6	7.1	9.0
	UK Heating	2.5	3.2	4.0	5.0	6.3	8.0	10.0
	UK Total Cooling - Hi (Sensible)	2.00 (1.80)	2.50 (2.50)	3.20 (3.00)	4.00 (3.80)	5.00 (4.20)	6.40 (5.10)	8.10 (7.20)
	UK Total Cooling - Mi2	-	-	-	-	-	-	-
	UK Total Cooling - Mi1	1.92	2.40	3.07	3.84	4.80	6.15	7.76
	UK Total Cooling - Lo	1.79	2.24	2.85	3.53	4.41	5.64	7.17
POWER INPUT (kW)	Heating (nominal)	0.05	0.07	0.9	0.12	0.12	0.12	0.22
	Cooling (nominal)	0.07	0.09	0.11	0.14	0.14	0.14	0.24
AIRFLOW (l/s)	Lo-Mi-Hi	125-150-175	167-200-233	200-242-283	242-300-350	242-300-350	242-300-350	383-467-550
EXTERNAL STATIC PRESSURE (Pa)		35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150	35-50-70-100-150
SOUND PRESSURE LEVEL (dBA) (50Pa)	Lo-Mi-Hi	23-26-29	23-27-30	25-29-32	26-29-34	26-29-34	26-29-34	28-33-37
WEIGHT (kg)		21	26	26	31	31	31	40
DIMENSIONS (mm)	Width	700	900	900	1100	1100	1100	1400
	Depth	732	732	732	732	732	732	732
	Height	250	250	250	250	250	250	250
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.44 / 0.55	0.53 / 0.64	0.63 / 0.74	1.04 / 1.15	1.04 / 1.15	1.04 / 1.15	1.36 / 1.47
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3	3
WATER PIPE CONNECTION		3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW	1 1/4" BSP SCREW	1 1/4" BSP SCREW

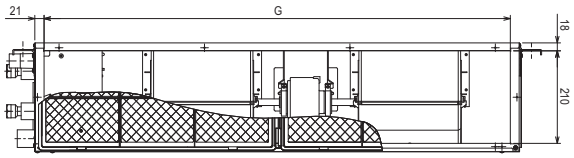
Note: HVRF indoor units can only be configured with the CMB-WM HBC (HVRF) and PURY-(E)M YNW-A1 or PQRY-P YLM-A1 outdoor units.

Product Dimensions PEFY-WP20/25/32/40/50VMA-E

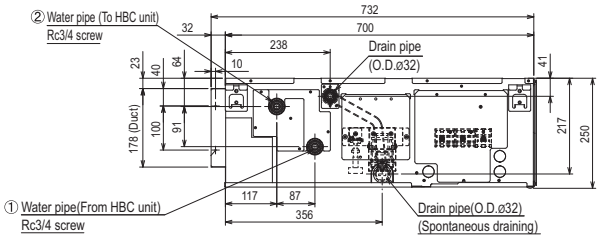
Upper View



Front View



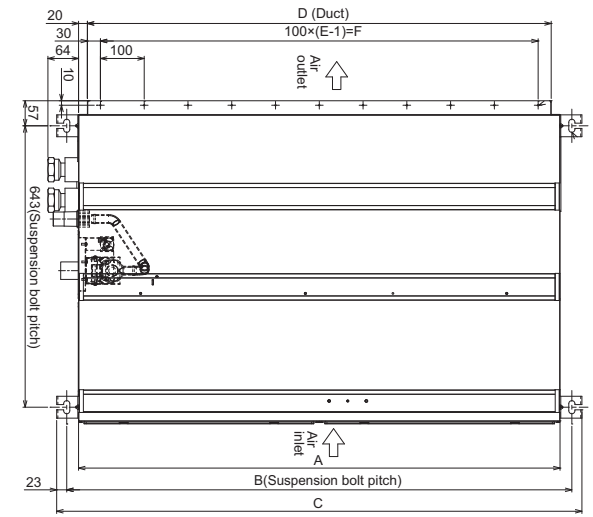
Side View



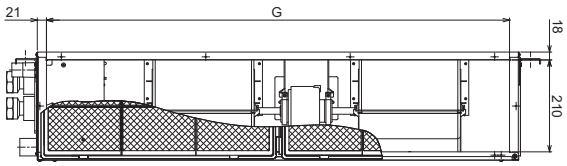
Model	A	B	C	D	E	F	G	①Water pipe (From HBC unit)	②Water pipe (To HBC unit)
PEFY-WP20VMA-E	700	754	800	660	7	600	658	Rc3/4 screw	
PEFY-WP25,32VMA-E	900	954	1000	860	9	800	858		
PEFY-WP40,50VMA-E	1100	1154	1200	1060	11	1000	1058		

Product Dimensions PEFY-WP63/80VMA-E

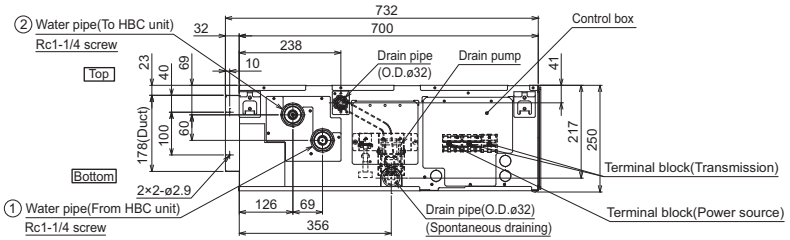
Upper View



Front View



Side View



Model	A	B	C	D	E	F	G	①Water pipe (From HBC unit)	②Water pipe (To HBC unit)
PEFY-WP63VMA-E	1100	1154	1200	1060	11	1000	1058	Rc1-1/4 screw	
PEFY-WP80VMA-E	1400	1454	1500	1360	14	1300	1358		

PLFY-WL-VEM-E

4-Way Blow Ceiling Cassette Indoor Unit

The new PLFY-WL-VEM-E offers 72 different airflow patterns, with the ability to handle a multitude of ceiling applications up to 4.2 metres in height. The easy to install, slim unit is ideal for maintaining constant temperatures, thanks to adjustable vanes that allow users to precisely direct air where it's needed.

Key Features

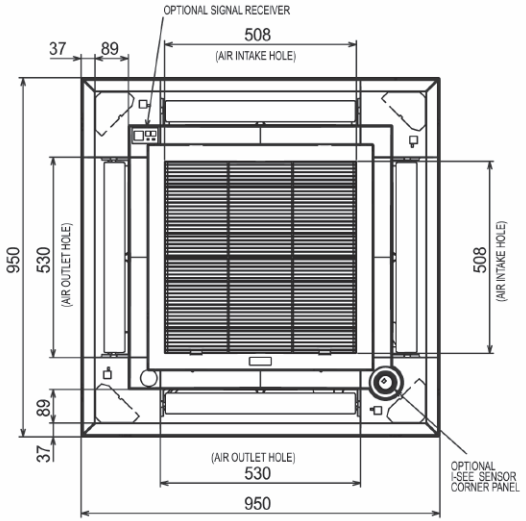
- Improved airflow control, including horizontal airflow for greater comfort (compared to the previous VBM model)
- Optional 3D i-see sensor grille (PLP-6EAE) provides customised comfort by automatically monitoring room occupancy, position and body temperatures
- Optional filter lowering operation down to 4m (PLP-6EAJ)



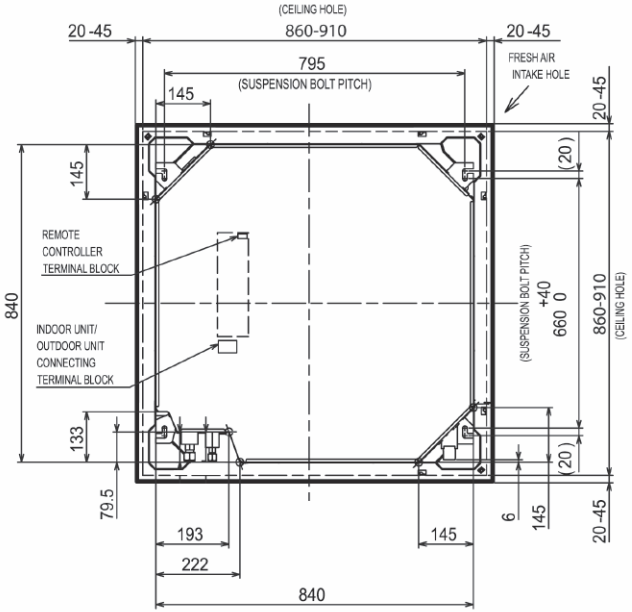
INDOOR UNITS		PLFY-WL32VEM-E	PLFY-WL40VEM-E	PLFY-WL50VEM-E
CAPACITY (kW)	Heating (nominal)	4.0	5.0	6.3
	Cooling (nominal)	3.6	4.5	5.6
	UK Heating	4.0	5.0	6.3
	UK Total Cooling - Hi (Sensible)	3.20 (3.20)	4.00 (3.60)	5.00 (4.20)
	UK Total Cooling - Mi2	3.16	3.95	4.87
	UK Total Cooling - Mi1	3.09	3.87	4.66
	UK Total Cooling - Lo	3.02	3.77	4.39
POWER INPUT (kW)	Heating (nominal)	0.03	0.03	0.04
	Cooling (nominal)	0.03	0.03	0.04
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	233-250-267-283	233-250-267-283	233-267-300-333
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	26-27-29-30	26-28-29-31	27-29-31-33
WEIGHT (kg)		20	20	20
DIMENSIONS (mm)	Width (Grille)	840 (950)	840 (950)	840 (950)
	Depth (Grille)	840 (950)	840 (950)	840 (950)
	Height (Grille)	258 (40)	258 (40)	258 (40)
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.27 / 0.33	0.29 / 0.35	0.34 / 0.40
FUSE RATING (BS88) - HRC (A)		6	6	6
MAINS CABLE No. Cores		3	3	3
GRILLE MODEL REFERENCE		PLP-6EA	PLP-6EA	PLP-6EA
WATER PIPE CONNECTION		20mm I.D	20mm I.D	20mm I.D

Note: HVRF indoor units can only be configured with the CMB-WM HBC (HVRF) and PURY-(E)M YNW-A1 or PQRY-P YLM-A1 outdoor units.

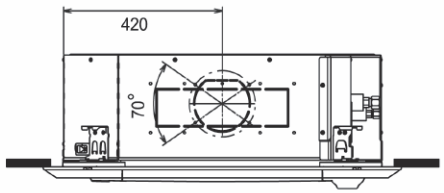
Lower View



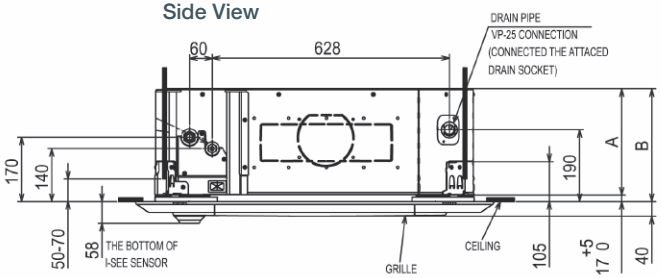
Upper View



Front View



Side View



	A	B
32/40	241	258
50		

PLFY-WL-VFM-E

600x600 4-Way Blow Ceiling Cassette Indoor Unit

The PLFY-WL-VFM-E cassette unit provides the smart solution to comfortable and efficient air conditioning. It combines a stylish square design slimline grille with the latest energy-saving technologies and is designed to fit snugly to ceilings making it ideal in both offices and retail.

Key Features

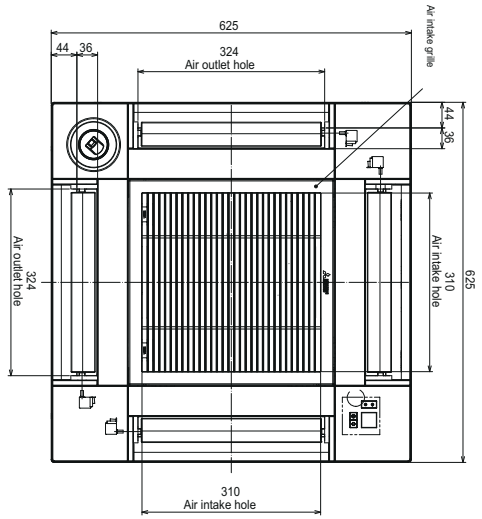
- New design - fits into narrow ceiling spaces with height of only 245mm
- Low noise levels - reduced noise value with 3D turbo fan
- Horizontal airflow - eliminating uncomfortable drafts and improved airflow control
- Easy installation - temporary hanging hook on grille and no screw removal for corner panel / control box
- Optional 3D i-see sensor grille (SLP-2FAE) provides customised comfort by automatically monitoring room occupancy, position and body temperatures



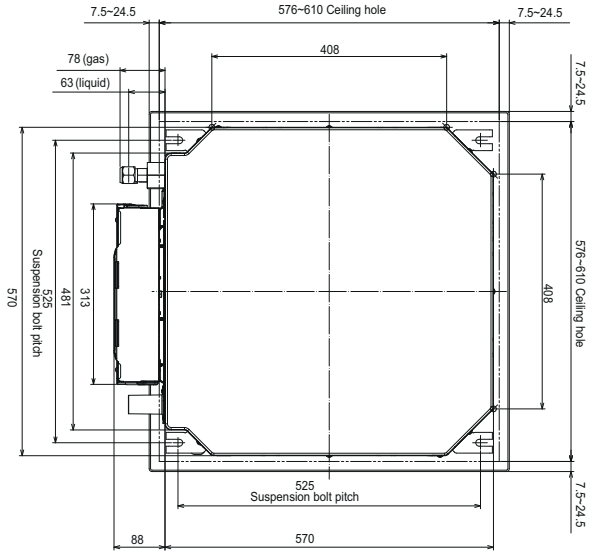
INDOOR UNITS		PLFY-WL15VFM-E	PLFY-WL20VFM-E	PLFY-WL25VFM-E	PLFY-WL32VFM-E
CAPACITY (kW)	Heating (nominal)	1.9	2.5	3.2	4.0
	Cooling (nominal)	1.7	2.2	2.8	3.6
	UK Heating	1.9	2.5	3.2	4.0
	UK Total Cooling - Hi (Sensible)	1.50 (1.30)	2.00 (1.60)	2.50 (2.00)	3.20 (2.60)
	UK Total Cooling - Mi1	1.44	1.92	2.38	2.92
	UK Total Cooling - Lo	1.36	1.89	2.26	2.52
POWER INPUT (kW)	Heating (nominal)	0.02	0.02	0.03	0.04
	Cooling (nominal)	0.02	0.02	0.03	0.04
AIRFLOW (l/s)	Lo-Mi-Hi	100-115-135	110-115-135	110-125-150	110-150-200
SOUND PRESSURE LEVEL (dBA)	Lo-Mi-Hi	25-26-29	27-29-31	27-30-34	27-33-41
WEIGHT (kg)	(Grille)	13 (3)	14 (3)	14 (3)	14 (3)
DIMENSIONS (mm)	Width (Grille)	570 (625)	570 (625)	570 (625)	570 (625)
	Depth (Grille)	570 (625)	570 (625)	570 (625)	570 (625)
	Height (Grille)	245 (10)	245 (10)	245 (10)	245 (10)
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.18 / 0.24	0.20 / 0.26	0.23 / 0.29	0.32 / 0.38
FUSE RATING (BS88) - HRC (A)		6	6	6	6
MAINS CABLE No. Cores		3	3	3	3
GRILLE MODEL REFERENCE		SLP-2FA	SLP-2FA	SLP-2FA	SLP-2FA
WATER PIPE CONNECTION		20mm I.D	20mm I.D	20mm I.D	20mm I.D

Note: HVRF indoor units can only be configured with the CMB-WM HBC (HVRF) and PURY-(E)M YNW-A1 or PQRY-P YLM-A1 outdoor units.

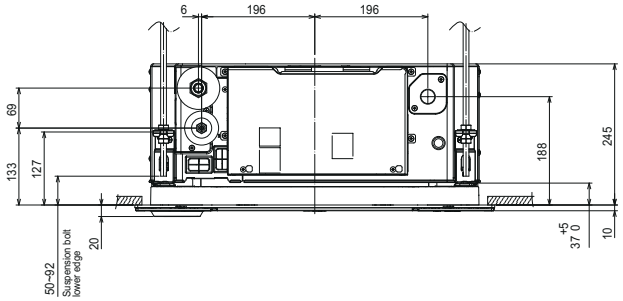
Upper View



Lower View



Side View



PKFY-WL-VLM-E

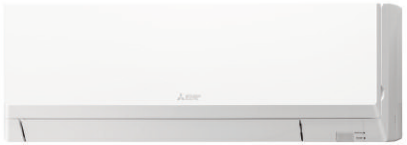
Wall Mounted Indoor Unit

An elegant design combined with compact dimensions and quiet operation make the PKFY-WL an ideal indoor unit choice. Noise levels are significantly reduced compared to the previous models.

Key Features

- Compact flat panel design - only 773mm wide (sizes 10-32)
- Widened vane control for improved air distribution and comfort
- Reduced noise levels of 22dB(A) (sizes 10-25)



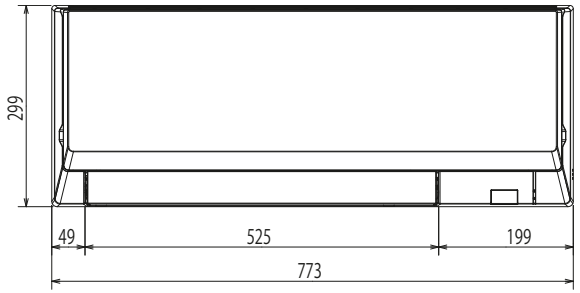


INDOOR UNITS		PKFY-WL10VLM-E	PKFY-WL15VLM-E	PKFY-WL20VLM-E	PKFY-WL25VLM-E	PKFY-WL32VLM-E	PKFY-WL40VLM-E
CAPACITY (kW)	Heating (nominal)	1.4	1.9	2.5	3.2	4.0	5.0
	Cooling (nominal)	1.2	1.7	2.2	2.8	3.6	4.5
	UK Heating	1.4	1.9	2.5	3.2	4.0	5.0
	UK Total Cooling - Hi (Sensible)	1.10 (1.02)	1.50 (1.20)	2.00 (1.56)	2.50 (1.95)	3.20 (2.60)	4.10 (3.16)
	UK Total Cooling - Mi2	1.08	1.50	1.98	2.47	3.16	4.01
	UK Total Cooling - Mi1	1.07	1.48	1.94	2.43	3.13	3.90
	UK Total Cooling - Lo	1.03	1.48	1.91	2.38	3.03	3.81
POWER INPUT (kW)	Heating (nominal)	0.01	0.01	0.02	0.03	0.03	0.04
	Cooling (nominal)	0.02	0.02	0.03	0.04	0.04	0.05
AIRFLOW (l/s)	Lo-Mi1-Mi2-Hi	55-63-68-75	55-63-72-82	67-83-100-117	67-90-117-140	105-127-150-173	107-137-167-198
SOUND PRESSURE LEVEL (dBA)	Lo-Mi1-Mi2-Hi	22-26-28-30	22-26-29-32	22-28-33-36	22-30-36-41	29-34-38-41	30-36-41-45
WEIGHT (kg)		25	25	25	25	29	29
DIMENSIONS (mm)	Width	773	773	773	773	898	898
	Depth	237	237	237	237	237	237
	Height	299	299	299	299	299	299
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.15 / 0.20	0.15 / 0.20	0.20 / 0.25	0.30 / 0.35	0.30 / 0.35	0.40 / 0.45
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3	3

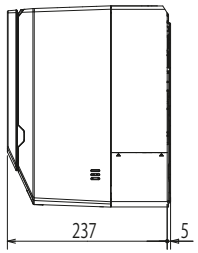
Note: HVRF indoor units can only be configured with the CMB-WM HBC (HVRF) and PURY-(E)M YNW-A1 or PQRY-P YLM-A1 outdoor units.

Product Dimensions PKFY-WL10/15/20/25VLM-E

Front View

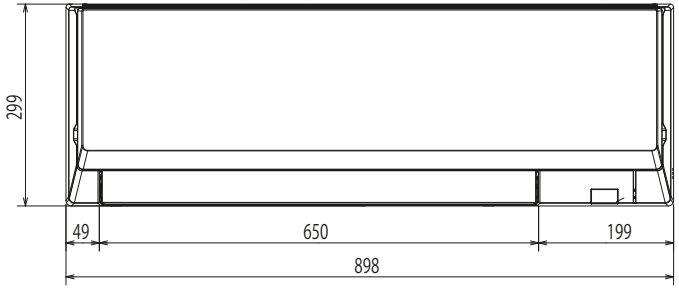


Side View

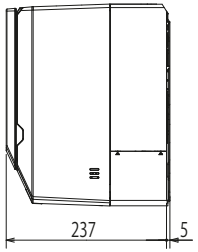


Product Dimensions PKFY-WL32/40VLM-E

Front View



Side View



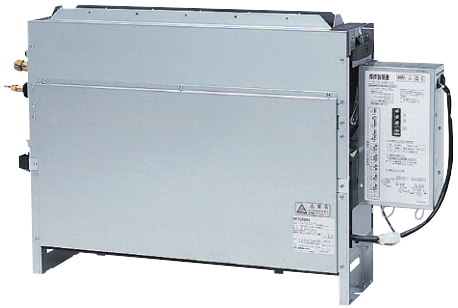
PFFY-WP-VLRMM-E

Floor Standing Concealed Indoor Unit

A compact concealed unit providing simple, effective air conditioning in perimeter zones. The unit is easy to install and at only 220mm deep offers an unobtrusive method of delivering a highly efficient air conditioning performance.

Key Features

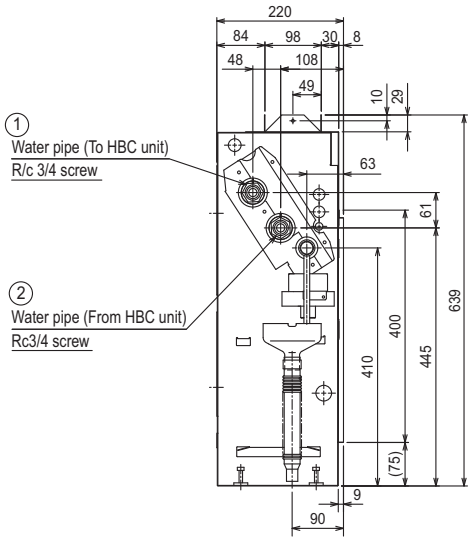
- Reduced noise levels
- 3 static pressure settings - 20/40/60Pa ideal for ducting in the perimeter zone
- Concealed unit for hidden installation. The unit can be hidden behind a wardrobe in a hotel, then ducted above and below the wardrobe doors - this offers lower noise, less disruption and a low visual impact



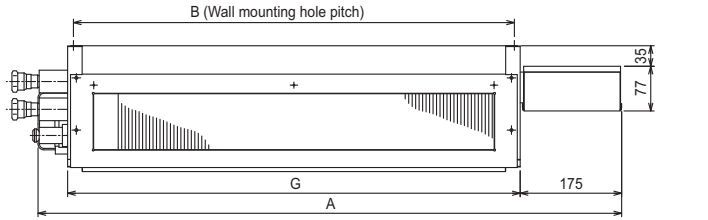
INDOOR UNITS		PFFY-WP20VLRMM-E	PFFY-WP25VLRMM-E	PFFY-WP32VLRMM-E	PFFY-WP40VLRMM-E	PFFY-WP50VLRMM-E
CAPACITY (kW)	Heating (nominal)	2.5	3.2	4.0	5.0	6.3
	Cooling (nominal)	2.2	2.8	3.6	4.5	5.6
	UK Heating	2.5	3.2	4.0	5.0	6.3
	UK Total Cooling - Hi (Sensible)	2.00 (1.50)	2.50 (2.00)	3.20 (2.50)	4.00 (3.10)	5.00 (3.90)
	UK Total Cooling - Mi2	-	-	-	-	-
	UK Total Cooling - Mi1	1.96	2.42	3.07	3.86	4.82
	UK Total Cooling - Lo	1.83	2.29	2.86	3.53	4.43
POWER INPUT (kW)	Heating (nominal)	0.04	0.04	0.05	0.05	0.07
	Cooling (nominal)	0.04	0.04	0.05	0.05	0.07
AIRFLOW (l/s)	Lo-Mi-Hi	75-83-100	100-117-133	125-150-175	133-167-192	175-217-250
EXTERNAL STATIC PRESSURE (Pa)		20-40-60	20-40-60	20-40-60	20-40-60	20-40-60
SOUND PRESSURE LEVEL (dBA) (20Pa)	Lo-Mi-Hi	31-33-38	31-33-38	31-35-38	34-37-40	37-42-45
WEIGHT (kg)		22	25	25	29	29
DIMENSIONS (mm)	Width	886	1006	1006	1246	1246
	Depth	220	220	220	220	220
	Height	639	639	639	639	639
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single
RUNNING CURRENT (A)	Heating / Cooling	0.35 / 0.35	0.35 / 0.35	0.47 / 0.47	0.47 / 0.47	0.65 / 0.65
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6
MAINS CABLE No. Cores		3	3	3	3	3
WATER PIPE CONNECTION		3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW	3/4" BSP SCREW

Note: HVRF indoor units can only be configured with the CMB-WM HBC (HVRF) and PURY-(E)M YNW-A1 or PQRY-P YLM-A1 outdoor units.

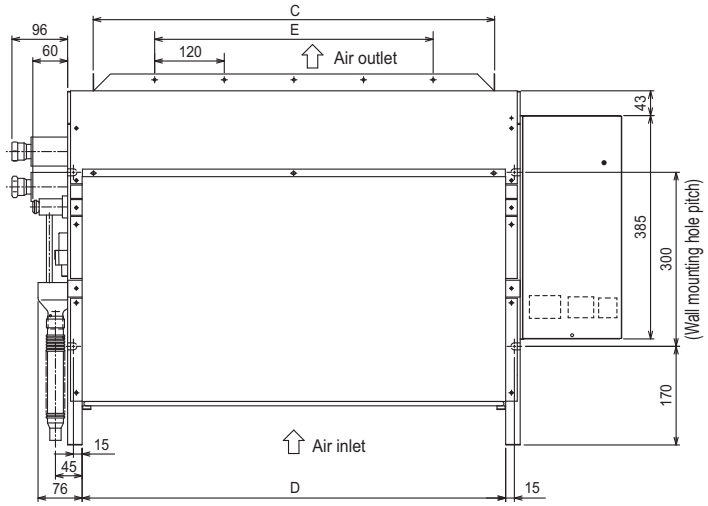
Side View



Upper View



Front View



Dimensions

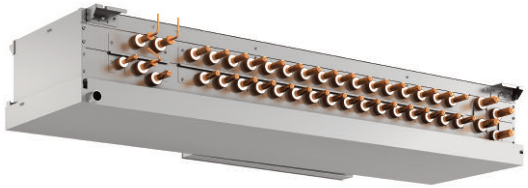
Model	A	B	C	D	E	F	G	① Water pipe (To HBC unit)	② Water pipe (From HBC unit)
PFFY-WP20VLRMM-E	886	640	572	610	360	4	660	Rc3/4 screw	
PFFY-WP25VLRMM-E PFFY-WP32VLRMM-E	1006	760	692	730	480	5	780		
PFFY-WP40VLRMM-E PFFY-WP50VLRMM-E	1246	1000	932	970	720	7	1020		

HBC Controllers

At the heart of both the R2 and WR2 Series, the HBC controller makes simultaneous heating and cooling possible. Improved system efficiency is achieved when energy is transferred intelligently around the building.

Key Features

- Valves, pumps and heat exchangers all contained within the HBC
- Manageable phased installation through modular system design
- Cat A to Cat B is simple through HBC system design
- Intuitive load adjusting flow control valves, inverter driven pumps and heat recovery for maximum efficiency



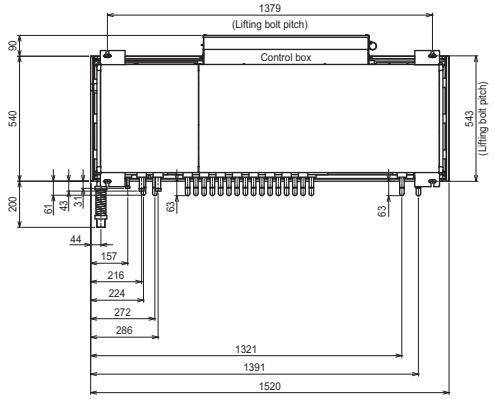
MASTER HBC CONTROLLERS		CMB-WM108V-AA	CMB-WM1016V-AA
NUMBER OF CONNECTIONS		8	16
WEIGHT (kg)		86 (96)*	98 (111)*
DIMENSIONS (mm)	Width	1520	1800
	Depth (Control Box)	540 (630)	540 (630)
	Height	300	300
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (kW)		0.46	0.47
RUNNING CURRENT (A)		2.83	2.89
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE No. Cores		3	3

SUB HBC CONTROLLERS		CMB-WM108V-AB	CMB-WM1016V-AB
NUMBER OF CONNECTIONS		8	16
WEIGHT (kg)		44 (49)*	53 (62)*
DIMENSIONS (mm)	Width	1520	1520
	Depth (Control Box)	540 (630)	540 (630)
	Height	300	300
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
POWER INPUT (kW)		0.01	0.01
RUNNING CURRENT (A)		0.05	0.05
FUSE RATING (BS88) – HRC (A)		6	6
MAINS CABLE No. Cores		3	3

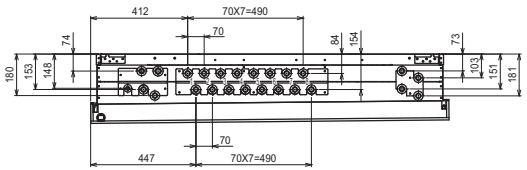
Notes: CMB-WM-V-AA and CMB-WM-V-AB units are for use with PURY-(E)M200-500YNW-A1, PQRY-P200-500YLM-A1 units and HVRF indoor units only.
One main HBC can be used on outdoor units PURY-(E)M200-250YNW-A1, PQRY-P200-250YNW-A1. One main HBC can be used on outdoor units PURY-(E)M300-350YNW-A1, PQRY-P300-350YLM-A1 with a system efficiency reduction.
Two main HBC's can be used in parallel on outdoor units PURY-(E)M300-500YNW-A1, PQRY-P300-500YLM-A1. PURY-(E)M400-500YNW-A1 requires 2No. Main HBC's
*( ) Includes Water

Product Dimensions CMB-WM108V-AA

Upper View

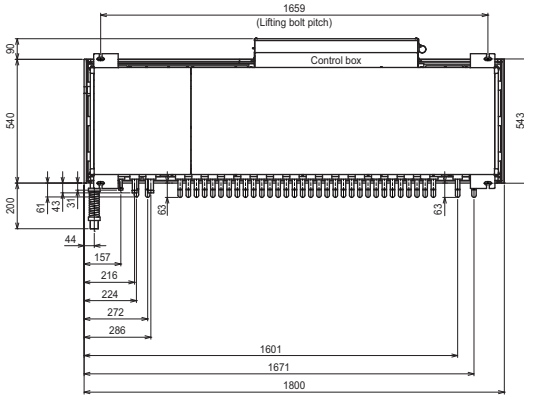


Side View

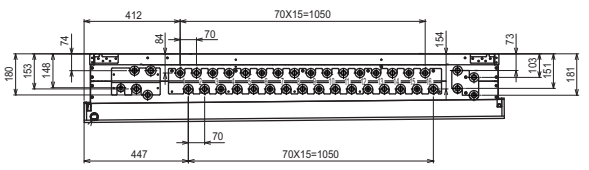


Product Dimensions CMB-WM1016V-AA

Upper View

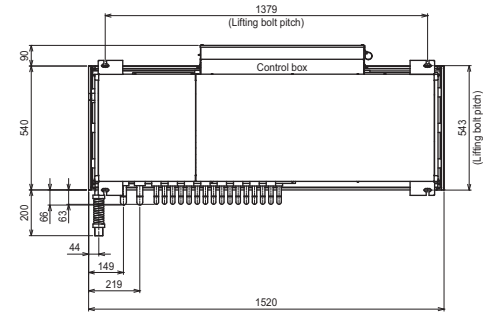


Side View

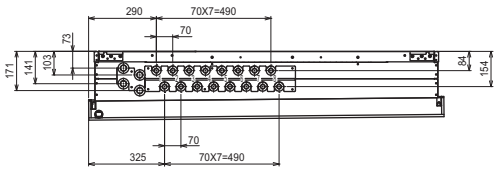


Product Dimensions CMB-WM108V-AB

Upper View

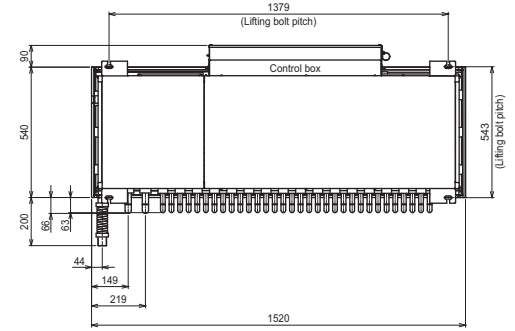


Side View

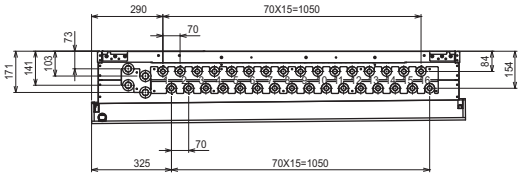


Product Dimensions CMB-WM1016V-AB

Upper View



Side View



The Energy Efficient

City Multi

Hybrid VRF Range

Accessories / Optional Extras

DESCRIPTION	MODEL REF.
Outdoor Units	
Fin Guard Side surfaces S / L modules (2pc) (P200-P450)	PAC-FG01S-E
Fin Guard Side surfaces XL module (2 pc) (P500)	PAC-FG02S-E
Fin Guard Rear surface S module (P200-P300)	PAC-FG01B-E
Fin Guard Rear surface L module (P350-P450)	PAC-FG02B-E
Fin Guard Rear surface XL module (P500)	PAC-FG03B-E
4-Way Blow Cassette Indoor Units	
Grille for PLFY-WL-VFM-E	SLP-2FA
3D i-see sensor grille for PLFY-WL-VFM-E	SLP-2FAE
Grille for PLFY-WL-VEM-E	PLP-6EA
3D i-see sensor grille for PLFY-WL-VEM-E	PLP-6EAE
Self elevating grille for PLFY-WL-VEM-E	PLP-6EAJ
Corner panel with i-see sensor for PLFY-WL-VEM-E	PAC-SE1ME-E
Corner panel with signal receiver for PLFY-WL-VEM-E	PAR-SE9FA-E
Shutter plate for PLFY-WL-VEM-E	PAC-SJ37SP-E
Multi-function casement for PLFY-WL-VEM-E	PAC-SJ41TME
Indoor Units	
Remote Temperature Sensor	PAC-SE41TS-E
Discreet Remote Temperature Sensor	KS9-BS1-A

MITSUBISHI ELECTRIC

Chillers

A new generation of energy saving
and innovative chiller technology





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i-BX Air Cooled Chiller Range, Three Phase (10.7-35.1kW)	**2.15**
i-NX Air Cooled Chiller Range (43.9-129kW)	**2.16**
i-NX Air Cooled Chiller Range, Low Noise Version (42.6-124kW)	**2.17**
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The Innovative **Chiller Range**

Mitsubishi Electric has manufactured chillers for over 40 years and in 2015 combined this extensive experience with advanced component technology from the commercial air conditioning sector to produce the e-series modular chiller range.

Later the same year, Mitsubishi Electric purchased Climaveneta, enhancing our product line up and marking our full scale entry into the chiller market.

Climaveneta is a strong European brand, supported by 45 years of customer trust and high quality production. Its range of energy-saving, low-noise and innovative chiller technology further expands the application and customisation capabilities we are now able to offer.

Through our technical expertise, long experience and innovative product range, we enable building operators everywhere to significantly improve energy efficiency, reduce running costs and adhere to increasingly tough legislation.

We believe that global climate challenges need local solutions. Our aim is to help individuals and businesses reduce the energy consumption of their buildings and their running costs.





e-series

CLIMAVENETA
SUSTAINABLE COMFORT

Our Modular Chiller Range

Chiller systems have been used for decades to deliver controlled cooling to buildings, but with increasing pressure on energy efficiency and running costs, we now need a low-carbon, flexible and cost effective option.

Comprising of Cooling Only and Heat Pump models, **Mitsubishi Electric's e-series modular chiller range** allows up to six individual units to be connected together to provide a system capacity from 90kW to 1,080kW.



The benefits of Mitsubishi Electric's e-series modular chiller range:

High efficiency

The e-series modular chiller range uses highly efficient scroll compressor technology from our City Multi VRF units, along with advanced inverters and controls to deliver exceptional efficiency and a wide operating range.

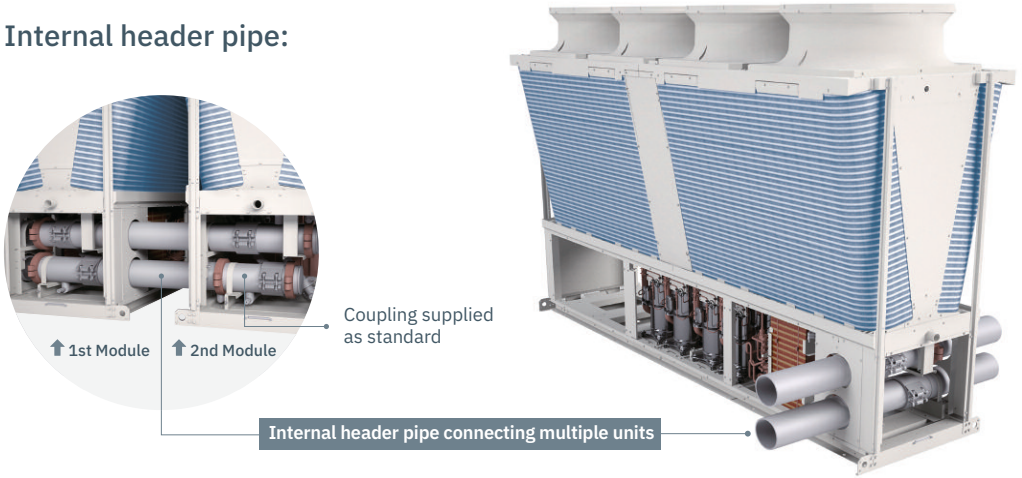
Unique modular approach

Using a modular approach reduces space requirements and simplifies lifting and installation. A modular approach also lends itself to a staged installation or future HVAC demands, as modular chillers can be scaled accordingly.

Reduced plant space

Each module can be positioned in a bank of up to six connected units using the same internal header. Typically 30% ~ 40% space saving can be achieved when compared with traditional flatbed type chillers.

Internal header pipe:



Our Modular Chiller Range

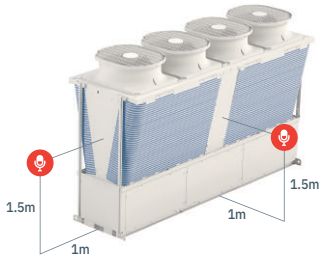
Low noise levels

By utilising highly efficient components within a uniquely shaped chiller, the e-series modular chiller range offers market leading low noise levels as standard.
Low noise levels are especially important in today's city centre locations where there is often a mixture of commercial and residential properties in the same area.

Sound pressure levels

EACV / EAHV	dB(A)		
Model	90kW	150kW	180kW
Front	64	66	68
Right	62	68	71
Back	65	66	67
Left	61	70	70

Measuring Point

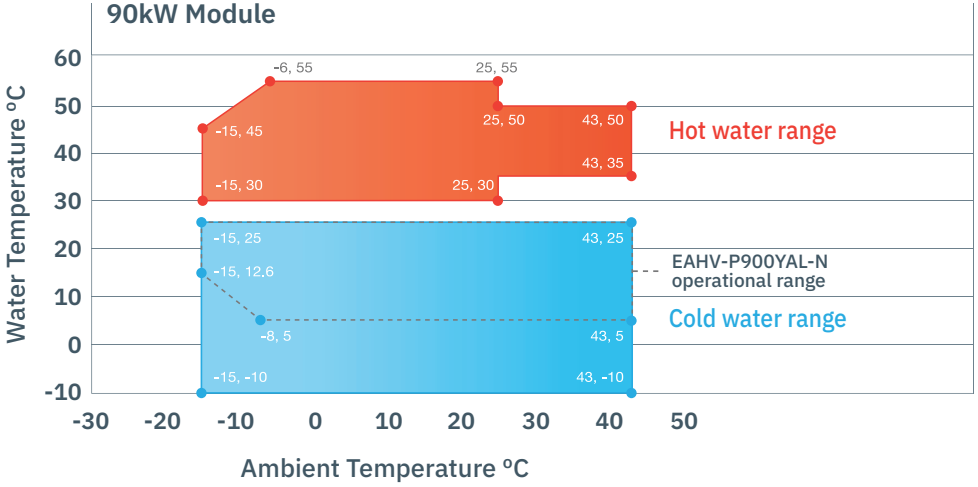


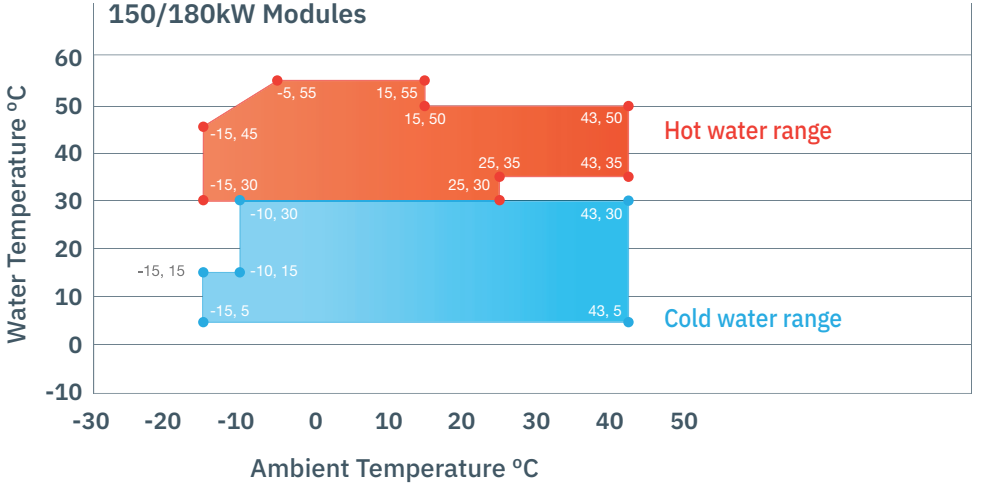
Sound power levels

EACV / EAHV	dB(A)								
Frequency (Hz)	63	125	250	500	1000	2000	4000	8000	PWL dB(A)
90kW Module	55.8	60.8	66	67.4	70.1	74	65.2	54.1	77.1
150kW Module	59.2	67.4	74.3	79.8	78	75.1	72.3	59.3	84
180kW Module	60.8	73.1	76.3	81.5	80.2	77.5	73.8	62.5	86

Wide operating range

The e-series modular chiller has a wide operating range in both cooling and heating. The low chilled water temperature range of the 90kW module is ideal for efficient process cooling applications.



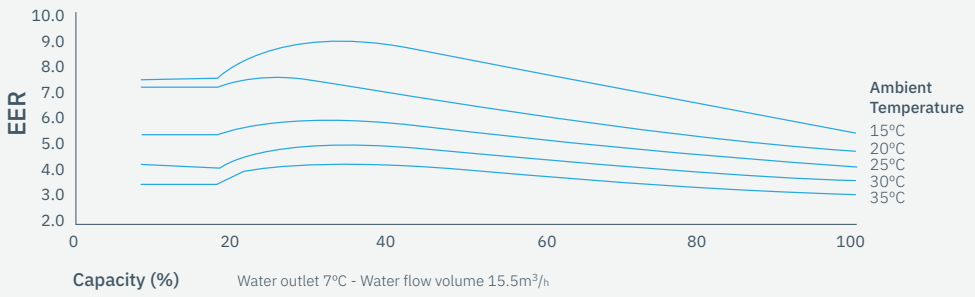


System efficiency and controllability

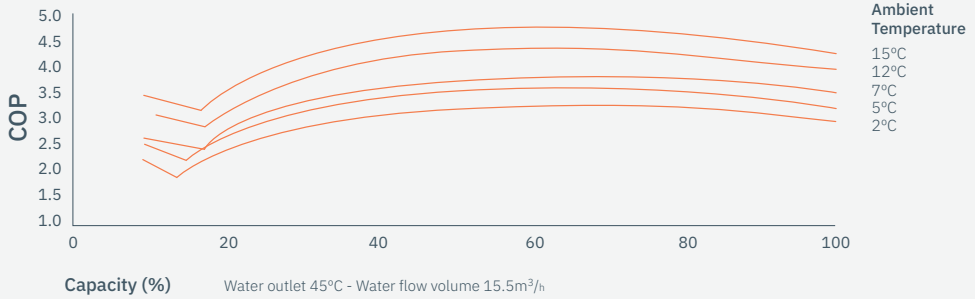
The e-series modular chiller has **multiple inverter driven compressors** that allow the unit to operate between 8% ~ 100% of capacity.
By having a broad operating range the chiller has exceptional part load efficiencies, which is where most systems will operate.

High partial load performance

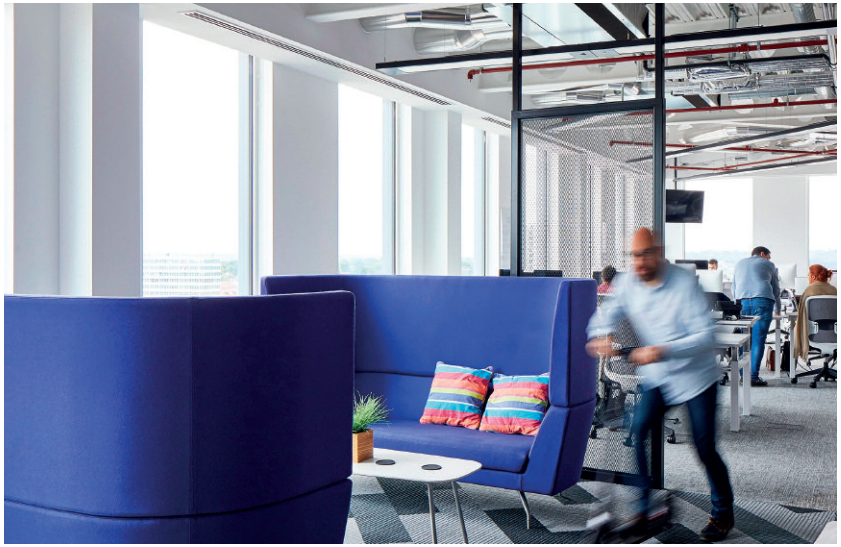
Cooling



Heating





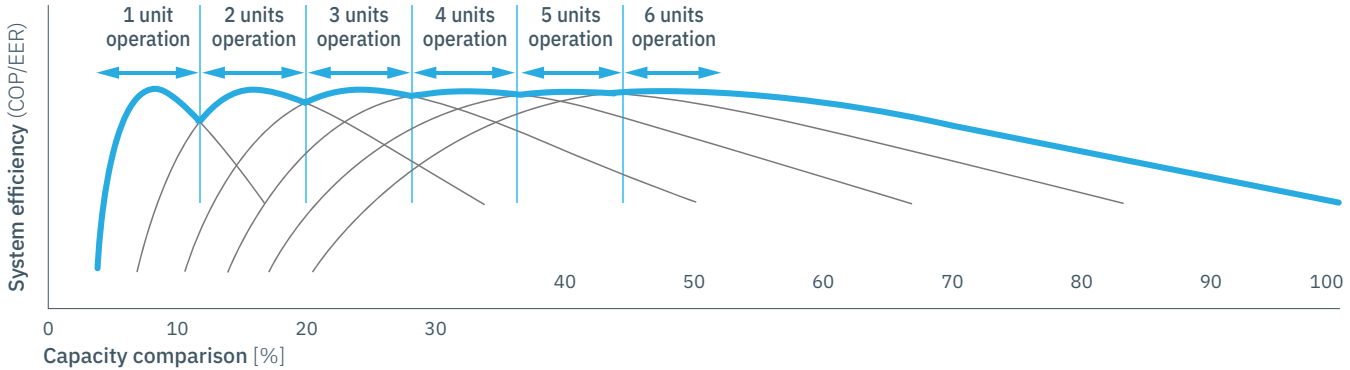


Our Modular Chiller Range

Optimum frequency control

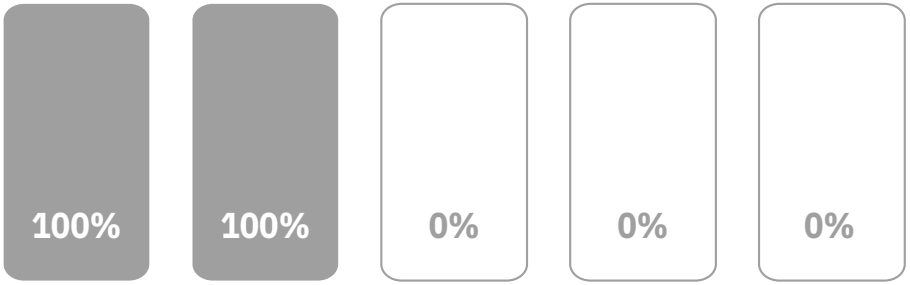
When multiple modules are connected, the frequency of each inverter compressor is controlled during operation to increase the efficiency of each module, achieving a high energy saving performance.

This control can be implemented by simply using our unique M-NET control, without the need for any other on-site design.



When the overall system load is 40%

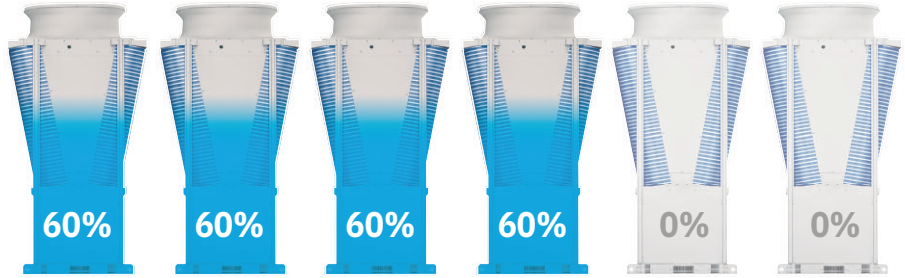
Without optimum frequency control



With non-inverter compressors, it is only possible to turn the unit on or off, and the compressor frequency cannot be adjusted according to the required capacity.

Since the compressors are running at inefficient frequencies, **the efficiency of the whole system is lower**.

With optimum frequency control



Our modules are equipped with inverter compressors, so the system can be operated in frequency ranges in which the efficiency of each module is at its peak (between 40 and 60%).

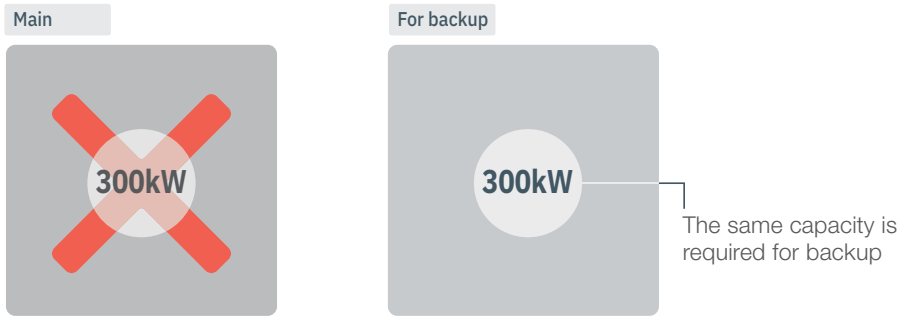
Optimum frequency control of each unit increases the efficiency of the whole system. In low load conditions, modules can be switched off to keep remaining modules at optimum efficiency.

The output of the pumps connected to the remaining group can be decreased, and the efficiency of the whole system is then increased. This control is achieved by connecting to M-NET. There is no need to prepare sensors, and the instrumentation is simple.

Improved redundancy & resilience

When a non-modular chiller is used as the main 300kW unit, as in this example, the same capacity would also be required as a backup. However, when a Mitsubishi Electric e-series modular chiller is used, two modules can still operate even if one module goes down, continuing normal operation. This reduces the backup capacity requirement.

Non-modular chiller



Mitsubishi Electric's e-series modular chiller

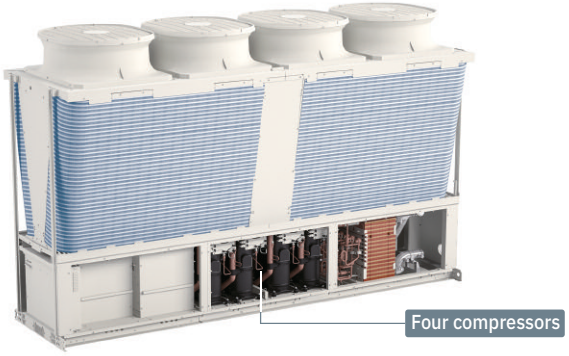


Emergency operation mode / Rotation operation

With a single module

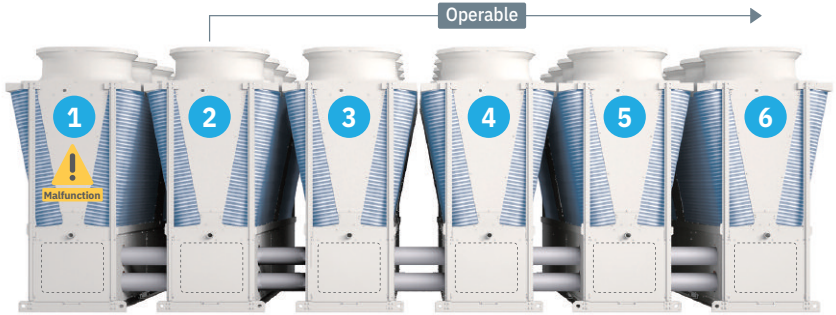
The e-series module contains four compressors (two for the 90kW module) developed by Mitsubishi Electric. The four compressors operate as two pairs. If something is wrong with one of the two pairs, the other pair can temporarily continue to operate.

The 90kW module achieves this by operating its two compressors independently.



Multiple modules

If one of the e-series modules goes down, the remaining modules can continue to operate. Each module can independently control the outlet water temperature. Even if the main module goes down, operation can be continued. When multiple modules are installed, the operating time of each module in the same system is also equalized according to the load of the whole system.



* Units that have been stopped by thermo OFF before the main unit goes down are kept in the thermo OFF mode.

e-series Modular Chiller

(90-1,080kW)

Cooling Only or Heat Pump

e-series





The e-series chiller allows for up to six individual units to be connected together to provide a system capacity from 90kW to 1,080kW.

Using this modular approach reduces space requirements and simplifies lifting and installation. The e-series chiller is available as a cooling only or heat pump version, suitable for both comfort and process cooling applications.

Key Features

- Two high efficiency advanced DC inverter-driven scroll compressors are incorporated within each 90kW module and four within the 150/180kW modules. This allows the unit to operate between 8% ~ 100% of capacity, producing exceptional part load efficiencies
- Two-stage cooling circuit - both compressors (or pair of compressors) serve separate plate heat exchangers located in the centre of the unit
- Reduced plant space - each size module can be positioned in a bank of up to six connected units using the same internal header
- Internal header pipe - the in-built internal header pipes simplify design, installation and maintenance and also reduces space requirements, making the e-series range modular and suitable for almost any situation
- High performance compact air heat exchanger - the use of U-shaped or Y-shaped heat exchangers allows for a greater surface area, maximising efficiency whilst also keeping the units much narrower than conventional chillers. Blue Fin anti-corrosion coating on the heat exchanger is also provided as standard

SYSTEM CONFIGURATIONS							
MAXIMUM CAPACITY	**90kW**	**150kW**	**180kW**	**270kW**	**300kW**	**360kW**	**450kW**
COOLING ONLY	EACV-P900YAL-N	EACV-P1500YBL-N	EACV-P900YAL-N x2	EACV-P900YAL-N x3	EACV-P1500YBL-N x2	EACV-P900YAL-N x4	EACV-P900YAL-N x5
			EACV-P1800YBL-N			EACV-P1800YBL-N x2	EACV-P1500YBL-N x3
HEATING / COOLING	EAHV-P900YAL-N	EAHV-P1500YBL-N	EAHV-P900YAL-N x2	EAHV-P900YAL-N x3	EAHV-P1500YBL-N x2	EAHV-P900YAL-N x4	EAHV-P900YAL-N x5
			EAHV-P1800YBL-N			EAHV-P1800YBL-N x2	EAHV-P1500YBL-N x3

MAXIMUM CAPACITY	**540kW**	**600kW**	**720kW**	**750kW**	**900kW**	**1,080kW**
COOLING ONLY	EACV-P900YAL-N x6	EACV-P1500YBL-N x4	EACV-P1800YBL-N x4	EACV-P1500YBL-N x5	EACV-P1500YBL-N x6	EACV-P1800YBL-N x6
	EACV-P1800YBL-N x3				EACV-P1800YBL-N x5	
HEATING / COOLING	EAHV-P900YAL-N x6	EAHV-P1500YBL-N x4	EAHV-P1800YBL-N x4	EAHV-P1500YBL-N x5	EAHV-P1500YBL-N x6	EAHV-P1800YBL-N x6
	EAHV-P1800YBL-N x3				EAHV-P1800YBL-N x5	

150/180kW lower GWP R32 refrigerant modules available Autumn 2020

- Micro-channel aluminium heat exchanger
- Reduced refrigerant volume - 90% reduction in CO_2 equivalent compared to the current R410A cooling only models
- Expanded operating temperature range - will work with outdoor temperatures of -20ºC

R32

e-series Modular Chiller

(90-1,080kW)

Cooling Only

e-series

R410A

MODEL			EACV-P900YAL-N Cooling Only	EACV-P1500YBL-N Cooling Only	EACV-P1800YBL-N Cooling Only
POWER SOURCE			3-phase 4-wire 380-400-415v, 50/60Hz	3-phase 4-wire 380-400-415v, 50/60Hz	3-phase 4-wire 380-400-415v, 50/60Hz
COOLING CAPACITY *1 WATER		kW	90.0	150.0	180.0
		kcal/h	77,400	129,000	154,800
		BTU/h	307,080	511,800	614,160
	Power Input	kW	27.27	45.1	59.01
	EER (Pump input is not included)		3.30	3.33	3.05
	IPLV *3		6.34	6.55	6.33
	Water Flow Rate	m^3/h	15.5	25.8	31
COOLING CAPACITY (EN14511)*2 WATER		kW	90	148.6	177.8
		kcal/h	77,400	127,779	152,874
		BTU/h	307,080	506,955	606,517
	Power Input	kW	29.2	46.52	61.25
	EER		3.08	3.19	2.90
	Eurovent Efficiency Class		B	A	B
	ESEER *4		4.71	4.74	4.45
	SEER (ηsc) (BS EN14825)		4.88 (192%)	4.62 (181%)	4.58 (180%)
	Water Flow Rate	m^3/h	15.5	25.8	31.0
	Minimum Water Circuit Volume	L	420	800	800
COOLING CAPACITY BRINE (ethylene glycol 35WT%)*5 *6		kW	56.73	N/A	N/A
		kcal/h	48,788	N/A	N/A
		BTU/h	193,563	N/A	N/A
	Power Input	kW	25.98	N/A	N/A
	Current Input 380 - 400 - 415V	A	43.9 - 41.7 - 40.2	N/A	N/A
	EER (Pump input is not included)		2.18	N/A	N/A
	EER (Includes pump input based on EN14511)		2.10	N/A	N/A
	SEPR (ηsc) (BS EN14825)		6.11 (241%)	N/A	N/A
	Brine (ethylenegylcol 35WT%) Flow Rate	m^3/h	11.5	N/A	N/A
CURRENT INPUT	Cooling Current 380 - 400 - 415V *1	A	46.0 - 43.7 - 42.2	77 - 73 - 70	77 - 73 - 70
	Maximum Current Input	A	61	111	111
WATER PRESSURE DROP *1	Water	kPa	135	114	164
	Brine (ethylene glycol 35WT%) *5	kPa	106	N/A	N/A
TEMP RANGE	Cooling Water	℃	Outlet water 5 ~ 25	Outlet water 5 ~ 30	Outlet water 5 ~ 30
	Cooling Brine (ethylene glycol 35WT%) *5	℃	Outlet brine -10 ~ 25	N/A	N/A
	Heating	℃	N/A	N/A	N/A
	Outdoor	℃	-15 ~ 43 *6	-15 ~ 43	-15 ~ 43
CIRCULATING WATER VOLUME		m^3/h	15.5	25.8	31
SOUND PRESSURE LEVEL (measured in anechoic room) at 1m *1		dB(A)	65	66	68
SOUND POWER LEVEL (measured in anechoic room) *1		dB(A)	77	84	86
DIAMETER OF WATER PIPE (Standard piping)	Inlet	mm	100A housing type joint	150A housing joint type	150A housing joint type
	Outlet	mm	100A housing type joint	150A housing joint type	150A housing joint type
EXTERNAL FINISH			Polyester powder coated steel plate	Polyester powder coated steel plate	Polyester powder coated steel plate
EXTERNAL DIMENSION	Width x Depth x Height	mm	2250 x 900 x 2450	3400 x 1080 x 2350	3400 x 1080 x 2350
WEIGHT	Inside Header Piping "-N" Model	kg	992	1256	1256
DESIGN PRESSURE	R410A	MPa	4.15	4.15	4.15
	Water	MPa	1	1	1
HEAT EXCHANGER	Water Side		Stainless steel plate and copper brazing	Stainless steel plate and copper brazing	Stainless steel plate and copper brazing
	Air Side		Plate fin and copper tube	Plate fin and copper tube	Plate fin and copper tube
COMPRESSOR	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Maker		Mitsubishi Electric Corporation	Mitsubishi Electric Corporation	Mitsubishi Electric Corporation
	Starting Method		Inverter	Inverter	Inverter
	Quantity		2	4	4
	Motor Output	kW	11.7 x 2	11.7 x 4	11.7 x 4
	Case Heater	kW	0.045 x 2	N/A	N/A
	Lubricant		MEL32	MEL32	MEL32
	Starting Current	A	8.5	19.1	19.1
	Max Running Current	A	61	111	111
FAN	Air Flow Rate	m^3/min	77 x 6	265 x 4	265 x 4
		L/s	1,283 x 6	4,417 x 4	4,417 x 4
		cfm	2,719 x 6	9,357 x 4	9,357 x 4
	Type, Quantity		Propeller fan x 6	Propeller fan x 4	Propeller fan x 4
	Starting Method		Inverter	Inverter	Inverter
	Motor Output	kW	0.19 x 6	0.94 x 4	0.94 x 4
PROTECTION	High Pressure Protection		High pres. sensor & High pres. switch at 4.15MPa (601psi)	High pres. sensor & High pres. switch at 4.15MPa (601psi)	High pres. sensor & High pres. switch at 4.15MPa (601psi)
	Inverter Circuit		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
REFRIGERANT	Charge (kg) R410A (GWP 2088)		19 x 2	15 x 4	15 x 4
	CO_2 Equivalent (t)		79.3	125.3	125.3
	Control		LEV	LEV	LEV

*1 Under normal cooling conditions at outdoor temp 35ºCDB/24ºCWB outlet water temp 7ºC inlet water temp 12ºC. Outlet brine temp -5ºC inlet brine temp 0ºC. Pump input not included.
*2 Under normal cooling conditions at outdoor temp 35ºCDB/24ºCWB outlet water temp 7ºC inlet water temp 12ºC. Pump input is included based on EN14511.
*3 IPLV IS is calcuated in accordance with AHRI 550 - 590.
*4 ESEER is calculated in accordance with EUROVENT conditions.
*5 Under normal cooling conditions at outdoor temp 35ºCDB/24ºCWB outlet brine temp -5ºC inlet water temp 0ºC.
*6 Only EACV-P900YA-N capable of water flow temps to -10ºC.

* Please always make water circulate, or take the circulation water out completely when not in use for long periods.
* The water circuit must be closed circuit.
* Due to continuous improvement, the above specifications may be subject to change without notice.

e-series Modular Chiller

(90-1,080kW)

Heat Pump

e-series

R410A

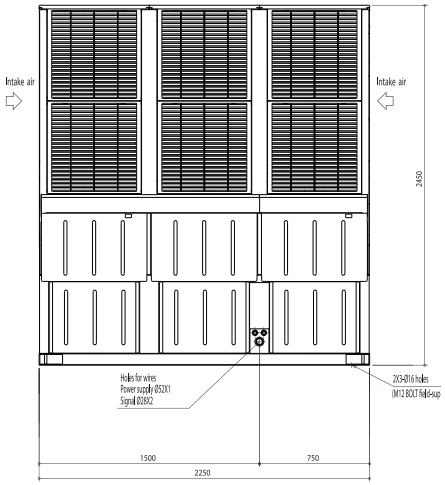
MODEL			EAHV-P900YAL-N Heating/Cooling	EAHV-P1500YBL-N Heating/Cooling	EAHV-P1800YBL-N Heating/Cooling
POWER SOURCE			3-phase 4-wire 380-400-415v, 50/60Hz	3-phase 4-wire 380-400-415v, 50/60Hz	3-phase 4-wire 380-400-415v, 50/60Hz
COOLING CAPACITY*1 WATER		kW	90.0	150.0	180.0
		kcal/h	77,400	129,000	154,800
		BTU/h	307,080	511,800	614,160
	Power Input	kW	30.6	45.1	59.01
	EER (Pump input is not included)		3.30	3.33	3.05
	IPLV *5		6.34	6.55	6.33
	Water Flow Rate	m^3/h	15.5	25.8	31
COOLING CAPACITY (EN14511)*2 WATER		kW	90	148.6	177.8
		kcal/h	77,400	127,779	152,874
		BTU/h	307,080	506,955	606,517
	Power Input	kW	29.2	46.52	61.25
	EER		2.94	3.19	2.90
	Eurovent Efficiency Class		B	A	B
	ESEER *6		4.71	4.74	4.45
	SEER (η_{sc}) (BS EN14825)		4.88 (192%)	4.62 (181%)	4.58 (180%)
	Water Flow Rate	m^3/h	15.5	25.8	31.0
	Minimum Water Circuit Volume	L	780	1450	1450
HEATING CAPACITY*3		kW	90.0	150	180
		kcal/h	77,400	129,000	154,800
		BTU/h	307,080	511,800	614,160
	Power Input *3	kW	25.71	44.59	55.68
	COP		3.50	3.36	3.23
	Water Flow Rate	m^3/h	15.5	25.8	31.0
HEATING CAPACITY (EN14511)*4		kW	90.0	151.42	182.24
		kcal/h	77,400	130,221	156,726
		BTU/h	307,080	516,645	621,803
	Power Input *3	kW	27.6	46.01	57.92
	COP		3.25	3.29	3.15
	Eurovent Efficiency Class		A+	A	B
	SCOP Low/Medium		3.66 (143%) / 2.89 (113%)	3.24 (127%) / 2.85 (112%)	3.24 (127%) / 2.85 (112%)
	Water Flow Rate	m^3/h	15.5	25.8	31.0
CURRENT INPUT	Cooling Current 380 - 400 - 415V *1	A	46.0 - 43.7 - 42.3	77 - 73 - 70	77 - 73 - 70
	Heating Current 380 - 400 - 415V *3	A	43.4 - 41.2 - 39.7	76 - 72 - 69	76 - 72 - 69
	Maximum Current Input	A	61	111	111
WATER PRESSURE DROP*1	Water	kPa	135	114	164
TEMP RANGE	Cooling Water	℃	Outlet water 5 ~ 25	Outlet water 5 ~ 30	Outlet water 5 ~ 30
	Heating	℃	Outlet water 30 ~ 55	Outlet water 30 ~ 55	Outlet water 30 ~ 55
	Outdoor	℃	-15 ~ 43	-15 ~ 43	-15 ~ 43
CIRCULATING WATER VOLUME		m^3/h	15.5	25.8	31
SOUND PRESSURE LEVEL (measured in anechoic room) at 1m *1		dB(A)	65	66	68
SOUND POWER LEVEL (measured in anechoic room) *1		dB(A)	77	84	86
DIAMETER OF WATER PIPE (Standard piping)	Inlet	mm	100A housing type joint	150A housing joint type	150A housing joint type
	Outlet	mm	100A housing type joint	150A housing joint type	150A housing joint type
EXTERNAL FINISH			Polyester powder coated steel plate	Polyester powder coated steel plate	Polyester powder coated steel plate
EXTERNAL DIMENSION	Width x Depth x Height	mm	2250 x 900 x 2450	3400 x 1080 x 2350	3400 x 1080 x 2350
WEIGHT	Inside Header Piping "-N" Model	kg	1022	1326	1326
DESIGN PRESSURE	R410A	MPa	4.15	4.15	4.15
	Water	MPa	1	1	1
HEAT EXCHANGER	Water Side		Stainless steel plate and copper brazing	Stainless steel plate and copper brazing	Stainless steel plate and copper brazing
	Air Side		Plate fin and copper tube	Plate fin and copper tube	Plate fin and copper tube
COMPRESSOR	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Maker		Mitsubishi Electric Corporation	Mitsubishi Electric Corporation	Mitsubishi Electric Corporation
	Starting Method		Inverter	Inverter	Inverter
	Quantity		2	4	4
	Motor Output	kW	11.7 x 2	11.7 x 4	11.7 x 4
	Case Heater	kW	0.045 x 2	N/A	N/A
	Lubricant		MEL32	MEL32	MEL32
	Starting Current	A	8.5	19.1	19.1
	Max Running Current	A	61	111	111
FAN	Air Flow Rate	m^3/min	77 x 6	265 x 4	265 x 4
		L/s	1,283 x 6	4,417 x 4	4,417 x 4
		cfm	2,719 x 6	9,357 x 4	9,357 x 4
	Type, Quantity		Propeller fan x 6	Propeller fan x 4	Propeller fan x 4
	Starting Method		Inverter	Inverter	Inverter
	Motor Output	kW	0.19 x 6	0.94 x 4	0.94 x 4
PROTECTION	High Pressure Protection		High pres. sensor & High pres. switch at 4.15MPa (601psi)	High pres. sensor & High pres. switch at 4.15MPa (601psi)	High pres. sensor & High pres. switch at 4.15MPa (601psi)
	Inverter Circuit		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		Over-heat protection	Over-heat protection	Over-heat protection
REFRIGERANT	Charge (kg) R410A (GWP 2088)		19 x 2	15 x 4	15 x 4
	CO_2 Equivalent (t)		79.3	125.3	125.3
	Control		LEV	LEV	LEV

*1 Under normal cooling conditions at outdoor temp 35ºCDB/24ºCWB outlet water temp 7ºC inlet water temp 12ºC. Pump input not included.
*2 Under normal cooling conditions at outdoor temp 35ºCDB/24ºCWB outlet water temp 7ºC inlet water temp 12ºC. Pump input is included based on EN14511.
*3 Under normal heating conditions at outdoor temp 7ºCDB/6ºCWB outlet water temp 45ºC inlet 40ºC. Pump input not included.
*4 Under normal heating conditions at outdoor temp 7ºCDB/6ºCWB outlet water temp 45ºC inlet 40ºC. Pump input power is included, based on EN14511.
*5 IPLV IS is calcuated in accordance with AHRI 550 - 590.
*6 ESEER is calculated in accordance with EUROVENT conditions.

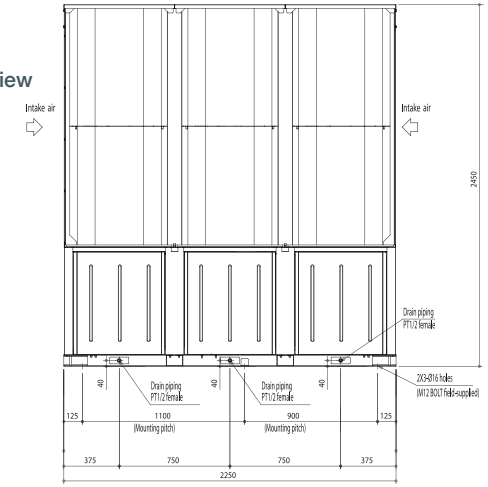
* Please always make water circulate, or take the circulation water out completely when not in use for long periods.
* The water circuit must be closed circuit.
* Due to continuous improvement, the above specifications may be subject to change without notice.

Product Dimensions EA(C)(H)V-P900YAL-N

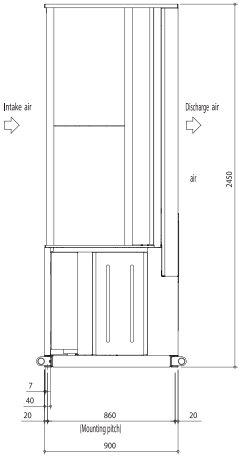
Front View



Side View

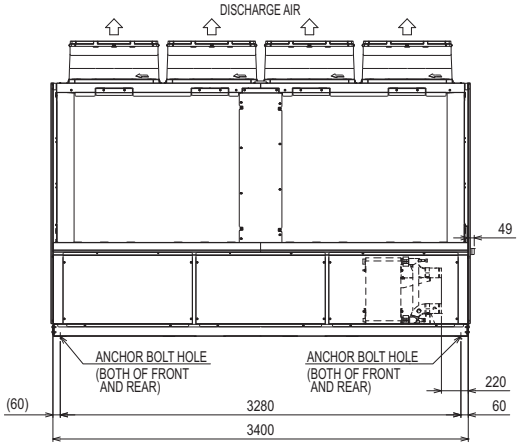


Rear View

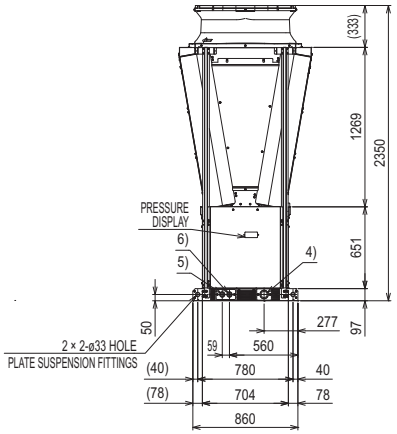


Product Dimensions EA(C)(H)V-P1500/1800YBL-N

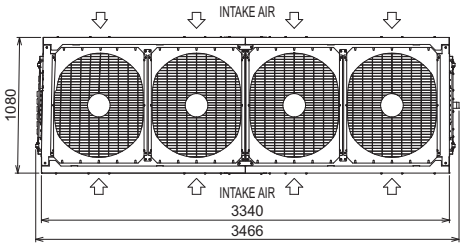
Front View



Side View



Upper View



i-BX
Air Cooled Chiller
(4.3-12.9kW)

Cooling Only

Single Phase

Climaveneta's range of small to medium sized, cooling only chillers efficiently and easily adapt to a wide range of cooling capacities. The whole range contains inverter driven compressors for enhanced efficiency and control.

Key Features

- Packaged monobloc unit for easy installation
- Full inverter technology with Mitsubishi Electric BLDC compressors
- Extended cooling range, water outlet temperature -8 ~ 18°C, at ambient range of -10 ~ 45°C
- Dynamic water set point, varies outlet temperature depending on ambient temperature
- EC water pump, relief valve, flow switch, safety valve and expansion vessel
- Night function incorporated to reduce noise levels during the night
- ErP 2021 compliant
- Modbus connectivity option
- Additional accessories available upon request



MODEL		i-BX 004 MHAN RV	i-BX 006 MHAN RV	i-BX 008 MHAN RV	i-BX 010 MHAN RV	i-BX 013 MHAN RV
POWER SUPPLY	V / ph / Hz	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50
PERFORMANCE						
COOLING CAPACITY *1	kW	4.3	6.11	8.1	10.6	12.9
TOTAL POWER INPUT *1	kW	1.55	2.12	2.82	3.64	4.74
EER *1		2.77	2.88	2.87	2.91	2.72
ESEER *1		4.2	4.36	4.7	4.29	4.55
COOLING ONLY (EN14511 VALUE)						
COOLING CAPACITY *1 *2	kW	4.3	6.11	8.11	10.6	12.9
EER *1 *2		2.82	2.92	2.92	2.92	2.74
ESEER *1 *2		4.53	4.6	5.08	4.34	4.69
COOLING ENERGY CLASS		C	B	B	B	C
SEASONAL EFFICIENCY IN COOLING (REG.EU 2016/2281) - AVERAGE CLIMATE CONDITIONS						
SEER		4.38	4.43	4.93	4.39	4.78
PERFORMANCE (ηs) *3	%	172	174	194	172	188
HEAT EXCHANGER (USER SIDE)						
WATER FLOW *1	l/s	0.21	0.29	0.39	0.51	0.62
MIN. SYSTEM WATER CONTENT	l	10	15	19	24	31
INLET / OUTLET CONNECTION SIZE	in	1"	1"	1"	1"	1"1/4
REFRIGERANT CIRCUIT						
COMPRESSORS	N°	1	1	1	1	1
CIRCUITS	N°	1	1	1	1	1
REGULATION		STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
MIN. CAPACITY STEP	%	25	25	25	25	25
REFRIGERANT CHARGE R410A	kg	1.45	2.1	3.55	3.6	3.65
CO_2 EQUIVALENT	t	3.02	4.38	7.41	7.51	7.62
OIL CHARGE	kg	0.35	0.35	0.4	0.87	1.4
ELECTRICAL						
FULL LOAD POWER (F.L.I.)	kW	1.9	2.7	3.7	4.9	6.5
FULL LOAD CURRENT (F.L.A.)	A	8.7	12.3	16.1	22.6	25.3
INRUSH CURRENT (S.A.)	A	1	1	1	1	1
FANS						
QUANTITY	N°	1	1	1	2	2
AIRFLOW	m³/s	1.02	0.98	0.99	1.74	1.58
FANS POWER INPUT	kW	0.12	0.12	0.12	0.12	0.12
NOISE LEVEL						
SOUND PRESSURE *4	dB(A)	33	34	35	38	39
SOUND POWER *5 *6	dB(A)	64	65	66	69	70
SIZE AND WEIGHT						
WIDTH *7	mm	900	900	900	900	900
DEPTH *7	mm	370	370	420	420	420
HEIGHT *7	mm	940	940	1240	1240	1240
OPERATING WEIGHT *7	kg	70	80	95	110	125

*1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
*2 Values in compliance with EN14511-3:2013.
*3 Seasonal energy efficiency of space cooling.
*4 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
*5 Sound power on the basis of measurements made in compliance with ISO 9614.
*6 Sound power level in cooling, outdoors.
*7 Unit in standard configuration/execution, without optional accessories.

Eurovent Certified Data

i-BX
Air Cooled Chiller
(10.7-35.1kW)

Cooling Only

Three Phase

Climaveneta's range of small to medium sized, cooling only chillers efficiently and easily adapt to a wide range of cooling capacities. The whole range contains inverter driven compressors for enhanced efficiency and control.

Key Features

- Packaged monobloc unit for easy installation
- Full inverter technology with Mitsubishi Electric BLDC compressors
- Extended cooling range, water outlet temperature -8 ~ 18°C, at ambient range of -10 ~ 45°C
- Dynamic water set point, varies outlet temperature depending on ambient temperature
- EC water pump, relief valve, flow switch, safety valve and expansion vessel
- Night function incorporated to reduce noise levels during the night
- ErP 2021 compliant
- Modbus connectivity option
- Additional accessories available upon request



MODEL		i-BX 010 THAN RV	i-BX 013 THAN RV	i-BX 015 THAN RV	i-BX 020 THAN RV	i-BX 025 THAN RV	i-BX 030 THAN RV	i-BX 035 THAN RV
POWER SUPPLY	V / ph / Hz	415/3/50+N	415/3/50+N	415/3/50+N	415/3/50+N	415/3/50+N	415/3/50+N	415/3/50+N
PERFORMANCE								
COOLING CAPACITY *1	kW	10.7	13.3	15.5	20.6	25.0	29.8	35.1
TOTAL POWER INPUT *1	kW	3.64	4.74	5.44	7.2	8.69	10.0	11.8
EER *1		2.94	2.81	2.85	2.86	2.88	2.98	2.97
ESEER *1		4.36	4.57	4.14	4.12	4.26	4.15	4.29
COOLING ONLY (EN14511 VALUE)								
COOLING CAPACITY *1 *2	kW	10.7	13.3	15.5	20.6	25	29.9	35.2
EER *1 *2		2.95	2.82	2.87	2.88	2.90	3.01	3.00
ESEER *1 *2		4.42	4.69	4.2	4.2	4.36	4.27	4.39
COOLING ENERGY CLASS		B	C	C	C	B	B	B
SEASONAL EFFICIENCY IN COOLING (REG.EU 2016/2281) - AVERAGE CLIMATE CONDITIONS								
SEER		4.46	4.80	4.31	4.31	4.52	4.52	4.57
PERFORMANCE (ηs) *3	%	176	189	169	169	178	178	180
HEAT EXCHANGER (USER SIDE)								
WATER FLOW *1	l/s	0.51	0.64	0.74	0.99	1.2	1.43	1.68
MIN. SYSTEM WATER CONTENT	l	26	32	37	49	60	71	84
INLET / OUTLET CONNECTION SIZE	in	1"	1"1/4	1"1/4	1"1/4	1"1/4	1"1/2	1"1/2
REFRIGERANT CIRCUIT								
COMPRESSORS	N°	1	1	1	1	1	1	1
CIRCUITS	N°	1	1	1	1	1	1	1
REGULATION		STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
MIN. CAPACITY STEP	%	25	25	25	25	25	25	25
REFRIGERANT CHARGE R410A	kg	3.6	3.65	4.7	6.8	7	7.9	8.4
CO_2 EQUIVALENT	t	7.51	7.62	9.81	14.19	14.62	16.49	17.54
OIL CHARGE	kg	0.87	1.4	1.4	1.4	1.4	2.3	2.3
ELECTRICAL								
FULL LOAD POWER (F.L.I.)	kW	4.9	6.5	7.4	9.4	11.3	13.7	16
FULL LOAD CURRENT (F.L.A.)	A	13	17	18	20	29	29	39
INRUSH CURRENT (S.A.)	A	1	1	1	1	1	1	1
FANS								
QUANTITY	N°	2	2	2	1	2	2	2
AIRFLOW	m³/s	1.74	1.7	1.64	2.26	3.76	4.2	4.86
FANS POWER INPUT	kW	0.12	0.12	0.12	0.6	0.4	0.55	0.52
NOISE LEVEL								
SOUND PRESSURE *4	dB(A)	38	39	43	43	43	44	45
SOUND POWER *5 *6	dB(A)	69	70	74	74	75	76	77
SIZE AND WEIGHT								
WIDTH *7	mm	900	900	900	1450	1450	1450	1700
DEPTH *7	mm	420	420	420	550	550	550	650
HEIGHT *7	mm	1240	1240	1390	1200	1700	1700	1700
OPERATING WEIGHT *7	kg	110	125	135	190	250	270	305

*1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
*2 Values in compliance with EN14511-3:2013.
*3 Seasonal energy efficiency of space cooling.
*4 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
*5 Sound power on the basis of measurements made in compliance with ISO 9614.
*6 Sound power level in cooling, outdoors.
*7 Unit in standard configuration/execution, without optional accessories.

Eurovent Certified Data

i-NX
Air Cooled Chiller
(43.9-129kW)

Cooling Only

Three Phase



CLIMAVENETA
SUSTAINABLE COMFORT

*1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
*2 Values in compliance with EN14511-3:2013.
*3 Seasonal energy efficiency of space cooling.
*4 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
*5 Sound power on the basis of measurements made in compliance with ISO 9614.
*6 Sound power level in cooling, outdoors.
*7 Unit in standard configuration/execution, without optional accessories.

Eurovent Certified Data

Climaveneta's range of small to medium sized i-NX Cooling Only chillers efficiently and easily adapt to a wide range of cooling capacities.

With the exclusive 1 + i philosophy, both the fixed speed scroll compressor and the scroll inverter compressor are combined in the same circuit. This technology ensures maximum benefit in terms of efficiency at partial loads compared to a solution with separate circuits. In different load conditions, only the most efficient combination of compressors required for optimum adaptation to the system load conditions is called upon.

Key Features

- High Efficiency - inverter driven scroll compressor
- Aluminium microchannel coils
- Wide operating range
- Available with EC fans
- ERP 2021 compliant
- Available with hydronic module

R410A

MODEL		i-NX 0151P	i-NX 0182P	i-NX 0202P	i-NX 0262P	i-NX 0302P	i-NX 0352P	i-NX 0402P	i-NX 0502P
POWER SUPPLY	V / ph / Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3/50	400/3/50
PERFORMANCE									
COOLING CAPACITY *1	kW	43.9	52.9	63.1	72.1	83.8	101	120	129
TOTAL POWER INPUT *1	kW	15.7	18.8	21.4	25	29.2	35.2	41.9	46.8
EER *1		2.8	2.81	2.95	2.88	2.87	2.87	2.86	2.76
ESEER *1		4.56	4.55	4.51	4.54	4.51	4.66	4.58	4.53
COOLING ONLY (EN14511 VALUE)									
COOLING CAPACITY *1 *2	kW	43.6	52.6	62.7	71.7	83.4	100.0	119.0	129.0
EER *1 *2		2.73	2.75	2.88	2.82	2.82	2.82	2.80	2.72
ESEER *1 *2		4.27	4.19	4.17	4.23	4.24	4.36	4.27	4.25
COOLING ENERGY CLASS		C	C	C	C	C	C	C	C
SEASONAL EFFICIENCY IN COOLING (REG.EU 2016/2281) - AVERAGE CLIMATE CONDITIONS									
SEER		4.15	4.11	4.13	4.18	4.23	4.36	4.32	4.30
PERFORMANCE (ηs) *3	%	163	161	162	164	166	171	170	169
HEAT EXCHANGER (USER SIDE)									
WATER FLOW *1	l/s	2.1	2.53	3.02	3.45	4.01	4.82	5.73	6.18
MIN. SYSTEM WATER CONTENT	l	154	185	221	252	293	354	420	452
PRESSURE DROP	kPa	37.2	41.2	42.3	39.4	35	36.2	42.9	38.9
INLET / OUTLET CONNECTION SIZE	in	1 1/2" VICTAULIC	1 1/2" VICTAULIC	1 1/2" VICTAULIC	2" VICTAULIC	2" VICTAULIC	2" VICTAULIC	2 1/2" VICTAULIC	2 1/2" VICTAULIC
REFRIGERANT CIRCUIT									
COMPRESSORS	N°	1	2	2	2	2	2	2	2
CIRCUITS	N°	1	1	1	1	1	1	1	1
REGULATION		STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
MIN. CAPACITY STEP	%	30	22	19	22	19	23	20	18
REFRIGERANT CHARGE R410A	kg	7	7.2	8.9	9.4	9.5	12.5	12.9	13.5
CO_2 EQUIVALENT	t	14.6	15	18.6	19.6	19.8	26.1	26.9	28.2
OIL CHARGE	kg	3.5	6.1	6.4	6.7	7	13.4	13.4	13.4
ELECTRICAL									
FULL LOAD POWER (F.L.I.)	kW	23.5	27.4	30.2	37.5	41.4	53.9	59.7	64.6
FULL LOAD CURRENT (F.L.A.)	A	39	46	52	63	70	87	96	104
INRUSH CURRENT (S.A.)	A	4	118	164	174	225	198	243	288
FANS									
QUANTITY	N°	4	4	5	5	6	2	2	2
AIRFLOW	m³/s	3.77	5.07	6.57	6.57	7.66	9.08	11.53	11.53
FANS POWER INPUT	kW	0.2	0.3	0.3	0.3	0.3	1.2	2	2
NOISE LEVEL									
SOUND PRESSURE *4	dB(A)	51	52	53	53	54	55	57	57
SOUND POWER *5 *6	dB(A)	83	84	85	85	86	87	89	89
SIZE AND WEIGHT									
WIDTH *7	mm	2000	2000	2625	2625	2625	3250	3250	3250
DEPTH *7	mm	1350	1350	1350	1350	1350	1350	1350	1350
HEIGHT *7	mm	2070	2070	2070	2070	2070	2170	2170	2170
OPERATING WEIGHT *7	kg	600	660	750	780	810	1060	1070	1080

i-NX
Air Cooled Chiller
Low Noise Version
(42.6-124kW)

Cooling Only

Three Phase



CLIMAVENETA
SUSTAINABLE COMFORT

Climaveneta's range of small to medium sized i-NX Cooling Only chillers efficiently and easily adapt to a wide range of cooling capacities. The super low noise variant offers up to a 7dB(A) reduction against the baseline model.

With the exclusive 1 + i philosophy both the fixed speed scroll compressor and the scroll inverter compressor are combined in the same circuit. This technology ensures maximum benefit in terms of efficiency at partial loads compared to a solution with separate circuits. In different load conditions, only the most efficient combination of compressors required for optimum adaptation to the system load conditions is called upon.

Key Features

- High Efficiency - inverter driven scroll compressor
- Aluminium microchannel coils
- Wide operating range
- Available with EC fans
- ERP 2021 compliant
- Available with hydronic module

R410A

MODEL		i-NX SL 0151P	i-NX SL 0182P	i-NX SL 0202P	i-NX SL 0262P	i-NX SL 0302P	i-NX SL 0352P	i-NX SL 0402P	i-NX SL 0502P
POWER SUPPLY	V / ph / Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3/50	400/3/50	400/3/50
PERFORMANCE									
COOLING CAPACITY *1	kW	42.6	51.2	60.1	68.1	81.2	96.7	115.0	124.0
TOTAL POWER INPUT *1	kW	14.4	17.8	20.9	24.5	28.3	33.9	39.3	44.3
EER *1		2.96	2.88	2.88	2.78	2.87	2.85	2.93	2.81
ESEER *1		4.48	4.58	4.49	4.55	4.54	4.75	4.78	4.7
COOLING ONLY (EN14511 VALUE)									
COOLING CAPACITY *1 *2	kW	42.3	50.9	59.8	67.7	80.8	96.3	115.0	124.0
EER *1 *2		2.89	2.81	2.81	2.73	2.82	2.80	2.88	2.76
ESEER *1 *2		4.21	4.26	4.2	4.25	4.26	4.48	4.5	4.43
COOLING ENERGY CLASS		C	C	C	C	C	C	C	C
SEASONAL EFFICIENCY IN COOLING (REG.EU 2016/2281) - AVERAGE CLIMATE CONDITIONS									
SEER		4.18	4.10	4.11	4.17	4.22	4.46	4.50	4.48
PERFORMANCE (ηs) *3	%	164	161	162	164	166	176	177	176
HEAT EXCHANGER (USER SIDE)									
WATER FLOW *1	l/s	2.04	2.45	2.87	3.26	3.88	4.62	5.5	5.95
MIN. SYSTEM WATER CONTENT	l	149	179	210	238	284	338	403	434
PRESSURE DROP	kPa	35.1	38.7	38.3	35.2	32.9	33.2	39.6	36.0
INLET / OUTLET CONNECTION SIZE	in	1 1/2" VICTAULIC	1 1/2" VICTAULIC	1 1/2" VICTAULIC	2" VICTAULIC	2" VICTAULIC	2" VICTAULIC	2 1/2" VICTAULIC	2 1/2" VICTAULIC
REFRIGERANT CIRCUIT									
COMPRESSORS	N°	1	2	2	2	2	2	2	2
CIRCUITS	N°	1	1	1	1	1	1	1	1
REGULATION		STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
MIN. CAPACITY STEP	%	30	23	20	23	20	24	21	19
REFRIGERANT CHARGE R410A	kg	8.1	8.3	8.7	9.2	11.8	12.3	14.7	15.2
CO_2 EQUIVALENT	t	16.9	17.3	18.2	19.2	24.6	25.7	30.7	31.7
OIL CHARGE	kg	3.5	6.1	6.4	6.7	7	13.4	13.4	13.4
ELECTRICAL									
FULL LOAD POWER (F.L.I.)	kW	23.8	27.4	30.5	37.8	43.6	53.9	59.3	64.3
FULL LOAD CURRENT (F.L.A.)	A	40	47	53	64	71	87	95	104
INRUSH CURRENT (S.A.)	A	6	120	165	175	226	198	242	287
FANS									
QUANTITY	N°	5	5	6	6	2	2	2	2
AIRFLOW	m³/s	4.28	5.03	5.73	5.73	7.37	8.41	10.47	10.47
FANS POWER INPUT	kW	0.2	0.2	0.2	0.2	0.9	1.1	1.15	1.15
NOISE LEVEL									
SOUND PRESSURE *4	dB(A)	45	45	46	46	47	48	50	50
SOUND POWER *5 *6	dB(A)	77	77	78	78	79	80	82	82
SIZE AND WEIGHT									
WIDTH *7	mm	2625	2625	2625	2625	3250	3250	3875	3875
DEPTH *7	mm	1350	1350	1350	1350	1350	1350	1350	1350
HEIGHT *7	mm	2070	2070	2070	2070	2170	2170	2170	2170
OPERATING WEIGHT *7	kg	700	760	790	820	980	1090	1180	1200

*1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
*2 Values in compliance with EN14511-3:2013.
*3 Seasonal energy efficiency of space cooling.
*4 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
*5 Sound power on the basis of measurements made in compliance with ISO 9614.
*6 Sound power level in cooling, outdoors.
*7 Unit in standard configuration/execution, without optional accessories.

Eurovent Certified Data

i-NX-Q SL Air Cooled 4-Pipe Chiller Low Noise Version

(45-139kW)

Heat Pump

Three Phase



Climaveneta's range of small to medium sized i-NX-Q chillers are designed to produce chilled and hot water simultaneously and efficiently using variable frequency drive compressors. The super low noise variant offers up to a 7dB(A) reduction against the baseline model.

The unit combines two variable speed scroll compressors in two separate refrigerant circuits. The full inverter solution applied on two separate refrigerant circuits ensures maximum reliability and total versatility, matching the thermal load request constantly and with maximum precision, while minimising energy consumption.

Key Features

- Simultaneous production of chilled water and hot water
- Two inverter scroll compressors
- Wide operating range
- ErP 2021 compliant
- Available with EC fans
- Available with factory installed pumps

R410A

MODEL		i-NX-Q SL 0152P	i-NX-Q SL 0182P	i-NX-Q SL 0202P	i-NX-Q SL 0252P	i-NX-Q SL 0262P	i-NX-Q SL 0302P	i-NX-Q SL 0352P	i-NX-Q SL 0402P	i-NX-Q SL 0502P	i-NX-Q SL 0552P
POWER SUPPLY	V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
PERFORMANCE											
COOLING ONLY (EN14511 VALUE)											
COOLING CAPACITY *1*2	kW	45.6	52.3	56.3	62.9	70.9	84.0	89.5	105.0	119.9	138.4
TOTAL POWER INPUT *1*2	kW	14.12	17.26	18.7	22.71	25.97	29.27	30.86	37.37	44.08	49.78
EER *1*2	kW/kW	3.23	3.03	3.01	2.77	2.73	2.87	2.90	2.81	2.72	2.78
HEATING ONLY (EN14511 VALUE)											
TOTAL HEATING CAPACITY *2*3	kW	51.2	59.0	62.5	70.7	78.5	93.1	98.1	114.2	132.4	153.2
TOTAL POWER INPUT *2*3	kW	15.19	17.82	18.38	21.49	23.22	27.63	28.43	34.09	39.4	45.33
COP *2*3	kW/kW	3.37	3.31	3.4	3.29	3.38	3.37	3.45	3.35	3.36	3.38
COOLING WITH TOTAL HEAT RECOVERY											
COOLING CAPACITY *4	kW	46.14	53.06	57.75	65.22	75.09	84.65	94.59	109.4	126.4	145.5
TOTAL POWER INPUT *4	kW	13.78	16.52	17.25	20.42	22.95	26.96	27.75	33.52	39.5	44.93
RECOVERY HEAT EXCHANGER CAPACITY *4	kW	59.1	68.6	74.0	84.4	96.7	110.0	120.7	140.9	163.6	187.7
TER	kW/kW	7.62	7.37	7.61	7.33	7.47	7.21	7.77	7.47	7.34	7.42
SEASONAL COOLING EFFICIENCY											
P RATED CAPACITY *5	kW	45.6	52.3	56.3	62.9	70.9	84.0	89.5	105.0	119.9	138.4
SEER *5*6	-	4.41	4.43	4.5	4.39	4.22	4.25	4.33	4.34	4.4	4.45
PERFORMANCE ηS *5*7	%	174	174	177	173	166	167	170	170	173	175
SEASONAL HEATING EFFICIENCY *8											
RATED HEAT OUTPUT AT T DESIGN H *9*10	Kw	37.0	43.0	45.0	52.0	59.0	70.0	74.0	79.0	97.0	115.0
SCOP *9*10	-	3.93	3.97	3.98	4.0	3.97	4.04	4.09	4.01	4.11	4.13
SEASONAL SPACE HEATING ENERGY EFFICIENCY *9*10	%	154	156	156	157	156	159	161	158	161	162
SEASONAL SPACE HEATING ENERGY EFFICIENCY CLASS *9*10	-	A++	A++	A++	A++	A++	A++	-	-	-	-
HEAT EXCHANGERS											
HEAT EXCHANGER USER SIDE IN COOLING											
WATER FLOW RATE *1	l/s	2.18	2.51	2.7	3.01	3.4	4.03	4.29	5.03	5.75	6.63
PRESSURE DROP *1	kPa	26.1	34.4	22.4	27.9	23.7	33.2	27.0	34.8	35.3	35.0
HEAT EXCHANGER USER SIDE IN HEATING											
WATER FLOW RATE *3	l/s	2.47	2.84	3.01	3.4	3.78	4.48	4.72	5.5	6.38	7.38
PRESSURE DROP *3	kPa	33.2	44	27.9	35.6	29.3	41.1	32.7	41.6	43.4	43.3
REFRIGERANT CIRCUIT											
COMPRESSORS	N°	2	2	2	2	2	2	2	2	2	2
NO. CIRCUITS	N°	2	2	2	2	2	2	2	2	2	2
REFRIGERANT CHARGE R410A	kg	26.7	27.3	27.8	29.2	31.2	43.8	40.6	45.8	53.4	60.0
OIL CHARGE	kg	4.6	4.6	4.6	4.6	7.2	7.2	13.4	13.4	13.4	13.4
NOISE LEVEL											
SOUND PRESSURE *11	dB(A)	47	47	48	49	49	50	50	51	53	55
SOUND POWER LEVEL *12*13	dB(A)	79	79	80	81	81	82	82	83	85	87
SIZE AND WEIGHT											
WIDTH (A) *14	mm	2625	2625	2625	2625	2625	3250	3250	3250	3875	4500
DEPTH (B) *14	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
HEIGHT (H) *14	mm	2070	2070	2070	2070	2070	2070	2070	2070	2070	2070
OPERATING WEIGHT *14	kg	960	960	990	990	1080	1210	1330	1440	1520	1660

*1 Plant (side) cooling heat exchanger water (in/out) 12.0°C/7.0°C; Source (side) heat exchanger air (in) 35.0°C.
*2 Values in compliance with EN14511.
*3 Plant (side) heating heat exchanger water (in/out) 40.0°C/45.0°C; Source (side) heat exchanger air (in) 7.0°C at 87% R.H.
*4 Plant (side) cooling heat exchanger water (in/out) 12.0°C/7.0°C; Plant (side) heating heat exchanger water (in/out) 40.0°C/45.0°C.
*5 Parameter calculated according to [Regulation (EU) N. 2016/2281].
*6 Seasonal energy efficiency ratio.
*7 Seasonal space cooling energy efficiency.
*8 Weather conditions average, bivalent temperature -7.0°C.
*9 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013].
*10 Calculated with variable flow rate and variable temperature.
*11 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calcuated from the sound power level.
*12 Sound power on the basis of measurements made in compliance with ISO 9614.
*13 Sound power level in cooling and heating, outdoors.
*14 Unit in standard configuration/execution, without optional accessories.

Eurovent Certified Data

Our Traditional, Chiller Range

An Overview



Consisting of a wide range of models, the Climaveneta range of chillers are a new generation of water chiller designed for comfort and process cooling applications.

Modern multi-function buildings, shopping centres, large business centres and process cooling are just some of the examples where increased comfort and precision control are required. The Climaveneta range of chillers can deliver all of this and more through their ability to be easily integrated into ever increasingly complex building systems.

In order to maximise performance, reliability and overall system efficiency, the Climaveneta range of products bring advanced technology and know-how together in customisable packages to aid design, specification, installation and on-going operation.

- Advanced technology
- Air source and water cooled versions
- Scalable and fully customisable
- Plate or Shell & Tube heat exchanger options

Flexible Application Options

Comfort Cooling

By using hydronic terminals, a simple application of a chiller can include cooling a space or environment to a set temperature. By using water as the medium of energy, high sensible cooling and stable room temperatures can be achieved.

- Retail stores / Shopping centres
- Airports
- Offices
- Cinemas / Theatres
- Schools / Universities
- Museums
- Hotels and Resorts
- Hospitals / Healthcare

Process Cooling

During manufacturing processes, many substances become hot and if overheated can negatively effect the productivity and efficiency of the process. By correctly applying a chiller it is possible to ensure optimum temperatures and conditions are maintained at a steady state.

- Manufacturing processes
- Automotive and Electronic processes
- Energy and Power generation
- Industrial technology



CLIMAVENETA
SUSTAINABLE COMFORT

For further information on our traditional chiller range, please contact your local sales office

Chillers for Cooling Only Applications

A wide range of advanced, customisable models for use in efficiently cooling a space or an environment to a set temperature.

Key Features

- Energy efficient, customisable chillers
- Low noise levels
- Low GWP, HFO and R513A refrigerant options
- Free cooling available



Green HFO Refrigerants
Climaveneta uses green HFO refrigerants such as HFO1234ze and HFO1234yf in many ranges.

Magnetic Levitation
Magnetic levitation centrifugal compressors range from 200kW to 4MW in both air source and water source, free cooling and evaporative free cooling versions, to deliver the highest efficiency in every application.

Inverter Driven Compressor
The capacity is modulated resulting in increased efficiency as well as in the possibility to effectively implement smart management solutions such as active redundancy.

VPF
The VPF (Variable Primary Flow) dynamically optimises the unit's thermoregulation for variable flow operation, thus ensuring both the highest pump energy savings and stable chiller operation.

Leading Heat Recovery Technology
Heat recovery solutions are employed, such as thermodynamic, plate and rotary heat recovery as well as refrigerant booster.

Configurable Efficiency Set
3 energy efficiency standard configurations available with most hydronic units.

Air Cooled Chillers

			Capacity Range
i-BX	Inverter driven scroll compressors	INVERTER · AXIAL · PLATES	4 / 35
i-NX	Inverter driven scroll compressors	INVERTER · AXIAL · PLATES	43 – 129
NX	Scroll compressors	R454B · AXIAL · PLATES	39 – 327
NX	Scroll compressors	AXIAL · SHELL&T.	159 – 352
NECS	Scroll compressors	AXIAL · SHELL&T.	334 – 885
FX	Screw compressors	R HFO1234ze · R 513A · PLATES · AXIAL · SHELL&T.	140 – 1710
i-FX (1+i)	Inverter driven screw compressors	R HFO1234ze · R 513A · INVERTER · AXIAL · SHELL&T.	447 – 1697
TECS2	Inverter driven oil-free centrifugal compressors	R 513A · INVERTER · AXIAL · EC FAN · FLOODED	220 – 1324
TECS2 HFO	Inverter driven oil-free centrifugal compressors	INVERTER · R HFO1234ze · EC FAN · FLOODED	339 – 1017

Capacity Range: 500 | 1000 | 1500kW

Water Cooled Chillers

			Capacity Range
NX-W	Scroll compressors	PLATES	38 – 398
FX-W	Screw compressors	R 513A · R HFO1234ze · SHELL&T.	124 – 401
FOCS2-W	Screw compressors	R 513A · SHELL&T.	306 – 2416
FOCS3-W	Screw compressors	R 513A · FLOODED	188 – 1693
i-FX-W (1+i)	Screw compressors	R 513A · INVERTER · FLOODED	532 – 1784
TECS2-W HFO	Inverter driven oil-free centrifugal compressors	R HFO1234ze · INVERTER · FLOODED	340 – 1364
TX-W	Inverter driven oil-free centrifugal compressors	R 513A · INVERTER · FLOODED	246 – 4191

Capacity Range: 1000 | 2000 | 3000 | 4000kW

Condenserless Chillers

			Capacity Range
NECS-ME	Scroll compressors	PLATES	39 – 432
FOCS-ME	Screw compressors	SHELL&T.	79 – 2240

Capacity Range: 500 | 1000 | 1500 | 2000kW

Air Cooled with Free-Cooling Technology

			Capacity Range
TECS-FC	Inverter driven oil-free centrifugal compressors	R 513A · TER · EC FAN · SHELL&T.	302 – 1693

Capacity Range: 500 | 1000 | 1500kW

Air Cooled Chillers with Evaporative Free-Cooling Technology

			Capacity Range
TECS-EFC	Inverter driven oil-free centrifugal compressors	INVERTER · AXIAL · FLOODED	300 – 1693

Capacity Range: 500 | 1000 | 1500kW

For further information please contact your local sales office

CLIMAVENETA
SUSTAINABLE COMFORT

Chillers for Heat Pump Applications

A wide range of advanced, customisable models for use in efficiently cooling or heating a space or an environment to a set temperature.

Key Features

- Energy efficient, customisable chillers
- Low noise levels
- Low GWP, HFO and R513A refrigerant options
- Free cooling available
- Hot water production up to 78°C



Inverter Driven Compressor
The capacity is modulated resulting in increased efficiency as well as in the possibility to effectively implement smart management solutions such as active redundancy.

VPF
The VPF (Variable Primary Flow) dynamically optimises the unit's thermoregulation for variable flow operation, thus ensuring both the highest pump energy savings and stable chiller operation.

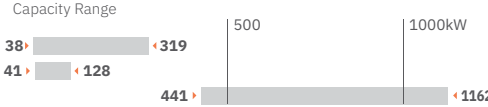
High Water Temperature
A complete range of solutions designed to deliver high water temperature for any heating requirement.

Leading Heat Recovery Technology
Heat recovery solutions are employed, such as thermodynamic, plate and rotary heat recovery as well as refrigerant booster.

Configurable Efficiency Set
3 energy efficiency standard configurations available with most hydronic units.

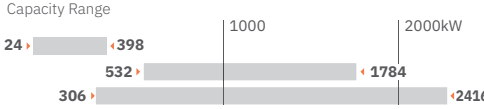
Air to Water Reversible Heat Pumps

			Capacity Range
NX-N	Scroll compressors	R 454B · SCROLL · AXIAL · PLATES	38 – 319
i-NX-N	Inverter driven scroll compressors	INVERTER · SCROLL · AXIAL · PLATES	41 – 128
FOCS-N	Screw compressors	SCREW · AXIAL · SHELL&T.	441 – 1162



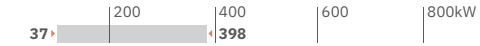
Water to Water Heat Pumps Reversible on Hydraulic Side

			Capacity Range
NX-W/H	Scroll compressors	SCROLL · PLATES	24 – 398
i-FX-W/H	Inverter screw compressors	R 513A · INVERTER · SCREW · FLOODED	532 – 1784
FOCS2-W/H	Scroll compressors	SCREW · SHELL&T.	306 – 2416



Water to Water Reversible Heat Pumps

			Capacity Range
NX-W/H	Scroll compressors	SCROLL · PLATES	37 – 398



Heating Only Heat Pumps

			Capacity Range
AW-HT	Air source with scroll compressors	SCROLL · AXIAL · PLATES	38 – 205
EW-HT	Water source with scroll compressors	SCROLL · PLATES	70 – 279



For further information please contact your local sales office

CLIMAVENETA
SUSTAINABLE COMFORT

INTEGRA Simultaneous Heating & Cooling 4-Pipe Chiller System

Air and Water sourced units for 4-pipe systems, using either scroll, screw or inverter screw compressors. Available from 45 to 1,125kW, these systems provide simultaneous heating and cooling in a highly efficient manner.

Key Features

- TER (Total efficiency Ratio) of up to 8
- Minimal footprint requiring less plant space
- Reduction of onsite operations as INTEGRA negates the need to connect to the gas network

Inverter Driven Compressor
The capacity is modulated resulting in increased efficiency as well as in the possibility to effectively implement smart management solutions such as active redundancy.

VPF
The VPF (Variable Primary Flow) dynamically optimises the unit's thermoregulation for variable flow operation, thus ensuring both the highest pump energy savings and stable chiller operation.

Smart Thermal Energy Management
An innovative heat recovery system that allows the smart use of rejected heat from the industrial process for comfort heating and other neighbouring applications.

High Water Temperature
A complete range of solutions designed to deliver high water temperature for any heating requirement.

Configurable Efficiency Set
3 energy efficiency standard configurations available with most hydronic units.



INTEGRA

Air to Water Units

i-NX-Q	Inverter scroll compressors	INVERTER · SCROLL · AXIAL · PLATES
NECS-Q	Scroll compressors	SCROLL · AXIAL · SHELL&T.
ERACS2-Q	Screw compressors	R 513A · SCREW · AXIAL · EC FAN · SHELL&T.
i-FX-Q2	Inverter screw compressors	R 513A · INVERTER · SCREW · EC FAN · SHELL&T.

Capacity Range

i-NX-Q	45 – 165
NECS-Q	150 – 928
ERACS2-Q	200 – 826
i-FX-Q2	334 – 1125

Water to Water Units

NECS-WQ	Scroll compressors	SCROLL · PLATES
ERACS-WQ	Screw compressors	R 513A · SCREW · SHELL&T.

Capacity Range

NECS-WQ	48 – 442
ERACS-WQ	189 – 393

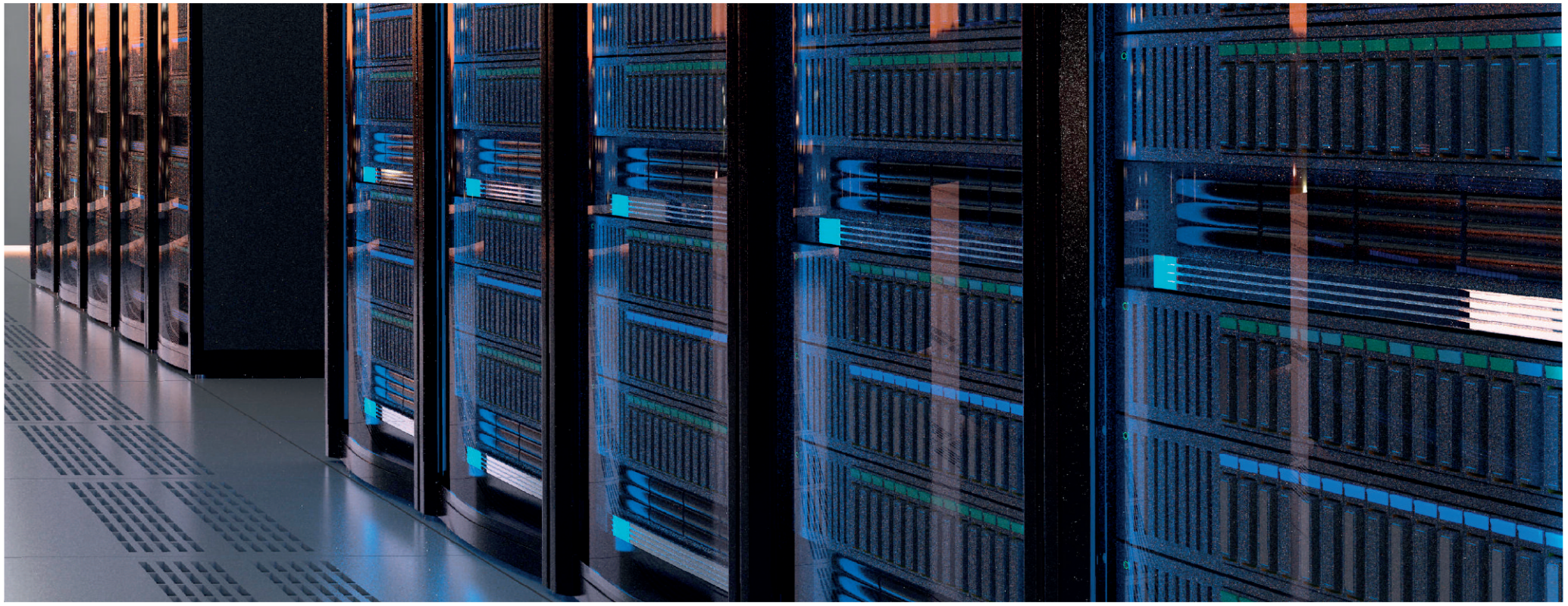
For further information please contact your local sales office

CLIMAVENETA
SUSTAINABLE COMFORT

MITSUBISHI ELECTRIC

I.T. Cooling

Close Control Computer Room
Air Conditioning Systems





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Close Control Air Conditioning Systems

Precise Temperature and Humidity Control

Complex I.T. environments are often characterised by variable cooling loads, which require a high cooling capacity at full load in order to allow the I.T. equipment to operate correctly when it is most needed.

Our I.T. Cooling range makes it possible to keep temperature and humidity constant, even with very wide load variations, ensuring the correct room conditions all year round.

The perfect match between efficiency and reliability

With our I.T. cooling systems, both efficiency and reliability are paramount throughout all the stages of research, design and manufacturing. By using this approach along **with over 50 years of manufacturing experience within the I.T. cooling sector,** we are able to offer tailor made I.T. Cooling solutions

Close Control Air Conditioning Systems

The need for high sensible cooling and close control of both temperatures and humidity in critical I.T. environments has never been higher.

Mitsubishi Electric and RC I.T. cooling systems have been designed to fulfil this requirement, reducing operational costs in the process through the use of highly efficient technology, with many systems incorporating inverter control as standard.



Mitsubishi Electric Perimeter Cooling units

Mitsubishi Electric's Close Control systems are specifically designed for rooms with a high sensible cooling load that require precise temperature and humidity control. Because of the need for close control 24 hours a day, 365 days a year, an inverter driven compressor has been incorporated into the outdoor units, maximising the energy efficiency of the system.



- Connects to Mr Slim Power Inverter outdoor units
- Easily integrates into existing and new control networks
- Quick recovery following power failure
- High Sensible cooling
- Close control of supply temperature
- Back-up and rotate function available
- Easy to install - no space required at the rear of the unit
- Inverter driven capacity control

RC Perimeter Cooling Units

The RC I.T. Cooling range of perimeter, upflow or downflow units have been designed to cool new and existing I.T. rooms efficiently and effectively. The perimeter range offers a broad range of unit types to meet any I.T. perimeter cooling demand.



- DX or chilled water versions available
- Precise temperature and humidity control
- New generation EC PUL (Polymeric ULtralight) high efficiency fans
- DC inverter technology
- Free cooling available
- Dual fluid circuits for the highest reliability
- Advanced control systems





Multi Density - Launching in 2020

Bringing together leading VRF technology and precision cooling

Mitsubishi Electric's new Multi Density systems combine the efficiency, quality and simplicity of City Multi VRF, with high performance in-row cooling solutions for high density data rooms.

- Plug and play
- High efficiency
- Long pipe runs
- Proven technology



In-Row Cooling Solution

These systems are suitable for application in modern I.T. infrastructure that is typically characterised by high thermal loads, and are particularly suitable for high density racks and blade server cooling in data centres with hot-spots.

The range is able to cope with the high density of the thermal load, with minimal impact of space in the data centre. In-row technology puts the air conditioning unit directly within the rows of racks to cool the localised heat sources (hot-spots).



Mitsubishi Electric cooling only VRF outdoor units

Multi Density is ideal for applications where high sensible cooling and close control of temperature in high density applications is required. Multi Density takes advantage of more than 50 years' experience of the RC brand within the I.T. Cooling market, coupled with Mitsubishi Electric renowned quality standards.

This indoor cooling package consists of multiple indoor 'coolside' close coupled air conditioners, connected to a City Multi VRF outdoor unit. The result is a full inverter multi-split system, designed according to the best quality standards and dedicated to the most reliable I.T. environments.

- Wide operating range
- Self-developed inverter compressor technology
- M-Net control
- Mitsubishi Electric Quality, manufactured in Japan

Air Conditioning for **High Density Racks and Blade Servers**

Rack Cooling Solutions

Rack cooling solutions have been designed for managing high density servers (blade servers), better known as hot-spots.

Through utilisation of advanced technology, these rack cooling units deliver targeted cooling exactly where it is required.

- DX or chilled water versions available
- Modulates airflow using EC high efficiency fans. The fans adapt to the thermal load detected by the sensors positioned in the hot and cold aisles
- Compatible with most rack systems and fully scalable
- Dual circuit and free cooling option available for N+1

Door Unit Cooling Solutions

Close-coupled cooling is one of the best ways to eliminate hot spots in a data centre environment.

The major advantage of door cooling systems lie in the fact that they are installed at the back of the rack (hot aisle), without occupying space that can then be used for servers. This in turn reduces the number of racks needed per row.

- New generation EC high efficiency fans
- Suitable for 42U / 48U racks
- Minimal intrusion into server space
- Dynamic control of air stratification
- Can be supplied with rack







s-MEXT-G00 DX

R32 Close Control System





High precision air conditioners are ideal for applications where high sensible cooling and close control of temperature and humidity are required.

s-MEXT takes advantage of more than 50 years experience of the RC brand within the I.T. Cooling market, coupled with Mitsubishi Electric renowned quality standards. The split cooling package consists of the indoor s-MEXT high precision air conditioner connected to a Mr Slim R32 Power Inverter outdoor unit. The result is a full inverter split system, designed according to the best quality standards and dedicated to the most reliable I.T. environments.

Key Features

- High Efficiency - full Mitsubishi Electric inverter technology and EC plug fans
- Small footprint
- Pipe runs up to 100m
- Trusted Mr Slim Power Inverter technology
- Available in Upflow [over] and Downflow [under] variants

R32

CRAC UNITS (Computer Room Air Conditioning)		s-MEXT-G00 DX 006 S F1	s-MEXT-G00 DX 009 S F1	s-MEXT-G00 DX 013 S F1	s-MEXT-G00 DX 022 S F2	s-MEXT-G00 DX 038 D F3	s-MEXT-G00 DX 044 D F3
COOLING CAPACITY (kW)*1	Total	6.82	10.1	11.9	22.6	39.0	42.5
	Sensible	6.18	8.91	10.2	19.3	33.6	35.3
SHR*2		0.91	0.88	0.86	0.85	0.86	0.83
SYSTEM EER		4.67	4.30	3.49	3.18	3.58	2.88
EC SUPPLY FAN (no.)		1	1	1	2	1	1
AIRFLOW (m^3/h)		2,000	2,500	2,800	5,000	8,800	10,000
NOMINAL EXTERNAL STATIC PRESSURE (Pa)		20	20	20	20	20	20
MAX EXTERNAL STATIC PRESSURE (Pa)		208	22	110	21	129	20
POWER INPUT (kW)*3		0.21	0.35	0.47	0.70	1.43	1.96
REFRIGERANT		R32	R32	R32	R32	R32	R32
REFRIGERANT CIRCUITS (no.)		1	1	1	1	2	2
AIR FILTERS (no.)		1	1	1	2	4	4
	Extended filtering surface (m^2)	0.68	0.68	0.68	1.05	1.76	1.76
	Efficiency [ISO EN 16890] (COARSE)	60%	60%	60%	60%	60%	60%
SOUND LEVEL [ISO 3744] (dB(A))*4	Pressure Level	53	57	61	60	63	67
	Power Level	69	73	77	76	79	83
POWER SUPPLY (V/Ph/Hz)		230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	400 / 3 / 50+N	400 / 3 / 50+N
ABSORBED CURRENT (A)*3		1.5	2.1	2.7	3.0	2.1	2.8
STARTING CURRENT (A)		2.0	2.0	2.8	3.3	3.8	3.8
MAX ABSORBED CURRENT (A)		2.3	2.3	2.8	3.9	3.8	3.8
ELECTRICAL PANEL	Power Input (kW)	0.14	0.14	0.14	0.14	0.14	0.14
DIMENSIONS (mm)	Width	600	600	600	1,000	1,000	1,000
	Depth	500	500	500	500	890	890
	Height	1,980	1,980	1,980	1,980	1,980	1,980
NET WEIGHT (kg)	Upflow	103	106	110	165	237	237
	Downflow	110	115	120	175	247	247
CONNECTIONS	Refrigerant pipes diameter - Gas (Ø Inch)	5/8"	5/8"	5/8"	1"	1"	1"
	Refrigerant pipes diameter - Liquid (Ø Inch)	3/8"	3/8"	3/8"	1/2"	3/8"	1/2"
	Condensate (Ømm)*5	19	19	19	19	19	19
	Power Supply wiring Cable (no. x mm^2)*6	3G1.5	3G1.5	3G1.5	3G1.5	5G1.5	5G1.5

OUTDOOR UNITS		PUZ-ZM60VHA	PUZ-ZM100VKAR1	PUZ-ZM125YKAR2	PUZ-ZM250YKA	2 x PUZ-ZM200YKA	2 x PUZ-ZM250YKA
SOUND PRESSURE LEVEL (dB(A))	Cooling	47	49	50	59	59	59
WEIGHT (kg)		70	116	125	138	137	138
DIMENSIONS (mm)	Width x Depth x Height	950 x 330 + 25 x 943	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330+40 x 1338	1050 x 330+40 x 1338	1050 x 330+40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Single	Single	Three	Three	Three	Three
OUTDOOR POWER INPUT (kW)	Cooling (nominal)	1.25	2.00	2.94	6.41	4.73	6.41
STARTING CURRENT (A)		6.0	13.0	6.0	12.3	8.67	12.3
MAX RUNNING CURRENT (A)	Cooling	19.2	27.0	10.0	22.5	22.5	22.5
FUSE RATING (BS88) - HRC (A)		25	32	16	32	32	32
MAINS CABLE	No. Cores	3	3	5	5	5	5
MAX PIPE LENGTH (m)		55	100	100	100	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) - 30m	2.80 / 1.89	4.00 / 2.70	4.00 / 2.70	6.80 / 4.59	6.30 / 4.25	6.80 / 4.59
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	0.80 / 0.54	2.80 / 1.89	2.80 / 1.89	2.40 / 1.62 (70m)*7	1.60 / 1.08 (70m)*7	2.40 / 1.62 (70m)*7
GUARANTEED OPERATING RANGE (°C)	Max Temp	46	46	46	46	46	46
	Min Temp*8	-15	-15	-15	-15	-15	-15

Notes:
The cooling capacity does not consider the supply fan motor thermal load.
*1 Gross value based on return air of 27°C - 47%RH; Ambient Temperature 35°C; ESP=20PA; Interconnecting pipework length 5m.
*2 SHR = Sensible cooling capacity / Total cooling capacity.
*3 Corresponding to the nominal ESP=20Pa.
*4 Sound pressure level on air return at 1m.
*5 Rubber pipe - referred to internal diameter.
*6 Minimum section.
*7 For 70 to 100m please consult the service handbook.
*8 Optional air protection guide is required for temperatures below -5°C.
These units contain <HFC R32 [GWP100 675]> fluorinated greenhouse gas.

s-MEXT-G00 DX

R410A Close Control System





High precision air conditioners are ideal for applications where high sensible cooling and close control of temperature and humidity are required.

s-MEXT takes advantage of more than 50 years experience of the RC brand within the I.T. Cooling market, coupled with Mitsubishi Electric renowned quality standards. The split cooling package consists of the indoor s-MEXT high precision air conditioner connected to a Mr Slim R410A Power Inverter outdoor unit. The result is a full inverter split system, designed according to the best quality standards and dedicated to the most reliable I.T. environments.

Key Features

- High Efficiency - full Mitsubishi Electric inverter technology and EC plug fans
- Small footprint
- Pipe runs up to 100m
- Trusted Mr Slim Power Inverter technology
- Available in Upflow [over] and Downflow [under] variants

CRAC UNITS (Computer Room Air Conditioning)		s-MEXT-G00 DX 006 S F1	s-MEXT-G00 DX 009 S F1	s-MEXT-G00 DX 013 S F1	s-MEXT-G00 DX 022 S F2	s-MEXT-G00 DX 038 D F3	s-MEXT-G00 DX 044 D F3
COOLING CAPACITY (kW)*1	Total	6.79	10.1	11.9	22.5	38.8	42.4
	Sensible	6.28	9.0	10.3	19.5	34.0	37.5
SHR*2		0.92	0.89	0.87	0.87	0.88	0.88
SYSTEM EER		3.90	4.01	3.01	2.88	3.15	2.62
EC SUPPLY FAN (no.)		1	1	1	2	1	1
AIRFLOW (m^3/h)		2,000	2,500	2,800	5,000	8,800	10,000
NOMINAL EXTERNAL STATIC PRESSURE (Pa)		20	20	20	20	20	20
MAX EXTERNAL STATIC PRESSURE (Pa)		208	22	110	21	129	20
POWER INPUT (kW)*3		0.21	0.35	0.47	0.7	1.43	1.96
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A
REFRIGERANT CIRCUITS (no.)		1	1	1	1	2	2
AIR FILTERS (no.)		1	1	1	2	4	4
	Extended filtering surface (m^2)	0.68	0.68	0.68	1.05	1.76	1.76
	Efficiency [ISO EN 16890] (COARSE)	60%	60%	60%	60%	60%	60%
SOUND LEVEL [ISO 3744] (dB(A))*4	Pressure Level	53	57	61	60	63	67
	Power Level	69	73	77	76	79	83
POWER SUPPLY (V/Ph/Hz)		230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	400 / 3 / 50+N	400 / 3 / 50+N
ABSORBED CURRENT (A)*3		1.5	2.1	2.7	3.0	2.1	2.8
STARTING CURRENT (A)		2.0	2.0	2.8	3.3	3.8	3.8
MAX ABSORBED CURRENT (A)		2.3	2.3	2.8	3.9	3.8	3.8
ELECTRICAL PANEL	Power Input (kW)	0.14	0.14	0.14	0.14	0.14	0.14
DIMENSIONS (mm)	Width	600	600	600	1,000	1,000	1,000
	Depth	500	500	500	500	890	890
	Height	1,980	1,980	1,980	1,980	1,980	1,980
NET WEIGHT (kg)	Upflow	103	106	110	165	237	237
	Downflow	110	115	120	175	247	247
CONNECTIONS	Refrigerant pipes diameter - Gas (Ø Inch)	5/8"	5/8"	5/8"	1"	1"	1"
	Refrigerant pipes diameter - Liquid (Ø Inch)	3/8"	3/8"	3/8"	1/2"	3/8"	1/2"
	Condensate (Ømm)*5	19	19	19	19	19	19
	Power Supply wiring Cable (no. x mm^2)*6	3G1.5	3G1.5	3G1.5	3G1.5	5G1.5	5G1.5

OUTDOOR UNITS		PUHZ-ZRP60VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP125YKA3	PUHZ-ZRP250YKA3	2 x PUHZ-ZRP200YKA3	2 x PUHZ-ZRP250YKA3
SOUND PRESSURE LEVEL (dB(A))	Cooling	47	49	50	59	59	59
WEIGHT (kg)		70	116	125	135	135	135
DIMENSIONS (mm)	Width x Depth x Height	950 x 330 + 30 x 943	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330+40 x 1338	1050 x 330+40 x 1338	1050 x 330+40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
PHASE		Single	Single	Three	Three	Three	Three
OUTDOOR POWER INPUT (kW)	Cooling (nominal)	1.53	2.17	3.49	7.11	5.44	7.11
STARTING CURRENT (A)		5	12	4	5	5	5
MAX RUNNING CURRENT (A)	Cooling	19	26.5	9.45	21	19	21
FUSE RATING (BS88) - HRC (A)		25	32	16	32	32	32
MAINS CABLE	No. Cores	3	3	5	5	5	5
MAX PIPE LENGTH (m)		50	75	75	100	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088) - 30m	3.50 / 7.31	5.00 / 10.44	5.00 / 10.44	7.70 / 16.08	7.10 / 14.82	7.70 / 16.08
MAX ADDITIONAL REFRIGERANT (kg) / CO_2 EQUIVALENT (t)	R410A (GWP 2088)	1.20 / 2.51	2.40 / 5.01	2.40 / 5.01	4.80 / 10.02 (75m)*7	3.60 / 7.52 (75m)*7	4.80 / 10.02 (75m)*7
GUARANTEED OPERATING RANGE (°C)	Max Temp	46	46	46	46	46	46
	Min Temp*8	-15	-15	-15	-15	-15	-15

Notes:
The cooling capacity does not consider the supply fan motor thermal load.
*1 Gross value based on return air of 27°C - 47%RH; Ambient Temperature 35°C; ESP=20PA; Interconnecting pipework length 5m.
*2 SHR = Sensible cooling capacity / Total cooling capacity.
*3 Corresponding to the nominal ESP=20Pa.
*4 Sound pressure level on air return at 1m.
*5 Rubber pipe - referred to internal diameter.
*6 Minimum section.
*7 For 75 to 100m please consult the service handbook.
*8 Optional air protection guide is required for temperatures below -5°C.
These units contain <HFC R410A [GWP100 2088]> fluorinated greenhouse gas.

i-NEXT DX

R410A Close Control System







High precision air conditioners are ideal for applications where high sensible cooling and close control of temperature and humidity are required.

The i-NEXT direct expansion air cooled range incorporates full inverter driven BLDC Mitsubishi Electric compressors and a new microchannel coil remote condenser, perfect for keeping room conditions constant under varying loads, whilst being highly efficient.

Key Features

- Perimeter unit with downflow and upflow configurations
- Full inverter technology with BLDC Mitsubishi Electric compressors
- Ultralight composite EC plug fans resulting in reduced noise and power usage
- Integrated control of up to 10 units for intelligent redundancy management
- Front access to main components for easy inspection and routine maintenance
- Automatic restart from power outage
- Return air temperature operating limits up to 40°C
- New microchannel coil remote condensers with AC axial fans
- Optional Modbus RS485 and BACnet TCP/IP connectivity
- Optional electrical heater and steam humidifiers
- Optional floor stands and discharge plenums

CRAC UNITS (Computer Room Air Conditioning)		i-NEXT DX 012 M1 S E1	i-NEXT DX 018 M1 S E2	i-NEXT DX 022 M1 S E3	i-NEXT DX 030 M1 S E4	i-NEXT DX 047 M1 S E5	i-NEXT DX 042 M2 D E5	i-NEXT DX 068 M2 D E7	i-NEXT DX 094 M2 D E8	i-NEXT DX 120 M4 D E9*1	i-NEXT DX 150 M4 D E9*1
COOLING CAPACITY (kW)*2	Capacity Range	3.2 - 10.0	6.7 - 20.4	7.1 - 23.1	12.5 - 37.7	17.4 - 51.6	15.4 - 47.4	23.9 - 75.7	33.5 - 101.0	25.7 - 108.0	32.1-129.0
	Total	10.0	20.4	23.1	37.7	51.6	47.4	75.7	101.0	108.0	129.0
	Sensible	9.8	19.3	23.1	37.7	51.4	47.4	75.7	97.1	108.0	129.0
SHR*3	Nominal	0.98	0.95	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00
EER*4	Nominal	3.21	2.80	3.18	3.02	2.98	3.14	3.12	3.01	3.21	2.79
EC SUPPLY FAN(S)	No.	1	1	1	1	1	1	2	2	3	3
AIRFLOW (m³/h)		2,800	4,100	5,500	10,000	12,000	12,000	20,000	22,000	28,000	32,000
EXTERNAL STATIC PRESSURE (Pa)	Nominal	20	20	20	20	20	20	20	20	20	20
MAX EXTERNAL STATIC PRESSURE (Pa)		75	311	831	191	217	283	451	388	572	379
POWER INPUT (kW)	Fan Motor ESP=20Pa	0.29	0.52	0.78	2.04	2.27	2.05	3.51	3.72	4.20	5.82
	Total*4	3.11	7.28	7.27	12.50	17.30	15.10	24.30	33.60	33.60	46.30
REFRIGERANT		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
REFRIGERANT CIRCUITS	No.	1	1	1	1	1	2	2	2	2	2
COMPRESSORS		BLDC Rotary Inverter	BLDC Scroll Inverter	BLDC Scroll Inverter	BLDC Scroll Inverter	BLDC Scroll Inverter	2x BLDC Scroll Inverter	2x BLDC Scroll Inverter	2x BLDC Scroll Inverter	4x BLDC Scroll*6	4x BLDC Scroll*6
AIR FILTERS	No.	1	1	2	2	3	3	4	5	6	6
	Extended filtering surface (m²)	0.6	0.8	1.2	2.1	2.6	2.6	3.9	4.5	5.2	5.2
	Efficiency [ISO EN 16890] (COARSE)	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
SOUND LEVEL dB(A) (ISO3774)*5	Downflow - Power / Pressure	63 / 47	64 / 48	62 / 46	74 / 57	76 / 59	76 / 59	75 / 58	78 / 60	80 / 62	80 / 62
	Upflow - Power / Pressure	69 / 53	63 / 47	65 / 49	75 / 58	81 / 64	81 / 64	79 / 62	83 / 65	N/A	N/A
POWER SUPPLY (V/Ph/Hz)		400 / 3 / 50+N	400 / 3 / 50+N	400 / 3 / 50+N	400 / 3 / 50+N	400 / 3 / 50+N	400 / 3 / 50+N	400 / 3 / 50+N	400 / 3 / 50+N	400 / 3 / 50+N	400 / 3 / 50+N
STARTING CURRENT (A)		4.3	5.7	8.2	9.2	11.4	8.4	13.9	15.9	70.9	72.9
MAX RUNNING CURRENT (A)		17.3	18.7	21.2	29.2	29.4	38.4	58.9	58.9	90.9	90.9
DIMENSIONS (mm)	Width	650	785	1,085	1,305	1,630	1,630	2,175	2,499	2,899	2,899
	Depth	675	675	775	930	930	930	930	930	930	930
	Height	1,925	1,925	1,925	1,980	1,980	1,980	1,980	1,980	1,980	1,980
NET WEIGHT (kg)	Downflow	220	250	330	440	490	575	705	865	985	1,010
	Upflow	210	240	320	430	480	565	650	805	N/A	N/A
CONNECTIONS	Refrigerant pipe diameter - Gas (Ø mm)*7	12	16	16	18	22	2 x 16	2 x 18	2 x 22	2 x 28	2 x 28
	Refrigerant pipe diameter - Liquid (Ø mm)*7	12	12	16	16	22	2 x 16	2 x 16	2 x 22	2 x 22	2 x 22
	Condensate (Ømm)*8	19	19	19	19	19	19	19	19	19	19

OUTDOOR UNITS / REMOTE CONDENSER(S)		GR-Z A B 50 013	GR-Z A B 50 027	GR-Z A B 50 034	GR-Z A B 50 049	GR-Z A B 50 067	2 x GR-Z A B 50 034	2 x GR-Z A B 50 049	2 x GR-Z A B 50 067	2 x GR-Z A B 50 082	2 x GR-Z A B 50 082
AIRFLOW (m³/h)		3,300	8,350	9,550	15,555	19,000	9,550	15,555	19,000	25,000	25,000
POWER SUPPLY (V/Ph/Hz)		230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50
MAX POWER INPUT (kW)		0.32	0.64	0.64	1.08	1.28	0.64	1.08	1.28	1.92	1.92
MAX RUNNING CURRENT (A)		1.40	2.90	2.90	4.94	5.80	2.90	4.94	5.80	8.70	8.70
SOUND PRESSURE LEVEL (dB(A))*5	1m (ISO3744)	50	55	56	54	58	56	54	58	59	59
DIMENSIONS (mm)	Horizontal Airflow (W x D x H)	770 x 718 x 900	1150 x 718 x 900	1360 x 718 x 1100	2040 x 718 x 1100	2600 x 718 x 1100	1360 x 718 x 1100	2040 x 718 x 1100	2600 x 718 x 1100	2600 x 718 x 1100	2600 x 718 x 1100
	Vertical Airflow (W x L x H)	940 x 770 x 1143	940 x 1150 x 1168	1140 x 1360 x 1168	1140 x 2040 x 1168	1140 x 2600 x 1168	1140 x 1360 x 1168	1140 x 2040 x 1168	1140 x 2600 x 1168	1140 x 2600 x 1168	1140 x 2600 x 1168
NET WEIGHT (kg)		30	45	53	86	100	53	86	100	120	120
CONNECTION SIZE	Refrigerant pipe diameter - Gas (Ø mm)*7	16	18	18	22	22	18	22	22	28	28
	Refrigerant pipe diameter - Liquid (Ø mm)*7	12	16	16	18	18	16	18	18	22	22

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

*1 Downflow version only.

*2 Gross value based on return air at 26°C - 40%RH; Ambient Temperature 35°C with above condenser(s) models.

*3 SHR = Sensible cooling capacity / Total cooling capacity.

*4 Compressor(s) & Fan(s) input power (ESP=20Pa) - Remote air cooled condenser not included.

*5 Average level at 1m from unit in free field conditions.

*6 In 2(1+i) configuration, 2 inverter driven with 2 direct online.

*7 Please refer to i-NEXT databook for interconnecting pipework size.

*8 Rubber pipe – refers to internal diameter.

These units contain <HFC R410A [GWP100 2088]> fluorinated greenhouse gas.

w-NEXT

Chilled Water
Close Control System





High precision air conditioners are ideal for applications where high sensible cooling and close control of temperature and humidity are required.

The w-NEXT chilled water range incorporates the latest EC plug fan(s), advanced controls software and an increased coil area resulting in the highest efficiency.

Key Features

- High Efficiency - EC plug fans
- Small footprint
- Adaptive Set Point
- Active Redundancy
- Available in Upflow [over] and Downflow [under] variants

CRAC UNITS (Computer Room Air Conditioning)		w-NEXT S 007 E0	w-NEXT S 013 E1	w-NEXT S 021 E2	w-NEXT S 032 E3	w-NEXT S 045 E3P	w-NEXT S 053 E4	w-NEXT S 072 E5
CAPACITY (kW)*2	Total	6.5	11.2	18.9	29.1	41.0	48.1	66.1
	Sensible	5.8	11.2	18.9	29.1	41.0	48.1	66.1
SHR*3		0.89	1.00	1.00	1.00	1.00	1.00	1.00
EER		54.2	38.6	21.5	17.5	18.6	22.4	22.8
EC SUPPLY FAN(S)	No.	1	1	1	1	1	1	2
AIRFLOW (m³/h)		1,800	2,900	4,920	7,800	10,800	13,100	16,350
EXTERNAL STATIC PRESSURE (Pa)		20	20	20	20	20	20	20
MAX EXTERNAL STATIC PRESSURE (Pa)		82	75	101	471	297	194	532
POWER INPUT (kW)*4		0.12	0.29	0.88	1.66	2.20	2.15	2.90
AIR FILTERS	No.	1	1	1	2	2	3	3
	Extended filtering surface (m²)	0.28	0.61	0.78	1.24	1.71	2.07	2.59
	Efficiency [ISO EN 16890] (COARSE)	40%	60%	60%	60%	60%	60%	60%
CHILLED WATER FLOW RATE (l/s)		0.31	0.54	0.90	1.39	1.96	2.30	3.16
WATERSIDE PRESSURE DROP (kPa)	Coil + 2-Port Valve	25.6	16.4	45.2	40.9	34.1	37.3	42.9
SOUND LEVEL dB(A) (ISO3774)*5	Downflow - Power / Pressure	58 / 43	63 / 47	67 / 51	68 / 52	73 / 57	74 / 57	73 / 56
	Upflow - Power / Pressure	65 / 50	67 / 51	71 / 55	72 / 56	77 / 61	78 / 61	77 / 60
POWER SUPPLY (V/Ph/Hz)		230 / 1 / 50	400 / 3+N / 50	400 / 3+N / 50	400 / 3+N / 50	400 / 3+N / 50	400 / 3+N / 50	400 / 3+N / 50
MAX POWER ABSORBED (kW)		0.15	1.32	0.97	2.70	2.90	2.70	5.40
MAX RUNNING CURRENT (A)		1.2	2.1	1.7	4.2	4.4	4.2	8.4
DIMENSIONS (mm)	Width	655	650	785	1085	1085	1305	1630
	Depth	445	675	675	675	930	930	930
	Height	1680	1925	1925	1925	1925	1980	1980
NET WEIGHT (kg)	Downflow	150	203	239	302	321	345	470
	Upflow	150	216	257	325	329	379	428
CONNECTIONS	Water Inlet / Outlet ISO 7/1 (Ø inch)	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/2"	2"
	Condensate (Ømm)*6	19	19	19	19	19	19	19

CRAC UNITS (Computer Room Air Conditioning)		w-NEXT S 081 E6	w-NEXT S 100 E7	w-NEXT S 120 E8	w-NEXT S 138 E9	w-NEXT S 160 E10*1	w-NEXT S 215 E10*1
CAPACITY (kW)*2	Total	73.5	91.6	111.0	126.0	147.0	204.0
	Sensible	73.5	91.6	111.0	126.0	147.0	177.0
SHR*3		1.00	1.00	1.00	1.00	1.00	0.87
EER		21.2	23.0	17.8	19.6	22.8	31.7
EC SUPPLY FAN(S)	No.	2	2	3	3	3	3
AIRFLOW (m³/h)		20,000	24,200	28,300	33,100	37,150	37,150
EXTERNAL STATIC PRESSURE (Pa)		20	20	20	20	20	20
MAX EXTERNAL STATIC PRESSURE (Pa)		458	247	237	309	207	207
POWER INPUT (kW)*4		3.47	3.98	6.22	6.42	6.44	6.44
AIR FILTERS	No.	4	4	5	6	6	6
	Extended filtering surface (m²)	3.16	3.83	4.47	5.24	6.54	6.54
	Efficiency [ISO EN 16890] (COARSE)	60%	60%	60%	60%	60%	60%
CHILLED WATER FLOW RATE (l/s)		3.51	4.38	5.33	6.04	7.03	9.74
WATERSIDE PRESSURE DROP (kPa)	Coil + 2-Port Valve	35.6	31.7	48.6	47	66.7	62.2
SOUND LEVEL dB(A) (ISO3774)*5	Downflow - Power / Pressure	75 / 58	76 / 59	79 / 61	80 / 62	79 / 61	79 / 61
	Upflow - Power / Pressure	79 / 62	80 / 63	83 / 65	81 / 63	N/A	N/A
POWER SUPPLY (V/Ph/Hz)		400 / 3+N / 50	400 / 3+N / 50	400 / 3+N / 50	400 / 3+N / 50	400 / 3+N / 50	400 / 3+N / 50
MAX POWER ABSORBED (kW)		5.80	5.40	8.10	8.70	8.10	8.10
MAX RUNNING CURRENT (A)		8.9	8.3	12.6	13.3	12.5	12.5
DIMENSIONS (mm)	Width	1875	2175	2499	2899	3510	3510
	Depth	930	930	930	930	930	930
	Height	1980	1980	1980	1980	1980	1980
NET WEIGHT (kg)	Downflow	531	589	660	753	900	970
	Upflow	483	535	598	679	N/A	N/A
CONNECTIONS	Water Inlet / Outlet ISO 7/1 (Ø inch)	2"	2 1/2"	2 1/2"	3"	3"	3"
	Condensate (Ømm)*6	19	19	19	19	19	19

THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD
*1 Downflow version only.
*2 Gross value based on return air at 24°C - 45%RH; Chiller water 7°C / 12°C.
*3 SHR = Sensible cooling capacity / Total cooling capacity.
*4 Fan(s) input power (ESP=20Pa).
*5 Average level at 1m from unit in free field conditions.
*6 Rubber pipe - refers to internal diameter.

I.T. Cooling Accessories / Optional Extras

DESCRIPTION
s-MEXT-G00 DX Accessories
Modbus serial card
BACnet TCP/IP serial card
Floor stand with rubber holders (255-350mm)
Floor stand with rubber holders (355-450mm)
Floor stand with rubber holders (400-510mm)
Electric heater
Steam humidifier
Air discharge plenum (downflow)
Air discharge plenum (upflow)
Panel(s) for return air suction from below (upflow)
i-NEXT DX Accessories
Modbus serial card
BACnet TCP/IP serial card
Floor stand with rubber holders (255-350mm)
Floor stand with rubber holders (355-450mm)
Floor stand with rubber holders (400-510mm)
Electric heater
Steam humidifier
Air discharge plenum (downflow)
Air discharge plenum (upflow)
Panel(s) for return air suction from below (upflow)
w-NEXT Accessories
Modbus serial card
BACnet TCP/IP serial card
Floor stand with rubber holders (255-350mm)
Floor stand with rubber holders (355-450mm)
Floor stand with rubber holders (400-510mm)
Electric heater
Steam humidifier
Air discharge plenum (downflow)
Air discharge plenum (upflow)
Panel(s) for return air suction from below (upflow)

MITSUBISHI ELECTRIC

Heating

Ecodan Renewable Heating Systems





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ecodan Renewable Heating Systems

ecodan Renewable Heating Technology

Ecodan Heat Pumps - Renewable Heating Systems

There is now no doubt that the world is in a climate crisis and that we need to act immediately to avoid catastrophic climate change. The UK Government have reacted by being the first major economy to pass net zero (Greenhouse Gas) emission laws. Renewable technologies, such as heat pumps, have become an integral part of the solution to the problem of reducing carbon emissions generated through heating.

As a market leader in both commercial and domestic heat pumps, Mitsubishi Electric is a pioneer in the development of this renewable technology. Around the world, heat pumps have been utilised for decades and Mitsubishi Electric has refined this technology to produce Ecodan - one of the most advanced, efficient heating systems available on the market today.

The award winning Ecodan heat pumps are available from 4kW up to 960kW, making them suitable for virtually any property, from small flats to large detached houses, from an office block to a school. They are the renewable, low carbon alternative to traditional high carbon heating systems.

- **Renewable heating solution capable of reducing emissions and achieving climate targets**
- **Highly efficient, proven and refined technology that can lower energy bills**
- **Range of easy to design, install and maintain systems suitable for a variety of property and application types**

Ecodan heat pumps are a renewable heating technology that efficiently and reliably generates sustainable space heating and hot water all year round, delivering a level of comfort that sets the technology apart from other forms of heating.



TV presenter, architect, lecturer and writer, George Clarke is a passionate advocate of design excellence and high levels of quality in the construction industry.

“ The way we design, build, heat, power and recycle our homes needs to change, and change quickly, and renewable heating is an important part of our future.

I’m therefore delighted to associate myself with Ecodan, the market-leading brand of heat pumps built here in the UK and which can help reduce energy bills and lower emissions for almost any home. ”

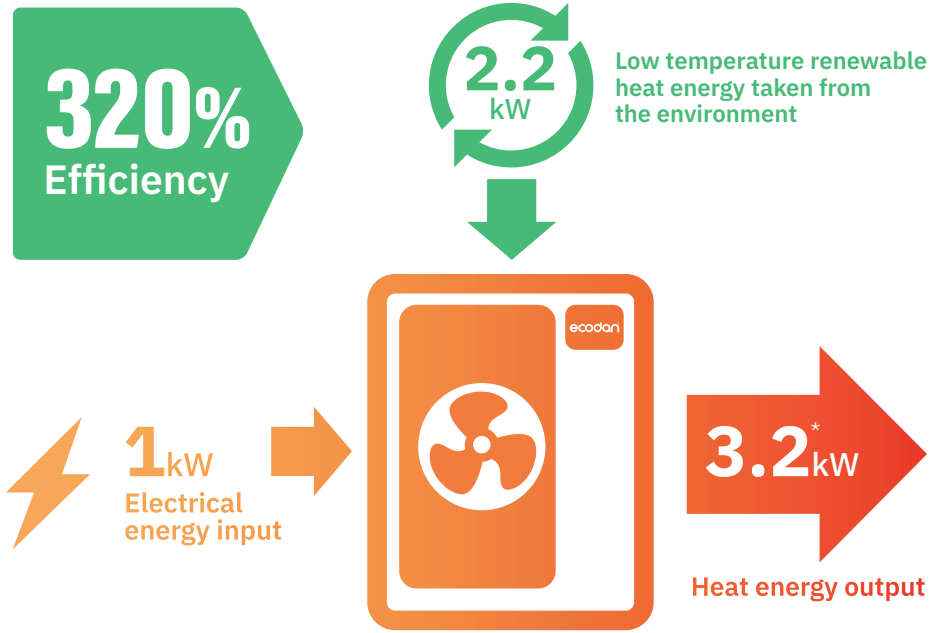
George Clarke

Ecodan Brand Ambassador

How do Ecodan air source heat pumps work?

Ecodan heat pumps harvest, upgrade and move heat from one location to another.

To achieve this, the **vapour compression cycle** is used, which has the ability to take low temperature renewable heat from the environment and raise it to usable temperatures capable of handling the space and water heating loads required in buildings.

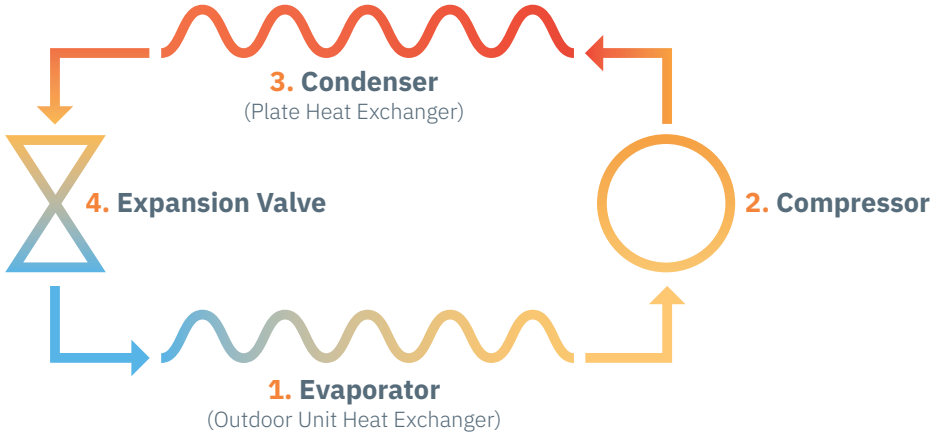


*As independently tested by BSRIA based upon BSEN14511 Part 3 standard rating conditions. Due to the method of operation, the performance of heat pumps will vary based upon the temperature of the heat source and the requirements of the heat delivered. The BSEN14511 testing relates to the heat pump performance only and not the entire heating system.

What is the vapour compression cycle?

- **At the beginning of the first phase the refrigerant is a cold low pressure liquid**

1. Refrigerant passes through the evaporator and is exposed to the heat energy of the outside air. As the air flows over the evaporator coil, this heat energy is transferred to the refrigerant, causing it to pressurise into a warm vapour.
2. This warm vapour then enters the compressor where its temperature increases as a result of the compression process and turns into a hot gas.
3. Hot refrigerant gas passes through the condenser (plate heat exchanger) and transfers its heat energy into the (cooler) water side that is connected to the primary water circuit. The heated water in this circuit is then used to heat up a hot water cylinder inside the property. Due to this energy transfer, the passing hot refrigerant gas cools and transforms back into a cool vapour.
4. Although the refrigerant vapour has cooled, in order to return the refrigerant back to its initial state, it is passed through an expansion valve. This lowers the pressure of the cool refrigerant vapour and transforms it back into a low pressure liquid - allowing for the vapour compression cycle to start once again.



- **This process is repeated**

As the refrigerant boils at -46ºC, there is still plenty of energy in the air on a cold day to make the process work.

ecodan Renewable Heating Systems

Ecodan Toolbox

Guidance and Support

With consideration for a multitude of different customers and requirements, Mitsubishi Electric have developed a wide range of advanced Ecodan products suited to satisfy the demands of the market.

Resources that provide guidance and support to optimise the performance and clarify the different types of Ecodan systems are readily available within our online Document Library and supporting digital media sources.

Whether technical product information sheets are required for a design specification, a brochure is required for a prospective customer, or a video is needed that explains how a heat pump is different from a common gas or oil boiler, an archive of useful resources are available at the click of a button.

Please visit the website:
library.mitsubishielectric.co.uk/pdf/directory/heating

Ecodan Selection Tool

The Ecodan Heat Pump Selection Tool enables different customer types with varying levels of technical knowledge to obtain an insight into how a property can benefit from the renewable heating that this technology can deliver.

Developed with two selection options to choose from, whether the project is a single domestic dwelling or a large commercial project, the tool will guide the user towards the solution most suited to the needs of the property. Upon completion of the selection process, the tool will generate a bespoke and professional equipment selection report based upon the criteria entered; providing the different user types with the relevant information and resources required to progress to the next stage of design.

Whether the user is a homeowner that wishes to understand the basic estimated costs of operating a renewable heating system or an installer that requires an MCS [MIS3005] standard compliant design for an RHI application, the Ecodan Selection Tool is capable of supporting an informed choice.

Please visit the website: **ecodanselectiontool.mitsubishielectric.co.uk**



Range Overview


QUHZ-W-VA


PUZ-WM-VHA


PUZ-WM-VAA


PUZ-WM-VAA


PUZ-WM-VAA


PU(H)Z-HW(M)-V/YHA


QAHV


CAHV


CRHV

System Type		Litres	4kW	5kW	6kW	8.5kW	11.2kW	14kW	40kW	43kW	60kW
Standalone				●	●	●	●	●	●	●	●
Thermal Store	EHPT20Q-VM2EA	200	●								
Packaged Cylinder	EHPT20X-MHEDW	200		●	●	●	●	●			
Pre-Plumbed Slimline Cylinder	EHPT15X-UKHLDW	150		●	●	●					
	EHPT17X-UKHLDW	170		●	●	●					
Pre-Plumbed Standard Cylinder	EHPT15X-UKHDW	150		●	●	●					
	EHPT17X-UKHDW	170		●	●	●					
	EHPT21X-UKH(D/C)W	210		●	●	●	●	●			
	EHPT25X-UKH(D/C)W	250				●	●	●			
	EHPT30X-UKH(D/C)W	300				●	●	●			
Pre-Plumbed Solar Cylinder	EHPT21X-UKHSDW	210		●	●	●	●	●			
	EHPT25X-UKHSDW	250				●	●	●			
	EHPT30X-UKHSDW	300				●	●	●			
Approvals	Manufactured in the United Kingdom			●	●	●	●				
	Red Dot Award				●	●	●				
	Microgeneration Certification Scheme		●					●		●	●
	Keymark			●	●	●	●	●			

Notes: Microgeneration or Keymark certification qualifies the approved product for the Renewable Heat Incentive (RHI) scheme.

ecodan®

QAHV

Monobloc Air Source Heat Pump



Specifically designed for commercial sanitary hot water application, where gas boilers, combined heat and power systems (CHP) or electric water heating have been traditionally utilised, the 40kW QAHV provides a low carbon solution for hotels, apartment blocks, leisure centres, hospitals, care homes, restaurants and education.

Utilising the natural and stable refrigerant CO_2 (R744), the environmentally clean solution enables compliance to strict local planning laws and boosts BREEAM points. Compounded by the increasing decarbonisation of the electrical grid, the QAHV provides a high efficiency, low carbon hot water delivery solution with leaving water temperature up to 90°C.

Key Features

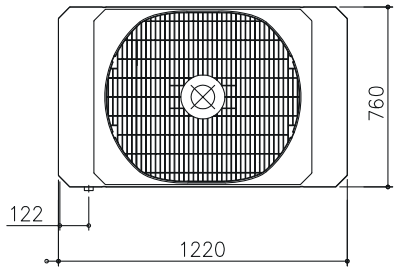
- High efficiency at high flow temperatures
- Utilises CO_2 refrigerant which has a GWP of 1
- Uses a unique twisted and spiral gas cooler to enhance energy efficiency
- Full heating capacity down to -3°C outdoor temperature and operates down to -25°C
- Super low noise levels
- Able to utilise with an indirect system

R744

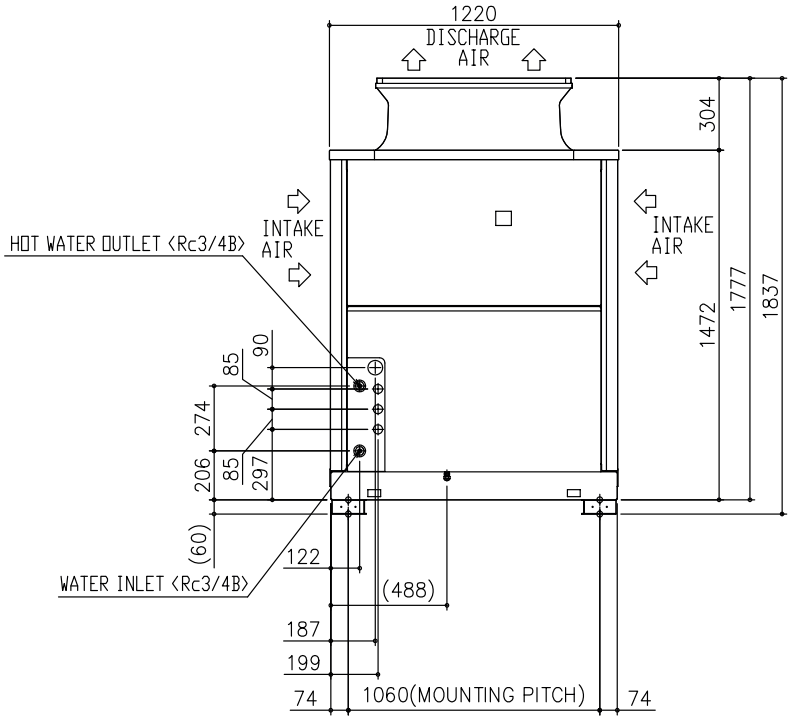
OUTDOOR UNIT		QAHV-N560YA-HPB
WATER HEATING 65°C *1	CAPACITY (kW)	40
	POWER INPUT (kW)	10.31
	CURRENT INPUT (A)	16.3
	COP	3.88
WATER HEATING 65°C *2	CAPACITY (kW)	40
	POWER INPUT (kW)	10.97
	CURRENT INPUT (A)	18.3
	COP	3.65
WATER HEATING 65°C *3	CAPACITY (kW)	40
	POWER INPUT (kW)	11.6
	CURRENT INPUT (A)	18.7
	COP	3.44
WATER HEATING ENERGY EFFICIENCY CLASS	FOR MEDIUM TEMPERATURE APPLICATION	A
TEMPERATURE RANGE	INLET WATER TEMPERATURE (°C)	5 ~ 63
	OUTLET WATER TEMPERATURE (°C)	55 ~ 90
	OUTDOOR TEMPERATURE (°C)	-25~43
ELECTRICAL	MAX CURRENT INPUT (A)	33.8
	ELECTRICAL SUPPLY (V / Hz)	380-415v, 50Hz
	PHASE	3
	FUSE RATING - MCB SIZES (A)*5	40
WATER DETAIL	INLET / OUTLET (mm (in.))	19.05 (Rc 3/4"), screw pipe / 19.05 (Rc 3/4"), screw pipe
	ALLOWABLE EXTERNAL PUMP HEAD (kPa)	77
DIMENSIONS (mm)	WIDTH	1220
	DEPTH	760
	HEIGHT	1837 (1777 without legs)
WEIGHT (kg)		400
NOISE LEVEL	SOUND PRESSURE *4 (dB(A))	56
REFRIGERANT	TYPE	R744 (GWP 1)
	REFRIGERANT CHARGE (kg) / CO_2 EQUIVALENT (t)	6.5 / 0.0065

*1 Under Normal heating conditions at the outdoor temp, 16°CDB/12°CWB, the outlet water temperature 65°C, and the inlet water temperature 17°C
*2 Under Normal heating conditions at the outdoor temp, 7°CDB/6°CWB, the outlet water temperature 65°C, and the inlet water temperature 9°C
*3 Under Normal heating conditions at the outdoor temp, 7°CDB/6°CWB, the outlet water temperature 65°C, and the inlet water temperature 15°C
*4 Measured 1m from the front of the unit in an anechoic room
*5 MCB Sizes BS EN60898-2 & BS EN60947-2

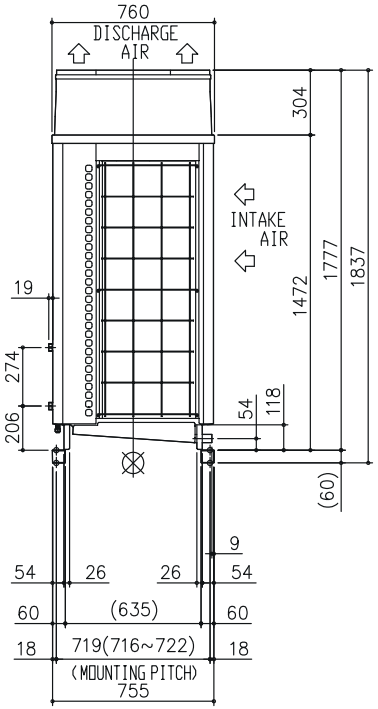
Upper View



Front View



Side View



ecodan

CAHV

Monobloc Air Source Heat Pump

Specifically designed for large applications, the Ecodan CAHV air source heat pump monobloc system can operate singularly, or form part of a multiple unit system. The CAHV also comes equipped with a wide range of controller features as standard.

A multiple unit system has the ability to cascade available units on and off to meet the load from a building. As an example of this modulation, a 16 unit system allows 0.5kW increments of capacity, from 18kW all the way up to 688kW. This level of modulation is unprecedented within the heating industry and with cascade and rotation built in as standard, the Ecodan CAHV system is perfectly suited to a wide range of commercial applications.

Key Features

- Multiple unit cascade control of up to 688kW capacity, only water and electrical connections needed
- Ability to rotate units based on accumulated run hours
- Provides from 25ºC up to 70°C water flow temperatures without boost heaters
- Low maintenance

R407C



APPROVED PRODUCT

MCS

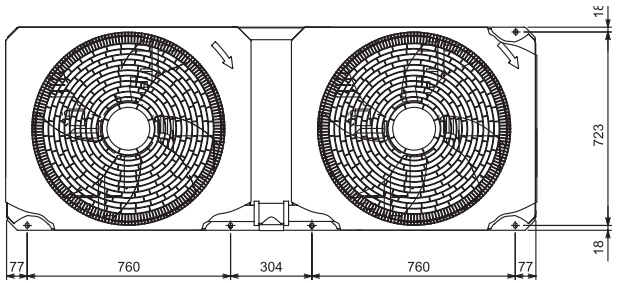
Certificate Number: MCS HP0002
Product Type: Heat Pumps
Product Reference: CAHV-P500YB-HPB

OUTDOOR UNIT		CAHV-P500YB-HPB
HEAT PUMP SPACE HEATER - 55°C	ErP Rating	A++
	η_s	125%
	SCOP	3.19
HEAT PUMP SPACE HEATER - 35°C	ErP Rating	A+
	η_s	139%
	SCOP	3.54
HEATING*1 (A-3/W35)	Capacity (kW)	42.6
	Power Input (kW)	15.2
	COP	2.80
OPERATING AMBIENT TEMPERATURE (°C DB)		-20~+40ºC
SOUND PRESSURE LEVEL AT 1M (dBA)*2*3		59
LOW NOISE MODE (dBA)*2		Variable
FLOW RATE (l/min)		126
WATER PRESSURE DROP (kPa)		18
DIMENSIONS (mm)	Width	1978
	Depth	759
	Height	1710 (1650 without legs)
WEIGHT (kg)		526
ELECTRICAL SUPPLY		380-415v, 50Hz
PHASE		3
NOMINAL RUNNING CURRENT [MAX] (A)		17.6 [52.9]
FUSE RATING - MCB SIZES (A)*4		63
REFRIGERANT CHARGE (kg) / CO_2 EQUIVALENT (t)	R407C (GWP 1774)	11 / 19.5

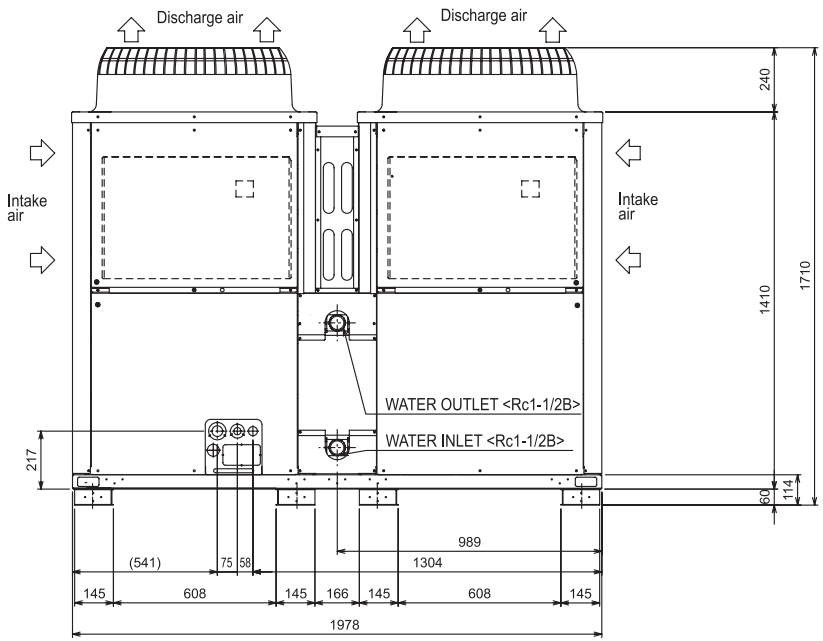
*1 Under normal heating conditions at outdoor temp: -3°CDB / -4°CWB, outlet water temp 35°C, inlet water temp 30°C *2 Under normal heating conditions at outdoor temp: 7°CDB / 6°CWB, outlet water temp 35°C, inlet water temp 30°C as tested to BS EN14511
*3 Sound power level of the CAHV-P500YB-HPB is 70.7dBA. Tested to BS EN12102 *4 MCB Sizes BS EN60898-2 & BS EN60947-2

η_s is the seasonal space heating energy efficiency (SSHEE) η_{wh} is the water heating energy efficiency

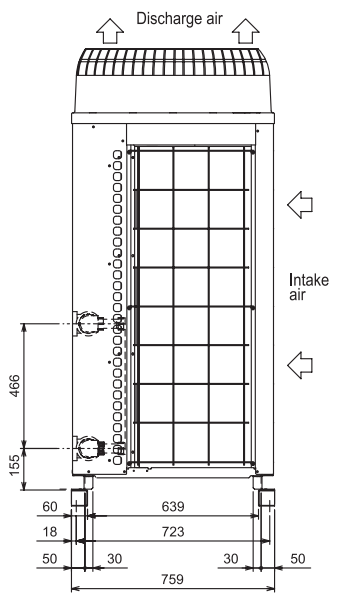
Upper View



Front View



Side View



ecodan®

CRHV

Monobloc Ground / Water Source Heat Pump



PLEASE NOTE: Full design criteria is needed to ascertain the capacity which could change based on heat source temperature and building flow temperature.

*1 Under normal heating conditions at brine inlet: 0°C, outlet water temp 35°C as tested to BS EN14511 (60kW)
*2 Under normal heating conditions at brine inlet: 0°C, outlet water temp 35°C as tested to BS EN14511 (45kW)
*3 Under normal heating conditions at water inlet: 10°C, outlet water temp 35°C as tested to BS EN14511 (60kW)
*4 Under normal heating conditions at water inlet: 10°C, outlet water temp 35°C as tested to BS EN14511 (45kW)
*5 Sound power level as tested to BS EN12102
*6 Heat source inlet temperature above 27ºC and up to 45°C option must reverse the inlet and outlet heat source connections and refer to manual for dip switch changes
*7 The system should be adequately protected from freezing
*8 MCB Sizes BS EN60898-2 & BS EN60947-2

* LTHW - Low Temperature Hot Water
* Please use adequate frost protection to ensure pipework and the unit do not freeze if the system is powered down
* Please do not use ground water or well water directly within the unit
* The water circuit must be a closed circuit

η_s is the seasonal space heating energy efficiency (SSHEE)
η_{wh} is the water heating energy efficiency

APPROVED PRODUCT

MCS

Certificate Number: MCS HP0002
Product Type: Heat Pumps
Product Reference: CRHV-P600YA-HPB

The inverter driven Ecodan CRHV monobloc ground / water source heat pump can operate singly, or be banked together to create a system that can modulate and cascade available units on and off to meet the load from a building.

This level of modulation is unprecedented within the heating industry, and with cascade and rotation built in as standard, the Ecodan CRHV system is perfectly suited to a wide range of commercial applications.

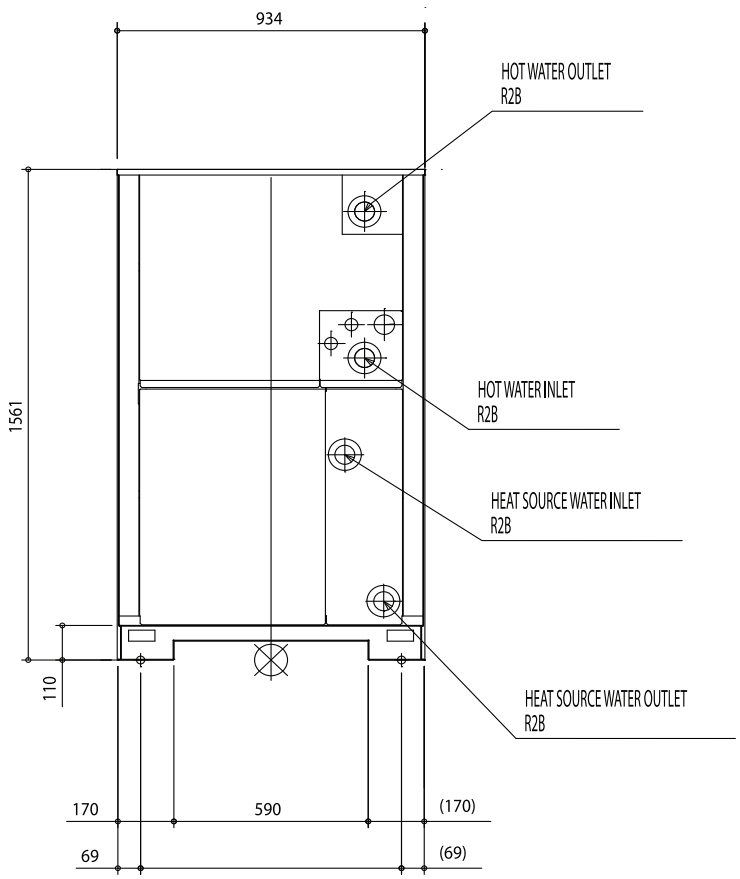
Key Features

- Wide range of heat sources - bore holes, slinkies, aquifers, lakes, rivers and waste heat
- Multiple unit cascade control of up to 16 units / 960kW
- Ability to rotate units based on accumulated run hours
- Provides up to 65°C water flow temperatures without booster heaters
- Low maintenance, just electrical and water connections
- Heat recovery applications can be achieved by moving heat between applications
- Passive cooling possible by exchanging ground / water source with a chilled water system

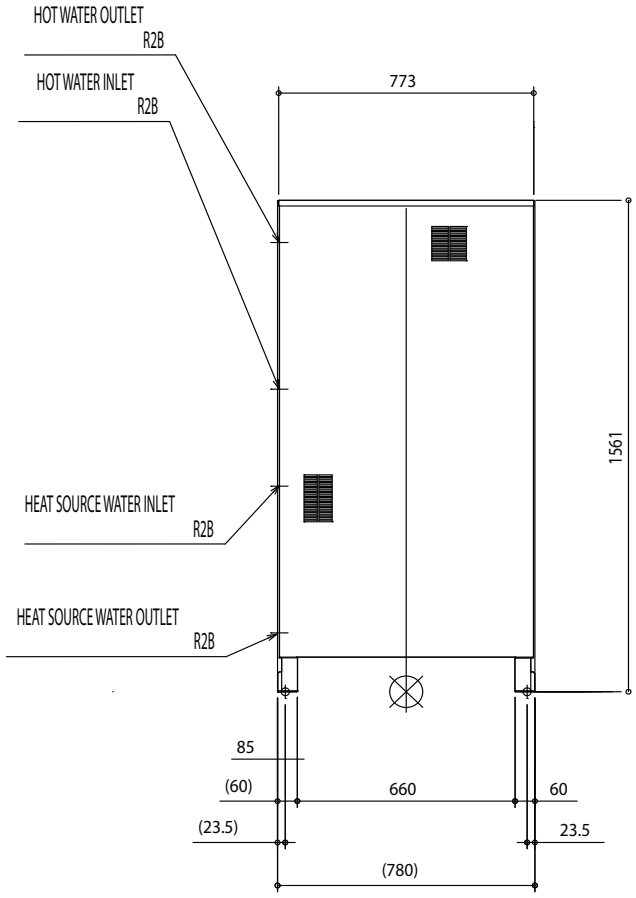
R410A

CRHV HEAT PUMP			CRHV-P600YA-HPB
HEAT PUMP SPACE HEATER - 55°C		ErP Rating	A++
		η_s	127%
		SCOP	3.37
HEAT PUMP SPACE HEATER - 35°C		ErP Rating	A++
		η_s	153%
		SCOP	4.03
HEATING*1 (B0/W35)		Capacity (kW)	60
		Power Input inc. pump (kW)	14.20
		COP	4.23
SEASONAL EFFICIENCY EN14825 (SPF)		B0/W35 (60kW)	4.33
HEATING*2 (B0/W35)		Capacity (kW)	45
		Power Input inc. pump (kW)	10.20
		COP	4.41
SEASONAL EFFICIENCY EN14825 (SPF)		B0/W35 (45kW)	4.03
HEATING*3 (W10/W35)		Capacity (kW)	60
		Power Input inc. pump (kW)	11.90
		COP	5.08
SEASONAL EFFICIENCY EN14825 (SPF)		W10/W35 (60kW)	5.09
HEATING*4 (W10/W35)		Capacity (kW)	45
		Power Input inc. pump (kW)	8.89
		COP	5.11
SEASONAL EFFICIENCY EN14825 (SPF)		W10/W35 (45kW)	4.55
SOUND DATA		Pressure Level L_{pA} at 1m (dBA)	50
		Power Level L_{WA} (dBA)*5	66
WATER DATA	Flow Rate Range	Heat Source (Brine) (l/s (m^3/hr))	1.5 to 4.1 (5.4 to 15)
		Building Side (LTHW) (l/s (m^3/hr))	1.5 to 4.4 (5.4 to 16)
	Mechanical Connections	Heat Source Outlet (Brine) (mm ("))	50.8 (R2) screw
		Heat Source Inlet (Brine) (mm ("))	50.8 (R2) screw
		Building Side Outlet (LTHW) (mm ("))	50.8 (R2) screw
		Building Side Inlet (LTHW) (mm ("))	50.8 (R2) screw
	Operating Temperature Range	Heat Source Inlet (Brine) (°C)	-5 to +27
		Heat Source Inlet Option (Brine) (°C)*6	-5 to +45
		Building Side Outlet (LTHW) (°C)	+30 to +65
	Heat Source Fluid Type*7		Min 30% Ethylene Glycol or equivalent
	Pressure Drop (at 1.5l/s inc 30% glycol in heat source fluid)	Heat Source (Brine) (kPa)	12
		Building Side (LTHW) (kPa)	7
	Maximum Working Pressure	Heat Source (Brine) (MPa(Bar))	1 (10)
		Building Side (LTHW) (MPa(Bar))	1 (10)
DIMENSIONS		Width (mm)	934
		Depth (mm)	780
		Height (mm)	1561
WEIGHT (kg)			395
REFRIGERANT		Type	R410A
		Charge (kg) / CO_2 Equivalent (t)	9 / 18.7
		Max pressure (MPa (Bar))	4.15 (41.5)
		Compressor Type	Inverter Driven
		Circuit type	Hermetically Sealed System
ELECTRICAL DATA		Electrical Supply	415v, 50Hz
		Phase	3
		Maximum Running Current (A)	44
		Fuse Rating - MCB Size (A)*8	50

Front View



Side View



QUHZ-W-VA

Monobloc Air Source Heat Pump With Thermal Store





The Ecodan QUHZ system combines a 4kW outdoor unit with a 200 litre Thermal Store and is the ideal plug and play heating and hot water solution for properties with a low space heating requirement.

With very low market leading noise levels for its class and highly efficient hot water generation due to its unique CO_2 system design, this compact space saving product is capable of providing instantaneous hot water and removes the risk of legionella.

Key Features

- Self contained system, only requires water connections and can be powered via the Thermal Store
- No need for gas supply, flues or ventilation
- Low maintenance and very quiet operation
- Operates with outside temperatures as low as -15°C
- Optimised low ambient defrost control and operation
- Capable of being used in domestic hot water generation mode only
- Energy monitoring as standard

R744

OUTDOOR UNIT		QUHZ-W40VA
HEAT PUMP COMBINATION HEATER - 55°C	ErP Rating	A+
	η_s	117%
	SCOP	2.90
HEAT PUMP COMBINATION HEATER - Large Profile*1	ErP Rating	A
	η_{wh}	129%
	COP	3.00
HEATING*2 (A-3/W55)	Capacity (kW)	4.32
	Power Input (kW)	2.18
	COP	1.98
OPERATING AMBIENT TEMPERATURE (°C DB)		-15 ~ +35
SOUND PRESSURE LEVEL AT 1M (dBA)*3		43
SOUND POWER LEVEL (dBA)*4		53
WATER DATA	Pipework Size (mm)	15
	Flow Rate (l/min)	3 to 8
DISTANCE BETWEEN OUTDOOR UNIT AND THERMAL STORE (m)	Height Difference	5
	Piping Length	15
DIMENSIONS (mm)	Width	809+70*5
	Depth	300+20*5
	Height	715
WEIGHT (kg)		57
ELECTRICAL DATA		Powered from indoor unit
REFRIGERANT CHARGE (kg) / CO_2 EQUIVALENT (t)	R744 (GWP 1)	1.15 / 0.0015

THERMAL STORE		EHPT20Q-VM2EA
NOMINAL THERMAL STORE WATER VOLUME (LITRES)		200
WATER TEMPERATURE RANGE	DHW Mode (°C)	40-70
	Space Heating Mode (°C)	25-60
MECHANICAL ZONES		DHW and 1 Heating Zone (2 Zone capability with 3rd party 2-port valves)
OPERATING AMBIENT TEMPERATURE (°C DB)		0 ~ +35°C (RH<80%)
SOUND PRESSURE LEVEL AT 1M (dBA)		30
SOUND POWER LEVEL (dBA)*4		40
WATER DATA	Primary Pump	Grundfos Solar PML 25-145 180
	Sanitary Hot Water Pump	Grundfos Solar PML 25-145 180
	Connection Size (mm) Heating / DHW	22 / 22
	Primary Expansion Vessel (Litres)	25
	Charge Pressure (MPa (Bar))	0.1 (1)
WATER SAFETY DEVICES	Pressure relief valve (Mpa (Bar))	0.3 (3) - 2 No. devices
	Flow sensor (supplied)	Min. flow 1.3 L/min
	Manual reset thermostat (°C)	90
DIMENSIONS (mm)	Width	595
	Depth	680
	Height	1600
WEIGHT EMPTY / FULL (kg)		77 / 283
ELECTRICAL DATA	Electrical Supply	220-240v, 50Hz
	Phase	Single
	Maximum Running Current (A)	12.8
	Fuse Rating - MCB Sizes (A)*6	20
OPTIONAL SIMPLIFIED WIRELESS ROOM THERMOSTAT AND WIRELESS RECEIVER		PAR-WT50-E Controller and PAR-WR51-E Receiver

*1 Combination with EHPT20Q-VM2EA Thermal Store.
*2 Under normal heating conditions at outdoor temp: -3°CDB / -4°CWB, outlet water temp 55°C, inlet water temp 47°C.
*3 Under normal heating conditions at outdoor temp: 7°CDB / 6°CWB, outlet water temp 55°C, inlet water temp 47°C as tested to BS EN14511.
*4 Sound power level tested to BS EN12102.
*5 Grille or pipe cover.
*6 MCB Sizes BS EN60898-2 & BS EN60947-2.

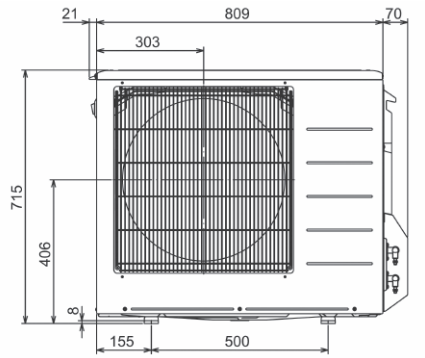
η_s is the seasonal space heating energy efficiency (SSHEE)
η_{wh} is the water heating energy efficiency

APPROVED PRODUCT

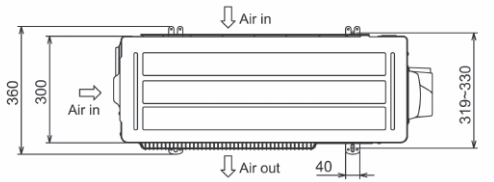
Certificate Number: MCS HP0002
Product Type: Heat Pumps
Product Reference: QUHZ-W40VA

Product Dimensions QUHZ-W40VA

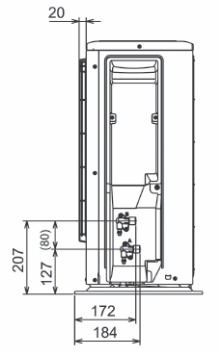
Front View



Upper View

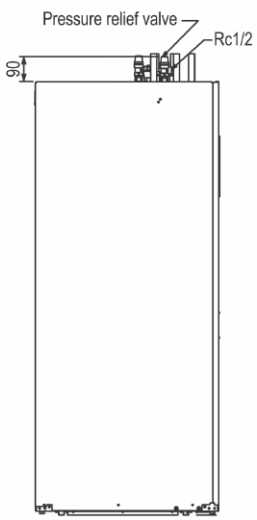


Side View

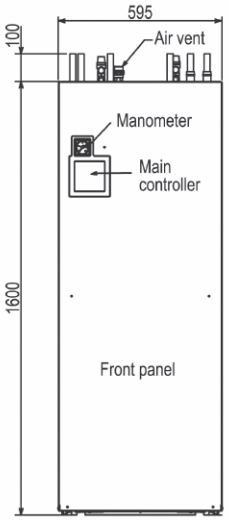


Product Dimensions EHPT20Q-VM2EA

Left View



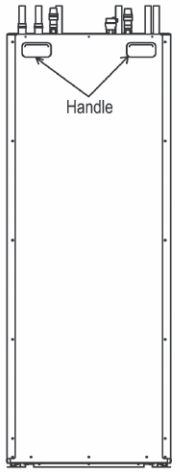
Front View



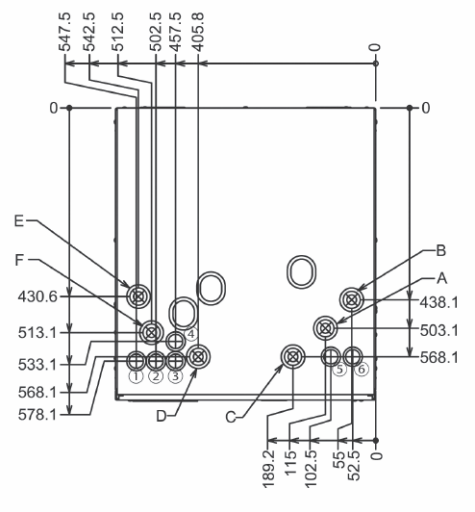
Right View



Rear View



Upper View



Letter	Pipe Description	Connection size/type
A	DHW outlet connection	22 mm/Compression
B	Cold water inlet connection	22 mm/Compression
C	Space heating return connection	22 mm/Compression
D	Space heating flow connection	22 mm/Compression
E	Flow from heat pump connection	22 mm/Compression
F	Return to heat pump connection	22 mm/Compression

ecodan®

PUZ-WM-VHA

Monobloc Standalone Air Source Heat Pump

Our range of Ecodan monobloc air source heat pumps includes a 5kW size.

With enhanced performance and efficiencies of the new chassis, combined with the ability to cascade up to six units of the same output, this Ecodan monobloc system can provide a capacity range from 5 through to 30kW. Designed to suit a wide number of applications, this model offers a viable solution for all types of domestic requirements that the UK housing market demands.

Key Features

- Self-contained unit, only requiring water and electric connections
- No need for gas supply, flues or ventilation
- Low maintenance and quiet operation
- Operates with outside temperatures as low as -20ºC
- Optimised low ambient defrost control and operation down to -7°C
- Hybrid function, for use with conventional boilers
- Energy monitoring as standard
- Multiple unit cascade function

Manufactured in the UK

R32



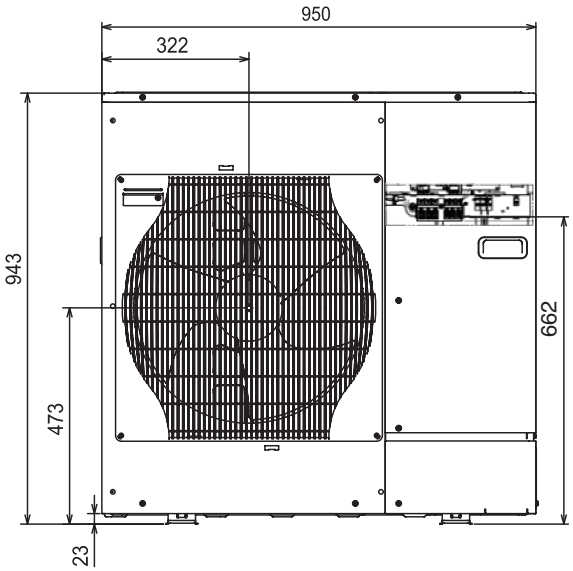
OUTDOOR UNIT		PUZ-WM50VHA(-BS)
HEAT PUMP SPACE HEATER - 55˚C	ErP Rating	A++
	η_s	129%
	SCOP	3.33
HEAT PUMP SPACE HEATER - 35˚C	ErP Rating	A+++
	η_s	183%
	SCOP	4.58
HEAT PUMP COMBINATION HEATER - Large Profile*1	ErP Rating	A+
	η_{wh}	135%
HEATING*2 (A-7/W35)	Capacity (kW)	5.0
	Power Input (kW)	1.67
	COP	3.00
OPERATING AMBIENT TEMPERATURE (°C DB)		-20 ~ +35
SOUND DATA*3	Pressure Level at 1m (dBA)	47
	Power Level (dBA)*4	61
WATER DATA	Pipework Size (mm)	22
	Flow Rate (l/min)	14.3
	Water Pressure Drop (kPa)	12.0
DIMENSIONS (mm)	Width	950
	Depth	330+30*7
	Height	923
WEIGHT (kg)		71
ELECTRICAL DATA	Electrical Supply	220-240v, 50Hz
	Phase	Single
	Nominal Running Current [MAX] (A)*5	4.64 [13]
	Fuse Rating - MCB Sizes (A)*6	16
REFRIGERANT CHARGE (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	2.0 / 1.35

*1 Combination with E*PT20X Cylinder
*2 Under normal heating conditions at outdoor temp: -7°CDB / -8°CWB, outlet water temp 35°C, inlet water temp 30°C.
*3 Under normal heating conditions at outdoor temp: 7°CDB / 6°CWB, outlet water temp 55°C, inlet water temp 47°C as tested to BS EN14511.
*4 Sound power level tested to BS EN12102.
*5 Under nominal heating conditions at outdoor temp: 7ºC, outlet water temp: 35ºC.
*6 MCB Sizes BS EN60898-2 & BS EN60947-2.
*7 Grille.

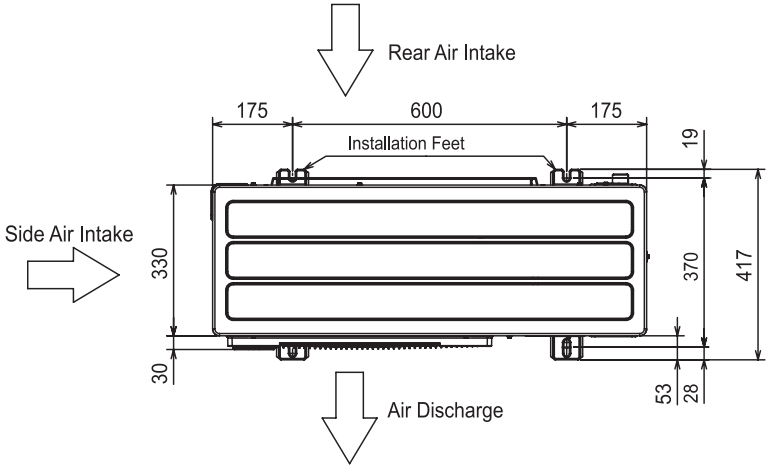
η_s is the seasonal space heating energy efficiency (SSHEE) η_{wh} is the water heating energy efficiency

Certificate Number: 037-0032-20
Product Type: Heat Pumps
Product Reference: PUZ-WM50VHA(-BS)

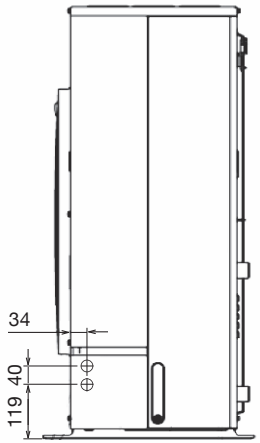
Front View



Upper View



Side View



ecodan®

PUZ-WM-VAA

Monobloc Standalone Ultra Quiet Air Source Heat Pumps

The multiple award winning range of Ultra Quiet AA chassis Ecodan monobloc air source heat pumps are designed specifically to suit the demands of the UK market and includes 6.0, 8.5 and 11.2kW sizes.

The innovative, stylish and compact single fan outdoor unit utilises advanced technologies to deliver improved efficiencies. Designed for a wide range of applications, the market leading low noise levels virtually eliminate the need for planning permission, maximises installation options and is a viable solution for all types of domestic requirements that the UK housing market demands.

Key Features

- Self-contained unit, only requiring water and electric connections
- No need for gas supply, flues or ventilation
- Low maintenance and ultra quiet operation
- Operates with outside temperatures as low as -25ºC
- Optimised low ambient defrost control and operation down to -7ºC
- Hybrid function, for use with conventional boilers
- Energy monitoring as standard
- Multiple unit cascade function

Manufactured in the UK

R32



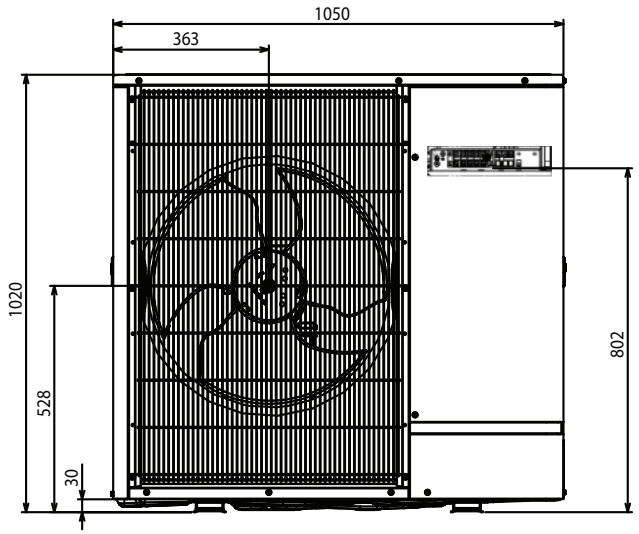
OUTDOOR UNIT		PUZ-WM60VAA(-BS)	PUZ-WM85VAA(-BS)	PUZ-WM112VAA(-BS)
HEAT PUMP SPACE HEATER - 55˚C	ErP Rating	A++	A++	A++
	η_s	142%	139%	134%
	SCOP	3.30	3.50	3.45
HEAT PUMP SPACE HEATER - 35˚C	ErP Rating	A+++	A+++	A+++
	η_s	190%	193%	191%
	SCOP	4.62	4.57	4.58
HEAT PUMP COMBINATION HEATER - Large Profile*1	ErP Rating	A+	A+	A+
	η_{wh}	145%	145%	148%
HEATING*2 (A-7/W35)	Capacity (kW)	6.0	8.5	11.2
	Power Input (kW)	1.88	3.27	3.73
	COP	3.20	2.60	3.00
OPERATING AMBIENT TEMPERATURE (°C DB)		-20 ~ +35	-20 ~ +35	-25 ~ +35
SOUND DATA*3	Pressure Level at 1m (dBA)	45	45	45
	Power Level (dBA)*4	58	58	60
WATER DATA	Pipework Size (mm)	22	28	28
	Flow Rate (l/min)	17.2	24.4	32.1
	Water Pressure Drop (kPa)	8.0	15.0	24.0
DIMENSIONS (mm)	Width	1050	1050	1050
	Depth	480	480	480
	Height	1020	1020	1020
WEIGHT (kg)		98	98	119
ELECTRICAL DATA	Electrical Supply	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
	Phase	Single	Single	Single
	Nominal Running Current [MAX] (A)*5	5.68 [13]	9.1 [22]	10.9 [28]
	Fuse Rating - MCB Sizes (A)*6	16	25	32
REFRIGERANT CHARGE (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675)	2.2 / 1.49	2.2 / 1.49	3.0 / 2.03

*1 Combination with E*PT20X Cylinder
*2 Under normal heating conditions at outdoor temp: -7°CDB / -8°CWB, outlet water temp 35°C, inlet water temp 30°C.
*3 Under normal heating conditions at outdoor temp: 7°CDB / 6°CWB, outlet water temp 55°C, inlet water temp 47°C as tested to BS EN14511.
*4 Sound power level tested to BS EN12102.
*5 Under nominal heating conditions at outdoor temp: 7ºC, outlet water temp: 35ºC.
*6 MCB Sizes BS EN60898-2 & BS EN60947-2.

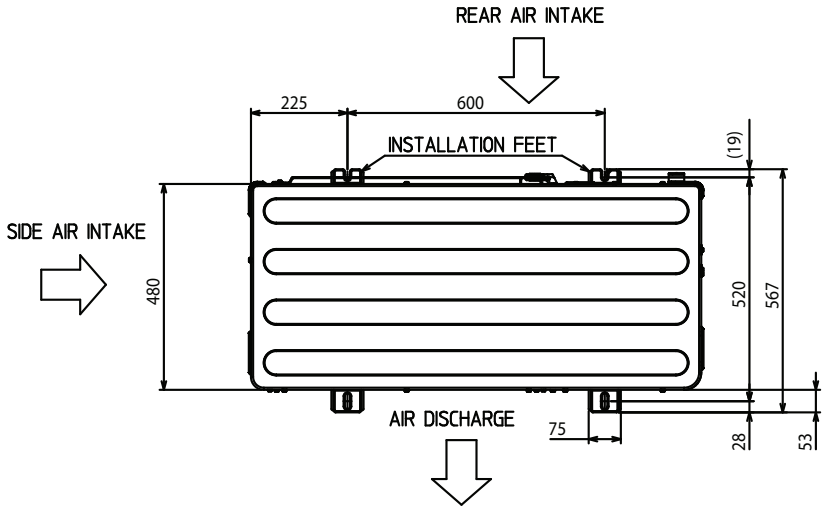
η_s is the seasonal space heating energy efficiency (SSHEE) η_{wh} is the water heating energy efficiency

Certificate Number: 037-0033-20 / 037-0034-20
Product Type: Heat Pumps
Product Reference: PUZ-WM60/85VAA(-BS) / PUZ-WM112VAA(-BS)

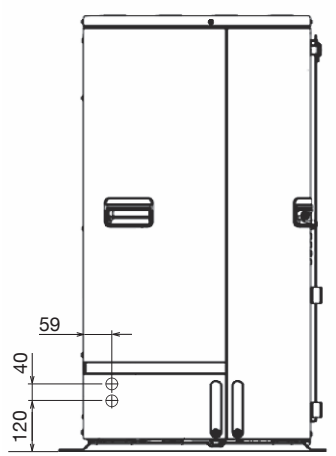
Front View



Upper View



Side View



ecodan

PU(H)Z-HW(M) -VHA/YHA(2)

Monobloc Standalone Air Source Heat Pumps

Our range of Zubadan chassis Ecodan monobloc air source heat pumps are suitable for properties with large space heating requirements and are available in single or three phase 14kW sizes.

With its advanced flash injection technology, this product provides a solution to low ambient capacity issues common to standard systems and is a viable solution for all types of domestic requirements that the UK housing market demands.

Key Features

- Self-contained unit, only requiring water and electric connections
- No need for gas supply, flues or ventilation
- Low maintenance and quiet operation
- Operates with outside temperatures as low as -28ºC
- Optimised low ambient defrost control and operation down to -15°C
- Hybrid function, for use with conventional boilers
- Energy monitoring as standard
- Multiple unit cascade function
- R32 models coming Autumn 2020

Manufactured in the UK



R32

R410A

OUTDOOR UNIT		PUZ-HWM140VHA(-BS)	PUZ-HWM140YHA(-BS)	PUHZ-HW140VHA2(-BS)	PUHZ-HW140YHA2(-BS)
HEAT PUMP SPACE HEATER - 55˚C	ErP Rating	A++	A++	A++	A++
	η_s	-	-	126%	126%
	SCOP	3.34	3.34	3.22	3.22
HEAT PUMP SPACE HEATER - 35˚C	ErP Rating	A+++	A+++	A++	A++
	η_s	-	-	157%	157%
	SCOP	4.45	4.45	3.99	3.99
HEAT PUMP COMBINATION HEATER - Large Profile*1	ErP Rating	A+	A+	A	A
	η_{wh}	-	-	96%	96%
HEATING*2 (A-7/W35)	Capacity (kW)	14.0	14.0	14.0	14.0
	Power Input (kW)	5.72	5.72	4.81	4.81
	COP	2.45	2.45	2.91	2.91
OPERATING AMBIENT TEMPERATURE (°C DB)		-28 ~ +35	-28 ~ +35	-25 ~ +35	-25 ~ +35
SOUND DATA*3	Pressure Level at 1m (dBA)	53	53	53	53
	Power Level (dBA)*4	67	67	65.5	67.5
WATER DATA	Pipework Size (mm)	28	28	28	28
	Flow Rate (l/min)	-	-	40.1	40.1
	Water Pressure Drop (kPa)	-	-	9.0	9.0
DIMENSIONS (mm)	Width	1020	1020	1020	1020
	Depth	330+30*7	330+30*7	330+30*7	330+30*7
	Height	1350	1350	1350	1350
WEIGHT (kg)		-	-	134	148
ELECTRICAL DATA	Electrical Supply	220-240v, 50Hz	380-415v, 50Hz	220-240v, 50Hz	380-415v, 50Hz
	Phase	Single	3	Single	3
	Nominal Running Current [MAX] (A)*5	- [-]	- [-]	14.9 [35]	5.1 [13]
	Fuse Rating - MCB Sizes (A)*6	-	-	40	16
REFRIGERANT CHARGE (kg) / CO_2 EQUIVALENT (t)	R32 (GWP 675) R410A (GWP 2088)	- / -	- / -	4.3 / 9.0	4.3 / 9.0

For information marked with a "-" please consult the databook or speak to your local sales office.

*1 Combination with E*PT20X Cylinder
*2 Under normal heating conditions at outdoor temp: -7°CDB / -8°CWB, outlet water temp 35°C, inlet water temp 30°C.
*3 Under normal heating conditions at outdoor temp: 7°CDB / 6°CWB, outlet water temp 55°C, inlet water temp 47°C as tested to BS EN14511.
*4 Sound power level tested to BS EN12102.
*5 Under nominal heating conditions at outdoor temp: 7ºC, outlet water temp: 35ºC.
*6 MCB Sizes BS EN60898-2 & BS EN60947-2.
*7 Grille.

η_s is the seasonal space heating energy efficiency (SSHEE) η_{wh} is the water heating energy efficiency

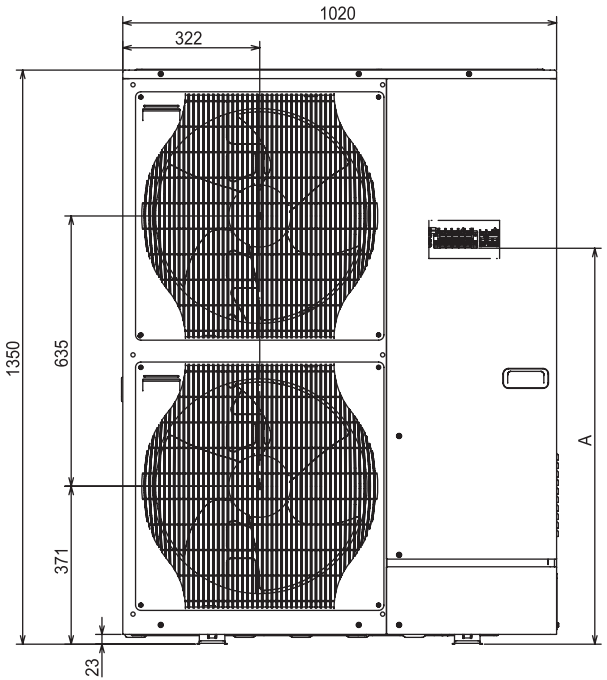
APPROVED PRODUCT

MCS

Certificate Number: MCS HP0002
Product Type: Heat Pumps
Product Reference:
PUHZ-HW140VHA2/YHA2(-BS)

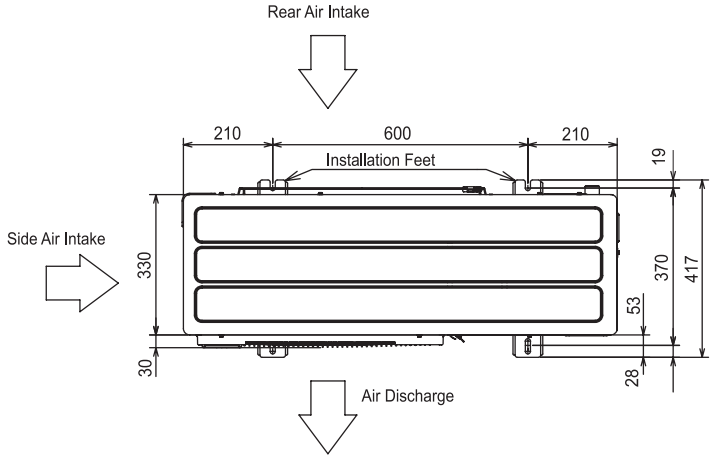
Certificate Number: 037-0035-20
Product Type: Heat Pumps
Product Reference: PUZ-HWM140VHA/YHA(-BS)

Front View

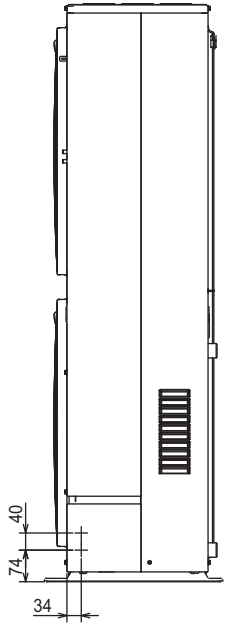


	A
VHA	1079
YHA	931

Upper View



Side View



EHPT20X-MHEDW

Packaged Cylinder for Ecodan Monobloc Units



The Packaged Cylinder provides a highly adaptable heating solution for all property types.

Designed to optimise performance within a compact white goods footprint, the plug and play packaged cylinder fully integrates with the Ecodan monobloc air source heat pump range. Advanced plate heat exchanger technology delivers superior heat up times and our rapid SD card commissioning, MELCloud WiFi connectivity and energy monitoring functions are also included as standard.

Key Features

- Optional 2-zone energy efficient space heating control
- Ready-Plumbed and wired for faster installation
- Hybrid function, for use with conventional boilers
- Energy monitoring as standard
- MELCloud Wi-Fi connectivity

Manufactured in the UK

FTC6 Controller



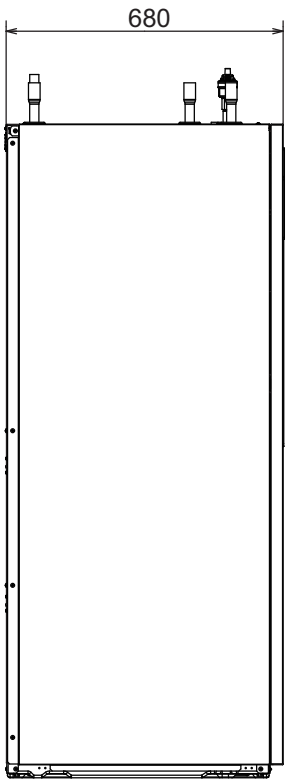
Mitsubishi Electric's sixth generation controller (FTC6) includes intelligent room temperature control as standard. This together with advanced weather compensation ensures the system delivers efficient, comfortable heating regardless of the season. FTC6 now also includes energy monitoring showing consumed and produced energy.

CYLINDER			EHPT20X-MHEDW
NOMINAL HOT WATER VOLUME (LITRES)			200
HEAT PUMP COMBINATION HEATER - Large Profile (Average Climate)		ErP Rating	A+
OPERATING AMBIENT TEMPERATURE (°C DB)			0 ~ +35°C (RH<80%)
SOUND PRESSURE LEVEL AT 1M (dBA)			28
WATER DATA		Flow Rate (l/min) - (H)WM 50 / 60 / 85 / 112 / 140	14 / 17 / 24 / 32 / 37
		Primary Circuit Pump	Grundfos UPM3 15-75 130
		Sanitary Hot Water Pump	Grundfos UPSO 15-60 130
		Connection Size (mm) Heating / DHW	28 / 22
WATER SAFETY DEVICES	Heating Water Circuit	Control Thermistor (°C)	1 - 80
		Flow Sensor (minimum flow 5L/min)	Supplied
	DHW Cylinder	Control Thermistor (°C)	75
		Temp and Pressure Relief Valve (°C)/ (MPa (Bar))	90 / 0.7 (7)
DIMENSIONS (mm)		Width	595
		Depth	680
		Height	1600
WEIGHT EMPTY / FULL (kg)			90 / 296
ELECTRICAL DATA	Control Board - *optionally powered by outdoor unit*	Electrical Supply	220-240v, 50Hz
		Phase	Single
		Fuse Rating - MCB Sizes (A)*1	10
	Immersion Heater	Electrical Supply	220-240v, 50Hz
		Phase	Single
		Capacity (kW)	3
		Max Running Current (A)	13
		Fuse Rating - MCB Sizes (A)*1	16
MECHANICAL ZONES			DHW and 1 Heating Zone*2
OPTIONAL SIMPLIFIED WIRELESS ROOM THERMOSTAT AND WIRELESS RECEIVER			PAR-WT50-E Controller and PAR-WR51-E Receiver

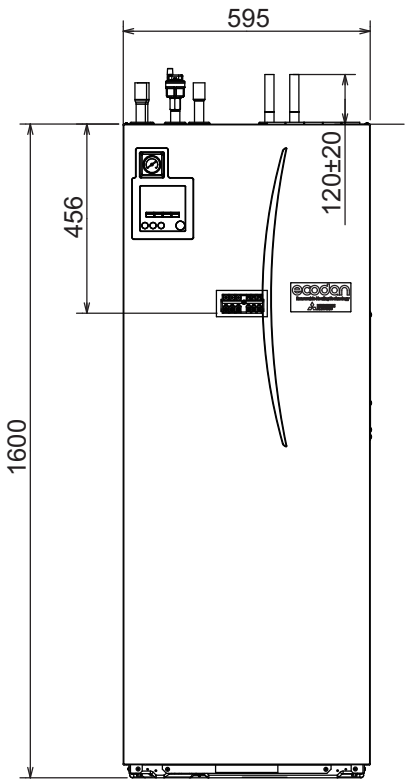
*1 MCB Sizes BS EN60898-2 & BS EN60947-2 *2 Optional 2 zone accessory pack available

Notes: Cylinder includes: Flow Temperature Controller (FTC6) with Main Controller and Temperature Sensors, Pumps & Valves for Zone 1 and DHW use, Flow Sensor, Plate Heat Exchanger, Scale Trap, 3kW Immersion Heater.

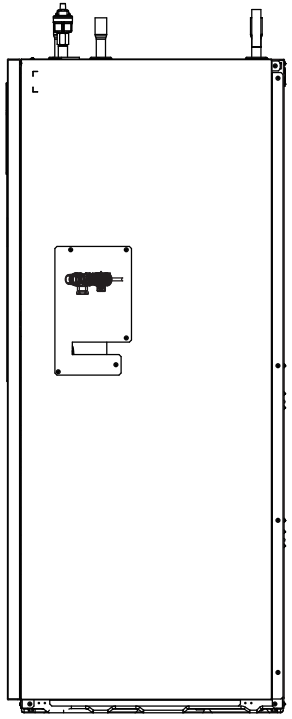
Left View



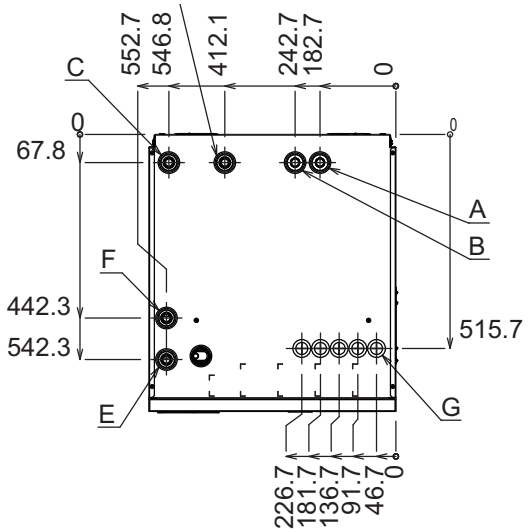
Front View



Right View



Upper View

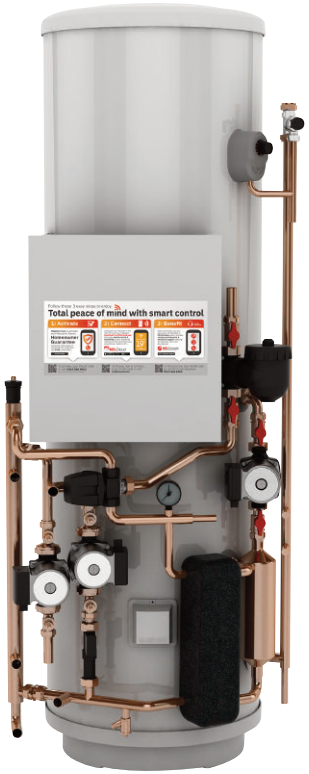


Letter	Description	Connection Size/Type
A	DHW outlet connection	22mm/Compression
B	Cold water inlet connection	22mm/Compression
C	Space heating return connection	28mm/Compression
D	Space heating flow connection	28mm/Compression
E	Flow from heat pump connection	28mm/Compression
F	Return to heat pump connection	28mm/Compression
G	Electrical cable inlets	

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EHPT15-17X -UKHLDW

Pre-Plumbed Slimline Cylinders for Ecodan Monobloc Units



The Pre-Plumbed Slimline Cylinder comes complete with integrated hydraulic components & advanced controls.

Designed to optimise performance and flexibility within a minimal footprint, the slimline cylinder fully integrates with the Ecodan monobloc air source heat pump range. Advanced plate heat exchanger technology delivers superior heat up times and our rapid SD card commissioning, MELCloud WiFi connectivity and energy monitoring functions are also included as standard.

Key Features

- Optional 2-zone energy efficient space heating control
- Pre-Plumbed and wired for faster installation
- Hybrid function, for use with conventional boilers
- Energy monitoring as standard
- MELCloud Wi-Fi connectivity

Manufactured in the UK

FTC6 Controller



Mitsubishi Electric's sixth generation controller (FTC6) includes intelligent room temperature control as standard. This together with advanced weather compensation ensures the system delivers efficient, comfortable heating regardless of the season. FTC6 now also includes energy monitoring showing consumed and produced energy.

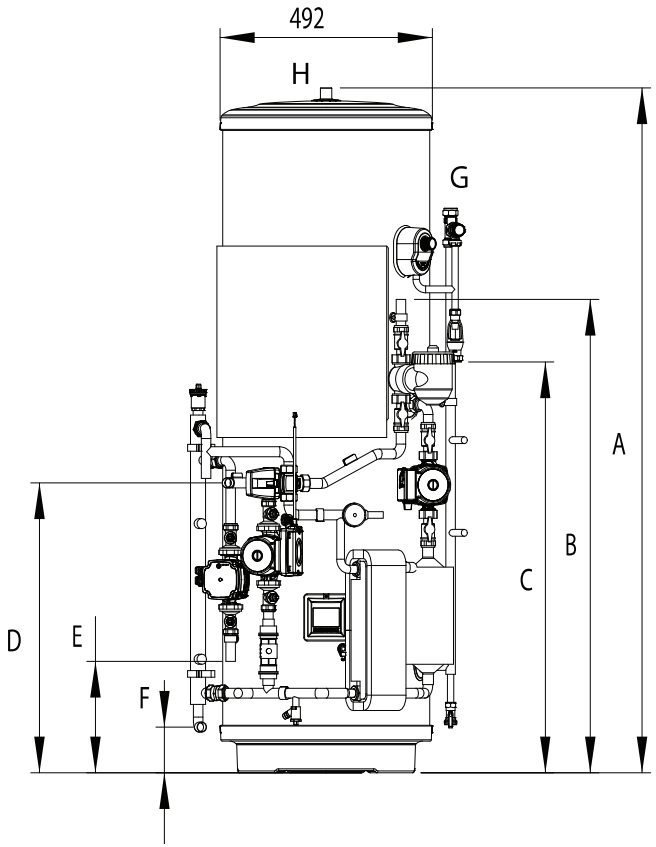
CYLINDER			EHPT15X-UKHLDW	EHPT17X-UKHLDW
NOMINAL HOT WATER VOLUME (LITRES)			150	170
ErP RATING			-	-
HEAT LOSS (kWh/24hrs)			1.40	1.59
HEAT LOSS (W)			58	66
WATER		Flow Rate (l/min) - WM 50 / 60 / 85	14 / 17 / 24	14 / 17 / 24
		Primary Circuit Pump	Grundfos UPMGEO 25-85	
		Heating Circuit Pump	Grundfos UPM3 25-70	
		Sanitary Hot Water Pump	Grundfos UPSO 15-60 CIL2	
		Connection Size (mm) Heating / DHW	22 / 22	22 / 22
		Charge Pressure (MPa (Bar))	0.35 (3.5)	0.35 (3.5)
WATER SAFETY	Water Circuit	Control Thermistor (°C)	1 - 80	1 - 80
		Expansion Relief Valve (Cold)	0.8 (8)	0.8 (8)
	DHW Cylinder	DHW Expansion Vessel (Litres)	12	18
		Control Thermistor	75	75
		Over Temperature Cut-Out (°C)	80 ± 5	80 ± 5
		Temp and Pressure Relief Valve (°C) / (MPa (Bar))	90 / 1.0 (10)	90 / 1.0 (10)
DIMENSIONS (mm)		Width	648	648
		Depth	645	645
		Height	1515	1689
WEIGHT EMPTY / FULL (kg)			54 / 204	60 / 230
CYLINDER MATERIAL	Cylinder	Cylinder Material	Stainless Steel	Stainless Steel
	Insulation	Insulation Type	CFC / HCFC-free flame-retardant expanded Polyurethane	
		Insulation Thickness (mm)	50	50
		GWP of Insulation	3.1	3.1
		ODP of Insulation	0	0
ELECTRICAL DATA	Control Board *optionally powered by outdoor unit*	Electrical Supply	220-240v, 50Hz	220-240v, 50Hz
		Phase	Single	Single
		Fuse Rating - MCB Sizes (A)*1	16	16
	Immersion Heater	Electrical Supply	220-240v, 50Hz	220-240v, 50Hz
		Phase	Single	Single
		Capacity (kW)	3	3
		Max Running Current (A)	13	13
		Fuse Rating - MCB Sizes (A)*1	16	16
MECHANICAL ZONES			DHW and 1 Heating Zone*2	
OPTIONAL SIMPLIFIED WIRELESS ROOM THERMOSTAT AND WIRELESS RECEIVER			PAR-WT50-E Controller and PAR-WR51-E Receiver	

For information marked with a "-" please consult the databook or speak to your local sales office.

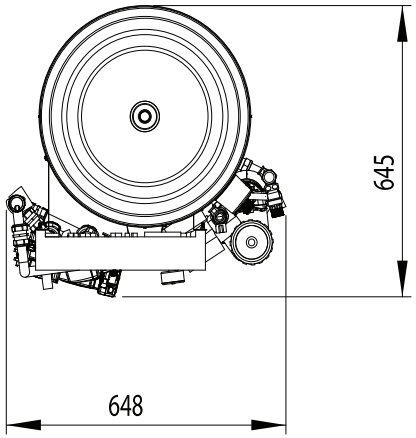
*1 MCB Sizes BS EN60898-2 & BS EN60947-2 *2 Optional 2 zone accessory pack available

Notes: Cylinder includes: Flow Temperature Controller (FTC6) with Main Controller and Temperature Sensors, Magnetic & Cyclonic Filter, Pumps & Valves for Zone 1 and DHW use, Flow Sensor, Plate Heat Exchanger, Scale Trap, 3kW Immersion Heater and Expansion Vessel.

Front View



Upper View



KEY

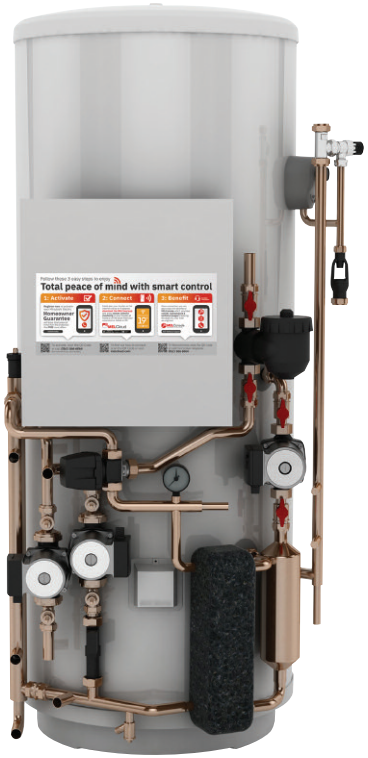
A	OVERALL HEIGHT
B	HEAT PUMP FLOW CONNECTION (22mm O/D COPPER)
C	TUNDISH OUTLET CONNECTION (22mm COMPRESSION)
D	HEAT PUMP RETURN CONNECTION (22mm O/D COPPER)
E	HEATING CIRCUIT FLOW CONNECTION (22mm O/D COPPER)
F	HEATING CIRCUIT RETURN CONNECTION (22mm O/D COPPER)
G	COLD WATER INLET CONNECTION (22mm COMPRESSION)
H	HOT WATER OUTLET CONNECTION (22mm COMPRESSION / 3/4" BSP M)

CAPACITY	150	170
A	1515	1689
B	1047	1047
C	909	1083
D	637	636
E	246	246
F	101	101

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EHPT15-30X -UKH(D/C)W

Pre-Plumbed Standard Cylinders for Ecodan Monobloc Units



The Pre-Plumbed Standard Cylinder comes complete with integrated hydraulic components & advanced controls.

Designed to optimise performance and flexibility within an average footprint, the standard cylinder fully integrates with the Ecodan monobloc air source heat pump range. Advanced plate heat exchanger technology delivers superior heat up times and our rapid SD card commissioning, MELCloud WiFi connectivity and energy monitoring functions are also included as standard.

Key Features

- Optional 2-zone energy efficient space heating control
- Pre-Plumbed and wired for faster installation
- Hybrid function, for use with conventional boilers
- Energy monitoring as standard
- MELCloud Wi-Fi connectivity

Manufactured in the UK

FTC6 Controller



Mitsubishi Electric's sixth generation controller (FTC6) includes intelligent room temperature control as standard. This together with advanced weather compensation ensures the system delivers efficient, comfortable heating regardless of the season. FTC6 now also includes energy monitoring showing consumed and produced energy.

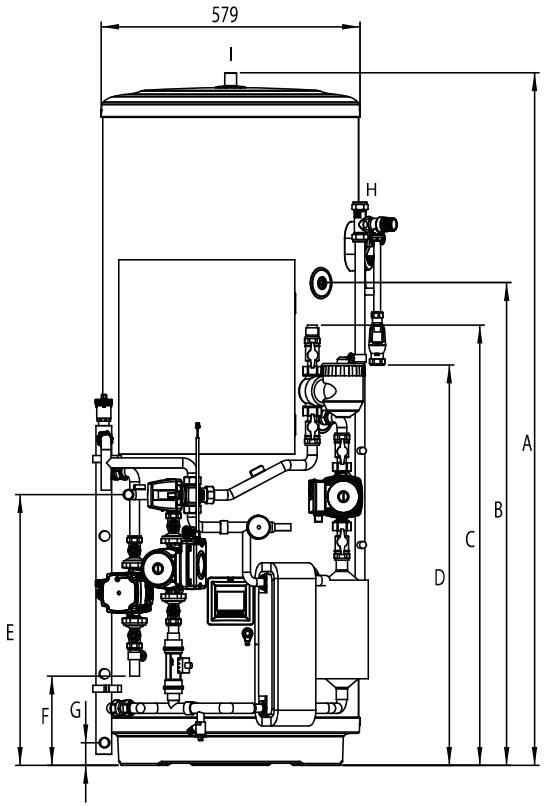
CYLINDER			EHPT15X-UKHDW	EHPT17X-UKHDW	EHPT21X-UKH(D/C)W	EHPT25X-UKH(D/C)W	EHPT30X-UKH(D/C)W
NOMINAL HOT WATER VOLUME (LITRES)			150	170	210	250	300
ErP RATING			-	-	- / C	- / C	- / C
HEAT LOSS (kWh/24hrs)			-	-	1.53 / 1.57	1.80 / 1.67	2.09 / 1.89
HEAT LOSS (W)			-	-	64 / 65	75 / 70	87 / 75
WATER		Flow Rate (l/min) - (H)WM 50 / 60 / 85 / 112 / 140 & HW140	14 / 17 / 24 / - / - & -	14 / 17 / 24 / - / - & -	14 / 17 / 24 / 32 / - & 40	N/A / N/A / 24 / 32 / - & 40	N/A / N/A / 24 / 32 / - & 40
		Primary Circuit Pump	Grundfos UPMGEO 25-85	Grundfos UPMGEO 25-85	Grundfos UPMGEO 25-85	Grundfos UPMXL GEO 25-125	Grundfos UPMXL GEO 25-125
		Heating Circuit Pump	Grundfos UPM3 25-70				
		Sanitary Hot Water Pump	Grundfos UPSO 15-60 CIL2				
		Connection Size (mm) Heating / DHW	22 / 22	22 / 22	22 / 22	22 / 22	22 / 22
		Charge Pressure (MPa (Bar))	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)
WATER SAFETY DEVICES	Water Circuit	Control Thermistor (°C)	1 - 80	1 - 80	1 - 80	1 - 80	1 - 80
		Expansion Relief Valve (Cold)	0.8 (8)	0.8 (8)	0.8 (8)	0.8 (8)	0.8 (8)
	DHW Cylinder	DHW Expansion Vessel (Litres)	12	18	18	24	24
		Control Thermistor	75	75	75 / 40-70	75 / 40-70	75 / 40-70
		Over Temperature Cut-Out (°C)	80 ± 5	80 ± 5	80 ± 5	80 ± 5	80 ± 5
		Temp and Pressure Relief Valve (°C) / (MPa (Bar))	90 / 1.0 (10)	90 / 1.0 (10)	90 / 1.0 (10)	90 / 1.0 (10)	90 / 1.0 (10)
DIMENSIONS (mm)		Width	683	683	683	683	683
		Depth	730	730	730	730	730
		Height	1130	1256	1508	1760	2074
WEIGHT EMPTY / FULL (kg)			56 / 206	62 / 232	69 / 279	77 / 327	87 / 387
CYLINDER MATERIAL	Cylinder	Cylinder Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
	Insulation	Insulation Type	CFC / HCFC-free flame-retardant expanded Polyurethane				
		Insulation Thickness (mm)	60	60	60	60	60
		GWP of Insulation	3.1	3.1	3.1	3.1	3.1
		ODP of Insulation	0	0	0	0	0
ELECTRICAL DATA	Control Board *optionally powered by outdoor unit*	Electrical Supply	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
		Phase	Single	Single	Single	Single	Single
		Fuse Rating - MCB Sizes (A)*1	16	16	16	16	16
	Immersion Heater	Electrical Supply	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
		Phase	Single	Single	Single	Single	Single
		Capacity (kW)	3	3	3	3	3
		Max Running Current (A)	13	13	13	13	13
		Fuse Rating - MCB Sizes (A)*1	16	16	16	16	16
MECHANICAL ZONES			DHW and 1 Heating Zone*2				
OPTIONAL SIMPLIFIED WIRELESS ROOM THERMOSTAT AND WIRELESS RECEIVER			PAR-WT50-E Controller and PAR-WR51-E Receiver				

For information marked with a "-" please consult the databook or speak to your local sales office.

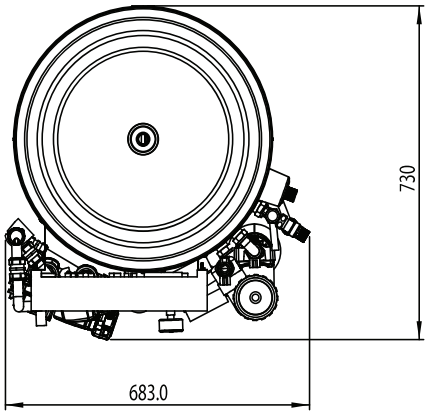
*1 MCB Sizes BS EN60898-2 & BS EN60947-2 *2 Optional 2 zone accessory pack available

Notes: Cylinder includes: Flow Temperature Controller with Main Controller and Temperature Sensors, Magnetic & Cyclonic Filter, Pumps & Valves for Zone 1 and DHW use, Flow Sensor, Plate Heat Exchanger, Scale Trap, 3kW Immersion Heater and Expansion Vessel.

Front View



Upper View



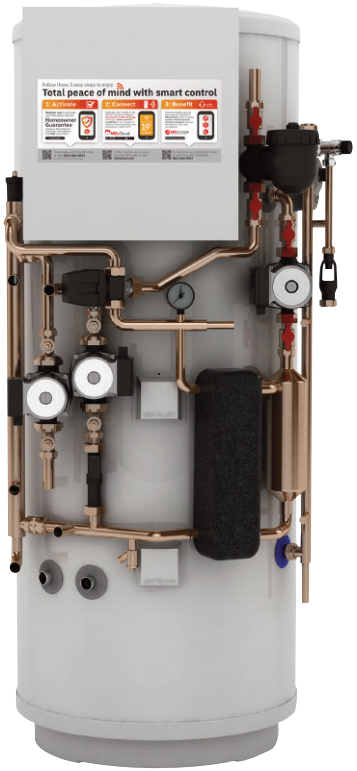
KEY

A	OVERALL HEIGHT
B	SECONDARY RETURN TAPPING
C	HEAT PUMP FLOW CONNECTION (22mm O/D COPPER)
D	TUNDISH OUTLET CONNECTION (22mm COMPRESSION)
E	HEAT PUMP RETURN CONNECTION (22mm O/D COPPER)
F	HEATING CIRCUIT FLOW CONNECTION (22mm O/D COPPER)
G	HEATING CIRCUIT RETURN CONNECTION (22mm O/D COPPER)
H	COLD WATER INLET CONNECTION (22mm COMPRESSION)
I	HOT WATER OUTLET CONNECTION (22mm COMPRESSION / 3/4" BSP M)

CAPACITY	150	170	210	250	300
A	1130	1256	1508	1760	2074
B	-	-	1050	1175	1385
C	996	996	996	996	996
D	493	619	871	1123	1437
E	585	585	585	585	585
F	195	195	195	195	195
G	50	50	50	50	50

EHPT21-30X -UKHSDW

Pre-Plumbed Solar Cylinders for Ecodan Monobloc Units



The Pre-Plumbed Solar Cylinder comes complete with integrated hydraulic components & advanced controls.

Designed to optimise performance and flexibility within an average footprint, the solar cylinder includes an independent coil and fully integrates with the Ecodan monobloc air source heat pump range. Advanced plate heat exchanger technology delivers superior heat up times and our rapid SD card commissioning, MELCloud WiFi connectivity & energy monitoring functions are included as standard.

Key Features

- Includes independent coil for connection to solar thermal systems
- Optional 2-zone energy efficient space heating control
- Pre-Plumbed and wired for faster installation
- Hybrid function, for use with conventional boilers
- Energy monitoring as standard
- MELCloud Wi-Fi connectivity

Manufactured in the UK

FTC6 Controller



Mitsubishi Electric's sixth generation controller (FTC6) includes intelligent room temperature control as standard. This together with advanced weather compensation ensures the system delivers efficient, comfortable heating regardless of the season. FTC6 now also includes energy monitoring showing consumed and produced energy.

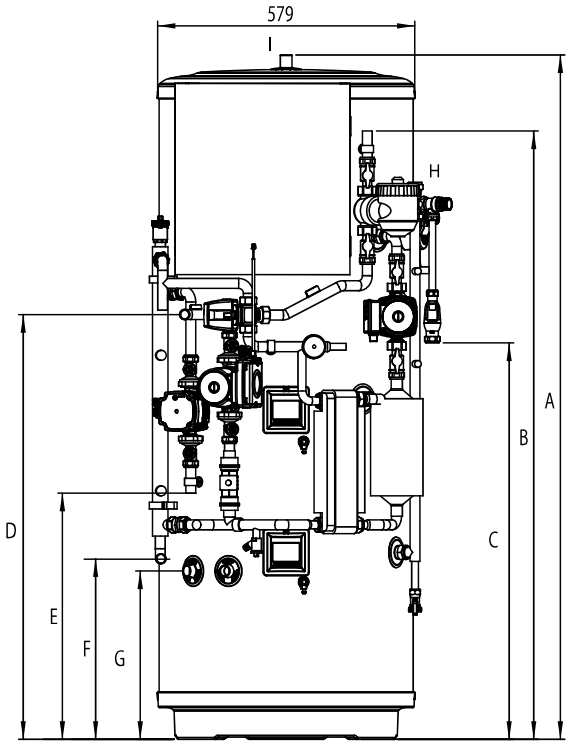
CYLINDER			EHPT21X-UKHSDW	EHPT25X-UKHSDW	EHPT30X-UKHSDW
NOMINAL HOT WATER VOLUME (LITRES)			210	250	300
ErP RATING			-	-	-
HEAT LOSS (kWh/24hrs)			1.55	1.79	-
HEAT LOSS (W)			65	75	-
WATER		Flow Rate (l/min) - (H)WM 50 / 60 / 85 / 112 / 140	14 / 17 / 24 / 32 / -	N/A / N/A / 24 / 32 / -	N/A / N/A / 24 / 32 / -
		Primary Circuit Pump	Grundfos UPMGEO 25-85	Grundfos UPMXL GEO 25-125	Grundfos UPMXL GEO 25-125
		Heating Circuit Pump	Grundfos UPM3 25-70		
		Sanitary Hot Water Pump	Grundfos UPSO 15-60 CIL2		
		Connection Size (mm) Heating / DHW	22 / 22	22 / 22	22 / 22
		Charge Pressure (MPa (Bar))	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)
WATER SAFETY DEVICES	Water Circuit	Control Thermistor (°C)	1 - 80	1 - 80	1 - 80
		Expansion Relief Valve (Cold)	0.8 (8)	0.8 (8)	0.8 (8)
	DHW Cylinder	DHW Expansion Vessel (Litres)	18	24	24
		Control Thermistor	75	75	75
		Over Temperature Cut-Out (°C)	80 ± 5	80 ± 5	80 ± 5
		Temp and Pressure Relief Valve (°C) / (MPa (Bar))	90 / 1.0 (10)	90 / 1.0 (10)	90 / 1.0 (10)
DIMENSIONS (mm)		Width	683	683	683
		Depth	730	730	730
		Height	1513	1765	2081
WEIGHT EMPTY / FULL (kg)			74 / 284	82 / 332	92 / 392
CYLINDER MATERIAL	Cylinder	Cylinder Material	Stainless Steel	Stainless Steel	Stainless Steel
	Insulation	Insulation Type	CFC / HCFC-free flame-retardant expanded Polyurethane		
		Insulation Thickness (mm)	60	60	60
		GWP of Insulation	3.1	3.1	3.1
		ODP of Insulation	0	0	0
ELECTRICAL DATA	Control Board *optionally powered by outdoor unit*	Electrical Supply	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
		Phase	Single	Single	Single
		Fuse Rating - MCB Sizes (A)*1	16	16	16
	Immersion Heater	Electrical Supply	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
		Phase	Single	Single	Single
		Capacity (kW)	3	3	3
		Max Running Current (A)	13	13	13
		Fuse Rating - MCB Sizes (A)*1	16	16	16
MECHANICAL ZONES			DHW and 1 Heating Zone*2		
OPTIONAL SIMPLIFIED WIRELESS ROOM THERMOSTAT AND WIRELESS RECEIVER			PAR-WT50-E Controller and PAR-WR51-E Receiver		

For information marked with a "-" please consult the databook or speak to your local sales office.

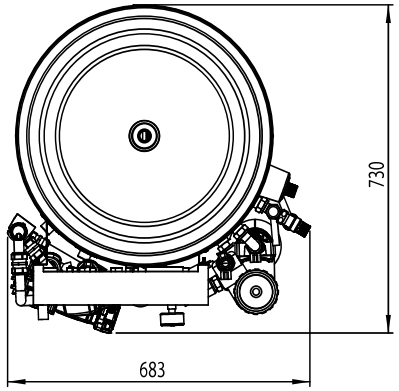
*1 MCB Sizes BS EN60898-2 & BS EN60947-2 *2 Optional 2 zone accessory pack available

Notes: Cylinder includes: Flow Temperature Controller (FTC6) with Main Controller and Temperature Sensors, Magnetic & Cyclonic Filter, Pumps & Valves for Zone 1 and DHW use, Flow Sensor, Plate Heat Exchanger, Scale Trap, 3kW Immersion Heater and Expansion Vessel.

Front View



Upper View



KEY

A	OVERALL HEIGHT
B	HEAT PUMP FLOW CONNECTION (22mm O/D COPPER)
C	TUNDISH OUTLET CONNECTION (22mm COMPRESSION)
D	HEAT PUMP RETURN CONNECTION (22mm O/D COPPER)
E	HEATING CIRCUIT FLOW CONNECTION (22mm O/D COPPER)
F	HEATING CIRCUIT RETURN CONNECTION (22mm O/D COPPER)
G	SOLAR COIL CONNECTIONS (22mm COMPRESSION / 3/4" BSP M)
H	COLD WATER INLET CONNECTION (22mm COMPRESSION)
I	HOT WATER OUTLET CONNECTION (22mm COMPRESSION / 3/4" BSP M)

CAPACITY	210	250	300
A	1513	1765	2081
B	1346	1346	1346
C	877	1129	1444
D	935	935	935
E	545	545	545
F	400	400	400
G	372	372	372

Solar coil specification:
Surface Area: 1.1m^2
Coil volume: 5.8 litres
Pressure drop: 3.6 kPa (0.036 bar)
Output rating: 30kW at 80°C flow temperature, 15 litres/minute flow rate
Connections: 22mm compression / 3/4" BSP male
Dedicated solar volume: 75 litres

ecodan®

FTC6 / FTC2BR Flow Temperature Controllers

For use with Ecodan Monobloc Units and Third Party BEMS



The FTC6 Flow Temperature Controller is designed specifically by Mitsubishi Electric to integrate with the Ecodan PUZ monobloc air source heat pump range and a third party cylinder.

The FTC2BR has been developed to allow the Ecodan PUZ range to interface with third party or BEMS (Building Energy Management System) controls. A combination of volt free and voltage inputs allow the Ecodan PUZ monobloc range to be used in applications where only simple on/off and temperature control is required.

Functions that can be controlled and monitored by third party controls:

Controlled

- On/Off heating mode
- On/Off heating ECO mode
- On/Off hot water mode
- On/Off holiday mode
- On/Off legionella mode
- Change water flow temperature

Monitored

- Unit running
- Error
- Defrost

The ability to interface with third party controls opens up a huge number of application opportunities. Many processes simply require a heat source that provides hot water, without polished end user controls. The FTC2BR controller allows the Ecodan PUZ to be used in these applications. FTC2BR inputs and outputs can be used in conjunction with local BEMS.

R32

FLOW TEMPERATURE CONTROLLERS		FTC6 (PAC-IF072B-E)	FTC2BR (PAC-IF033B-E)
COMPATIBILITY	PUZ-WM50VHA(-BS)	✓	✓
	PUZ-WM60VAA(-BS)	✓	✓
	PUZ-WM85VAA(-BS)	✓	✓
	PUZ-WM112VAA(-BS)	✓	✓
	PUZ-HWM140VHA/YHA(-BS)	✓	✓
	PUHZ-HW140VHA/YHA2(-BS)		
BUILT-IN FEATURES	Initial Setting Wizard	✓	
	Comissioning Aide	✓	
	Smart Grid Ready	✓	
	PV Connection	✓	
	Energy Monitoring	✓	
	Dual Set-Point DHW	✓	
	Silent-Mode	✓	
	Cascade*1	✓	
	Hybrid	✓	
MELCloud*2		✓	
BEMS INTERFACE			✓
DIMENSIONS (MM)	Width	393	336
	Depth	86.7	69
	Height	422	278
WEIGHT (kg)		4.1	3.2
OPERATING AMBIENT TEMPERATURE (°C) / HUMIDITY		0~ +35°C (RH<80%)	0~ +35°C (RH<80%)
ELECTRICAL DATA	Electrical Supply	Via Outdoor Unit or Independent Source (230v)	Via Outdoor Unit or Independent Source (230v)
	Phase	Single	Single

*1 Requires Optional part(s) PAC-SIF051B-E. Please contact your regional sales office technical team.
*2 Requires Wi-Fi interface MAC-567IF-E.

FTC5 / FTC2B Flow Temperature Controllers

For use with Ecodan Monobloc Units and Third Party BEMS



The FTC5 Flow Temperature Controller is designed specifically by Mitsubishi Electric to integrate with the Ecodan PUHZ monobloc air source heat pump range and a third party cylinder.

The FTC2B has been developed to allow the Ecodan PUHZ range to interface with third party or BEMS (Building Energy Management System) controls. A combination of volt free and voltage inputs allow the Ecodan PUHZ monobloc range to be used in applications where only simple on/off and temperature control is required.

Functions that can be controlled and monitored by third party controls:

Controlled

- On/Off heating mode
- On/Off heating ECO mode
- On/Off hot water mode
- On/Off holiday mode
- On/Off legionella mode
- Change water flow temperature

Monitored

- Unit running
- Error
- Defrost

The ability to interface with third party controls opens up a huge number of application opportunities. Many processes simply require a heat source that provides hot water, without polished end user controls. The FTC2B controller allows the Ecodan PUHZ to be used in these applications. FTC2B inputs and outputs can be used in conjunction with local BEMS.

R410A

FLOW TEMPERATURE CONTROLLERS		FTC5 (PAC-IF062B-E)	FTC2B (PAC-IF032B-E)
COMPATIBILITY	PUZ-WM50VHA(-BS)		
	PUZ-WM60VAA(-BS)		
	PUZ-WM85VAA(-BS)		
	PUZ-WM112VAA(-BS)		
	PUZ-HWM140VHA/YHA(-BS)		
	PUHZ-HW140VHA/YHA2(-BS)	✓	✓
BUILT-IN FEATURES	Initial Setting Wizard		
	Comissioning Aide		
	Smart Grid Ready	✓	
	PV Connection		
	Energy Monitoring	✓	
	Dual Set-Point DHW		
	Silent-Mode		
	Cascade*1	✓	
	Hybrid	✓	
MELCloud*2		✓	
BEMS INTERFACE			✓
DIMENSIONS (MM)	Width	393	336
	Depth	86.7	69
	Height	422	278
WEIGHT (kg)		4.4	3.2
OPERATING AMBIENT TEMPERATURE (°C) / HUMIDITY		0~ +35°C (RH<80%)	0~ +35°C (RH<80%)
ELECTRICAL DATA	Electrical Supply	Via Outdoor Unit or Independent Source (230v)	Via Outdoor Unit (230v)
	Phase	Single	Single

*1 Requires Optional part(s) PAC-SIF051B-E. Please contact your regional sales office technical team.
*2 Requires Wi-Fi interface MAC-567IF-E.

MELCloud Wi-Fi Connectivity

MELCloud™

Featuring the award-winning

MELConsole
Remote Maintenance & Technical Support

MELCloud is a cloud based solution for controlling your Mitsubishi Electric Ecodan heating system either locally or remotely by PC, Mac, Tablet or Smartphone via the internet.

The set up and remote operation of your Ecodan heating system via MELCloud is simple and straight forward. All you need is a wireless connection where the Ecodan is located and an internet connection on your mobile or fixed device. To set up the system, the router and the Ecodan Wi-Fi interface need pairing and this is done simply and quickly via the WPS button found on all mainstream routers, or using access point pairing via a mobile phone.

Key Features

- Access to remote maintenance and technical support
- View and control your heating and hot water from anywhere in the world
- Reports on energy use, temperature history and more
- Live weather feed at location of Ecodan
- Share / restrict access and control of the Ecodan system
- Compatible with Alexa
- Available for any FTC6 / FTC5 based system, new or retrofit using a MAC-567IF-E interface

Available on the App Store

ANDROID APP ON Google play

Windows Store

MELConsole

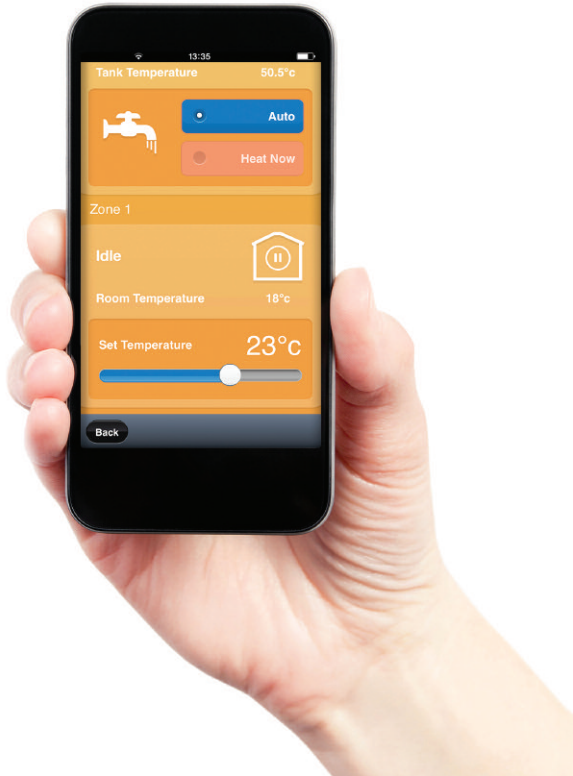
Ecodan Helpdesk

Once connected, you can also enjoy the benefits of **MELConsole** which provides **remote maintenance & technical support** reducing the need of a visit from an engineer.

MELConsole
Remote Maintenance & Technical Support

24/7 Technical Support





MELCloud™



For a demonstration of Mitsubishi Electric's MELCloud visit our website: **melcloud.com** and click 'Login'

Available for PC, Mac, Tablet or Smartphone

Supported Ecodan Models

All **Ecodan FTC6 / FTC5** systems have energy monitoring functionality as standard and the ability to connect to MELCloud. A MAC-567IF-E Wi-Fi Interface is required to use MELCloud.

Wi-Fi Interface		MAC-567IF-E
DESCRIPTION		Wi-Fi Interface
CONNECT TO		Indoor Unit
MAX NUMBER OF UNITS		1
COMPATIBILITY		Ecodan FTC6 / FTC5
POWER SUPPLY		From indoor unit
DIMENSIONS (WxDxH) mm		79 x 18.5 x 44
CONTROL	On/Off	✓
	Mode	✓
	Heating Setpoint	✓
	Hot Water Boost	✓
	2-Zone Control	✓
	Holiday Mode	✓
	Timer	✓
	Frost Protection	✓
MONITOR	On/Off	✓
	Mode	✓
	Heating Setpoint	✓
	Tank Temperature	✓
	Tank Target Temperature	✓
	Outside Temperature	✓
	Fault Codes	✓
	Consumed Electrical Energy	✓
	Produced Heat Energy	✓

Supported Hardware / Software

Tablets (Apps or Web Client)
- Apple iPad / iPad mini
- Samsung Galaxy Tab / Note
- Google Nexus
- Dell Latitude 10
- Microsoft Surface
- BlackBerry PlayBook

Smartphones (Apps or Web Client)
- Apple iPhone
- Samsung Galaxy S
- Google Nexus
- Nokia Lumia
- BlackBerry Z10

Operating Systems
- Android
- Apple iOS / OS
- Microsoft Windows
- BlackBerry

Internet Browsers (Web Client only)
- Microsoft Internet Explorer
- Google Chrome
- Apple Safari
- Mozilla Firefox
- Opera

Please Note:
This is not definitive list of all compatible devices, other similar devices which use supported Operating Systems or Internet Browsers should also work either via dedicated Apps or via Web Browser / Web Client options. Please note that user experience may vary slightly depending on hardware and software combination.

ecodan®

Energy Monitoring Packs

All Ecodan Flow Temperature Control (FTC6 / FTC5) systems come with free energy monitoring as standard. System users are able to measure both consumed electrical energy and produced heat energy to the nearest kWh. Further energy monitoring packs are also available, ranging from electric meter packs, through to a Renewable Heat Incentive (RHI) compliant Metering and Monitoring Service Pack (MMSP) which allows additional RHI payments to be claimed.

In addition to the basic system functionality features, i.e. hot water and heating status, the system's energy performance can also now be viewed. Historic energy consumption, heat production and run cost reports are available via the main controller, SD card or MELCloud.

MELCloud


QUHZ-W-VA


PUZ-WM-VHA


PUZ-WM-VAA


PUZ-WM-VAA


PUZ-WM-VAA


PU(H)Z-HWM-VHA/YHA(2)









PACK	4kW	5kW	6kW	8.5kW	11.2kW	14kW
EMP1	✓	✓	✓	✓	✓	✓
EMP2	✓	✓	✓	✓	✓	✓
EMP3-M-1Ph		✓	✓	✓	✓	✓ *VHA
EMP3-M-3Ph						✓ *YHA
EMP3-Q-1Ph	✓					
EMPH-M-1Ph		✓	✓	✓	✓	✓

DESCRIPTION	ELECTRIC METER	HEAT METER	OPTIONAL WI-FI	DATA STORAGE
Energy input & output estimation included as standard			Optional	
Electrical energy measurement consumption pack	2		Optional	
MMSP compliant electrical energy consumption and heat generation pack with cloud data storage	2	1	Optional	✓
MMSP compliant electrical energy consumption and heat generation pack with cloud data storage	2	1	Optional	✓
MMSP compliant electrical energy consumption and heat generation pack with cloud data storage	2	1	Optional	✓
Electrical energy consumption and heat generation pack for hybrid systems	2	1	Optional	

i-LIFE2 Slim

Fan Assisted Radiator

The i-Life2 Slim Fan Assisted Radiator designed to work seamlessly with existing heating or renewable technologies.

Key Features

- Stylish - At only 13cm deep, the sleek and elegant satin-white, wall mounted cabinet is designed to blend seamlessly into any setting
- Flexible - Packed with advanced controls and functions, the i-Life2 Slim will work with traditional heating or renewable systems such as heat pumps
- Easy to Use - Airflow is managed by deflectors at the top of the unit, which open and close automatically ensuring fast even heat distribution

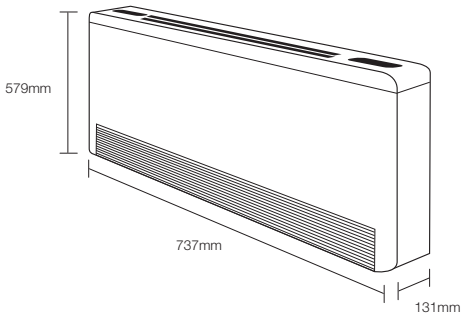


i-Life2 Slim units are managed by a variable speed fan motor that continuously modulates the fan speed

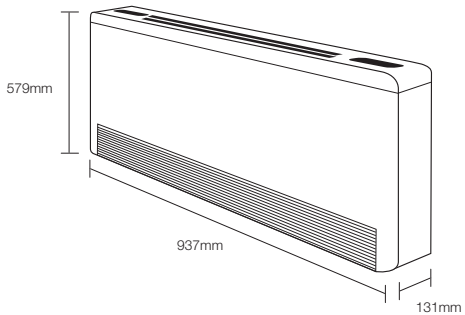
MODEL		i-LIFE2 SLIM DLMV 80	i-LIFE2 SLIM DLMV 170
CAPACITY (W)*2 *6 *8		500 / 780 / 880	1060 / 1660 / 2130
ELECTRICAL DATA	Electrical Supply	230v, 50Hz	230v, 50Hz
	Phase	Single	Single
	Fan Power Input (W) - (Lo-Mi-Hi)*1 *8	0.7 / 4.6 / 10.7	1.62 / 10.1 / 19.0
WATER DATA	Water Flow Rate (l/min) - (Lo-Mi-Hi)*2	1.2 / 2.4 / 2.4	3 / 4.8 / 6
	Water Pressure Drop (kPa) - (Lo-Mi-Hi)*2 *8	3 / 6 / 8	2 / 5 / 8
AIR DATA	Air Flow Rate (m3/h) - (Lo-Mi-Hi)*1	51 / 93 / 125	122 / 221 / 277
SOUND DATA	Sound Pressure (dB(A)) - (Lo-Mi-Hi)*3	24 / 35 / 41	26 / 36 / 42
	Sound Power (dB(A)) - (Lo-Mi-Hi)*4 *7 *8	33 / 44 / 50	35 / 45 / 51
DIMENSIONS (mm)*5	Width	737	937
	Depth	131	131
	Height	579	579
WEIGHT (kg)*5		17	20

1. Room temperature 27°C d.b./19°C w.b.; Chilled water (in/out) 7/12°C.
2. Room temperature 20°C d.b.; Hot water (in/out) 45/40 °C.
3. Sound pressure level in free field on a reflective surface, 1m from fan front and 1m from the ground. Non-binding value obtained from sound power level.
4. Sound power on the basis of measurements made in compliance with ISO 374 and Eurovent 8/2.
5. Unit in standard configuration/execution, without optional accessories.
6. Values in compliance with EN14511-3:2013.
7. Values in compliance with [REGULATION (UE) N.2016/2281].
8. Certified data in EUROVENT.

Product Dimensions i-LIFE2 SLIM DLMV 80



Product Dimensions i-LIFE2 SLIM DLMV 170



CLIMAVENETA
SUSTAINABLE COMFORT

ecodan®
Renewable Heating Technology

Accessories / Optional Extras

DESCRIPTION	MODEL REF.
QAHV Accessories	
Main Pipework Thermistor	**TW-TH16**
Differential Pressure Switch for Water Systems	**KS10-EP100S**
Wired Remote Controller	**PAR-W31MAA-J**
Centralised Controller	**AE-200E**
AE-200E Wall Mounted Box - for Wall Mounting	**PAC-YG82TB**
Secondary Side Control Circuit Kit	**Q-1SCK**
CAHV Accessories	
Main Pipework Thermistor	**TW-TH16**
Differential Pressure Switch for Water Systems	**KS10-EP100S**
Wired Remote Controller	**PAR-W21MAA-J**
Centralised Controller	**AE-200E**
AE-200E Wall Mounted Box - for Wall Mounting	**PAC-YG82TB**
CRHV Accessories	
Main Pipework Thermistor	**TW-TH16**
Differential Pressure Switch for Water Systems	**KS10-EP100S**
Wired Remote Controller	**PAR-W21MAA-J**
Centralised Controller	**AE-200E**
AE-200E Wall Mounted Box - for Wall Mounting	**PAC-YG82TB**
External Temperature Sensor and Solar Guard	**TMP-O**
PU(H)Z / QUHZ Accessories	
Wireless Controller Transmitter	**PAR-WT50R-E**
Wireless Controller Receiver	**PAR-WR51R-E**
MELCloud Wi-Fi Interface	**MAC-567IF-E**
FTC6 / FTC5 Flow and Return Temperature Sensors 5m Cable	**PAC-TH011-E**
FTC5 High Temperature Sensor 5m Cable	**PAC-TH011HT-E**
FTC6 High Temperature Sensor 5m Cable	**PAC-TH012HT-E**
VHA Drain Socket Kit	**PAC-SH71DS-E**
VHA & VAA Drain Socket Kit	**PAC-SG61DS-E**
FTC6 / FTC5 Internal Air Temperature Sensor including Cover	**PAC-SE41TS-E**
Ecodan Anti-Vibration Fix-It-Foot 600mm Kit	**ACC-AVM-001**
Ecodan Reinforced Lightweight Slab plus Anti-Vibration Fix-It-Foot Kit	**ACC-AVS-001**
Insulated Flexible Connection Pipes (28mm x 300mm) Elbow Pair	**ACC-FCP-E28**
Insulated Through Wall Sleeve Kit (85mm)	**ACC-FCP-TW1**
External Pipework Trunking Length (1m x 140mm Black x2)	**ACC-TRU-LE1**
External Pipework Trunking Length (2m x 140mm Black x1)	**ACC-TRU-LE2**
External Pipework Trunking Length Connector (140mm Black)	**ACC-TRU-JO1**
External Pipework Trunking Wall Cover (140mm Black)	**ACC-TRU-CO1**
External Pipework Trunking Elbow (140mm Black)	**ACC-TRU-EL1**
External Pipework Trunking External Corner (140mm Black)	**ACC-TRU-EC1**
External Pipework Trunking Internal Corner (140mm Black)	**ACC-TRU-IC1**
10L Anti Freeze	**ACC-AFZ-010**
25L Anti Freeze	**ACC-AFZ-025**
Pack for 2 Zone Systems with Equal Temperatures	**ACC-2ZP-K01**
Pack for 2 Zone Systems with Different Temperatures	**ACC-2ZP-K02**

Ventilation

Fresh Air Ventilation Range





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Fresh Air Ventilation Range

Why Do We Need **Fresh Air Ventilation**?



The build-up of health damaging pollutants, mould and rot are all attributed to poor indoor air quality and the lack of effective ventilation.

With highly airtight buildings on the rise, alongside increasingly strict legislation on air quality, the need is growing for an effective solution such as mechanical ventilation, which is also energy efficient. Mitsubishi Electric systems are perfectly placed to address this need and are the ideal solution to provide fresh air.

Our range includes single and multi-room Mechanical Ventilation with Heat Recovery (MVHR) units and medium to large scale ventilation solutions including Air Handling Units (AHUs). All systems have been designed to provide the best ventilation solution for the chosen application, by delivering the required amount of fresh air, whilst extracting the right amount of stale air, in the most energy efficient way possible.

Fresh air benefits include:

- A healthy and better maintained building
- Improved air quality for occupants
- Improved comfort via the recovery of heat to incoming fresh air





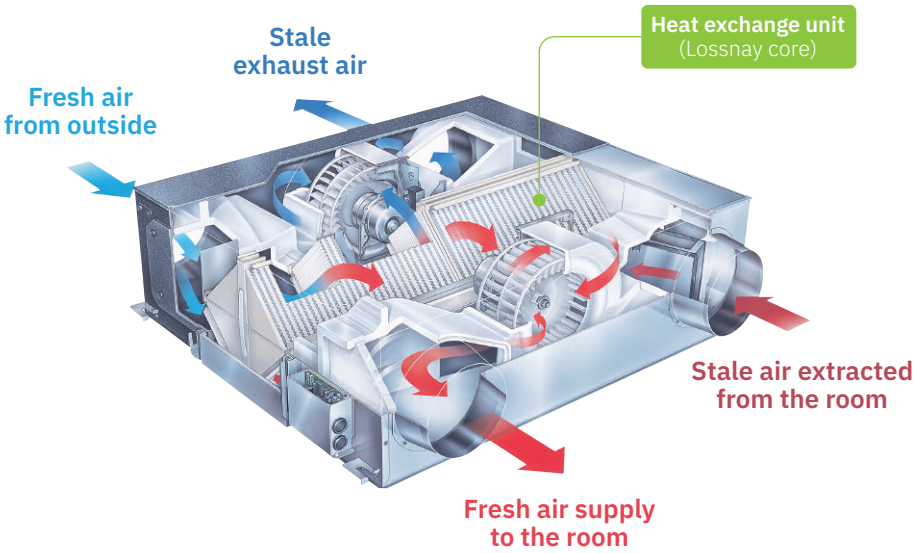
Excellent Air Quality and Heat Exchange Efficiency

How Lossnay Works

Our Lossnay systems have perfected the recovery of energy that would have otherwise been wasted. They do this by either warming or cooling incoming air, a feature which makes Mitsubishi Electric MVHR units extremely energy efficient.

Heat Recovery is made possible via the unique Lossnay ultra-thin paper core technology, which is constructed in a corrugated form and layered in alterative directions.

This design allows a cross airflow to maximise heat recovery without the supply and exhaust air mixing, ensuring only fresh air is introduced to the building.



How Air Handling Units work

Packaged Air Handling Units (AHUs) are designed to provide a tempered fresh air supply into commercial buildings. They work in conjunction with the building's air conditioning system to provide occupants with a fresh and comfortable environment.

The technology behind the Climaveneta Wizard AHU includes a highly efficient heat recovery thermal wheel to transfer heat between the supply and return air. By capturing and reusing this heat before it leaves the building, substantial energy savings can be made.

This technology can also provide free cooling and benefits from fully integrated, intelligent controls.



Lossnay

The Lossnay range of units have been developed to suit both commercial and domestic applications and benefit from heat recovery technology, ensuring effective fresh air ventilation whatever the type of building. The GUG air processing unit has been designed for use with the LGH range of Lossnay units to provide a full heating, cooling and ventilation solution for commercial applications.

LGH-RVX(T)-E

Exceptional ventilation for commercial applications



With 12 units available, the RVX(T) range of MVHR units cover a wide range of air volumes making them suitable for most commercial applications.

As well as a simultaneous supply of fresh air with an extraction of stale air and heat recovery, efficiency is further enhanced with a free cooling function that lowers the cooling demand of a building and saves on running costs.

Schools Factories Restaurants Offices Small shops Hotels Leisure

VL-220CZGV-EB

Maximum efficiency and minimal energy use



The ceiling ducted VL-220 Mechanical Ventilation with Heat Recovery (MVHR) unit is an energy efficient whole-house ventilation solution, which is also suitable for applications such as small commercial.

It simultaneously supplies fresh air, whilst extracting stale and moist air from kitchens and bathrooms, enabling maximum heat recovery and dwelling welfare benefits.

Offices Leisure Home

VL-100(E)U_5-E

Compact and stylish



The wall mounted VL-100 is a single room total heat exchanger, suitable for applications such as small offices and homes.

It is compact, easy-to-install and enables a fresh, clean and healthy internal environment to be maintained, whilst helping to reduce energy bills.

Offices Home

Lossnay

GUG-01/02/03SL-E

Enhanced ventilation for LGH-RVX(T) units



Available in three sizes, the GUG is an air processing unit which works in conjunction with Mr Slim R410A outdoor units to heat and cool the supply air from a Lossnay LGH-RVX(T)-E unit.

The combination of these three products effectively creates an air handling system, which can supply fresh air efficiently to commercial applications.

Schools Factories Restaurants Offices Retail Hotels Leisure

GUF-50/100RD4

Enhanced ventilation with City Multi VRF



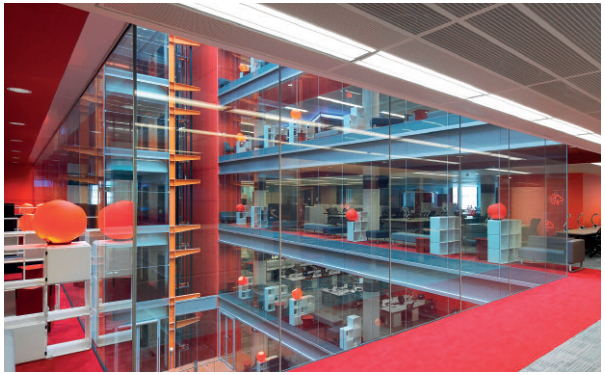
Available in two sizes, the GUF is an outdoor air processing unit which works in conjunction with City Multi outdoor units to provide ventilation, dust removal and heat recovery to help maintain a healthy indoor air quality.

Schools Factories Restaurants Offices Retail Hotels Leisure

Air Handling Unit

WizardX E-OU

Large scale commercial ventilation systems



The new Climaveneta Wizard AHUs, which range from 0.83m³/s up to 5.56m³/s, benefit from thermal wheel heat recovery technology and are fully compliant with Ecodesign.

These systems utilise Mr Slim Power Inverter technology and feature integrated controls making them highly advanced, flexible and efficient.

Schools Factories Restaurants Offices Retail Hotels Leisure

LGH-RVX-E

Commercial Lossnay

Designed to supply fresh air into any commercial building whilst simultaneously extracting stale air, the Lossnay **LGH-RVX-E** units also recover valuable heat energy for maximum efficiency, with total heat exchange.

Key Features

- Clean, fresh air
- Energy efficient heat recovery
- Can be used in conjunction with Mr Slim and City Multi for highly efficient and effective operation





MODEL			LGH15RVX-E	LGH25RVX-E	LGH35RVX-E	LGH50RVX-E	LGH65RVX-E	LGH80RVX-E	LGH100RVX-E	LGH150RVX-E	LGH200RVX-E
ELECTRICAL POWER SUPPLY			220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz
RUNNING CURRENT (A)		SP1	0.10	0.10	0.12	0.13	0.15	0.15	0.17	0.29	0.33
		SP2	0.15	0.16	0.26	0.26	0.39	0.36	0.50	0.70	0.88
		SP3	0.24	0.28	0.54	0.59	0.90	0.83	1.20	1.75	2.20
		SP4	0.40	0.48	0.98	1.15	1.65	1.82	2.50	3.71	4.88
INPUT POWER (W)		SP1	7	8	11	12	15	18	21	38	42
		SP2	14	16	31	32	49	60	75	123	153
		SP3	28	33	70	78	131	151	200	311	400
		SP4	49	62	140	165	252	335	420	670	850
AIRFLOW (m^3/h)*2		SP1	38	63	88	125	163	200	250	375	500
		SP2	75	125	175	250	325	400	500	750	1000
		SP3	113	188	263	375	488	600	750	1125	1500
		SP4	150	250	350	500	650	800	1000	1500	2000
AIRFLOW (l/s)*2		SP1	10	17	24	35	45	56	69	104	139
		SP2	21	35	49	69	90	111	139	208	278
		SP3	31	52	73	104	135	167	208	313	417
		SP4	42	69	97	139	181	222	278	417	556
SPECIFIC FAN POWER (W/(l/s))		SP1	0.70	0.47	0.46	0.34	0.33	0.32	0.30	0.37	0.30
		SP2	0.67	0.46	0.63	0.46	0.54	0.54	0.54	0.59	0.55
		SP3	0.90	0.63	0.96	0.75	0.97	0.90	0.96	0.99	0.96
		SP4	1.17	0.90	1.44	1.19	1.39	1.51	1.51	1.61	1.53
EXTERNAL STATIC PRESSURE (Pa)		SP1	6	5	10	8	8	10	11	11	10
		SP2	24	21	40	30	30	38	43	44	38
		SP3	54	48	90	68	68	85	96	98	84
		SP4	95	85	160	120	120	150	170	175	150
SOUND PRESSURE LEVEL (dBA)		SP1	17	17	17	18	18	18	18	18	18
		SP2	19	20	20	19	22	23	23	24	28
		SP3	24	22	28	28	29	30	31	32	36
		SP4	28	27	32	34	34.5	34.5	37	39	40
TEMPERATURE EXCHANGE EFFICIENCY (%)		SP1	84	86	88.5	87	86	85	89.5	85	89.5
		SP2	83	82	86	83.5	84	84	86.5	84	86.5
		SP3	81	80	82.5	81	81	82.5	83	82.5	83
		SP4	80	79	80	78	77	79	80	80	80
ENTHALPY EXCHANGE EFFICIENCY (%)	Heating	SP1	79	83	83.5	82.5	82	81	87	81	87
		SP2	78	76	78.5	75	76	78	78	78	78
		SP3	75.5	72	74	71	71	73.5	74	73.5	74
		SP4	73	69.5	71.5	69	68.5	71	72.5	72	72.5
	Cooling	SP1	79	83	82	82	81	81	85.5	81	85.5
		SP2	78	74.5	78	72.5	74	78	77	78	77
		SP3	74.5	70	73	68	69.5	72.5	73	72.5	73
		SP4	71	68	71	66.5	66	70	71	70.5	71
WEIGHT (kg)			20	23	30	33	38	48	54	98	110
DIMENSIONS (mm)		Width x Depth x Height	780 x 610 x 289	780 x 735 x 289	888 x 874 x 331	888 x 1016 x 331	908 x 954 x 404	1144 x 1004 x 404	1144 x 1231 x 404	1144 x 1004 x 808	1144 x 1231 x 808
DUCT SIZE (mm)			100	150	150	200	200	250	250	(SA,RA)250 (OA,EA)270 x 700	(SA,RA)250 (OA,EA)270 x 700
STANDARD FILTER*1			EU-G3	EU-G3	EU-G3	EU-G3	EU-G3	EU-G3	EU-G3	EU-G3	EU-G3
FUSE RATING (BS88) – HRC (A)			6	6	6	6	6	6	6	10	10

Notes: Running Current, Input Power and Recovery Efficiency are based on the above airflow rate, power supply 240v, 50Hz. Sound Pressure Level measured at 1.5m under the centre of panel.
*1: EU-F7 filter available as optional parts. *2: Airflow tested to Japan industrial standard JIS B 8628. SP1, SP2, SP3 & SP4 relate to the fan speeds of the Lossnay RVX units i.e. fanspeed 1, 2, 3 & 4.

Accessories

Remote Controllers

PZ-61DR-E

Lossnay remote controller for LGH-RVX-E

Filters

PZ-15RFM-E

F7 filter for LGH-15RVX-E

PZ-25RFM-E

F7 filter for LGH-25RVX-E

PZ-35RFM-E

F7 filter for LGH-35RVX-E

PZ-50RFM-E

F7 filter for LGH-50RVX-E

PZ-65RFM-E

F7 filter for LGH-65RVX-E

PZ-80RFM-E

F7 filter for LGH-80RVX-E / LGH-150RVX-E (2 sets)

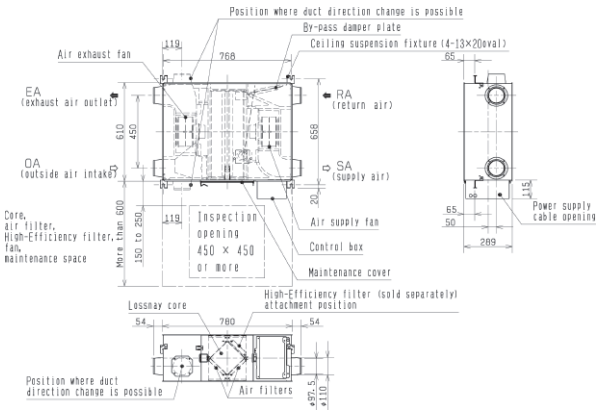
PZ-100RFM-E

F7 filter for LGH-100RVX-E / LGH-200RVX-E (2 sets)

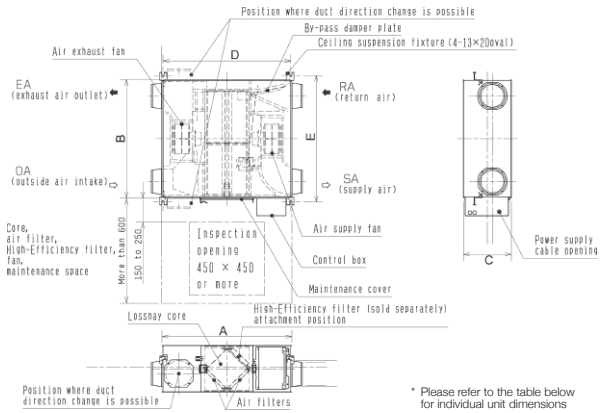
Weather Proof Housings

Weather proof housings are also available

DIMENSIONS LGH-15RVX-E



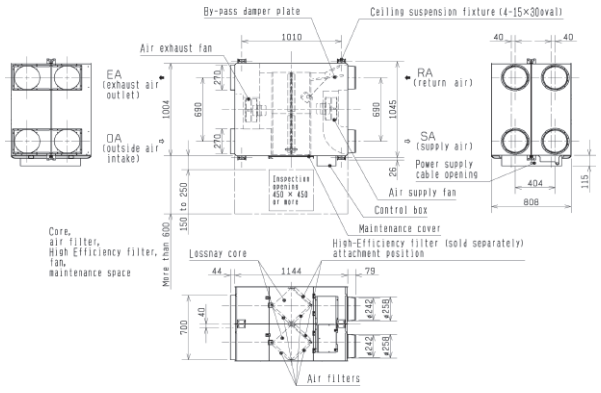
DIMENSIONS LGH-25-100RVX-E*



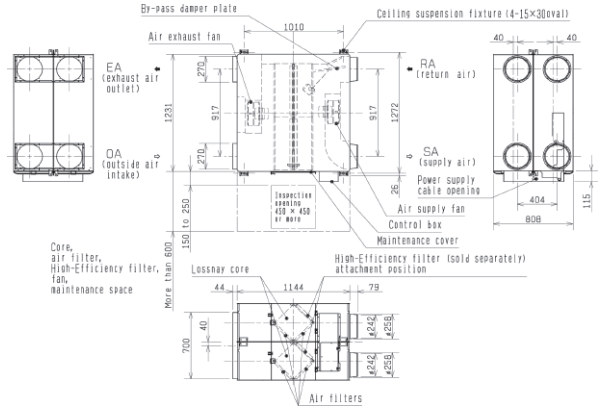
* Please refer to the table below for individual unit dimensions

MODEL REFERENCE	DIMENSIONS			CEILING SUSPENSION FIXTURE PITCH		NOMINAL DUCT DIAMETER
	A	B	C	D	E	
LGH-25RVX-E	780	735	289	768	782	150
LGH-35RVX-E	888	874	331	875	921	150
LGH-50RVX-E	888	1016	331	875	1063	200
LGH-65RVX-E	908	954	404	895	1001	200
LGH-80RVX-E	1144	1004	404	1131	1051	250
LGH-100RVX-E	1144	1231	404	1131	1278	250

DIMENSIONS LGH-150RVX-E



DIMENSIONS LGH-200RVX-E



LGH-RVXT-E

Commercial Lossnay

Lossnay **LGH-RVXT-E** Mechanical Ventilation Heat Recovery (MVHR) systems are designed to supply fresh air into any commercial building, whilst simultaneously extracting stale air and, most importantly, recovering valuable heat energy for maximum efficiency. The reduced height of this model makes it particularly suitable for installation in ceiling voids.

Key Features

- Clean, fresh air for improved air quality and comfort
- Energy efficient heat recovery
- Total heat exchange (sensible and latent)
- Significantly reduced height



MODEL			LGH150RVXT-E	LGH200RVXT-E	LGH250RVXT-E
ELECTRICAL POWER SUPPLY			220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz
RUNNING CURRENT (A)		SP1	0.36	0.39	0.57
		SP2	1.10	1.10	1.40
		SP3	2.40	2.70	3.60
		SP4	4.30	5.40	7.60
INPUT POWER (W)		SP1	48	56	82
		SP2	176	197	244
		SP3	421	494	687
		SP4	792	1000	1446
AIRFLOW (m^3/h)*2		SP1	375	500	625
		SP2	750	1000	1250
		SP3	1125	1500	1875
		SP4	1500	2000	2500
AIRFLOW (l/s)*2		SP1	104	139	174
		SP2	208	278	347
		SP3	313	417	521
		SP4	417	556	694
SPECIFIC FAN POWER (W/(l/s))		SP1	0.46	0.40	0.47
		SP2	0.85	0.71	0.70
		SP3	1.35	1.18	1.32
		SP4	1.90	1.80	2.08
EXTERNAL STATIC PRESSURE (Pa)		SP1	11	11	11
		SP2	44	44	44
		SP3	98	98	98
		SP4	175	175	175
SOUND PRESSURE LEVEL (dBA)		SP1	22	22	24
		SP2	29.5	28	32
		SP3	35.5	35.5	39
		SP4	39.5	39.5	43
TEMPERATURE EXCHANGE EFFICIENCY (%)		SP1	81.5	84	82.5
		SP2	81	82.5	80.5
		SP3	80.5	81	79
		SP4	80	80	77
ENTHALPY EXCHANGE EFFICIENCY (%)	Heating	SP1	75	83	79
		SP2	73	77	74
		SP3	71	73.5	71.5
		SP4	70	72.5	68
	Cooling	SP1	74	80.5	76.5
		SP2	72	74.5	71.5
		SP3	70	71	69
		SP4	69	70	65.5
WEIGHT (kg)			156	159	198
DIMENSIONS (mm)		Width x Depth x Height	1980 x 1500 x 500	1980 x 1500 x 500	1980 x 1500 x 500
DUCT SIZE (mm)			250 x 750	250 x 750	250 x 750
STANDARD FILTER*1			EU-G3	EU-G3	EU-G3
FUSE RATING (BS88) – HRC (A)			10	10	10

Notes: Running Current, Input Power and Recovery Efficiency are based on the above airflow rate, power supply 240v, 50Hz. Sound Pressure Level measured at 1.5m under the centre of panel.
*1: M6 medium efficiency filter and F8 high efficiency filter available as optional parts. *2: Airflow tested to Japan industrial standard JIS B 8628. SP1, SP2, SP3 & SP4 relate to the fan speeds of the Lossnay RVXT units i.e. fanspeed 1, 2, 3 & 4.

Accessories

Remote Controllers

PZ-61DR-E

Lossnay remote controller for LGH-RVXT-E

Filters

PZ-M6RTFM-E

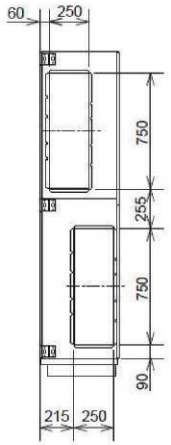
M6 filter for LGH-RVXT-E

PZ-F8RTFM-E

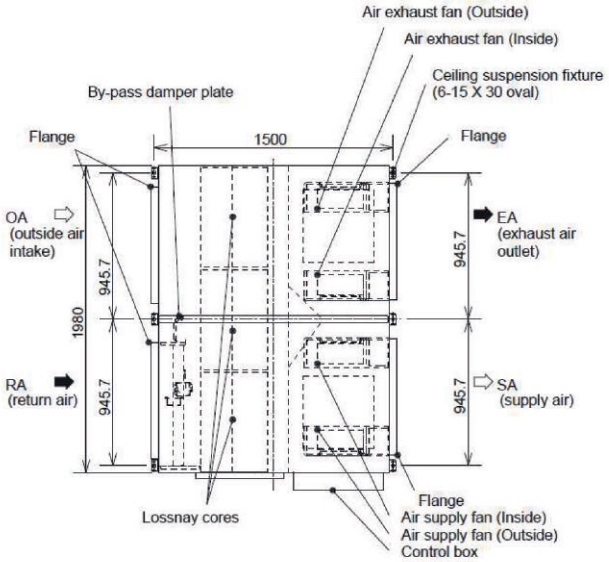
F8 filter for LGH-RVXT-E

DIMENSIONS LGH-150/200/250RVXT-E

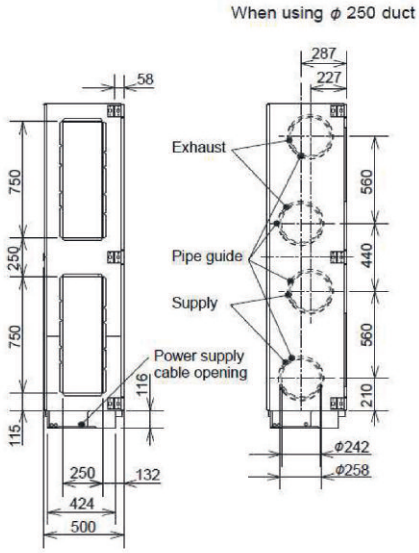
Left Side View



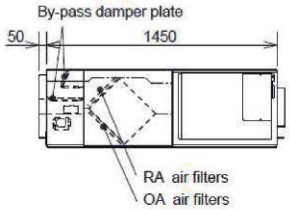
Upper View



Right Side View



Front View



VL-100(E)U$_5$-E

Wall Mounted Lossnay



The **VL-100** units supply fresh air inside a room using simultaneous supply and extract operation in an energy efficient manner.

The recovery of both latent heat and sensible heat ensures a comfortable internal environment as well as reducing heat losses, saving both energy and costs.

The compact unit with its simple installation makes it ideal for single room applications, such as small offices, bedrooms etc.

Key Features

- **Effective fresh air ventilation with improved air quality**
- **Reduces heating / cooling costs**
- **Simple installation**

MODEL		VL-100U$_5$-E	VL-100EU$_5$-E
ELECTRICAL POWER SUPPLY		220-240V, 50Hz	220-240V, 50Hz
PHASE		Single	Single
POWER CONSUMPTION (W)	Low	17	17
	High	34	34
AIRFLOW (m^3/h)	Low	61	61
	High	106	106
SOUND PRESSURE LEVEL (dBA)	Low	27	27
	High	38	38
TEMPERATURE EXCHANGE EFFICIENCY (%)	Low	79	79
	High	72	72
WEIGHT (kg)		7.5	7.5
DIMENSIONS (mm)	Width	620	620
	Depth	200	200
	Height	265	265
DUCT SIZE (mm)		2 x Ø75	2 x Ø75
FUSE RATING (BS88) - HRC (A)		6	6
MAINS CABLE No. Cores		3	3
CONTROL ON/OFF		Pull Cord	Field Supplied

Notes: The VL-100U$_5$-E includes a pull cord switch to control the unit. Also available as VL-100EU$_5$-E which includes the option to fit a field supplied external wall switch

Accessories

Filters

P-100HF$_5$-E

M6 filter for VL-100(E)U$_5$-E

Extension Pipe Kits

P-100P-E

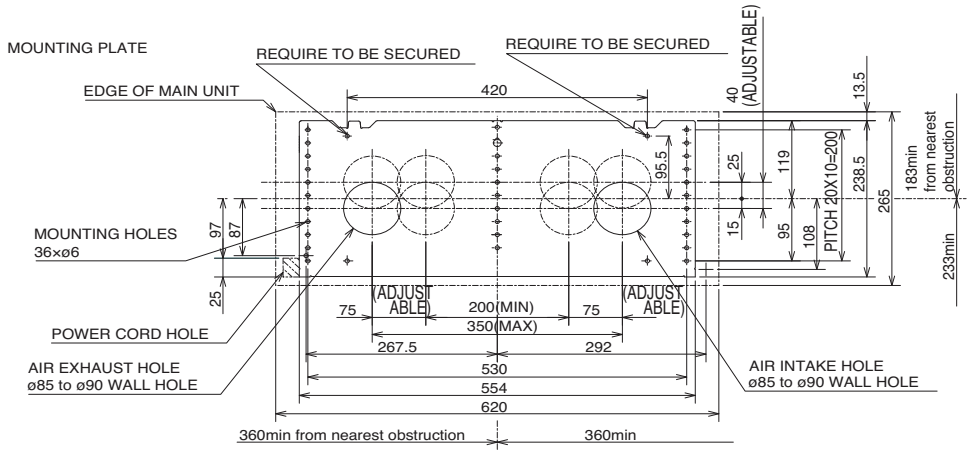
Extension pipe for VL-100(E)U$_5$-E (300mm)

P-100PJ-E

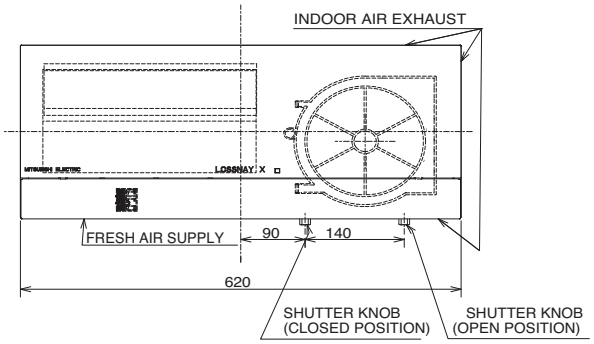
Extension pipe joint for VL-100(E)U$_5$-E (300mm)

Product Dimensions VL-100(E)U$_5$-E

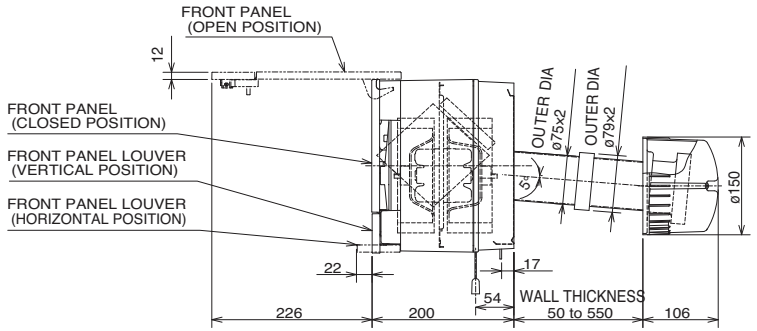
Front View



Upper View



Side View



Unit: mm

VL-220CZGV-EB

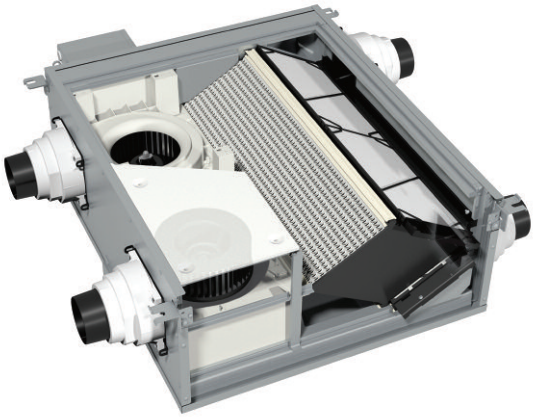
Residential / Light Commercial Lossnay

The Lossnay **VL-220** Mechanical Ventilation with Heat Recovery (MVHR) unit is an energy efficient whole-house ventilation solution which provides a clean, fresh air supply to a home.

It simultaneously extracts stale air from the internal environment whilst recovering valuable heat energy to maximise efficiency and minimise energy use. Ideal for high humidity areas, the Lossnay VL-220 is also suitable for small commercial properties.

Key Features

- Energy efficient whole-house ventilation with heat recovery
- Free cooling function
- Dedicated remote controller
- Treated Lossnay core allowing extract from high humidity areas



MODEL		VL-220CZGV-EB			
ELECTRICAL POWER SUPPLY		220-240V/50Hz			
WEIGHT (kg)		32			
FAN SPEED		1	2	3	4
RUNNING CURRENT (A)		0.11	0.18	0.29	0.60
INPUT POWER (W)		8.5	18.5	35	80
AIRFLOW (m^3/h)		65	120	165	220
AIRFLOW (l/s)		18	33	46	64
EXTERNAL STATIC PRESSURE (Pa)		13	44	84	164
TEMPERATURE EXCHANGE EFFICIENCY (%)		86	85	84	82
NOISE (dB)		14	19	25	31
DIMENSIONS (mm)	Width	850			
	Depth	720			
	Height	340			
MAXIMUM CURRENT (A)		0.8			

Accessories

Controllers

PZ-61DR-E

Lossnay remote controller for VL-220CZGV-EB

PZ-43SMF-E

Lossnay simplified remote controller for VL-220CZGV-EB

Filters

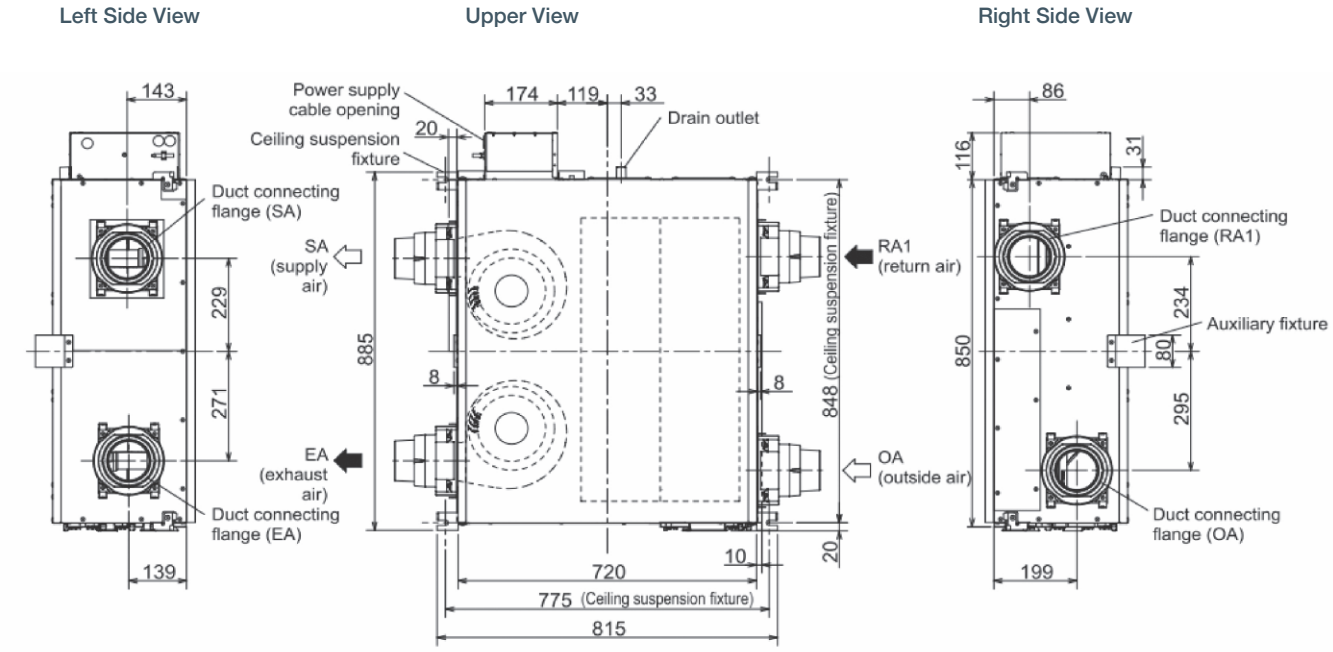
P-220EMF-E

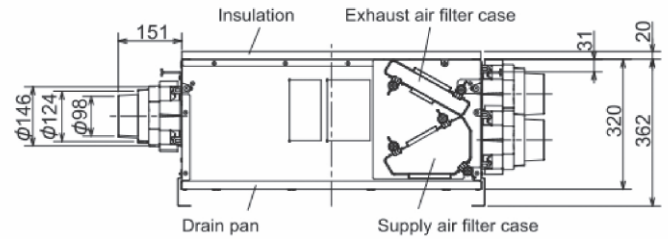
G4 filter for VL-220CZGV-EB (return air)

P-220SHF-E

M6 filter for VL-220CZGV-EB (supply air)

Product Dimensions VL-220CZGV-EB

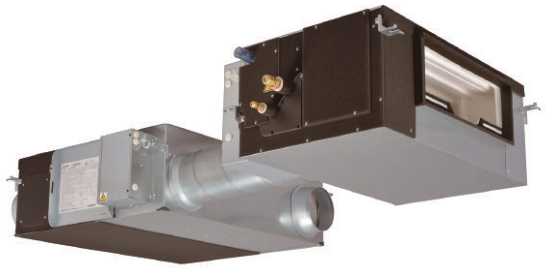




GUG-SL-E

Lossnay Air Processing DX Unit

Return Air Temperature Control
(5.6 to 15.8kW)









The **GUG-SL-E** combines a Lossnay Mechanical Ventilation with Heat Recovery (MVHR) unit with a Mr Slim Power Inverter outdoor heat pump to heat and cool the supply air delivery to the space.

In return temperature control mode, the combination of both technologies can provide the fresh air and temperature control to a space from a single system.

Key Features

- Single system reduces installation time, costs and space
- Provides heat recovery ventilation and air conditioning from the same ventilation system
- Return air temperature control allows for control dependent on the actual internal temperature

MODEL		GUG50-56RAV	GUG65-66RAV	GUG80-83RAV	GUG100-113RAV	GUG150-157RAVT	GUG150-157RAYT	GUG150-158RAV
FAN SPEED 3 (75%)	Air Volume (l/s)	104	135	167	208	313	313	313
	External Static Pressure (Pa)	59	53	73	73	84	84	84
FAN SPEED 4 (100%)	Air Volume (l/s)	139	181	222	278	417	417	417
	External Static Pressure (Pa)	105	95	130	130	150	150	150
HEATING CAPACITY*1 (kW)	DX Coil Capacity	4.1	4.5	6.0	8.1	13.0	13.0	13.0
	Heat Recovery Capacity	2.4	3.2	4.0	5.1	7.4	7.4	7.7
	Total Capacity	6.5	7.7	10.0	13.2	20.4	20.4	20.7
COOLING CAPACITY*1 (kW)	DX Coil Capacity	3.6	4.0	5.0	7.1	9.5	9.5	9.5
	Heat Recovery Capacity	2.0	2.6	3.3	4.2	6.2	6.2	6.3
	Total Capacity	5.6	6.6	8.3	11.3	15.7	15.7	15.8
SHF	Nominal	0.66	0.69	0.69	0.66	0.68	0.68	0.68
SYSTEM POWER INPUT (kW)	Heating (nominal)	1.59	1.63	2.17	2.99	5.01	5.01	4.88
	Cooling (nominal)	1.2	1.31	1.75	2.27	3.12	3.12	3
PERFORMANCE INDEX*2	Heating (nominal)	4.09	4.72	4.62	4.42	4.07	4.07	4.24
	Cooling (nominal)	4.69	5.03	4.76	4.98	5.03	5.03	5.27
MAX PIPE LENGTH (m)		50	50	50	50	75	75	75
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30	30
PIPE SIZE mm(in)	Gas	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
GUG DIMENSIONS (mm)	Width x Depth x Height	812 x 607 x 330	812 x 607 x 330	1034 x 607 x 394	1034 x 607 x 394	1130 x 576 x 404	1130 x 576 x 404	1130 x 576 x 404
GUG WEIGHT (kg)		21	21	26	26	28	28	28
GUG ELECTRICAL SUPPLY (supplied from outdoor unit)*3		220-240v / 50Hz	220-240v / 50Hz	220-240v / 50Hz	220-240v / 50Hz	220-240v / 50Hz	220-240v / 50Hz	220-240v / 50Hz
GUG UNIT*4		GUG-01SL-E	GUG-01SL-E	GUG-02SL-E	GUG-02SL-E	GUG-03SL-E	GUG-03SL-E	GUG-03SL-E
MR SLIM OUTDOOR UNIT		PUHZ-ZRP35VKA2	PUHZ-ZRP35VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP71VHA2	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP100VKA3
LOSSNAY UNIT		LGH-50RVX-E	LGH-65RVX-E	LGH-80RVX-E	LGH-100RVX-E	LGH-150RVXT-E	LGH-150RVXT-E	LGH-150RVX-E
LOSSNAY CONTROLLER		PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E

Notes:
*1 The cooling and heating capacities are based on the rated airflow of fan speed 4 and the following air conditions: Cooling Indoor: 27°CDB/19°CWB Outdoor: 35°CDB/24°CWB. Heating Indoor: 20°CDB/15°CWB Outdoor: 7°CDB/6°CWB
*2 Performance index is the total capacity divided by the total power consumption of the outdoor unit and Lossnay at the conditions above.
*3 For electrical power requirements for Lossnay and Mr Slim outdoor unit, please refer to their respective sections
*4 GUG unit includes a dedicated controller

GUG-SL-E

Lossnay Air Processing DX Unit

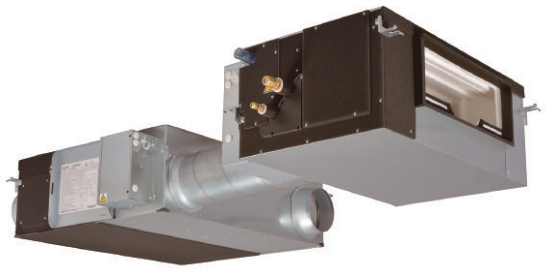
Return Air Temperature Control
(15.8 to 22.3kW)

The **GUG-SL-E** combines a Lossnay Mechanical Ventilation with Heat Recovery (MVHR) unit with a Mr Slim Power Inverter outdoor heat pump to heat and cool the supply air delivery to the space.

In return temperature control mode, the combination of both technologies can provide the fresh air and temperature control to a space from a single system.

Key Features

- Single system reduces installation time, costs and space
- Provides heat recovery ventilation and air conditioning from the same ventilation system
- Return air temperature control allows for control dependent on the actual internal temperature





POWER INVERTER

MODEL		GUG150-156RAY	GUG200-184RAV	GUG200-184RAY	GUG200-184RAVT	GUG200-184RAYT	GUG250-223RAVT	GUG250-223RAYT
FAN SPEED 3 (75%)	Air Volume (l/s)	313	417	417	417	417	521	521
	External Static Pressure (Pa)	84	59	59	82	82	79	79
FAN SPEED 4 (100%)	Air Volume (l/s)	417	556	556	556	556	694	694
	External Static Pressure (Pa)	150	105	105	145	145	140	140
HEATING CAPACITY*1 (kW)	DX Coil Capacity	13	13.5	13.5	13.5	13.5	14	14
	Heat Recovery Capacity	7.7	10.3	10.3	10.3	10.3	12.1	12.1
	Total Capacity	20.7	23.8	23.8	23.8	23.8	26.1	26.1
COOLING CAPACITY*1 (kW)	DX Coil Capacity	9.5	10.0	10.0	10.0	10.0	12.5	12.5
	Heat Recovery Capacity	6.3	8.4	8.4	8.4	8.4	9.8	9.8
	Total Capacity	15.8	18.4	18.4	18.4	18.4	22.3	22.3
SHF	Nominal	0.68	0.76	0.76	0.76	0.76	0.87	0.87
SYSTEM POWER INPUT (kW)	Heating (nominal)	4.88	4.74	4.74	4.89	4.89	5.49	5.49
	Cooling (nominal)	3.00	3.14	3.14	3.29	3.29	4.86	4.86
PERFORMANCE INDEX*2	Heating (nominal)	4.24	5.02	5.02	4.86	4.86	4.75	4.75
	Cooling (nominal)	5.27	5.86	5.86	5.59	5.59	4.59	4.59
MAX PIPE LENGTH (m)		75	75	75	75	75	75	75
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30	30
PIPE SIZE mm(in)	Gas	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
GUG DIMENSIONS (mm)	Width x Depth x Height	1130 x 576 x 404	1130 x 576 x 404	1130 x 576 x 404	1130 x 576 x 404	1130 x 576 x 404	1130 x 576 x 404	1130 x 576 x 404
GUG WEIGHT (kg)		28	28	28	28	28	28	28
GUG ELECTRICAL SUPPLY (supplied from outdoor unit)*3		220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz
GUG UNIT*4		GUG-03SL-E	GUG-03SL-E	GUG-03SL-E	GUG-03SL-E	GUG-03SL-E	GUG-03SL-E	GUG-03SL-E
MR SLIM OUTDOOR UNIT		PUHZ-ZRP100YKA3	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP100VKA3	PUHZ-ZRP100YKA3	PUHZ-ZRP125VKA3	PUHZ-ZRP125YKA3
LOSSNAY UNIT		LGH-150RVX-E	LGH-200RVX-E	LGH-200RVX-E	LGH-200RVXT-E	LGH-200RVXT-E	LGH-250RVXT-E	LGH-250RVXT-E
LOSSNAY CONTROLLER		PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E

Notes:
*1 The cooling and heating capacities are based on the rated airflow of fan speed 4 and the following air conditions: Cooling Indoor: 27°CDB/19°CWB Outdoor: 35°CDB/24°CWB. Heating Indoor: 20°CDB/15°CWB Outdoor: 7°CDB/6°CWB
*2 Performance index is the total capacity divided by the total power consumption of the outdoor unit and Lossnay at the conditions above.
*3 For electrical power requirements for Lossnay and Mr Slim outdoor unit, please refer to their respective sections
*4 GUG unit includes a dedicated controller

GUG-SL-E

Lossnay Air Processing DX Unit

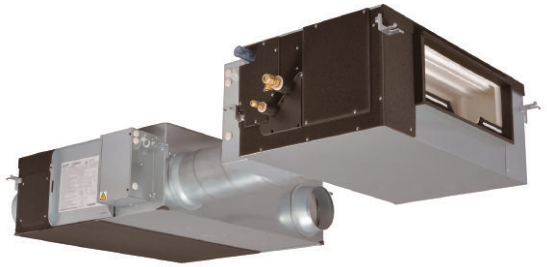
Supply Air Temperature Control (8.3-17.6kW)

The **GUG-SL-E** combines a Lossnay Mechanical Ventilation with Heat Recovery (MVHR) unit with a Mr Slim Power Inverter outdoor heat pump to heat and cool the supply air delivery to the space.

In supply air temperature control mode, the combination of both technologies provides effective tempering of fresh air entering a space, taking the load off other cooling/heating services whilst elimating any chance of draughts.

Key Features

- Single system reduces installation time, costs and space
- Provides heat recovery ventilation and air conditioning from the same ventilation system
- Supply air temperature control allows the system to target a specific temperature to supply to the internal environment









MODEL		GUG80-83SAV	GUG100-95SAV	GUG150-133SAVT	GUG150-134SAV	GUG200-159SAV	GUG200-159SAVT	GUG250-176SAVT
FAN SPEED 3 (75%)	Air Volume (l/s)	167	208	313	313	417	417	521
	External Static Pressure (Pa)	73	73	84	84	59	82	79
FAN SPEED 4 (100%)	Air Volume (l/s)	222	278	417	417	556	556	694
	External Static Pressure (Pa)	130	130	150	150	105	145	140
HEATING CAPACITY*1 (kW)	DX Coil Capacity	6.0	6.3	8.9	8.9	9.2	9.2	9.5
	Heat Recovery Capacity	4.0	5.1	7.4	7.7	10.3	10.3	12.1
	Total Capacity	10.0	11.4	16.3	16.6	19.5	19.5	21.6
COOLING CAPACITY*1 (kW)	DX Coil Capacity	5.0	5.3	7.1	7.1	7.4	7.4	7.8
	Heat Recovery Capacity	3.3	4.2	6.2	6.3	8.5	8.5	9.8
	Total Capacity	8.3	9.5	13.3	13.4	15.9	15.9	17.6
SHF	Nominal	0.69	0.73	0.86	0.85	0.90	0.90	0.95
SYSTEM POWER INPUT (kW)	Heating (nominal)	2.17	2.24	3.16	3.04	3.10	3.25	3.62
	Cooling (nominal)	1.75	1.75	2.64	2.52	2.72	2.87	3.32
PERFORMANCE INDEX*2	Heating (nominal)	4.62	5.09	5.16	5.46	6.30	6.01	5.97
	Cooling (nominal)	4.76	5.43	5.03	5.32	5.85	5.54	5.31
MAX PIPE LENGTH (m)		50	50	50	50	50	50	50
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30	30
PIPE SIZE mm(in)	Gas	12.7 (1/2")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
GUG DIMENSIONS (mm)	Width x Depth x Height	1034 x 607 x 394	1034 x 607 x 394	1130 x 576 x 404	1130 x 576 x 404	1130 x 576 x 404	1130 x 576 x 404	1130 x 576 x 404
GUG WEIGHT (kg)		26	26	28	28	28	28	28
GUG ELECTRICAL SUPPLY (supplied from outdoor unit)*3		220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz
GUG UNIT*4		GUG-02SL-E	GUG-02SL-E	GUG-03SL-E	GUG-03SL-E	GUG-03SL-E	GUG-03SL-E	GUG-03SL-E
MR SLIM OUTDOOR UNIT		PUHZ-ZRP50VKA2	PUHZ-ZRP50VKA2	PUHZ-ZRP71VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP71VHA2	PUHZ-ZRP71VHA2
LOSSNAY UNIT		LGH-80RVX-E	LGH-100RVX-E	LGH-150RVXT-E	LGH-150RVX-E	LGH-200RVX-E	LGH-200RVXT-E	LGH-250RVXT-E
LOSSNAY CONTROLLER		PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E	PZ-61DR-E

Notes:

*1 The cooling and heating capacities are based on the rated airflow of fan speed 4 and the following air conditions: Cooling Indoor: 27°CDB/19°CWB Outdoor: 35°CDB/24°CWB. Heating Indoor: 20°CDB/15°CWB Outdoor: 7°CDB/6°CWB

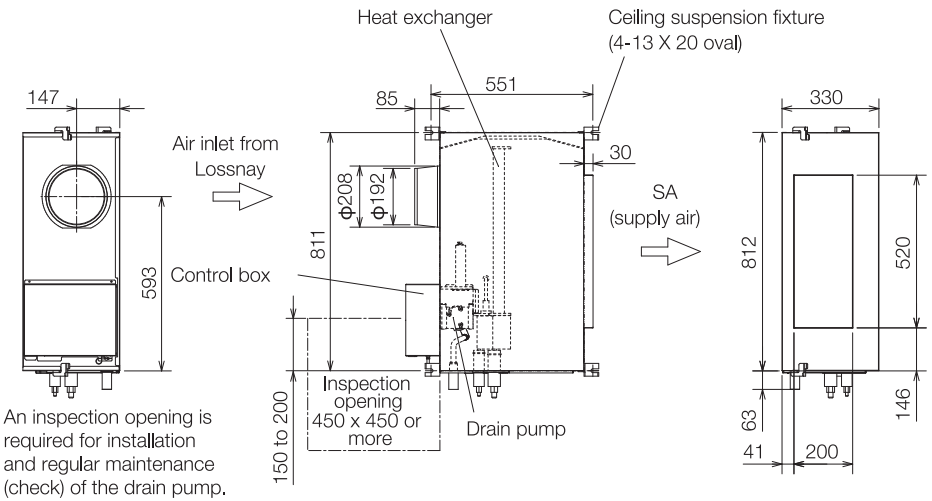
*2 Performance index is the total capacity divided by the total power consumption of the outdoor unit and Lossnay at the conditions above.

*3 For electrical power requirements for Lossnay and Mr Slim outdoor unit, please refer to their respective sections

*4 GUG unit includes a dedicated controller

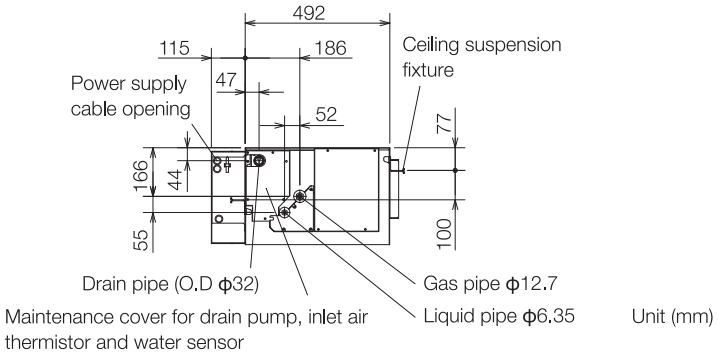
DIMENSIONS GUG-01SL-E

Left Side View / Upper View / Right Side View



An inspection opening is required for installation and regular maintenance (check) of the drain pump.

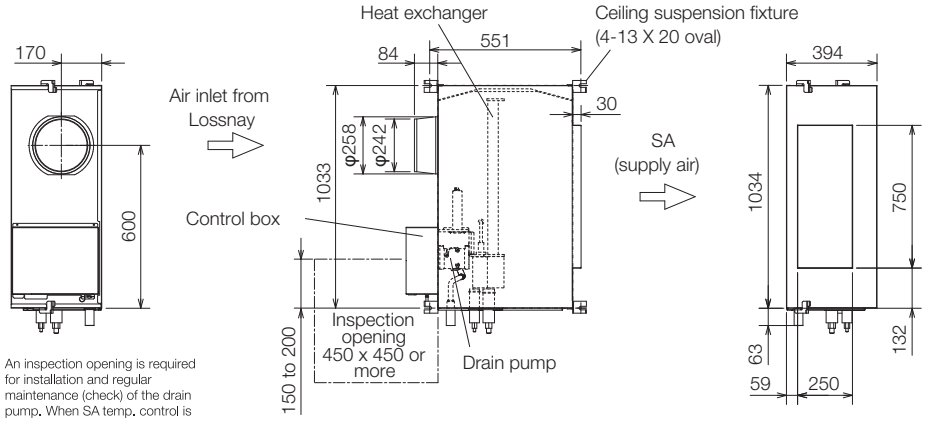
Front View



Unit (mm)

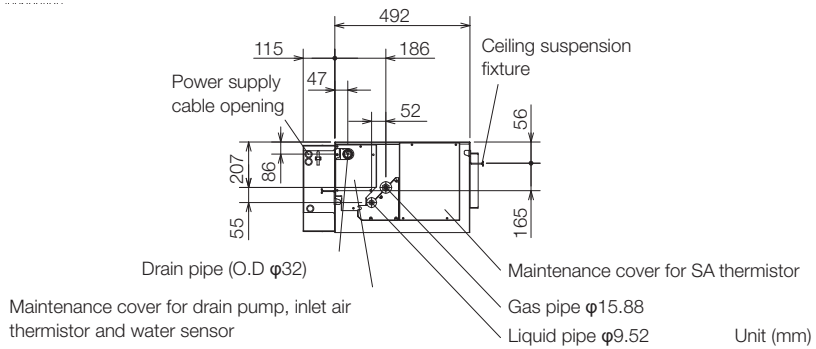
DIMENSIONS GUG-02SL-E

Left Side View / Upper View / Right Side View



An inspection opening is required for installation and regular maintenance (check) of the drain pump. When SA temp. control is selected, another inspection opening may be required in front of the unit for SA thermistor replacement only when an error occured on the SA thermistor.

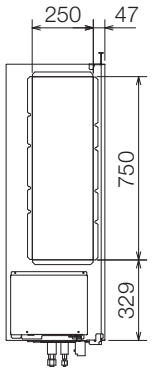
Front View



Unit (mm)

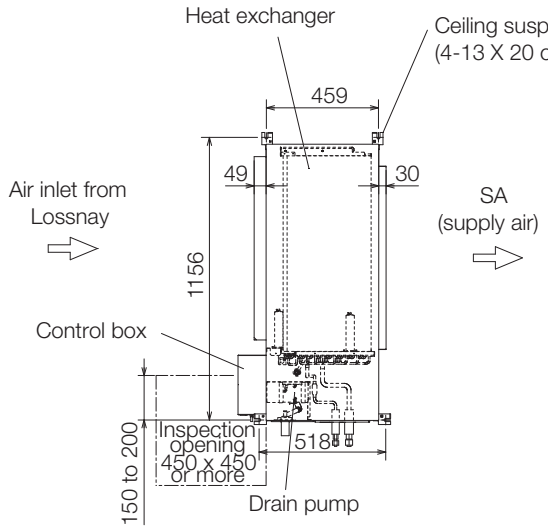
DIMENSIONS GUG-03SL-E

Left Side View

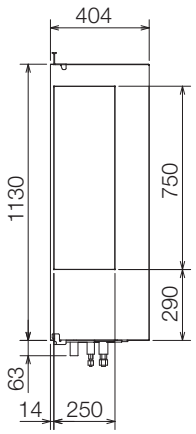


An inspection opening is required for installation and regular maintenance (check) of the drain pump. When SA temp. control is selected, another inspection opening may be required in front of the unit for SA thermistor replacement only when an error occured on the SA thermistor.

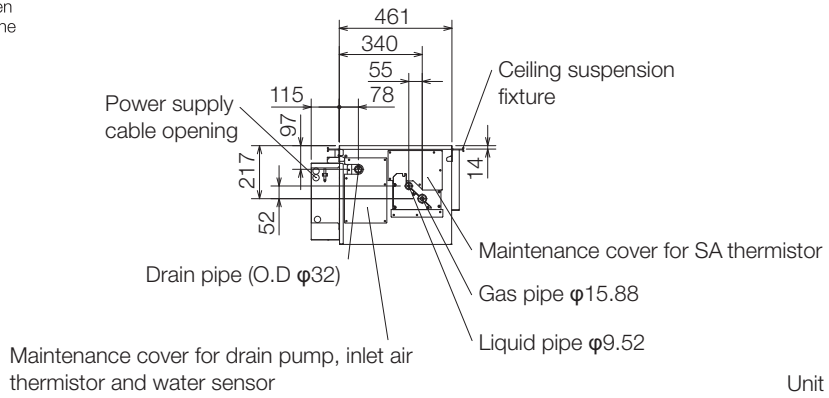
Upper View



Right Side View



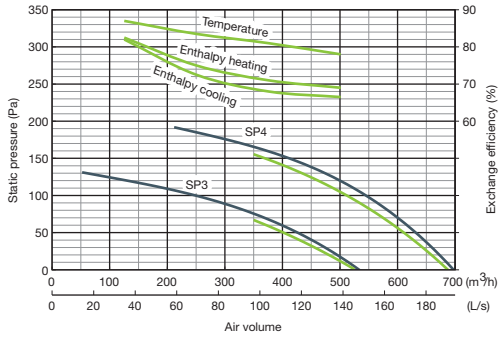
Front View



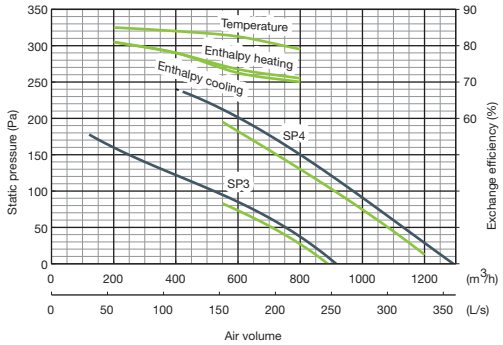
Unit (mm)

GUG-SL-E FAN CURVE CHARACTERISTICS

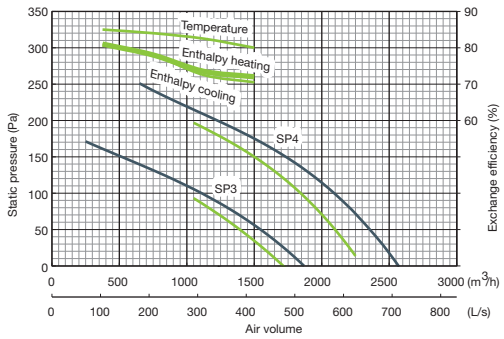
LGH-50RVX-E



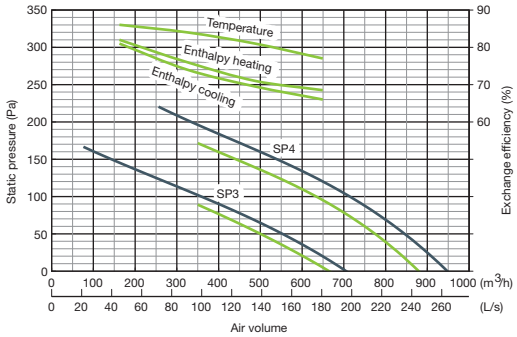
LGH-80RVX-E



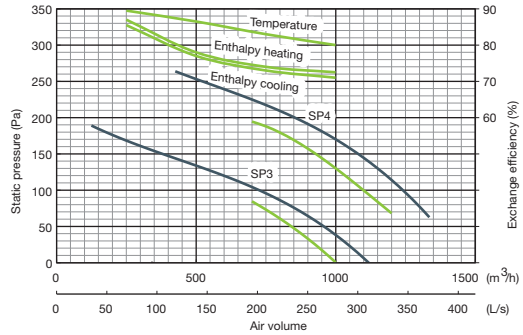
LGH-150RVX-E



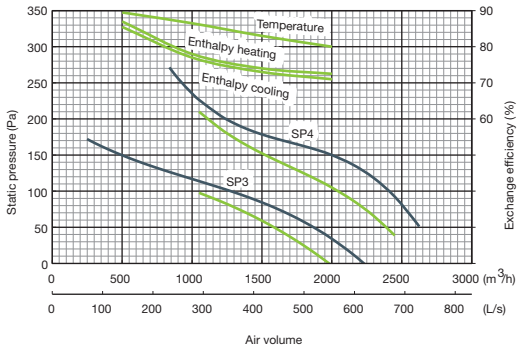
LGH-65RVX-E



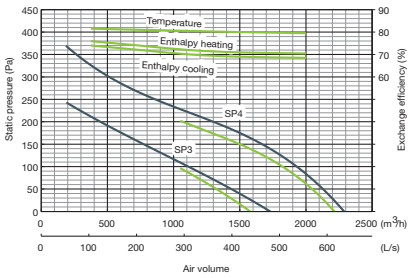
LGH-100RVX-E



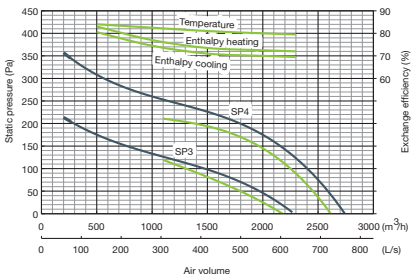
LGH-200RVX-E



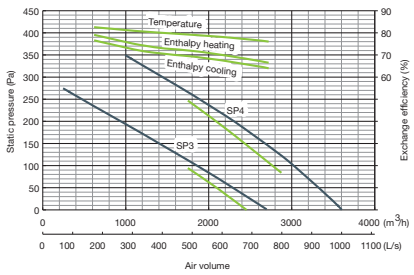
LGH-150RVXT-E



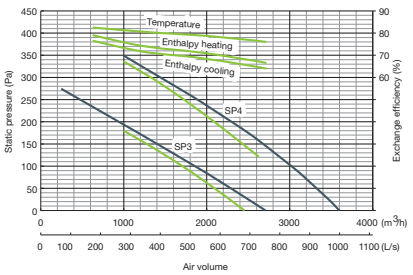
LGH-200RVXT-E



LGH-250RVXT-E
RA Temperature Control



LGH-250RVXT-E
SA Temperature Control



With GUG-01SLE-E Without GUG-01SLE-E

GUF-RD4

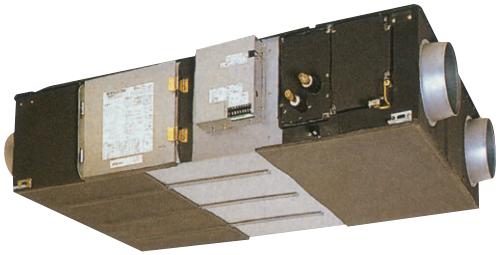
Lossnay Outdoor Air Processing Unit

The **GUF-50RD4** and **GUF-100RD4** Outdoor Air Processing units can be used with any of the extensive range of City Multi indoor units to provide ventilation, dust removal, humidification and heat recovery.

Key Features

- A combination of a Lossnay & City Multi indoor in a single unit
- The ventilating and air conditioning functions are integrated in a single unit, saving space and installation costs
- Heat recovery helps to save energy - a benefit that's not only good for the environment, but also great for cutting energy costs
- Free cooling is also available should outdoor conditions be suitable

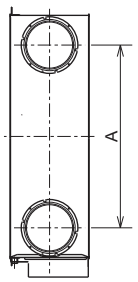
R410A



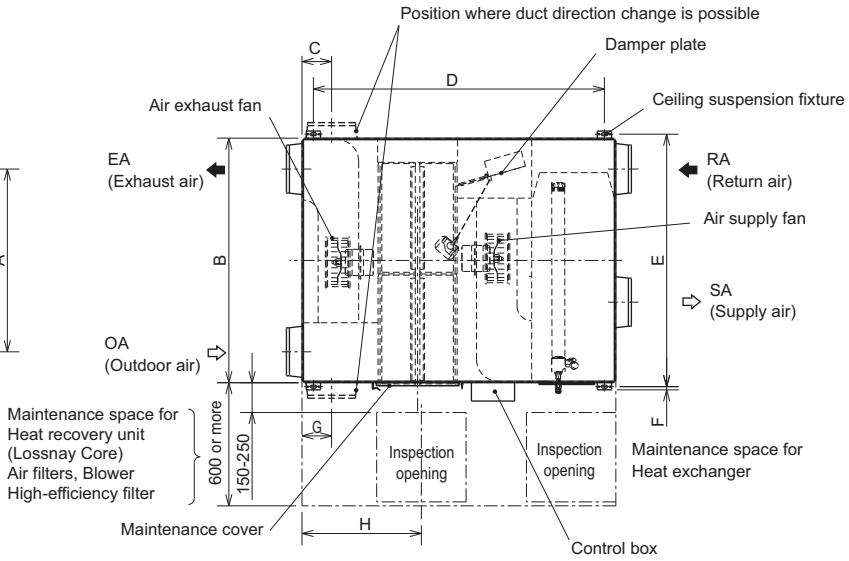
MODEL		GUF-50RD4	GUF-100RD4
CAPACITY (kW)	Heating (nominal)	6.21 (2.04)	12.56 (4.26)
	Cooling (nominal)	5.57 (1.94)	11.44 (4.12)
	UK Heating (High Performance)	6.42 (2.25)	13.00 (4.70)
	UK Heating (COP Priority)	5.93 (2.08)	12.01 (4.34)
	UK Total Cooling	5.03 (1.58)	10.27 (3.32)
POWER INPUT (kW)	Lo-Hi	0.150 / 0.265	0.370 / 0.505
AIRFLOW (m^3/h)	Lo-Hi	400-500	800-1000
EXTERNAL STATIC PRESSURE (Pa)	Lo-Hi	90 - 140	90 - 140
TEMPERATURE EXCHANGE EFFICIENCY (%)	Lo-Hi	80 - 77.5	81.5 - 79.5
SOUND PRESSURE LEVEL (dBA)	Lo-Hi	29.5 - 34.5	34 - 39
WEIGHT (kg)		54	92
DIMENSIONS (mm)	Width	1016	1231
	Depth	1288	1580
	Height	317	398
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single
RUNNING CURRENT (A)	Lo-Hi	0.70-1.15	1.73-2.20
FUSE RATING (BS88) - HRC (A)		6	6
MAINS CABLE No. Cores		3	3

Notes: The figures in ( ) indicate the heat recovery at Lossnay core. Total value is capacity of Lossnay core and refrigerant coil. The current and input are based on the above air volume.
The sound pressure at the air outlets (45º angle 1.5m ahead) is about 6dBA greater than the indicated value (high speed). Specifications may be subject to change without notice.

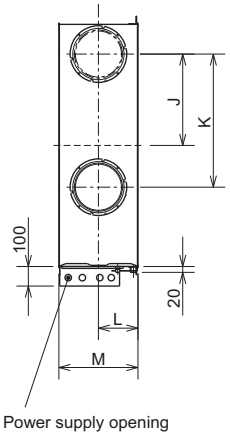
Side View



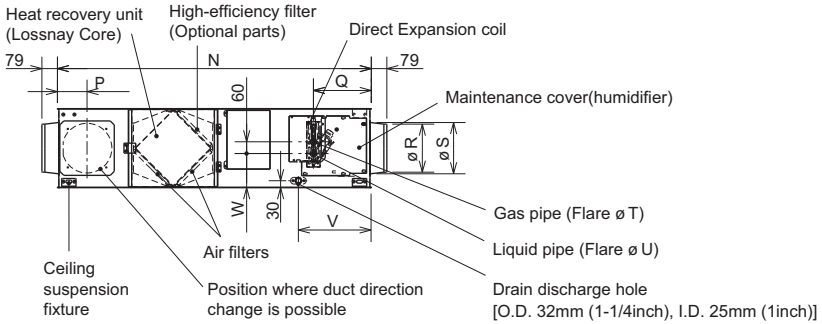
Upper View



Side View



Front View



Model	A	B	C	D	E	F	G	H	J	K	L
GUF-50RD4	745	1,016	124	1,185	1,048	22	124	450	372.5	435	158.5
GUF-100RD4	920	1,231	149	1,465	1,271	16	149	600	460	670	199
Model	M	N	P	Q	R	S	T	U	V	W	Y
GUF-50RD4	317	1,288	124	266	192	208	12.7	6.35	347	99	135
GUF-100RD4	398	1,580	149	280	242	258	15.88	9.52	361	110	169

WizardX E-OU

Air Handling Unit

CLIMAVENETA
SUSTAINABLE COMFORT





The **Climaveneta Wizard Air Handling Units (AHUs)** utilise Mr Slim Power Inverter heat pump technology, efficient thermal wheel heat recovery technology and an integrated controls system, making them highly advanced, flexible and efficient.

Key Features

- Mr Slim Power Inverter heat pump technology
- Thermal wheel with hygroscopic coating
- Constant volume EC plug fans
- Easy air flow commissioning with selectable target air volume control
- Fully integrated controls and single point power supply regardless of accessories
- Units available in sections with all fixings, wiring, and electrical connectors included

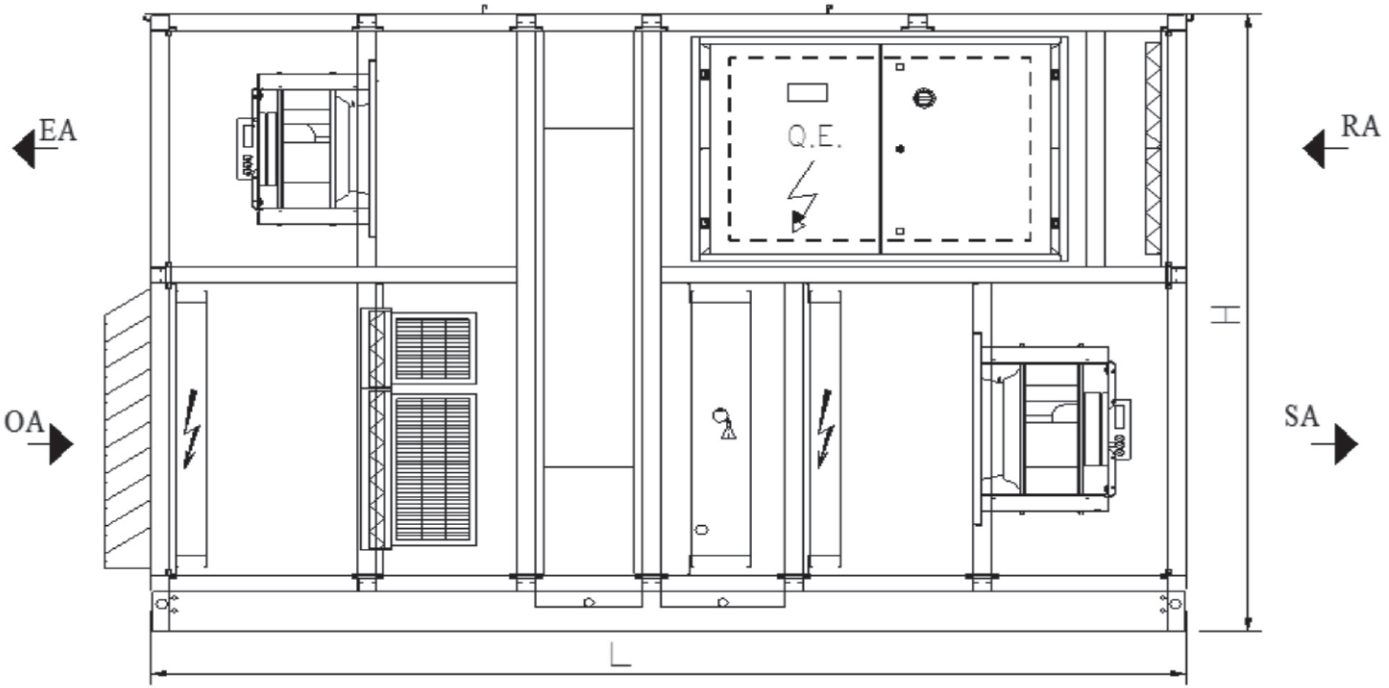
R410A

MODEL		WIZARDX E-OU 3000	WIZARDX E-OU 5000	WIZARDX E-OU 7500	WIZARDX E-OU 10000	WIZARDX E-OU 12500	WIZARDX E-OU 15000	WIZARDX E-OU 20000
RATED AIR VOLUME (m^3/s)		0.83	1.39	2.08	2.78	3.47	4.17	5.56
AIR VOLUME RANGE (m^3/s)		0.56 - 0.83	0.97 - 1.39	1.53 - 2.08	2.22 - 2.78	2.92 - 3.47	3.61 - 4.17	4.31 - 5.56
EXTERNAL STATIC PRESSURE (Pa)	Standard fans	250	250	250	250	250	250	250
	Uprated fans	400	400	400	400	400	400	400
COOLING CAPACITY (kW)	DX Coil Capacity	9.38	18.9	23.6	37.5	39.7	47.1	70.6
	Wheel Recovery Capacity	24	39.4	57.7	77.8	96.2	115	160
	Total Capacity	33.38	58.3	81.3	115.3	135.9	162.1	230.6
HEATING CAPACITY (kW)	DX Coil Capacity	8.48	16.8	20.9	33.7	35.9	40.8	61
	Wheel Recovery Capacity	30.9	49.9	73.6	98.9	123	147	206
	Total Capacity	39.38	66.7	94.5	132.6	158.9	187.8	267
HEAT RECOVERY EFFICIENCY (%)		79	75.5	74.7	75.1	74.7	74.6	78.9
SPECIFIC FAN POWER (SFPint) (W/(l/s))		0.96	0.77	0.76	0.75	0.74	0.8	0.91
SOUND POWER LEVEL (dB(A))	Fresh/Outdoor	71	78	73	77	81	77	80
	Supply	78	85	79	83	87	83	87
	Return	69	78	71	75	81	74	79
	Exhaust	76	85	77	82	87	80	85
	Breakout	60	67	63	67	72	66	71
UNIT DIMENSIONS (WxDxH)*1 (mm)		3400x1000x1600	3400x1400x1600	3400x1500x2200	3400x1800x2200	3400x2000x2300	3800x2200x2360	3800x2500x2820
WEIGHT (kg)		850	1000	1150	1350	1600	1950	2300
STANDARD FILTRATION	Fresh air 1st stage	ISO Coarse 50% / G4						
	Fresh air 2nd stage	ISO ePM1 50% / F7 Bag Filter						
	Return air	ISO Coarse 50% / G4						
CONSTRUCTION	Profiles	60mm aluminium						
	Panels	45mm sandwich panels, galvinised steel sheets with a pre-plastified external finish						
	Insulation	45 kg/m3 density polyurethane foam						
EN1886 ACHIEVED CLASSES (Deflection/Leakage/Filter bypass/Thermal transmittance/Thermal bridging)		D1(M), L3, F9, T3, TB4						
OPERATING RANGES (°C DB)	Target Supply Air Setpoint	17 - 28						
	DX On Coil Cooling	15 - 32						
	DX On Coil Heating	5 - 28						
ELECTRICAL POWER REQUIREMENTS		400VAC / 3ph+Positive Earth / 50Hz						
COMPATIBLE OUTDOOR UNITS	Power Inverter (R410A)	2 x PUHZ-ZRP50	2 x PUHZ-ZRP100	2 x PUHZ-ZRP125	2 x PUHZ-ZRP200	3 x PUHZ-ZRP140	2 x PUHZ-ZRP250	3 x PUHZ-ZRP250
	Standard Inverter (R410A)	Not Compatible	Not Compatible	Not Compatible	2 x PUHZ-P200	Not Compatible	2 x PUHZ-P250	3 x PUHZ-P250

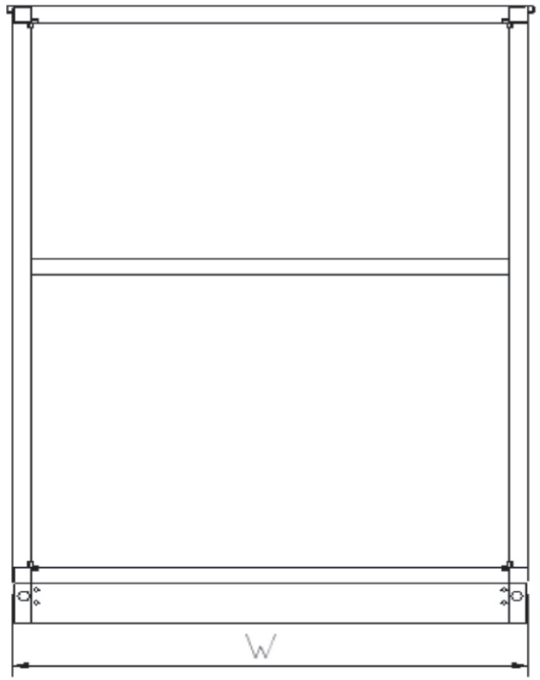
Note: Please refer to Mr Slim section for outdoor unit specification data. The specification data is based on the rated conditions below, at the rated air flows.
*1 Units in sections as an option will include extra profiles, increasing the weight and dimensions of the final unit.

RATED CONDITIONS	SUMMER		WINTER	
INDOOR	23°C DB	50% RH	21°C DB	50% RH
OUTDOOR	35°C DB	50% RH	-5°C DB	85% RH

Front View



Side View



MODEL	Q [m³/h]	W [mm]	H [mm]	L [mm]	STANDARD WEIGHT [kg]
E-OU 3000	3000	1000	1600	3400	850
E-OU 5000	5000	1400	1600	3400	1000
E-OU 7500	7500	1500	2200	3400	1150
E-OU 10000	10000	1800	2200	3400	1350
E-OU 12500	12500	2000	2300	3400	1600
E-OU 15000	15000	2200	2360	3800	1950
E-OU 20000	20000	2500	2820	3800	2300

Fresh Air
Ventilation
Range

Ventilation Accessories / Optional Extras

DESCRIPTION	MODEL REF.
Remote Controllers	
Lossnay Remote Controller for LGH-RVX(T)-E and VL-220CZGV-EB	**PZ-61DR-E**
Lossnay Simplified Remote Controller for VL-220CZGV-EB	**PZ-43SMF-E**
Filters	
M6 Filter for VL-100(E)U_5-E	**P-100HF$_5$-E**
G4 Filter for VL-220CZGV-EB (return air)	**P-220EMF-E**
M6 Filter for VL-220CZGV-EB (supply air)	**P-220SHF-E**
F7 Filter for LGH-15RVX-E	**PZ-15RFM-E**
F7 Filter for LGH-25RVX-E	**PZ-25RFM-E**
F7 Filter for LGH-35RVX-E	**PZ-35RFM-E**
F7 Filter for LGH-50RVX-E	**PZ-50RFM-E**
F7 Filter for LGH-65RVX-E	**PZ-65RFM-E**
F7 Filter for LGH-80RVX-E / LGH-150RVX-E (2 sets)	**PZ-80RFM-E**
F7 Filter for LGH-100RVX-E / LGH-200RVX-E (2 sets)	**PZ-100RFM-E**
M6 Filter for LGH-RVXT-E	**PZ-M6RTFM-E**
F8 Filter for LGH-RVXT-E	**PZ-F8RTFM-E**
Extension Pipe Kit	
Extension Pipe for VL-100(E)U_5-E (300mm)	**P-100P-E**
Extension Pipe joint for VL-100(E)U_5-E (300mm)	**P-100PJ-E**
Weather Proof Housings	
Lossnay weather proof housings are also available for LGH-RVX-E	

WizardX E-OU Optional Accessories	MODEL						
DESCRIPTION	E-OU 3000	E-OU 5000	E-OU 7500	E-OU 10000	E-OU 12500	E-OU 15000	E-OU 20000
High static pressure supply fan (400 Pa)	WD-3000 B501	WD-5000 B501	WD-7500 B501	WD-10000 B501	WD-12500 B501	WD-15000 B501	WD-20000 B501
High static pressure exhaust fan (400 Pa)	WD-3000 B511	WD-5000 B511	WD-7500 B511	WD-10000 B511	WD-12500 B511	WD-15000 B511	WD-20000 B511
Pre-heating electric coil	WD-3000 B531	WD-5000 B531	WD-7500 B531	WD-10000 B531	WD-12500 B531	WD-15000 B531	WD-20000 B531
Re-heating electric coil	WD-3000 1333	WD-5000 1333	WD-7500 1333	WD-10000 1333	WD-12500 1333	WD-15000 1333	WD-20000 1333
Pre-heating water coil	WD-3000 B532	WD-5000 B532	WD-7500 B532	WD-10000 B532	WD-12500 B532	WD-15000 B532	WD-20000 B532
Re-heating water coil	WD-3000 1331	WD-5000 1331	WD-7500 1331	WD-10000 1331	WD-12500 1331	WD-15000 1331	WD-20000 1331
Steam humidification system	WD-3000 B591	WD-5000 B591	WD-7500 B591	WD-10000 B591	WD-12500 B591	WD-15000 B591	N/A
Steam humidification system (two sections)	WD-3000 B592	WD-5000 B592	WD-7500 B592	WD-10000 B592	WD-12500 B592	WD-15000 B592	WD-20000 B592
Three-way mixing recirculation box	WD-3000 B601	WD-5000 B601	WD-7500 B601	WD-10000 B601	WD-12500 B601	WD-15000 B601	N/A
Three-way mixing recirculation box (two sections)	WD-3000 B602	WD-5000 B602	WD-7500 B602	WD-10000 B602	WD-12500 B602	WD-15000 B602	WD-20000 B602
CO_2 probe for mixing box	WD-3000 B612	WD-5000 B612	WD-7500 B612	WD-10000 B612	WD-12500 B612	WD-15000 B612	WD-20000 B612
Two speed fan via VFC	WD-3000 B631	WD-5000 B631	WD-7500 B631	WD-10000 B631	WD-12500 B631	WD-15000 B631	WD-20000 B631
Two speed air flow with CO_2 probe	WD-3000 B611	WD-5000 B611	WD-7500 B611	WD-10000 B611	WD-12500 B611	WD-15000 B611	WD-20000 B611
Fresh air damper	WD-3000 B551	WD-5000 B551	WD-7500 B551	WD-10000 B551	WD-12500 B551	WD-15000 B551	WD-20000 B551
Supply air damper	WD-3000 B561	WD-5000 B561	WD-7500 B561	WD-10000 B561	WD-12500 B561	WD-15000 B561	WD-20000 B561
Return air damper	WD-3000 B571	WD-5000 B571	WD-7500 B571	WD-10000 B571	WD-12500 B571	WD-15000 B571	WD-20000 B571
Exhaust air damper	WD-3000 B581	WD-5000 B581	WD-7500 B581	WD-10000 B581	WD-12500 B581	WD-15000 B581	WD-20000 B581
Activated charcoal filters F7	WD-3000 2529	WD-5000 2529	WD-7500 2529	WD-10000 2529	WD-12500 2529	WD-15000 2529	WD-20000 2529
Bag filters F9	WD-3000 2521A	WD-5000 2521A	WD-7500 2521A	WD-10000 2521A	WD-12500 2521A	WD-15000 2521A	WD-20000 2521A
Variable speed thermal wheel	WD-3000 B521	WD-5000 B521	WD-7500 B521	WD-10000 B521	WD-12500 B521	WD-15000 B521	WD-20000 B521
Intake weather protection grille	WD-3000 B621	WD-5000 B621	WD-7500 B621	WD-10000 B621	WD-12500 B621	WD-15000 B621	WD-20000 B621
Canopy - (essential for installation outdoors)	WD-3000 B541	WD-5000 B541	WD-7500 B541	WD-10000 B541	WD-12500 B541	WD-15000 B542	WD-20000 B542
Canopy for units in 3, 5 or 6 sections - (essential for installation outdoors)	WD-3000 B542	WD-5000 B542	WD-7500 B542	WD-10000 B542	WD-12500 B542	WD-15000 B542	WD-20000 B542
Wizard sub-divided into 5 sections	WD-3000 B482	WD-5000 B482	WD-7500 B482	WD-10000 B482	WD-12500 B482	WD-15000 B482*1	N/A*2
Modbus connection for BEMS	WD-3000 4181	WD-5000 4181	WD-7500 4181	WD-10000 4181	WD-12500 4181	WD-15000 4181	WD-20000 4181
Bacnet TCP-IP connection for BEMS	WD-3000 4185	WD-5000 4185	WD-7500 4185	WD-10000 4185	WD-12500 4185	WD-15000 4185	WD-20000 4185
Left-handed configuration (no additional charge)	WD-3000 2963	WD-5000 2963	WD-7500 2963	WD-10000 2963	WD-12500 2963	WD-15000 2963	WD-20000 2963
Connection to AE-200E for on/off and general alarm monitoring				PAC-YG66DCA			

Note: *1 Three sections as standard, *2 Six sections as standard.

Controls

Control Solutions




culture hub
newsroom
the observer
sport
lifts
toilets

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The Importance of **Controls**

Time to take control

Operating an air conditioning, ventilation or heating system without effective controls can be costly in more ways than one. Not only are you likely to face higher monthly energy bills, it will also lead to an increase in carbon emissions - something that will become ever more important as businesses strive to keep up with tougher environmental legislation.

The right controls take building performance to the next level. With them, building systems become more responsive, easier to automate, monitor and maintain, and less costly to operate in the long-term.

The right controls can deliver a cost-effective solution that helps manage, monitor and report on the performance of all building services systems.

Control technology is now widely available for buildings of all sizes, so it is possible to access the benefits whatever the scale or scope of your project.



Mitsubishi Electric technology

Mitsubishi Electric has been dedicated to producing energy efficient technology for over ninety years. Controls are an essential part of that. Mitsubishi Electric has long heritage in factory automation where the company leads the field in providing controls that enhance productivity, efficiency and energy use.

We have taken this extensive knowledge and experience and transferred it to the heart of our building services equipment.

We were also one of the first manufactures to provide an open gateway to our products to make integration easier for our customers. This enables direct connection of equipment into many common building energy management system (BEMS) platforms.

Recently, Mitsubishi Electric has developed Internet-based building controls that put information on building performance wherever users need it most and wireless technology that makes retro-fitting into existing buildings so much easier.

From a simple hand-held controller to a centralised BEMS, Mitsubishi Electric puts its customers in control.





The European Standard EN 15232

"Energy Performance of Buildings - Impact of Building Automation, Controls and Building Management" was compiled in conjunction with the Europe-wide implementation of the directive for energy efficiency in buildings (Energy Performance of Buildings Directive EPBD) 2002/91/EG.

The Standard describes methods for evaluating the influence of building automation and technical building management on the energy consumption of buildings.

Four efficiency classes A to D have been introduced to this purpose. After a building has been equipped with building automation and control systems, it will be assigned one of these classes. The potential savings for thermal and electrical energy can be calculated for each class based on the building type and building purpose. The values of the energy class C are used as the reference for comparing the efficiency.

The diagram on the right, shows the differences in energy consumption for three building types in the energy efficiency classes A, B and D relative to the basis values in rating C. For example, by using class A, 30 % of the thermal energy can be saved in offices.

BS EN 15232: Function list and assignment to energy performance classes

	Heating / Cooling Control	Ventilation / Air Conditioning Control	Lighting	Sun Protection
A	☐ Individual room control with communication between controllers ☐ Indoor temperature control of distribution network water temperature ☐ Total interlock between heating and cooling control	☐ Demand or presence dependent air flow control at room level ☐ Variable set point with load dependant compensation of supply temperature control ☐ Room or exhaust or supply air humidity control	☐ Automatic daylight control ☐ Automatic occupancy detection manual on / auto off ☐ Automatic occupancy detection manual on / dimmed ☐ Automatic occupancy detection auto on / auto off ☐ Automatic occupancy detection auto on / dimmed	☐ Combined light / blind / HVAC control
B	☐ Individual room control with communication between controllers ☐ Indoor temperature control of distribution network water temperature ☐ Partial interlock between heating and cooling control (dependent on HVAC system)	☐ Time dependent air flow control at room level ☐ Variable set point with outdoor temperature compensation of supply temperature control ☐ Room or exhaust or supply air humidity control	☐ Manual daylight control ☐ Automatic occupancy detection manual on / auto off ☐ Automatic occupancy detection manual on / dimmed ☐ Automatic occupancy detection auto on / auto off ☐ Automatic occupancy detection auto on / dimmed	☐ Motorised operation with automatic blind control
C	☐ Individual room control with communication between controllers ☐ Indoor temperature control of distribution network water temperature ☐ Partial interlock between heating and cooling control (dependent on HVAC system)	☐ Time dependent air flow control at room level ☐ Constant set point of supply temperature control ☐ Supply air humidity limitation	☐ Manual daylight control ☐ Manual on / off switch + additional sweeping extinction signal ☐ Manual on / off switch	☐ Motorised operation with manual blind control
D	☐ No automatic control ☐ No control of distribution network water temperature ☐ No interlock between heating and cooling control	☐ No air flow control at room level ☐ No supply temperature control ☐ No air humidity control	☐ Manual daylight control ☐ Manual on/off switch + additional sweeping extinction signal ☐ Manual on/off switch	☐ Manual operation for blinds

Section from table 1 of the BSEN 15232:2007 [D]

Building Automation and Control (BAC) efficiency classes to EN 15232

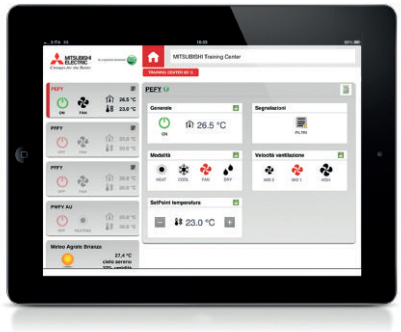
		Efficiency factor for thermal energy			Efficiency factor for electrical energy		
		Office	School	Hotel	Office	School	Hotel
A	High energy performance building automation and control system (BACS) and technical building management (TBM)	0.70	0.80	0.68	0.87	0.86	0.90
B	Advanced BACS and TBM	0.80	0.88	0.85	0.93	0.93	0.95
C	Standard BACS	1	1	1	1	1	1
D	Non energy efficient BACS	1.51	1.20	1.31	1.10	1.07	1.07

The Importance of Controls

The Internet of Things

The Internet of Things (or IoT) describes the revolution already under way, with a growing number of internet-enabled devices that can network and communicate with each other and with other web-enabled gadgets.

Mitsubishi Electric is at the forefront of this revolution and all our products are now connectable to the internet using the following solutions*1.

Features	MELCloud	RMI
		
Connect to	Wi-Fi	Ethernet or 3G
Compatibility	Air Conditioning, Ventilation and Heating	Air Conditioning and Ventilation
Third party control	x	✓ (with option PAC-YG66DCA)
SIM card provided	x	✓ (with 3G version)
Smartphone application	✓	✓
Tablet application	✓	✓
Web portal	✓	✓

*1 VL-100 and VL-220 are not connectable to the Internet

Which Controls Product for Which Application?

Good controls will benefit any application. With a wide portfolio of control products, it is important to select the right control solution for each application.







APPLICATION	SIZE	TYPICAL PRODUCT INSTALLED	CONTROL SOLUTIONS	CASE STUDY
OFFICE	SMALL	City Multi VRF Systems Mr Slim Split-Systems Mr Slim IT Room Applications	PAR-40MAA or AE-200E-WEB USER AE-200E or AT-50B PAC-YG66DCA or PAC-YG60MCA	Wholesaler PACAIR uses an AE-200E Centralised Controller to provide complete control of the office air conditioning. The 10.4" touch screen controller and easy to use interface gives PACAIR the ability to set up a weekly time schedule, as well as offering a host of energy saving features.
	LARGE	City Multi VRF Systems City Multi Air Curtains City Multi PWFY Heat Pumps	PAR-40MAA or AE-200E-WEB USER AE-200E or AT-50B	Mitsubishi Electric's Hatfield headquarters has been updated to new AE-200E/EW-50E HTML5 controls to monitor and control all of the air conditioning equipment across 3 floors and 2 wings. This enables the system to operate as efficiently as possible, incorporating easy to use controls and allows for fully programmable scheduling that accommodates flexible working patterns.
HOTEL	SMALL	City Multi VRF Systems	PAR-CT01MAA-S/PB AE-200E	The luxury 4-star Kingsmills Hotel provides a chic and contemporary venue for discerning Highlands travellers and focuses on relaxation, revitalisation and calm. The centralised controller delivers the efficiency and flexibility that both the hotel and its guests need, with air conditioning integrated with the room key card system combined with simple to use room controllers.
	LARGE	City Multi VRF Systems	PAR-CT01MAA-S/PB AE-200E MELCOTEL	The Premier Inn Hotel, Leicester uses the MELCOTEL™ control interface to efficiently and effectively control air conditioning that provides heating and cooling to 135 bedrooms, the bar, restaurant and back offices. A variety of control strategies were implemented and monitored and analysed, resulting in a 30% decrease in average monthly system running costs and CO_2 emissions.
RETAIL	SMALL	Mr Slim Split-System Mr Slim Air Curtains	MELCORETAIL MINI	Costa Coffee was one of the first to make use of the MELCORETAIL MINI to capitalise on its energy saving feature whilst ensuring that customers and staff were comfortable in the overall coffee shop environment. Across a year of monitoring the MELCORETAIL MINI helped achieve a 20% reduction in energy use, giving it a payback period of less than 2 months.
	LARGE	City Multi VRF Systems City Multi Air Curtains	RMI PACKAGE LAN/ADSL RMI PACKAGE 3G	A pilot site for EON has demonstrated how connecting RMI to air conditioning can highlight ways of reducing energy or identify unnecessary use. An average saving of 30% throughout the branch network was made by employing RMI, providing a return on investment within 6 months.
LEISURE	SMALL	Mr Slim Split-System Mr Slim Air Curtains	MELCOBEMS MINI	The Castle golf course at St Andrews need a heating and cooling system that was as controllable and efficient as possible. The M2M interface controls and monitors the air conditioning to make sure it maximises energy saving, whilst allowing for continuous fine-tuning according to the golf clubs needs.
	LARGE	Mr Slim Split-System Mr Slim Air Curtains City Multi VRF Systems City Multi Air Curtains	MELCOBEMS	Fitness First uses monitoring BEMS to communicate with the air conditioning using Modbus, across its UK network. Dedicated Modbus Interfaces offer complete monitoring and control of the system and highlights the flexibility and potential for reducing running costs that our control systems have when working in conjunction with third party BEMS.
RESIDENTIAL	SMALL	Ecodan	MELCloud	A WW2 veteran has shown the way to a sustainable future with the installation of a hybrid Ecodan air source heat pump to work alongside his existing gas boiler. The hybrid system is designed specifically to work in conjunction with conventional boilers and the MELCloud Wi-Fi system also allows the heat pump to be monitored and controlled remotely
	LARGE	Ecodan	MELCloud AE-200E	The renewable heating system for St Mungo's in Lewisham needs to cope with different heating loads and deal effectively with regular changes in tenancy and occupied hours. It also had to offer tenants the ability to alter the temperature of their individual flats, whilst allowing the charity full central control of the system.

Which Controls Product for Which Function?

With a wide portfolio of control products, many functions are available.
It is important to select the right control solution for each function.

FUNCTION	SMALL SYSTEM SIZE LARGE					NOTES
	OPTION 1	OPTION 2	OPTION 3	OPTION 4	OPTION 5	
Remote On/Off or fire alarm	PAC-SA89TA	KTR-53B	MELCORETAIL MINI	AT-50B and PAC-YT51HAA	AE-200E and PAC-YG10HA	On/Off remote controller button lock except KTR-53B
Monitor run and faults	PAC-SA88HA	MELCORETAIL MINI	AT-50B and PAC-YT51HAA	AE-200E / EW-50E and PAC-YG10HA	-	Relays or power supply may be required
Window interlocking	PAC-SA89TA	KTR-53B	-	-	-	Controller will be centrally controlled when window opened
Setpoint limit	PAR-40MAA	PAR-U02MEDA	AT-50B	AE-200E / EW-50E	AE-200E	Available in Heat, Cool and Auto modes
Weekly timer	PAR-40MAA PAR-U02MEDA	AT-50B	AE-200E / EW-50E	AE-200E	-	Setpoint, On/Off can be reset
Night set back	KTR-53B	PAR-40MAA PAR-U02MEDA	AE-200E / EW-50E / AT-50B	AE-200E	-	KTR-53B requires thermostat, time switch, 12/24v AC/DC power supply
Energy monitoring	AE-200E / EW-50E Total Energy Measurement	AE-200E / EW-50E PAC-YG60MCA Total Energy Management	AE-200E and EW-50E Energy Apportioning	AE-200E / EW-50E PAC-YG60MCA Energy Apportioning	-	Different options for each choice. Meters required
Load shedding	EW-50E and PAC-YG60MCA	AE-200E and PAC-YG60MCA	-	-	-	Energy meters required
Trend logging	EW-50E and PAC-YG60MCA	AE-200E	-	-	-	CSV data available on a spreadsheet

Notes: The PAC-SA89TA is also known as a 3 wire adaptor and the PAC-SA88HA is also known as a 5 wire adaptor. **Disclaimer:** These options are for guidance only.

Which Controls Product for Which Function?

With a wide portfolio of control products, many functions are available.
It is important to select the right control solution for each function.

FUNCTION	SMALL SYSTEM SIZE LARGE			NOTES
	OPTION 1	OPTION 2	OPTION 3	
Night mode	PAC-SA89TA	EW-50E	AE-200E	PAC-SA89TA requires a third party timer
Ambient tracking	AE-200E and PAC-YG63MCA	MELCOBEMS MINI	AE-200E	Option 1 is only available in cooling mode
Key card interlock for hotel	AE-200E and PAC-SA89TA	AE-200E / EW-50E, MELCOTEL2™ and PAC-SA89TA	-	Volt free contact for key card normally open
Window sensor interlock for hotel	AE-200E and PAC-SA89TA	AE-200E / EW-50E, MELCOTEL2™ and PAC-SA89TA	-	Volt free contact for window sensor normally closed
2 setpoints (1 for cool and 1 for heat)	-	MELCOMMS MINI	AE-200E	For instance, 19°C heat and 23°C cool. Fan only in between
Duty / Standby	PAR-40MAA	MELCOMMS MINI MELCOBEMS MINI	-	Backup, rotate, join in and high temperature function
A/C faults via Modbus and BACnet	MELCOBEMS MINI	-	-	SIM card not supplied
Optimised start	AE-200E	-	-	-
Mini BEMS	MELCOBEMS MINI	AE-200E	-	-
Occupancy sensor	PAR-U02MEDA	-	-	-

Notes: The PAC-SA89TA is also known as a 3 wire adaptor and the PAC-SA88HA is also known as a 5 wire adaptor. **Disclaimer:** These options are for guidance only.

Centralised Controllers

A wide range of centralised controllers are available to monitor and control our equipment efficiently. Some of our centralised controllers can also be used to monitor and control third party equipment.

Key Features

AT-50B



- 5'' basic touch screen
- Centralised controller
- Monitor and control up to 50 indoor units
- Monitor and control general equipment

AE-200E



- 10.4'' full function touch screen
- Centralised controller
- Monitor and control up to 50 indoor units (or up to 200 indoor units with EW-50Es)
- Monitor and control general equipment
- Energy monitoring, load shedding
- Web based controller
- Onboard HTML5 web browser
- Optional direct BACnet connection

EW-50E



- Web based controller
- Monitor and control up to 50 indoor units
- Monitor and control general equipment
- Energy monitoring, load shedding
- Onboard HTML5 web browser
- Optional direct BACnet connection

AE-200E-WEB USER



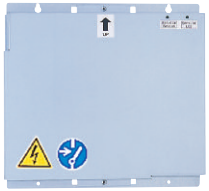
- Available as an option
- 200 user accounts per PIN CODE
- No installation cost
- Centralised controller required
- Very simple to use

PAC-SC51KUA



- M-NET power supply

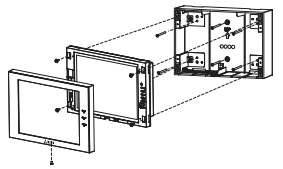
PAC-SF46EPA



- M-NET transmission booster

Centralised Controllers

Technical Specification

CENTRALISED CONTROLLERS		AT-50B	AE-200E	KS10-RFFI	PAC-YG82TB
					
Description		5" Touch Screen Controller	10.4" Touch Screen Controller	AE-200E Interface	AE-200E Plastic Wall Mounted Box
Connect to		M-NET Network	M-NET Network	AE-200E and EW-50E	-
Max Number of Units		50	50 and 4 Pulse Meters	-	-
Compatibility		M Series, Mr Slim, City Multi and Lossnay	M Series, Mr Slim, City Multi, Lossnay, e-series, MEHITS Chillers*1 and Ecodan QAHV/CAHV/CRHV	-	AE-200E
Power Supply		Via PAC-SC51KUA	220-240v, 50Hz	220-240v, 50Hz	-
Dimensions (mm) (WxDxH)		180 x 30 x 120	283 x 64 x 199	130 x 30 x 80	282 x 77 x 198
Control	On/Off	✓	✓	-	-
	Mode	✓	✓	-	-
	Setpoint	✓	✓	-	-
	Fan Speed	✓	✓	-	-
	Air Direction	✓	✓	-	-
	Permit/Prohibit	✓	✓	-	-
	Filter Sign	✓	✓	-	-
Monitor	On/Off	✓	✓	✓	-
	Mode	✓	✓	-	-
	Setpoint	✓	✓	-	-
	Fan Speed	✓	✓	-	-
	Air Direction	✓	✓	-	-
	Permit/Prohibit	✓	✓	-	-
	Filter Sign	✓	✓	-	-
	Fault Codes	✓	✓	✓	-
	Room Temperature	✓	✓	-	-
Weekly Schedule		✓	✓	-	-
Annual Schedule		x	✓	-	-
Night Set Back		✓	✓	-	-
Web Pages		x	✓	-	-
Optimised Start		x	✓	-	-
Automatic Setpoint Adjustment		x	✓	-	-
Load Shedding		x	✓	-	-
Occupied / Unoccupied Settings Reset		x	x	-	-
Remote Monitoring with M2M		x	✓	-	-
Simple Energy Monitoring		x	✓	-	-
Advanced Energy Monitoring		x	✓	-	-

Notes: *1 MEHITS adaptor required.
AE-200E demonstration website: **http://dl.mitsubishielectric.co.jp/dl/ldg/wink/wink_doc/contents/doc/acr/menu/ae200/en/**

PIN CODES:

AE-200E-ENERGY
AE-200E-BACNET
AE-200E-WEB USER

Centralised Controllers

Technical Specification

CENTRALISED CONTROLLERS		EW-50E	AE-200E-WEB USER	PAC-SC51KUA	PAC-SF46EPA
					
Description		Web Interface and AE-200E expansion controller	AE-200E Web User Pin Code	M-NET Power Supply	M-NET Transmission Booster
Connect to		M-NET Network	AE-200E and EW-50E	M-NET Network	M-NET Network
Max Number of Units		50 and 4 Pulse Meters	200	50	-
Compatibility		M Series, Mr Slim, City Multi, Lossnay, e-series, MEHITS Chillers*1 and Ecodan QAHV/CAHV/CRHV	AE-200E and EW-50E	AT-50B, EW-50E and AE-200E	M Series, Mr Slim and City Multi
Power Supply		220-240v, 50Hz	-	220-240v, 50Hz	220-240v, 50Hz
Dimensions (mm) (WxDxH)		172 x 92 x 253	-	271 x 72 x 169	360 x 59 x 340
Control	On/Off	✓	✓	-	-
	Mode	✓	✓	-	-
	Setpoint	✓	✓	-	-
	Fan Speed	✓	✓	-	-
	Air Direction	✓	✓	-	-
	Permit/Prohibit	✓	✓	-	-
	Filter Sign	✓	x	-	-
Monitor	On/Off	✓	✓	-	-
	Mode	✓	✓	-	-
	Setpoint	✓	✓	-	-
	Fan Speed	✓	✓	-	-
	Air Direction	✓	✓	-	-
	Permit/Prohibit	✓	✓	-	-
	Filter Sign	✓	✓	-	-
	Fault Codes	✓	✓	-	-
	Room Temperature	✓	✓	-	-
Weekly Schedule		✓	✓	-	-
Annual Schedule		✓	✓	-	-
Night Set Back		✓	x	-	-
Web Pages		✓	✓	-	-
Optimised Start		✓	x	-	-
Automatic Setpoint Adjustment		✓	x	-	-
Load Shedding		✓	x	-	-
Occupied / Unoccupied Settings Reset		x	x	-	-
Remote Monitoring with M2M		✓	x	-	-
Simple Energy Monitoring		✓	✓	-	-
Advanced Energy Monitoring		✓	✓	-	-

Notes: *1 MEHITS adaptor required

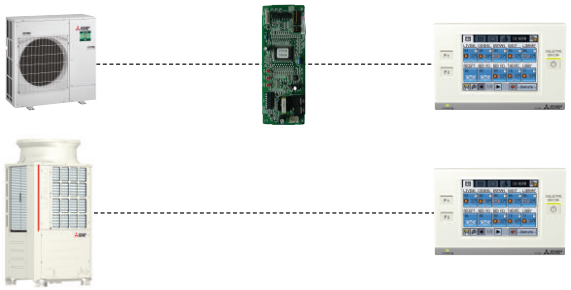
PIN CODES:

AE-200E-ENERGY

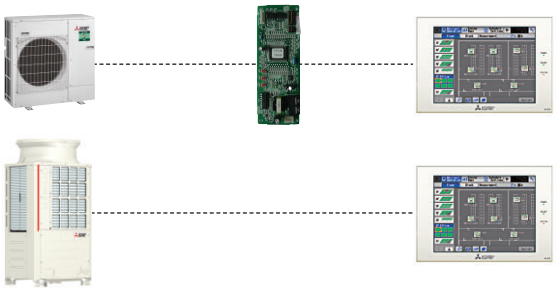
AE-200E-BACNET

AE-200E-WEB USER

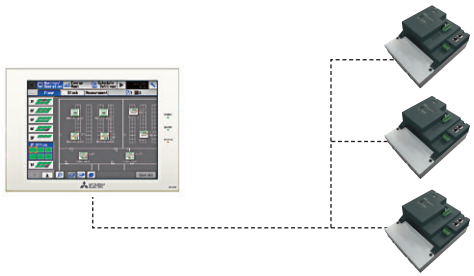
System Diagram AT-50B



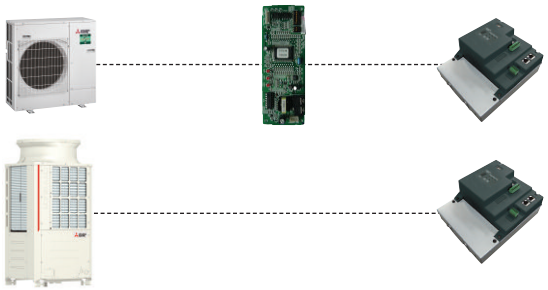
System Diagram AE-200E



System Diagram EW-50E



System Diagram EW-50E



System Diagram PAC-SC51KUA



System Diagram PAC-SF46EPA

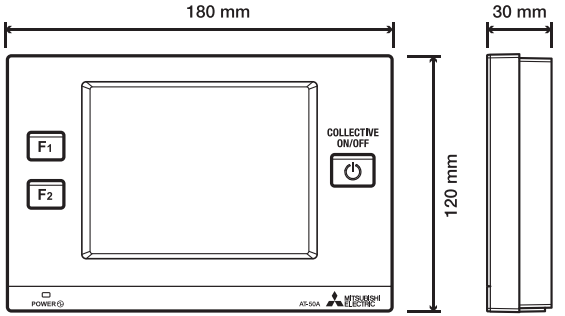


System Diagram AE-200E-WEB USER



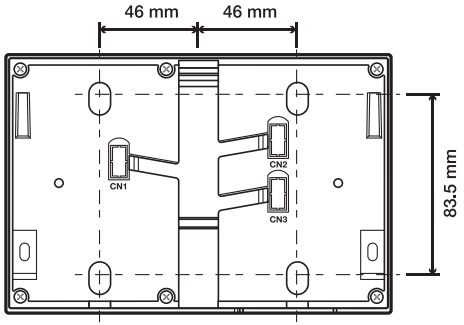
Product Dimensions AT-50B

Front View

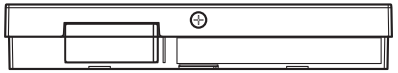


Side View

Back View

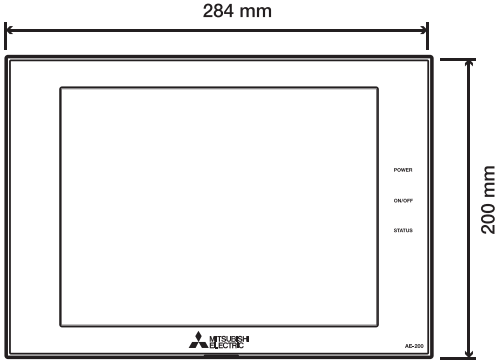


Top View

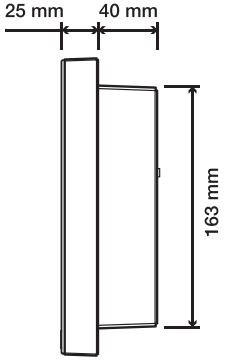


Product Dimensions AE-200E

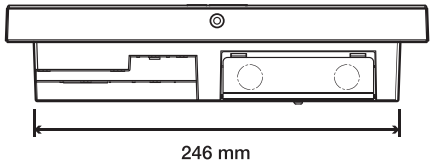
Front View



Side View

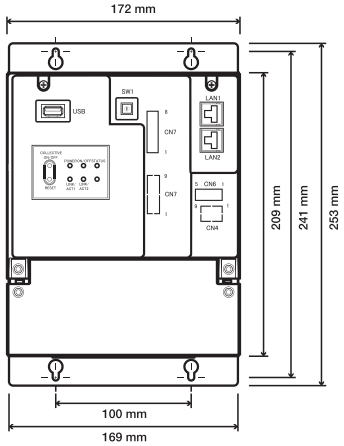


Top View

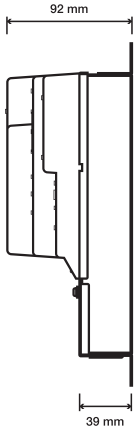


Product Dimensions EW-50E

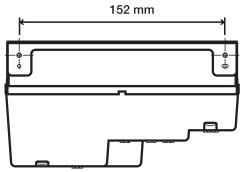
Front View



Side View

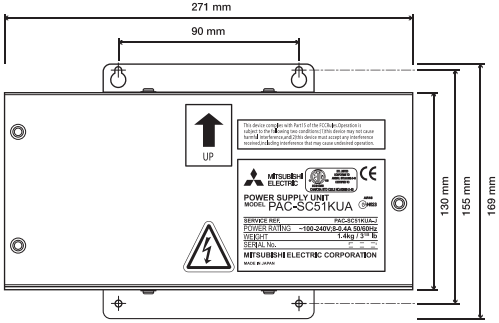


Top View

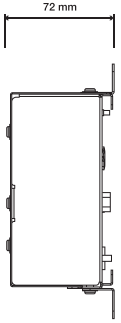


Product Dimensions PAC-SC51KUA

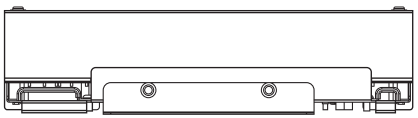
Front View



Side View

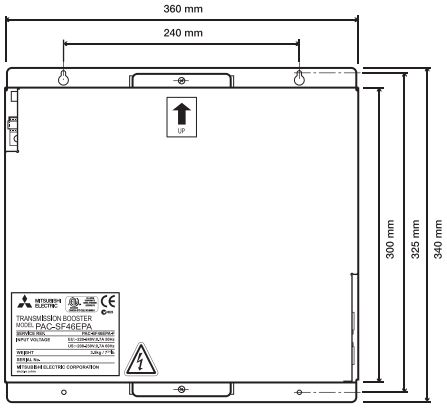


Top View



Product Dimensions PAC-SF46EPA

Front View



Side View



Top View



Remote Controllers

From a simplified controller perfect for hotel applications to a full backlight touch screen controller, we have the right remote controller to choose from.

Key Features

PAR-CT01MAA-SB / PAR-CT01MAA-PB



- Simple to use
- Touch screen
- 180 colour screen
- 180 colour font display
- Backlight
- Fully configurable via smartphone App
- Customisable display
- Ability to display customer logos

PAR-U02MEDA



- Touch screen M-Net Controller
- Night set back, scheduling, setpoint limitation
- Built in occupancy/brightness sensor
- Backlight
- 0.5°C Set Point adjustment
- Dual Set Point

PAR-40MAA



- Most popular controller
- Night set back, scheduling, setpoint limitation
- 0.5°C Set Point adjustment
- Dual Set Point
- Run/Standby for Mr Slim
- Contact number under fault condition
- Backlight (White / Black options)
- Daylight saving function

PAR-FL / FA32MA



- Infrared solution
- Controller and receiver
- Controller able to control more than one receiver

PZ-61DR-E



- Dedicated Lossnay controller
- Night set back, scheduling
- Flexible night purge
- Backlight

PZ-43SMF-E



- Simplified Lossnay controller
- Controls a maximum of 2 units

PAR-W31MAA / PAR-W21MAA



- Dedicated remote controller (see technical specification on page 6.18)
- Button lock
- Contact number under fault condition
- Fault codes

PAR-WT50R-E / PAR-WR51R-E



- Ecodan wireless controller
- Ecodan receiver

PAC-IF072B-E / PAC-IF062B-E



- Ecodan controller
- Backlight

Remote Controllers

Technical Specification

REMOTE CONTROLLERS		PAR-CT01MAA-SB	PAR-CT01MAA-PB	PAR-U02MEDA	PAR-40MAA	PAR-FL32MA	PAR-FA32MA
							
Description		Simplified Touch Screen Wired Remote Controller	Simplified Touch Screen Wired Remote Controller (Premium Finish)	Touch Screen Remote Controller	Standard Wired Remote Controller	Infrared Remote Controller	Infrared Receiver
Connect to		Indoor	Indoor	M-NET Network	Indoor	-	Indoor
Max Number of Units		16	16	16	16	-	16
Compatibility		Mr Slim, City Multi and M Series via MAC-397IF*3	Mr Slim, City Multi and M Series via MAC-397IF*3	City Multi (M Series and Mr Slim via A2M adapter) *2	Mr Slim, City Multi and M Series via MAC-397IF or MAC-334IF	Mr Slim, City Multi and M Series via MAC-397IF	Mr Slim, City Multi and M Series via MAC-397IF
Dimensions (mm) (WxDxH)		120 x 14.1 x 65	120 x 14.1 x 65	140 x 25 x 120	120 x 14.5 x 120	157 x 18 x 57	120 x 18 x 70
Control	On/Off	✓	✓	✓	✓	✓	-
	Mode	✓	✓	✓	✓	✓	-
	Setpoint	✓	✓	✓ (0.5°C)	✓ (0.5°C)	✓	-
	Fan Speed	✓	✓	✓	✓	✓	-
	Air Direction	✓	✓	✓	✓	✓	-
	Permit/Prohibit	✓	✓	✓	✓	x	-
	Filter Sign	✓	✓	✓	✓	x	-
Monitor	On/Off	✓	✓	✓	✓	✓	-
	Mode	✓	✓	✓	✓	✓	-
	Setpoint	✓	✓	✓ (0.5°C)	✓ (0.5°C)	✓	-
	Fan Speed	✓	✓	✓	✓	✓	-
	Air Direction	✓	✓	✓	✓	✓	-
	Permit/Prohibit	✓	✓	✓	✓	✓	-
	Filter Sign	✓	✓	✓	✓	x	-
	Fault Codes	✓	✓	✓	✓	x	LED
	Room Temperature	✓	✓	✓ (0.5°C)	✓ (0.5°C)	x	-
Backlight		✓	✓	✓	✓	x	-
Setpoint Limitation		✓	✓	✓	✓	x	-
Independent Vane Control		x	x	x	✓	x	-
Contact Number under Fault Condition		x	x	x	✓	x	-
Scheduling		✓	✓	Weekly	Weekly	x	-
Night Set Back		x	x	✓	✓	x	-
Button Lock		✓	✓	✓	✓	x	-
Easy Maintenance with Mr Slim		x	x	x	✓	x	-
Run / Standby with Mr Slim		x	x	x	✓	x	-
Silent Mode with Mr Slim		x	x	x	✓	x	-
Energy Saving with Mr Slim		x	x	x	✓	x	-
Occupancy Sensor (PIR)		x	x	✓	x	x	-

Notes: *1 Permit/Prohibit is via Centralised Controllers. ✓= Yes, x = No, - = Not applicable. *2 M-NET Power Supply Required via PAC-SC51KUA for M Series & Mr Slim

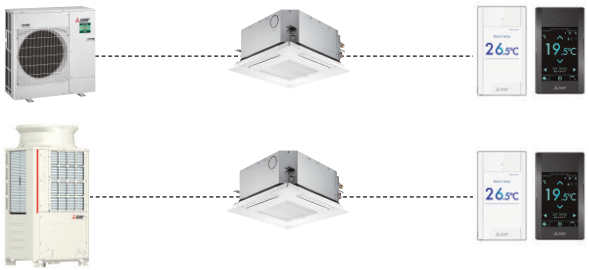
Remote Controllers

Technical Specification

REMOTE CONTROLLERS	PZ-61DR-E	PZ-43SMF-E	PAR-W31MAA	PAR-W21MAA	PAR-WT50R-E	PAR-WR51R-E	PAC-IF072B-E	PAC-IF062B-E
								
Description	Lossnay Wired Remote Controller	Lossnay Simplified Wired Remote Controller	Standard Wired Remote Controller	Standard Wired Remote Controller	Wireless Remote Controller Transmitter	Wireless Remote Controller Receiver	Flow Temperature Controller FTC6	Flow Temperature Controller FTC5
Connect to	Indoor	Indoor	e-series EACV / EAHV (1500 / 1800) and Ecodan QAHV	PWFY, e-series EACV / EAHV (900), Mr Slim Air Curtains and Ecodan CAHV / CRHV	Ecodan PU(H)Z / QUHZ	Ecodan PU(H)Z / QUHZ	Ecodan PUZ / QUHZ	Ecodan PUHZ / QUHZ
Max Number of Units	15	2	6 (depends on unit connected)	16	8	1	1	1
Compatibility	Lossnay LGH-RVX(T)-E	Lossnay VL-220CZGV-EB	e-series EACV / EAHV (1500 / 1800) and Ecodan QAHV	PWFY, e-series EACV / EAHV (900), Mr Slim Air Curtains and Ecodan CAHV / CRHV	Ecodan PU(H)Z / QUHZ	Ecodan PU(H)Z / QUHZ	Ecodan PUZ / QUHZ	Ecodan PUHZ / QUHZ
Dimensions (mm) (WxDxH)	120 x 19 x 120	70 x 15 x 120	120 x 19 x 120	130 x 19 x 120	140 x 18 x 75	100 x 30 x 80	120 x 19 x 120	120 x 19 x 120
Control On/Off	✓	✓	✓	✓	x	-	✓	✓
Control Mode	✓	✓	✓	✓	✓	-	✓	✓
Control Setpoint	x	x	✓	✓	✓	-	✓	✓
Control Fan Speed	✓	✓	x	x	x	-	x	x
Control Air Direction	x	x	x	x	x	-	x	x
Control Permit/Prohibit	x	x	x	-	x	-	x	x
Control Filter Sign	x	x	x	x	x	-	x	x
Monitor On/Off	✓	✓	✓	✓	✓	-	✓	✓
Monitor Mode	✓	✓	✓	✓	✓	-	✓	✓
Monitor Setpoint	✓	✓	✓	✓	✓	-	✓	✓
Monitor Fan Speed	✓	✓	x	x	x	-	x	x
Monitor Air Direction	x	x	x	x	x	-	x	x
Monitor Permit/Prohibit	x	x	✓	x	x	-	x	x
Monitor Filter Sign	✓	✓	x	x	x	-	x	x
Monitor Fault Codes	✓	x	✓	✓	x	-	✓	✓
Monitor Room Temperature	x	x	x	x	✓	-	✓	✓
Backlight	✓	x	✓	x	✓	-	✓	✓
Setpoint Limitation	x	x	x	✓	✓	-	x	x
Independent Vane Control	x	x	x	x	x	-	x	x
Contact Number under Fault Condition	x	x	✓	✓	x	-	x	x
Scheduling	Weekly	x	Weekly	Weekly	Weekly	-	Weekly	Weekly
Night Set Back	x	x	x	x	✓	-	✓	✓
Button Lock	x	x	x	✓	x	-	✓	✓
Easy Maintenance with Mr Slim	x	x	x	x	x	-	x	x
Run / Standby with Mr Slim	x	x	x	x	x	-	x	x
Silent Mode with Mr Slim	x	x	x	x	x	-	x	x
Energy Saving with Mr Slim	x	x	x	x	x	-	x	x
Occupancy Sensor (PIR)	x	x	x	x	x	-	x	x

Notes: *1 Permit/Prohibit is via Centralised Controllers. ✓= Yes, x = No, - = Not applicable.

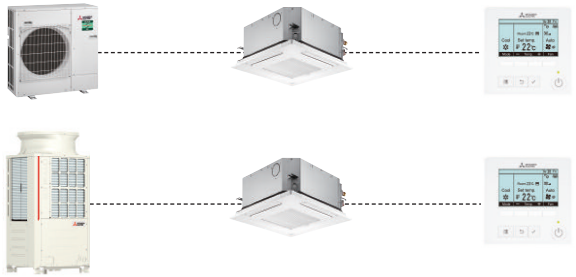
System Diagram PAR-CT01MAA-SB / PAR-CT01MAA-PB



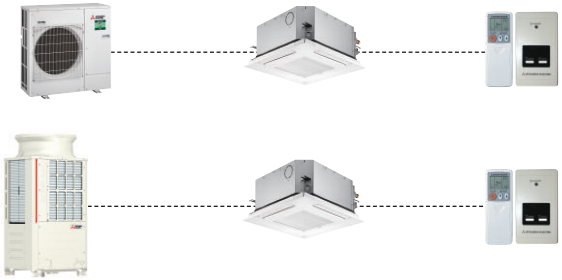
System Diagram PAR-U02MEDA



System Diagram PAR-40MAA



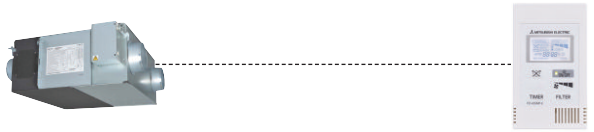
System Diagram PAR-FL / FA32MA



System Diagram PZ-61DR-E



System Diagram PZ-43SMF-E



System Diagram PAR-W31MAA



System Diagram PAR-WT50R-E / PAR-WR51R-E



System Diagram PAC-IF072B-E / PAC-IF062B-E

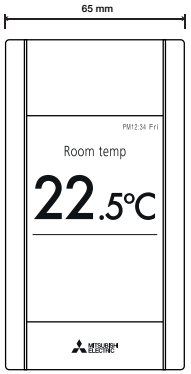


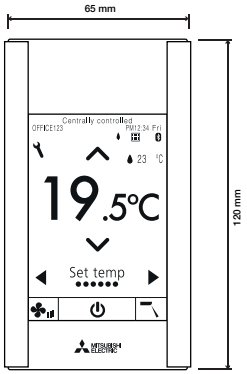
System Diagram PAR-W21MAA



Product Dimensions PAR-CT01MAA-SB / PAR-CT01MAA-PB

Front View

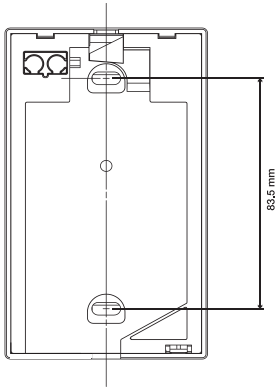




Side View

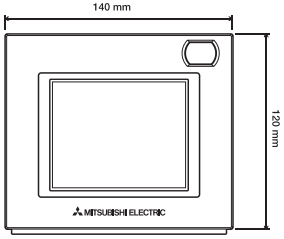


Back View

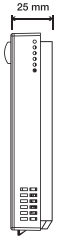


Product Dimensions PAR-U02MEDA

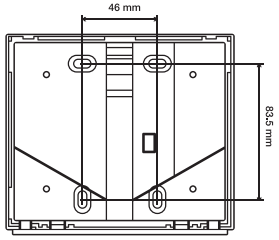
Front View



Side View



Back View

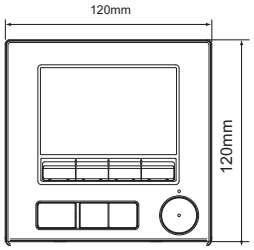


Top View



Product Dimensions PAR-40MAA

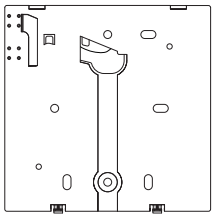
Front View



Side View

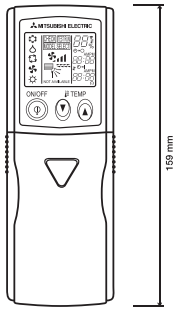


Back View



Product Dimensions PAR-FL32MA

Front View



Side View



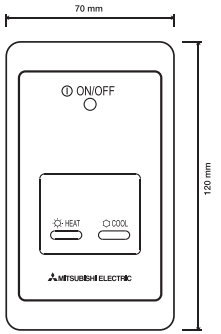


Back View

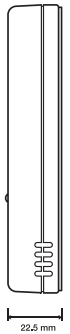


Product Dimensions PAR-FA32MA

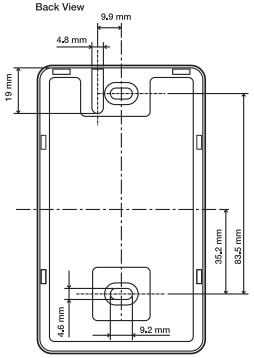
Front View



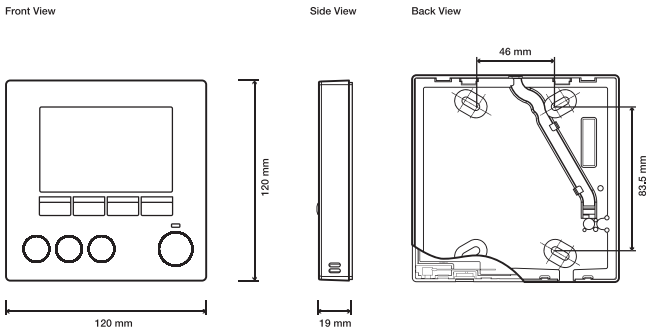
Side View



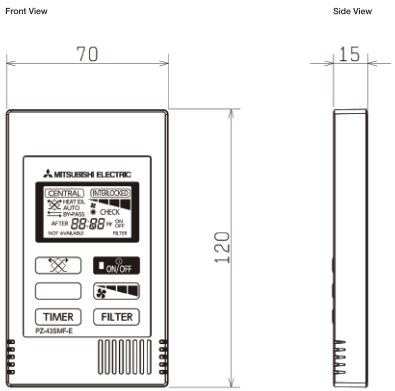
Back View



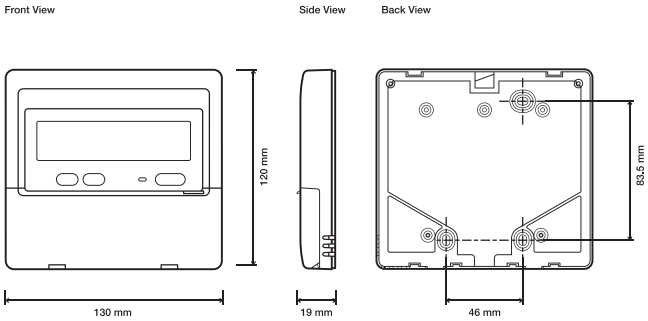
Product Dimensions PZ61DR-E / PAR-W31MAA



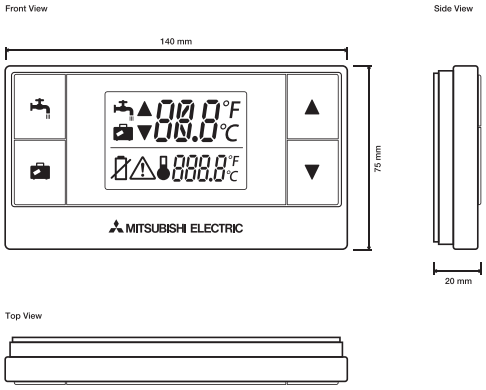
Product Dimensions PZ-43SMF-E



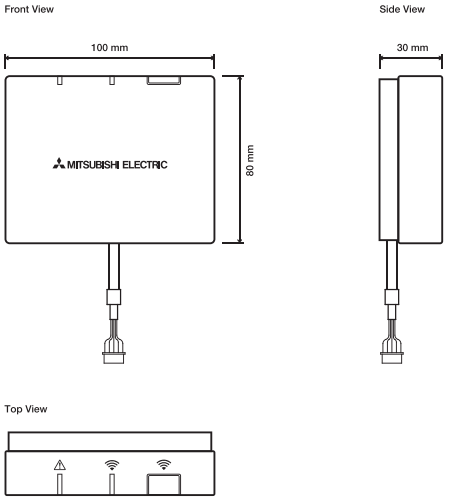
Product Dimensions PAR-W21MAA



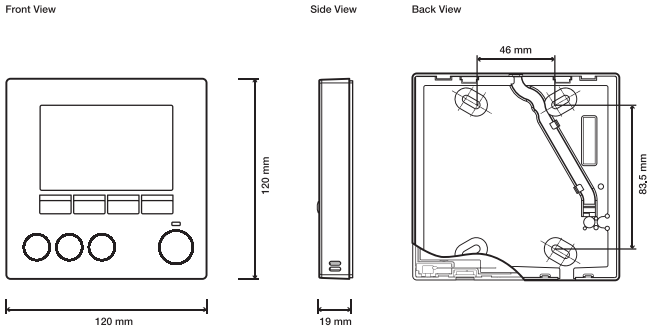
Product Dimensions PAR-WT50R-E



Product Dimensions PAR-WR51R-E



Product Dimensions PAC-IF072B-E / PAC-IF062B-E



Solution Interfaces

Our dedicated solution interfaces now include new sector specific products such as our **RMI Interfaces**.

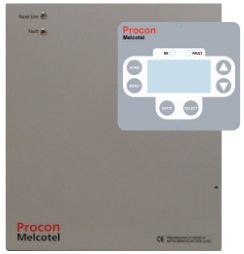
Key Features

MELCOMMS MINI



- Monitor and control up to 8 indoor units
- Run / Standby panel
- Includes 2 x MELCOBEMS MINI Interfaces (A1M)

MELCOTEL2



- Monitor and control up to 200 indoor units
- Dedicated hotel interface
- Key card and non key card integration
- Automatic Setpoint adjustment
- Occupied / Unoccupied Settings Reset

RMI PACKAGE LAN/ADSL



- Monitor and control up to 42 centralised controllers (2,100 indoor units)
- Reporting function on system operation and estimated energy performance
- Multi site control
- Multi user login available
- Site commissioning by MEU-UK Field Service included
- Connection via Wi-Fi router (LAN) or customer network

RMI PACKAGE 3G



- Monitor and control up to 42 centralised controllers (2,100 indoor units)
- Reporting function on system operation and estimated energy performance
- Multi site control
- Multi user login available
- Site commissioning by MEU-UK Field Service included
- Connection via 3G sim card (included)

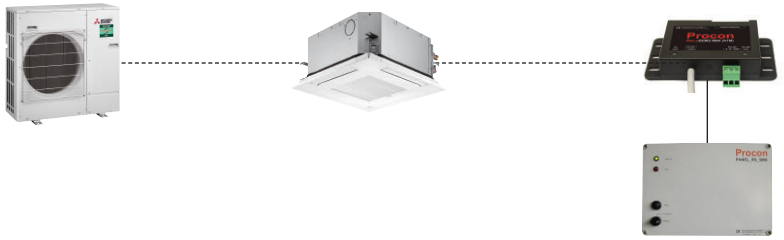
Solution Interfaces

Technical Specification

SOLUTION INTERFACES		MELCOMMS MINI	MELCOTEL2	RMI Package LAN/ADSL	RMI Package 3G
					
Description		Run Standby Panel	AE-200E Hotel Interface and display	Remote Control & Monitoring Interface	Remote Control & Monitoring Interface
Connect to		MELCOBEMS MINI	AE-200E and EW-50E	AE-200E & EW-50E	AE-200E & EW-50E
Max Number of Units		8	200	2,100	2,100
Compatibility		M Series and Mr Slim	City Multi	M Series, Mr Slim, City Multi, Lossnay and Commercial Heating (CAHV / CRHV)	M Series, Mr Slim, City Multi, Lossnay and Commercial Heating (CAHV / CRHV)
Power Supply		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
Dimensions (mm) (WxDxH)		253 x 90 x 180	350 x 80 x 400	113 x 28 x 89	85 x 36 x 100
SMS/GPRS Capabilities		x	x	x	3G*3
Ethernet Capabilities		x	x	✓	✓
SIM Card Provided		x	x	x	✓
Inputs		x	x	✓ 2 Digital*4	✓ 2 Digital*4
Outputs		✓ 1 Digital (Fault)	x	✓ 2 Digital*4	✓ 2 Digital*4
Control	On/Off	✓	✓	✓	✓
	Mode	✓	✓	✓	✓
	Setpoint	✓	✓	✓	✓
	Fan Speed	x	x	✓	✓
	Air Direction	x	x	✓	✓
	Permit/Prohibit	x	x	✓	✓
	Filter Sign	x	x	✓	✓
Monitor	On/Off	✓	✓	✓	✓
	Mode	✓	✓	✓	✓
	Setpoint	✓	✓	✓	✓
	Fan Speed	x	x	✓	✓
	Air Direction	x	x	✓	✓
	Permit/Prohibit	x	x	✓	✓
	Filter Sign	x	x	✓	✓
	Fault Codes	✓	x	✓	✓
	Room Temperature	✓	✓	✓	✓
Weekly Schedule		x	x	✓	✓
Annual Schedule		x	x	✓	✓
Night Setback		x	✓	✓	✓
Web Pages		x	x	✓	✓
Optimised Start		x	x	x	x
Automatic Setpoint Adjustment		x	✓	x	x
Load Shedding		x	x	x	x
Occupied / Unoccupied Settings reset		x	✓	x	x
Simple Energy Monitoring		x	x	✓*1	✓*1

Notes: *1 The energy monitoring is estimated using the outdoor unit data. *2 Discount cannot be applied. *3 Includes 5 years SIM hosting. *4 PAC-YG66DCA required.

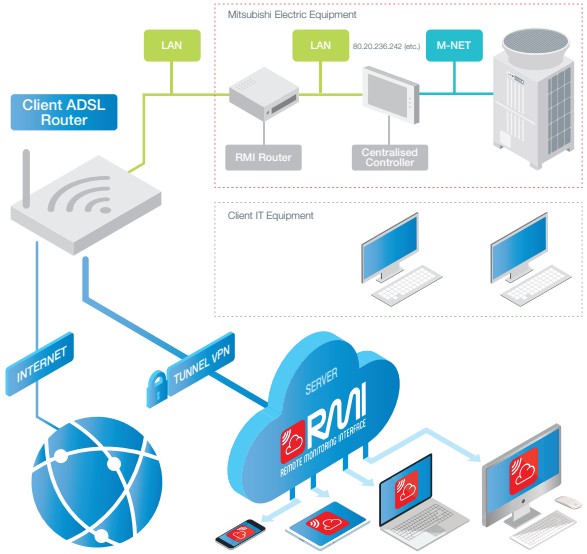
System Diagram — MELCOMMS MINI



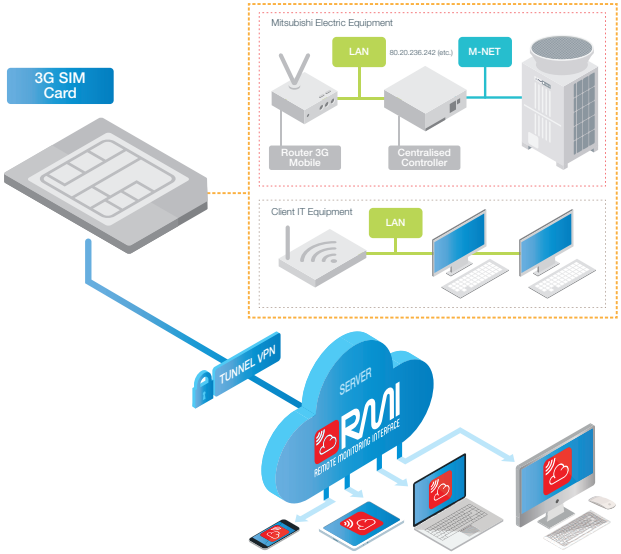
System Diagram — MELCOTEL2



System Diagram — RMI PACKAGE LAN/ADSL

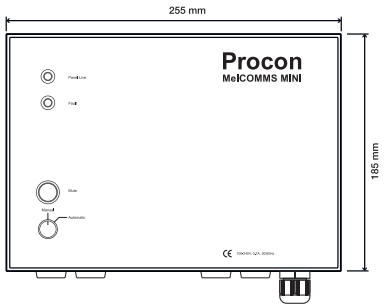


System Diagram — RMI PACKAGE 3G

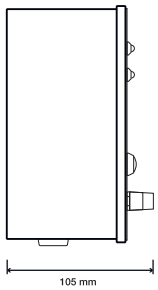


System Diagram | MELCOMMS MINI

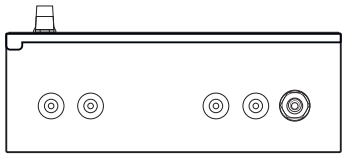
Front View



Side View

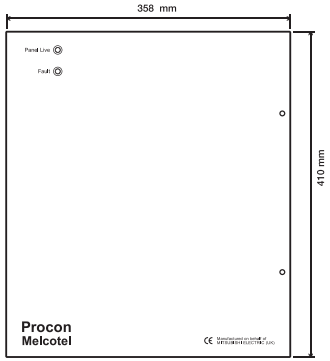


Top View

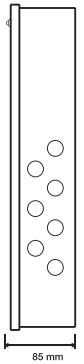


System Diagram | MELCOTEL2

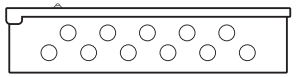
Front View



Side View



Top View



Simple Interfaces

A wide range of interfaces are available to allow third party equipment to monitor and control our units. Some interfaces are also available to monitor and control third party equipment from our centralised controllers.

Key Features

PAC-SA89TA



- Also known as 3 wire adaptor
- Remote on/off
- Fire alarm input
- Night mode
- Demand control

PAC-SA88HA



- Heating and cooling signal
- Run and fault signal

PAC-YT51HAA



- Remote on/off
- Fire alarm input
- Common run and fault signal

PAC-YG10HA



- Remote on/off
- Fire alarm input
- Common run and fault signal

PAC-SJ95MA-E / PAC-SJ96MA-E



- Adaptor to connect Mr Slim units to M-NET

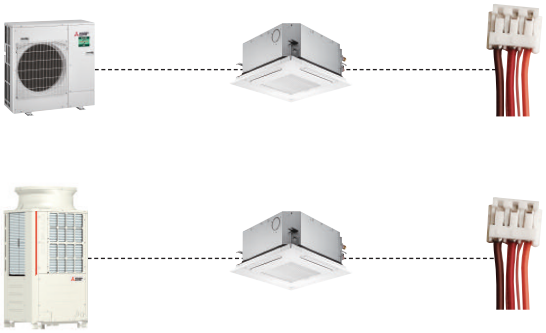
Simple Interfaces

Technical Specification

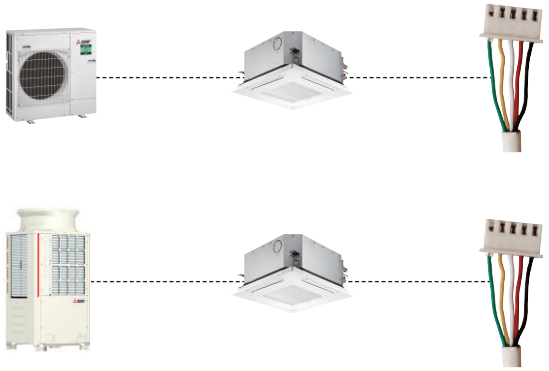
INTERFACES		PAC-SA89TA	PAC-SA89TA	PAC-SA88HA	PAC-SA88HA	PAC-SA88HA	PAC-YT51HAA	PAC-YG10HA	PAC-SJ95MA-E[1] PAC-SJ96MA-E[2]
									
Description		On/Off Adaptor (3 wire adaptor)	Night Mode and Demand Control (3 wire adaptor)	Run and Fault Adaptor (5 wire adaptor)	Heat and Cool Adaptor (5 wire adaptor)	Run and Fault Adaptor (5 wire adaptor)	On/Off Run and Fault Adaptor	On/Off Run and Fault Adaptor (9 wire adaptor)	M-NET Converter
Connect to		Indoor	Outdoor	Indoor	Indoor	Outdoor	AT-50B	AE-200E and EW-50E	Outdoor
Max Number of Units		1	1	1	1	1	1	1	1
Compatibility		Mr Slim and City Multi	Mr Slim and City Multi	Mr Slim and City Multi	City Multi	City Multi	AT-50B	AE-200E and EW-50E	Mr Slim Outdoor
Dimensions (mm) (WxDxH)		-	-	-	-	-	-	-	130 x 15 x 90
Control	On/Off	✓	✓	x	x	x	✓	✓	-
	Mode	x	x	x	x	x	x	x	-
	Setpoint	x	x	x	x	x	x	x	-
	Fan Speed	x	x	x	x	x	x	x	-
	Air Direction	x	x	x	x	x	x	x	-
	Permit/Prohibit	x	x	x	x	x	x	x	-
	Filter Sign	x	x	x	x	x	x	x	-
Monitor	On/Off	x	x	✓	x	✓	✓	✓	-
	Mode	x	x	x	✓	x	x	x	-
	Setpoint	x	x	x	x	x	x	x	-
	Fan Speed	x	x	x	x	x	x	x	-
	Air Direction	x	x	x	x	x	x	x	-
	Permit/Prohibit	x	x	x	x	x	x	x	-
	Filter Sign	x	x	x	x	x	x	x	-
	Fault Codes	x	x	✓	✓	✓	✓	✓	-
	Room Temperature	x	x	x	x	x	x	x	-
	Fire Alarm	✓	✓	x	x	x	✓	✓	-
On/Off but Centrally Controlled		VFC	x	x	x	x	VFC	Via 24VDC	-
On/Off but NOT Centrally Controlled		x	x	x	x	x	x	x	-
Run and Fault Output		x	x	12VDC	x	12VDC	Via 24VDC	Via 24VDC	-
Heat and Cool Output		x	x	x	12VDC	x	x	x	-
Night Mode and Demand Control		x	VFC	x	x	x	x	x	-
Connect Mr Slim to M-NET		-	-	-	-	-	-	-	✓*1 *2

Notes: VFC: Volt free contact. *1 PAC-SJ95MA-E M-NET adaptor for PUZ-ZM60-250, PUHZ-ZRP71-250, PU(H)Z-M100-250, PUZ-SM100-140. *2 PAC-SJ96MA-E M-NET adaptor for PUZ-ZM35-50.
✓= Yes, x = No, - = Not applicable.

System Diagram PAC-SA89TA



System Diagram PAC-SA88HA



System Diagram PAC-YT51HAA



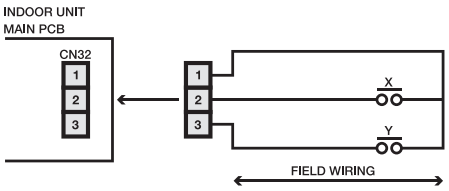
System Diagram PAC-YG10HA



System Diagram PAC-SJ95MA-E / PAC-SJ96MA-E



Wiring Diagram PAC-SA89TA



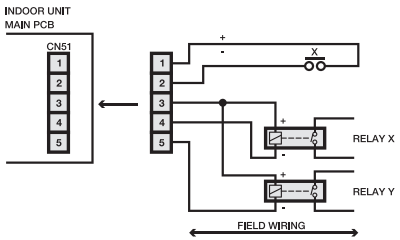
NOTE

- ON / OFF BUTTON ON THE REMOTE CONTROLLER NOT AVAILABLE
- ADAPTER WIRE COLOURS MAY VARY
- RELAYS NOT SUPPLIED

OPERATION

- X AND Y CLOSED TO START UNIT

Wiring Diagram PAC-SA88HA



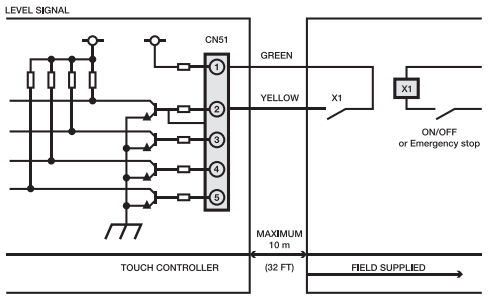
NOTE

- RELAYS NOT SUPPLIED
- X REQUIRES A PULSE SIGNAL TO START / STOP UNIT

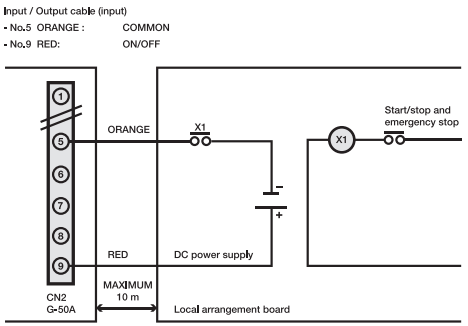
OPERATION

- RELAY X SUPPLIED WITH 12V DC WHEN UNIT IS ON
- RELAY Y SUPPLIED WITH 12V DC WHEN UNIT IN FAULT

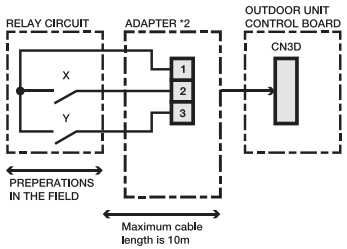
Wiring Diagram PAC-YT51HAA



Wiring Diagram PAC-YG10HA



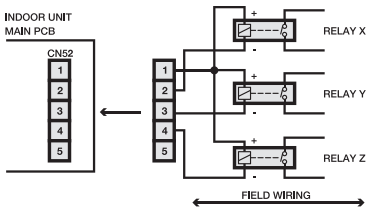
Wiring Diagram PAC-SA89TA



NOTE

X : Low noise mode or demand
Y : Demand
X, Y : Relay Contact rating voltage >= 15VDC
Contact rating current >=0.1A
Minimum applicable load =< 1mA at DC

Wiring Diagram PAC-SA88HA



NOTE

- RELAYS NOT SUPPLIED

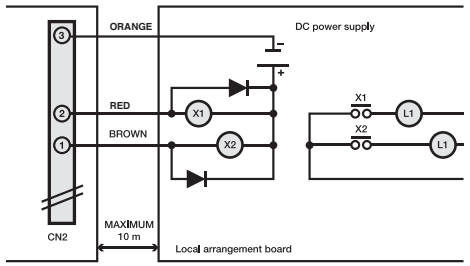
OPERATION

- RELAY X SUPPLIED WITH 12V DC WHEN FAN IS RUNNING
- RELAY Y SUPPLIED WITH 12V DC WHEN UNIT IS IN COOLING MODE AND THE REMOTE CONTROLLER IS ON OR OFF
- RELAY Z SUPPLIED WITH 12V DC WHEN UNIT IS IN HEATING MODE AND THE REMOTE CONTROLLER IS ON OR OFF

Wiring Diagram PAC-YT51HAA

Input / Output cable (output)

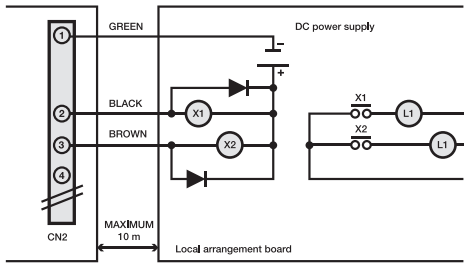
- No. 1 ORANGE: COMMON
- No. 2 RED: FAULT
- No. 3 BROWN: ON/OFF



Wiring Diagram PAC-YG10HA

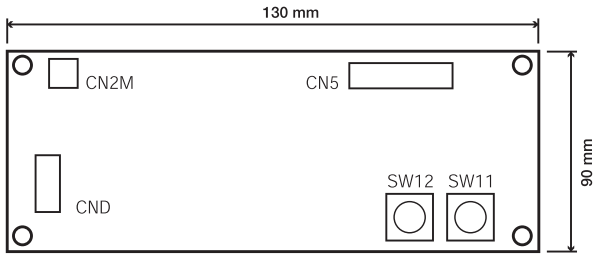
Input / Output cable (output)

- No.1 GREEN : COMMON
- No.2 BLACK: ON/OFF
- No.3 BROWN: FAULT



Product Dimensions PAC-SJ95MA-E / PAC-SJ96MA-E

Front View



Side View



Advanced Interfaces

A wide range of interfaces are available to allow third party equipment to monitor and control our units. Some interfaces are also available to monitor and control third party equipment from our centralised controllers.

Key Features

KTR-53B



- Remote on/off
- Run and fault volt free outputs

MELCORETAIL MINI



- On/off, fire alarm and lock input
- Setpoint and fan speed input
- Run, fault, heat and cool output
- 2 energy saving features

PAC-YG60MCA



- Monitor up to 4 energy meters

PAC-YG63MCA



- Monitor up to 2 temperature sensors

PAC-YG66DCA



- Monitor and control up to 2 pieces of general equipment

MAC-397IF / MAC-334IF



- Adaptor to connect remote controller to M Series
- Adaptor to connect M Series to M-NET
- 3rd party heating interlock

MAC-567IF



- Wi-Fi Interface for MELCloud solution
- ATA, Lossnay and ATW support
- WPS and Wi-Fi pin pairing

Advanced Interfaces

Technical Specification

INTERFACES	KTR-53B	MELCORETAIL MINI	PAC-YG60MCA	PAC-YG63MCA	PAC-YG66DCA
					
Description	On/Off and Run/Fault Adaptor	Retail Control and Input / Output Interface	Pulse Meter Interface	Temperature and Humidity Interface	Third Party Control and Interface
Connect to	Indoor	Indoor	M-NET Network	M-NET Network	M-NET Network
Max Number of Units	1	1	4 Pulse Meters	1 PT100, 1 Humidity Sensor	2 General Equipment
Compatibility	Mr Slim and City Multi	M Series and Mr Slim	AE-200E and EW-50E	AE-200E and EW-50E	AE-200E and EW-50E
Power Supply	12/24VAC/DC	-	24VDC	24VDC	24VDC
Dimensions (mm) (WxDxH)	80 x 45 x 80	85 x 32 x 138	200 x 45 x 120	200 x 45 x 120	200 x 45 x 120
Control On/Off	✓	VFC	-	-	✓
Mode	-	0 to 10VDC	-	-	x
Setpoint	-	0 to 10VDC	-	-	x
Fan Speed	-	0 to 10VDC	-	-	x
Air Direction	-	-	-	-	x
Permit/Prohibit	-	VFC	-	-	x
Filter Sign	-	-	-	-	x
Monitor On/Off	✓	VFC	-	-	✓
Mode	-	VFC	-	-	x
Setpoint	-	-	-	-	x
Fan Speed	-	-	-	-	x
Air Direction	-	-	-	-	x
Permit/Prohibit	-	-	-	-	x
Filter Sign	-	-	-	-	x
Fault Codes	✓	VFC	-	-	✓
Room Temperature	-	-	-	-	x
On/Off but Centrally Controlled	Option Lock/Unlock	VFC	x	-	-
On/Off but NOT Centrally Controlled	12/24VAC/DC	VFC	x	-	-
Run Output	x	VFC	x	-	-
Fault Output	x	VFC	x	-	-
Energy Saving	x	VFC	x	-	-
Heat / Cool / Thermo Output	x	VFC	x	-	-
Pulse Weight	x	x	0.1, 1.0 and 10	-	-

Notes: VFC: Volt free contact. ✓= Yes, **x** = No, - = Not applicable.

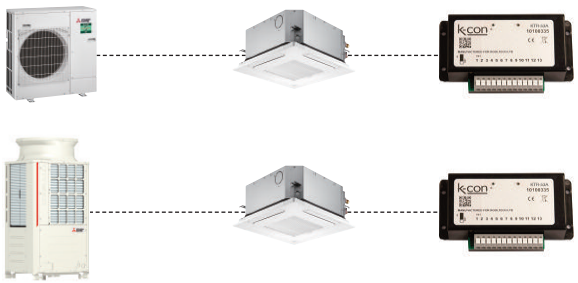
Advanced Interfaces

Technical Specification

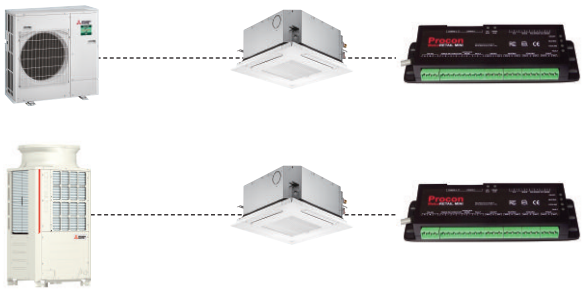
INTERFACES		MAC-397IF	MAC-334IF	MAC-567IF	
					
				AIR CONDITIONING	ECODAN*
Description		Interface for MA Remote Controller, On/Off Input and Run/Fault Output	Interface for M-NET, MA Remote Controller, On/Off Input, Run/Fault Output and 3rd Party Heating Interlock (M Series)	MELCloud Wi-Fi Interface	MELCloud Wi-Fi Interface
Connect to		Indoor	Indoor	Indoor	Indoor
Max Number of Units		1	1	1	1
Compatibility		M Series and Mr Slim (SUZ)	M Series and Mr Slim (SUZ)	M Series, Mr Slim, City Multi and Lossnay	Ecodan FTC6 / FTC5
Power Supply		-	-	-	-
Dimensions (mm) (WxDxH)		160 x 55 x 70	160 x 55 x 70	79 x 18.5 x 44	79 x 18.5 x 44
Control	On/Off	✓	✓	✓	✓
	Mode	x	x	✓	✓
	Setpoint	x	x	✓	✓
	Fan Speed	x	x	✓	x
	Air Direction	x	x	✓	x
	Permit/Prohibit	x	x	x	x
	Filter Sign	x	x	x	x
Monitor	On/Off	✓	✓	✓	✓
	Mode	x	x	✓	✓
	Setpoint	x	x	✓	✓
	Fan Speed	x	x	✓	✓
	Air Direction	x	x	✓	✓
	Permit/Prohibit	x	x	x	x
	Filter Sign	x	x	✓	✓
	Fault Codes	✓	✓	✓	✓
	Room Temperature	x	x	✓	✓
On/Off but Centrally Controlled		x	x	-	-
On/Off but NOT Centrally Controlled		✓	✓	-	-
Run Output		x	x	-	-
Fault Output		x	x	-	-
Energy Saving		x	x	-	-
Heat / Cool / Thermo Output		x	✓	-	-
Pulse Weight		x	x	-	-

Notes: VFC: Volt free contact. ✓= Yes, x = No, - = Not applicable. *For further technical specification on the MAC-567IF for Ecodan please refer to the Heating Section of the Product Catalogue, pages 4.32 - 4.33.

System Diagram KTR-53B



System Diagram MELCORETAIL MINI



System Diagram PAC-YG60MCA



System Diagram PAC-YG63MCA



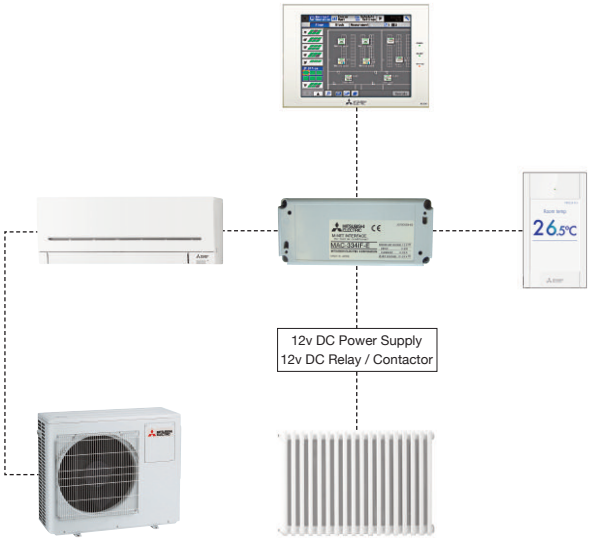
System Diagram PAC-YG66DCA



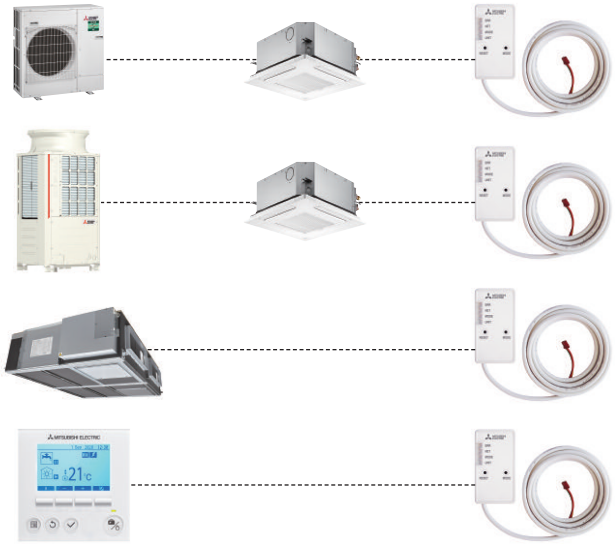
System Diagram MAC-397IF / MAC-334IF



System Diagram MAC-334IF Heating Interlock

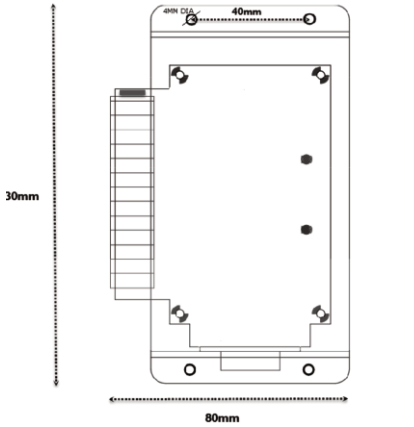


System Diagram MAC-567IF

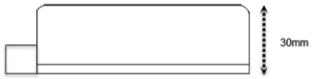


Product Dimensions KTR-53B

Front View

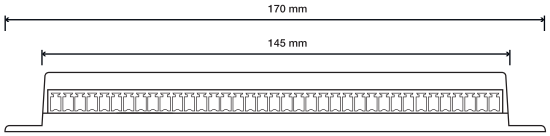


Top View



Product Dimensions MELCORETAIL MINI

Front View

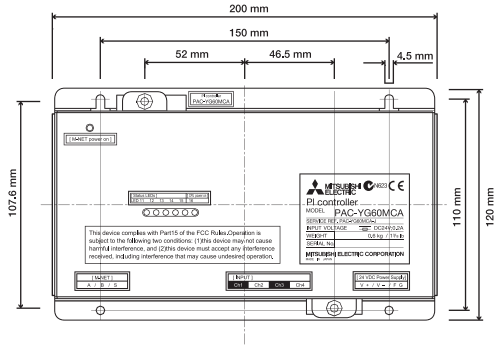


Top View

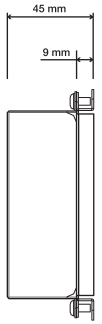


Product Dimensions PAC-YG60MCA

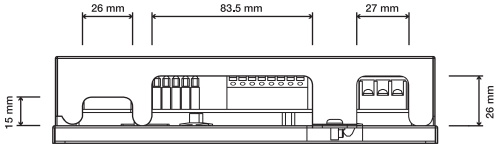
Front View



Side View

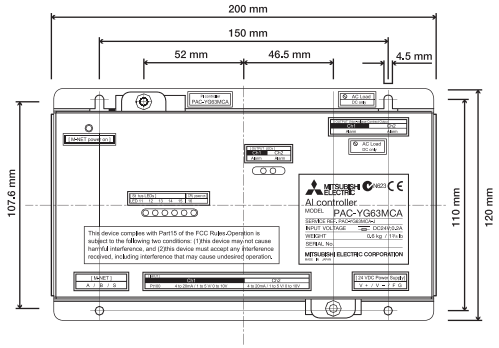


Top View

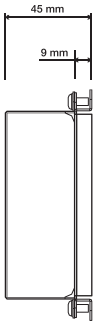


Product Dimensions PAC-YG63MCA

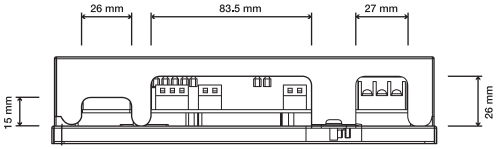
Front View



Side View

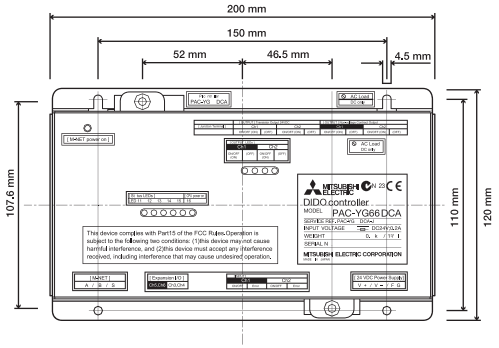


Top View

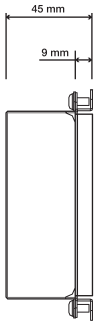


Product Dimensions PAC-YG66DCA

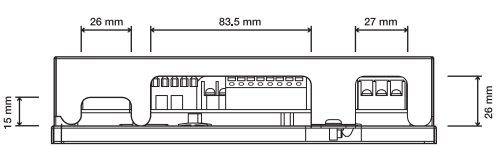
Front View



Side View

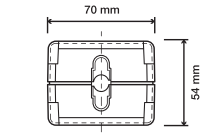


Top View

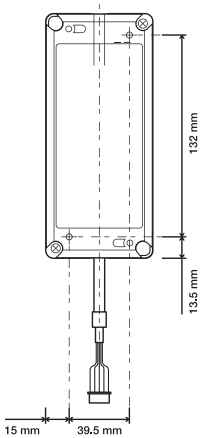


Product Dimensions MAC-397IF

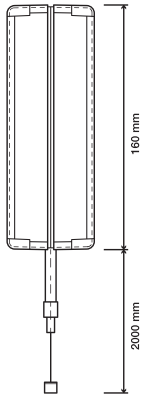
Top View



Front View

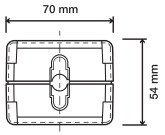


Side View

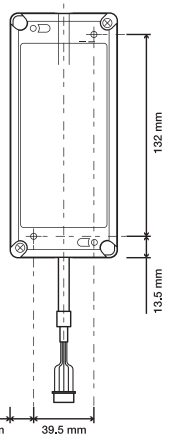


Product Dimensions MAC-334IF

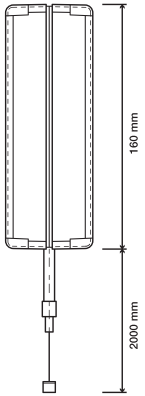
Top View



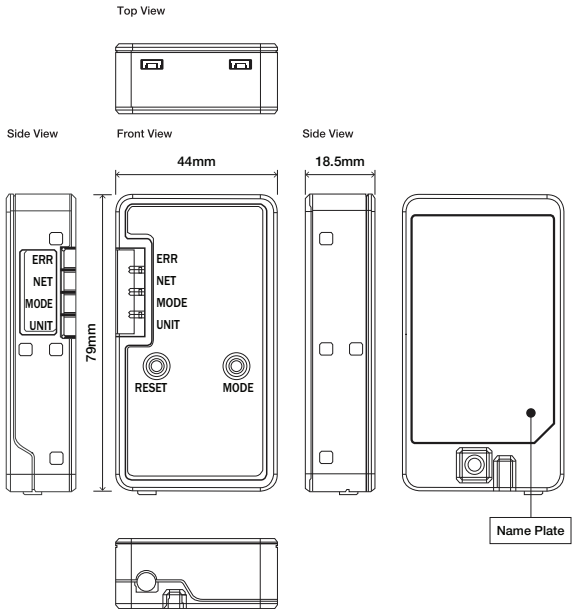
Front View



Side View



Product Dimensions MAC-567IF



BEMS Interfaces

Building Energy Management Systems (BEMS) will allow a building to run efficiently. A wide range of interfaces are available to connect our systems simply to a BEMS.

Key Features

MELCOBEMS MINI



- Monitor and control up to 1 indoor unit
- Modbus and BACnet interface

MELCOBEMS



- Monitor and control up to 50 indoor units
- Modbus and BACnet interface
- Energy monitoring

IQ4 XNC



- Monitor and control up to 50 indoor units
- Trend interface

MELCOJACE-8000



- Monitor and control up to 50 / 100 / 200 indoor units
- Tridium Niagara 4 compatible
- Built in HTML5 web page for plug & play
- On-board library Modbus & BACnet MSTP for Procon MELCOBEMS MINI (A1M)
- No additional interface required, direct plug & play to centralised controllers
- On-board Wi-Fi application to allow commissioning by PC, tablet or smartphone
- BACnet
- Modbus

BEMS Interfaces

Technical Specification

BEMS INTERFACES		MELCOBEMS MINI		MELCOBEMS
				
Description		Air to Air Splits Modbus/BACnet Interface. Air (Water) to Water Modbus Interface, Lossnay Modbus Interface		AE-200E, EW-50E Modbus BACnet Interface
Connect to		Indoor or Ecodan PCB		AE-200E and EW-50E
Max Number of Units		1		50
Compatibility		M Series, Mr Slim, City Multi, Ecodan FTC6/5/4, e-series Chiller, Ecodan QAHV/CAHV/CRHV and Lossnay (LGH-RVX(T)-E1)		M Series, Mr Slim and City Multi
Power Supply		-		24VDC
Dimensions (mm) (WxDxH)		70 x 19 x 50		102 x 32 x 180
Network		Modbus / BACnet RS485*1		Modbus / BACnet RS485 and TCP/IP
BEMS Compatibility		Cylon, Satchwell, Crestron, Invensys, Interactive Homes, North BT, Andover, Siemens, WEMS, RDM		Cylon, Satchwell, Crestron, Invensys, Interactive Homes, North BT, Andover, Siemens, WEMS, Andover Controls, York BMS, Siemens, Priva Building Intelligence, Delta Controls, RDM
		Air to Air Splits and Lossnay	Air (Water) to Water	
Control	On/Off	DI	AI	DI
	Mode	AI	AI	AI
	Setpoint	AI	AI	AI
	Fan Speed	AI	-	AI
	Air Direction	AI	-	AI
	Permit/Prohibit	x	AI	DI
	Filter Sign	DI	-	DI
Monitor	On/Off	DO	DO	DO
	Mode	AO	AO	AO
	Setpoint	AO	AO	AO
	Fan Speed	AO	-	AO
	Air Direction	AO	-	AO
	Permit/Prohibit	x	AO	DO
	Filter Sign	DO	-	DO
	Fault Codes	AO	AO	AO
	Room Temperature	AO	AO	AO
	Daily kW Energy	-	AO	With EW-50E
	Monthly kW Energy	-	AO	With EW-50E

Key: DI = Digital Input. DO = Digital Output. AI = Analogue Input. AO = Analogue Output.

Notes: *1 Function only available on M Series, Mr Slim and City Multi.
The MELCOBEMS can monitor indoor daily and monthly kWh when used in conjunction with AE-200E, EW-50E, PAC-YG60MCA on third party energy meters.

BEMS Interfaces

Technical Specification

BEMS INTERFACES		IQ4 XNC	MELCOJACE-8000
			
Description		AE-200E and EW-50E Trend Interface*1	AE-200E & EW-50E Tridium Niagara Interface*2
Connect to		AE-200E and EW-50E	AE-200E, EW-50E, AG-150A, EB-50G, GB-50
Max Number of Units		50	50 / 100 / 200
Compatibility		M Series, Mr Slim, City Multi and Lossnay	M Series, Mr Slim, City Multi and Lossnay
Power Supply		220-240v, 50Hz	24v, AC/DC
Dimensions (mm) (WxDxH)		263 x 46 x 150	171 x 61 x 110
Network		Trend	Niagara
BEMS Compatibility		Trend	Any Niagra compatible BMS/BEMS
Control	On/Off	DI	✓
	Mode	AI	✓
	Setpoint	AI	✓
	Fan Speed	AI	✓
	Air Direction	AI	✓
	Permit/Prohibit	DI	✓
	Filter Sign	DI	✓
Monitor	On/Off	DO	✓
	Mode	AO	✓
	Setpoint	AO	✓
	Fan Speed	AO	✓
	Air Direction	AO	✓
	Permit/Prohibit	DO	✓
	Filter Sign	DO	✓
	Fault Codes	AO	✓
	Room Temperature	AO	✓
	Daily kWh Energy	-	✓*3
	Monthly kWh Energy	-	✓*3

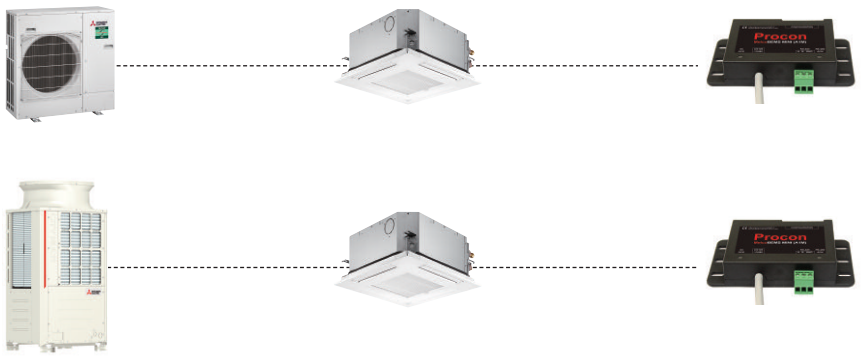
Notes: The PAC-YG***CA are not compatible with MELCOBEMS and IQ4 XNC.

*1 Synapsys Solutions Ltd, 1 Woodlands Court, Albert Drive, Burgess Hill, West Sussex, RH15 9TN, Telephone 0845 680 0303

*2 The MELCOJACE-8000 can monitor indoor daily and monthly kWh when used in conjunction with AE-200E, EW-50E, PAC-YG60MCA on third party energy meters.

*2 The MELCOJACE-8000 range is only available from Forest Rock Systems Ltd, Charmwood Building, Holywell Park, Ashby Road, Loughborough, LE11 3AQ. Telephone: 0845 5197958

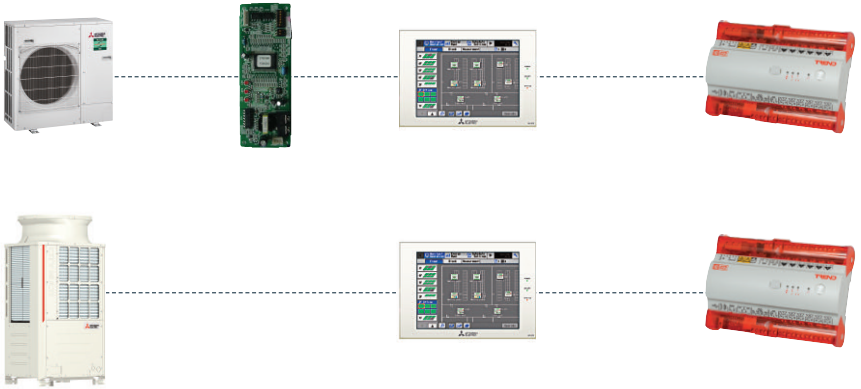
System Diagram MELCOBEMS MINI



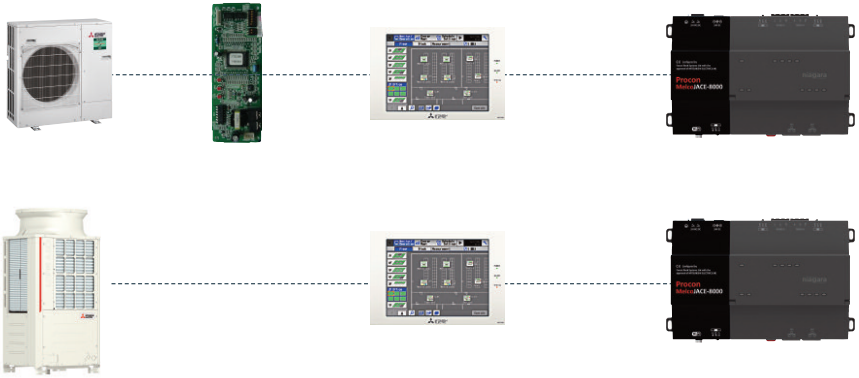
System Diagram MELCOBEMS



System Diagram IQ4 XNC

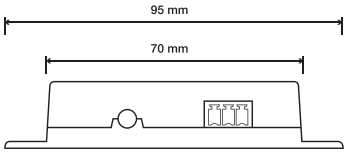


System Diagram MELCOJACE-8000

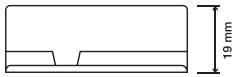


Product Dimensions MELCOBEMS MINI

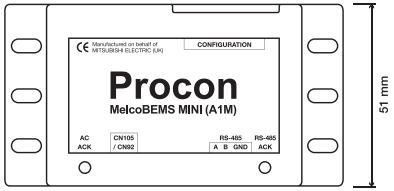
Front View



Side View

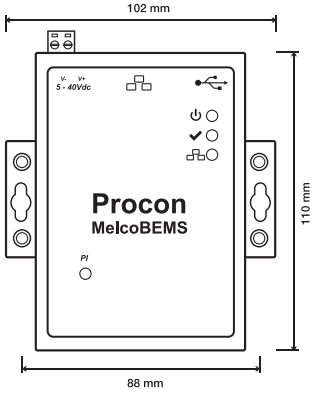


Top View

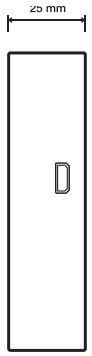


Product Dimensions MELCOBEMS

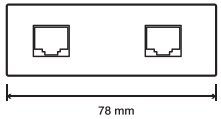
Front View



Side View

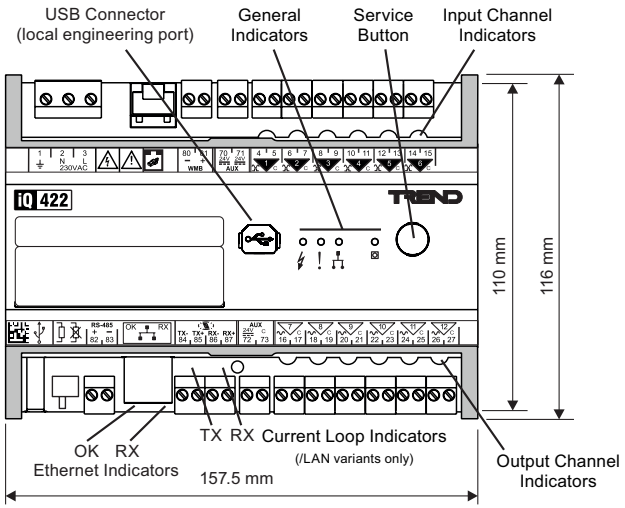


Top View

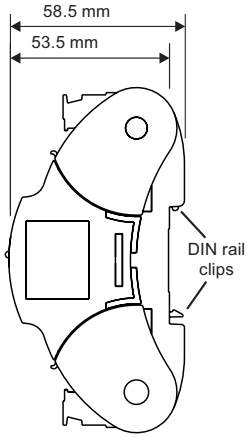


Product Dimensions IQ4 XNC

Front View

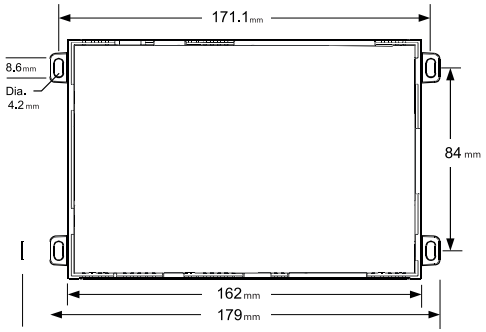


Side View

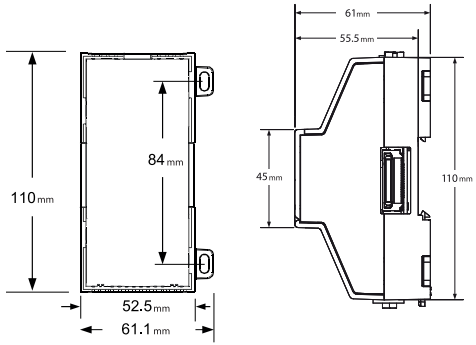


Product Dimensions MELCOJACE-8000

Front View



Side View

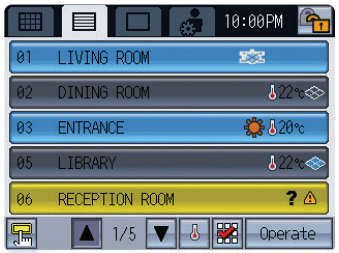


AT-50B Screen Examples

AT-50B Home Screen 1



AT-50B Home Screen 2



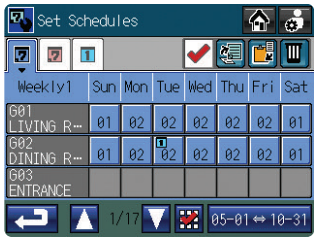
AT-50B Home Screen 3



AT-50B Indoor Unit Settings

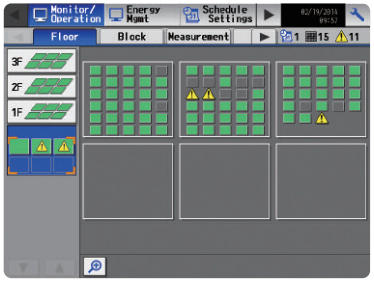


AT-50B Scheduling



AE-200E Screen Examples

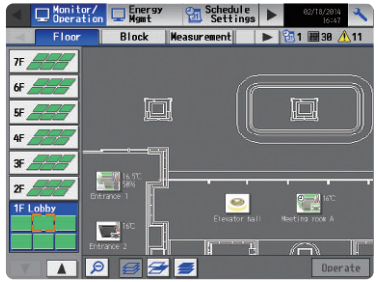
AE-200E Home Screen 1



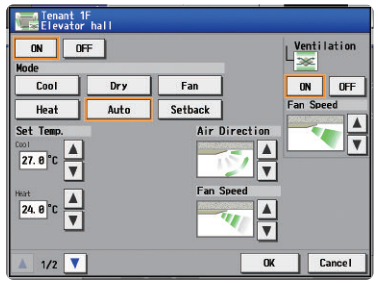
AE-200E Home Screen 2



AE-200E Home Screen 3



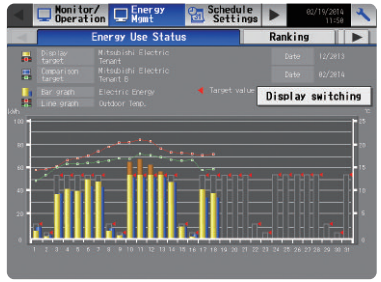
AE-200E Indoor Unit Settings



AE-200E Monitoring

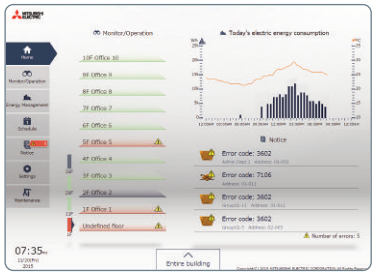


AE-200E Energy Monitoring



AE-200E HTML5 Web Page Examples

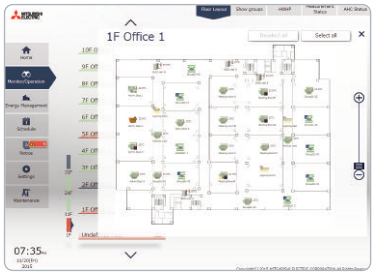
Home Screen



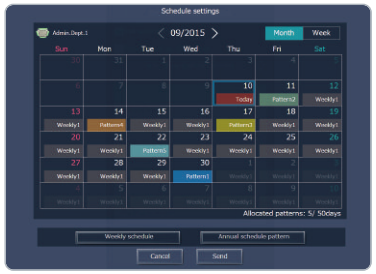
Group Screen



Floor Layout



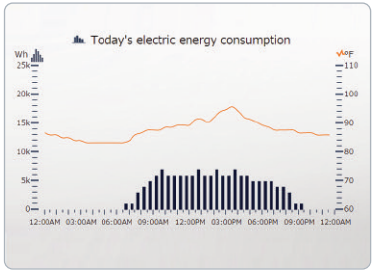
Scheduling



Energy Display



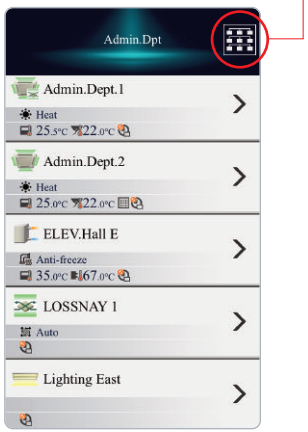
Energy Graph



AE-200E HTML5 Mobile Examples

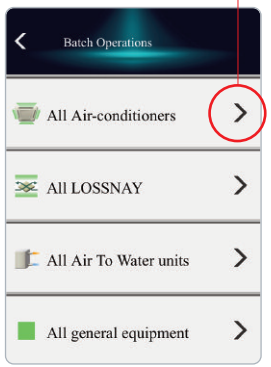
Home Screen

Batch operation
Click to operate all groups at once



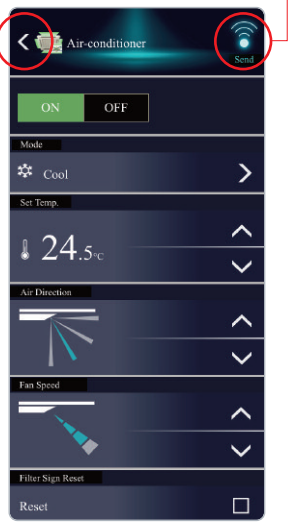
Batch Control

Advanced settings



Individual Control

Cancel Send



Detailed Control

Advanced settings



How to Quote

How to quote an AE-200E System Controller with Energy Monitoring

How to quote Basic Energy Measurement



START	
SETUP ONBOARD PI 1-4 ON AE-200E & EW-50E	Setup on AE-200E screen kWh pulse weight and onboard PI 1-4 inputs or PAC-YG60MCA PI inputs
CONNECT kWh METER PULSE TO ONBOARD PI 1-4 OR QUOTE PAC-YG60MCA PI CONTROLLER	Connect 1no kWh meter per AE-200E / EW-50E onboard PI port or to PAC-YG60MCA PI Ports
BASIC ENERGY DISPLAYED IN AE-200E MEASUREMENT SCREEN FOR AE-200E & EW-50E	Only total energy displayed on AE-200E screen
END	

How to quote Energy Apportioning



START	
QUOTE FOR 1-4 x EW-50E FOR M-NET CONNECTION	Only EW-50E can be used for M-NET connection
QUOTE FOR 1 x AE-200E. QUOTE FOR 1 x AE-200E-ENERGY PIN CODE	All control available via AE-200E screen
LAN CONNECT AE-200E & EW-50E	LAN connect all centralised controllers together with CAT5/6 cable - max 100m distance from each AE-200E/EW-50E to Hub/Switch
CONNECT kWh METER PULSE TO ONBOARD PI 1-4 OR QUOTE PAC-YG60MCA PI CONTROLLER	Connect 1 x kWh meter per AE-200E / EW-50E onboard PI port or to PAC-YG60MCA PI Ports
ADD 3 DAYS FIELD SERVICE COMMISSIONING	Quote for 3 x days field service commissioning
END	Apportioned energy displayed on AE-200E screen and via HTML5 web page (if set up)

How to Quote

How to quote an AE-200E System Controller & BACnet Option

How to quote up to 200 indoor units

- START
- QUOTE FOR AE-200E
- ARE MORE THAN 50 INDOOR UNITS TO BE CONNECTED?
  - Quote for 1-3 x EW-50E expansion adapters - max 200 indoors to create system control group
- 9 WIRE ADAPTER REQUIRED?
  - Quote for 1 x PAC-YG10HA per AE-200E & EW-50E
- END

How to quote up to 2000 indoor units

- START
- HOW MANY AE-200E SYSTEM CONTROL GROUPS?
  - Quantity of AE-200E system control groups from up to 200 indoor selections
- LAN CONNECT UP TO 10 x SYSTEM CONTROL GROUPS TOGETHER
  - LAN connect all centralised controllers together with CAT5/6 cable - max 100m distance from each AE-200E/EW-50E to Hub/Switch
- ARE INDIVIDUAL WEB USERS REQUIRING ACCESS? MAX 200 USERS
  - Quote AE-200E-WEB USER Pin Code
- ADD 1 DAY FIELD SERVICE COMMISSIONING
  - Quote for 1 x day field service commissioning
- END

How to quote BACnet Option

- START
- QUOTE 1 x AE-200E-BACNET PIN CODE PER AE-200E
  - Quote for 1 x BACnet pin code per AE-200E / EW-50E system control group
- QUOTE 1 DAY FIELD SERVICE COMMISSIONING
  - Quote for 1 x day field service commissioning
- END

Services

Support at every step of the way





Support at every step of the way

At Mitsubishi Electric, we have not only developed an innovative range of cooling, heating, ventilation and control solutions, we have also examined how we support the market throughout the complete lifecycle of our products - from cradle to grave.

Whether in pre-sales design and specification, installation, or service and maintenance support, right through to our recycling programme, we can offer solutions that deliver the quality and excellence you would expect to make a world of difference.

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MELSmart Chiller Service and Maintenance for Central Plant and I.T. Cooling	7.10
Design and Consulting Services	7.11
Mitsubishi Electric Partner Programme	7.12
Mitsubishi Electric MELFinance Solutions	7.14
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MELSmart Technical Services

Advanced, reliable technical support at every step of the way

Meeting today's energy challenges for our commercial premises demands more integrated thinking from everyone involved in the design, supply, installation, commissioning and maintenance of essential building services - whether it is for an individual property or a national estate.

Ever increasing energy bills, the need to reduce carbon emissions and a raft of challenging legislation are driving the demand for increased energy efficiency and control in the cooling, heating, ventilation and associated technologies that we use.

As a manufacturer, we realise that product development alone is not enough. To keep our products working at their optimum, we have developed the MELSmart approach to ensure our customers are able to maximise the energy efficiency of their building's services right from the start.

MELSmart offers a range of support that includes:

- Site Services
- 24/7/365 Technical Help Desk
- Spare Parts, Warranty & Returns
- CPD Accredited Technical Product Training

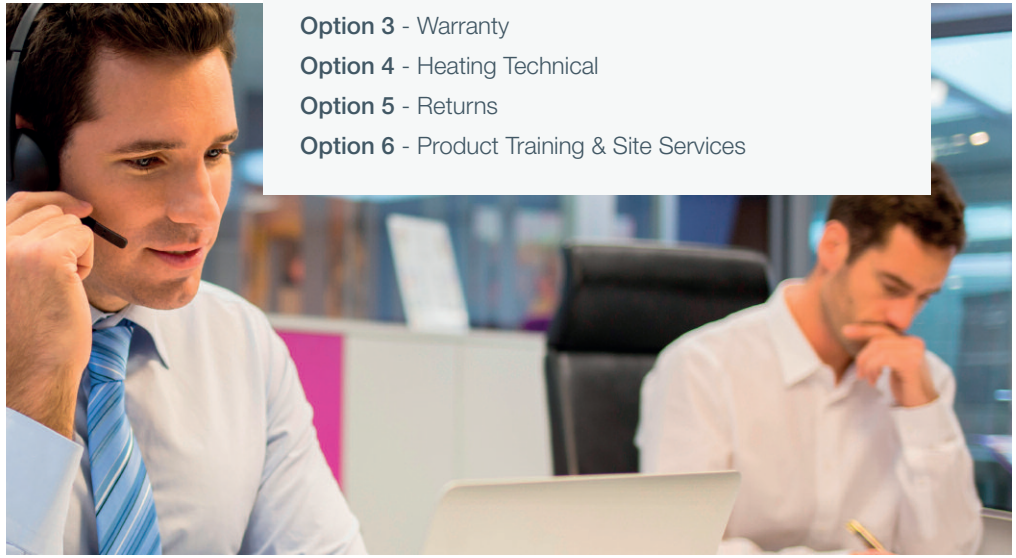
Whatever the challenge, we're here to help you meet it.

MELSmart Customer Services & Support

Telephone: 0161 866 6089

Option 1 - Air Conditioning Technical
Option 2 - Spares
Option 3 - Warranty
Option 4 - Heating Technical
Option 5 - Returns
Option 6 - Product Training & Site Services





MELSMART
TECHNICAL SERVICES

Fault Finding

Our Fault Finding service is carried out on new and existing installations to identify problems and offer resolutions to ensure the system is returned to a fully operational condition in the shortest possible timeframe.

Our Fault Finding service is available across our entire product range. During the Fault Finding process our engineers will carry out assessments of the following to determine a resolution:

- System design, application and specification
- Standard of installation
- Operational performance of equipment
- Current and historic fault codes

Product	Detail
Air Conditioning	One day per reported fault
Controls	One day per reported fault
Hybrid VRF	One day per reported fault
e-series Chillers	One day per reported fault
Commercial Heating	One day per reported fault

Note: Whilst our engineers will carry out a thorough assessment of the system and provide recommendations to rectify any issues, they do not carry spare parts and cannot provide a same day resolution in the event of part failure. If equipment failure due to manufacturing is discovered, no cost will be raised and the visit will be carried out F.O.C. It is the responsibility of the customer to provide access to all of the affected equipment on site. Whilst our engineer will identify any installation and setup issues that are affecting performance, it is the responsibility of the contractor to rectify any problems.





Commissioning

Our assisted commissioning service is aimed at both new and existing customers; the objective is to demonstrate how to effectively commission our systems so that customers can carry out these tasks unassisted in the future.

Our commissioning service is available across our full product range including: **Air Conditioning, Controls, Hybrid VRF, e-series Chillers and Commercial Heating products**.



During the commissioning process, our engineers will carry out the following tasks:

- Comprehensive inspection of the installed system to ensure the system meets Mitsubishi Electric specification
- Check the system addressing and advise on any incorrect settings
- For systems other than controls we will operate in both cooling and heating modes where applicable and record temperatures, pressures and water flow rates for the system
- Supervise the completion of commissioning logbooks

Type of Commissioning	Detail
Air Conditioning	Max 3 City Multi systems per day
Controls	1 x AE-200 and up to 4 x EW-50E per day
Hybrid VRF	½ day pre installation visit ½ day mid installation visit 2 day commissioning visit
e-series	Max 4 chillers per day
Commercial Heating	Max 3 units per day*

Control System	Commissioning Days	Charge Pin Codes	Bacnet Pin Code
1 x AE-200E + 1-4 EW-50E	1 day	1 - 5	1 - 5
2 x AE-200E + 1-4 EW-50E	2 days	1 - 10	1 - 10
3 x AE-200E + 1-4 EW-50E	3 days	1 - 15	1 - 15
4 x AE-200E + 1-4 EW-50E	4 days	1 - 20	1 - 20
5 x AE-200E + 1-4 EW-50E	5 days	1 - 25	1 - 25

Whilst our engineer will supervise the successful completion of all tasks and address any questions or skill gaps that present themselves, it is the responsibility of the installing contractor under supervision to carry out all of the listed tasks. Whilst our engineer will supervise the successful completion of the commissioning logbooks, it is the responsibility of the customer to complete and submit the commissioning logbooks to Mitsubishi Electric unless specified.

*Transit bolts must be removed before we arrive on site. If transit bolts are not removed additional time and cost may be incurred.

Health Checks

Our Health Check service is carried out on existing installations to ensure that the system is operating within our design parameters. The service is available to both new and existing customers and the objective is to establish a fully operational system.

Our Health Check service is available for the following product ranges: Air Conditioning including Hybrid VRF, e-series Chillers and Commercial Heating products. During the Health Check process, our engineers will carry out the following tasks:

- Comprehensive visual inspection of the installed system to ensure the system meets Mitsubishi Electric specification
- Check the system addressing and advise on any incorrect settings
- Full operation in both cooling and heating modes where applicable
- Record operating data including temperatures, pressures and water flow rates of outdoor units, BC Boxes and indoor units to determine the correct operation

Product	Detail
Air Conditioning	Up to 3 systems per day
Hybrid VRF	Up to 2 systems per day
e-series Chillers	Up to 4 systems per day
Commercial Heating	Up to 3 systems per day

Note: Whilst our engineer will ensure the successful completion of all tasks and address any questions or skill gaps that present themselves, it is the responsibility of the contractor to provide access to all equipment. Whilst our engineer will identify any installation and setup issues that are affecting performance, it is the responsibility of the contractor to rectify any problems.





Product Training

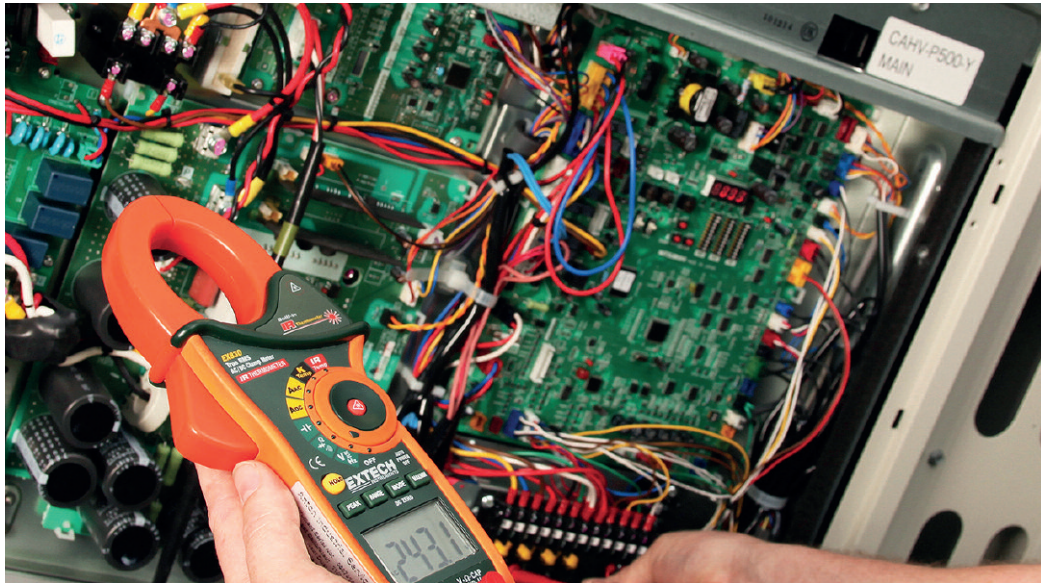
Mitsubishi Electric has seven state-of-the-art training suites based at Hatfield, Birmingham, Bristol, Manchester, Wakefield, Scotland and Reigate for your convenience.

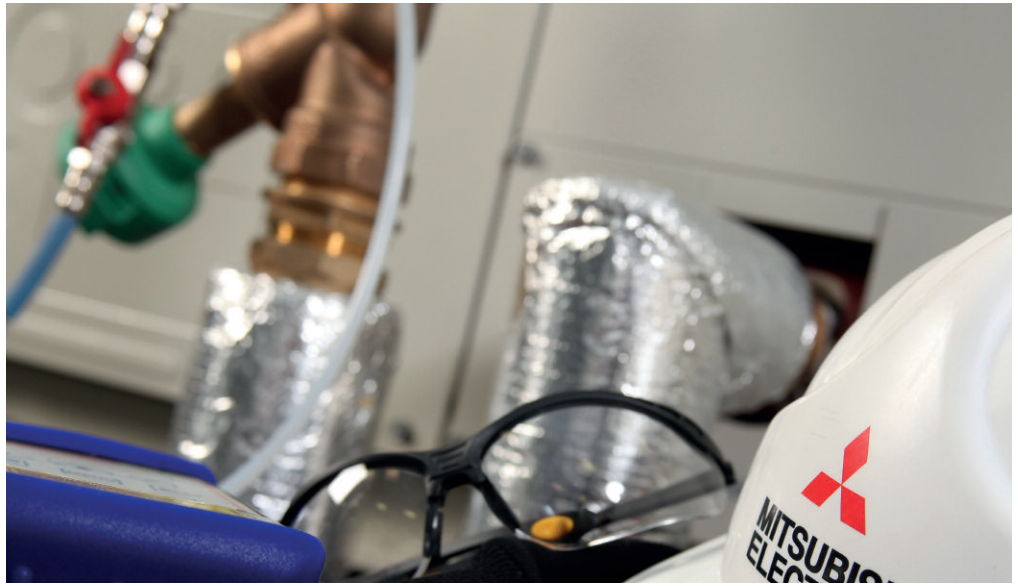
Providing product training for all levels of expertise, our courses are taught by experienced engineers, with a wealth of knowledge and are all CPD accredited.

CPD CERTIFIED
The CPD Certification Service

For bookings please telephone
0161 866 6089 (Option 6, Option 1)

Product Range	Course	Reference
City Multi (VRF)	Design and Application	CMDA
City Multi (Hybrid VRF)	Hybrid VRF Design, Application, Installation and Commissioning	HVRF
City Multi	Installation and Commissioning	CMPT1
City Multi	Service and Fault Finding	CMPT2
City Multi	Monitor Tool	MT
M Series and Mr Slim	Installation, Service and Fault Finding	MPISF
Ecodan	Design and Application Part 1	ED&A
Ecodan	Installation and Commissioning Part 2	EI&C
Ecodan	Service and Fault Finding Part 3	ES&FF





MELSMART
TECHNICAL SERVICES

City Multi / Chiller Stripdown

For installations where the City Multi / Chiller outdoor unit(s) cannot be moved to the final location, Mitsubishi Electric offer a City Multi / Chiller strip down service.

Product Range	Model Reference
	PURY-EM/EP YNW-A1 PURY-M/P YNW-A1 Small Module PUHY-M/P YNW-A1
	PURY-EM/EP YNW-A1 PURY-M/P YNW-A1 Large Module PUHY-P YNW-A1
	PURY-EM/EP YNW-A1 PURY-M/P YNW-A1 Extra Large Module PUHY-P YNW-A1

Product Range	Model Reference
	PQRY-P YLM-A1 PQHY-P YLM-A1
	EACV EAHV Climaveneta Chillers

MELSmart Chiller Service and Maintenance for Central Plant and I.T. Cooling

Bringing Mitsubishi Electric quality to your service and maintenance contract, utilising the latest technology for in field reporting and diagnostics. Our highly trained and qualified chiller service and maintenance engineers are based nationwide, operating from our network of service offices. Our engineers are experienced in the servicing, maintenance and repair of chiller systems across the industry.

What we do:

- Comprehensive service and maintenance plans
- National coverage (four dedicated service centres)
- Fast response times
- Reactive-response and call-out service
- Spare parts
- Project finance options available
- F-Gas and REFCOM Elite accredited engineers
- 24/7 365 emergency call out service
- Service and maintenance for all manufacturers' applied products:
  - Commercial
  - Government
  - Office
  - Data Centre
  - NHS / Education
  - Hotel / Leisure
- Commissioning / Start-up
- System checks
- Fault finding
- Extended warranties
- Strip-downs (model / application specific)





For further information and Service & Maintenance enquiries:

Hatfield: 01707 278683
Birmingham: 0121 607 2375
Manchester: 0161 866 6070
Scotland: 01786 450348
National Spares: 0161 866 6089 (option 2)

Email:
melsmartservicelondon@meuk.mee.com
melsmartservicebirmingham@meuk.mee.com
melsmartservicemanchester@meuk.mee.com
melsmartservicestirling@meuk.mee.com

Design and Consulting Services

As part of the Mitsubishi Electric commitment to supporting robust application of our leading technologies, a team of consultant sales professionals work nationally with mechanical building services specifiers and consultants to achieve early engagement in project design.

Clients are able to apply cooling, heating, ventilation and controls confidently within their individual projects, with the emphasis on a solution-based philosophy to support ‘as-designed’ performance and efficiencies.

This approach helps projects realise ‘as-specified’ performance and efficiency levels - all designed to achieve the most efficient and cost-effective outcome for the building operator, whilst reducing the overall environmental impact.

As initial designs move from the drawing board through planning, procurement, installation and commissioning, to on-going operation and use, we work closely with our customers to balance capital expenditure, system efficiencies, installation costs, control strategies and running costs.

Working in the real world

Recognising the commercial and delivery pressures of projects in the real world Mitsubishi Electric has in place a number of technically biased and focused Business Development Managers.

Our team support the M&E roll out and tackle the challenges associated with change of building use or layout (design evolution) from original design and to support robust value engineering that does not compromise the original design or performance criteria.

We understand the link between effective design and achieving the best outcomes for built environment owners, operators and users. The goal of our team is therefore to ensure robust design and to support an equally robust implementation.

Getting the right balance between capital cost, system efficiencies, installation costs, control systems and ultimately operating costs all need to be considered at an early stage to ensure a positive outcome.

The market-leading service we offer our clients is framed by on-going professional and personal development of our employees to meet ever increasing customer needs in product knowledge, industry practice and legislation.





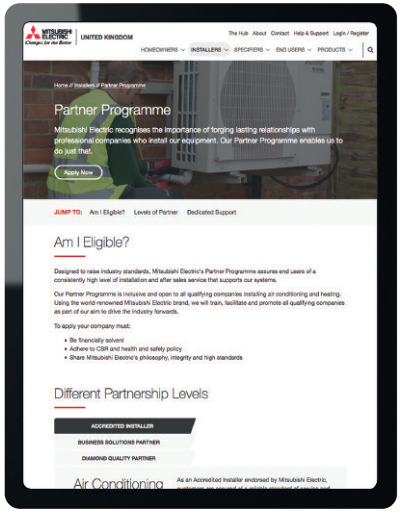
Mitsubishi Electric Partner Programme

The Mitsubishi Electric Partner Programme is inclusive and open to all qualifying air conditioning and heating installation companies, large or small.

Using the world-renowned Mitsubishi Electric brand, we will train, support and promote all qualifying companies as part of our aim to drive the industry forwards. Mitsubishi Electric recognises the importance of forging lasting relationships with professional companies who install our equipment. Our Partner Programme enables us to do just that.

Established in 2005 and designed to raise industry standards, our Partner Programme assures end users of a consistently high level of installation and after sales service that supports our systems. To be eligible to join our scheme in the first instance, prospective installation partners must comply with the necessary building regulations and meet specific industry, programme and CSR standards.

All partners are reviewed on a regular basis to ensure they continue to meet the required standards that makes them eligible to be part of the Mitsubishi Electric Partner Programme.



How to apply for the Partner Programme:
Speak to your Mitsubishi Electric Representative
or email **partner@meuk.mee.com**





GROW YOUR BUSINESS
Powered By Mitsubishi Electric

Partner Programme Benefits

Dedicated Partner Programme Team

Our dedicated Partner Programme Team are on hand to give Partners the support they need.

Mitsubishi Electric Customer Portal

We have developed our Customer Portal to help our Partners grow their business by enhancing their online presence on channels such as social media and via their own website.

Product images, social media copy, easy to follow strategy guides and marketing training videos are just a few examples of free content that can be downloaded.

Take a look today and see how you can use this to grow your business:
les.mitsubishielectric.co.uk/customer-portal

Joint Marketing / Relationship Development Fund (RDF)

We will work with Partners to promote our relationship and generate awareness of the unique business benefits of the Partner Programme to end-users.

We operate a Partner Programme Relationship Development Fund (RDF) allocated in relation to their commercial activities with Mitsubishi Electric.

Promotional Goods RDF Catalogue

Partners can take advantage of their RDF to enhance their company image with dual branded work wear and promotional items.

Product and Industry Training

Our Partners receive a free allocation of training courses and additional courses can be funded from the Relationship Development Fund.

24hr Technical Support

To assist our Partners in the maintenance of our equipment, we have a dedicated technical support team who will endeavour to speedily diagnose faults and offer solutions to the problems our Partners may encounter.

Extended Warranty

We will offer all Partners who adhere to our standards exclusive extended product warranties.

Business Support Tools

We have made it easier to do business with Mitsubishi Electric through the introduction of new technologies and our business tools available to Partners.

Factory Visits & Events

Our Partners and their clients will have the opportunity to witness first-hand the manufacture of air conditioning and Ecodan units at our manufacturing facility in Scotland. We organise regular factory visits to our manufacturing facility in Scotland, along with other events designed to develop our Partners expertise and support them in growing their business.





Mitsubishi Electric MELFinance Solutions

We developed MELFinance Solutions to respond to current market conditions and the need for customers to manage cash flow, while benefitting from the installation of leading technology to reduce carbon emissions and operational costs.

MELFinance Solutions can help end user customers fund the cost of new equipment and its installation via hire-purchase finance. Put simply, this means that (subject to financial status), an end-user customer can repay the combination of 'fixed asset' and maintenance costs over an agreed period of between 1 to 5 years. For qualifying companies, it is a flexible alternative to a traditional bank loan that provides significant cash flow and tax benefits:

No need for hefty deposits

Finance deals are secured wholly or largely on the heating, cooling and/or ventilation equipment being financed

Stronger cash flow

Releases tied-up cash and preserves other forms of credit for other business or operational needs

Fixed, regular payments

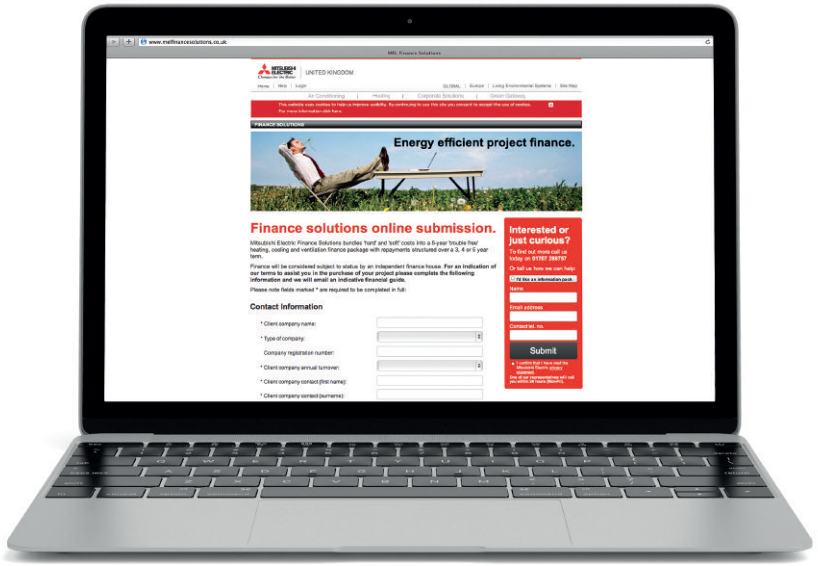
Helps you plan for the future by eliminating uncertainty and costly surprises

Quick decisions

We always aim to provide a prompt turnaround for funding applications

Immediate payment

Settlement of the full installation and equipment invoice upon installation/delivery



The five-year, "trouble-free" cooling, heating and ventilation finance package offers a host of advantages integrating on-site installation and commissioning fees, minimum three-year warranty on all Mitsubishi Electric equipment, scheduled maintenance visits and 24/7 emergency technical helpline for any on-site issues.

To get your no obligation finance proposal visit: **www.MELFinanceSolutions.co.uk** or email **MELFinanceSolutions@meuk.mee.com**

Mitsubishi Electric Europe B.V. holds a Consumer Credit Licence no. 0658891 for credit brokerage. As from 1st April 2014: Authorised and regulated by the Financial Conduct Authority as a credit broker.

Hire-purchase finance will be considered subject to status by an independent finance house as facilitated by Mitsubishi Electric. Finance house's terms and conditions apply. This website text does not constitute an offer to supply goods/services or provide or arrange hire-purchase finance. Finance only available where you enter into Mitsubishi Electric's contract package for removal of any existing installation, design, supply and commissioning services. Package is conditional on you entering into (i) a maintenance contract for the installation and (ii) a hire-purchase agreement with Mitsubishi Electric's finance partner. Otherwise, all goods are supplied subject to Company's General Terms and Conditions of sale, copy available upon request.

Mitsubishi Electric Deliveries

At Mitsubishi Electric, we take our delivery programme very seriously because we realise that our customers' businesses can depend on getting the right equipment on site at the right time.

That's why we have developed a comprehensive and flexible delivery programme with one of the longest delivery windows in the industry. With the ability to offer timed, weekend and Public Holiday deliveries, coupled with free 'Text Ahead' and 'Ring Ahead' functions, we aim to keep our customers informed every step of the way.

Delivery Notes
Cut off for next day deliveries is 2.30pm on the working day prior to delivery
Standard delivery is between 8.00am and 5.30pm
AM / PM / Timed / Weekend / Public Holiday deliveries are all available (additional notice needed and charges will apply - please refer to full delivery guidelines for further details)
Standard delivery will normally be made on an 18T rigid lorry equipped with a tail lift and a single driver with a pump truck
Other vehicle types will be utilised dependant on any site access issues and delivery size
If there are access restrictions at your nominated delivery point and a vehicle other than an 18T lorry is required, this will need to be booked in advance and a charge may apply
Our 'Text Ahead' and 'Ring Ahead' functions are available on all deliveries with the exception of parcel providers, which will offer 'Text Ahead' only
Deliveries available via HIAB (Flatbed vehicle with crane) / with chapter 8 signage - require 48 hours' notice and extra charges may apply
We offer a 2-man delivery service, removal of packaging and a stair walker - these require 48 hours' notice and extra charges will apply
Mitsubishi Electric is an Associate Member of the Fleet Operator Recognition Scheme (FORS) and all of our vehicles are FORS accredited to Bronze level
Collection is also available from our Milton Keynes warehouse - this must be pre-arranged and require at least 3 hours' notice
Returns to be notified within 15 working days - Terms and Conditions apply
MEHITS product deliveries are subject to alternate delivery arrangements - Terms and Conditions apply

Mitsubishi Electric Website, Document Library and The Hub

Website

For further information on any of our products and services please visit our website: **les.mitsubishielectric.co.uk** which has been designed to provide a detailed overview of the energy saving solutions we can provide you.

Document Library

Our website: **library.mitsubishielectric.co.uk** features all current operating and installation manuals, as well as product literature, case studies, CPD guides and more. There is no requirement for visitors to login to our sites to download the latest product and technical information. A document library app is also available allowing visitors to access this information simply from their tablet or smart phone.

The Hub - online content portal

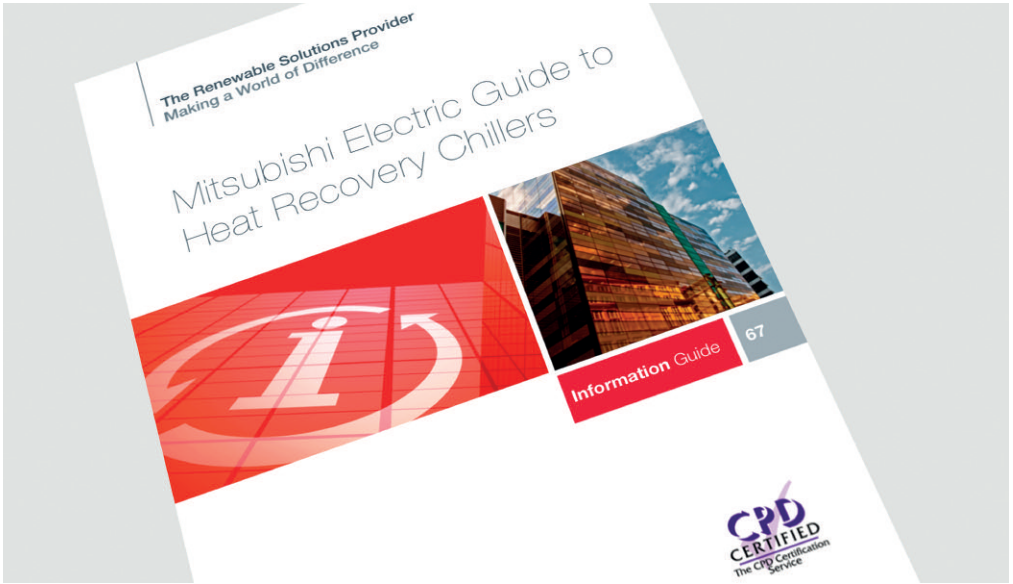
The Hub is a new approach from Mitsubishi Electric which offers useful and informative comments and articles from both leading independent editors and technical experts on the issues affecting the built environment, please visit: **thehub.mitsubishielectric.co.uk**

CPD Information Guides

Mitsubishi Electric is accredited by the Construction CPD Certification Service in many different areas, aimed at enhancing the knowledge of its customers and providing a view of the key issues facing our industry today.

We have produced a number of Industry Information Guides that are available to download from our Document Library. We also run a number of CPD seminars and training courses across the UK. **To find out more, simply contact your local Mitsubishi Electric sales office.**





Sales Contacts

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Tel: 01737 387170

Manchester
Tel: 0161 866 6060

Scotland
Tel: 01506 444960

Ireland
Tel: +353 (0)1 419 8800

MITSUBISHI ELECTRIC
Changes for the Better

Telephone: 01707 282880

MELSmart Customer Services & Support: 0161 866 6089

Option 1 - Air Conditioning Technical
Option 2 - Spares
Option 3 - Warranty
Option 4 - Heating Technical
Option 5 - Returns
Option 6 - Product Training & Site Services

email: livingenvironmentalsystems@meuk.mee.com
website: les.mitsubishielectric.co.uk

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Note: The fuse rating is for guidance only. Please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2088), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), R1234ze (GWP:7) or R1234yf (GWP:4). *These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP:1975), R32 (GWP:550), R407C (GWP:1650) or R134a (GWP:1300).

SAP No. 494754

Green Gateway®
www.greengateway.mitsubishielectric.co.uk
Mitsubishi Electric UK's commitment to the environment

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