

Comfort & IT Cooling Systems

Full product catalogue 2024

VRF & HVRF Systems, Heating, Ventilation,
Control Systems, Hydronic and IT Cooling Systems



LIVING ENVIRONMENTAL SYSTEMS

Comfort e It Cooling Systems

 **VRF System** 38-151

 **HVRF System** 152-211

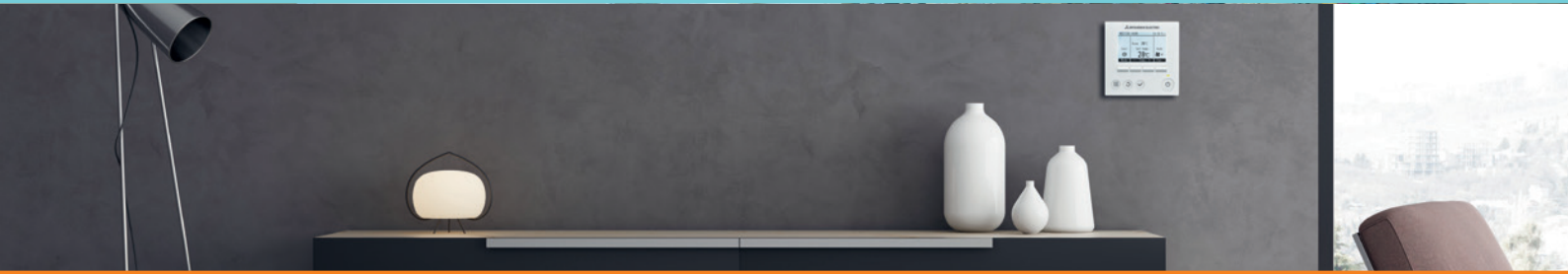
 **Heating** 212-237

 **Ventilation** 238-269

 **Control Systems** 270-307

 **Applied Hydronic systems** 308-361

 **IT Cooling** 362-383

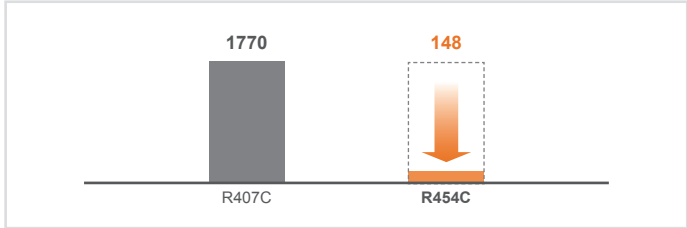




VRF-HVRF System CITY MULTI: innovation

New HOT WATER HEAT PUMP CAHV-R450YA-HPB

- Refrigerant system R454C Low-GWP refrigerant. The GWP of R454C refrigerant is 148. It is approximately 91% lower than the R407C refrigerant which is used in the conventional model (CAHV-P500YB-HPB)
- Multiple unit cascade control from 7.8kW to 640kW
- Achieves 70°C outlet temperature down to -2°C ambient temperature for continuous heating provision
- Multiple unit cascade control from 7.8kW to 640kW* capacity provides design flexibility for a wide range of commercial applications



New Indoor unit “Floorstanding type” PFFY-P VEM-E

New sophisticated design in clear white and pearl grey blends in with any interior.

Three installation options are available to suit a wide range of applications:

- Wall-mounted
- Freestanding
- Floorstanding

CITY MULTI	
CAHV-R450YA-HPB	NEW VRF INDOOR UNITS







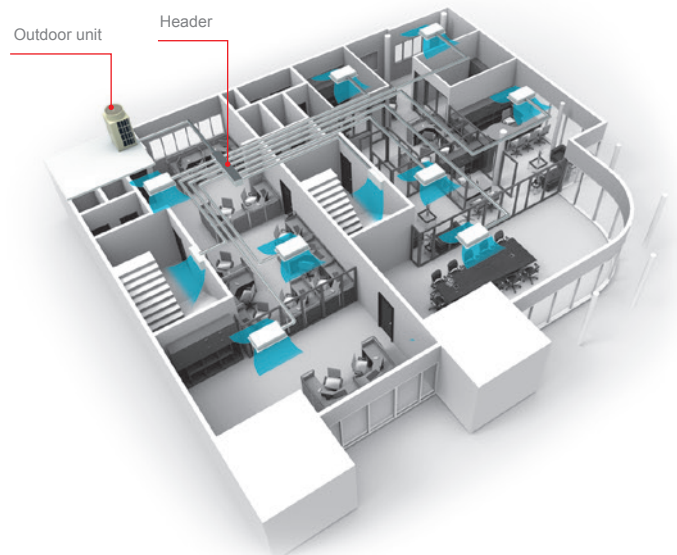
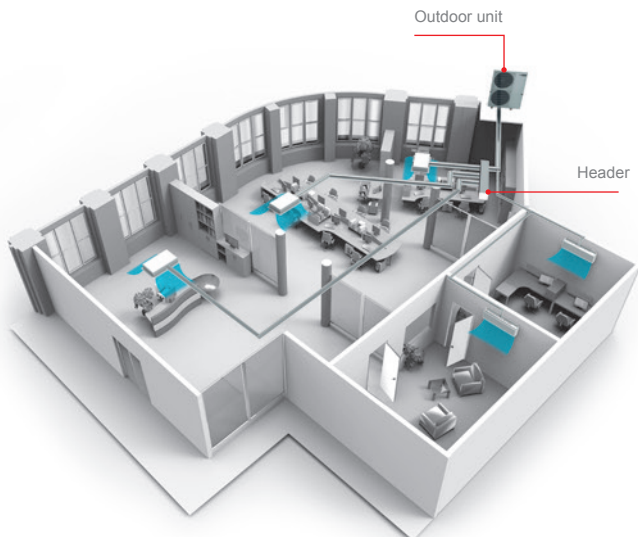
VRF System

System types



SMALL Y AND SMALL Y COMPACT LINES
(SMALL SYSTEM)

Y LINE
(HEAT PUMP)



Y Line

The two-pipe zoned system designed for Heat Pump Operation

The CITY MULTI Small lines (for small applications) and Y lines (for large applications) make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively. With a wide line-up of indoor units in connection with a flexible piping system, the CITY MULTI series can be configured for all applications. Up to 11 (Small line) or 50 (Y line) indoor units can be connected with up to 130% connected capacity to maximize engineer's design options. This feature allows easy air conditioning in each area with convenient individual controllers.

Y ZUBADAN Line

Bringing a year round comfort solutions to extreme climates



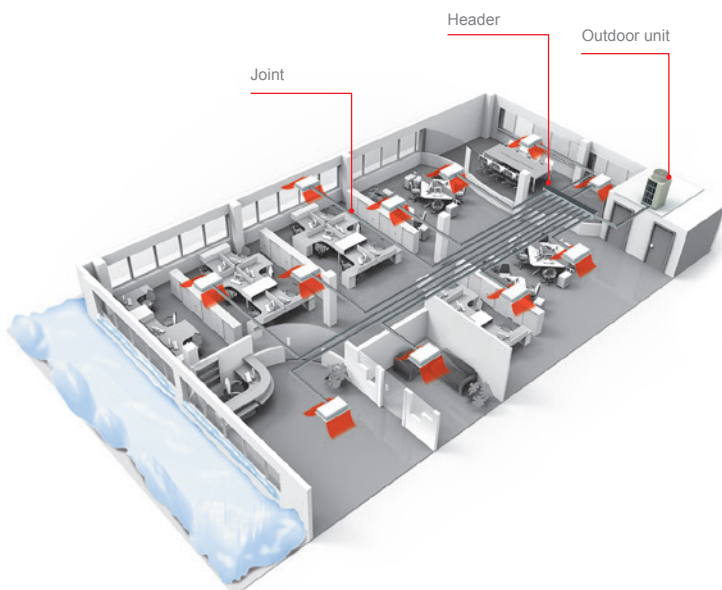
CITY MULTI ZUBADAN-Series combines the ultimate in application flexibility and powerful cooling and heating capabilities to deliver precise comfort even in the coldest days of the year down to -30°C. The new ZUBADAN-Series that has new, larger-capacity compressors with an injection function in the suction chamber is capable of running at the rated heating capacity down to -20°C. In addition, the guaranteed outside temperature range of heating operation is expanded down to -30°C.

R2 Line

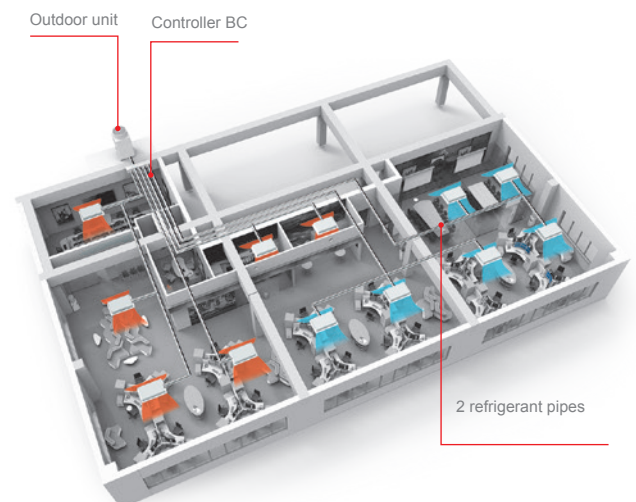
The world's first two-pipe system that Simultaneously Cools and Heats

CITY MULTI R2 line offers the ultimate in freedom and flexibility. Cool one zone while heating another. Our exclusive BC controller makes two-pipe simultaneous cooling and heating possible. The BC controller is the technological heart of the CITY MULTI R2 series. It houses a liquid and gas separator, allowing the outdoor unit to deliver a mixture of hot gas for heating and liquid for cooling, all through the same pipe. This innovation results in virtually no energy wasted by being expelled outdoors. Depending on capacity, up to 50 indoor units can be connected with up to 150% connected capacity.

Y LINE AIR CONDENSED HEAT PUMP



R2 LINE AIR CONDENSED RECOVERY HEAT PUMP SIMULTANEOUSLY HEATING AND COOLING



WY Line

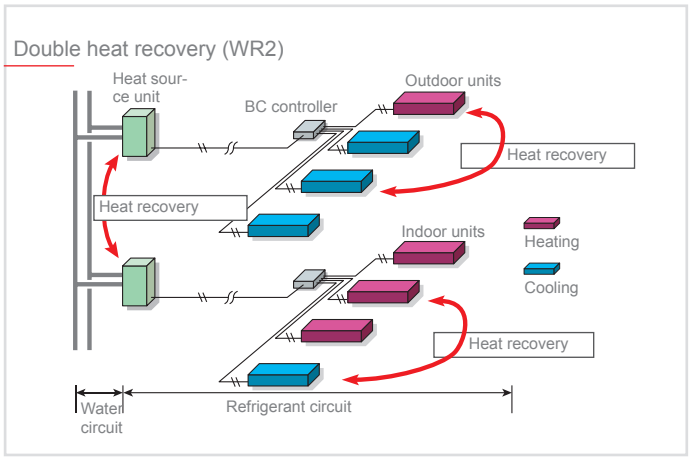
Water energy source system allows switching between cooling and heating

The WY-Line has all the benefits of the Y-Series using water source condensing units. Condensing units can be situated indoors allowing greater design flexibility and no limitation on building size. Depending on capacity, up to 17 to 50 indoor units can be connected to a single condensing unit with individualized and/or centralized control. The two-pipe system allows all CITY MULTI solutions to switch between cooling and heating while maintaining a constant indoor temperature.

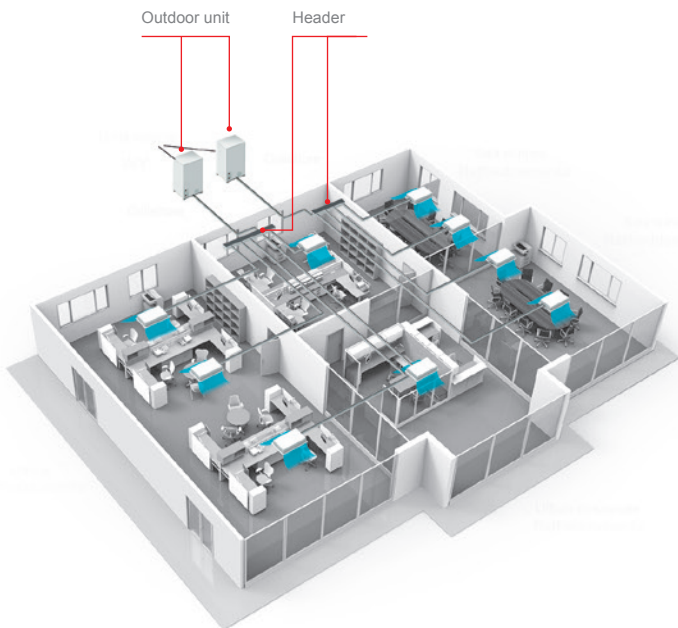
WR2 Line

Advanced water heat source unit enjoying the benefits of R2 series

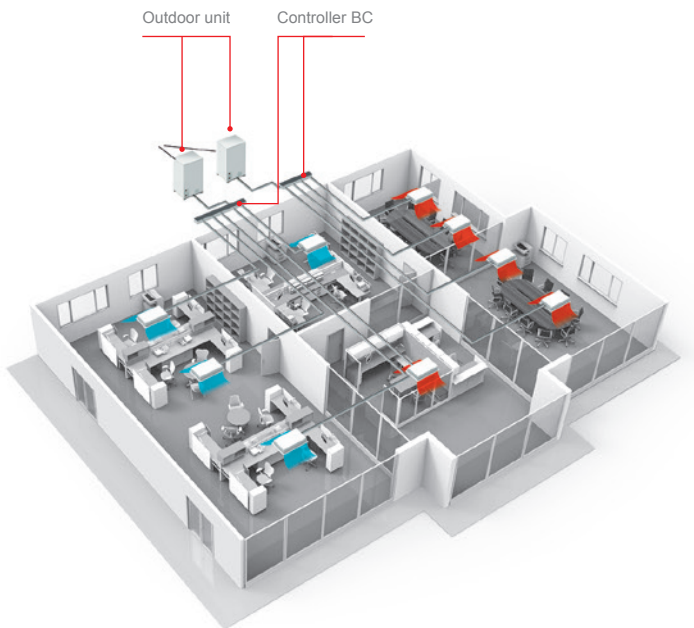
The CITY MULTI WR2 line provides all of the advantages of the R2 series with the added advantages of a water heat source system, making it suitable for wider range of applications in high rises, frigid climates, coastal areas, etc. Not only does it produce heat recovery from the indoor units on the same 2-pipe refrigerant circuit, it also produces heat recovery via the water circuit between heat source units, making it a very economical system.



WY LINE
WATER CONDENSED HEAT PUMP











WR2 LINE SIMULTANEOUSLY HEATING AND COOLING WATER CONDENSED





	<p>CITY MULTI SMALL Y SMALL Y COMPACT SYSTEM SMALL Y -HIGH CAPACITY- LINE</p>	<p>Compact heat pump systems</p>
	<p>CITY MULTI Y NEXT STAGE SYSTEM</p>	<p>Heat pump systems with continuous heating</p>
	<p>CITY MULTI Y NEXT STAGE HIGH EFFICIENCY SYSTEM</p>	<p>High efficiency heat pump systems with continuous heating</p>
	<p>CITY MULTI Y ZUBADAN SYSTEM</p>	<p>Heat pump systems optimized for cold climates</p>
	<p>CITY MULTI WY SYSTEM</p>	<p>Water condensed Heat Pump systems</p>
	<p>CITY MULTI R2 NEXT STAGE SYSTEM</p>	<p>Two-pipes Cooling / Heating simultaneous systems with heat recovery and continuous heating</p>
	<p>CITY MULTI R2 NEXT STAGE HIGH EFFICIENCY SYSTEM</p>	<p>High Efficiency two-pipes Cooling / Heating simultaneous systems with heat recovery and continuous heating</p>
	<p>CITY MULTI WR2 SYSTEM</p>	<p>Water condensed Heat Recovery systems</p>

	<p>SINGLE PHASE PUMY-SP VKM (-BS) - HP 4,5-6 PUMY-P VKM (-BS) - HP 4,5-6</p> <p>THREE PHASE PUMY-P YKM (-BS) - HP 4,5-8 PUMY-P YBM (-BS) - HP 10,12</p>
	<p>SINGLE Y PUHY-P YNW-A2 (-BS) - HP 8~20</p> <p>DOUBLE Y PUHY-P YSNW-A2 (-BS) - HP 16~36</p> <p>TRIPLE Y PUHY-P YSNW-A2 (-BS) - HP 38~54</p>
	<p>SINGLE Y PUHY-EP YNW-A2 (-BS) - HP 8~20</p> <p>DOUBLE Y PUHY-EP YSNW-A2 (-BS) - HP 16~36</p> <p>TRIPLE Y PUHY-EP YSNW-A2 (-BS) - HP 38~54</p>
	<p>SINGLE Y PUHY-HP YNW-A- HP 08~10</p> <p>DOUBLE Y PUHY-HP YSNW-A - HP 16~20</p>
	<p>SINGLE WY PQHY-P YLM-A1 - HP 8~24</p> <p>DOUBLE WY PQHY-P YSLM-A1 - HP 16~36</p>
	<p>SINGLE R2 PURY-P YNW-A2 (-BS) - HP 8~22</p> <p>DOUBLE R2 PURY-P YNW-A2 (-BS) - HP 16~44</p>
	<p>SINGLE R2 PURY-EP YNW-A2 (-BS) - HP 8~22</p> <p>DOUBLE R2 PURY-EP YNW-A2 (-BS) - HP 16~44</p>
	<p>SINGLE WR2 PQRV-P YLM-A1 - HP 8~24</p> <p>DOUBLE WR2 PQRV-P YSLM-A1 - HP 16~36</p>

System		HP	4,5	5	6	8	10	12	14	16		
		Model	P112	P125	P140	P200	P250	P300	P350	P400		
Air condensed	Heat pump Small Y Line Small Y Compact Line Small Y -High Capacity- Line	PUMY-P Y(V)KM (-BS) PUMY-SP VKM (-BS) PUMY-P YBM (-BS)		Single phase	4,5	5	6					
				Three phase	4,5	5	6	8	10	12		
	Heat pump Y Next Stage Line	PUHY-P YNW-A2(-BS) PUHY-P YSNW-A2(-BS)		SINGLE				8	10	12	14	16
				DOUBLE								8+8
				TRIPLE								
	Heat pump High Efficiency Y Next Stage Line	PUHY-EP YNW-A2(-BS) PUHY-EP YSNW-A2(-BS)		SINGLE				8	10	12	14	16
				DOUBLE								8+8
				TRIPLE								
	Heat recovery R2 Next Stage Line	PURY-P YNW-A2(-BS) PURY-P YSNW-A2(-BS)		SINGLE				8	10	12	14	16
				DOUBLE								8+8
	High Efficiency Heat recovery R2 Next Stage Line	PURY-EP YNW-A2(-BS) PURY-EP YSNW-A2(-BS)		SINGLE				8	10	12	14	16
				DOUBLE								8+8
Heat pump Y Zubadan Line	PUHY-HP YNW-A- HP PUHY-HP YSNW-A - HP		SINGLE				8	10				
			DOUBLE								8+8	
Water condensed	Heat pump WY Line	PQHY-P YLM-A1 PQHY-P YSLM-A1		SINGLE				8	10	12	14	16
				DOUBLE								8+8
	Heat recovery WR2 Line	PQRY-P YLM-A1 PQRY-P YSLM-A1		SINGLE				8	10	12	14	16
				DOUBLE								8+8

	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
	P450	P500	P550	P600	P650	P700	P750	P800	P850	P900	P950	P1000	P1050	P1100	P1150	P1200	P1250	P1300	P1350	P1400	P1450	P1500
	18	20																				
	8+10	10+10	10+12	12+12	10+16	14+14	14+16	14+18	16+18	18+18												
											10+14 +14	10+14 +16	10+16 +16	14+14 +16	14+16 +16	16+16 +16	16+16 +18	16+18 +18	18+18 +18			
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	18	20	22																			
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	18	20	22																			
	8+10	10+10	10+12	12+12	12+14	14+14	14+16	16+16	16+18	18+18	18+20	20+20	20+22	22+22								
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	8+10	10+10	10+12	12+12		14+14	14+16	16+16	16+18	18+18												
	18	20	22	24																		
	8+10	10+10	10+12	12+12		14+14	14+16	16+16	16+18	18+18												

Tecology

NEW

NEXT STAGE generation

New compressor NEXT STAGE GENERATION

The compressor, known as the heart of the air conditioner, has been newly developed. A new centrifugal force canceling mechanism and a new multi-port mechanism have been developed. In addition, we have mounted a high-efficiency motor. The synergetic effect of these new technologies increases the compressor performance and efficiency, and also helps to improve the performance of the outdoor unit.



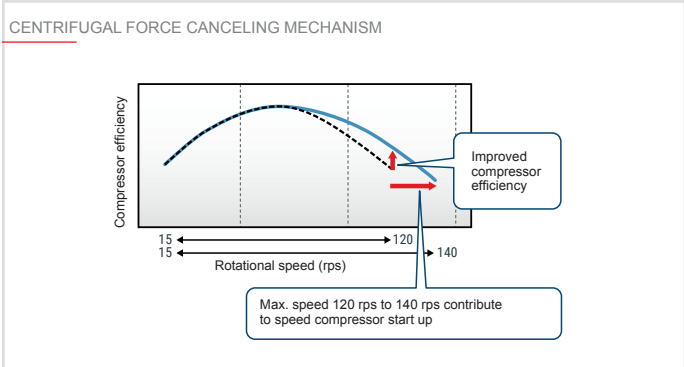
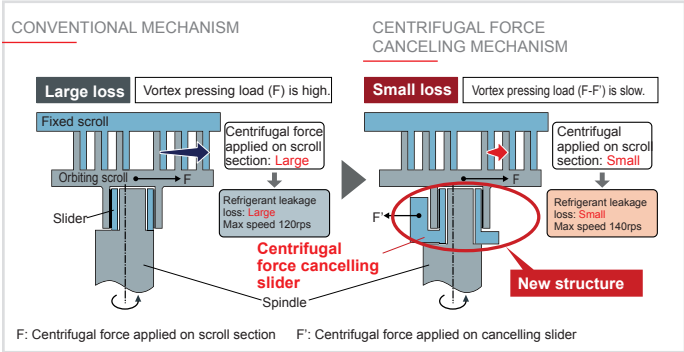
Centrifugal force canceling mechanism (8 to 14HP)

The structure of the scroll compressor causes a centrifugal force during operation. Conventionally, that centrifugal force is applied onto the scroll section.

This causes refrigerant to leak, and restricts the increase in rotational speed to a maximum of 120rps.

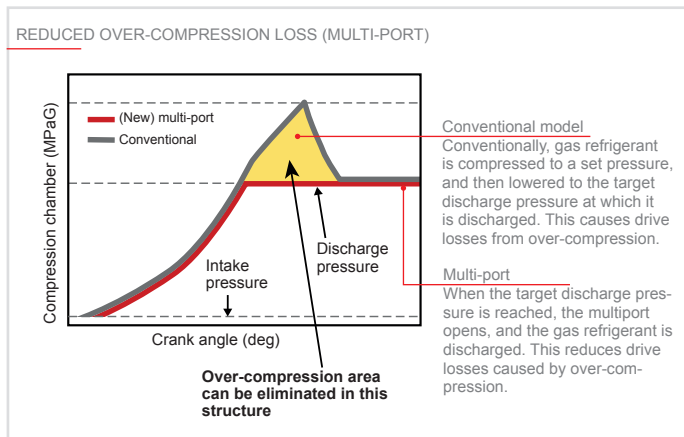
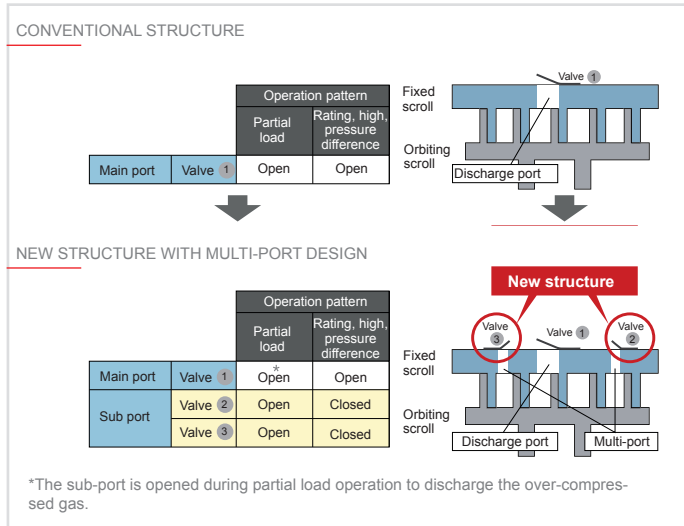
With the new compressor, a new structure (centrifugal force canceling mechanism) has been mounted to suppress the centrifugal force. This mechanism successfully suppresses the centrifugal force generated at the scroll section, reduces refrigerant leakage losses, and increases the compressor efficiency. The maximum rotational speed has been increased from the conventional 120rps to 140rps.

This new mechanism also speeds up the start of operation, and enables operations such as preheat defrost operation and the smooth auto-shift startup mode.



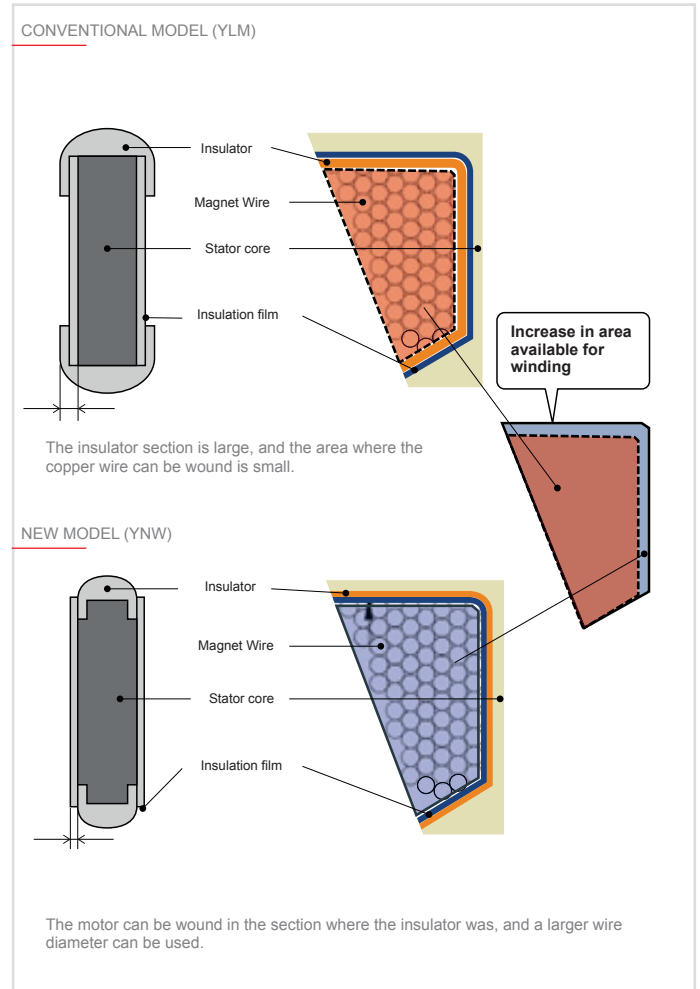
Multi-port mechanism

Efficient partial load operation is realised by avoiding over-compression. With the scroll compressor, the distance of the compression process in the scroll is usually fixed, so over-compression occurs during low loads and low rotation. The new compressor is equipped two sub-ports in addition to the conventional discharge port to reduce this over-compression loss during low loads. In operation conditions having a low compression rate, the distance in the compression process is kept short by that successfully avoiding unnecessary compression, and contributing to efficient partial load operation.



Improved high-efficiency motor

The insulator section that traditionally created a dead space is eliminated by insulating the motor's stator film. Since winding can be set in that section, the winding area can be increased by approx. 9%. The wire diameter has also been increased by two ranks, so the resistance between terminals is reduced, and the insulation distance is shorter. This improves the motor's operation performance and contributes to high-efficiency operation of the compressor.



Flat tube

FLAT TUBE thermal exchange coil

With the new **Y High Efficiency and R2 High Efficiency lines** of outdoor units, Mitsubishi Electric has also introduced the new FLAT TUBE all-aluminium thermal exchange coil. The new solution, which is covered by global patents, sets new standards for heating and cooling performance while also reducing the overall size of the machine.

The FLAT TUBE technology coil – also known as a “micro-channel heat exchanger” – consists of three components: the flat tubing, the internal fins forming the micro-channels, and two refrigerant fluid collector boxes.

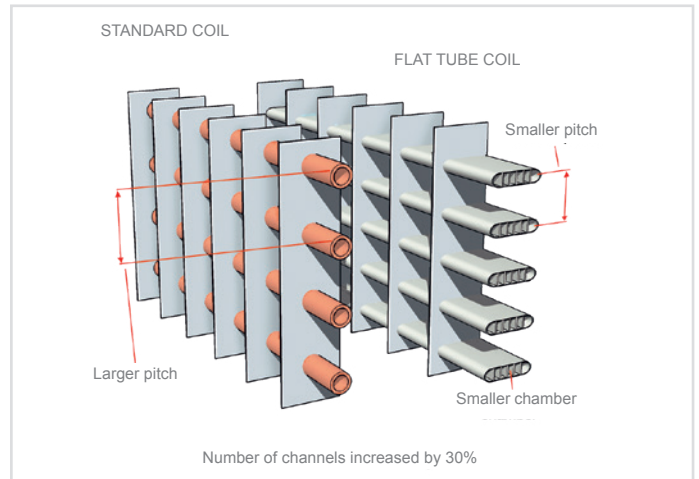
This type of heat exchanger was used for the first time in around 2008 in the automotive industry. With its globally patented FLAT TUBE system, Mitsubishi Electric has further developed this technology to offer even more advantages.

Unparalleled quality, efficiency and product integrity are the tangible results of a production process based on a single brazing stage instead of the 200-300 manually brazed individual connections necessary with a conventional copper/aluminium coil. Moreover, the FLAT TUBE heat exchanger requires a smaller

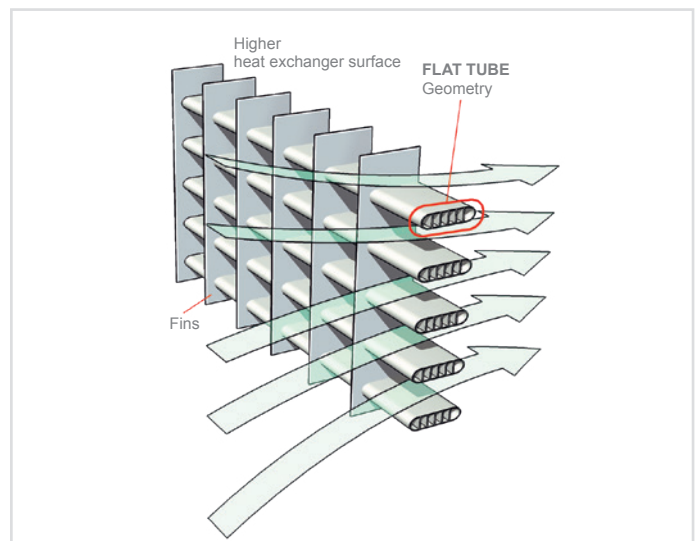
charge volume than a conventional bi-metal coil, as the microchannels limit the available volume for the refrigerant fluid while also creating a larger thermal exchange surface area.

Weather resistance is a key factor for the heat exchanger coil, as it is perhaps the component that is most exposed to the harmful effects of the atmosphere.

Here too, the **FLAT TUBE** coil outperforms other solutions: the single component in aluminium only is far less susceptible to corrosion than a conventional bi-metal coil in copper and aluminium. As if that were not already enough, the direct expansion coil of the new **Y High Efficiency and R2 High Efficiency lines** outdoor units receive a special galvanic treatment with **sacrificial zinc anodes** to further prevent any possibility of corrosion, while a **waterproofing treatment** protects the copper pipes connecting the heat exchanger coil to the refrigeration circuit against electrolytic corrosion. A special version (denominated -BS) may be ordered for installations in highly saline conditions or coastal zones, which is specifically designed for these applications.



- ➔ +30% more piping
 - ➔ +17% more Contact with Piping
 - ➔ +26% more Contact with Refrigerant
 - ➔ Smaller Pitch and Pipe Chamber
 - ➔ Reduced Refrigerant Volume
- A world first for VRF systems**





Inverter-driven compressor technology

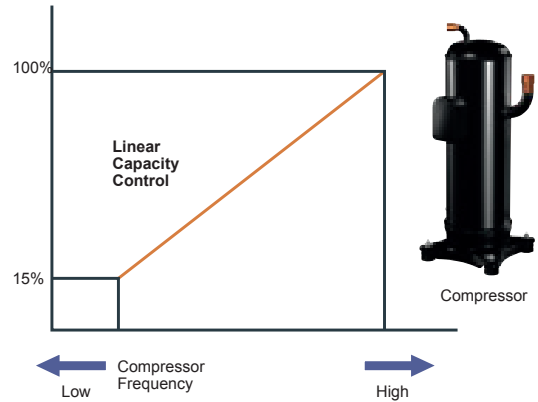
All CITY MULTI compressors are of the inverter-driven type, capable of precisely matching a building's cooling and heating demands.

The compressor varies its speed to match the indoor cooling or heating demand and therefore only consumes the energy that is required. When an inverter driven system is operating at partial load, the energy efficiency of the system is significantly higher than that of a standard fixed speed, non-inverter system.

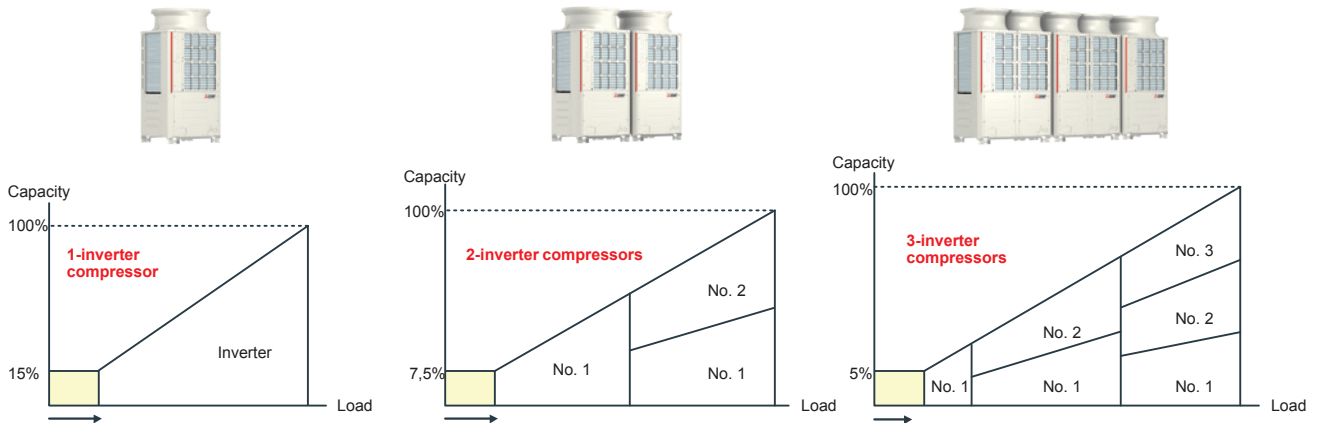
The fixed speed system can only operate at 100%, however, partial load conditions prevail for the majority of the time.

Therefore, fixed speed systems cannot match the annual efficiencies of inverter driven systems. Using proven single inverter driven compressor technology, the CITY MULTI range is favored by the industry for low starting currents (just 8 amps for a 20HP outdoor unit) and smooth transition across the range of compressor frequencies.

HEATING / COOLING CAPACITY

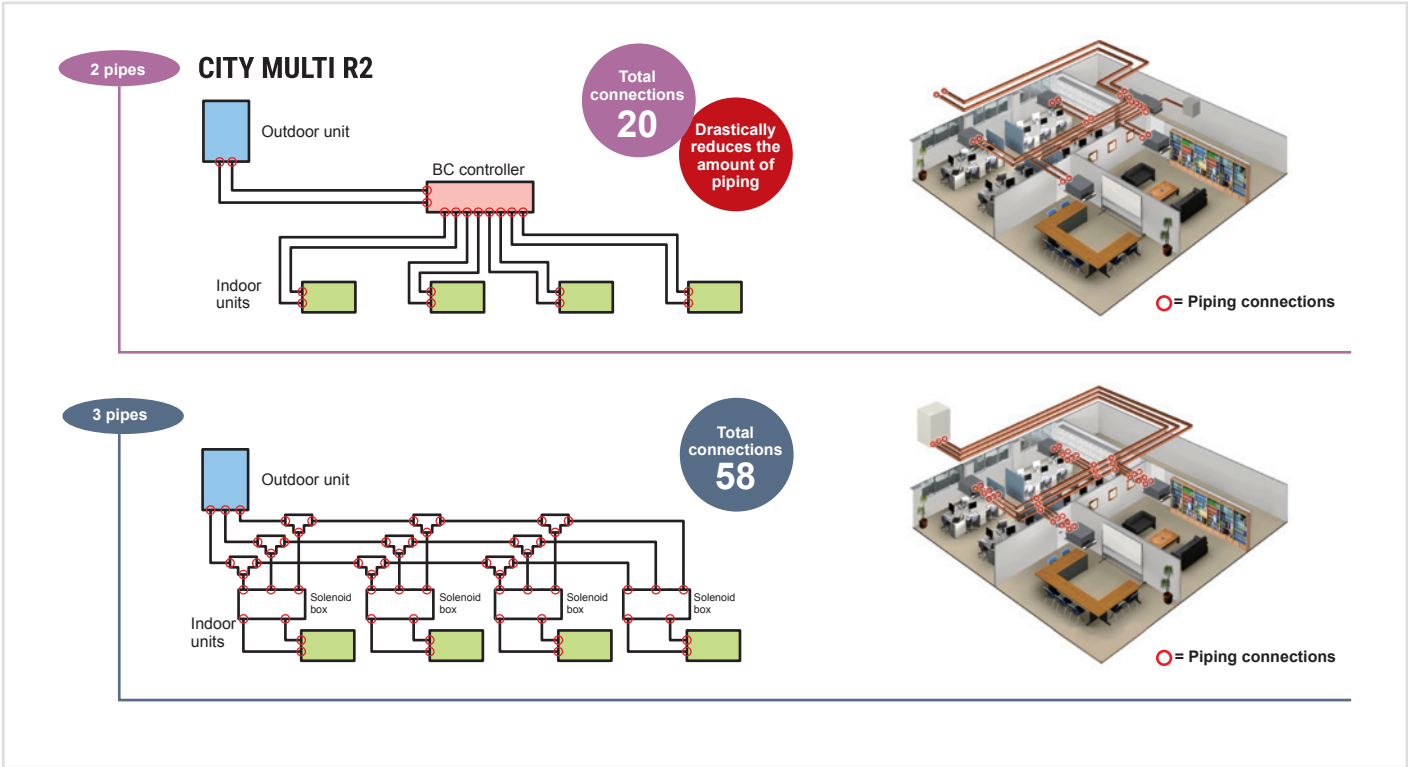


STABLE AND SMOOTH OPERATION



Heat recovery system

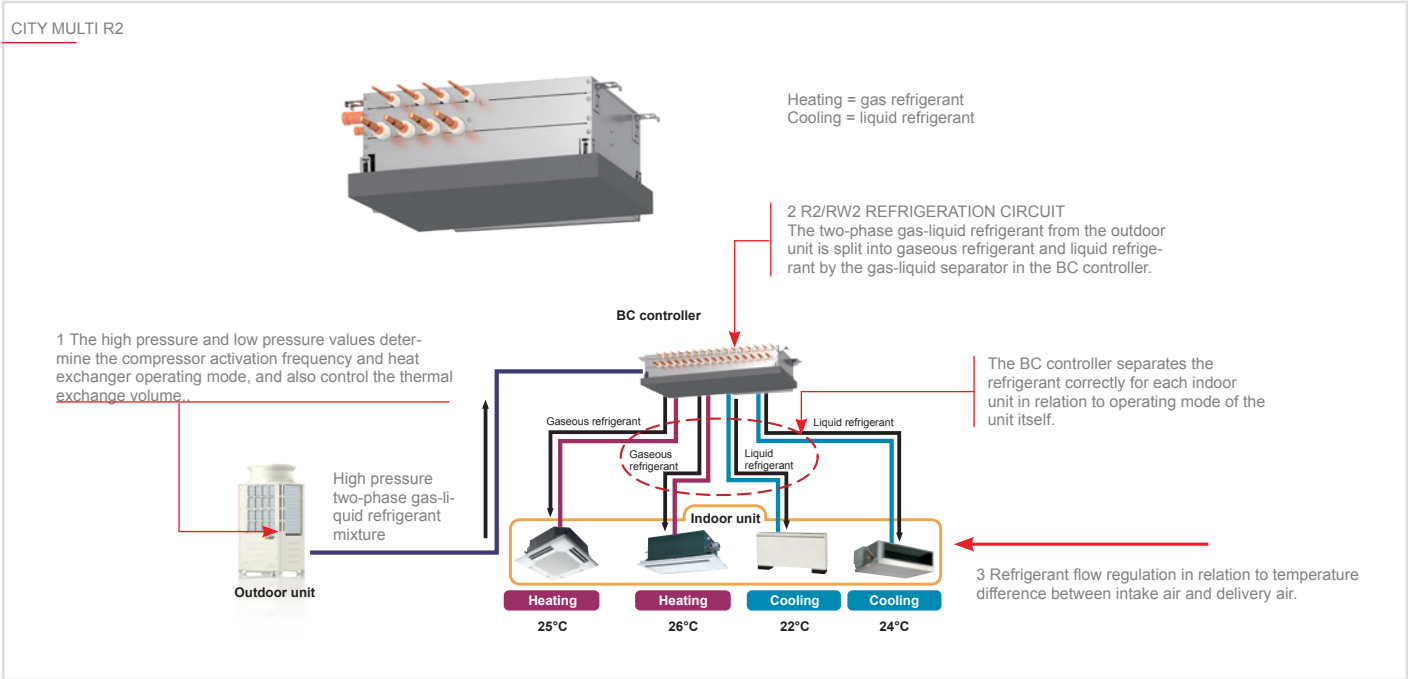
Comparison between different systems with different pipe connection points



How does the R2 / WR2 heat recovery system work with two pipes?

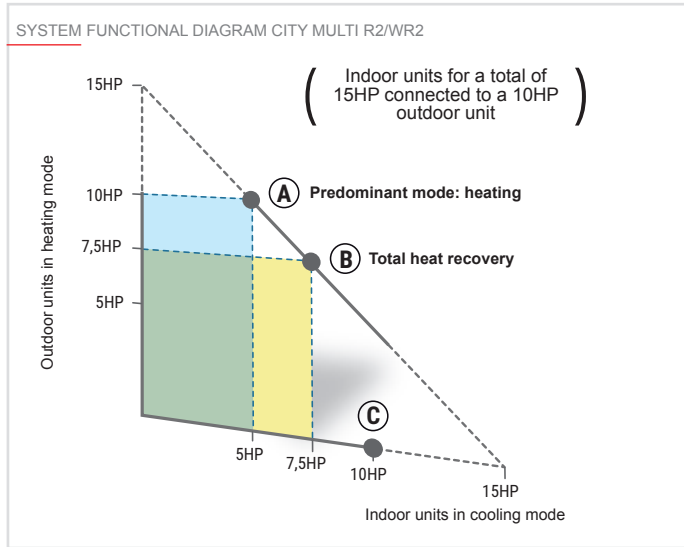
The secret of the VRF CITY MULTI heat recovery system lies in the BC controller. The BC controller contains a liquid/gas separator which allows the outdoor unit to produce a two-phase mixture of hot gas for heating and liquid for cooling delivered through the same pipe. Three pipe systems use one pipe for

each of these two phases. The mixture is separated when it reaches the BC controller, and the correct phase (gas or liquid) is sent to each indoor unit in relation to individual demand for heating or cooling.



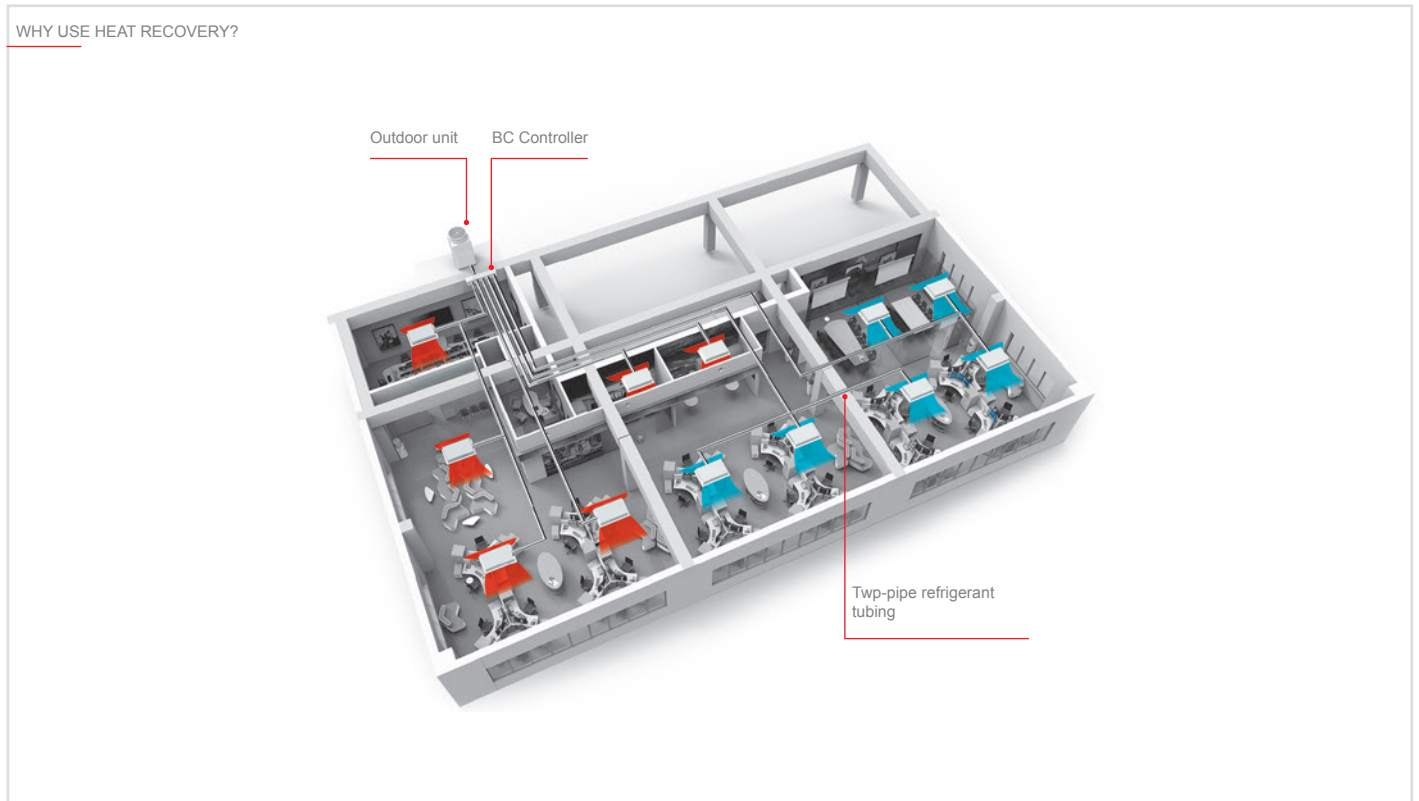
Heat recovery system

With the heat recovery system, the more often the simultaneous cooling and heating function is used, the greater the energy savings.



Why use heat recovery?

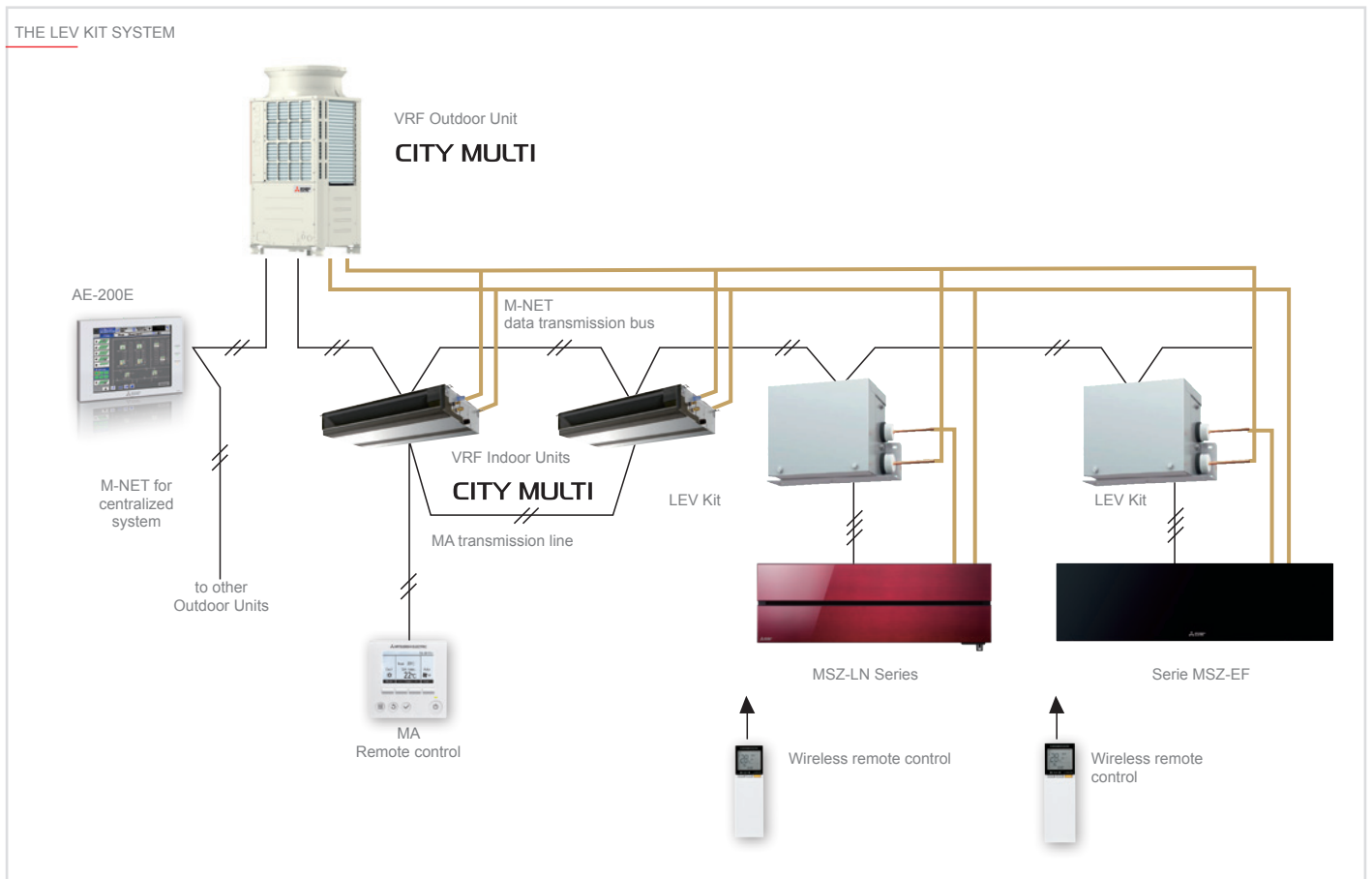
Flexibility and efficacy are decisive factors when choosing a system with heat recovery capability. For instance, while a heat pump system is suitable for an office with a large open space plan, in an office space subdivided into more units, a system is needed that can simultaneously heat and cool different zones in accordance with the preferences of each individual user. The efficacy of these systems stems from their ability to use by-products of cooling and heating to transfer energy where it is needed, therefore functioning as a balanced heat exchanger offering savings of up to 20% in operating costs compared with a conventional heat pump system. Moreover, the number of connection points needed for an R2 / WR2 system is significantly lower than the number required by a three pipe system. This reduces installation costs, further adding to the savings offered by using the VRF CITY MULTI system.



The LEV Kit system

The LEV Kit makes it possible to use the indoor units of Residential Line – which represent the state of the art in Mitsubishi Electric air conditioning system design – together with




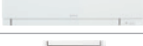


VRF CITY MULTI systems. Mixed installations can therefore be created with complete freedom.



The Mitsubishi Electric external units compatible with the LEV Kit are:

- Small Y Line
- Small Y Compact Line
- Small Y High Capacity Line
- Y Next Stage Line
- Y Zubadan Line
- Y Next Stage High Efficiency Line
- R2 Next Stage Line
- R2 Next Stage High Efficiency Line
- WY Line
- WR2 Line



Types and Sizes available Residential indoor units	15	18	20	22	25	35	42	50
MSZ-LN_VG(2) 		•			•	•		•
MSZ-AP_VG(K) 	•		•		•	•	•	•
MSZ-EF_VE/VG 		•		•	•	•	•	•
MSZ-SF_VAVE3 	•		•	•	•	•	•	•
MFZ-KJ_VE 					•	•		•
MFZ-KT_VG 					•	•		•

ATTENTION!!
FOR DETAILS ON COMPATIBILITY BETWEEN EACH MODEL OF INDOOR UNITS AND OUTDOOR UNITS PLEASE CONTACT YOUR LOCAL DISTRIBUTOR

Functions

M-NET Power

With the M-Net transmission line and the use of separate power and control circuits for indoor units, the following states can be identified automatically:

- indoor unit malfunction
- power loss to indoor unit

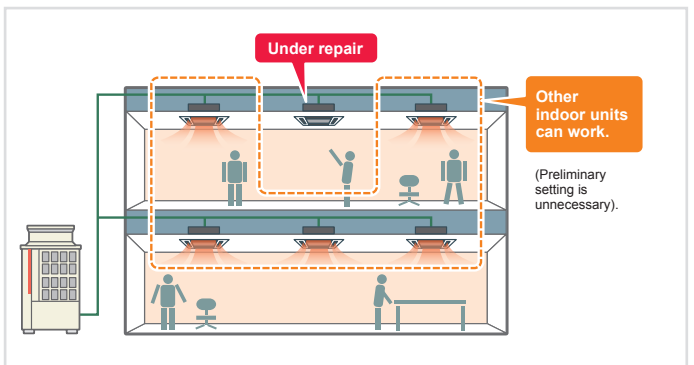
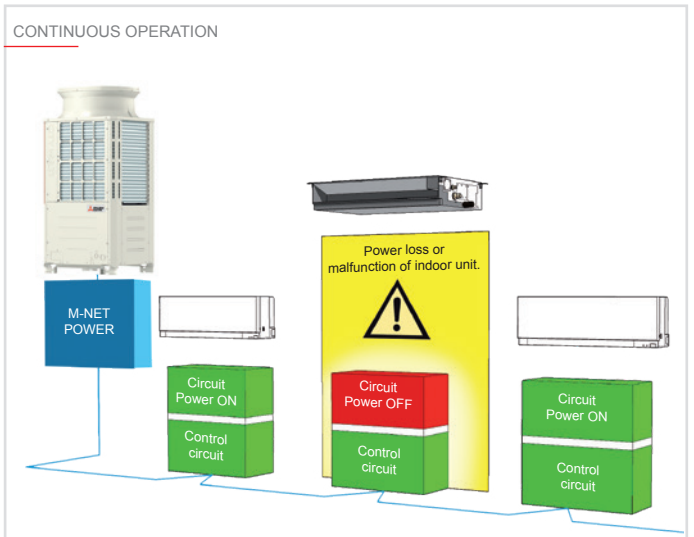
In the event of one of these conditions, the outdoor unit isolates the malfunctioning indoor unit or indoor unit receiving no power to ensure the continued electrical and refrigeration functionality of the system with no action required from a technician and/or a system administrator. This allows total flexibility in planning and laying out 220V AC power circuits, without the need for shared main lines and without requiring any additional devices to attain compliance with legislation for electrical systems. This circuit configuration is essential for situations where the system itself is shared by multiple owners or tenants, and where each must be able to electrically isolate their respective indoor terminal sections when required.

Continuous operation

In the event of power loss or partial malfunction of one or more indoor units, the system continues to function uninterruptedly and without requiring any action from a technician and/or system administrator.

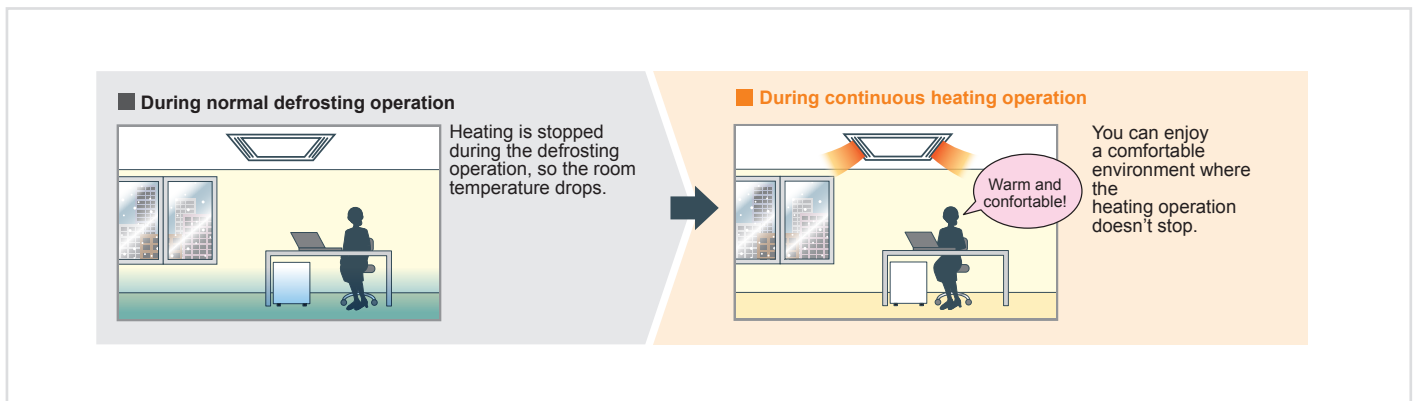
Continuous heating operation

Normally, it is necessary to stop the heating operation during defrosting. However, the continuous heating operation method makes it possible to perform defrosting while the heating operation continues.



Reduction in the stoppage time of the heating operation prevents drops in room temperature.

Use a dip switch on the outdoor unit to switch between the continuous heating operation method and the conventional defrosting method.

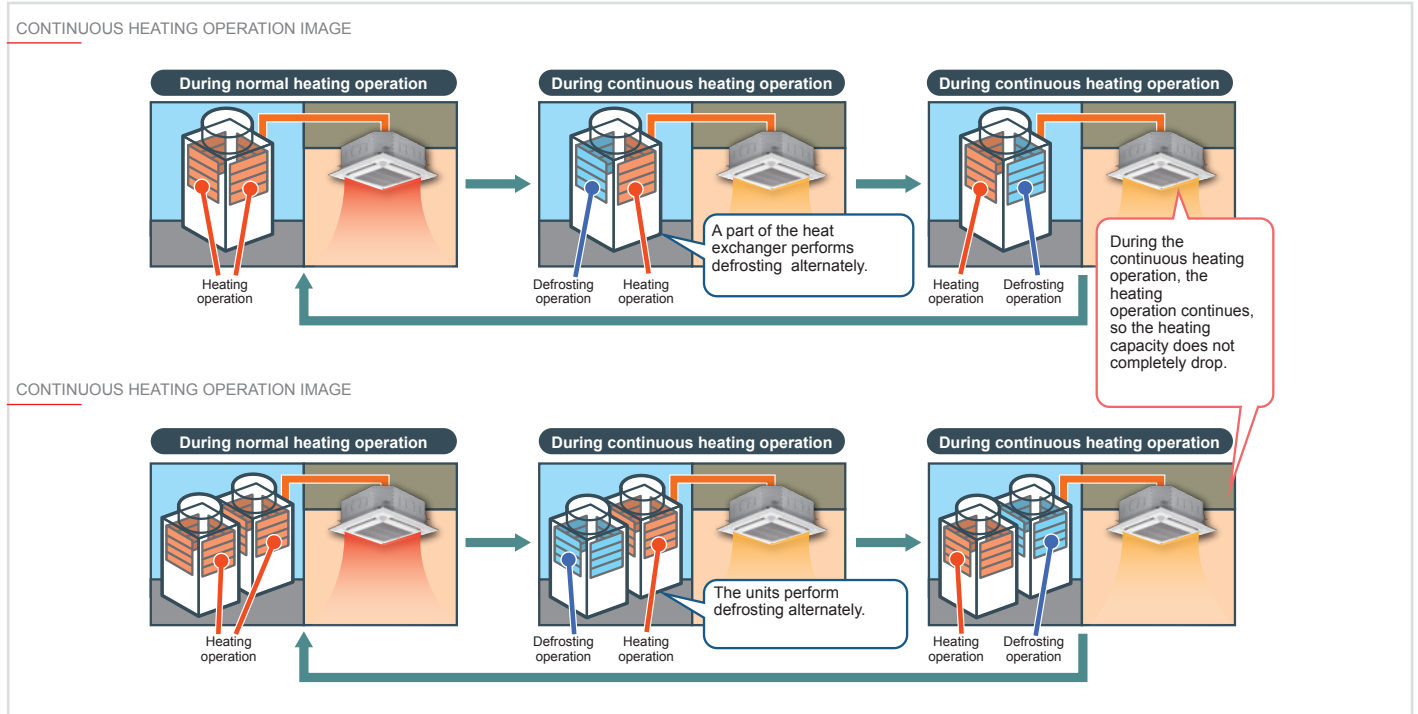


Continuous heating operation image (single unit)

The heat exchanger of the outdoor unit is split into parts. Even when defrosting is necessary, the heating operation is continued with a part of the heat exchangers.

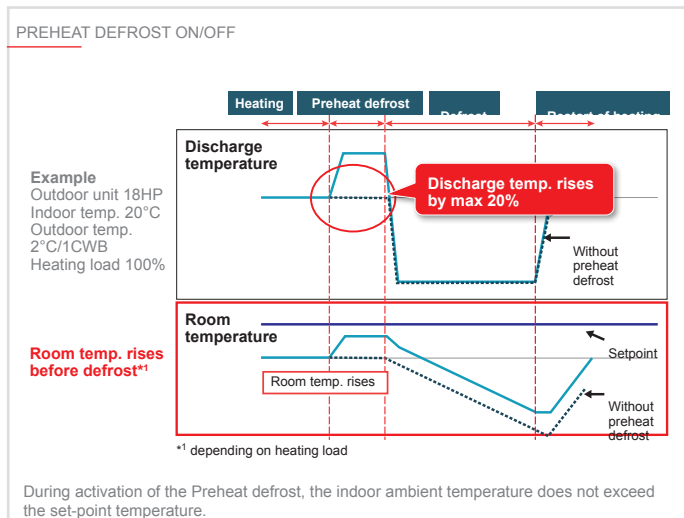
Continuous heating operation image (combination)

With the combination model, units perform defrosting alternately. While one unit is performing defrosting, the other continues heating.



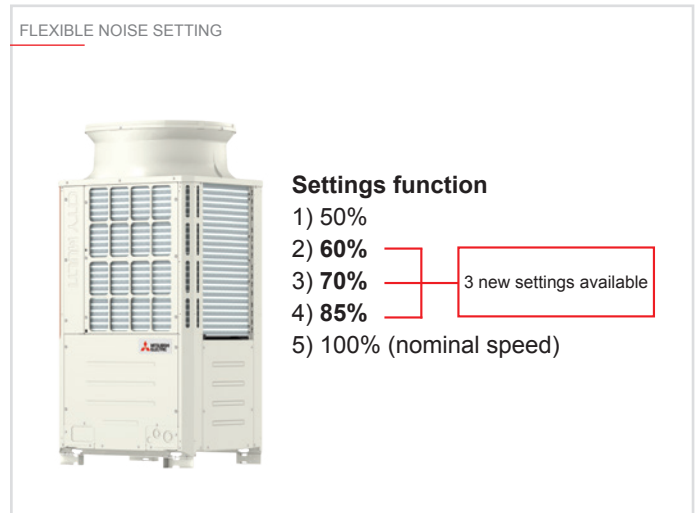
Preheat defrost operation

The new outdoor unit is equipped with a preheat defrost operation that raises the discharge temperature of the air before beginning defrost operation. This contributes to raising the room temperature before the start of defrost operation and prevents room occupants experiencing a chilling sensation.



Flexible Noise Setting

The "Low Noise" mode, which conventionally only had one pattern, has been increased to four patterns so that a mode can be selected from a total of five patterns, including the rated pattern. The low-noise mode has four patterns 85%, 70%, 60% and 50% in respect to the fan speed. This can be set with the outdoor unit's DIP switch. The pattern can be selected according to the customer's requests when low-noise operation is required.



200% extended connectivity system

The innovative Ecodan® HWS unified VRF system by Mitsubishi Electric for domestic hot water production brings VRF technology to the heating market.

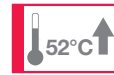
To ensure correct power usage in applications such as centralized residential systems and hotels, where permitted by the coincidence factor, Mitsubishi Electric offers a system allowing up to 200% extended connectivity.

The 200% extended connectivity system offers the advantage of simplified, intuitive and, most importantly, automated operation comparable to a conventional centralized heating system (e.g. gas boiler), meaning that the professional installer is no longer required to include complicated, redundant management and adjustment systems.

System architecture

For example, in a hypothetical installation with a P200 outdoor unit, this system permits the connection of units with a total power index equal to 200% that of the outdoor unit (P400), subdivided according to the following rules:

- Maximum power index for hydronic modules = P200 (100% of outdoor unit power index)

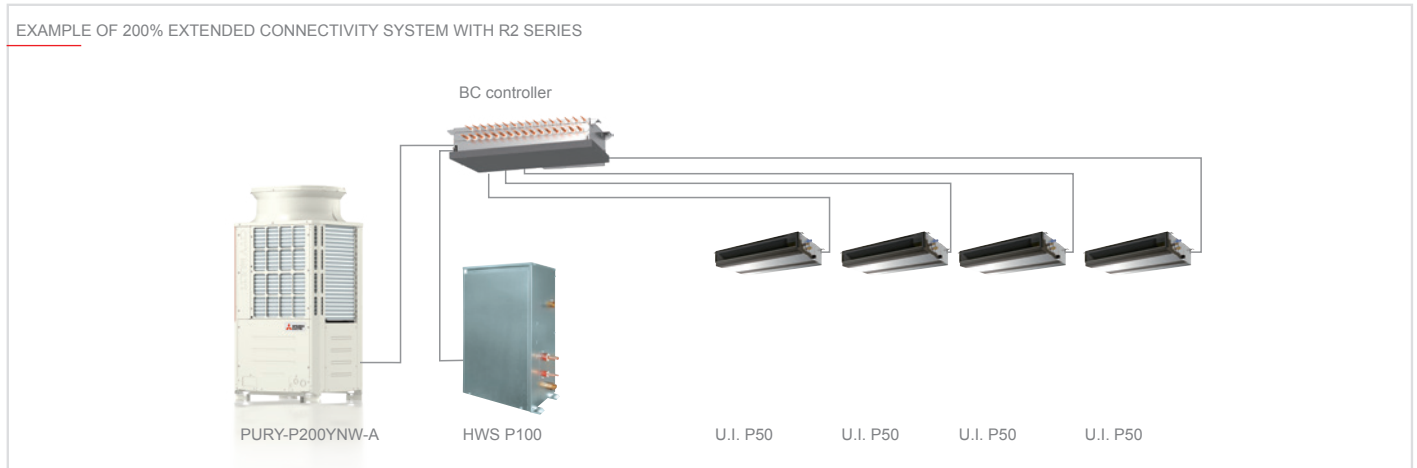


Extension of operating limit in Cooling to 52°C

In certain types of installation and in areas with high building density the passage of air can be obstructed. In very high outdoor temperature conditions and if the air expelled by the unit's fan is not correctly removed, it can stagnate and increase the air temperature around the machine. Thanks to an extended operating range of up to 52°C, the system can operate uninterruptedly even in these conditions.

- Maximum power index for indoor modules = P200 (100% of outdoor unit power index)

A VRF Ecodan® installation with this configuration will ensure simultaneous operation up to a power index of 150% in the case of an R2 heat recovery simultaneous heating and cooling system.



The right power for the right application

The 200% extended connectivity system conceived by Mitsubishi Electric is applicable only for mixed configurations with simultaneous production functions: domestic hot water production with HWS modules (in this case, only with R2 heat recovery simultaneous cooling and heating systems). This system requires that a precise operating limit is defined that will ensure that the outdoor unit power drawn is appropriate for the ambient loads effectively to be satisfied in all operating conditions and at all times. As a consequence, it is always important to evaluate maximum simultaneous power demand in the different operating modes possible.

Operation with simultaneous cooling and heating heat recovery systems (R2 (PURY))

Application	ATW Hydronic Module	ATW Hydronic Module	Indoor unit
	DWH Production	Primary Heating	Air Cooling and Heating
Winter	On (365days/year)	On	Off
Autumn/Spring	On (365days/year)	Off	On
Summer	On (365days/year)	Off	On



Extended settable temperature range in cooling mode, with minimum temperature of 14°C*

Where the ability to cool to temperatures lower than the standard lowest comfort value of 19°C (typically for sports centres, laboratories etc.) is necessary, the settable temperature range in cooling mode may be extended to offer a lowest temperature of 14°C.

The indoor unit fan is run at a higher speed in this configuration (except with the SMALL Y model outdoor unit of the PUMY series).

*Contact your local distributor for compatible indoor units with this function.



Rotation function

Y Series (Ecostandard Line, Y Line and Y High Efficiency Line) and R2 Series (Y Line and Y High Efficiency Line) combined modules use an automatic “Rotation Function” routine which optimises the usage of indoor and outdoor units to extend the lifespan of all system components.



Emergency backup function

Y Series (Ecostandard Line, Y Line and Y High Efficiency Line) and R2 Series (R2 Line and R2 High Efficiency Line) combined modules offer unparalleled reliability with the new emergency backup function, which is easily activated from the remote control of any indoor unit in the event of a system malfunction.

The backup function allows the system to continue operating in heating and cooling mode for an average period of 4 hours.



Energy efficiency control

Evaporating temperature control (during cooling)

In a traditional system, the evaporation temperature is kept constant regardless of the system load conditions. In low load conditions (when thermal loads to be dealt with are limited) increasing the evaporation temperature of the system decreases the compressor's workload and consequently limits the electrical absorption of the outdoor unit without affecting the environmental comfort level.

EVAPORATING TEMPERATURE CONTROL (DURING COOLING) NORMAL MODE

The evaporating temperature is kept constant regardless of the load. Even at low loads, the normal evaporating temperature does not change, which leads to energy losses during partial load operation.

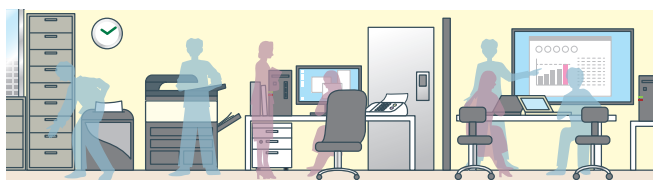
SMART EVAPORATING TEMPERATURE CONTROL MODE

The evaporating temperature is increased and the compressor input is decreased according to the load, resulting in increased operating efficiency. There are two patterns to control the evaporating temperature as follows.

- 1) The evaporating temperature is controlled to be constant, regardless of the ΔT . The evaporating temperature is set to a value that is higher than the normal evaporating temperature.
- 2) The evaporating temperature is controlled by shifting it according to the ΔT . The user can select from 4 control patterns.

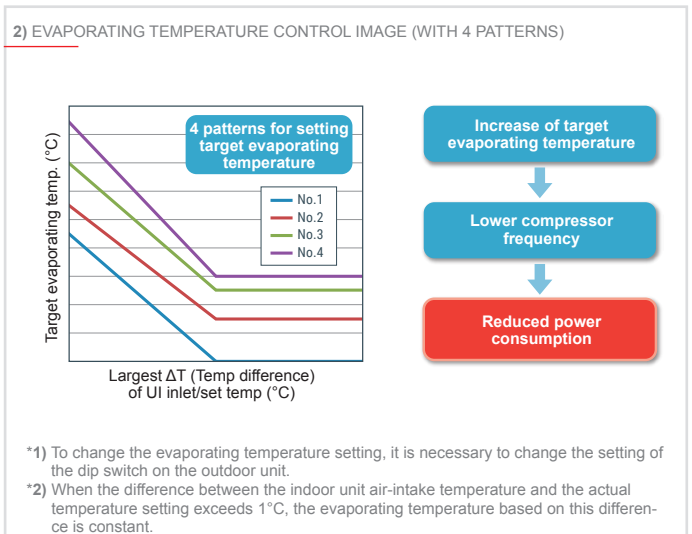
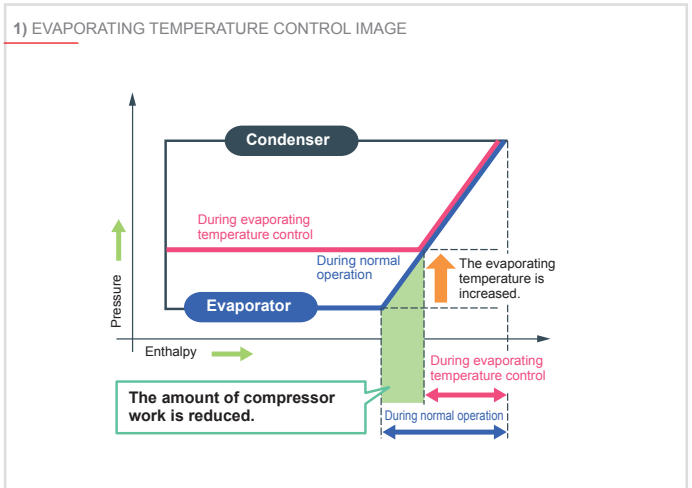
* The availability of 1 and 2 varies depending on the model. Refer to the function table.
* Changing the evaporating temperature reduces latent heat capacity. Select an appropriate pattern according to the installation conditions.

SUITABLE SITUATIONS



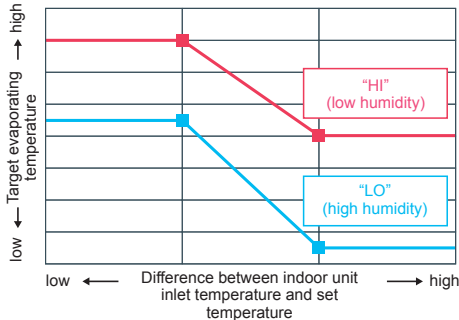
- Spaces with constant high temperatures from heat sources such as OA equipment
- When the load is low during periods when air conditioners are used for cooling (such as during the morning).

The new outdoor units are equipped with an evaporation temperature selection function, which automatically takes the system load conditions into account.



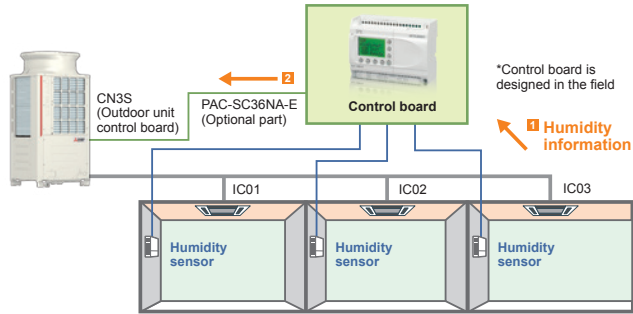
High sensible heat operation

The evaporating temperature is controlled according to room temperature and humidity, and refrigerant pressure.



With high sensible heat operation mode activated, air conditioners consume less energy, thereby realizing cost savings. If a locally-procured humidity sensor is installed, the evaporating temperature of the outdoor unit can be controlled optimally as shown below according to the difference between the indoor unit inlet temperature and set temperature. A wide range of temperature settings are available, from a low evaporating temperature close to the temperature for normal operation to a high evaporating temperature to realize energy savings.

LOCALLY-PROCURED HUMIDITY SENSOR INSTALLATION IMAGE



- 1 Humidity information is sent to the control board.
- 2 The control board judges the humidity information, and sends a HIGH/LOW signal to the outdoor unit through CN3S. The outdoor unit shifts the evaporating temperature depending on the information from the control board.

TEMPERATURE AND HUMIDITY CONDITIONS

	Room state	Condition of outdoor unit	Zone	Evaporating temperature control
<p>Comfortable temperature and humidity</p> <p>High sensible heat operation</p>	<p>Comfortable</p>	<p>Comfortable and energy-saving operation even at low compressor rotating speed</p>	<p>Humidity</p>	<p>Temperature of refrigerant in indoor unit kept high</p>
<p>High humidity</p>	<p>A little humid</p>	<p>Compressor rotating at medium speed to reduce humidity</p>	<p>Humidity</p>	<p>Temperature of refrigerant in indoor unit slightly reduced</p>
<p>High temperature and humidity</p>	<p>Uncomfortable</p>	<p>Compressor rotating at high speed to reduce temperature and humidity</p>	<p>Humidity</p>	<p>Temperature of refrigerant in indoor unit greatly reduced</p>

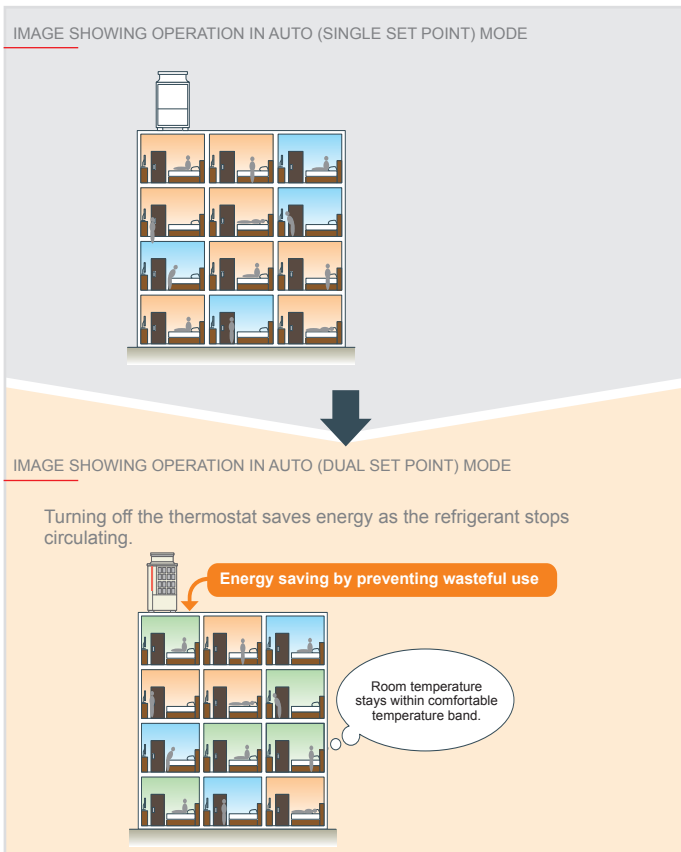
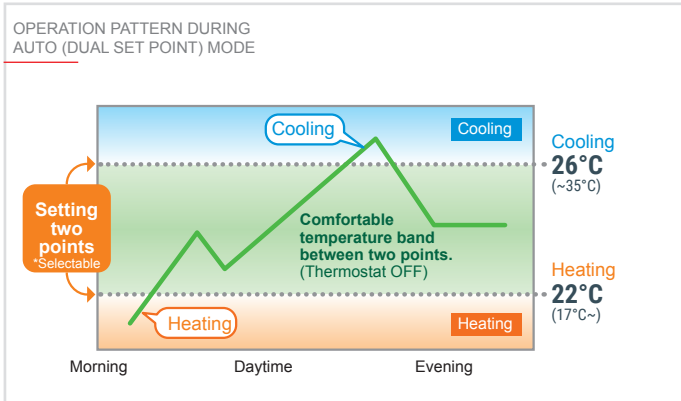


Dual Set Point

Normally, the desired room temperature is set to the same value for cooling and heating. However, the dual set point function makes it possible to set different temperatures for cooling and heating. When operation switches from cooling to heating or vice versa, the preset temperature changes accordingly.

Setting dual set points for the Auto mode on R2 and WR2 helps improve energy efficiency, compared to setting a single set point.

When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, the indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range. The outdoor unit does not operate in the dead band defined by two temperature points where the thermostat is off. This cuts down on unnecessary operation of the air conditioning system.

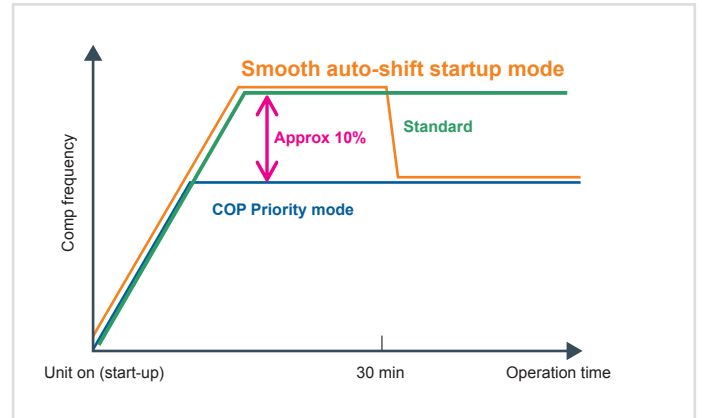


Heating operation Cooling operation Thermo OFF



Smooth auto-shift startup mode

Smooth auto-shift startup mode, a new operation mode on the outdoor unit, can now be selected in addition to the conventional COP Priority and Capacity Priority modes. In order to heat the room faster, Capacity Priority mode runs for 30 minutes when heating operation starts. The unit then switches to COP Priority mode to increase energy-saving efficiency. This enables both improved comfort and energy savings.



Compressor: new induction heating technology

The Y Line and R2 Line outdoor units employ a pre-heating system for the scroll compressor based on induction technology. This solution is used to warm the compressor housing to minimise energy absorption in stand-by state. Yet another solution contributing to reducing energy consumption.



Installation and maintenance

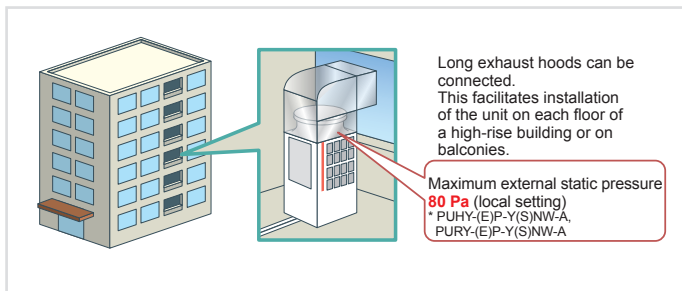
R410A R407C R22

Multi-refrigerant

The indoor units of VRF CITY MULTI systems are the first and only products on the market with multi-refrigerant capability. These units can operate with R22, R407C and R410A systems with no loss in performance, irrespective of the different pipe sizes. This allows unparalleled freedom for installation, as well as offering total reverse compatibility in the event of replacing indoor units with an R22 or R407C VRF CITY MULTI system.

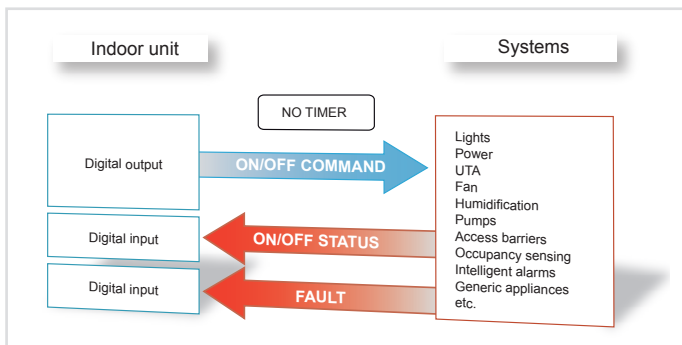
80Pa ↑ Selectable external static pressure of the outdoor unit

The static pressure specification of the outdoor unit can be selected (0, 30, 60, or 80 Pa). This facilitates installation of the unit on each floor of a high-rise building or on balconies. The static pressure that can be set varies depending on the model.



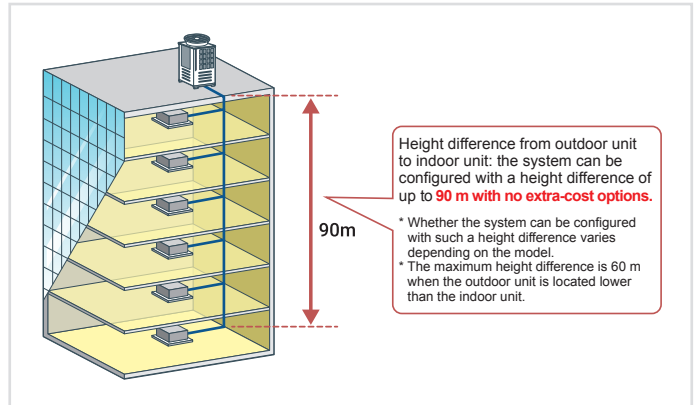
Intelligent Terminal Boards

Intelligent indoor unit terminal boards are a unique feature of Mitsubishi Electric VRF systems. These intelligent terminal boards make it possible to use the air conditioning system and the M-NET communication network, via the indoor units, as a vehicle for collecting, transferring and monitoring field signals from generic appliances such as lighting, power, access management, intelligent alarm systems etc. Using the intelligent terminal boards of the indoor units together with the existing infrastructure drastically reduces the number of cables needed to collect these field signals and the amount of labour required to route the cables to the centralized units. Typically, each indoor unit supports the following signals and functions:



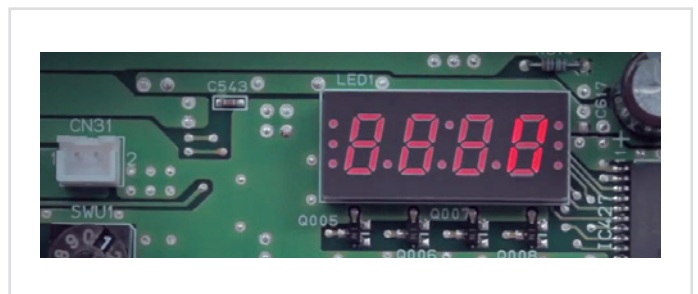
90m ↑ Usable in an application with a large vertical separation of up to 90 meters

A height difference of up to 90 m from the outdoor unit to the indoor unit can be supported with no extra-cost options. This increases design flexibility and facilitates installation of these units even in high-rise buildings.



Self-diagnosis of VRF CITY MULTI system

For even simpler maintenance, CITY MULTI systems have a self-diagnostic function which is capable of communicating malfunctions on different levels using fault codes. With the special Maintenance Tool software developed by Mitsubishi Electric, the user can connect to any point in the transmission line to acquire all technical operating information interactively.






USB ↓ Downloading operating data via USB

Operation data was retrieved from conventional models using the maintenance tool. On the new model, the data can be retrieved quickly via USB*1. It is unnecessary to carry the personal computer in which the maintenance tool has been installed, reducing field operation time and improving convenience. Software can be rewritten via USB, while data for up to 4 days and the 5 minutes after an error has occurred can be stored in the the USB memory device*2.

*1 In the case of OC-IC maximum configuration
*2 USB memory devices conforming to USB2.0 can be used.

Remote monitoring and control systems

			
Group/Individual simplified management*	•	•	•
Available for Smartphone and Tablet	•	•	•
Dedicated App		•	•
User restrictions	•	•	•
Outside the building (Cloud)		•	•
Internet connection needed		•	•
WEB Server centralized control needed	•		•
Advanced energy monitoring			•
Monthly/Custom charts and reports			•
Multi-site management		•	•
Energy consumption apportioning			•

* For compatible product lines please refer to catalogues or contact headoffice



3D Tablet Controller

3D Tablet Controller is the new solution by Mitsubishi Electric allowing portable system management from Smartphone and Tablet **inside the building**. User configuration, with restrictions and privileges, makes it the ideal solution in those application serving different environments, such as offices or apartments. Thanks to its simple and intuitive interface the user is able to control and monitor **air conditioning** and **hot water production** units on **mobile device**, just as easily as he would on a traditional remote control. This is possible thanks to WEB Server 3D centralized control installed on site, connected to the building Wi-Fi router.

MELCloud



- Cloud remote **monitoring and control** system.
- Born for residential applications, it's now being expanded to VRF CITY MULTI.
- **Complete and intuitive** solution with all main control and monitoring functions.
- Does not require WEB Server 3D centralized control (AE-200, EW-50).

RMI



- Cloud remote monitoring and control system **for professional use**.
- Allows all main remote control and monitoring functions.
- **Advanced energy monitoring** features are available, such as hourly consumption view, custom charts and data collection and display.
- Geo-localized **multi-site** management.
- **Multi-user** management for centralized systems.
- Energy **consumption apportioning**.







Mitsubishi Electric for sustainability

Thanks to our network of qualified professionals, we can contribute to obtain BREEAM and LEED certifications during the design stage.

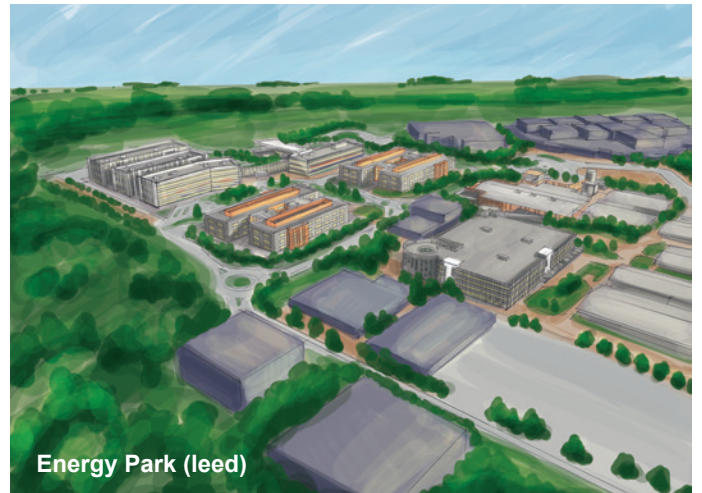


Our sustainable solutions will help you improve your BREEAM and LEED rating. We at Mitsubishi Electric have carried out BREEAM - and LEED - certified projects across Europe.

Environmental sustainability

CITY MULTI

BREEAM® Launched in the 1990s, BREEAM is one of the best-known tools to assess and certify the sustainability performance of a building. BREEAM is based on a rating that is clear and transparent for both the client and the professionals operating in the construction industry. All this has a positive impact on the activities carried out from the design stage to when the building is used.



The LEED certification plays a primary role in energy and environmental design. It ensures the use of efficient and sustainable resources, as well as environmentally friendly management of the building.

The assessment criteria include sustainability of the site, energy, materials and resources used, quality of the air, internal environment, design and innovation.

There are four levels of certification: Basic, Silver, Gold, and Platinum.



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Ecodesign - The ErP Directive

CITY MULTI

The European ecodesign directive on energy-related products (ErP) has become even more stringent to reduce greenhouse gas emissions resulting from the construction and real estate industries, overall energy consumption, and accelerate the transformation of this market with energy-efficient products.

An air conditioning system will change the performance with the changing of the seasons. That's why it's important to calculate its seasonal energy efficiency ratio (SEER) and the seasonal coefficient of performance (SCOP).

The ecodesign directive establishes the minimum efficiency requirements and a new method for measuring performance. The directive was implemented in the EU through the EN14825 standard, which establishes the seasonal performance factors of a climate control system.



Visit the website

erp.mitsubishielectric.eu/erp

Scan the QR code
to visit the website



BIM - Building information modelling

CITY MULTI

BIM is a collaborative way of working that allows the design team to share a virtual information model of a building and analyse its life cycle from design to demolition, highlighting any criticality of the technologies used.

This approach helps increase productivity and sustainability while improving risk management and reducing waste and costs.

BIM is not a tool. It's a method for working and sharing information that requires teamwork and collaboration, from when a building is first designed and commissioned to when it's used.

BIM can include any information about the building or parts of it. Usually, the information collected is about the geographic location, geometry, properties of the materials and technical elements, execution phases, and maintenance operations.

We at Mitsubishi Electric share our BIM files through the MEP content platform.

Click this link to access our BIM library
www.mepcontent.com/en/bim-files/



**Are you a designer of HVAC systems?
 Then MMESD (Mitsubishi Electric System Designer) for Revit and AutoCAD is the add-on you need.**

Download it now.
 You can use CAD files and Mitsubishi Electric Revit families to design in BIM successfully. If you have any doubts, our video tutorials can help solve them.

Click the link
<https://www.mepcontent.com/en/apps/detail/11/>
 to download the app and watch the demo



Click the link
<https://youtu.be/Pr5GiYmKfD8>
 to watch the video tutorials

MEPcontent







VRF Systems

Outdoor units

Air condensed

SMALL Y COMPACT LINE

PUMY-SP Y(V)KM (-BS)	42
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SMALL Y LINE

PUMY-P Y(V)KM (-BS)	48
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SMALL Y (HIGH CAPACITY) LINE

PUMY P200 YKM (-BS) / PUMY P250/300 YBM (BS)	52
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Y ZUBADAN LINE

PUHY-HP Y(S)NW-A	58
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Y NEXT STAGE LINE

PUHY-(E)P Y(S)NW-A2(-BS)	64
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R2 NEXT STAGE LINE

PURY-(E)P Y(S)NW-A2(-BS)	74
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Water condensed

WY WR2 LINE





PQH(R)Y-P Y(S)LM-A1 82

BC controllers for R2/WR2 lines







CMB-M V-J1/V-JA1/V-KB1, CMB-P V-KA1 90

Refrigerant piping length

96

		Line				
		Model	PUMY-SP-Y(V)KM	PUMY-P-Y(V)KM	PUMY P-YKM/YBM	PUHY-P-Y(S)NW-A2
Technology	Inverter-driven compressor technology	•	•	•	•	
	IH warmer				•	
	Flat tube Heat exchanger					
Function	Operation mode	COP priority mode				•
		Low noise mode	•	•	•	50, 60, 70, 85, 100%
		Auto-shift mode				•
		Dual set point	•	•	•	•
	Energy efficiency control	Evaporating temperature control (Fixed temperature control irrespective of the ΔT)				+6°C, +9°C, +14°C
		Evaporating temperature control (Automatic control shifting according to the ΔT)				4 patterns
		High sensible heat operation (during cooling)				•
		Demand control	4 steps	4 steps	4 steps	12 steps
	Defrosting	Continuous heating operation				•
		Pre-heat defrost				•
	External static pressure	Selectable external static pressure of outdoor unit	30 Pa	30 Pa	30 Pa YBM only	0, 30, 60, 80 Pa
	High ambient temperature	Operation at high outside temperatures	52°C	52°C	52°C	52°C
	Piping length flexibility	Usable in an application with a large vertical separation of up to 90 meters				•
	Maintenance	Rotation control				•
		Emergency operation mode				•
		Pump down function				• Automatic
		M-Net Power	•	•	•	•
		USB Data download				•

* Power supplied to the heater only for 22HP and 24HP (P550 and P600) single modules

						
	PUHY-EP-Y(S)NW-A2	PUHY-HP Y(S)NW-A	PQHY-P-Y(S)LM-A1	PURY-P-Y(S)NW-A2	PURY-EP-Y(S)NW-A2	PQRY-P-Y(S)LM-A1
	•	•	•	•	•	•
	•	•	• *	•	•	• *
	•	•			•	
	•	•		•	•	
	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%	50, 100%	50, 60, 70, 85, 100%	50, 60, 70, 85, 100%	50, 100%
	•			•	•	
	•	•	•	•	•	•
	+6°C, +9°, +14°C	+6°C, +9°, +14°C	+6°C, +9°, +14°C	+6°C, +9°, +14°C	+6°C, +9°, +14°C	+6°C, +9°, +14°C
	4 patterns	4 patterns	4 patterns	4 patterns	4 patterns	4 patterns
	•	•	•	•	•	•
	12 steps	12 steps	8 steps	8 steps	8 steps	8 steps
	•			•	•	
	•			•	•	
	0, 30, 60, 80 Pa	0, 30, 60, 80 Pa		0, 30, 60, 80 Pa	0, 30, 60, 80 Pa	
	52°C	52°C	-	52°C	52°C	-
	•	•		•	•	
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	Automatic	•	•	Automatic	Automatic	•
	•	•	•	•	•	•
	•			•	•	

SMALL Y COMPACT LINE

OUTDOOR UNITS - PUMY-SP Y(V)KM2 (-BS)



COMPACT SIZE AND
LOW WEIGHT

MAXIMUM FLEXIBILITY
OF CONNECTION
THROUGH BRANCH
BOX

TOP OF THE RANGE
EFFICIENCY





SUPER SILENT MODE

UP TO 30 PA STATIC
PRESSURE OUTDOOR
FAN UNIT

FLEXIBLE PIPE
CONNECTION

Compact dimensions




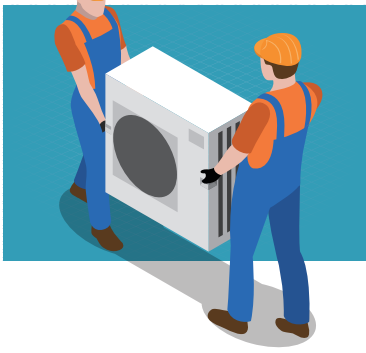
The SMALL Y COMPACT (PUMY-SP) delivers the power and performance of a VRF system in residential applications with a significantly smaller footprint than ever before, thanks to its new single-fan design.

<u>PUMY-P YKM3(-BS)</u>		<u>PUMY-SP Y(V)KM(-BS)</u>	
			
	Height 1,338mm		27% down
	Weight 125kg		Height 981mm
			25% down
			Weight 94kg

Easy installation and transport

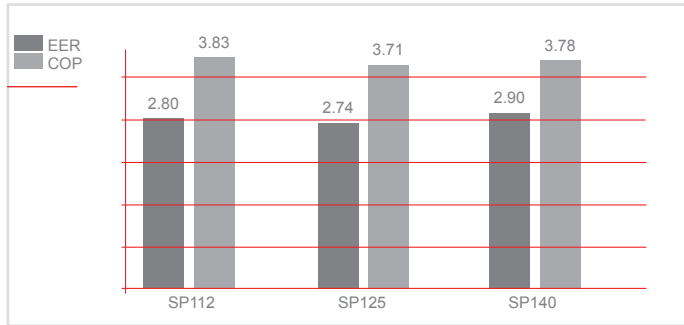
The compact chassis of the SMALL Y COMPACT (PUMY-SP) and above all its low height (under one metre) make the machine suitable for installation on balconies. The low weight makes the unit easy to transport.

THE OUTDOOR UNIT CAN BE INSTALLED ON BALCONIES

	
↓	↓
	

Top of the range efficiency

Despite its compact size and low weight, the new SMALL Y COMPACT (PUMY-SP) provides top of the range efficiency. This reduces operating costs.



Super Silent Mode

The SMALL Y COMPACT (PUMY-SP) is the first model in the range that can operate in the new "Super Silent" mode, which reduces sound emission by -10dB(A). It is therefore possible to install the unit even in particularly sensitive acoustic environments.

*The optional PAC-SC36NA-E connector is required in order to activate "Super Silent" mode.
*System capacity is reduced if "Silent" or "Super Silent" mode is activated.

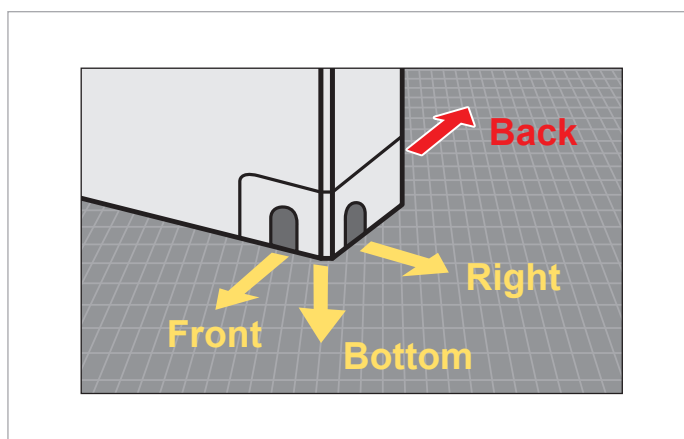
Geometric limits

The compactness of the new model SMALL Y COMPACT (PUMY-SP) does not affect the system's flexibility, so it is still possible to have extended and capillary pipe development.

GEOMETRIC LIMITS	
	PUMY-SP112/125/140 VKM(-BS)/YKM(-BS)
Total length of pipes	120 m
Total pipe length after branch box/boxes	70 (90) m
Maximum level difference between UI and UE (UE above)	50 m
Maximum height difference between UI and UE (UE below)	30 m

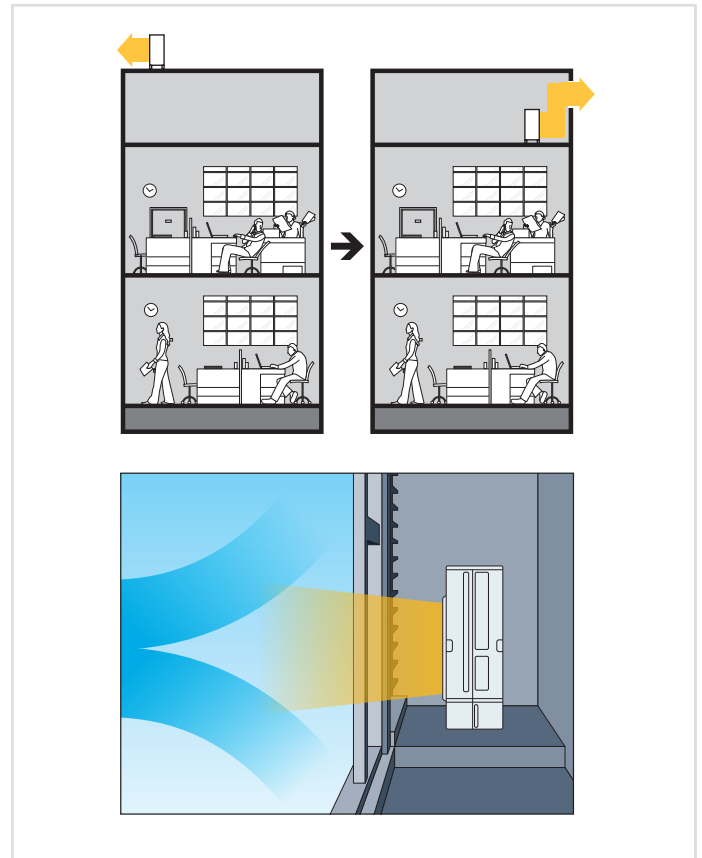
Flexible connection

The new SMALL Y COMPACT line is equipped with front, side, rear and lower refrigeration connections, making it easier to install.



Static pressure outdoor fan unit

The 30 Pa static pressure option increases flexibility in the choice of the unit's installation point.



Connectivity

SMALL Y COMPACT (PUMY-SP) single-fan units can be connected to Residential and Commercial line indoor units by branch-box PAC-MK34/54. It is also possible to create mixed systems with VRF indoor units and residential and commercial units. Thanks to these features, the system has essentially unlimited flexibility, serving every need.

New Branch Box (3 and 5 connections) - Total flexibility

The new Branch Boxes are designed to give the system the highest possible flexibility of configuration. It is therefore possible to create systems with CITY MULTI VRF units, consisting exclusively of Residential/Commercial Series indoor units or mixed systems in which the two types of units coexist.



M-NET Branch Box

The new PAC-MK34/54 branch boxes are designed for direct connection to MELANS control and supervision systems. To connect a system composed of internal units of the Residential or Commercial Line to an M-Net centraliser, it is therefore not necessary to provide a dedicated interface. Instead it is sufficient to use Branch Boxes and connect them to the communication bus consisting of a simple two-wire, non-polarised cable. In addition, the new Branch Boxes do not need to be prepared for condensate drainage.

Model	1 Branch Box		2 Branch Box	
	Via Branch Box	CITY MULTI Indoor units	Via Branch box	CITY MULTI Indoor units
PUMY-SP112	Max. 5	Max. 5	Max. 7	Max. 3
			Max. 8	Max. 2
PUMY-SP125	Max. 5	Max. 5	Max. 8	Max. 3
PUMY-SP140				

Technical specifications

MODEL			PUMY-SP112VKM2 (-BS)	PUMY-SP112YKM2 (-BS)	PUMY-SP125VKM2 (-BS)	PUMY-SP125YKM2 (-BS)	PUMY-SP140VKM2 (-BS)	PUMY-SP140YKM2(-BS)
HP			4.5	4.5	5.0	5.0	6.0	6.0
Power	Phases/Voltage/Freq.	V/Hz/n ^o	1-phase 220-230-240V 50Hz, 220V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz	1-phase 220-230-240V 50Hz, 220V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz	1-phase 220-230-240V 50Hz, 220V 60Hz	3-phase 380-400-415V 50Hz, 380V 60Hz
Cooling	Nominal capacity*1	kW	12.5	12.5	14.0	14.0	15.5	15.5
	Power absorption	kW	4.46	4.46	5.11	5.11	5.34	5.34
	SEER		7,13	7,13	7,20	7,20	7,37	7,37
	Operating temperature range	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB*3*4		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Nominal capacity*2	kW	14.0	14.0	16.0	16.0	16.5	16.5
	Power absorption	kW	3.66	3.66	4.31	4.31	4.36	4.36
	SCOP		5.07	5.07	4.22	4.22	4.48	4.48
	Operating temperature range	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.0°C	-20.0~15.0°C	-20.0~15.0°C	-20.0~15.0°C	-20.0~15.0°C	-20.0~15.0°C
Sound pressure*5	Heating/Cooling	dB(A)	52/54	52/54	53/56	53/56	54/56	54/56
Connectable indoor units	Model/ Quantity	CITY MULTI	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
		Branch Box	P10-P140, M20-M140/9	P10-P140, M20-M140/9	P10-P140, M20-M140/10	P10-P140, M20-M140/10	P10-P140, M20-M140/12	P10-P140, M20-M140/12
		Mixed System	P15~P100/8	P15~P100/8	P15~P100/8	P15~P100/8	P15~P100/8	P15~P100/8
External diameter of refrigerant connectors	Liquid/Gas	mm	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88
	External dimensions	mm	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)	981 x 1,050 x 330 (+40)
	Net weight	kg	93	94	93	94	93	94
	Ref Charge R410A/CO ₂ Eq	kg	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31	3.5 / 7.31

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 10 to 52.; when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VLE(R)M, PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, and M-Series, S-Series, and P-Series type indoor unit with branch box, M-Series type indoor unit with connection kit.

*4 -15 to 52.; when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*3.

*5 Cooling mode/Heating mode

*6 External static pressure option is available (30 Pa/3.1 mmH2O).

*7 94 (207), for PUMY-SP112/125/140VKM2-BS,

*8 95 (209), for PUMY-SP112/125/140YKM2-BS.

*Nominal condition *1,*2 are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

PUMY-SP Series Branch Box Connection Compatibility Table for PUMY-SP112/125/140

Series	Type	Model Name	Capacity											
			15	18	20	22	25	35	42	50	60	71	100	
M Series	Wall-mounted	MSZ-LN-VG2					•	•			•			
		MSZ-RW-VF-E					•	•			•			
		MSZ-AP-VG(K)	•		•		•	•	•		•			
		MSZ-FH-VE2					•	•			•			
		MSZ-EF-VG(K)		•		•	•	•	•		•			
		MSZ-SF-VA	•		•									
		MSZ-AP-VF-E	•		•									
		MSZ-SF-VE3					•	•	•		•			
	MSZ-GF-VE2										•	•		
	Floor-Standing	MFZ-KT-VG					•	•			•			
MFZ-KJ-VE-E						•	•			•				
1-way Cassette	MLZ-KP-VF					•	•			•				
	MLZ-KA-VA-E					•	•			•				
S Series	Ceiling-Concealed	SEZ-M-DA(L)(2)					•	•			•	•	•	
		SEZ-KD-VA-E					•	•			•	•	•	
	2x2 Cassette	SLZ-M-FA(2)	•				•	•			•			
		SLZ-KF-VA-E					•	•			•			
P Series	Ceiling-Suspended	PCA-M-KA(2)						•			•	•	•	•
		PCA-RP-KAQ-E									•	•	•	•
	4-way Cassette	PLA-M-EA(2)									•	•	•	•
		PLA-RP-EA-E									•	•	•	•
	Ceiling-Concealed	PEAD-M-JA(L)(2)									•	•	•	•
		PEAD-RP-JAQ(L)-E									•	•	•	•

PUMY-SP Series LEV Kit Connection Compatibility Table for PUMY-SP112/125/140

Series	I/U Type	Model Name	Capacity											
			15	18	20	22	25	35	42	50	60	71		
M Series	Wall-mounted	MSZ-LN-VG2					•	•			•			
		MSZ-AP-VG(K)	•		•		•	•	•		•			
		MSZ-FH-VE2					•	•			•			
		MSZ-EF-VG(K)		•		•	•	•	•		•			
		MSZ-SF-VA	•		•									
		MSZ-AP-VF-E	•		•									
		MSZ-SF-VE3					•	•	•		•			
	1-way Cassette	MFZ-KT-VG					•	•			•			

PUMY-SP Series CITY MULTI Indoor Unit Compatibility Table for PUMY-SP112/125/140

Series	Type	Model Name	Capacity													
			P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY MULTI series	1-way cassette	PMFY-P-VBM-E			•	•	•	•								
	2-way cassette	PLFY-P-VLMD-E			•	•	•	•					•	•	•	
	4-way cassette	PLFY-M-VEM-E			•	•	•	•	•				•	•	•	•
		PLFY-M-VEM6-E			•	•	•	•	•			•	•	•	•	•
		PLFY-P-VBM-E					•	•	•	•			•	•	•	•
		PLFY-P-VEM-E					•	•	•	•			•	•	•	•
		PLFY-P-VCM-E		•	•	•	•	•					•	•	•	•
		PLFY-P-VFM-E		•	•	•	•	•	•							
	Ceiling-concealed	PEFY-P-VMR-E-L/R			•	•	•	•								
		PEFY-P-VMS1-E		•	•	•	•	•	•							
		PLFY-P-VMA-E			•	•	•	•	•		•	•	•	•	•	•
		PEFY-M-VMA-A(1)			•	•	•	•	•		•	•	•	•	•	•
		PEFY-P-VMH(S)-E					•	•	•	•		•	•	•	•	•
		PEFY-P-VMH-E-F					•	•	•	•			•	•	•	•
	PEFY-P-VMHS-E-F													•	•	
	Ceiling-suspended	PCFY-P-VKM-E	•						•			•		•	•	
		PKFY-P-VLM-E		•	•	•	•	•	•							
	Wall-mounted	PKFY-P-VBM-E		•	•	•										
		PKFY-P-VHM-E					•	•	•							
		PKFY-P-VKM-E									•			•		
	Built in	PDFY-P-VM-E			•	•	•	•	•		•	•	•	•	•	
		PFFY-P-VKM-E2			•	•	•	•	•							
	Floor-standing	PFFY-P-VLEM-E			•	•	•	•	•		•	•				
		PFFY-P-VLRM-E			•	•	•	•	•		•	•				
PFFY-P-VLRMM-E				•	•	•	•	•		•	•					
PFFY-P-VCM-E				•	•	•	•	•		•	•					
Lossnay *																
													GUF-50/100RD(H)4			

*Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)



STADSHUS

SMALL Y LINE

OUTDOOR UNITS - PUMY-P Y(V)KM 6(5)-BS



MORE QUIETNESS
THANKS TO THE NEW
FAN

CONNECTABLE
TO **ecodan** ATW
Renewable Heating Technology
MODULES FOR HOT
WATER PRODUCTION
UP TO 55°C

GEOMETRIC PIPING
LIMITATIONS
INCREASED

H.I.C. CIRCUIT (HEAT
INTER CHARGER)
FOR THE SUBCOOLING
CONTROL

HEATING OPERATION
RANGE EXTENDED UP
TO -20°C OUTDOOR
TEMPERATURE

TOP PERFORMANCE
AND COP > 4 ON THE
ENTIRE RANGE

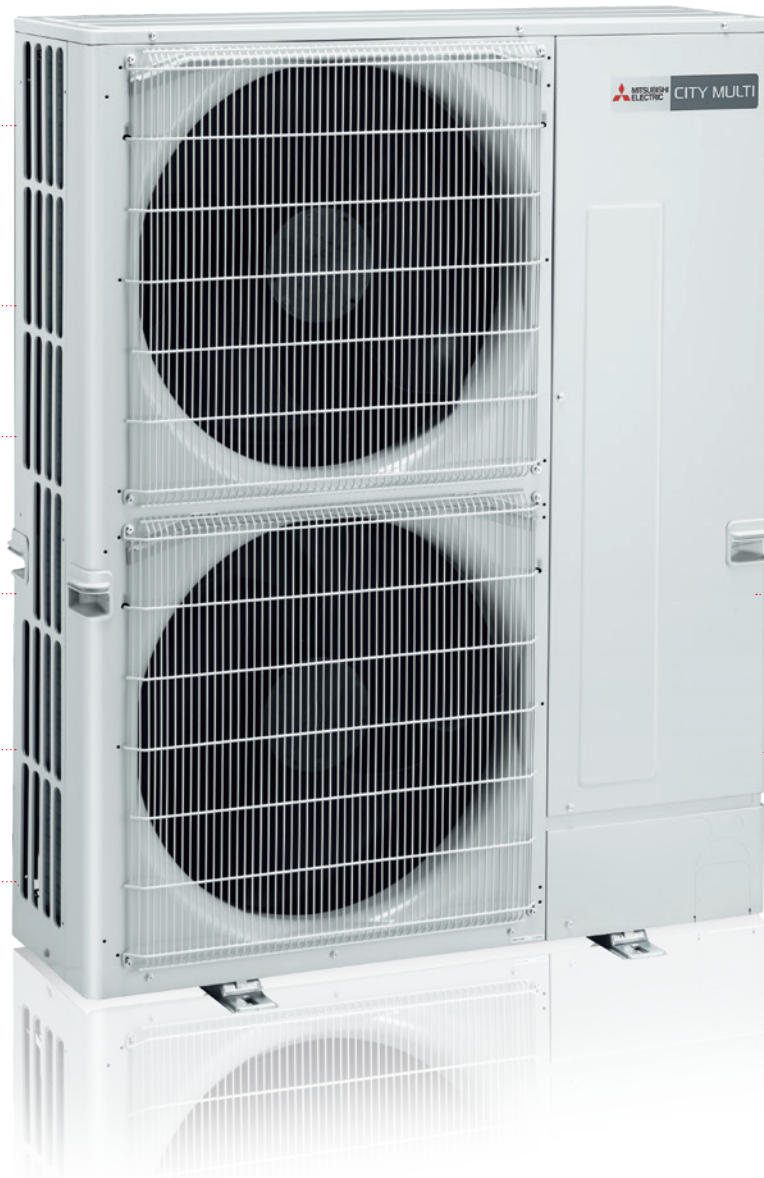
POWER RANGE
4-5-6 HP
THREE-PHASE
AND SINGLE SIZE

NEW CHASSIS WITH
INCREASED HEAT
EXCHANGE SURFACE

INCREASED
RELIABILITY

CONNECTABLE TO
RESIDENTIAL AND
COMMERCIAL INDOOR
UNITS BY LEV-KIT AND
BRANCH BOX

NATIVE REPLACE
TECHNOLOGY
FUNCTION FOR THE
REPLACEMENT OF R22
SYSTEMS



New PUMY Y(V)KM 4(5) - The smallest, but with all the technology and efficiency of our bigger units

The SMALL Y (PUMY) series of outdoor units by Mitsubishi Electric, which now offers 7 different variants (with single and three-phase 4.5, 5 and 6 HP versions and a three-phase 8 HP version), is the ideal solution for large homes and medium-sized offices. These outdoor units may be connected to up to 12 indoor units of different type and power rating. This system offers exceptional savings in operating costs and is suitable for both residential and commercial applications.

Class-beating energy efficiency

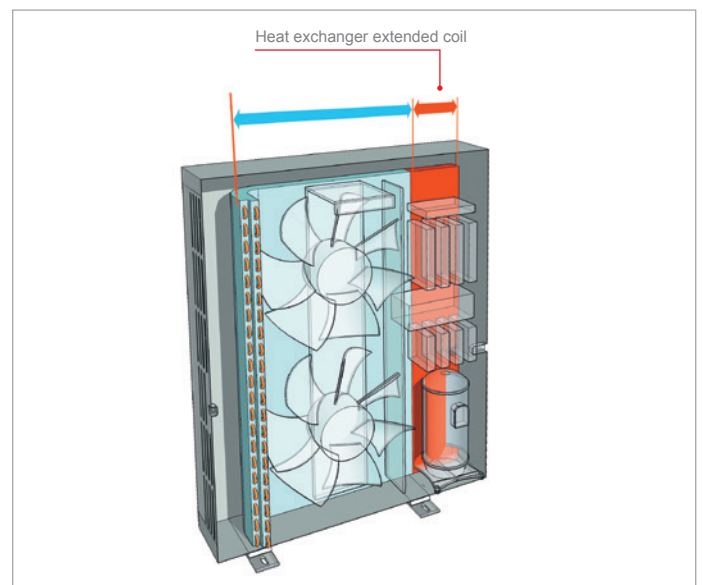
The new SMALL Y (PUMY) series has been designed to offer extraordinary levels of energy efficiency in both summer (EER) and winter (COP) operation. The entire range scores **COP values above 4**, making these units usable even in regions where legislation sets more restrictive performance limitations.

Total comfort. Even at -20°C

The new SMALL Y (PUMY) series is now capable of operating in heating mode over an even broader temperature range (from -20 to +15 °C).

New chassis with larger heat exchange surface area

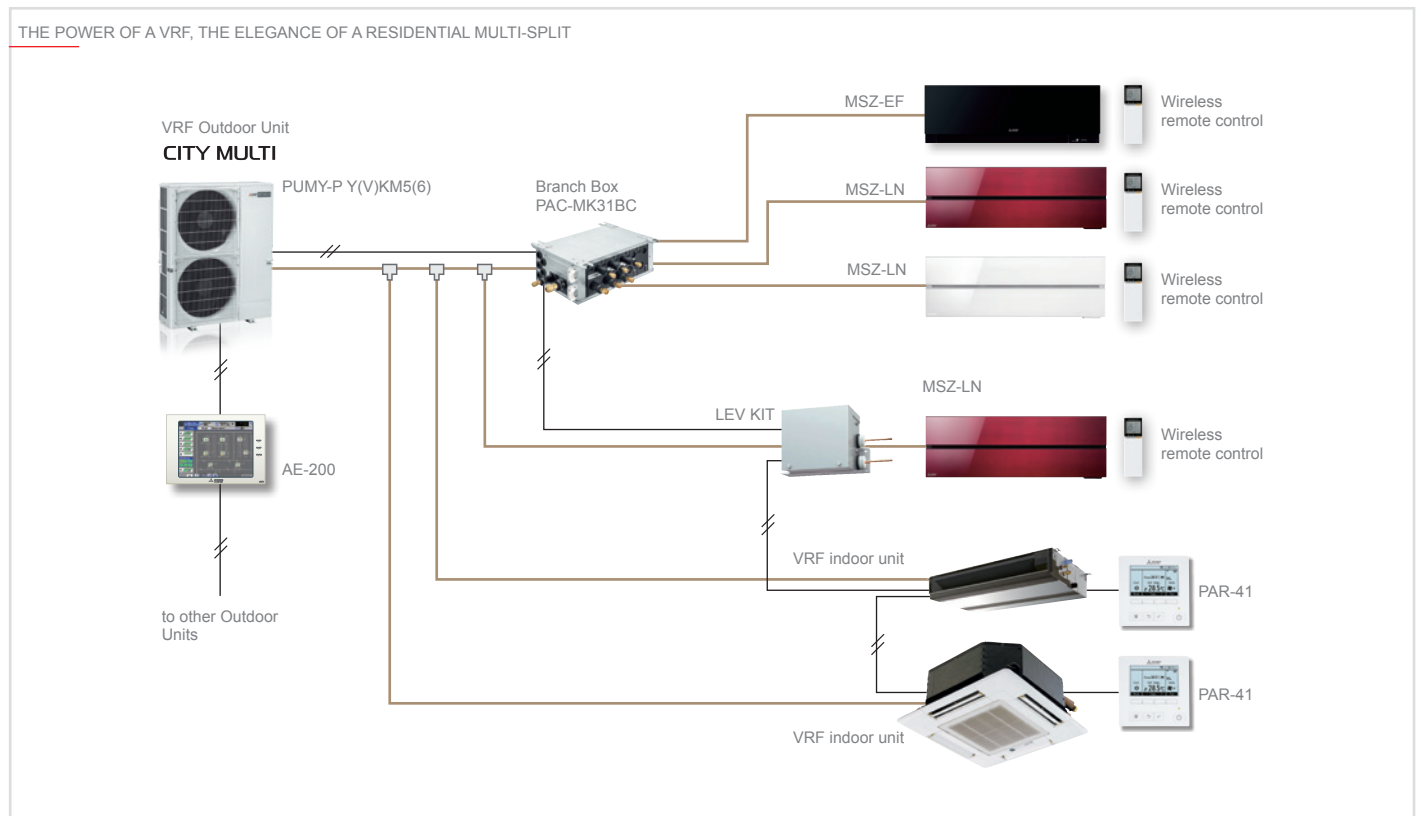
The new design of the SMALL Y (PUMY) series has made it possible to use a direct expansion coil with greater heat exchange surface area and density. Together with the introduction of the **Heat Inter Charger** overcooling circuit – a technological solution now appearing for the first time in units of this series – these improvements ensure superlative performance and extraordinary energy efficiency in cooling mode. The flat fin configuration of the coil and special Blue Fin treatment protect the



coil itself against corrosion, ensuring that the unit continues to function with the same outstanding thermal exchange efficiency and performance over time.

The power of a VRF, the elegance of a residential Multi-Split

With the **LEV KIT** and the new dedicated **Branch Box** (available as 3 and 5 connection versions), the outdoor units of the Small Y series can now be connected to the entire range of **residential and commercial** indoor units, with looks that are perfectly suited to applications (such as residential buildings and hotels) where design and elegance are decisive factors in the choice of indoor units.



New Branch Boxes (3 or 5 connections) – Total flexibility

The new Branch Boxes are designed to offer the greatest configuration flexibility possible for the system. This makes it possible to create systems consisting entirely of CITY MULTI VRF units, systems with Residential/ Commercial series indoor units only, or mixed systems with both types of unit.

Model	1 Branch Box		2 Branch Box	
	Branch Box ways	CITY MULTI Indoor units	Branch Box ways	CITY MULTI Indoor units
PUMY-P112	Max. 5	Max. 5	Max. 7	Max. 3
			Max. 8	Max. 2
PUMY-P125	Max. 5	Max. 5	Max. 8	Max. 3
PUMY-P140				

Mixed systems

SMALL Y series (PUMY) sizes 4.5-5-6 HP can be connected to **Ecodan HYDROBOX and HYDROTANK**, allowing mixed systems (domestic hot water, radiant panels or air heating and air cooling). Thanks to this feature the system can produce **hot water up to 55°C**.

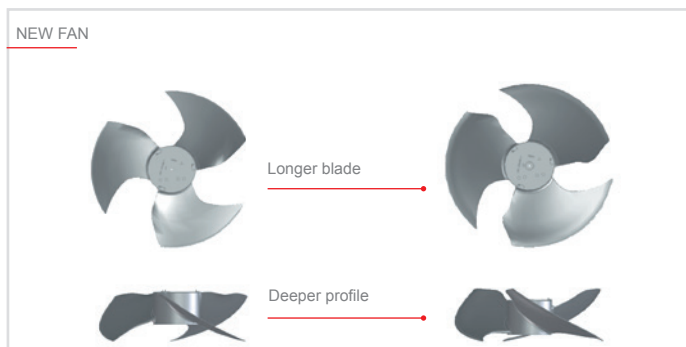
Unparalleled silence

The new fans cut through the air more effectively and minimise turbulence, for superlative static overpressure with **minimum noise impact**. These fans generate a **10% higher outdoor air flow than the previous version** while operating at the same noise levels. Small Y (PUMY) is also capable of operating in “low noise” mode, reducing sound pressure levels by 2 dB. By connecting an external timer or switch to the fan, this mode can be set for specific time brackets during the day.

New fan

Diameter increased from 490 mm to 550 mm.

The new fan has longer, differently shaped blades to direct air more effectively, reduce turbulence and increase efficiency.



Total flexibility for installation and maintenance

With increased geometric limits for piping, the SMALL Y (PUMY) series offers unparalleled flexibility for installation.

INCREASED GEOMETRICAL LIMITS FOR PIPING	
PUMY P112-P125-P140 Y(V)KM4	
Total effective length	300 m
Effective length of a single circuit	150 m
Maximum vertical difference between indoor units	15 m
“Maximum vertical difference between indoor and outdoor units (with outdoor unit in lower position)”	40 m

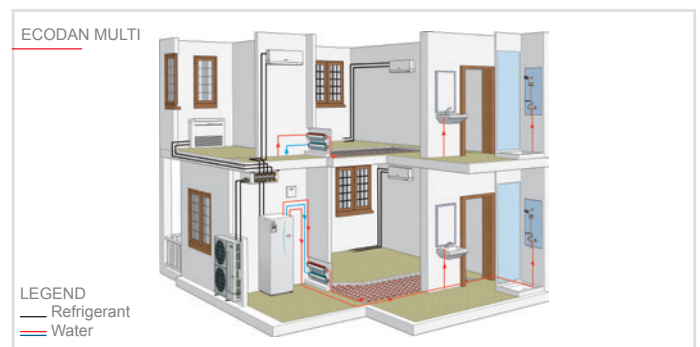
New PUMY Y(V)KM with Replace Technology

The EU regulation 2037/2000/EC has banned the use of virgin HCFC refrigerants (R22) since 1/1/2010. As a result, in the event of a fault or even just a refrigerant leak in an air conditioning system using R22, it is no longer possible to recharge the system. With small to medium-sized installations in particular, the most cost effective solution is to replace the entire air conditioning system. This is because of the following reasons:

- New generation outdoor units with R410A are much more efficient, with lower electric power consumption;
- They are quieter and offer more effective air filtration;
- Taking advantage of tax rebates offered for replacing winter air conditioning systems will minimise the time necessary to recoup the initial outlay.

The main problem in replacing an existing air conditioner using R22 fluid with a system using new R410A refrigerant is posed by the residue of chlorine and mineral oils remaining in the existing piping onto which the air conditioner system containing R22 was connected. This residue is extremely harmful for the new air conditioner, and unless the circuit is flushed out extremely thoroughly, may degrade the new oil and/or cause obstructions in the refrigerant circuit and, as a result, lead to system malfunctions. Moreover, the diameters and thickness of the existing piping may not be compatible with the new units.

The **SMALL Y (PUMY) Lines** of outdoor units features **Mitsubishi Electric Replace Technology**, which allows the **existing piping to be used** without modification, even with piping with different diameters and wall thicknesses. By using exclusive HAB oil and special low friction technology for the compressor, the majority of our air conditioners may operate with the original piping, cutting installation times and costs and material costs while minimising environmental impact.



AC PRE-HEATING compressor pre-heating system

AC pre-heating system is used for the compressor. The pre-heat routine is based on the temperature of the refrigerant and of the compressor. AC control reduces power absorption in stand-by state, increasing seasonal efficiency.

Technical specifications					
MODEL			PUMY-P112VKM6(-BS)	PUMY-P125VKM6(-BS)	PUMY-P140VKM6(-BS)
HP			4.5	5.0	6.0
Power	Phases/Voltage/Freq.		1-phase 220-230-240V 50Hz, 220-230V 60Hz		
Cooling	Nominal capacity*1		12.5	14.0	15.5
	Power absorption		4.34	5.00	5.17
	SEER		6.40	6.33	7.29
	Operating temperature range	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB*3*4		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Nominal capacity*2		14.0	16.0	18.0
	Power absorption		3.04	3.74	4.47
	SCOP		4.25	4.37	4.38
	Operating temperature range	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.0°C	-20.0~15.0°C	-20.0~15.0°C
Sound pressure*5			49/51	50/52	51/53
Connectable indoor units	Total capacity		50~130 % of outdoor unit capacity		
	Model/Quantity	CITY MULTI	P10-P140, M20-M140/9	P10-P140, M20-M140/10	P10-P140, M20-M140/12
		Branch Box	P15~P100/8	P15~P100/8	P15~P100/8
		Mixed System	please refer to databook		
External diameter of refrigerant connectors	Liquid	mm	9.52	9.52	9.52
	Gas	mm	15.88	15.88	15.88
Fan air flow rate*6			110	110	110
External dimensions (HxLxW)			1338 x 1050 x 330 (+40)	1338 x 1050 x 330 (+40)	1338 x 1050 x 330 (+40)
Net weight			123	123	123
Ref. Charge R410A/CO ₂ Eq			4.8/10.02	4.8/10.02	4.8/10.02

Technical specifications					
MODEL			PUMY-P112YKM5(-BS)	PUMY-P125YKM5(-BS)	PUMY-P140YKM5(-BS)
HP			4.5	5.0	6.0
Power	Phases/Voltage/Freq.		3-phase 380-400-415V 50Hz, 380V 60Hz		
Cooling	Nominal capacity*1		12.5	14.0	15.5
	Power absorption		4.34	5.00	5.17
	SEER		6.42	6.36	7.28
	Operating temperature range	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB*3*4		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Nominal capacity*2		14.0	16.0	18.0
	Power absorption		3.49	4.06	4.63
	SCOP		4.30	4.40	4.38
	Operating temperature range	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.0°C	-20.0~15.0°C	-20.0~15.0°C
Sound pressure*5			49/51	50/52	51/53
Connectable indoor units	Total capacity		50~130 % of outdoor unit capacity		
	Model/Quantity	CITY MULTI	P10-P140, M20-M140/9	P10-P140, M20-M140/10	P10-P140, M20-M140/12
		Branch Box	P15~P100/8	P15~P100/8	P15~P100/8
		Mixed System	please refer to databook		
External diameter of refrigerant connectors	Liquid	mm	9.52	9.52	9.52
	Gas	mm	15.88	15.88	15.88
Fan air flow rate*6			110	110	110
External dimensions (HxLxW)			1338 x 1050 x 330 (+40)	1338 x 1050 x 330 (+40)	1338 x 1050 x 330 (+40)
Net weight			125	125	125
Ref. Charge R410A/CO ₂ Eq			4.8/10.02	4.8/10.02	4.8/10.02

*1,2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 10 to 52°C D.B. [50 to 126°F D.B.], when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VLEM, PFFY-P20/25/32VLRM(M), PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, PEFY-P25/32/40VMA3; and M-Series, S-Series, and P-Series type indoor unit.

*4 -15 to 52°C D.B. [50 to 126°F D.B.], when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*3.

*5 Cooling mode/Heating mode

*6 External static pressure option is available (30 Pa/3.1 mmH₂O). To use this option, PAC-SJ71FM-E is needed.

*Nominal condition *1,2 are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

SMALL Y (HIGH CAPACITY) LINE

OUTDOOR UNITS - PUMY P200 YKM3(-BS) / PUMY P250-300 YBM2(-BS)



* P200 Model only

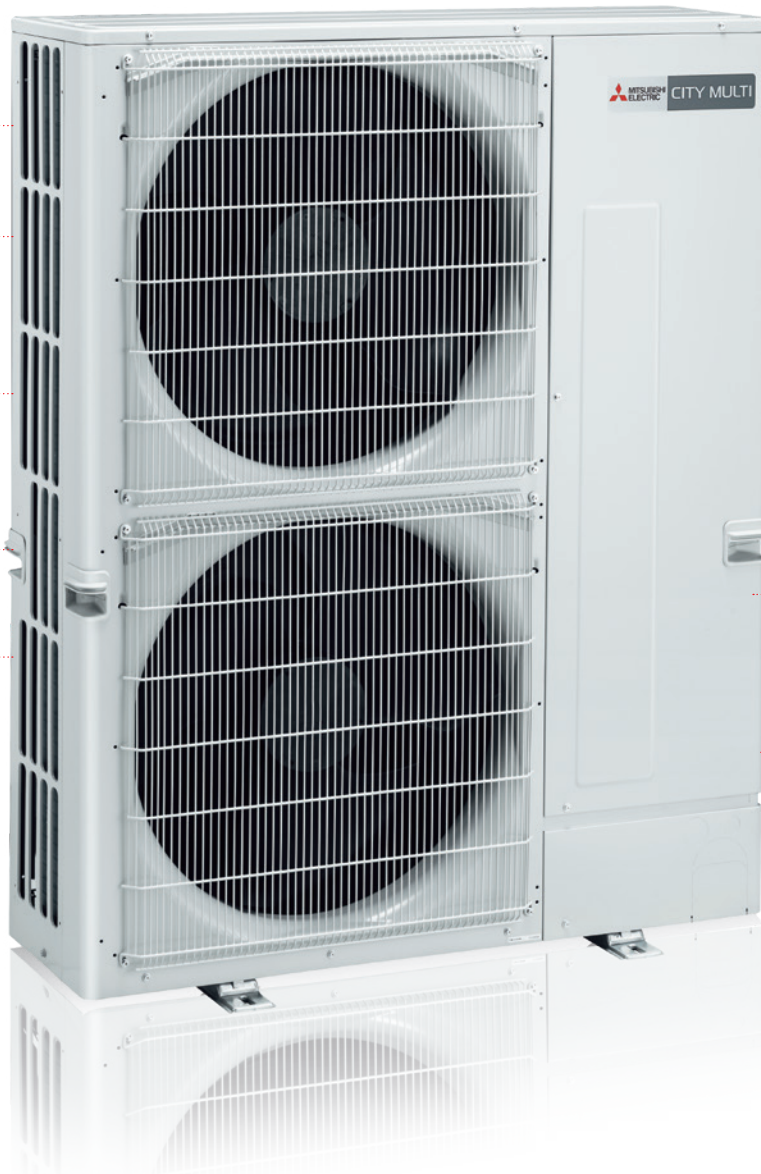
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HEATING OPERATION
RANGE EXTENDED UP
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TEMPERATURE

TOP PERFORMANCE
AND COP > 4



POWER RANGE
EXTENDED WITH THE
INTRODUCTION
OF THE NEW 8, 10, 12 HP
THREE-PHASE SIZE

NEW CHASSIS WITH
INCREASED HEAT
EXCHANGE SURFACE

INCREASED
RELIABILITY

CONNECTABLE TO
RESIDENTIAL AND
COMMERCIAL INDOOR
UNITS BY LEV-KIT AND
BRANCH BOX

NATIVE REPLACE
TECHNOLOGY
FUNCTION FOR THE
REPLACEMENT OF R22
SYSTEMS

The power and performance of a VRF with the compact dimensions of a multisplit

The new PUMY-P200YKM 8HP is the ideal solution for all applications where there can be no compromise in efficiency, power and installation flexibility – even where installation space is limited.

The power of a VRF, the elegance of a residential Multi-Split

With the use of the **LEV KIT** and **Branch Box** (available as 3 and 5 connection versions) the outdoor units of the Small Y series in **8 HP** size can now be connected to the entire range of indoor units of the **residential and commercial series**, with looks that are perfectly suited to applications (residential and hotel buildings) where design and elegance are decisive factors in the choice of indoor units.

Branch Box (3-5 ports) - Total flexibility

New Branch Box grants high flexibility in system design and indoor unit choice. It is possible to connect Residential/Commercial units and/or CITY MULTI VRF units, realizing mixed systems with both types.

Note: PUMY-P200YKM(2)3 to Branch Box connection is **only available in AtA configuration**.

Model	1 Branch Box		2 Branch Box	
	Branch Box ways	CITY MULTI Indoor Units	Branch Box ways	CITY MULTI Indoor Units
PUMY-P200	Max. 5	Max. 5	Max. 8	Max. 3

*The maximum total capacity of the units that can be connected to each branch box is 20.2kW

Technical specifications

MODEL		PUMY-P200YKM3(-BS)		
HP	8			
Power	Phases/Voltage/Freq.	3-phase 380-400-415V 50Hz		
Cooling	Capacity ^{*1}	kW	22.4	
	Power input	kW	7.18	
	SEER		6.67	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C
Outdoor DB ^{*3*}		°C	-5.0~52.0°C	
Heating	Capacity ^{*2}	kW	25.0	
	Power input	kW	5.85	
	SCOP		3.66	
	Temperature operating field	Indoor DB	°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.0°C	
Sound power level ^{*5}		dB(A)	57/61	
Connectable indoor units	Model/Quantity	CITY MULTI		50~130 % of outdoor unit capacity
		P10-P200, M20-M140/12		
		Branch Box		P15~P100/8
		Mixed System		please refer to databook
Ø Ref. piping	Liquid/Gas	mm	9.52 ^{*6} /19.05	
External dimensions (HxLxW)		mm	1338 x 1050 x 330 (+40)	
Net weight		kg	141	
Ref. Charge R410A/CO ₂ Eq		kg/Tons	7.3/15.24	

^{*1,2} Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

^{*3} 10 to 52°C, when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VLEM, PFFY-P20/25/32VLRM(M), PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, PEFY-P40/63/VMA3-E; and M-Series, S-Series, and P-Series type indoor unit.

^{*4} -15 to 52°C, when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in³.

^{*5} Cooling mode/Heating mode

^{*6} Liquid pipe diameter: 12.7 mm, in case of further piping length is longer than 60 m.

*Nominal condition ^{*1,2} are subject to ISO 15042.

*Due to continuing improvement, above specification may be subject to change without notice.

The power and performance of a VRF with the compact dimensions of a multisplit

The new PUMY-P250/300 YKB 10-12 HP is the ideal solution for all applications where there can be no compromise in efficiency, power and installation flexibility – even where installation space is limited.

Model	1 Branch Box		2 Branch Box		3 Branch Box	
	Branch Box ways	CITY MULTI Indoor Units	Branch Box ways	CITY MULTI Indoor Units	Branch Box ways	CITY MULTI Indoor Units
PUMY-P250	Max. 5	Max. 25	Max. 10	Max. 23	Max. 12	Max. 22
PUMY-P300	Max. 5	Max. 25	Max. 10	Max. 23	Max. 12	Max. 22

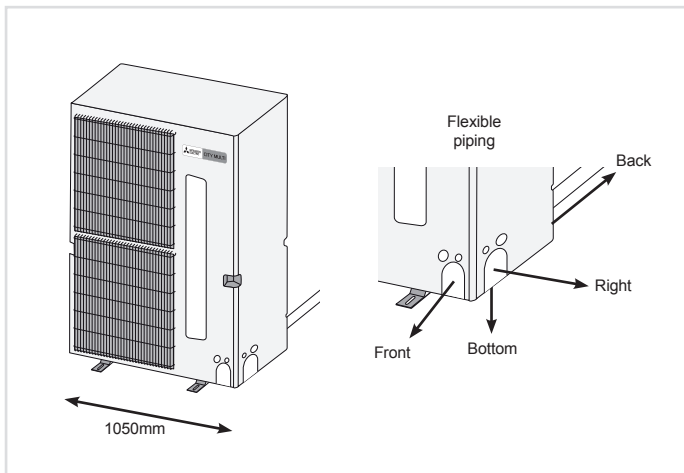
*The maximum total capacity of the units that can be connected to each branch box is 20.2kW

The power of a VRF, the elegance of a residential Multi-Split

With the use of the **LEV KIT** and **Branch Box** (available as 3 and 5 connection versions) the outdoor units of the Small Y series in **10/12 HP** size can now be connected to the entire range of indoor units of the **residential and commercial series**, with looks that are perfectly suited to applications (residential and hotel buildings) where design and elegance are decisive factors in the choice of indoor units.

Installation flexibility

The 10 and 12HP models introduce further installation flexibility by ensuring connection of the refrigerant also from the rear of the unit, making these models adaptable to all application requirements.



Branch Box (3-5 ports) - Total flexibility

New Branch Box grants high flexibility in system design and indoor unit choice. It is possible to connect Residential/Commercial units and/or CITY MULTI VRF units, realizing mixed systems with both types.

Note: PUMY-P250/300 YBM to Branch Box connection is **only available in AtA configuration**.

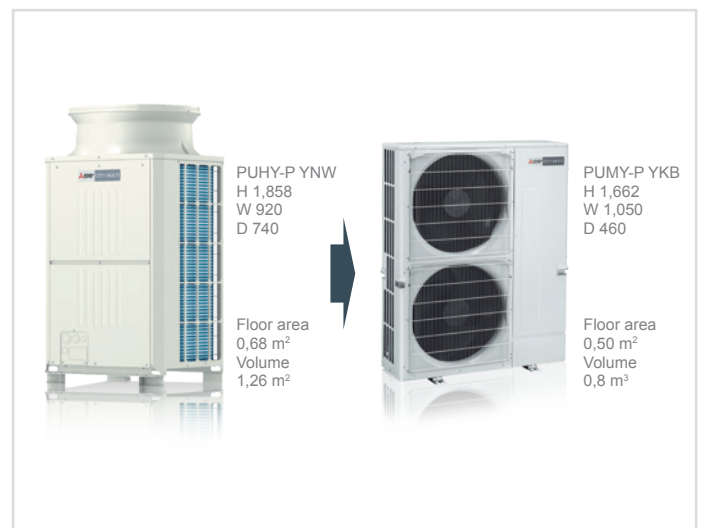
The new 10 and 12HP models

The SMALL Y Line gets enriched by the addition of new models (10 and 12HP) in response to the increasing market need for a compact machine that covers bigger capacity.

The PUMY P250/300 YBM outdoor units are available in a single version with three-phase power supply, double fan structure, side-flow and with different sizes depending on the model. Also available in -BS version, with anti-saline treatment.

Side Flow vs Top Flow

Side-flow outdoor units have a smaller footprint and volume than Top-flow units.



Technical specifications

MODEL			PUMY-P250YBM2(-BS)	PUMY-P300YBM2(-BS)
HP			10	12
Power	Phases/Voltage/Freq.		3-phase, 380-400-415V, 50Hz	
Cooling	Capacity*1		kW	28.0
	Power input		kW	8.21
	SEER			6,28
	Temperature operating field	Indoor WB	°C	15.0 to 24.0°C
Outdoor DB*3*4		°C	-5.0 to 52.0°C	
Heating	Capacity*2		kW	31.5
	Power input		kW	7.91
	SCOP			4,22
	Temperature operating field	Indoor WB	°C	15.0 to 27.0°C
Outdoor DB		°C	-20.0 to 15.0°C	
Sound power level*5			dB(A)	55/61
Connectable indoor units			50~130% of kW outdoor unit capacity	
	Model/Quantity	CITY MULTI		P10-P250/30
		Branch Box		P15~P100/12
		Mixed System		please refer to databook
Ø Ref. piping	Liquid/Gas	mm	9.52/22.4*5	12.7/22.4*5
External dimensions (HxLxW)			mm	1662 × 1050 × 460 (+45)
Net weight			kg	192
Ref. Charge R410A/CO ₂ Eq			kg/Tons	9.3/19.41

*1,2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 10 to 52°C, when connecting following models: PKFY-P10/15/20/25/32VLM, PFFY-P20/25/32VKM, PFFY-P20/25/32VCM, PFFY-P20/25/32VLEM, PEFY-P63/71/80VMA3-E; and M series type indoor unit.

*4 -15 to 52°C, when using an optional air protect guide [PAC-SK21AG-E]. However, this condition does not apply to the indoor unit listed in *3.

*5 Liquid pipe diameter: 12.7mm, when further piping length is longer than 90m, and when PEFY-P200 or P250 is connected.

*6 It is possible to set the External static pressure to 30 Pa by Dip Switch.

*Nominal conditions *1, *2 are subject to ISO15042.

*Due to continuing improvement, above specification may be subject to change without notice.

PUMY-P Series Branch Box Connection Compatibility Table for PUMY-P112/125/140/200

Series	Type	Model Name	Capacity										
			15	18	20	22	25	35	42	50	60	71	100
M Series	Wall-Mounted	MSZ-LN+VG2					●	●		●			
		MSZ-AP+VG(K)	●		●		●	●	●	●			
		MSZ-FH+VE2					●	●		●			
		MSZ-EF+VE		●		●	●	●	●	●			
		MSZ-EF+VG(K)		●		●	●	●	●	●			
		MSZ-SF+VA	●		●								
		MSZ-AP+VF	●		●								
	Floor-Standing	MSZ-SF+VE3					●	●	●	●			
		MSZ-GF+VE2									●	●	
		MFZ-KT+VG					●	●		●			
1-way Cassette	MFZ-KJ+VE-E					●	●		●				
	MLZ-KP+VF					●	●		●				
	MLZ-KA+VA-E					●	●		●				
S Series	Ceiling-Concealed	SEZ-M+DA(L)2					●	●		●	●	●	
		SEZ-KD+VA-E					●	●		●	●	●	
		SEZ-M+DA(L)2-E *1					●	●		●	●	●	
	2x2 Cassette	SLZ-M+FA(2)	●				●	●		●			
SLZ-KF+VA-E						●	●		●				
P Series	Ceiling-Suspended	PCA-M+KA(2)						●		●	●	●	
		PCA-RP+KAQ-E						●		●	●	●	
	4-way Cassette	PLA-M+EA(2)						●		●	●	●	
		PLA-RP+EA-E						●		●	●	●	
	Ceiling-Concealed	PEAD-M+JA(L)								●	●	●	
		PEAD-RP+JA(L)Q-E								●	●	●	
		PEAD-M+DA(L)2 *1							●	●	●		

(1) Connectable outdoor units are PUMY-P112/125/140VKM6(YKM5) only.

PUMY-P Series LEV Kit Connection Compatibility Table for PUMY-P112/125/140/200

Series	I/U Type	Model Name	Capacity									
			15	18	20	22	25	35	42	50	60	71
M Series	Wall-mounted	MSZ-LN+VG2					●	●		●		
		MSZ-AP+VG(K)	●		●		●	●	●	●		
		MSZ-FH+VE2					●	●		●		
		MSZ-EF+VG(K)		●		●	●	●	●	●		
		MSZ-SF+VA	●		●							
	MSZ-SF+VE3					●	●		●	●		
Floor-Standing	MFZ-KT+VG					●	●		●			

PUMY-P Series CITY MULTI Indoor Unit Compatibility Table for PUMY-P112/125/140

Series	Type	Model Name	Capacity													
			P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY MULTI series	1-way cassette	PMFY-P+VBM-E			●	●	●	●								
	2-way cassette	PLFY-P+VLM-E			●	●	●	●	●	●			●	●	●	
		PLFY-M+VEM-E			●	●	●	●	●	●			●	●	●	
	4-way cassette	PLFY-M+VEM6-E			●	●	●	●	●	●	●		●	●		
		PLFY-P+VFM-E		●	●	●	●	●	●							
	Ceiling-concealed	PEFY-P+VMR-E-L/R			●	●	●									
		PEFY-P+VMS1-E		●	●	●	●	●	●							
		PEFY-M+VMA-A(1)			●	●	●	●	●	●	●	●	●	●	●	
		PEFY-P+VMHS-E						●	●	●	●	●	●	●	●	
	Ceiling-suspended	PEFY-P+VMHS-E-F												●		
		PCFY-P+VKM-E						●		●				●	●	
	Wall-mounted	PKFY-P+VLM-E	●	●		●	●	●	●							
		PKFY-P+VKM-E									●			●		
	Floor-standing	PFFY-P+VKM-E2			●	●	●	●								
		PFFY-P+VLEM-E			●	●	●	●	●	●						
		PFFY-P+VLRM-E			●	●	●	●	●	●						
		PFFY-P+VLRMM-E			●	●	●	●	●	●						
		PFFY-P+VCM-E			●	●	●	●	●	●						
ATW	PWFY-P+VM-E1 *1														●	
Lossnay *2															GUF-50/100RD(H)4	

*1 Note that connection is not allowed inside EU countries and UK.

PWFY can not connect to PUMY-P200YKM2.

*2 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)

PUMY-P Series CITY MULTI Indoor Unit Compatibility Table for PUMY-P200

Series	Type	Model Name	Capacity													
			P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY MULTI series	1-way cassette	PMFY-P-VBM-E			●	●	●	●								
	2-way cassette	PLFY-P-VLMD-E			●	●	●	●	●	●		●	●	●		
		PLFY-M-VEIM-E			●	●	●	●	●	●		●	●	●		
	4-way cassette	PLFY-M-VEIM6-E			●	●	●	●	●	●	●	●	●	●		
		PLFY-P-VFM-E		●	●	●	●	●	●	●						
	Ceiling-concealed	PEFY-P-VMR-E-L/R			●	●	●									
		PEFY-P-VMS1-E		●	●	●	●	●	●	●						
		PEFY-M-VMA-A(1)			●	●	●	●	●	●	●	●	●	●	●	
		PEFY-P-VMHS-E							●	●	●	●	●	●	●	●
	Ceiling-suspended	PEFY-P-VMHS-E-F														●
		PCFY-P-VKM-E							●	●		●		●	●	
	Wall-mounted	PKFY-P-VLM-E	●	●	●	●	●	●	●							
		PKFY-P-VKM-E									●			●		
	Floor-standing	PFFY-P-VKM-E2			●	●	●	●								
		PFFY-P-VLEM-E			●	●	●	●	●	●						
		PFFY-P-VLRM-E			●	●	●	●	●	●	●					
		PFFY-P-VLRMM-E			●	●	●	●	●	●	●					
PFFY-P-VCM-E				●	●	●	●	●	●	●						
Lossnay *2		GUF-50/100RD(H)4														

*1 Note that connection is not allowed inside EU countries and UK.
 PWFY can not connect to PUMY-P200YKM2.
 *2 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)

PUMY-P Series Branch Box/LEV Kit Connection Compatibility Table for PUMY-P250/300

Series	I/U Type	Model Name	Capacity							
			15	18	20	22	25	35	42	50
M Series	Wall-mounted	MSZ-LN-VG2					●	●		●
		MSZ-AP-VG(K)	●		●		●	●	●	
		MSZ-FH-VE2					●	●		●
		MSZ-EF-VG(K)		●		●	●	●	●	
	Floor-Standing	MFZ-KT-VG					●	●		●

PUMY-P Series CITY MULTI Indoor Unit Compatibility Table for PUMY-P250/300

Series	Type	Model Name	Capacity													
			P10	P15	P20	P25	P32	P40	P50	P63	P71	P80	P100	P125	P140	P200
CITY MULTI series	1-way cassette	PMFY-P-VBM-E			●	●	●	●								
	2-way cassette	PLFY-P-VLMD-E			●	●	●	●	●	●		●	●	●		
		PLFY-M-VEIM-E			●	●	●	●	●	●	●	●	●	●		
	4-way cassette	PLFY-M-VEIM6-E			●	●	●	●	●	●	●	●	●	●		
		PLFY-P-VFM-E		●	●	●	●	●	●	●						
	Ceiling-concealed	PEFY-P-VMR-E-L/R			●	●	●									
		PEFY-P-VMS1-E		●	●	●	●	●	●	●						
		PEFY-M-VMA-A			●	●	●	●	●	●	●	●	●	●	●	
		PEFY-P-VMA-A1			●	●	●	●	●	●	●	●	●	●	●	●
	Ceiling-suspended	PEFY-P-VMHS-E							●	●	●	●	●	●	●	●
		PEFY-P-VMHS-E-F														●
	Ceiling-suspended	PCFY-P-VKM-E							●	●		●		●	●	
		PKFY-P-VLM-E	●	●	●	●	●	●	●	●						
	Wall-mounted	PKFY-P-VKM-E									●			●		
		PFFY-P-VKM-E2			●	●	●	●								
	Floor-standing	PFFY-P-VLEM-E			●	●	●	●	●	●						
		PFFY-P-VCM-E			●	●	●	●	●	●	●					
Lossnay *2		GUF-50/100RD(H)4														

*1 Do not connect Lossnay remote controller(s). (PZ-61DR-E, PZ-60DR-E, PZ-52SF-E, PZ-43SMF-E)

Y ZUBADAN LINE

OUTDOOR UNITS - Heat Pump - PUHY HP Y(S)NW-A



NEW FOUR-SIDED BATTERY

STATIC PRESSURE OF FAN INCREASED UP TO 80 PA.

CITY MULTI

NEW FAN WITH LOW FRICTION PROFILE



COMPRESSOR OPTIMISED WITH "MULTI-POR" TECHNOLOGY

NEW AUTO-SHIFT MODE

NEW AUTO-SHIFT MODE PREHEAT DEFROST FUNCTION

ADVANCED ETC CONTROL OF EVAPORATION TEMPERATURE.

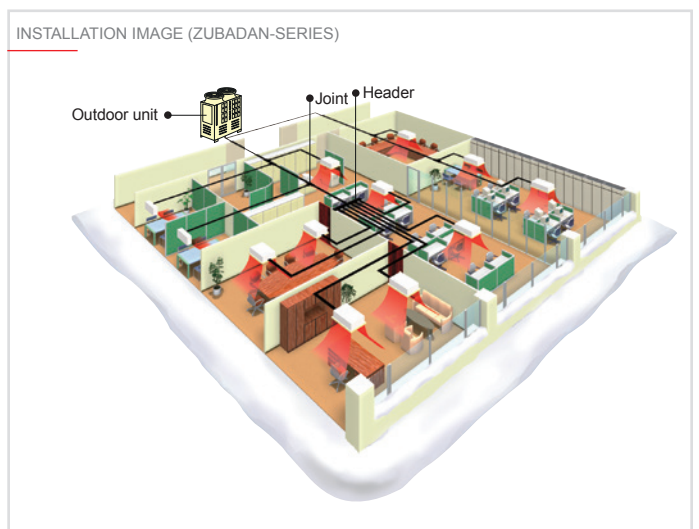
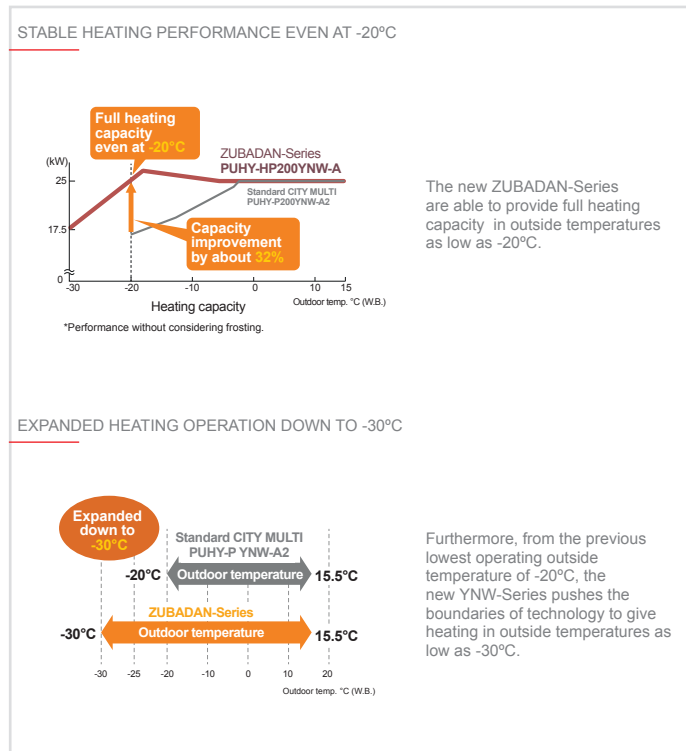
FLEXIBLE NOISE SETTING

Bringing a year round comfort solutions to extreme climates

CITY MULTI ZUBADAN-Series combines the ultimate in application flexibility and powerful cooling and heating capabilities to deliver precise comfort even in the coldest days of the year down to -30°C. The new ZUBADAN-Series that has new, larger-capacity compressors with an injection function in the suction chamber is capable of running at the rated heating capacity down to -20°C. In addition, the guaranteed outside temperature range of heating operation is expanded down to -30°C.

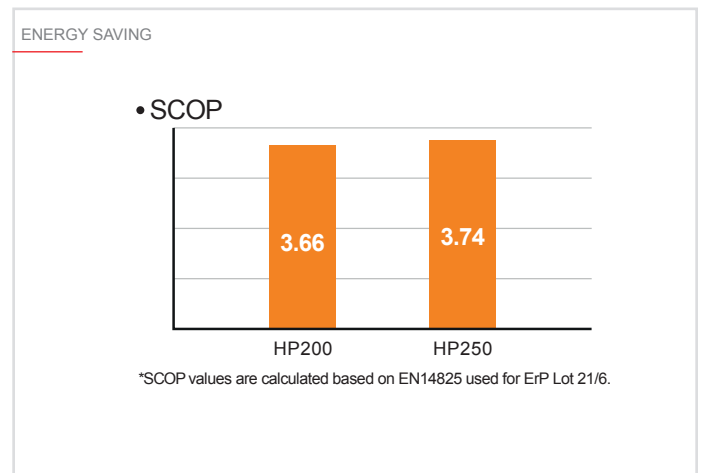
Reliable heating performance

The improved operating performance in low outside temperatures contributes to comfortable heating in cold weather.



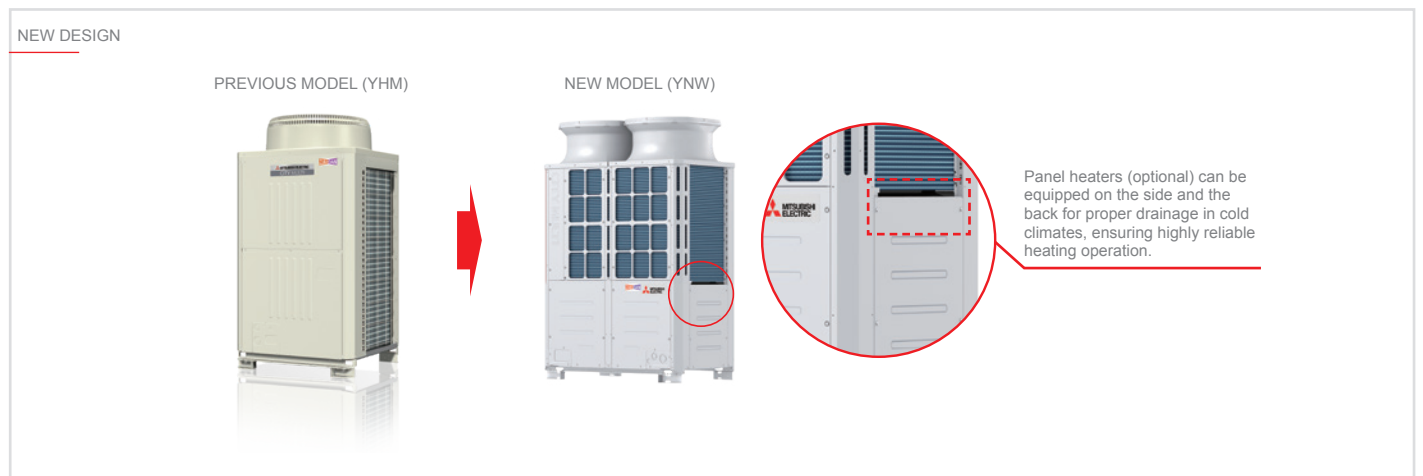
Energy saving

The ZUBADAN-Series delivers high energy-saving performance throughout the year. The improved compressor with the latest technologies realizes both reliable performance and highly efficient operation. The highest SCOP 3.74 is achieved by the HP250 model.



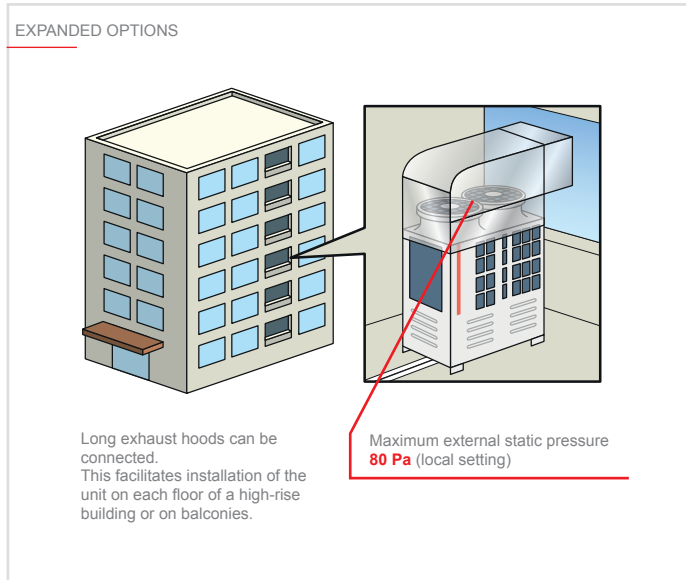
New design

The structure and design have been revised. The appearance is more sophisticated which can enhance the design of building.



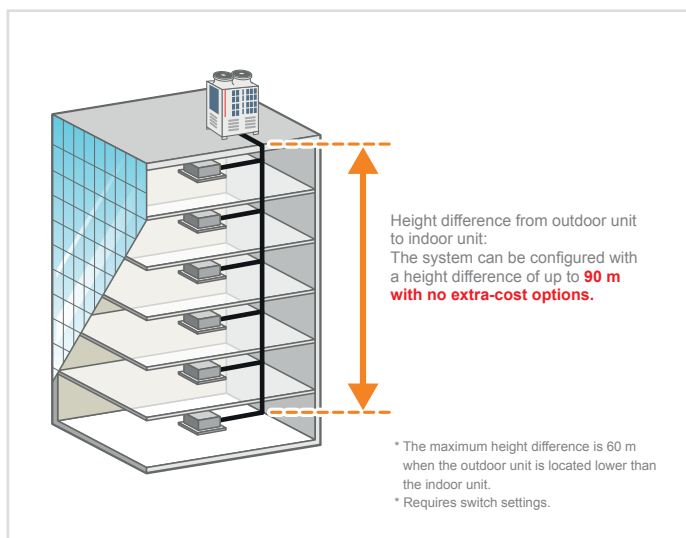
Expanded options for external static pressure settings

The new models (YNW) offer the static pressure options of 0, 30, 60, and 80 Pa, while previous models (YHM) had maximum external static pressure of 60 Pa. This facilitates installation of the unit on each floor of a high-rise building or on balconies.



Usable in an application with a large vertical separation of up to 90 meters

A height difference of up to 90 m from the outdoor unit to the indoor unit can be supported with no extra-cost options. This increases design flexibility and facilitates installation of these units even in high-rise buildings.



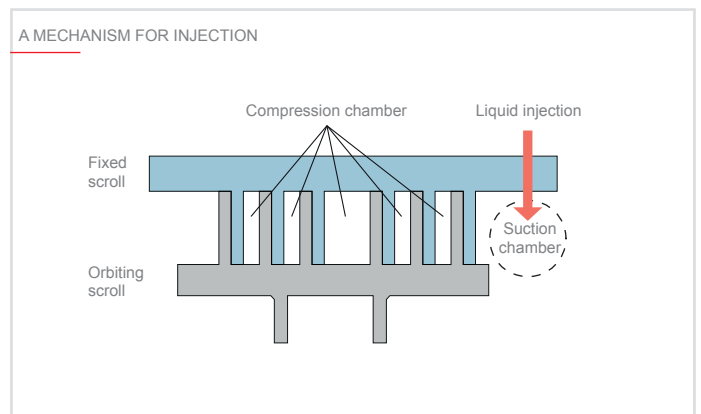
Change refrigerant oil of compressor

The new ZUBADAN-Series uses MEL46EH refrigerant oil instead of the conventional MEL32, for greater resistance to low temperatures and steady circulation even in cold environments.



Suction chamber injection mechanism

The reliable heating operation of ZUBADAN-Series is supported by a suction chamber injection mechanism. This mechanism injects liquid refrigerant into the suction chamber and suppresses the temperature rise of the discharge gas. Owing to this technology, the ZUBADAN-Series can perform heating operation even at an outside temperature as low as -30°C. Furthermore, heating performance at low outside temperatures is improved, because the rated capacity is maintained even at outside temperatures down to -20°C.



Multi-port mechanism

Efficient partial load operation is realized by avoiding overcompression. With the scroll compressor, the distance of the compression process in the scroll is usually fixed, so over-compression occurs during low loads and low rotation. The new compressor is equipped two sub-ports in addition to the conventional discharge port to reduce this over-compression loss

during low loads. In operation conditions having a low compression rate, the distance in the compression process is kept short by that successfully avoiding unnecessary compression, and contributing to efficient partial load operation.

MULTI-PORT MECHANISM

Conventional structure
There was only one discharge port in the center and regardless of the air conditioning loads, the refrigerant was compressed up to the center part of scroll, then discharged with constant pressure. This means that the refrigerant tends to be compressed to higher than necessary pressure during low loads.

There is only one discharge port and refrigerant is discharged with constant pressure regardless of loads.

Image of refrigerant pressure (medium loads)

New structure
The new compressor is equipped two sub-ports in addition to the discharge port at the center, and it realizes discharge according to air conditioning loads. The suppression of over-compression contributes to improve the operation efficiency of partial load.

Some discharge ports are equipped and refrigerant is discharged by the pressure according to loads without useless.

Image of refrigerant pressure

The new structure, multi-port compressor which newly equipped two sub-ports which open and close according to loads, discharges refrigerant from sub-port during the partial load operation.

Conventional structure

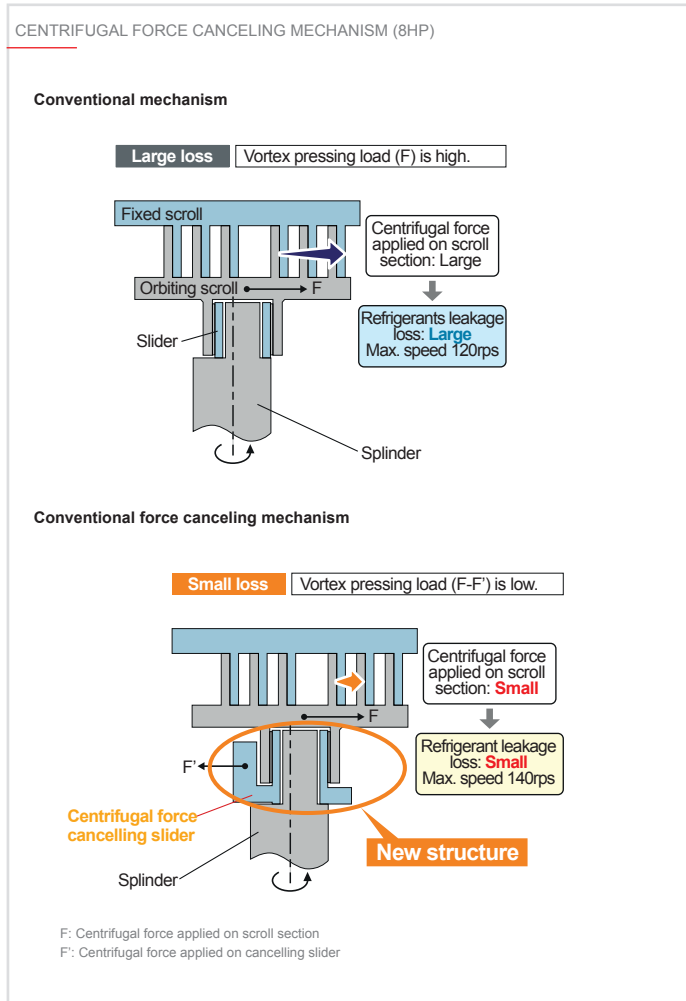
		Operation pattern	
		Partial load	Rating, high pressure difference
Main port	Valve ①	open	open

New structure • Multi-port

		Operation pattern	
		Partial load	Rating, high pressure difference
Main port	Valve ①	open	open
Sub port	Valve ②	open	close
Sub port	Valve ③	open	close

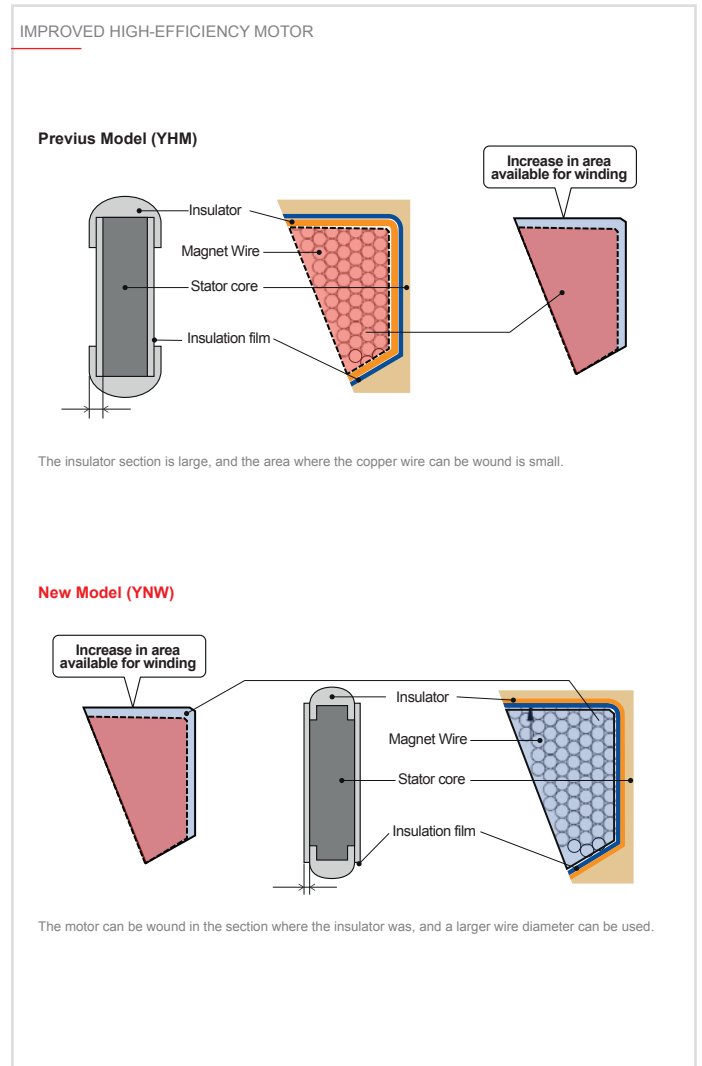
Centrifugal force canceling mechanism (8HP)

The latest structure has been mounted to suppress the centrifugal force. This mechanism successfully suppresses the centrifugal force generated at the scroll section, reduces refrigerant leakage losses, and increases the compressor efficiency. The maximum rotational speed has been increased from the conventional 120rps to 140rps. This mechanism also speeds up the start of operation, and enables operations such as preheat defrost and the smooth auto-shift startup mode.



Improved high-efficiency motor

The insulator section that traditionally created a dead space is eliminated by insulating the motor's stator film. Since winding can be set in that section, the winding area can be increased by approx. 9%. The wire diameter has also been increased by two ranks, so the resistance between terminals is reduced, and the insulation distance is shorter. This improves the motor's operation performance and contributes to high-efficiency operation of the compressor.



Key Technologies

Technical specifications

MODEL			PUHY-HP200YNW-A	PUHY-HP250YNW-A	PUHY-HP400YSNW-A	PUHY-HP500YSNW-A
HP			8	10	12	14
Modules			PUHY-HP200YNW-A	PUHY-HP250YNW-A	PUHY-HP(200+200)YNW-A	PUHY-HP(250+250)YNW-A
Power supply	V/Hz/n ^o		3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling	Capacity (nominal) ^{*1}	kW	22,4	28,0	44,8	56,0
	Power input (nominal)	kW	6,45	7,69	13,33	15,86
	SEER		6,52	6,49	6,33	6,7
	Temperature operating field	Indoor WB	°C	15.0~24.0 °C	15.0~24.0 °C (59~75 °F)	15.0~24.0 °C (59~75 °F)
Outdoor DB		°C	-5.0~52.0 °C	-5.0~52.0 °C (23~126 °F)	-5.0~52.0 °C (23~126 °F)	-5~+52
Heating	Capacity (nominal) ^{*2} / Capacity (max) ^{*2}	kW	22,4/25,0	28,0/31,5	44,8/ 50,0	56,0/63,0
	Power input (nominal)/ Power input (max)	kW	5,12/6,11	6,73/8,09	10,59/12,62	13,89/16,71
	SCOP		3,66	3,74	3,55	3,62
	Temperature operating field	Indoor DB	°C	15.0~27.0 °C	15.0~27.0 °C	15.0~27.0 °C
Outdoor WB		°C	-30.0~15.5 °C	-30.0~15.5 °C	-30.0~15.5 °C	-30.0~15.5 °C
Sound level ^{*4,5}	Sound pressure (Sound power) level	dB(A)	53.5 / 54.0 (73 / 73)	56.0 / 57.5 (75/77)	57.0 / 57.5 (77/77)	59,5/61,0 (79/81)
Connectable indoor units	Total Capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~50
Ø Ref. piping diameter	Liquid	mm	9,52	9,52	12,7	15,88
	Gas	mm	22,2	22,2	28,58	28,58
Fan ^{*6}	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 4	Propeller fan x 4
	Air flow	m ³ /min	190	210	190+190	210+210
Compressor	Type		Inverter scroll hermetic			
	Motor output	kW	3,8	4,5	3,8	4,5
External dimensions	H(H ⁺)xWxD	mm	1858(1798)x1240x740	1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	274	294	274+274	294+294
Refrigerant	Ref. Charge R410	kg	9,8	10,8	19,6	21,6
	CO ₂ eq. ^{*8}	Tons	20,46	22,55	40,92	45,10

^{*1,2} Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

^{*3} Eurovent registered

^{*4} Cooling mode / Heating mode

^{*5} The sound pressure level measured by the conventional method in JIS for reference purpose.

^{*6} External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

^{*}Due to continuing improvement, above specifications may be subject to change without notice.

Y NEXT STAGE LINE

OUTDOOR UNITS - PUHY-(E)P Y(S)NW-A2(-BS)



NEW FOUR-SIDED BATTERY

STATIC PRESSURE OF FAN INCREASED UP TO 80 PA.

CITY MULTI

NEW FAN WITH LOW FRICTION PROFILE

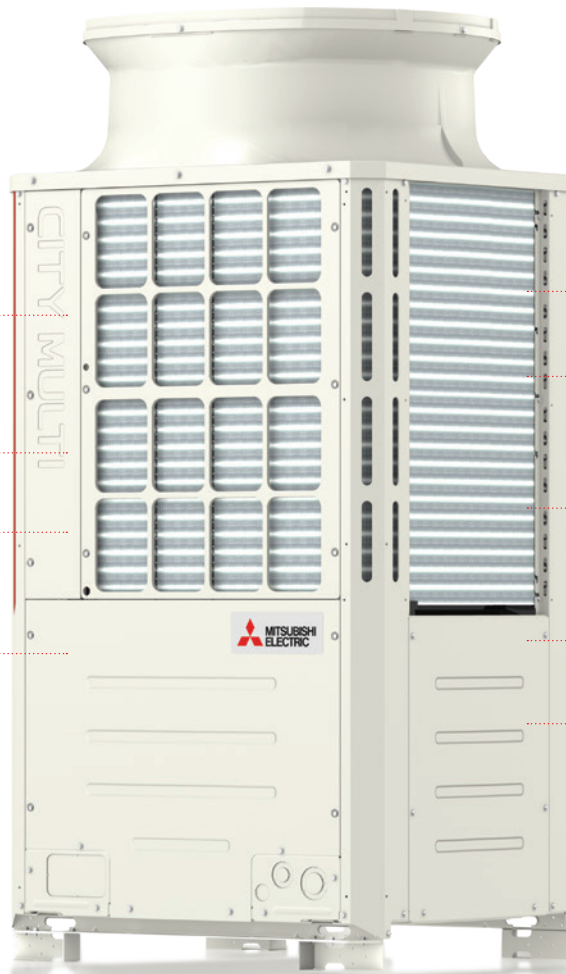
COMPRESSOR OPTIMISED WITH "MULTI-POR" TECHNOLOGY

NEW AUTO-SHIFT MODE

NEW AUTO-SHIFT MODE PREHEAT DEFROST FUNCTION

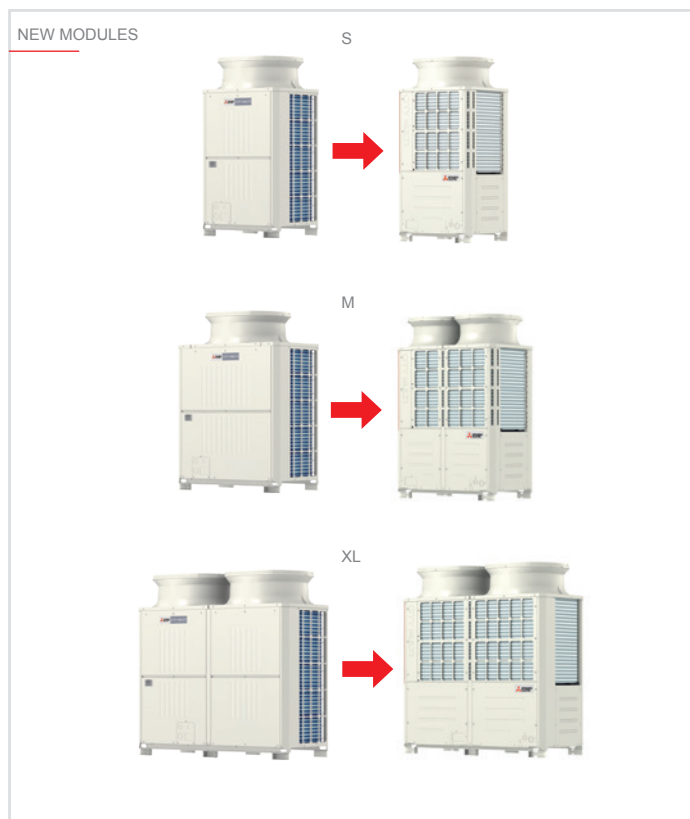
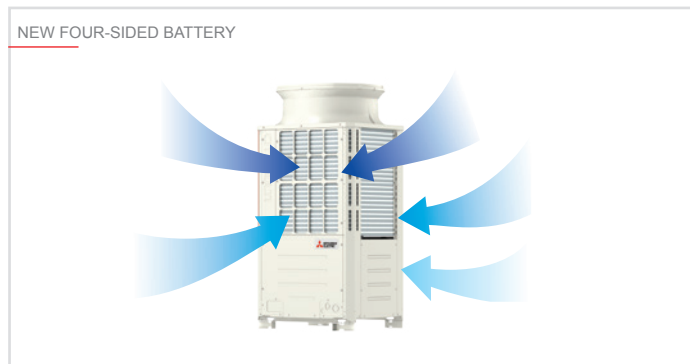
ADVANCED ETC CONTROL OF EVAPORATION TEMPERATURE.

FLEXIBLE NOISE SETTING



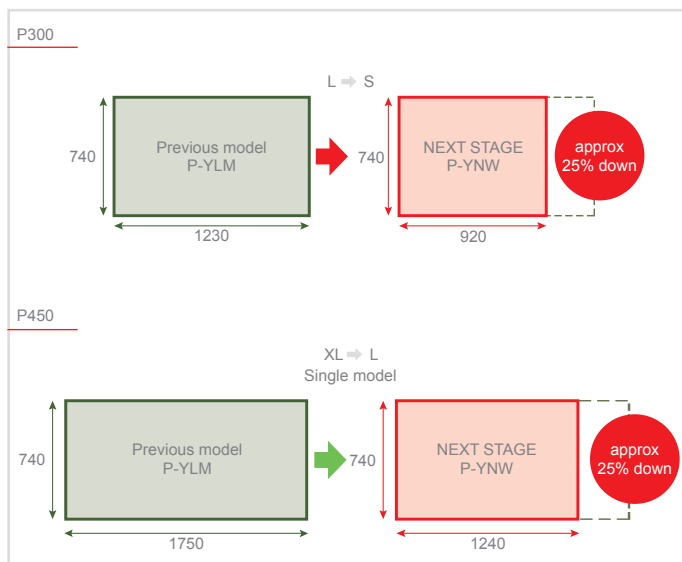
New design

The new outdoor units of the YNW series use a four-sided heat exchanger close to the top of the case near the fan. This technological and construction choice makes it possible to increase heat exchange efficiency.



Single module

		Previous model	YNW
8HP	P200	S	S
10HP	P250	S	S
12HP	P300	L	S
14HP	P350	L	L
16HP	P400	L	L
18HP	P450	XL	L
20HP	P500	XL	XL



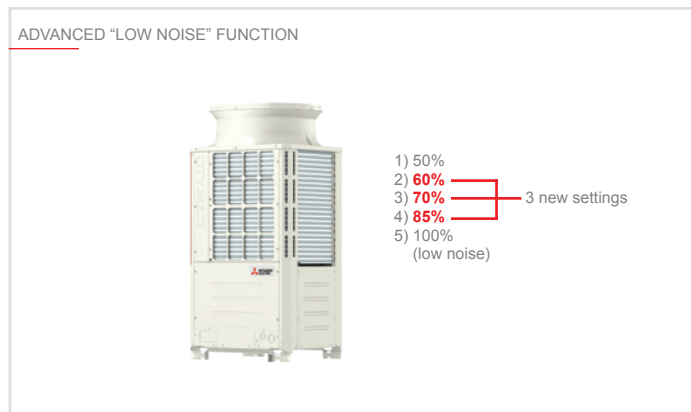
Energy saving

Energy efficiency has been further improved compared to YLM units and now hits top of the range performance values. SEER values have been raised by 139% (P500) compared to the previous model and SCOP values by 49% (P300 and P500). This allows the new YNW units to consume less energy in both cooling and heating. All year-round saving.



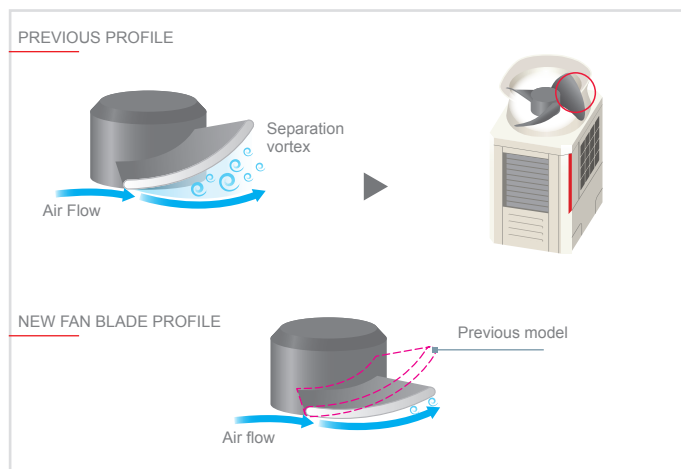
Advanced “Low Noise” function

“Low noise” mode can now be selected from five different settings: 85%, 70%, 60% and 50% (values referring to fan speed). Noise reduction is directly configurable from the control board of the outdoor unit. Different settings can be selected based on the installation requirements (in applications with special noise constraints).



Fan blade profile

The YNW series fan has been completely redesigned to match the new four-sided battery. The profile of the fins has been optimised to minimise fluid flow losses.



Key Technologies

Technical specifications

MODEL			PUHY-P200YNW-A2(-BS)	PUHY-P250YNW-A2(-BS)	PUHY-P300YNW-A2(-BS)	PUHY-P350YNW-A2(-BS)	PUHY-P400YNW-A2(-BS)
HP			8	10	12	14	16
Modules			PUHY-P200YNW-A2	PUHY-P250YNW-A2	PUHY-P300YNW-A2	PUHY-P350YNW-A2	PUHY-P400YNW-A2
Power supply		V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) *1	kW	22.4	28.0	33.5	40.0	45.0
	Power input (nominal)	kW	6.03	9.62	11.31	13.98	17.57
	SEER		7.65	6.90	6.70	6.35	5.85
	Temperature operating field	Indoor WB °C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
	Outdoor DB °C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) *2/ Capacity (max) *2	kW	22.4/25.0	28.0/31.5	33.5/37.5	40.0/45.0	45.0/50.0
	Power input (nominal)/ Power input (max)	kW	5.18/6.08	7.01/8.49	8.74/10.30	10.20/12.32	12.00/14.20
	SCOP		4.35	4.39	4.12	4.33	4.00
	Temperature operating field	Indoor DB °C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
	Outdoor WB °C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	
Sound level*4*5	Sound pressure (Sound power) level	dB(A)	58/59 (75/77)	60/61 (78/80)	61/64.5 (80/84)	62/64.5 (80/84)	65/67 (82/86)
Connectable indoor units	Total Capacity		50~130% of outdoor unit capacity				
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~30	P10~P250, M20~M140/1~35	P10~P250, M20~M140/1~40
Ø Ref. piping diameter	Liquid	mm	9.52	9.52	9.52	12.7	12.7
	Gas	mm	22.2	22.2	22.2	28.58	28.58
Fan*6	Type x quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow	m³/min	170	185	240	270	300
Compressor	Type		Inverter scroll hermetic				
	Motor output	kW	3.5	5.3	6.7	8.6	11.4
External dimensions	H(H*)xWxD	mm	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x1240x740	1858(1798)x1240x740
Net weight		kg	213	213	226	277	277
Refrigerant	Ref. Charge R410	kg	6.5	6.5	6.5	9.8	9.8
	CO ₂ eq.	Tons	13.57	13.57	13.57	20.46	20.46

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PUHY-P450YNW-A2(-BS)	PUHY-P500YNW-A2(-BS)	PUHY-P400YSNW-A2(-BS)	PUHY-P450YSNW-A2(-BS)	PUHY-P500YSNW-A2(-BS)
HP			16	20	16	16	20
Modules			PUHY-P450YNW-A2	PUHY-P500YNW-A2	PUHY-P(200+200)YNW-A2	PUHY-P(200+250)YNW-A2	PUHY-P(250+250)YNW-A2
Power supply	V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	50,0	56,0	44,8	50,4	56,0
	Power input (nominal)	kW	18,86	21,05	12,47	15,94	19,85
	SEER		6,48	6,32	7,42	7,03	6,69
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) *3/ Capacity (max) *2	kW	50,0/56,0	56,0/63,0	44,8/50,0	50,4/56,5	56,0/63,0
	Power input (nominal)/ Power input (max)	kW	13,77/16,51	14,85/17,89	10,37/12,16	12,20/14,56	14,03/16,98
	SCOP		4,31	4,04	4,35	4,37	4,39
	Temperature operating field	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level**4,5	Sound pressure (Sound power) level	dB(A)	65,5/71,0 (84/90)	63,5/66,5 (82/85)	61/62 (78/80)	62/63 (80/82)	63/64 (81/83)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50
Ø Ref. piping diameter	Liquid	mm	15,88	15,88	12,7	15,88	15,88
	Gas	mm	28,58	28,58	28,58	28,58	28,58
Fan*6	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow	m³/min	305	365	170+170	170+185	185+185
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	11,7	13,3	3,5+3,5	3,5+5,3	5,3+5,3
External dimensions	H(H*)xWxD	mm	1858(1798)x1240x740	1858(1798)x1750x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740
Net weight		kg	293	334	213+213	213+213	213+213
Refrigerant	Ref. Charge R410	kg	10,8	10,8	13	13	13
	CO ₂ eq.	Tons	22,55	22,55	27,14	27,14	27,14

Technical specifications

MODEL			PUHY-P550YSNW-A2(-BS)	PUHY-P600YSNW-A2(-BS)	PUHY-P650YSNW-A2(-BS)	PUHY-P700YSNW-A2(-BS)	PUHY-P750YSNW-A2(-BS)
HP			22	24	26	28	30
Modules			PUHY-P(250+300)YNW-A2	PUHY-P(300+300)YNW-A2	PUHY-P(250+400)YNW-A2	PUHY-P(350+350)YNW-A2	PUHY-P(350+400)YNW-A2
Power supply	V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	61,5	67,0	73,0	80,0	85,0
	Power input (nominal)	kW	21,65	23,34	27,96	28,88	32,56
	SEER		6,59	6,50	6,08	6,15	5,90
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) *3/ Capacity (max) *2	kW	61,5/69,0	67,0/75,0	73,0/81,5	80,0/90,0	85,0/95,0
	Power input (nominal)/ Power input (max)	kW	15,76/18,80	17,49/20,60	19,01/22,70	20,40/24,65	22,25/26,53
	SCOP		4,24	4,12	4,14	4,33	4,14
	Temperature operating field	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level**4,5	Sound pressure (Sound power) level	dB(A)	63,5/66 (82/85)	64/67,5 (83/87)	66,5/68 (83/87)	65/67,5 (83/87)	67/69 (84/88)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	15,88	15,88	15,88	19,05	19,05
	Gas	mm	28,58	28,58	28,58	34,93	34,93
Fan*6	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 3	Propeller fan x 4	Propeller fan x 4
	Air flow	m³/min	185+240	240+240	185+300	270+270	270+300
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	5,3+6,7	6,7 + 6,7	5,3 + 11,4	8,6+8,6	8,6+11,4
External dimensions	H(H*)xWxD	mm	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	213+226	226+226	213+277	277+277	277+277
Refrigerant	Ref. Charge R410	kg	13	13	16,3	19,6	19,6
	CO ₂ eq.	Tons	27,14	27,14	34,03	40,92	40,92

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PUHY-P800YSNW-A2(-BS)	PUHY-P850YSNW-A2(-BS)	PUHY-P900YSNW-A2(-BS)	PUHY-P950YSNW-A2(-BS)	PUHY-P1000YSNW-A2(-BS)
HP			32	34	36	38	40
Modules			PUHY-P(350+450)YNW-A2	PUHY-P(400+450)YNW-A2	PUHY-P(450+450)YNW-A2	PUHY-P(250+350+350)YNW-A2	PUHY-P(250+350+400)YNW-A2
Power supply	V/Hz/n ³	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) ^{*1}	kW	90	95,0	100,0	108,0	113,0
	Power input (nominal)	kW	33,96	37,69	38,91	38,84	42,48
	SEER		6,22	5,99	6,28	6,30	6,10
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) ^{*2} / Capacity (max) ^{*2}	kW	90,0/101,0	95,0/106,0	100,0/112,0	108,0/121,5	113,0/126,5
	Power input (nominal)/ Power input (max)	kW	24,00/28,85	25,81/30,72	27,54/33,03	27,48/33,19	29,27/35,04
	SCOP		4,32	4,16	4,32	4,34	4,21
	Temperature operating field	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level ^{**4,5}	Sound pression (Sound power) level	dB(A)	67,5/71 (85/91)	68,5/73 (86/91)	68,5/74 (87/93)	66,5/68,5 (84/88)	68/70 (85/89)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	19,05	19,05	19,05	19,05	19,05
	Gas	mm	34,93	41,28	41,28	41,28	41,28
Fan ⁶	Type x quantity		Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	Propeller fan x 5	Propeller fan x 5
	Air flow	m ³ /min	270+305	300+305	305+305	185+270+270	185+270+300
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	8,6+11,7	11,4+11,7	11,7+11,7	5,3+8,6+8,6	5,3+8,6+11,4
External dimention	H(H ⁵)xWxD	mm	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	277+293	277+293	293+293	213+277+277	213+277+277
Refrigerant	Ref. Charge R410	kg	20,6	20,6	21,6	26,1	26,1
	CO ₂ eq.	Tons	43,01	43,01	45,10	54,49	54,49

Technical specifications

MODEL			PUHY-P1050YSNW-A2(-BS)	PUHY-P1100YSNW-A2(-BS)	PUHY-P1150YSNW-A2(-BS)	PUHY-P1200YSNW-A2(-BS)	PUHY-P1250YSNW-A2(-BS)
HP			42	44	46	48	50
Modules			PUHY-P(250+400+400)YNW-A2	PUHY-P(350+350+400)YNW-A2	PUHY-P(350+400+400)YNW-A2	PUHY-P(400+400+400)YNW-A2	PUHY-P(400+400+450)YNW-A2
Power supply	V/Hz/n ³	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) ^{*1}	kW	118,0	125,0	130,0	135,0	140,0
	Power input (nominal)	kW	46,09	46,99	50,58	54,43	55,77
	SEER		5,93	5,98	5,82	5,66	5,89
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) ^{*1} / Capacity (max) ^{*2}	kW	118,0/131,5	125,0/140,0	130,0/145,0	135,0/150,0	140,0/156,0
	Power input (nominal)/ Power input (max)	kW	31,05/36,93	32,46/38,88	34,21/40,84	36,00/42,61	37,83/44,95
	SCOP		4,09	4,20	4,09	4,00	4,11
	Temperature operating field	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level ^{**4,5}	Sound pression (Sound power) level	dB(A)	69,0/70,5 (86/90)	68,5/70,5 (86/90)	69,5/71,5 (86/90)	70/72 (87/91)	70/74 (88/93)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50
Ø Ref. piping diameter	Liquid	mm	19,05	19,05	19,05	19,05	19,05
	Gas	mm	41,28	41,28	41,28	41,28	41,28
Fan ⁶	Type x quantity		Propeller fan x 5	Propeller fan x 6	Propeller fan x 6	Propeller fan x 6	Propeller fan x 6
	Air flow	m ³ /min	185+300+300	270+270+300	270+300+300	300+300+300	300+300+305
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	5,3+11,4+11,4	8,6+8,6+11,4	8,6+11,4+11,4	11,4+11,4+11,4	11,4+11,4+11,7
External dimention	H(H ⁵)xWxD	mm	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	213+277+277	277+277+277	277+277+277	277+277+277	277+277+293
Refrigerant	Ref. Charge R410	kg	26,1	29,4	29,4	29,4	30,4
	CO ₂ eq.	Tons	54,49	61,38	61,38	61,38	63,47

^{1,2,3} Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

³ Eurovent registered

⁴ Cooling mode / Heating mode

⁵ The sound pressure level measured by the conventional method in JIS for reference purpose.

⁶ External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PUHY-P1300YSNW-A2(-BS)		PUHY-P1300YSNW-A2(-BS)		
HP			52		54		
Modules			PUHY-P (400+450+450)YNW-A2		PUHY-P (450+450+450)YNW-A2		
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz				
Cooling	Capacity (nominal) **	kW	145,0		150,0		
	Power input (nominal)	kW	57,08		58,36		
	SEER		6,09		6,28		
	Temperature operating field	Indoor WB	°C	15.0~24.0°C		15.0~24.0°C	
Outdoor DB		°C	-5.0~52.0°C		-5.0~52.0°C		
Heating	Capacity (nominal) **3/ Capacity (max) **2	kW	145,0/162,0		150,0/168,0		
	Power input (nominal)/ Power input (max)	kW	39,61/47,23		41,32/49,55		
	SCOP		4,21		4,32		
	Temperature operating field	Indoor DB	°C	15.0~27.0°C		15.0~27.0°C	
		Outdoor WB	°C	-20.0~-15.5°C		-20.0~-15.5°C	
Sound level**4,5	Sound pression (Sound power) level	dB(A)	70/75 (88/94)		70,5/76 (89/95)		
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50		P10~P250, M20~M140/3~50		
Ø Ref. piping diameter	Liquid	mm	19,05		19,05		
	Gas	mm	41,28		41,28		
Fan*6	Type x quantity	Propeller fan x 6		Propeller fan x 6			
	Air flow	m³/min	300+305+305		305+305+305		
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	11,4+11,7+11,7		11,7+11,7+11,7		
External dimentions	H(H*5)xWxD	mm	1858(1798)x1240x740		1858(1798)x1240x740		
			1858(1798)x1240x740		1858(1798)x1240x740		
			1858(1798)x1240x740		1858(1798)x1240x740		
Net weight		kg	277+293+293		293+293+293		
Refrigerant	Ref. Charge R410	kg	31,4		32,4		
	CO ₂ eq.	Tons	65,56		67,65		

Technical specifications

MODEL			PUHY-EP200YNW-A2 (-BS)	PUHY-EP250YNW-A2 (-BS)	PUHY-EP300YNW-A2 (-BS)	PUHY-EP350YNW-A2 (-BS)	PUHY-EP400YNW-A2 (-BS)	
HP			8	10	12	14	16	
Modules			PUHY-EP200YNW-A2	PUHY-EP250YNW-A2	PUHY-EP300YNW-A2	PUHY-EP350YNW-A2	PUHY-EP400YNW-A2	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) **	kW	22.4	28.0	33.5	40.0	45.0	
	Power input (nominal)	kW	5.51	8.21	9.68	12.42	14.65	
	SEER		7.76	7.51	7.26	7.03	6.83	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) **3/ Capacity (max) **2	kW	22.4 / 25.0	28.0 / 31.5	33.5 / 37.5	40.0 / 45.0	45.0 / 50.0	
	Power input (nominal)/ Power input (max)	kW	5,01 / 5,93	6,84 / 8,13	8,27 / 9,84	9,77 / 11,81	11,65 / 13,85	
	SCOP		4.36	4.40	4.12	4.35	4.25	
	Temperature operating field	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
		Outdoor WB	°C	-20.0~-15.5°C	-20.0~-15.5°C	-20.0~-15.5°C	-20.0~-15.5°C	-20.0~-15.5°C
Sound level**4,5	Sound pression (Sound power) level	dB(A)	58.0/59.0 (75/78)	60.0/61.0 (78/80)	61.0/64.5 (80/84)	62.0/64.0 (80/83)	65.0/65.5 (82/85)	
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity						
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~30	P10~P250, M20~M140/1~35	P10~P250, M20~M140/1~40	
Ø Ref. piping diameter	Liquid	mm	9.52	9.52	9.52	12.7	12.7	
	Gas	mm	22.2	22.2	28.58	28.58	28.58	
Fan*6	Type x quantity	Propeller fan x 1		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	
	Air flow	m³/min	170	185	240	270	270	
Compressor	Type	Inverter scroll hermetic compressor						
	Motor output	kW	3.4	5.1	6.1	7.7	9.8	
External dimentions	H(H*5)xWxD	mm	1858(1798)x920x740		1858(1798)x920x740		1858(1798)x1240x740	
			1858(1798)x920x740		1858(1798)x920x740		1858(1798)x1240x740	
			1858(1798)x920x740		1858(1798)x920x740		1858(1798)x1240x740	
Net weight		kg	228	228	231	282	303	
Refrigerant	Ref. Charge R410	kg	6,5	6,5	6,5	9,8	10,8	
	CO ₂ eq.	Tons	13,57	13,57	13,57	20,46	22,55	

1,3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PUHY-EP450YNW-A2 (-BS)	PUHY-EP500YNW-A2 (-BS)	PUHY-EP400YSNW-A2 (-BS)	PUHY-EP450YSNW-A2 (-BS)	PUHY-EP500YSNW-A2 (-BS)
HP			18	20	16	18	20
Modules			PUHY-EP450YNW-A2	PUHY-EP500YNW-A2	PUHY-EP(200+200)YNW-A2	PUHY-EP(200+250)YNW-A2	PUHY-EP(250+250)YNW-A2
Power supply	V/Hz/n [°]	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	50.0	56.0	44.8	50.4	56.0
	Power input (nominal)	kW	17.73	20.51	11.39	14.07	16.96
	SEER		6.94	6.55	7.53	7.40	7.29
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) *2/ Capacity (max) *2	kW	50.0 / 56.0	56.0 / 63.0	44.8 / 50.0	50.4 / 56.5	56.0 / 63.0
	Power input (nominal)/ Power input (max)	kW	12.85 / 16.18	14.73 / 17.74	10.02 / 11.87	11.85 / 14.05	13.69 / 16.27
	SCOP		4.32	4.10	4.36	4.37	4.40
	Temperature operating field	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level**4,5	Sound pression (Sound power) level	dB(A)	65.5/70.5 (84/90)	63.5/66.5 (82/85)	61.0/62.0 (78/81)	62.5/63.5 (80/82)	63.5/64.0 (81/83)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50
Ø Ref. piping diameter	Liquid	mm	15.88	15.88	12.7	15.88	15.88
	Gas	mm	28.58	28.58	28.58	28.58	28.58
Fan*6	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow	m ³ /min	305	365	170 + 170	170 + 185	185 + 185
Compressor	Type	Inverter scroll hermetic compressor					
	Motor output	kW	11.1	12.5	3.4 + 3.4	3.4 + 5.1	5.1 + 5.1
External dimentions	H(H*)xWxD	mm	1858(1798)x1240x740	1858(1798)x1750x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740
Net weight		kg	303	342	228 + 228	228 + 228	228 + 228
Refrigerant	Ref. Charge R410	kg	10.8	10.8	13	13	13
	CO ₂ eq.	Tons	22,55	22,55	27,14	27,14	27,14

Technical specifications

MODEL			PUHY-EP550YSNW-A2 (-BS)	PUHY-EP600YSNW-A2 (-BS)	PUHY-EP650YSNW-A2 (-BS)	PUHY-EP700YSNW-A2 (-BS)	PUHY-EP750YSNW-A2 (-BS)
HP			22	24	26	28	30
Modules			PUHY-EP(250+300)YNW-A2	PUHY-EP(300+300)YNW-A2	PUHY-EP(250+400)YNW-A2	PUHY-EP(350+350)YNW-A2	PUHY-EP(350+400)YNW-A2
Power supply	V/Hz/n [°]	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	61.5	67.0	73.0	80.0	85.0
	Power input (nominal)	kW	18.46	20.00	23.54	25.64	27.96
	SEER		7.16	7.04	6.89	6.82	6.72
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) *2/ Capacity (max) *2	kW	61.5 / 69.0	67.0 / 75.0	73.0 / 81.5	80.0 / 90.0	85.0 / 95.0
	Power input (nominal)/ Power input (max)	kW	15.14 / 18.01	16.54 / 19.68	18.52 / 21.96	19.55 / 23.62	21.46 / 25.67
	SCOP		4.24	4.12	4.30	4.35	4.29
	Temperature operating field	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level**4,5	Sound pression (Sound power) level	dB(A)	64.0/66.5 (82/85)	64.0/67.5 (83/87)	66.5/67.0 (83/86)	65.0/67.0 (83/86)	67.0/68.0 (84/87)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	15.88	15.88	15.88	19.05	19.05
	Gas	mm	28.58	28.58	28.58	34.93	34.93
Fan*6	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 3	Propeller fan x 4	Propeller fan x 4
	Air flow	m ³ /min	185 + 240	240 + 240	185 + 270	270 + 270	270 + 270
Compressor	Type	Inverter scroll hermetic compressor					
	Motor output	kW	5.1 + 6.1	6.1 + 6.1	5.1 + 9.8	7.7 + 7.7	7.7 + 9.8
External dimentions	H(H*)xWxD	mm	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	228 + 231	231 + 231	228 + 303	282 + 282	282 + 303
Refrigerant	Ref. Charge R410	kg	13	13	17.3	19.6	20.6
	CO ₂ eq.	Tons	27,14	27,14	36,12	40,92	43,01

*1~*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m (0ft.)
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m (0ft.)

*3 Eurovent registered

*4 Cooling mode / Heating mode

*5 The sound pressure level measured by the conventional method in JIS for reference purpose.

*6 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O). Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PUHY-EP800YSNW-A2 (BS)	PUHY-EP850YSNW-A2 (BS)	PUHY-EP900YSNW-A2 (BS)	PUHY-EP950YSNW-A2 (BS)	PUHY-EP1000YSNW-A2 (BS)
HP			32	34	36	38	40
Modules			PUHY-EP(350+450)YNW-A2	PUHY-EP(400+450)YNW-A2	PUHY-EP(450+450)YNW-A2	PUHY-EP(250+350+350)YNW-A2	PUHY-EP(250+350+400)YNW-A2
Power supply	V/Hz/n ³	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) ^{*1}	kW	90.0	95.0	100.0	108.0	113.0
	Power input (nominal)	kW	31.03	33.45	36.63	34.06	36.33
	SEER		6.77	6.68	6.73	6.95	6.87
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) ^{*3} / Capacity (max) ^{*2}	kW	90.0 / 101.0	95.0 / 106.0	100.0 / 112.0	108.0 / 121.5	113.0 / 126.5
	Power input (nominal)/ Power input (max)	kW	22.67 / 27.97	24.54 / 30.02	25.70 / 32.36	26.40 / 31.80	28.32 / 33.82
	SCOP		4.33	4.28	4.32	4.36	4.32
	Temperature operating field	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level ^{**4,5}	Sound pressure (Sound power) level	dB(A)	67.5/70.5 (85/91)	68.5/72.0 (86/91)	69.0/73.5 (87/93)	66.5/68.0 (84/87)	68.0/68.5 (85/88)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50
Ø Ref. piping diameter	Liquid	mm	19.05	19.05	19.05	19.05	19.05
	Gas	mm	34.93	41.28	41.28	41.28	41.28
Fan ⁶	Type x quantity		Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	Propeller fan x 5	Propeller fan x 5
	Air flow	m ³ /min	270 + 305	270 + 305	305 + 305	185 + 270 + 270	185 + 270 + 270
Compressor	Type	Inverter scroll hermetic compressor					
	Motor output	kW	7.7 + 11.1	9.8 + 11.1	11.1 + 11.1	5.1 + 7.7 + 7.7	5.1 + 7.7 + 9.8
External dimensions	H(H ⁺)xWxD	mm	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	282 + 303	303 + 303	303 + 303	228 + 282 + 282	228 + 282 + 303
Refrigerant	Ref. Charge R410	kg	20.6	21.6	21.6	26.1	27.1
	CO ₂ eq.	Tons	43.01	45.1	45.1	54.49	56.58

Technical specifications

MODEL			PUHY-EP1050YSNW-A2 (BS)	PUHY-EP1100YSNW-A2 (BS)	PUHY-EP1150YSNW-A2 (BS)	PUHY-EP1200YSNW-A2 (BS)	PUHY-EP1250YSNW-A2 (BS)
HP			42	44	46	48	50
Modules			PUHY-EP(250+400+400)YNW-A2	PUHY-EP(350+350+400)YNW-A2	PUHY-EP(350+400+400)YNW-A2	PUHY-EP(400+400+400)YNW-A2	PUHY-EP(400+400+450)YNW-A2
Power supply	V/Hz/n ³	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) ^{*1}	kW	118.0	125.0	130.0	135.0	140.0
	Power input (nominal)	kW	38.68	40.71	43.04	45.45	48.44
	SEER		6.79	6.75	6.69	6.62	6.66
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) ^{*3} / Capacity (max) ^{*2}	kW	118.0 / 131.5	125.0 / 140.0	130.0 / 145.0	135.0 / 150.0	140.0 / 156.0
	Power input (nominal)/ Power input (max)	kW	30.17 / 35.83	31.25 / 37.53	33.07 / 39.50	34.97 / 41.55	36.17 / 43.94
	SCOP		4.28	4.31	4.27	4.25	4.27
	Temperature operating field	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level ^{**4,5}	Sound pressure (Sound power) level	dB(A)	68.5/69.0 (86/89)	68.0/69.5 (86/89)	69.0/70.0 (86/89)	70.0/70.5 (87/90)	70.0/73.0 (88/92)
Connectable indoor units	Total Capacity	50~130% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50
Ø Ref. piping diameter	Liquid	mm	19.05	19.05	19.05	19.05	19.05
	Gas	mm	41.28	41.28	41.28	41.28	41.28
Fan ⁶	Type x quantity		Propeller fan x 5	Propeller fan x 6	Propeller fan x 6	Propeller fan x 6	Propeller fan x 6
	Air flow	m ³ /min	185 + 270 + 270	270 + 270 + 270	270 + 270 + 270	270 + 270 + 270	270 + 270 + 305
Compressor	Type	Inverter scroll hermetic compressor					
	Motor output	kW	5.1 + 9.8 + 9.8	7.7 + 7.7 + 9.8	7.7 + 9.8 + 9.8	9.8 + 9.8 + 9.8	9.8 + 9.8 + 11.1
External dimensions	H(H ⁺)xWxD	mm	1858(1798)x920x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740 1858(1798)x1240x740
Net weight		kg	282 + 303 + 303	282 + 282 + 303	282 + 303 + 303	303 + 303 + 303	303 + 303 + 303
Refrigerant	Ref. Charge R410	kg	28.1	30.4	31.4	32.4	32.4
	CO ₂ eq.	Tons	58.67	63.47	63.47	67.65	67.65

^{*1,2,3} Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m (0ft.)
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m (0ft.)

³ Eurovent registered

⁴ Cooling mode / Heating mode

⁵ The sound pressure level measured by the conventional method in JIS for reference purpose.

⁶ External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PUHY-EP1300YSNW-A2 (-BS)	PUHY-EP1350YSNW-A2 (-BS)
HP			52	54
Modules			PUHY-EP(400+450+450)YNW-A2	PUHY-EP(450+450+450)YNW-A2
Power supply	V/Hz/n ³		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling	Capacity (nominal) ^{*1}	kW	145.0	150.0
	Power input (nominal)	kW	51,60	54,94
	SEER		6,70	6,73
	Temperature operating field	Indoor WB	°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) ^{*2} / Capacity (max) ^{*2}	kW	145.0 / 162.0	150.0 / 168.0
	Power input (nominal)/ Power input (max)	kW	37,37 / 46,28	38,56 / 48,55
	SCOP		4,29	4,32
	Temperature operating field	Indoor DB	°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C
Sound level ^{**5}	Sound pressure (Sound power) level	dB(A)	70.0/74.0 (88/94)	70.5/75.5 (89/95)
Connectable indoor units	Total Capacity		50~130% of outdoor unit capacity	
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50
Ø Ref. piping diameter	Liquid	mm	19.05	19.05
	Gas	mm	41.28	41.28
Fan ^{*5}	Type x quantity		Propeller fan x 6	Propeller fan x 6
	Air flow	m ³ /min	270 + 305 + 305	305 + 305 + 305
Compressor	Type		Inverter scroll hermetic compressor	
	Motor output	kW	9.8 + 11.1 + 11.1	11.1 + 11.1 + 11.1
External dimensions	H(H ^{*5})xWxD	mm	1858(1798)x1240x740	1858(1798)x1240x740
			1858(1798)x1240x740	1858(1798)x1240x740
			1858(1798)x1240x740	1858(1798)x1240x740
Net weight		kg	303 + 303 + 303	303 + 303 + 303
Refrigerant	Ref. Charge R410	kg	32,4	32,4
	CO ₂ eq.	Tons	67,65	67,65

^{*1,2,3} Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

^{*3} Eurovent registered

^{*4} Cooling mode / Heating mode

^{*5} The sound pressure level measured by the conventional method in JIS for reference purpose.

^{*6} External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

office



R2 NEXT STAGE LINE

OUTDOOR UNITS - PURY-(E)P Y(S)NW-A2(-BS)



NEW FOUR-SIDED BATTERY

STATIC PRESSURE OF FAN INCREASED UP TO 80 PA.

CITY MULTI

NEW FAN WITH LOW FRICTION PROFILE

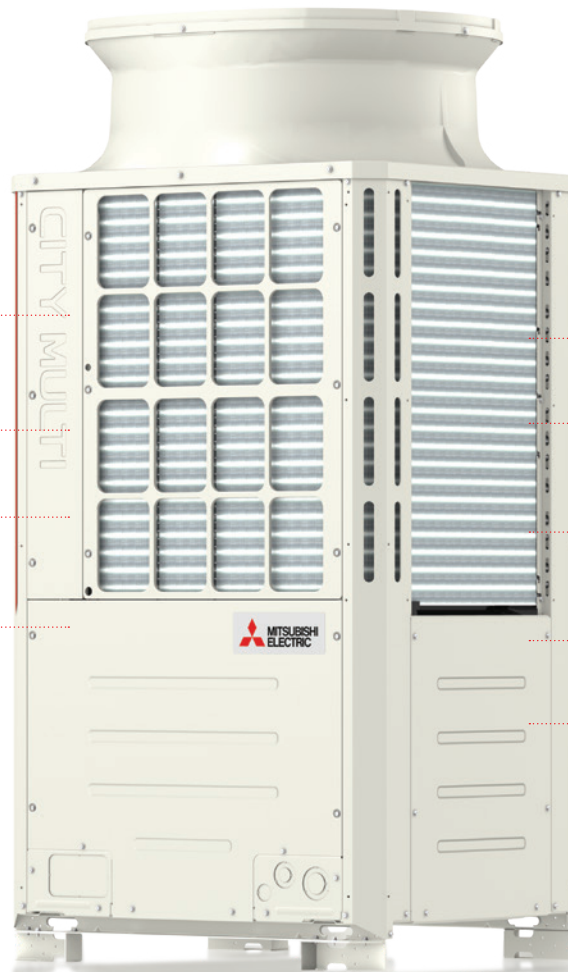
COMPRESSOR OPTIMISED WITH "MULTI-PORT" TECHNOLOGY

NEW AUTO-SHIFT MODE

NEW AUTO-SHIFT MODE PREHEAT DEFROST FUNCTION

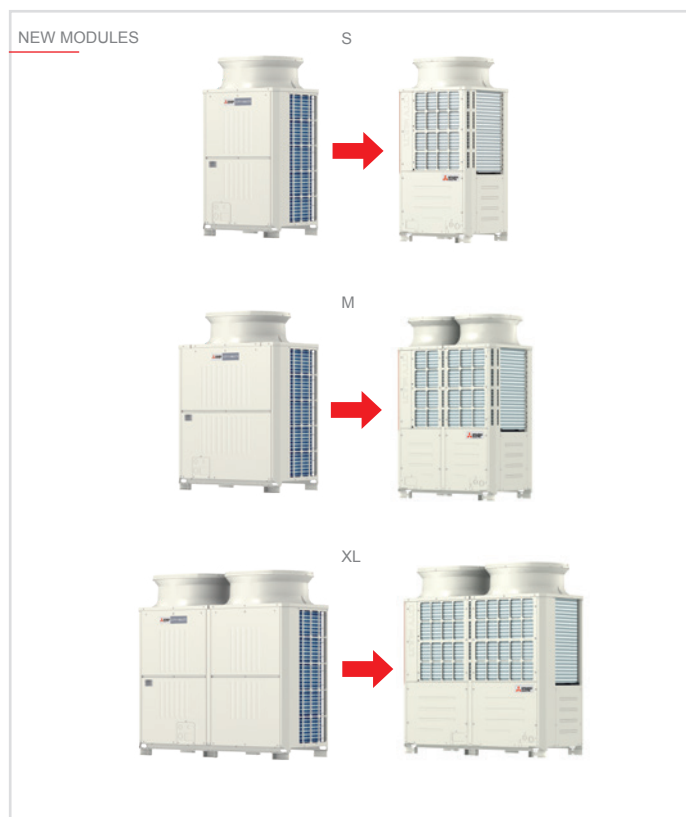
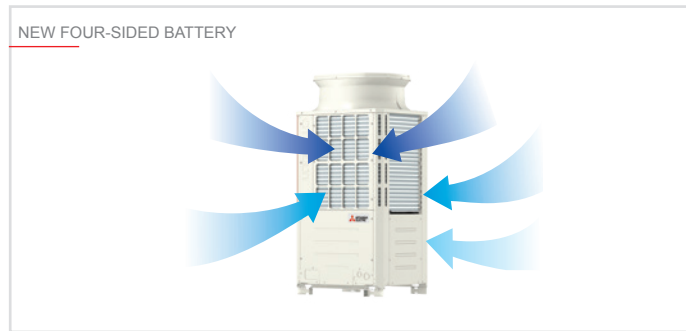
ADVANCED ETC CONTROL OF EVAPORATION TEMPERATURE.

FLEXIBLE NOISE SETTING



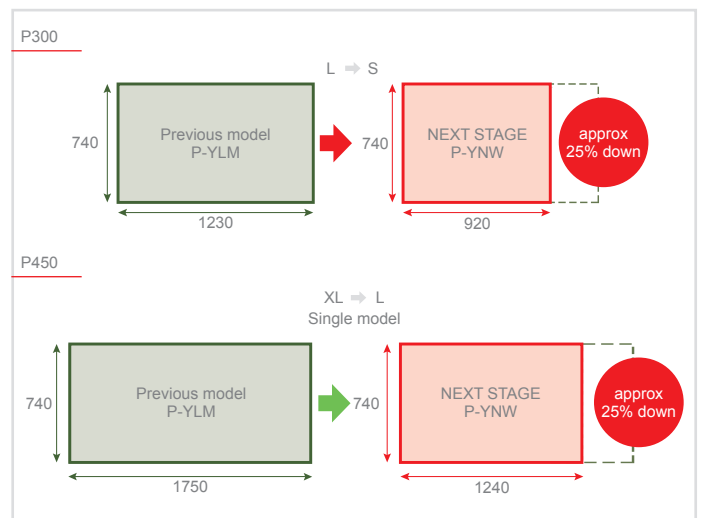
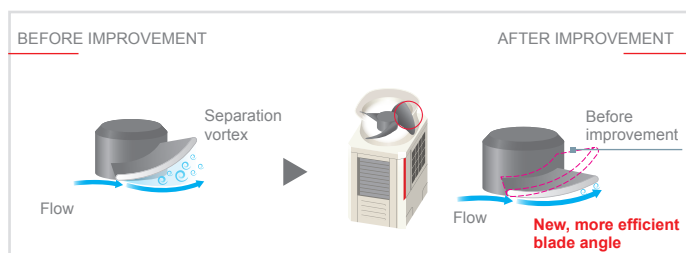
New design

The new outdoor units of the YNW series use a four-sided heat exchanger close to the top of the case near the fan. This technological and construction choice makes it possible to increase heat exchange efficiency.



New fan with new blade profile

The fan of the new YNW series has been completely redesigned to fit with the new four-sided battery. The profile of the fins has been optimised to minimise fluid flow losses.



Energy saving

Energy efficiency has been further improved compared to YLM units and now hits top of the range performance values. SEER values have been raised by 139% (P500) compared to the previous model and SCOP values by 49% (P300 and P500). This allows the new YNW units to consume less energy in both cooling and heating. All year-round saving.

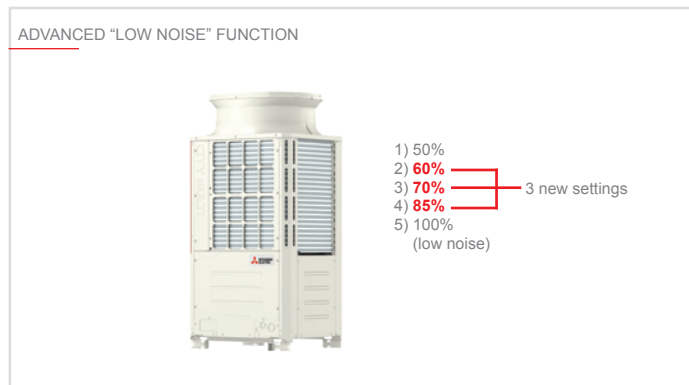


Single module

		Previous model	YNW
8HP	P200	S	S
10HP	P250	S	S
12HP	P300	L	S
14HP	P350	L	L
16HP	P400	L	L
18HP	P450	XL	L
20HP	P500	XL	XL

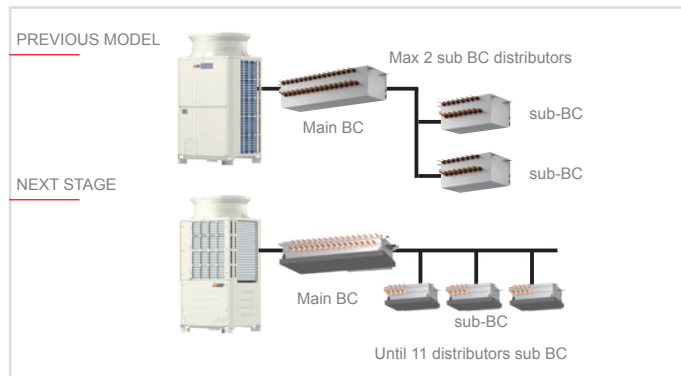
Advanced “Low Noise” function

Low noise” mode can now be selected using five different settings: 85%, 70%, 60% and 50% (values referring to ventilation speed). Noise reduction is directly configurable from the control board of the outdoor unit. Different settings can be selected depending on the installation requirements (in applications with special noise constraints).



New BC distributor

Increased number of connections (for systems with BC SUB distributor) and increased geometric limits. In the R2 heat recovery systems of the new YNW line, up to 11 BC SUB distributors can be connected to the BC Main distributor, thus allowing greater flexibility of configuration. The adoption of the new architecture allows a reduction of the refrigerant charge in the system.



Key Technologies

Technical specifications

MODEL		PURY-P200YNW-A2(-BS)	PURY-P250YNW-A2(-BS)	PURY-P300YNW-A2(-BS)	PURY-P350YNW-A2(-BS)	PURY-P400YNW-A2(-BS)	
HP		8	10	12	14	16	
Modules		PURY-P200YNW-A2	PURY-P250YNW-A2	PURY-P300YNW-A2	PURY-P350YNW-A2	PURY-P400YNW-A2	
Power supply	V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	22.4	28.0	33.5	40.0	45.0
	Power input (nominal)	kW	6.68	10.25	11.75	14.92	19.65
	SEER		7.27	6.85	6.34	5.98	5.82
Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
	Outdoor DB	°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C
Heating	Capacity (nominal) *2/ Capacity (max) *2	kW	22.4/25.0	28.0/31.5	33.5/33.5	40.0/45.0	45.0/50.0
	Power input (nominal)/ Power input (max)	kW	5.38/6.79	7.36/9.57	9.62/9.62	10.89/13.88	13.39/16.66
	SCOP		4.01	4.01	4.01	3.53	3.51
	Temperature operating field**	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
Outdoor WB		°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level *5*6	Sound pressure (Sound power) level	dB(A)	59/59 (76/76)	60.5/64 (78/83)	61/67 (80/86)	62.5/64 (81/83)	65/69 (83/88)
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity					
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~30	P10~P250, M20~M140/1~35	P10~P250, M20~M140/1~40
Ø Ref. piping diameter	Liquid	mm	15.88	19.05	19.05	19.05	22.2
	Gas	mm	19.05	22.2	22.2	28.58	28.58
Fan**	Type x quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow	m³/min	170	220	240	250	315
Compressor	Type	Inverter scroll hermetic					
	Motor output	kW	5.0	8.0	9.2	12.0	16.1
External dimensions	HxWxD	mm	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x1240x740	1858(1798)x1240x740
Net weight		kg	214	223	225	269	269
Refrigerant	Ref. Charge R410	kg	5.2	5.2	5.2	8.0	8.0
	CO ₂ eq.	Tons	10.85	10.85	10.85	16.70	16.70

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.), -11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PURY-P450YNW-A2(-BS)	PURY-P500YNW-A2(-BS)	PURY-P550YNW-A2(-BS)	PURY-P400YSNW-A2(-BS)	PURY-P450YSNW-A2(-BS)	PURY-P500YSNW-A2(-BS)	
HP			18	20	22	16	18	20	
Modules			PURY-P450YNW-A2	PURY-P500YNW-A2	PURY-P550YNW-A2	PURY-P(200+200)YNW-A2	PURY-P(200+250)YNW-A2	PURY-P(250+250)YNW-A2	
Power supply	V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz							
Cooling	Capacity (nominal) *1	kW	50.0	56.0	60.0	44.8	50.4	56.0	
	Power input (nominal)	kW	19.84	22.22	25.86	13.78	17.08	21.13	
	SEER		6.38	6.24	6.25	7.05	6.85	6.64	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) *3/ Capacity (max) *2	kW	50.0/56.0	56.0/63.0	63.0/69.0	44.8/50.0	50.4/56.5	56.0/63.0	
	Power input (nominal)/ Power input (max)	kW	15.33/18.79	16.76/21.14	20.00/24.55	11.08/14.00	13.05/16.71	15.17/19.74	
	SCOP		3.51	3.51	3.51	4.01	4.01	4.01	
	Temperature operating field**	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
		Outdoor WB	°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level *5*6	Sound pressure (Sound power) level	dB(A)	65.5/70 (83/89)	63.5/64.5 (82/84)	70.0/70.0 (89/89)	62/62 (79/79)	63/65.5 (81/84)	63.5/67 (81/86)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity							
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50	
Ø Ref. piping diameter	Liquid	mm	22.2	22.2	22.2	22.2	22.2	22.2	
	Gas	mm	28.58	28.58	28.58	28.58	28.58	28.58	
Fan*7	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	
	Air flow	m³/min	315	295	410	170+170	170+220	220+220	
Compressor	Type	Inverter scroll hermetic							
	Motor output	kW	16.2	17.4	20.5	5.0+5.0	5.0+8.0	8.0+8.0	
External dimensions	HxWxD	mm	1858(1798)x1240x740	1858(1798)x1750x740	1858(1798)x1750x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	
Net weight		kg	289	335	335	214+214	214+223	223+223	
Refrigerant	Ref. Charge R410	kg	10.8	10.8	10.8	10.4	10.4	10.4	
	CO ₂ eq.	Tons	22.55	22.55	22.55	21.71	21.71	21.71	

Technical specifications

MODEL			PURY-P550YSNW-A2(-BS)	PURY-P600YSNW-A2(-BS)	PURY-P650YSNW-A2(-BS)	PURY-P700YSNW-A2(-BS)	PURY-P750YSNW-A2(-BS)	
HP			22	24	26	28	30	
Modules			PURY-P(250+300)YNW-A2	PURY-P(300+300)YNW-A2	PURY-P(300+350)YNW-A2	PURY-P(350+350)YNW-A2	PURY-P(350+400)YNW-A2	
Power supply	V/Hz/n°	3-phase 4-wire 380-400-415 V 50/60 Hz						
Cooling	Capacity (nominal) *1	kW	61.5	67.0	73.5	80.0	85.0	
	Power input (nominal)	kW	22.69	24.27	27.42	30.76	35.26	
	SEER		6.40	6.15	5.98	5.80	5.72	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) *3/ Capacity (max) *2	kW	61.5/65.0	67.0/67.0	73.5/78.5	80.0/90.0	85.0/95.0	
	Power input (nominal)/ Power input (max)	kW	17.42/19.81	19.82/19.81	21.18/24.07	22.47/28.66	24.92/31.35	
	SCOP		4.01	4.01	3.53	3.53	3.51	
	Temperature operating field**	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
		Outdoor WB	°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level *5*6	Sound pressure (Sound power) level	dB(A)	64/69 (83/88)	64/70 (83/89)	65/69 (84/88)	65.5/67 (84/86)	67/70.5 (86/90)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity						
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	
Ø Ref. piping diameter	Liquid	mm	22.2	22.2	28.58	28.58	28.58	
	Gas	mm	28.58	28.58	28.58	34.93	34.93	
Fan*7	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 3	Propeller fan x 4	Propeller fan x 4	
	Air flow	m³/min	220+240	240+240	240+250	250+250	250+315	
Compressor	Type	Inverter scroll hermetic						
	Motor output	kW	8.0+9.2	9.2+9.2	9.2+12.0	12.0+12.0	12.0+16.1	
External dimensions	HxWxD	mm	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	
Net weight		kg	223+225	225+225	225+269	269+269	269+269	
Refrigerant	Ref. Charge R410	kg	10.4	10.4	13.2	16	16	
	CO ₂ eq.	Tons	21.71	21.71	27.56	33.40	33.40	

*1,2,3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.)/-11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PURY-P800YSNW-A2(-BS)	PURY-P850YSNW-A2(-BS)	PURY-P900YSNW-A2(-BS)	PURY-P950YSNW-A2(-BS)	PURY-P1000YSNW-A2(-BS)	
HP			32	34	36	38	40	
Modules			PURY-P(400+400)YNW-A2	PURY-P(400+450)YNW-A2	PURY-P(450+450)YNW-A2	PURY-P(450+500)YNW-A2	PURY-P(500+500)YNW-A2	
Power supply	V/Hz/n*		3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) **1	kW	90.0	95.0	100.0	106.0	112.0	
	Power input (nominal)	kW	40.54	40.77	40.98	43.44	45.90	
	SEER		5.65	5.92	6.19	6.12	6.05	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) **2/ Capacity (max) **2	kW	90.0/100.0	95.0/106.0	100.0/112.0	106.0/119.0	112.0/126.0	
	Power input (nominal)/ Power input (max)	kW	27.60/34.36	29.59/36.55	31.64/38.75	33.12/41.17	34.56/43.59	
	SCOP		3.51	3.51	3.51	3.51	3.51	
	Temperature operating field**4	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
		Outdoor WB	°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level **5#6	Sound pressure (Sound power) level	dB(A)	68/72 (86/91)	68.5/72.5 (86/92)	68.5/73.0 (86/92)	68/71.5 (86/91)	66.5/67.5 (85/87)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity						
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	
Ø Ref. piping diameter	Liquid	mm	28.58	28.58	28.58	28.58	28.58	
	Gas	mm	34.93	41.28	41.28	41.28	41.28	
Fan*7	Type x quantity		Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	
	Air flow	m³/min	315+315	315+315	315+315	315+295	295+295	
Compressor	Type	Inverter scroll hermetic						
	Motor output	kW	16.1+16.1	16.1+16.2	16.2+16.2	16.2+17.4	17.4+17.4	
External dimensions	HxWxD	mm	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	
	Net weight	kg	269+269	269+289	289+289	289+335	335+335	
Refrigerant	Ref. Charge R410	kg	16	18.8	21.6	21.6	21.6	
	CO ₂ eq.	Tons	33.40	39.25	45.1	45.1	45.1	

Technical specifications

MODEL			PURY-P1050YSNW-A2(-BS)	PURY-P1100YSNW-A2(-BS)	
HP			42	44	
Modules			PURY-P(500+550)YNW-A2	PURY-P(550+550)YNW-A2	
Power supply	V/Hz/n*		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling	Capacity (nominal) **1	kW	116.0	120.0	
	Power input (nominal)	kW	49.36	53.32	
	SEER		6.06	6.06	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) **2/ Capacity (max) **2	kW	119.0/132.0	126.0/138.0	
	Power input (nominal)/ Power input (max)	kW	37.77/46.97	41.17/50.54	
	SCOP		3.51	3.51	
	Temperature operating field**4	Indoor DB	°C	15.0~27.0°C (59~81°F)	15.0~27.0°C
		Outdoor WB	°C	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C
Sound level **5#6	Sound pressure (Sound power) level	dB(A)	71.0/71.5 (90/91)	73.0/73.0 (92/92)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity			
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	
Ø Ref. piping diameter	Liquid	mm	34.93	34.93	
	Gas	mm	41.28	41.28	
Fan*7	Type x quantity		Propeller fan x 4	Propeller fan x 4	
	Air flow	m³/min	295+410	410+410	
Compressor	Type	Inverter scroll hermetic			
	Motor output	kW	17.4+20.5	20.5+20.5	
External dimensions	HxWxD	mm	1858(1798)x1750x740 1858(1798)x1750x740	1858(1798)x1750x740 1858(1798)x1750x740	
	Net weight	kg	335+335	335+335	
Refrigerant	Ref. Charge R410	kg	21.6	21.6	
	CO ₂ eq.	Tons	45.1	45.1	

*1,2,3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.)/-11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PURY-EP200YNW-A2(-BS)	PURY-EP250YNW-A2(-BS)	PURY-EP300YNW-A2(-BS)	PURY-EP350YNW-A2(-BS)	PURY-EP400YNW-A2(-BS)	
HP			8	10	12	14	16	
Modules			PURY-EP200YNW-A2	PURY-EP250YNW-A2	PURY-EP300YNW-A2	PURY-EP350YNW-A2	PURY-EP400YNW-A2	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	22.4	28.0	33.5	40.0	45.0	
	Power input (nominal)	kW	6.38	9.75	11.20	14.23	18.75	
	SEER		7.45	7.05	6.48	6.03	6.10	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) *3/ Capacity (max) *2	kW	22.4 / 25.0	28.0 / 31.5	33.5 / 37.5	40.0 / 45.0	45.0 / 50.0	
	Power input (nominal)/ Power input (max)	kW	5.37 / 6.72	7.31 / 9.51	9.59 / 10.90	10.63 / 13.39	13.15 / 16.33	
	SCOP		3.51	3.51	3.54	3.56	3.57	
	Temperature operating field**	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
		Outdoor WB	°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level *5*6	Sound pressure (Sound power) level	dB(A)	59.0/59.0 (76/76)	60.5/61.0 (78/80)	61.0/67.0 (80/86)	62.5/64.0 (81/83)	65.0/69.0 (83/88)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity						
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~20	P10~P250, M20~M140/1~25	P10~P250, M20~M140/1~30	P10~P250, M20~M140/1~35	P10~P250, M20~M140/1~40	
Ø Ref. piping diameter	Liquid	mm	15.88	19.05	19.05	19.05	22.2	
	Gas	mm	19.05	22.2	22.2	28.58	28.58	
Fan*7	Type x quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	
	Air flow	m³/min	170	185	240	250	315	
Compressor	Type	Inverter scroll hermetic						
	Motor output	kW	4.9	7.5	8.8	11.4	15.3	
External dimensions	HxWxD	mm	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x920x740	1858(1798)x1240x740	1858(1798)x1240x740	
Net weight		kg	219	228	230	275	276	
Refrigerant	Ref. Charge R410	kg	5.2	5.2	5.2	8.0	8.0	
	CO ₂ eq.	Tons	10.85	10.85	10.85	16.70	16.70	

Technical specifications

MODEL			PURY-EP450YNW-A2(-BS)	PURY-EP500YNW-A2(-BS)	PURY-EP550YNW-A2(-BS)	PURY-EP400YSNW-A2(-BS)	PURY-EP450YSNW-A2(-BS)	
HP			18	20	22	16	18	
Modules			PURY-EP450YNW-A2	PURY-EP500YNW-A2	PURY-EP550YNW-A2	PURY-EP(200+200)YNW-A2	PURY-EP(200+250)YNW-A2	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	50.0	56.0	60.0	44.8	50.4	
	Power input (nominal)	kW	18.93	21.78	25.70	13.17	16.31	
	SEER		6.58	6.38	6.40	7.23	7.03	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) *3/ Capacity (max) *2	kW	50.0 / 56.0	56.0 / 63.0	63.0 / 69.0	44.8 / 50.0	50.4 / 56.5	
	Power input (nominal)/ Power input (max)	kW	14.61 / 18.36	16.66 / 21.00	19.81 / 23.87	11.08 / 13.85	12.98 / 16.56	
	SCOP		3.56	3.54	3.51	3.51	3.51	
	Temperature operating field**	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
		Outdoor WB	°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level *5*6	Sound pressure (Sound power) level	dB(A)	65.5/70.0 (83/89)	63.5/64.5 (82/84)	70.0/70.0 (89/89)	62.0/62.0 (79/79)	63.0/63.5 (81/82)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity						
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~45	P10~P250, M20~M140/1~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/1~40	P10~P250, M20~M140/1~45	
Ø Ref. piping diameter	Liquid	mm	22.2	22.2	22.2	22.2	22.2	
	Gas	mm	28.58	28.58	28.58	28.58	28.58	
Fan*7	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	
	Air flow	m³/min	315	295	410	170 + 170	170 + 185	
Compressor	Type	Inverter scroll hermetic						
	Motor output	kW	15.5	17.0	20.4	4.9 + 4.9	4.9 + 7.5	
External dimensions	HxWxD	mm	1858(1798)x1240x740	1858(1798)x1750x740	1858(1798)x1750x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	
Net weight		kg	301	346	346	219 + 219	219 + 228	
Refrigerant	Ref. Charge R410	kg	10.8	10.8	10.8	10.4	10.4	
	CO ₂ eq.	Tons	22.55	22.55	22.55	21.71	21.71	

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.)/-11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PURY-EP500YSNW-A2(-BS)	PURY-EP550YSNW-A2(-BS)	PURY-EP600YSNW-A2(-BS)	PURY-EP650YSNW-A2(-BS)	PURY-EP700YSNW-A2(-BS)	
HP			20	22	24	26	28	
Modules			PURY-EP(250+250)YNW-A2	PURY-EP(250+300)YNW-A2	PURY-EP(300+300)YNW-A2	PURY-EP(300+350)YNW-A2	PURY-EP(350+350)YNW-A2	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	56.0	61.5	67.0	73.5	80.0	
	Power input (nominal)	kW	20.14	21.65	23.10	26.15	29.30	
	SEER		6.84	6.56	6.29	6.07	5.85	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) *2/ Capacity (max) *2	kW	56.0 / 63.0	61.5 / 69.0	67.0 / 75.0	73.5 / 82.5	80.0 / 90.0	
	Power input (nominal)/ Power input (max)	kW	15.05 / 19.62	17.32 / 21.10	19.76 / 22.45	20.88 / 25.00	21.91 / 27.60	
	SCOP		3.51	3.51	3.54	3.54	3.56	
	Temperature operating field**	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
		Outdoor WB	°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level *5*6	Sound pressure (Sound power) level	dB(A)	63.5/64.0 (81/83)	64.0/68.0 (83/87)	64.0/70.0 (83/89)	65.0/69.0 (84/88)	65.5/67.0 (84/86)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity						
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/1~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	
Ø Ref. piping diameter	Liquid	mm	22.2	22.2	22.2	28.58	28.58	
	Gas	mm	28.58	28.58	28.58	28.58	34.93	
Fan*7	Type x quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 3	Propeller fan x 4	
	Air flow	m³/min	185 + 185	185 + 240	240 + 240	240 + 250	250 + 250	
Compressor	Type	Inverter scroll hermetic						
	Motor output	kW	7.5 + 7.5	7.5 + 8.8	8.8 + 8.8	8.8 + 11.4	11.4 + 11.4	
External dimensions	HxWxD	mm	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x920x740	1858(1798)x920x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	
	Net weight	kg	228 + 228	228 + 230	230 + 230	230 + 275	275 + 275	
Refrigerant	Ref. Charge R410	kg	10.4	10.4	10.4	13.2	16	
	CO ₂ eq.	Tons	21.71	21.71	21.71	27.56	33.40	

Technical specifications

MODEL			PURY-EP750YSNW-A2(-BS)	PURY-EP800YSNW-A2(-BS)	PURY-EP850YSNW-A2(-BS)	PURY-EP900YSNW-A2(-BS)	PURY-EP950YSNW-A2(-BS)	
HP			30	32	34	36	38	
Modules			PURY-EP(350+400)YNW-A2	PURY-EP(400+400)YNW-A2	PURY-EP(400+450)YNW-A2	PURY-EP(450+450)YNW-A2	PURY-EP(450+500)YNW-A2	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling	Capacity (nominal) *1	kW	85.0	90.0	95.0	100.0	106.0	
	Power input (nominal)	kW	33.59	38.62	38.93	39.06	41.89	
	SEER		5.88	5.92	6.15	6.38	6.29	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) *2/ Capacity (max) *2	kW	85.0 / 95.0	90.0 / 100.0	95.0 / 106.0	100.0 / 112.0	106.0 / 119.0	
	Power input (nominal)/ Power input (max)	kW	24.42 / 30.54	27.10 / 33.67	28.61 / 35.81	30.12 / 37.83	32.21 / 40.61	
	SCOP		3.56	3.57	3.56	3.56	3.54	
	Temperature operating field**	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
		Outdoor WB	°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level *5*6	Sound pressure (Sound power) level	dB(A)	67.0/70.5 (86/90)	68.0/72.0 (86/91)	68.5/72.5 (86/92)	68.5/73.0 (86/92)	68.0/71.5 (86/91)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity						
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	P10~P250, M20~M140/2~50	
Ø Ref. piping diameter	Liquid	mm	28.58	28.58	28.58	28.58	28.58	
	Gas	mm	34.93	34.93	41.28	41.28	41.28	
Fan*7	Type x quantity		Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	
	Air flow	m³/min	250 + 315	315 + 315	315 + 315	315 + 315	315 + 295	
Compressor	Type	Inverter scroll hermetic						
	Motor output	kW	11.4 + 15.3	15.3 + 15.3	15.3 + 15.5	15.5 + 15.5	15.5 + 17.0	
External dimensions	HxWxD	mm	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1240x740	1858(1798)x1240x740 1858(1798)x1750x740	
	Net weight	kg	275 + 276	276 + 276	276 + 301	301 + 301	301 + 346	
Refrigerant	Ref. Charge R410	kg	16	16	18.8	21.6	21.6	
	CO ₂ eq.	Tons	33.40	37.58	39.25	45.1	45.1	

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.)/-11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

Technical specifications

MODEL			PURY-EP1000YSNW-A2(-BS)	PURY-EP1050YSNW-A2(-BS)	PURY-EP1100YSNW-A2(-BS)	
HP			40	42	44	
Modules			PURY-EP(500+500)YNW-A2	PURY-EP(500+550)YNW-A2	PURY-EP(550+550)YNW-A2	
Power supply	V/Hz/n°		3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling	Capacity (nominal) *1	kW	112.0	116.0	120.0	
	Power input (nominal)	kW	44.97	48.73	53.08	
	SEER		6.19	6.20	6.21	
	Temperature operating field	Indoor WB	°C	15.0~24.0°C	15.0~24.0°C	15.0~24.0°C
Outdoor DB		°C	-5.0~52.0°C	-5.0~52.0°C	-5.0~52.0°C	
Heating	Capacity (nominal) *3/ Capacity (max) *2	kW	112.0 / 126.0	119.0 / 132.0	126.0 / 138.0	
	Power input (nominal)/ Power input (max)	kW	34.35 / 43.29	37.53 / 46.15	40.90 / 49.28	
	SCOP		3.54	3.51	3.51	
	Temperature operating field*4	Indoor DB	°C	15.0~27.0°C	15.0~27.0°C	15.0~27.0°C
		Outdoor WB	°C	-20.0~15.5°C	-20.0~15.5°C	-20.0~15.5°C
Sound level *5*6	Sound pressure (Sound power) level	dB(A)	66.5/67.5 (85/87)	71.0/71.5 (90/91)	73.0/73.0 (92/92)	
Connectable indoor units	Total Capacity	50~150% of outdoor unit capacity				
	Model/Quantity	CITY MULTI	P10~P250, M20~M140/2~50	P10~P250, M20~M140/3~50	P10~P250, M20~M140/3~50	
Ø Ref. piping diameter	Liquid	mm	28.58	34.93	34.93	
	Gas	mm	41.28	41.28	41.28	
Fan*7	Type x quantity		Propeller fan x 4	Propeller fan x 4	Propeller fan x 4	
	Air flow	m³/min	295 + 295	295 + 410	410 + 410	
Compressor	Type	Inverter scroll hermetic				
	Motor output	kW	17.0 + 17.0	17.0 + 20.4	20.4 + 20.4	
External dimensions	HxWxD	mm	1858(1798)x1750x740 1858(1798)x1750x740	1858(1798)x1750x740 1858(1798)x1750x740	1858(1798)x1750x740 1858(1798)x1750x740	
	Net weight	kg	346 + 346	346 + 346	346 + 346	
Refrigerant	Ref. Charge R410	kg	21.6	21.6	21.6	
	CO ₂ eq.	Tons	45.1	45.1	45.1	

*1,*2,*3 Nominal conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB	35°C DB	7.5m	0m
Heating	20°C DB	7°C DB/6°C WB	7.5m	0m

*3 Eurovent registered

*4 -10°C D.B. (14°F D.B.)/-11°C W.B. (12°F W.B.) to 21°C D.B. (70°F D.B.)/15.5°C W.B. (60°F W.B.) with cooling/heating mixed operation.

*5 Cooling mode / Heating mode

*6 The sound pressure level measured by the conventional method in JIS for reference purpose.

*7 External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH₂O, 6.1 mmH₂O, 8.2 mmH₂O).

Consult your dealer about the specification when setting External static pressure option.

*Due to continuing improvement, above specifications may be subject to change without notice.

WY WR2 LINE

OUTDOOR UNITS - Water condensed Heat pump and Heat recovery PQH(R)Y-P Y(S)LM-A1



WEIGHT REDUCED UP TO -44% COMPARED TO PREVIOUS MODEL

WIDER LINEUP INTRODUCING 14HP SIZE

SINGLE MODULE UP TO SIZE 24HP FOR EASIER INSTALLATION AND LESS ENCUMBRANCE

HIGHER EFFICIENCY THAN PREVIOUS MODEL (UP TO +20% EER AND +34% COP)

NEW CASE IN SMALL AND LARGE VERSIONS

EVAPORATING TEMPERATURE CONTROL (ETC) FEATURE AVAILABLE

WATER FLOW AUTOMATIC CONTROL WITH 0-10V INPUT

FOR SIZES P700-P900 (28-36HP) REDUCED OCCUPIED SURFACE.



*1 Values referring to the model PQHY-P600 YSLM-A compared to the same size as the previous series
*2 Value referred to the model P400 compared with the same size as the previous model

New Small and Large case

New water condensed outdoor units WY and WR2 are available in two module types: Small and Large. Large module allows capacity up to 24HP (69 kW in Cooling and 76,5 kW in Heating) with just one module, reducing occupied surface in installation site up to 50% compared to previous model. For double module configuration room saving can be up to 33%.

Weight reduction

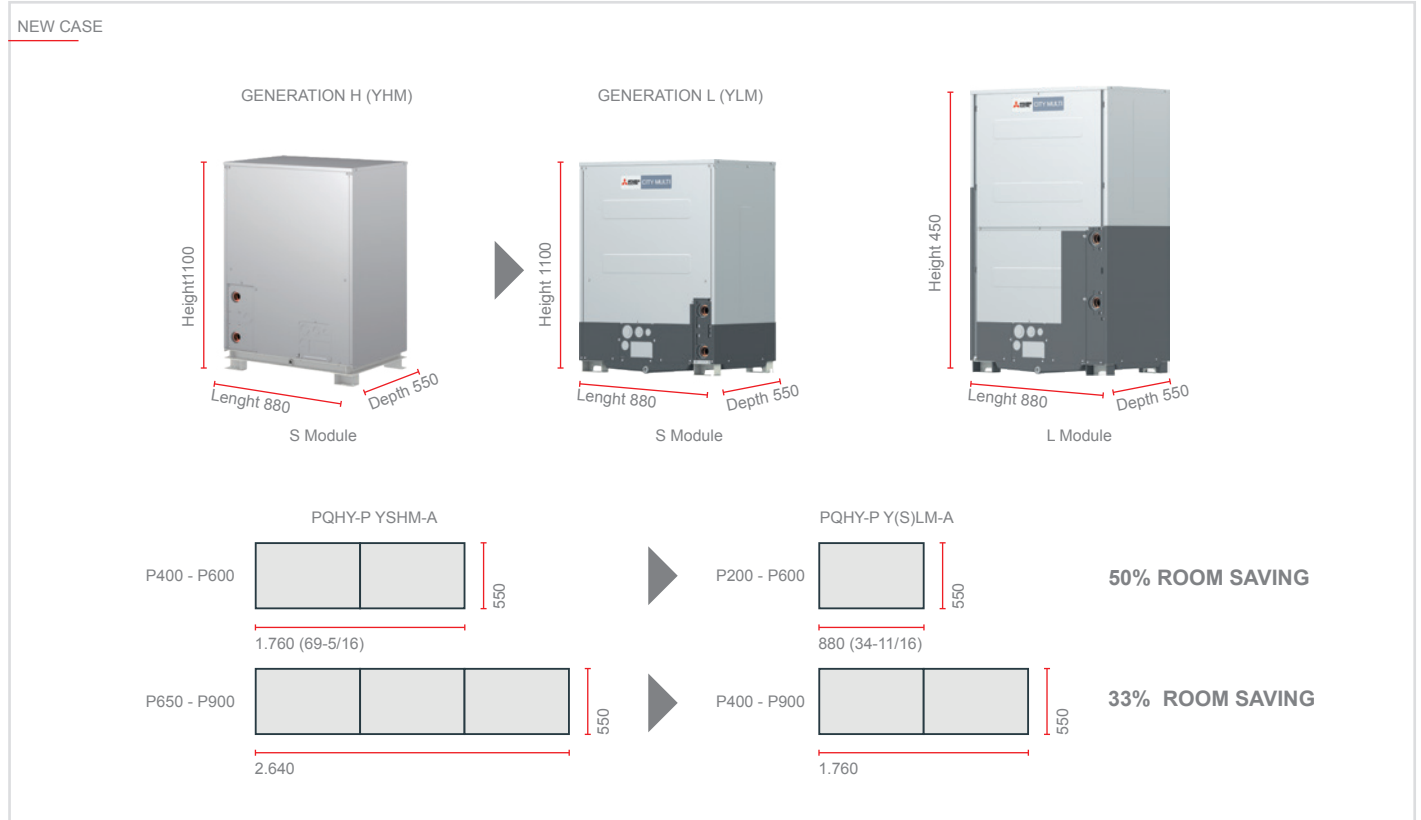
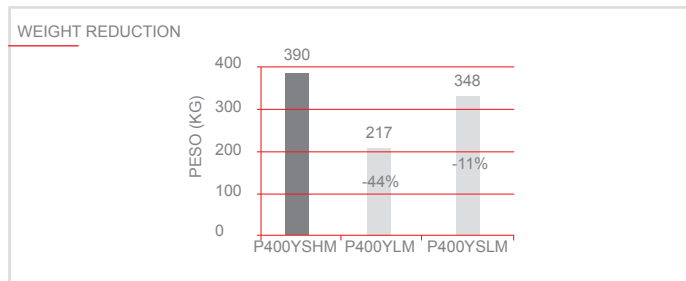
A significant weight reduction compared to previous model, up to 44% with Large module, allows an easier installation and transportation of the unit.

Higher energy efficiency

New WY and WR2 model grants top of the class EER and COP performances. Energy efficiency has been improved for both single and double module, in Cooling and Heating, up to +34%. This type of systems are among the most efficient in the world, thanks to high performances and constant temperature attributes of geothermal application.

	PQHY		PQRY	
	Y(S)HM	Y(S)LM	Y(S)HM	Y(S)LM
P200	195	174	181	172
P250	195	174	181	172
P300	195	174	181	172
P350	-	217	-	216
P400	390	217 ^{*1}	362	216 ^{*1}
		348		344 ^{*2}
P450	390	217 ^{*1}	362	216 ^{*1}
		348		344 ^{*2}
P500	390	217 ^{*1}	362	216 ^{*1}
		348		344 ^{*2}
P550	390	246 ^{*1}	362	246 ^{*1}
		348 ^{*2}		344 ^{*2}
P600	390	246 ^{*1}	362	246 ^{*1}
		348 ^{*2}		344 ^{*2}
P700	585	434	-	432
P750	585	434	-	432
P800	585	434	-	432
P850	585	434	-	432
P900	585	434	-	432

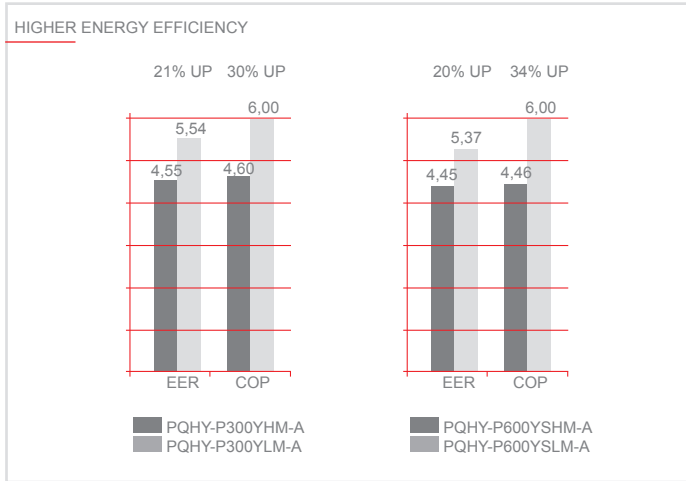
*1 Single module
*2 Double module



Water flow rate control

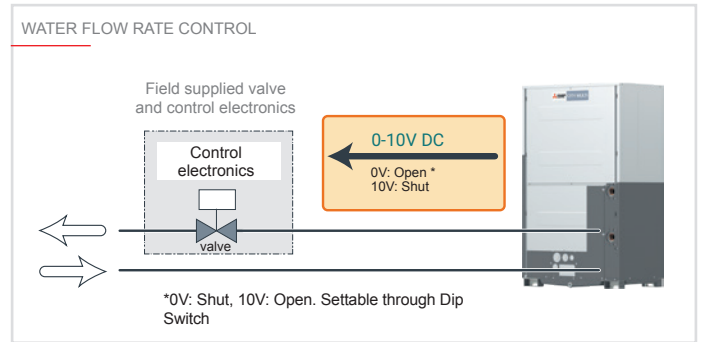
New YLM water condensed outdoor units are equipped with an automatic flow rate control system, which allows reduction of pumping consumption when the system works in partial load conditions. Flow rate control is performed by a 0-10V signal, which controls the regulation valve by shutting or opening it (field supplied).

Thanks to factory setting water circulation pumping is performed even during temporary blackout.



Advantages

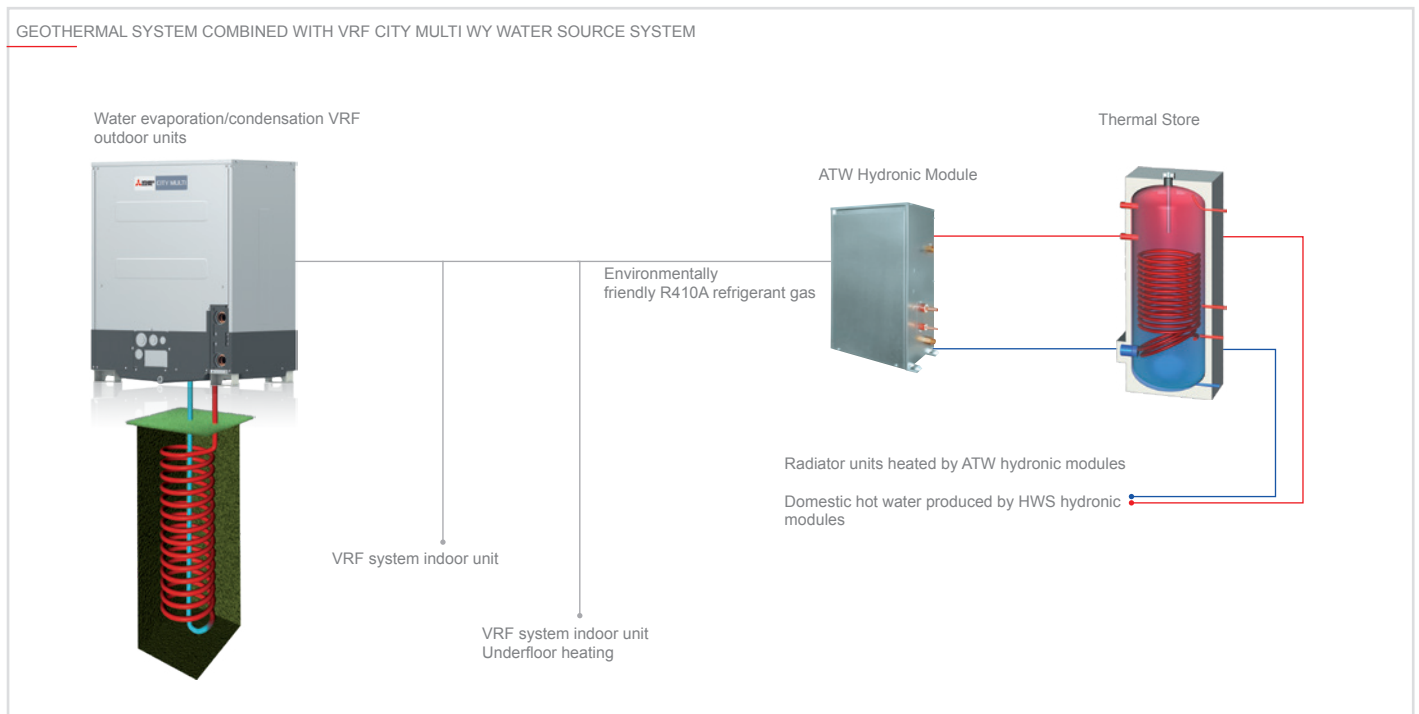
WY and WR2 lines VRF CITY MULTI systems have all the benefits of the Y series, using water evaporation condensing units. Water heat source condensing units offer the advantage of being installable inside the building, for even greater installation flexibility with practically no limitations for the dimensions of the infrastructure. Depending on the capacity of the outdoor unit, up to 26 indoor units can be connected to a single condensing unit, while up to 50 indoor units can be connected to a modular system with individual user and/or centralized control. The two-pipe system allows the system to transition from heating to cooling mode and vice versa, for superior comfort in all zones.












Geothermal applications

WY and WR2 lines outdoor units are perfectly suited for geothermal applications as they use water as the thermal medium fluid which, at depths from 10 m below ground, maintains a practically constant temperature with no significant excursions all year round.

A geothermal installation uses the ground as a heat source in winter and as a heat sink in summer. Using geothermal probes (heat exchangers) together with VRF CITY MULTI WY and WR2 systems, heat may be extracted from the ground to warm in winter, and dissipated into the ground to cool in summer.



Key Technologies

								
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Technical specifications WY LINE

MODEL Single			PQHY-P200YLM-A1	PQHY-P250YLM-A1	PQHY-P300YLM-A1
HP			8	10	12
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3-phase 380-400-415V 50Hz		
Cooling	Capacity*1	kW	22.4	28.0	33.5
	Power input	kW	3.71	4.90	6.04
	SEER		8.12	8.16	7.42
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	25.0	31.5	37.5
	Power input	kW	3.97	5.08	6.25
	SCOP		4.90	4.61	4.55
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3			46	48	54
Connectable indoor units	Total capacity		50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity
	Model/Quantity		P15~P250/1~17	P15~P250/1~21	P15~P250/1~26
Ø Ref. piping	Liquid	mm	9.52	9.52	9.52
	Gas	mm	19.05	22.2	22.2
Circulating Water	Flow rate	m³/h	5.76	5.76	5.76
	Operating volume range		3.0~7.2	3.0~7.2	3.0~7.2
	Pressure drop	kPa	24	24	24
	Heat exchanger volume	l	5.0	5.0	5.0
External dimensions			1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550
Net weight			170	170	170
Ref. Charge R410*/CO ₂ Eq			5.0 / 10.44	5.0 / 10.44	5.0 / 10.44

*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

*3 Values measured in anechoic chamber.

** GWP value of HFC R410A 2088 according to 517 / 2014.

Technical specifications WY LINE

MODEL Single			PQHY-P350YLM-A1	PQHY-P400YLM-A1	PQHY-P450YLM-A1	PQHY-P500YLM-A1	PQHY-P550YLM-A1	PQHY-P600YLM-A1
HP			14	16	18	20	22	24
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3-phase 380-400-415V 50Hz					
Cooling	Capacity*1	kW	40.0	45.0	50.0	56.0	63.0	69.0
	Power input	kW	7.14	8.03	9.29	11.17	12.54	14.49
	SEER		7.44	7.40	6.62	6.30	6.89	6.89
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	45.0	50.0	56	63.0	69.0	76.5
	Power input	kW	7.53	8.37	9.79	11.43	12.27	14.51
	SCOP		4.29	4.25	4.17	4.04	3.77	3.51
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3			52	52	54	54	56.5	56.5
Connectable indoor units	Total capacity		50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity	50 to 130% of O.U. capacity
	Model/Quantity		P15~P250/1~30	P15~P250/1~34	P15~P250/1~39	P15~P250/1~43	P15~P250/2~47	P15~P250/2~50
Ø Ref. piping	Liquid	mm	12.7	15.88	15.88	15.88	15.88	15.88
	Gas	mm	28.58	28.58	28.58	28.58	28.58	28.58
Circulating Water	Flow rate	m³/h	7.20	7.20	7.20	7.20	11.52	11.52
	Operating volume range		4.5~11.6	4.5~11.6	4.5~11.6	4.5~11.6	6.0~14.4	6.0~14.4
	Pressure drop	kPa	44	44	44	44	45	45
	Heat exchanger volume	l	5.0	5.0	5.0	5.0	10.0	10.0
External dimensions			1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550
Net weight			214	214	214	214	243	243
Ref. Charge R410*/CO ₂ Eq			6.0 / 12.53	6.0 / 12.53	6.0 / 12.53	6.0 / 12.53	11.7 / 24.43	11.7 / 24.43

*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

*3 Values measured in anechoic chamber.

** GWP value of HFC R410A 2088 according to 517 / 2014.

Technical specifications WY LINE

MODEL Double			PQHY-P400YSLM-A1	PQHY-P450YSLM-A1	PQHY-P500YSLM-A1	PQHY-P550YSLM-A1	PQHY-P600YSLM-A1	
HP			16	18	20	22	24	
Modules			PQHY-P200YLM-A1 PQHY-P200YLM-A1	PQHY-P250YLM-A1 PQHY-P200YLM-A1	PQHY-P250YLM-A1 PQHY-P250YLM-A1	PQHY-P300YLM-A1 PQHY-P250YLM-A1	PQHY-P300YLM-A1 PQHY-P300YLM-A1	
Twinning joint			CMY-Y100VBK3					
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3 phase 380-400-415V 50Hz					
Cooling	Capacity*1	kW	45.0	50.0	56.0	63.0	69.0	
	Power input	kW	7.70	8.78	10.12	11.55	12.84	
	SEER		-	-	-	-	-	
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0
		Water	°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	50.0	56.0	63.0	69.0	76.5	
	Power input	kW	7.94	8.97	10.16	11.31	12.75	
	SCOP		-	-	-	-	-	
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0
		Water	°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3		dB(A)	49	50	51	55	57	
Connectable indoor units	Total capacity		50 to 130% of O.U. capacity					
	Model/Quantity		P15~P250/1~34	P15~P250/1~39	P15~P250/1~43	P15~P250/2~47	P15~P250/2~50	
Ø Ref. piping	Liquid/Gas	mm	15.88/28.58	15.88/28.58	15.88/28.58	15.88/28.58	15.88/28.58	
Circulating Water	Flow rate	m³/h	5.76+5.76	5.76+5.76	5.76+5.76	5.76+5.76	5.76+5.76	
	Operating volume range		3+3~7.2+7.2	3+3~7.2+7.2	3+3~7.2+7.2	3+3~7.2+7.2	3+3~7.2+7.2	
	Pressure drop	kPa	24+24	24+24	24+24	24+24	24+24	
	Heat exchanger volume	l	5.0+5.0	5.0+5.0	5.0+5.0	5.0+5.0	5.0+5.0	
External dimentions		mm	1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550	
			1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550	
Net weight		kg	170+170	170+170	170+170	170+170	170+170	
Ref. Charge R410*/CO ₂ Eq		kg/Tons	5.0+5.0/20.88	5.0+5.0/20.88	5.0+5.0/20.88	5.0+5.0/20.88	5.0+5.0/20.88	

*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

*3 Values measured in anechoic chamber.

*4 GWP value of HFC R410A 2088 according to 517 / 2014.

Technical specifications WY LINE

MODEL Double			PQHY-P700YSLM-A1	PQHY-P750YSLM-A1	PQHY-P800YSLM-A1	PQHY-P850YSLM-A1	PQHY-P900YSLM-A1	
HP			28	30	32	34	36	
Modules			PQHY-P350YLM-A1 PQHY-P350YLM-A1	PQHY-P400YLM-A1 PQHY-P350YLM-A1	PQHY-P400YLM-A1 PQHY-P400YLM-A1	PQHY-P450YLM-A1 PQHY-P400YLM-A1	PQHY-P450YLM-A1 PQHY-P450YLM-A1	
Twinning joint			CMY-Y200VBK2					
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3 phase 380-400-415V 50Hz					
Cooling	Capacity*1	kW	80.0	85.0	90.0	96.0	101.0	
	Power input	kW	14.73	15.64	16.57	18.03	19.38	
	SEER		-	-	-	-	-	
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0
		Water	°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	88.0	95.0	100.0	108.0	113.0	
	Power input	kW	14.73	15.90	16.75	18.49	19.74	
	SCOP		-	-	-	-	-	
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0
		Water	°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3		dB(A)	55	55	55	56	57	
Connectable indoor units	Total capacity		50 to 130% of O.U. capacity					
	Model/Quantity		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50	P15~P250/2~50	P15~P250/2~50	
Ø Ref. piping	Liquid/Gas	mm	19.05/34.93	19.05/34.93	19.05/34.93	19.05/41.28	19.05/41.28	
Circulating Water	Flow Rate	m³/h	7.20+7.20	7.20+7.20	7.20+7.20	7.20+7.20	7.20+7.20	
	Operating volume range		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	
	Pressure drop	kPa	44+44	44+44	44+44	44+44	44+44	
	Heat exchanger volume	l	5.0+5.0	5.0+5.0	5.0+5.0	5.0+5.0	5.0+5.0	
External dimentions		mm	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	
			1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	
Net weight		kg	214+214	214+214	214+214	214+214	214+214	
Ref. Charge R410*/CO ₂ Eq		kg/Tons	6.0+6.0/25.06	6.0+6.0/25.06	6.0+6.0/25.06	6.0+6.0/25.06	6.0+6.0/25.06	

*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

*3 Values measured in anechoic chamber.

*4 GWP value of HFC R410A 2088 according to 517 / 2014.

Technical specifications WR2 LINE					
MODEL Single			PQRY-P200YLM-A1	PQRY-P250YLM-A1	PQRY-P300YLM-A1
HP			8	10	12
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3 phase 380-400-415V 50Hz		
Cooling	Capacity*1	kW	22.4	28.0	33.5
	Power input	kW	3.71	4.90	6.04
	SEER		7.91	7.99	7.30
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	25.0	31.5	37.5
	Power input	kW	3.97	5.08	6.25
	SCOP		4.90	4.61	4.55
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3			46	48	54
Connectable indoor units	Total capacity	50 to 150% of O.U. capacity			
	Model/Quantity	P15-P250/1~20		P15-P250/1~25	
Ø Ref. piping	Liquid	mm	15.88	19.05	19.05
	Gas	mm	19.05	22.2	22.2
Circulating Water	Flow Rate	m³/h	5.76	5.76	5.76
	Operating volume range		3.0~7.2	3.0~7.2	3.0~7.2
	Pressure drop	kPa	24	24	24
	Heat exchanger volume	l	5.0	5.0	5.0
External dimentions			1100 x 880 x 550	1100 x 880 x 550	1100 x 880 x 550
Net weight			173	173	173
Ref. Charge R410*/CO ₂ Eq			5.0/10.44	5.0/10.44	5.0/10.44

*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

*3 Values measured in anechoic chamber.

*4 GWP value of HFC R410A 2088 according to 517 / 2014.

Technical specifications WR2 LINE										
MODEL Single			PQRY-P350YLM-A1	PQRY-P400YLM-A1	PQRY-P450YLM-A1	PQRY-P500YLM-A1	PQRY-P550YLM-A1	PQRY-P600YLM-A1		
HP			14	16	18	20	22	24		
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3 phase 380-400-415V 50Hz							
Cooling	Capacity*1	kW	40.0	45.0	50.0	56.0	63.0	69.0		
	Power input	kW	7.14	8.03	9.29	11.17	12.54	14.49		
	SEER		7.34	7.31	6.56	6.25	6.84	6.84		
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0	
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0		
Heating	Capacity*2	kW	45.0	50.0	56.0	63.0	69.0	76.5		
	Power input	kW	7.53	8.37	9.79	11.43	12.27	14.51		
	SCOP		4.29	4.25	4.17	4.04	3.77	3.51		
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0	
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0		
Sound power level*3			52	52	54	54	56.5	56.5		
Connectable indoor units	Total capacity	50 to 150% of O.U. capacity								
	Model/Quantity	P15-P250/1~35		P15-P250/1~40		P15-P250/1~45		P15-P250/1~50		P15-P250/2~50
Ø Ref. piping	Liquid	mm	22.2	22.2	22.2	22.2	22.2	22.2		
	Gas	mm	28.58	28.58	28.58	28.58	28.58	34.93		
Circulating Water	Flow Rate	m³/h	7.20	7.20	7.20	7.20	11.52	11.52		
	Operating volume range		4.5~11.6	4.5~11.6	4.5~11.6	4.5~11.6	6.0~14.4	6.0~14.4		
	Pressure drop	kPa	44	44	44	44	45	45		
	Heat exchanger volume	l	5.0	5.0	5.0	5.0	10.0	10.0		
External dimentions			1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550	1450 x 880 x 550		
Net weight			217	217	217	217	247	247		
Ref. Charge R410*/CO ₂ Eq			6.0/12.53	6.0/12.53	6.0/12.53	6.0/12.53	11.7/24.43	11.7/24.43		

*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

*3 Values measured in anechoic chamber.

*4 GWP value of HFC R410A 2088 according to 517 / 2014

Technical specifications WR2 LINE

MODEL Double			PQRY-P400YSLM-A1	PQRY-P450YSLM-A1	PQRY-P500YSLM-A1	PQRY-P550YSLM-A1	PQRY-P600YSLM-A1
HP			16	18	20	22	24
Modules			PQRY-P200YLM-A1 PQRY-P200YLM-A1	PQRY-P250YLM-A1 PQRY-P200YLM-A1	PQRY-P250YLM-A1 PQRY-P250YLM-A1	PQRY-P300YLM-A1 PQRY-P250YLM-A1	PQRY-P300YLM-A1 PQRY-P300YLM-A1
Twinning joint	CMY-Q100VBK						
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3-phase 380-400-415V 50Hz				
Cooling	Capacity*1	kW	45.0	50.0	56.0	63.0	69.0
	Power input	kW	7.70	8.78	10.12	11.55	12.84
	SEER		-	-	-	-	-
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	50.0	56.0	63.0	69.0	76.5
	Power input	kW	7.94	8.97	10.16	11.31	12.75
	SCOP		-	-	-	-	-
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3			49	50	51	55	57
Connectable indoor units	Total capacity	50 to 150% of O.U. capacity					
	Model/Quantity	P15~P250/1~40		P15~P250/1~45	P15~P250/1~50	P15~P250/2~50	P15~P250/2~50
Ø Ref. piping	Liquid/Gas	mm	22.2/28.58	22.2/28.58	22.2/28.58	22.2/28.58	22.2/34.93
	Flow Rate	m³/h	5.76 + 5.76	5.76 + 5.76	5.76 + 5.76	5.76 + 5.76	5.76 + 5.76
Circulating Water	Operating volume range		3+3 ~ 7.2+7.2	3+3 ~ 7.2+7.2	3+3 ~ 7.2+7.2	3+3 ~ 7.2+7.2	3+3 ~ 7.2+7.2
	Pressure drop	kPa	24 + 24	24 + 24	24 + 24	24 + 24	24 + 24
	Heat exchanger volume	l	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0
	External dimentions	mm		1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550	1100 x 880 x 550 1100 x 880 x 550
Net weight	kg		173+173	173+173	173+173	173+173	173+173
Ref. Charge R410*/CO ₂ Eq	kg/Tons		5.0+5.0 /20.88	5.0+5.0 /20.88	5.0+5.0 /20.88	5.0+5.0 /20.88	5.0+5.0 /20.88

*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

*3 Values measured in anechoic chamber.

*4 GWP value of HFC R410A 2088 according to 517 / 2014

Technical specifications WR2 LINE

MODEL Double			PQRY-P700YSLM-A1	PQRY-P750YSLM-A1	PQRY-P800YSLM-A1	PQRY-P850YSLM-A1	PQRY-P900YSLM-A1
HP			28	30	32	34	36
Modules			PQRY-P350YLM-A1 PQRY-P350YLM-A1	PQRY-P400YLM-A1 PQRY-P350YLM-A1	PQRY-P400YLM-A1 PQRY-P400YLM-A1	PQRY-P450YLM-A1 PQRY-P400YLM-A1	PQRY-P450YLM-A1 PQRY-P450YLM-A1
Twinning joint	CMY-Q100VBK						
Power supply	Phases/Voltage/Freq.	V/Hz/n°	3-phase 380-400-415V 50Hz				
Cooling	Capacity*1	kW	80.0	85.0	90.0	96.0	101.0
	Power input	kW	14.73	15.64	16.57	18.03	19.38
	SEER		-	-	-	-	-
	Temperature operating field	Indoor WB	°C	15.0~24.0	15.0~24.0	15.0~24.0	15.0~24.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Heating	Capacity*2	kW	88.0	95.0	100.0	108.0	113.0
	Power input	kW	14.73	15.90	16.75	18.49	19.74
	SCOP		-	-	-	-	-
	Temperature operating field	Indoor DB	°C	15.0~27.0	15.0~27.0	15.0~27.0	15.0~27.0
Water		°C	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0	10.0~45.0
Sound power level*3			55	55	55	56	57
Connectable indoor units	Total capacity	50 to 150% of O.U. capacity					
	Model/Quantity	P15~P250/2~50		P15~P250/2~50	P15~P250/2~50	P15~P250/2~50	P15~P250/2~50
Ø Ref. piping	Liquid/Gas	mm	28.58/34.93	28.58/34.93	28.58/34.93	28.58/41.28	28.58/41.28
	Flow Rate	m³/h	7.20 + 7.20	7.20 + 7.20	7.20 + 7.20	7.20 + 7.20	7.20 + 7.20
Circulating Water	Operating volume range		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
	Pressure drop	kPa	44 + 44	44 + 44	44 + 44	44 + 44	44 + 44
	Heat exchanger volume	l	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0	5.0 + 5.0
	External dimentions	mm		1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550	1450 x 880 x 550 1450 x 880 x 550
Net weight	kg		217+217	217+217	217+217	217+217	217+217
Ref. Charge R410*/CO ₂ Eq	kg/Tons		6.0+6.0 /25.06	6.0 + 6.0 /25.06	6.0 + 6.0 /25.06	6.0 + 6.0 /25.06	6.0 + 6.0 /25.06

*1 Nominal cooling conditions: Indoor: 27°C DB / 19°C WB. Water temperature 30°C. Piping length 7.5 m, vertical difference 0 m.

*2 Nominal heating conditions: Indoor 20°C DB. Water temperature 20°C. Piping length 7.5 m, vertical difference 0 m.

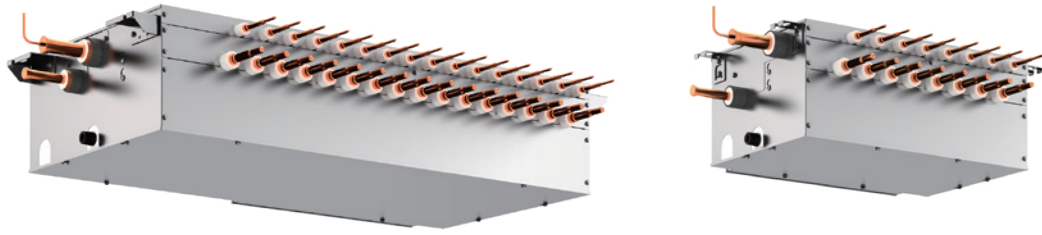
*3 Values measured in anechoic chamber.

*4 GWP value of HFC R410A 2088 according to 517 / 2014



BC CONTROLLERS FOR R2 LINES

CMB-M V-J1/V-JA1/V-KB1, CMB-P V-KA1



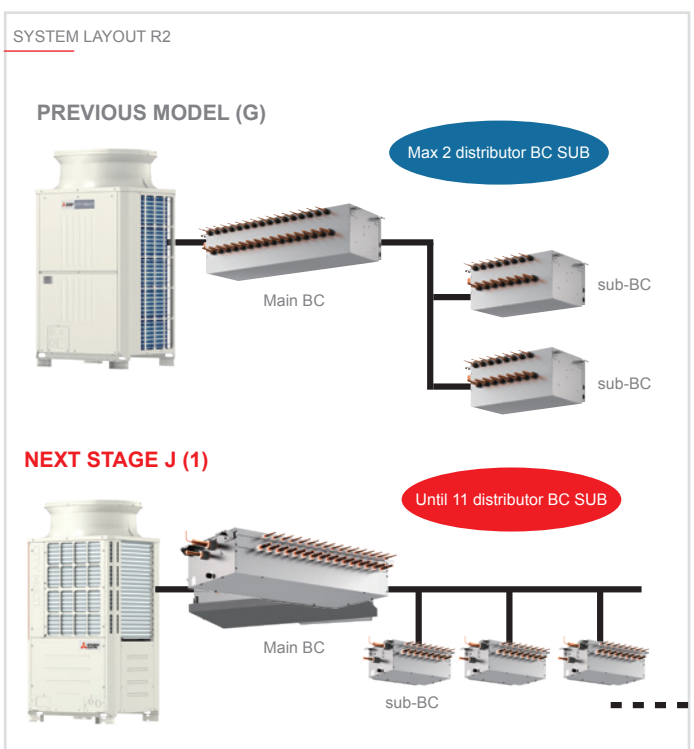
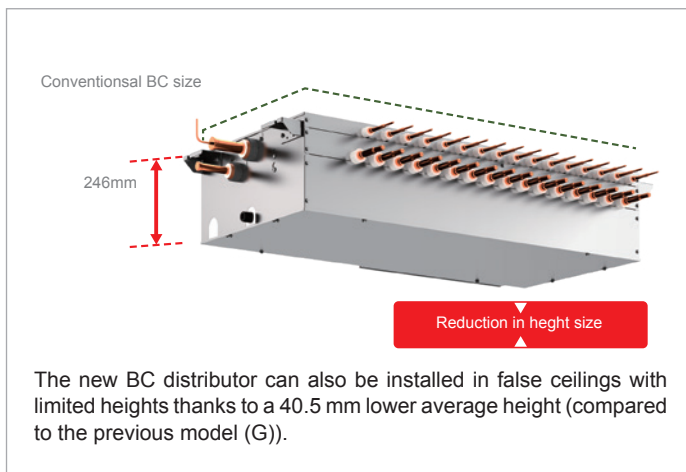
BC Distributors

The new BC distributor of the CMB-P(M)-V-J(1) series effectively distributes the refrigerant depending on the operating mode of the indoor units (heating or cooling). It contains the highly efficient gas/liquid separator developed by Mitsubishi Electric and carefully separates the gas for heating from the cooling liquid. For a greater height difference and an increase in the maximum pipe length, it uses a subcooling heat exchanger that further chills the coolant destined for the indoor units in cooling mode.

New BC controller

Increased number of connections (for systems with BC SUB distributor) and increase of geometric limits. In the R2 heat recovery systems of the new YNW-A1 line it is possible to connect up to 11 BC SUB distributors to the BC MAIN distributor thus allowing greater configuration flexibility. The adoption of the new architecture allows a reduction of the refrigerant charge adopted in the system.

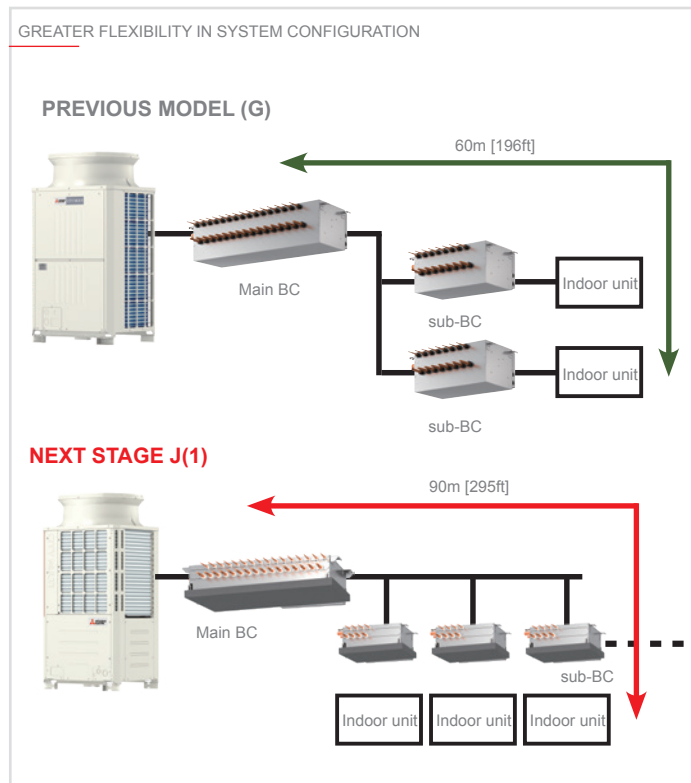
Reduced height



Greater flexibility in system configuration

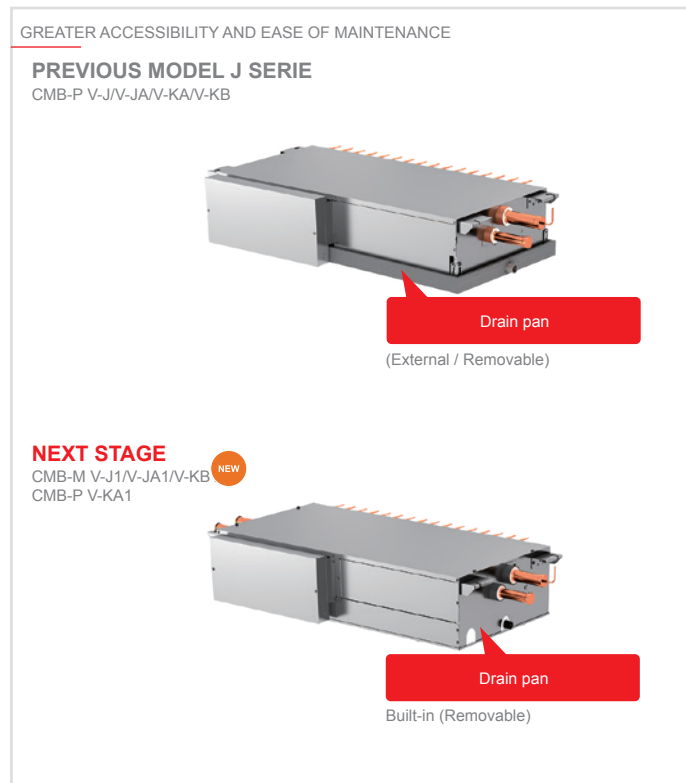
The maximum length of the refrigeration line between the BC MAIN distributor unit and the indoor unit has been increased to 90 metres* (compared to 60 metres for the previous model) for greater flexibility of system design.

*If the indoor unit is connected to an SUB BC Controller unit



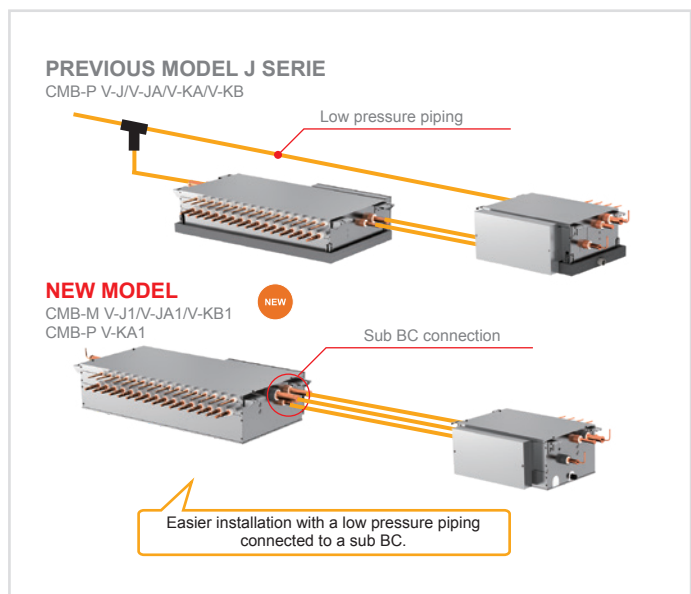
Greater accessibility and ease of maintenance

In the previous model, the drainage panel was on the lower side of the distributor. In the new model it is instead installed on the lower side of the structure, making it easy to remove from the lower part for maintenance access.



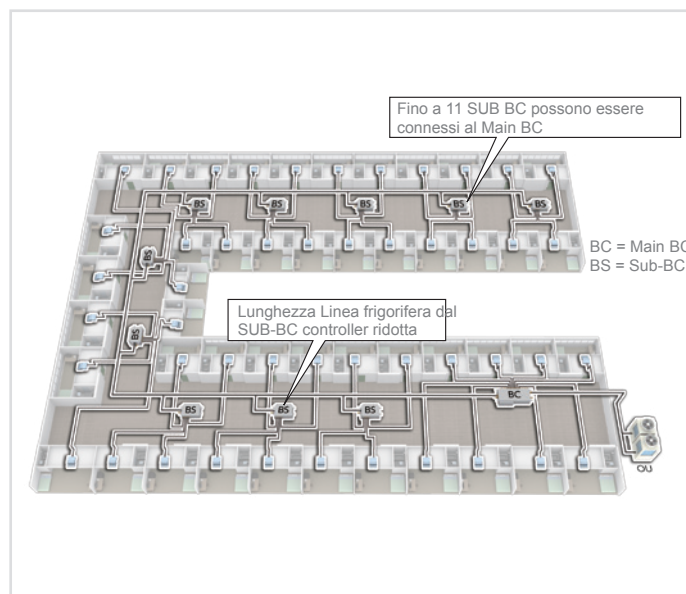
Sub-BC controller connections increased

Only two sub-BC controllers could be connected to a main BC controller in previous models. Up to 11 sub-BC controllers can now be connected to the new BC controller, allowing for more flexibility in system design. The line-branching method enables the creation of system designs that use less refrigerant.



The line-branching method with a main BC controller and sub-BC controllers

The sub-BC controller can be installed near the indoor units, so the branch piping can be greatly reduced. This also reduces the length of system piping, enabling using less refrigerant design.



Technical specifications

MODEL Single				CMB-M104V-J1	CMB-M106V-J1	CMB-M108V-J1	CMB-M1012V-J1	CMB-M1016V-J1	
Number of branch				4	6	8	12	16	
Power source				1-phase 220-230-240 V					
Power input	kW	50Hz	Cooling	0.067/0.076/0.085	0.097/0.110/0.123	0.127/0.144/0.161	0.186/0.211/0.236	0.246/0.279/0.312	
			Heating	0.030/0.034/0.038	0.045/0.051/0.057	0.060/0.068/0.076	0.090/0.102/0.114	0.119/0.135/0.151	
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81.)					
Connectable outdoor/heat source unit capacity				P200 to P350					
Height	mm			250	250	250	252	252	
Width	mm			596	596	596	911	1,135	
Depth	mm			476	476	476	622	622	
Refrigerant piping diameter	To outdoor/heat source unit			Connectable unit capacity					
				P200	P250/P300			P350	
	High press. pipe			15.88 (5/8) Brazed		19.05 (3/4) Brazed		19.05 (3/4) Brazed or 22.2 (7/8) Brazed	
	Low press. pipe			19.05 (3/4) Brazed		22.2 (7/8) Brazed		28.58 (1-1/8) Brazed	
	To indoor unit	Liquid pipe			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed				
Gas pipe			Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2(7/8) with optional joint pipe used.)						
Drain pipe	mm (in.)			O.D. 32 (1-1/4)	O.D. 32 (1-1/4)	O.D. 32 (1-1/4)	O.D. 32 (1-1/4)	O.D. 32 (1-1/4)	
Net weight	kg (lbs)			26 (58)	29 (64)	33 (73)	49 (109)	59 (131)	

Technical specifications

MODEL Main				CMB-M108V-JA1			CMB-M1012V-JA1			CMB-M1016V-JA1			
Number of branch				8			12			16			
Power source				1-phase 220-230-240 V									
Power input	kW	50Hz	Cooling	0.127/0.144/0.161			0.186/0.211/0.236			0.246/0.279/0.312			
			Heating	0.060/0.068/0.076			0.090/0.102/0.114			0.119/0.135/0.151			
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81.)									
Connectable outdoor/heat source unit capacity				P200 to P900									
Height	mm			252			252			252			
Width	mm			911			1,135			1,135			
Depth	mm			622			622			622			
Refrigerant piping diameter	To outdoor/heat source unit			Connectable unit capacity									
				P200	P250/P300	P350	P400 to P500	P550	P600	P650	P700 to P800	P850 to P900	
	High press. pipe			15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
	Low press. pipe			19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed	
	To indoor unit	Liquid pipe			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed								
		Gas pipe			Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)								
	To other BC controller			Total down-stream Indoor unit capacity									
				to P200	P201 to P300	P301 to P350	P351 to P400	P401 to P600	P601 to P650	P651 to P800	P801 to P1000	P1001 or above	
High press. pipe			15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed		
Low press. pipe			19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed		
Liquid pipe			9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed		
Drain pipe	mm (in.)			O.D. 32 (1-1/4)			O.D. 32 (1-1/4)			O.D. 32 (1-1/4)			
Net weight	kg (lbs)			48 (106)			60 (133)			68 (150)			

★ Combination chart of BC Controller for R2 series (YNW)

	P200-P350	P400-P900	P950-P1100
CMB-M V-J1	•	N/A	N/A
CMB-M V-JA1	•	•	N/A
CMB-P V-KA1	•	•	•
CMB-M V-KB1 (Sub)	CMB-M108/1012/1016V-JA1, CMB-P1016V-KA1		

Technical specifications

MODEL Main				CMB-P1016V-KA1								
Number of branch				16								
Power source				1-phase 220-230-240 V								
Power input	kW	50Hz	Cooling	0.246/0.279/0.312								
			Heating	0.119/0.135/0.151								
Indoor unit capacity connectable to 1 branch				Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81.)								
The maximum number of connectable Sub BC controllers				-								
The maximum connectable capacity of indoor units				-								
Connectable outdoor/heat source unit capacity				P200 to P1100								
Connectable Main BC controller				-								
Height	mm			250								
Width	mm			1,135								
Depth	mm			622								
Refrigerant piping diameter	To outdoor/heat source unit			Connectable unit capacity								
				P200	P250/P300	P350	P400 to P500	P550	P600	P650	P700 to P800	P850 to P1000
	High press. pipe			15.88 (5/8) Braze	19.05 (3/4) Braze	19.05 (3/4) Braze or 22.2 (7/8) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze or 28.58 (1-1/8) Braze	22.2 (7/8) Braze or 28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze
	Low press. pipe			19.05 (3/4) Braze	22.2 (7/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze or 34.93 (1-3/8) Braze	28.58 (1-1/8) Braze	34.93 (1-3/8) Braze	41.28(1-5/8) Braze
	To indoor unit	Liquid pipe		Indoor unit Model 50 or smaller 6.35 (1/4) Braze bigger than 50 9.52 (3/8) Braze								
		Gas pipe		Indoor unit Model 50 or smaller 12.7 (1/2) Braze bigger than 50 15.88 (5/8) Braze (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)								
	To other BC controller			Total down-stream Indoor unit capacity								
				to P200	P201 to P300	P301 to P350	P351 to P400	P401 to P600	P601 to P650	P651 to P800	P801 to P1000	P1001 or above
	High press. pipe			15.88 (5/8) Braze	19.05 (3/4) Braze	19.05 (3/4) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	34.93 (1-3/8) Braze
	Low press. pipe			19.05 (3/4) Braze	22.2 (7/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	34.93 (1-3/8) Braze	41.28(1-5/8) Braze	41.28(1-5/8) Braze
Liquid pipe			9.52 (3/8) Braze	9.52 (3/8) Braze	12.7 (1/2) Braze	12.7 (1/2) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze	19.05 (3/4) Braze	19.05 (3/4) Braze	19.05 (3/4) Braze	
Drain pipe	mm (in.)			O.D. 32 (1-1/4)								
Net weight	kg (lbs)			69 (153)								

Technical specifications

MODEL Sub				CMB-M104V-KB1										
Number of branch				4										
Power source				1-phase 220-230-240 V										
Power input	kW	50Hz	Cooling	0.060/0.068/0.076										
			Heating	0.030/0.034/0.038										
The maximum number of connectable Sub BC controllers				11										
The maximum connectable capacity of indoor units				P350 for each										
Connectable Main BC controller				CMB-M108/1012/1016V-JA1, CMB-P1016V-KA1										
Height	mm			250										
Width	mm			596										
Depth	mm			476										
Refrigerant piping diameter	To outdoor/heat source unit			-										
	High press. pipe			-										
	Low press. pipe			-										
	To indoor unit	Liquid pipe			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed									
		Gas pipe			Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4) with optional joint pipe used.)									
	To other BC controller			Total down-stream Indoor unit capacity										
				to P200	P201 to P300	P301 to P350	P351 to P400	P401 to P600	P601 to P650	P651 to P800	P801 to P1000	P1001 or above		
	High press. pipe			15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed		
	Low press. pipe			19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	41.28(1-5/8) Brazed	41.28(1-5/8) Brazed		
	Liquid pipe			9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed		
Drain pipe	mm (in.)			O.D. 32 (1-1/4)										
Net weight	kg (lbs)			23 (51)										

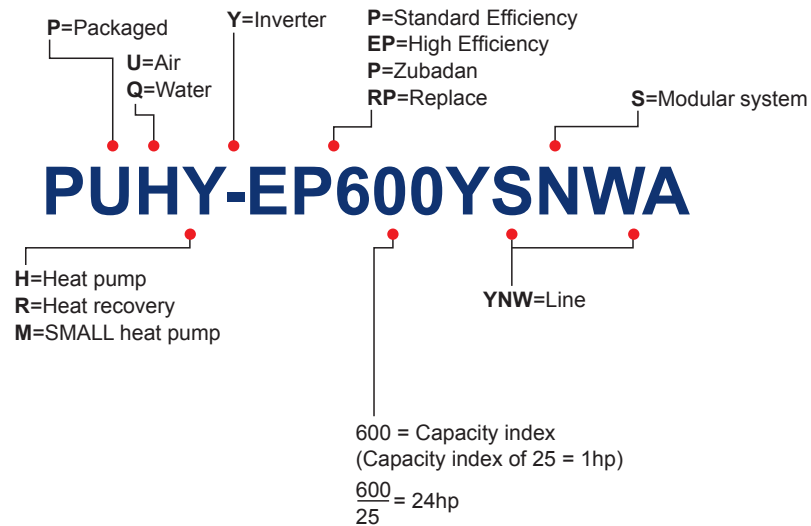
Technical specifications

MODEL Sub				CMB-M108V-KB1										
Number of branch				8										
Power source				1-phase 220-230-240 V										
Power input	kW	50Hz	Cooling	0.119/0.135/0.151										
			Heating	0.060/0.068/0.076										
The maximum number of connectable Sub BC controllers				11										
The maximum connectable capacity of indoor units				P350 for each										
Connectable Main BC controller				CMB-M108/1012/1016V-JA1, CMB-P1016V-KA1										
Height	mm			246										
Width	mm			596										
Depth	mm			495										
Refrigerant piping diameter	To outdoor/heat source unit			-										
	High press. pipe			-										
	Low press. pipe			-										
	To indoor unit	Liquid pipe			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed									
		Gas pipe			Gas pipe Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed(19.05 (3/4) with optional joint pipe used.)									
	To other BC controller			Total down-stream Indoor unit capacity										
				to P200	P201 to P300	P301 to P350	P351 to P400	P401 to P600	P601 to P650	P651 to P800	P801 to P1000	P1001 or above		
	High press. pipe			15.88	19.05	19.05	22.2	22.2	28.58	28.58	28.58	34.93		
	Low press. pipe			19.05	22.2	28.58	28.58	28.58	28.58	34.93	41.28	41.28		
	Liquid pipe			9.52	9.52	12.7	12.7	15.88	15.88	19.05	19.05	19.05		
Drain pipe	mm (in.)			O.D. 32 (1-1/4)										
Net weight	kg (lbs)			31 (69)										

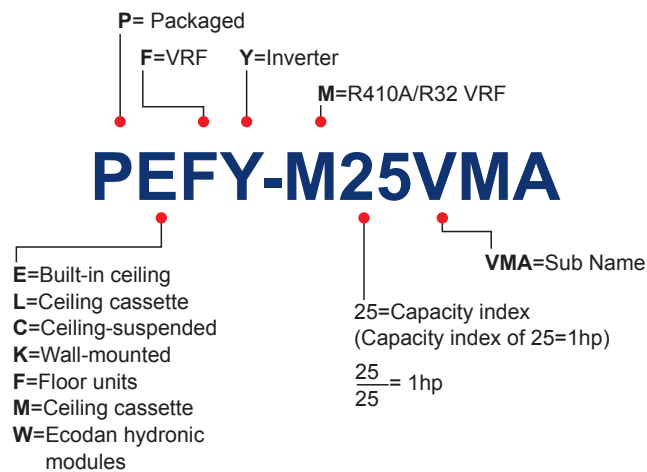


Model code

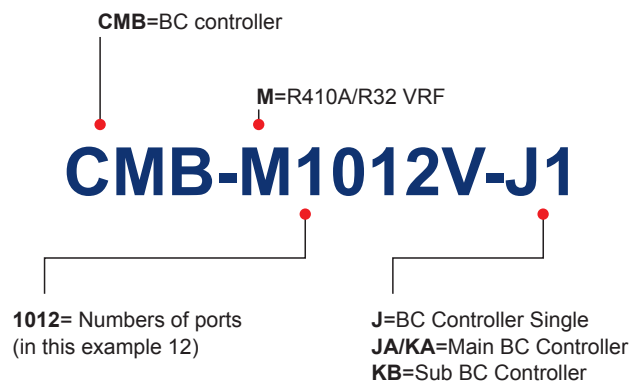
CITY MULTI outdoor units



CITY MULTI indoor units

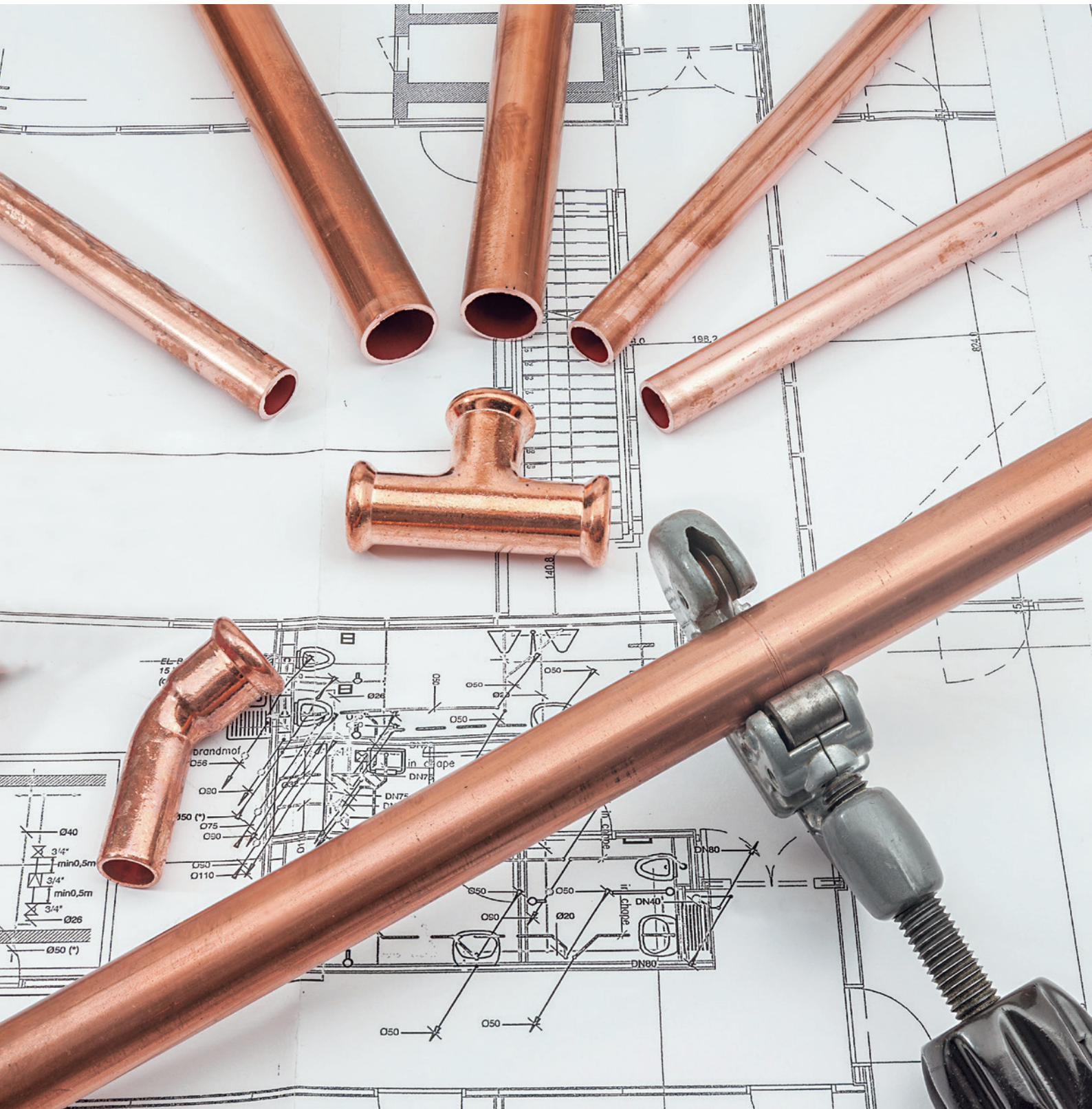


BC Controller





Refrigerant piping lenght

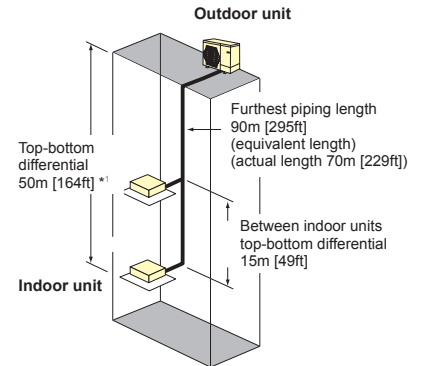


PUMY-SP112~140 Y(V)KM2

SMALL Y COMPACT LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	120 m max.
Effective length of a single circuit	70 m (90 m equivalent) max.
Effective length after first branch	50 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	30 m max.
Indoor/Indoor	15 m max.

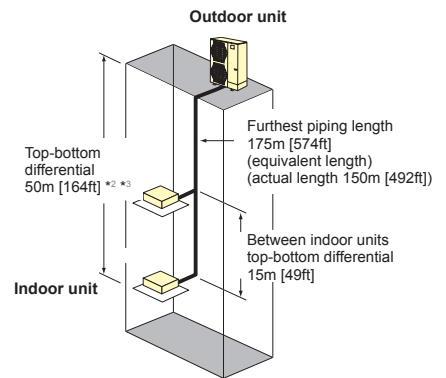


PUMY-P112~140 Y(V)KM5(6)

SMALL Y LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	300 m max.
Effective length of a single circuit	150 m (175 m equivalent) max.
Effective length after first branch	30 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.

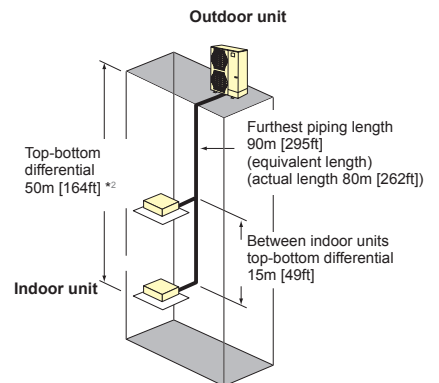


PUMY-P200 YKM3

SMALL Y (HIGH CAPACITY) LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	150 m max.
Effective length of a single circuit	80 m (90 m equivalent) max.
Effective length after first branch	30 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.



Indicative values only – See technical handbook for installation details.

*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 30m [98ft].

*2 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].

*3 30m [98ft] or less if PKFY-P10/15/20/25/32/VLM, PFFY-P*VKM, PFFY-P*VCM, PFFY-P*VL* type of indoor units are included.

PUMY-P250/300 YBM2

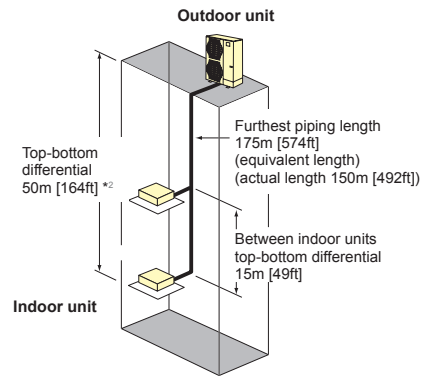
SMALL Y (HIGH CAPACITY) LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	310 m max.
Effective length of a single circuit	150 m (175 m equivalent) max.
Effective length after first branch	30 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.

Indicative values only – See technical handbook for installation details.

*2 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].



PUHY-P200-1350Y(S)NW-A2

PUHY-EP200-1350Y(S)NW-A2

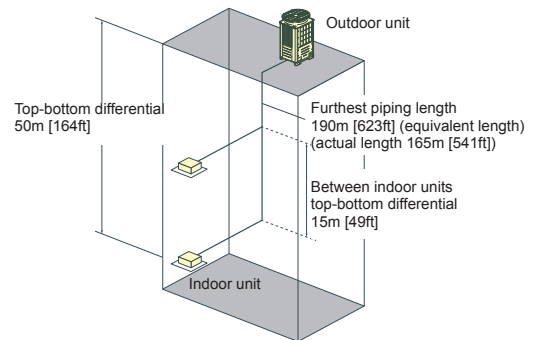
Y NEXT STAGE LINE

Y NEXT STAGE HIGH EFFICIENCY LINE

GEOMETRIC PIPING LIMITATIONS WITH ONE OR MORE BC CONTROLLERS	
Total effective length	1000 m max.
Effective length of a single circuit	165 m max.
Equivalent length of a single circuit	190 m max.
Effective length after first branch	90 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	30 m max.

Indicative values only – See technical handbook for installation details.



PUHY-HP200-500Y(S)NW-A

Y ZUBADAN LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	1000 m max.
Effective length of a single circuit	165 m (190 m equivalent) max.
Effective length after first branch	40 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.

Indicative values only – See technical handbook for installation details.

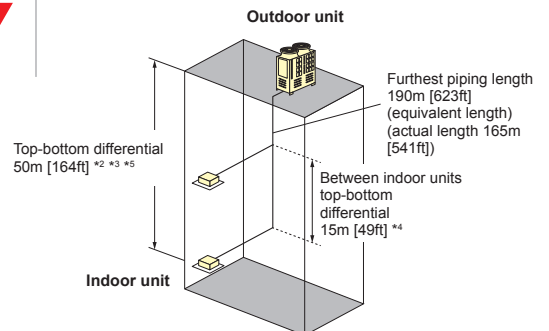
*1 90m is available. When the piping length exceeds 40m, use one size larger liquid pipe starting with the section of piping where 40m is exceeded and all piping after that point.

*2 90m is available depending on installation conditions. For more detailed information, contact your local distributor.

*3 60m is available depending on installation conditions. For more detailed information, contact your local distributor.

*4 30m is available. If the height difference between indoor units exceeds 15m (but does not exceed 30m), use one size larger pipes for indoor unit liquid pipes.

*5 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m.



PURY-P200-1100Y(S)NW-A2

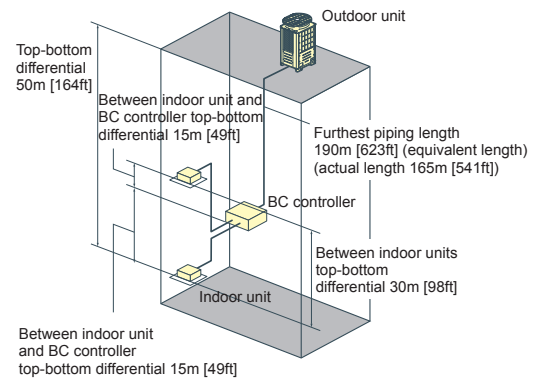
PURY-EP200-1100Y(S)NW-A2

R2 NEXT STAGE LINE
R2 NEXT STAGE HIGH EFFICIENCY LINE

GEOMETRIC PIPING LIMITATIONS WITH ONE OR MORE BC CONTROLLERS	
Total effective length	500-1000 m max.
Effective length of a single circuit	165 m max.
Equivalent length of a single circuit	190 m max.
Effective length between outdoor unit and BC controller	110 m max.
Effective length between BC controller and indoor unit	60 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/BC Controller	15 m max.
Indoor/Indoor	30 m max.
Effective length between outdoor unit and BC controller	15 m max.

Indicative values only – See technical handbook for installation details.



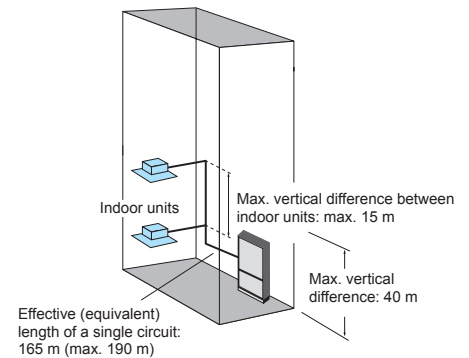
PQHY-P200-900Y(S)LM-A1

WY LINE

GEOMETRIC LIMITS OF REFRIGERATION PIPELINES	
Total effective length	300-500 m max.
Effective length of a single circuit	165 m max.
Equivalent length of a single circuit	190 m max.
Effective length after first branch	40 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/Indoor	15 m max.

Indicative values only – See technical handbook for installation details.
*500 m max per PQHY-P350-600YLM



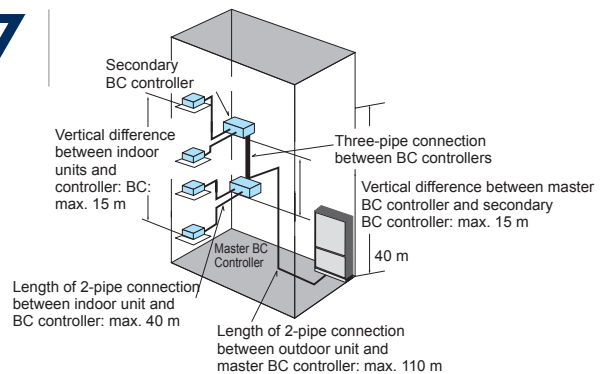
PQRY-P200~900Y(S)LM-A1

WR2 LINE

GEOMETRIC PIPING LIMITATIONS WITH ONE OR MORE BC CONTROLLERS	
Total effective length	300-750 m max.
Effective length of a single circuit	165 m max.
Equivalent length of a single circuit	190 m max.
Effective length between outdoor unit and BC controller	110 m max.
Effective length between BC controller and indoor unit	40-60 m max.

VERTICAL DIFFERENCE BETWEEN UNITS	
Indoor/outdoor (outdoor unit in higher position)	50 m max.
Indoor/outdoor (indoor unit in higher position)	40 m max.
Indoor/BC Controller	15 m max.
Indoor/Indoor	30 m max.
BC Controller and SUB BC Controller	15 m max.

Indicative values only – See technical handbook for installation details.







VRF Systems

Indoor units

Ceiling cassette

PLFY-P VFM-E1 4-way cassette 600x600	110
PLFY-M VEM6-E 4 way cassette 900x900	112
PLFY-P VLMD-E 2 way cassette	118
PMFY-P VBM-E 1 way cassette	122

Ceiling concealed

PEFY-P VMS1-E Medium to low static pressure	124
PEFY-M VMA-A1 Medium to high static pressure	126
PEFY-P VMHS-E High static pressure	130
PEFY-P VMHS-E High static pressure	132

Ceiling suspended

PCFY-P VKM-E	134
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Wall mounted

PKFY-P VLM-E	136
PKFY-P VKM-E	138
PAC-LV11-E Wall mounted design indoor unit LEV-KIT	140



Floor standing

PFFY-P VKM-E Design unit	142
PFFY-P VEM-E Freestanding	NEW 144
PFFY-P VCM-E Concealed type	148

Type		Model		P10	P15	P20	P25	P32		
				1.2 kW ¹	1.7 kW ¹	2.2 kW ¹	2.8 kW ¹	3.6 kW ¹		
Ceiling cassette	4 way flow	PLFY-P VFM-E1			•	•	•	•		
		PLFY-M VEM6-E				•	•	•		
	2 way cassette	PLFY-P VLMD-E				•	•	•		
	1 way cassette	PMFY-P VBM-E				•	•	•		
Ceiling concealed indoor units	Middle-high static pressure	PEFY-P VMS1-E			•	•	•	•		
	Middle-high static pressure	PEFY-M VMA-A1				•	•	•		
	High static pressure	PEFY-P VMHS-E								
	High static pressure	PEFY-P VMHS-E								
Ceiling Suspended indoor units		PCFY-P VKM-E								
Wall mounted indoor units		PKFY-P VLM		•	•	•	•	•		
		PKFY-P VKM								
	Wall mounted design with LEV-KIT	LEV KIT MSZ-EF			•	•	•	•	•	
		LEV KIT MSZ-LN					•	•	•	
Floor standing indoor units		PFFY-P VKM-E				•	•	•		
		PFFY-P VEM-E				•	•	•		
	Concealed type	PFFY-P VCM-E				•	•	•		

¹Nominal cooling capacity

	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250
	4.5 kW ⁻¹	5.6 kW ⁻¹	7.1 kW ⁻¹	8.0 kW ⁻¹	9.0 kW ⁻¹	11.2 kW ⁻¹	14.0 kW ⁻¹	16.0 kW ⁻¹	22.4 kW ⁻¹	28.0 kW ⁻¹
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Key Technologies

Mitsubishi Electric innovation allowed the development of functions and technologies at the service of comfort and energy efficiency.

Style



“Pure white” colour

This is the colour adopted by Mitsubishi Electric for many of its indoor units. It is a colour suitable for virtually all interior spaces.



Automatic vane

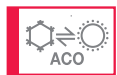
The vane adjusts automatically to the optimum angle in relation to operating mode and output air temperature.

Functions



Timer

Annual, weekly, daily or simplified timer functions may be used to switch the unit on and off as desired.



Automatic mode switching

The indoor unit automatically (AUTO) switches operating mode (COOL/HEAT) in relation to the temperature setting.



Ultra silent

These indoor units produce extraordinarily low sound pressure levels.

Air quality



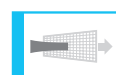
Deodorizing filter

The bad smells present in the environment are captured from the deodorizing filter and then be eliminated by the technology plasma. Extremely low deodorization time makes this function even more effective against the odors of animals or of cooking.



Outdoor air intake

The air quality in the indoor space may be improved using the outdoor fresh air intake.



Standard filter

A honeycomb or synthetic fibre filter with high dust holding capacity.



Long-life filter

The special surface of the long-life filter requires less maintenance than a conventional filter.



“Dirty filters” indicator signal

Filter usage is monitored to indicate when maintenance is necessary.



Air purifying filter

The filter has a large capture area and deodorise the circulating air.

Air distribution



Vane positions

Number of possible positions for the air deflector vane.



Swing vane

A continuous swinging motion of the vane ensures that air is distributed ideally throughout the room.



Fan speed

Number of fan speeds available.



Automatic fan

The fan speed is automatically adjusted to meet the desired level of comfort



High ceiling

For installations on high ceilings, the air flow may be augmented to improve air distribution.



Low ceiling

For installations on low ceilings, the air flow may be reduced to prevent unpleasant draughts.



Air intake on underside

As an option during installation, the unit may be configured with the air intake on the underside.

Installation and maintenance



Condensate drain pump

The condensate drain pump facilitates installation.



Self-diagnostic

A self-diagnostic system makes troubleshooting and correcting malfunctions easier by recording a log of faults.

Special functions



Auto-restart

The auto restart function may be used to configure the indoor units to restart automatically after a power outage, minimising interruptions in the operation of the system to maintain thermal comfort levels in the air conditioned spaces. This function must be enabled as an option as it is not enabled by default. A choice of two automatic start configurations is available:

- restart only the indoor units which were on before the power outage;
- restart all indoor units, irrespective of on/off state before the power outage.



Stratification compensation

The automatic heat stratification compensation function in HEAT mode is implemented by adjusting the ambient temperature read by a probe on the indoor unit, to obtain a value that more closely reflects the true temperature of the air conditioned space.

An offset of -4°C is applied, so that, for instance, if the inlet temperature measured is 24°C, the system automatically displays an adjusted value of 20°C, which should more closely reflect the true ambient temperature. The Mitsubishi Electric CITY MULTI VRF system bases the thermal power actually delivered on this value.

The stratification compensation function is available on all Mitsubishi Electric indoor unit types with the exception of floor-standing units and certain specific cases (such as with units with underside air intakes), and may be disabled on request.


































Low temperature cooling





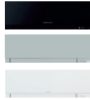



This function extends the operating temperature range in cooling mode to offer a lowest settable temperature of 14°C. Where the ability to cool to temperatures lower than the standard lowest comfort value of 19°C (typically for sports centres, laboratories etc.) is necessary, the settable temperature range in cooling mode may be extended to offer a lowest temperature of 14°C.

Contact your local distributor for more details on the types of compatible Indoor units.

The indoor unit fan is run at a higher speed in this configuration (except with the SMALL Y model outdoor unit of the PUMY series).

		Cassette						
								
		PLFY-P VFM-E1	PLFY-M VEM6-E	PLFY-P VLMD-E	PMFY-P VBM-E	PEFY-P VMS1-E	PEFY-M VMA-A1	PEFY-P VMHS-E
Style		•	•	•	•			
		•	•	•	•			
Functions		•	•		•	•	•	•
		•	•	•	•	•	•	•
		•	•	•		•		
Air quality		•	•	•				
			•		•			
		•	•	•				
		•	•	•	•			
								
								
								
Air distribution		5	5	4	4			
		•	•	•	•			
		3	4	3 4(P125)	4	3	3	2
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							•	
Install. and mainten.		•	•	•	•	•*	•	•*
		•	•	•	•	•	•	•
Special functions		•	•	•	•	•	•	•
		•	•		•	•	•	•
		**	**	**	**	**	**	**

* Optional
 ** Please contact your local distributor for compatibility

							Floor standing	
								
PEFY-P VMHS-E	PCFY-P VKM-E	PKFY-P VKM-E	PKFY-P VLM	LEV KIT MSZ-EF	LEV KIT MSZ-LN	PFFY-P VEM-E	PFFY-P VCM-E	
	•	•	•			•		
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**	**	**	**	**	**	**	**	

PLFY-P VFM-E1

INDOOR UNITS - 4-way cassette 600x600



CITY MULTI

Ideal for...

The **straight-line shape** introduced has resulted in a stylish and modern square design. Its high affinity ensures the ability to blend in seamlessly with any interior. The indoor unit is an ideal match for office or store use.



3D i-see Sensor

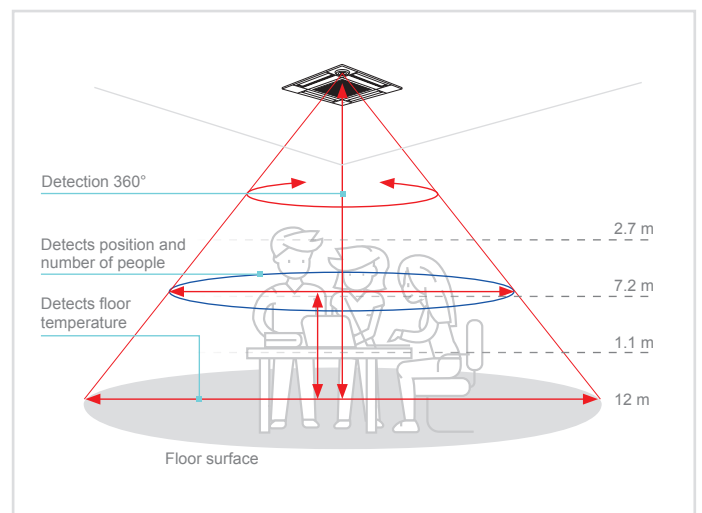
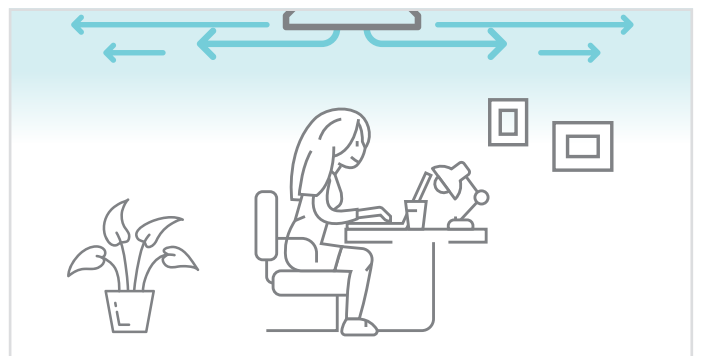
New advanced 3D i-see sensor detects people's position and number. Once a person is detected, the angle of the vane is automatically adjusted. Each vane can be independently set to "Direct Airflow" or "Indirect Airflow" according to taste.

The 3D i-see Sensor detects the number of people in the room and adjusts the power accordingly. This makes automatic power-saving operation possible in places where the number of people changes frequently.

Additionally, when the area is continuously unoccupied, the system switches to a more enhanced power-saving mode. Depending on the setting, it can also stop the operation.

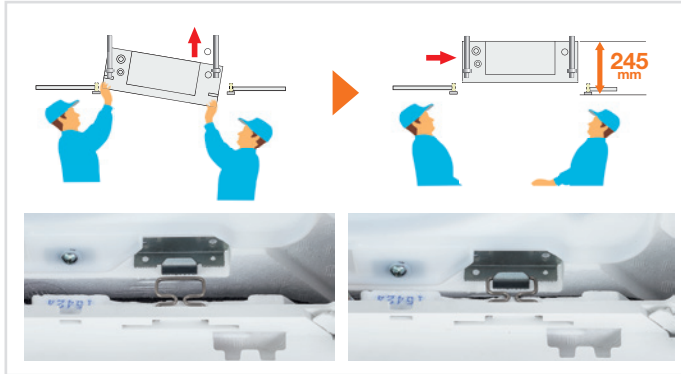
Horizontal flow

The new airflow control completely eliminates that uncomfortable drafty-feeling with the introduction of a **horizontal airflow** that spreads across the ceiling, maximizing the Coanda effect. Furthermore, 5 patterns for vane position (on previous VCM was 4) and individual settable vane and ways ensure higher comfort. The ideal airflow for offices and restaurants.



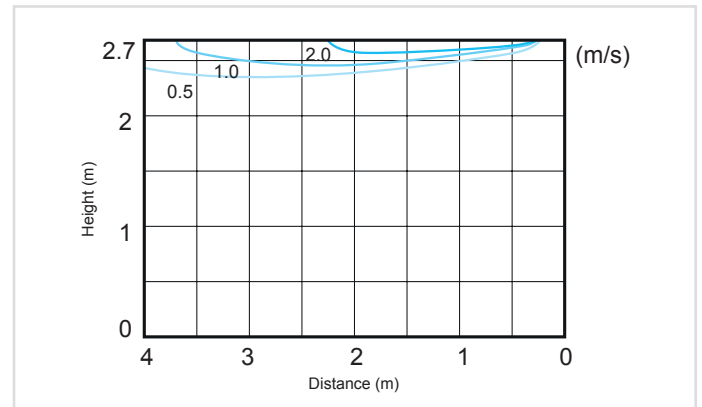
Simplified installation

The height above ceiling of 245 mm is top class in the industry. The height above ceiling of 245 mm enables fitting into narrow ceiling space. Installation is simple, even when the ceiling spaces are narrow to make the ceilings higher. Light weight (max 15kg) and temporary hanging hooks for grille allow to make installation easier and quicker.



Panel and control

The unit is supplied with SLP-2FAL panel which includes signal receiver. Is available as optional the SLP-2FALM panel combined with the new PAR-SL101A-E wireless remote control with weekly timer, backlight, temperature setting in 0.5 °C steps and individual control of the 4 deflectors.



Key Technologies

Technical specifications

MODEL			PLFY-P15VFM-E1	PLFY-P20VFM-E1	PLFY-P25VFM-E1	PLFY-P32VFM-E1	PLFY-P40VFM-E1	PLFY-P50VFM-E1
Default panel			SLP-2FAL					
Power			Single phase, 220-240V 50Hz					
Capacity in cooling mode*1		kW	1.7	2.2	2.8	3.6	4.5	5.6
		Btu/h	5800	7500	9600	12300	15400	19100
Capacity in heating mode*1		kW	1.9	2.5	3.2	4	5	6.3
		Btu/h	6500	8500	10900	13600	17100	21500
Power consumption	Cooling	kW	0.02	0.02	0.02	0.02	0.03	0.04
	Heating	kW	0.02	0.02	0.02	0.02	0.03	0.04
Current	Cooling	A	0.19	0.21	0.22	0.23	0.28	0.4
	Heating	A	0.14	0.16	0.17	0.18	0.23	0.35
External finish	Unit		Galvanized steel sheet with uncoated thermal insulation					
	Grille		Pure White					
Dimensions A x L x P	Unit	mm	245x570x570	245x570x570	245x570x570	245x570x570	245x570x570	245x570x570
	Grille	mm	10x625x625	10x625x625	10x625x625	10x625x625	10x625x625	10x625x625
Net weight	Unit	kg	14	14	14	15	15	15
	Grille	kg	3	3	3	3	3	3
Heat exchanger			Cross fins					
Fan	Type x Quantity		3D Turbo fan x 1					
	Air flow*2	m³/min	6.5 - 7.5 - 8	6.5 - 7.5 - 8.5	6.5 - 8 - 9	7 - 8 - 9.5	7.5 - 9 - 11	9 - 11 - 13
	Ext. Static pressure	Pa	0	0	0	0	0	0
Air filter			Polypropylen honeycomb (long life)					
Refrigerant pipe diameter	Gas (swaged)	mm	12.7	12.7	12.7	12.7	12.7	12.7
	Liquid (swaged)	mm	6.35	6.35	6.35	6.35	6.35	6.35
Sound pressure*2*3		dB(A)	26 - 28 - 30	26 - 29 - 31	26 - 30 - 33	26 - 30 - 34	28 - 33 - 39	33 - 39 - 43

* Default panel. SLP-2FAL panel is equipped by Signal receiver

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

*2 Air flow/noise levels given for operation in low-medium-high modes.

*3 Measured in anechoic chamber with 230V mains power.

Optional parts	DESCRIPTION
PAC-SF1ME-E	Corner 3D I-see Sensor for PLFY-P VFM-E1

PLFY-M VEM6-E

INDOOR UNITS - 4-way cassette 900x900



CITY MULTI

Ideal for...

New design of 4-way cassette VEM model suits most commercial applications thanks to its elegance and style. Its peculiar features are horizontal flow function, individually settable vanes and possibility to install 3D i-see sensor for top environment comfort control.

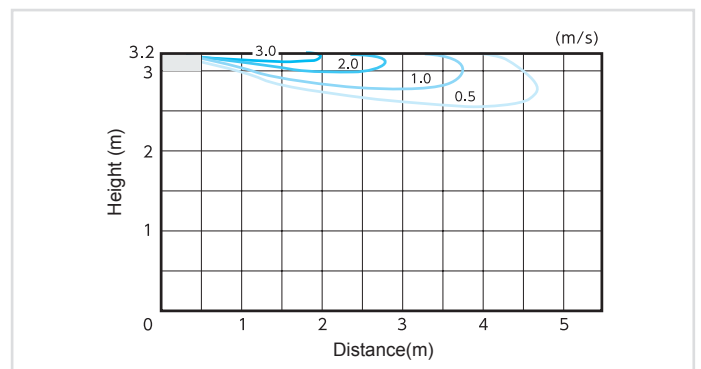
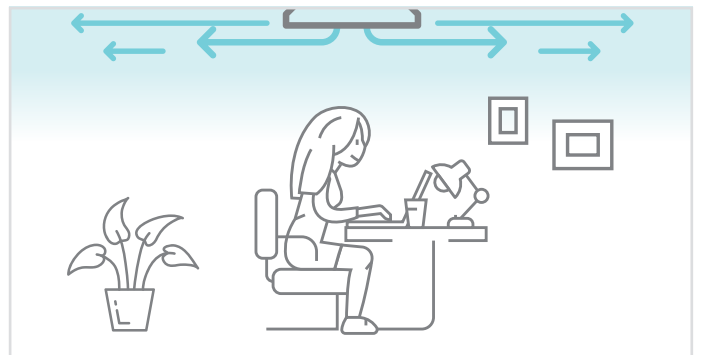
3D i-see sensor: Temperature sensor

3D i-see sensor is able to detect temperature distribution inside the room, making it possible to direct airflow to those areas which generally receive less air, making them more uncomfortable (too cold or too hot) for users.



Horizontal flow

This new indoor unit is capable of handling five vane positions, making it possible to achieve horizontal flow that spreads across the ceiling, maximizing the Coanda effect. This allows to avoid, if needed, direct airflow to users in the room, which can sometimes be uncomfortable.





Key Technologies

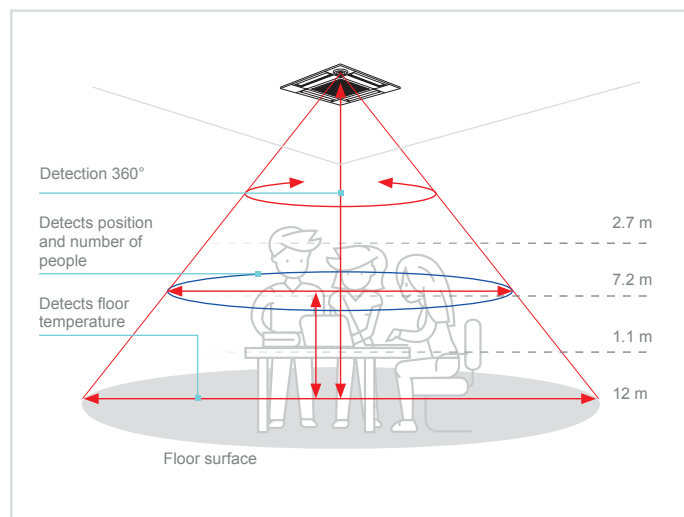
3D i-see sensor: Direct/Indirect flow function

Optional 3D i-see sensor allows to detect and count users in the environment and their position. User can set either Direct or Indirect flow to occupied areas, with single control on four vanes.



3D i-see sensor: Energy saving

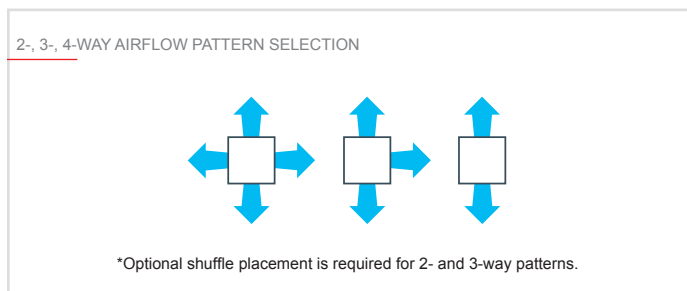
3D i-see sensor features allow to optimize comfort conditions and at the same time achieve energy saving. Thanks to the occupancy sensor the unit is able to automatically handle and reduce power output accordingly to users actually being present in the room or in certain areas of it. This feature is particularly helpful in those environments in which occupancy varies significantly during the day.



Optimum airflow

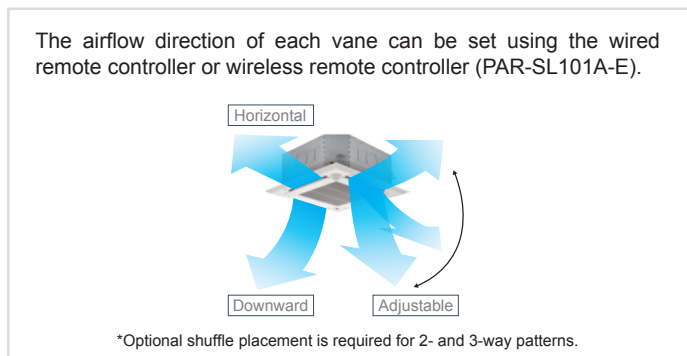
2-, 3-, 4-way airflow pattern selection

Three outlet options are available--bidirectional, three-way, and four-way--to suit different types of installation. Select, for example, the four-way pattern for installation in the center of the room and three-way pattern for installation in the corner.



Individual vane angle settings

Vane direction can be changed or fixed from the remote controller to direct the supply air at or away from objects or occupants in the room.

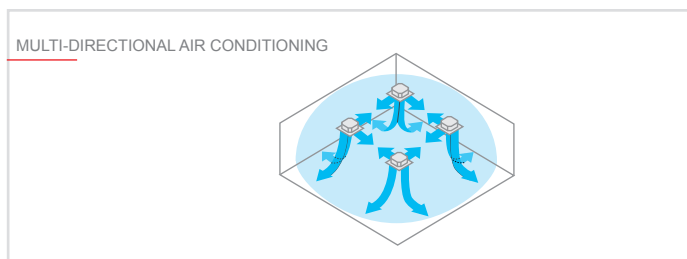


2-, 3-, 4-way airflow pattern selection

+

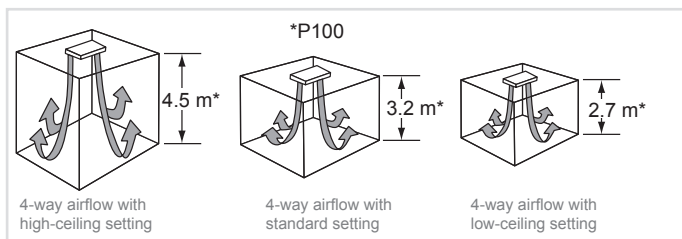
Individual vane angle settings

Combinations with individual vane settings enable an optimal outlet setting for each room layout to ensure even temperature distribution throughout each room. The result is uniformly comfortable air conditioning.



Equipped with high- and low-ceiling modes

Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match the height of the room. Being able to choose the optimum airflow volume helps optimize the breezy sensation felt throughout the room.

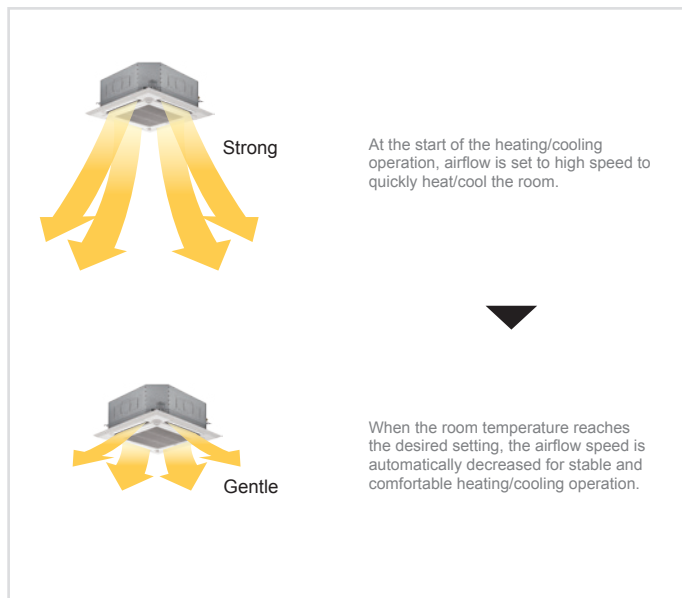


Airflow range

Model Airflow pattern	M20-M80			M100/M125		
	High-ceiling setting	Standard setting	Low-ceiling setting	High-ceiling setting	Standard setting	Low-ceiling setting
4-way	3.5 m	2.7 m	2.5 m	4.5 m	3.2 m	2.7 m
3-way	3.5 m	3.0 m	2.7 m	4.5 m	3.6 m	3.0 m
2-way	3.5 m	3.3 m	3.0 m	4.5 m	4.0 m	3.3 m

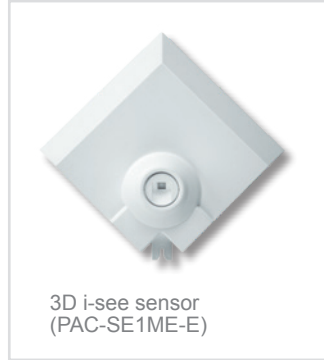
Automatic air-speed adjustment

An automatic air-speed mode automatically adjusts airflow speed to maintain comfortable room conditions at all times. This setting automatically adjusts the air speed to conditions that match the room environment.



Panel and control

The unit is supplied with PLP-6EA panel which does not include signal receiver. This component (PAR-SE9FA-E) can be installed as a corner accessory, as well as 3D i-See Sensor (PAC-SE1ME-E). The unit is compatible with all wired MA and ME remote controls and, if equipped with signal receiver, wireless remote controls. New PAR-SL101A-E is compatible with PLFY-M VEM, and presents numerous new features, such as weekly timer, backlit display, 0,5°C temperature setting and monitoring, as well as functions for 3D i-see sensor (optional). Now it's possible to provide such as accessories also the new black panel PLP-6EAB. Not included 3D i-see sensor and without signal receiver.

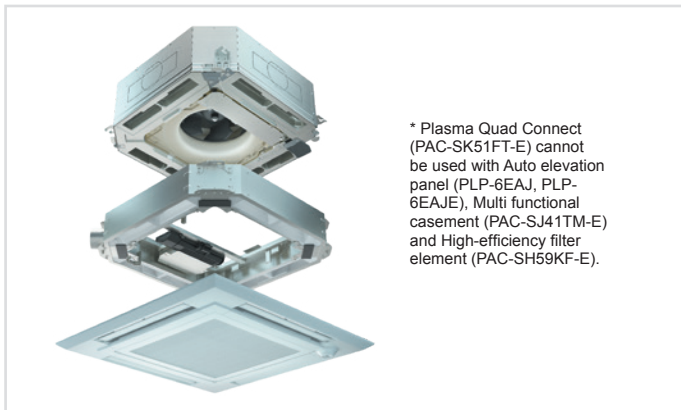


Also, panel weight has been reduced by 20% thanks to a new design.



Connectable to Plasma Quad Connect

The optional Plasma Quad Connect PAC-SK51FT-E can be installed on the indoor units.



A simple loosening of support screws allows the removal of the control box and corner accessories.



Simplified installation

Thanks to new temporary panel supports maintenance and installation operation are now easier for field technicians.



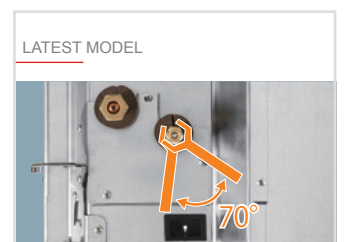
Electrical box wiring

After reviewing the power supply terminal position in the electrical box, the structure has been redesigned to improve connectivity. This makes complex wiring work easier.



Increased space for plumbing work

The top and bottom positions of the liquid and gas pipes have been reversed to allow the gas pipe work, which requires more effort, to be completed first. Further, through structural innovations related to the space around the pipes, the area for the spanner has been increased, thus improving liquid piping work and enabling it to be completed smoothly.



Technical specifications

MODEL			PLFY-M20VEM6-E	PLFY-M25VEM6-E	PLFY-M32VEM6-E	PLFY-M40VEM6-E	PLFY-M50VEM6-E
Power			1-phase 220-240V 50Hz, 1-phase 220V 60Hz				
Capacity in cooling mode*1		kW	2.2	2.8	3.6	4.5	5.6
		Btu/h	7500	9600	12300	15400	19100
Capacity in heating mode*1		kW	2.5	3.2	4.0	5.0	6.3
		Btu/h	8500	10900	13600	17100	21500
Power consumption	Cooling	kW	0.03	0.03	0.03	0.03	0.06
	Heating	kW	0.03	0.03	0.03	0.03	0.07
Current	Cooling	A	0.31	0.31	0.32	0.32	0.52
	Heating	A	0.24	0.24	0.25	0.25	0.60
External finish(Munsell No.)	Unit	Galvanized steel plate					
	Grille	MUNSELL (1.0Y 9.2/0.2)					
Dimensions (HxLxW)	Unit	mm	258x840x840				298 x 840 x 840
	Grille	mm	40x950x950				
Net weight	Unit	kg	19	19	19	19	24
	Grille	kg	5	5	5	5	5
Heat exchanger	Cross fin (Aluminium fin and copper tube)						
Fan	Type x Quantity	Turbo fan x 1					
	Air flow*2	m³/min	12-13-14-15	12-13-14-15	13-14-15-16	13-14-15-17	16 - 17 - 18 - 25 (Cooling) 16 - 17 - 18 - 28 (Heating)
		l/s	200-217-233-250	200-217-233-250	217-233-250-267	217-233-250-283	267 - 283 - 300 - 417 (Cooling) 267 - 283 - 300 - 467 (Heating)
	Static ext.l pressure	Pa	0	0	0	0	0
Motor	Type	DC Motor					
	Power output	kW	0.050	0.050	0.050	0.050	0.120
Air filter	Polypropilene honeycomb fabric						
Refrigerant pipe diameter	Gas (swaged)	mm	Ø 12.7	Ø 12.7	Ø 12.7	Ø 12.7	Ø 12.7
	Liquid (swaged)	mm	Ø 6.35	Ø 6.35	Ø 6.35	Ø 6.35	Ø 6.35
Local drain pipe diameter	Grille		O.D.32	O.D.32	O.D.32	O.D.32	O.D.32
Sound pressure*2*3		dB(A)	24-26-27-29	24-26-27-29	26-27-29-31	26-27-29-31	27 - 29 - 31 - 38(Cooling) 27 - 29 - 31 - 41(Heating)

*1 Cooling/Heating capacity is the maximum value measured in the following conditions.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) BS. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

*2 High-mid1-mid2-low setting

*3 Measured in anechoic chamber with 230V power supply.

Optional parts	DESCRIPTION
PAC-SK51FT-E	Plasma Quad Connect
PAC-SE1ME-E	Corner 3D I-see Sensor for PLFY-M VEM-E
PLP-6EALM	Panel with wireless remote controller
PLP-6EA	Panel
PLP-6EAB	Black Panel

Technical specifications			PLFY-M63VEM6-E	PLFY-M71VEM6-E	PLFY-M80VEM6-E	PLFY-M100VEM6-E	PLFY-M125VEM6-E
MODEL							
Power			1-phase 220-240V 50Hz, 1-phase 220V 60Hz				
Capacity in cooling mode*1		kW	7.1	8.0	9.0	11.2	14.0
		Btu/h	24200	27300	30700	38200	47800
Capacity in heating mode*1		kW	8.0	9.0	10.0	12.5	16.0
		Btu/h	27300	30700	34100	42700	54600
Power consumption	Cooling	kW	0.09	0.12	0.12	0.12	0.12
	Heating	kW	0.12	0.12	0.12	0.12	0.12
Current	Cooling	A	0.74	0.97	0.97	0.97	0.97
	Heating	A	0.90	0.94	0.94	0.94	0.94
External finish(Munsell No.)	Unit	Galvanized steel plate					
	Grille	MUNSELL (1.0Y 9.2/0.2)					
Dimensions (HxLxW)	Unit	mm	298x840x840	298x840x840	298x840x840	298x840x840	298x840x840
	Grille	mm	40x950x950	40x950x950	40x950x950	40x950x950	40x950x950
Net weight	Unit	kg	24	27	27	27	27
	Grille	kg	5	5	5	5	5
Heat exchanger			Cross fin (Aluminium fin and copper tube)				
Fan	Type x Quantity	Turbo fan x 1					
	Air flow*2	m ³ /min	16 - 18 - 20 - 32 (Cooling) 16 - 18 - 20 - 35 (Heating)	16 - 18 - 20 - 35	16 - 20 - 23 - 35	17 - 22 - 28 - 35	17 - 24 - 31 - 35
		l/s	267 - 300 - 333 - 533 (Cooling) 267 - 300 - 333 - 583 (Heating)	267 - 300 - 333 - 583	267 - 333 - 383 - 583	283 - 367 - 467 - 583	283 - 400 - 517 - 583
	Static ext.l pressure	Pa	0	0	0	0	0
Motor	Type	DC Motor					
	Power output	kW	0.120	0.120	0.120	0.120	0.120
Air filter			Polypropilene honeycomb fabric				
Refrigerant pipe diameter	Gas (swaged)	mm	Ø 15.88	Ø 15.88	Ø 15.88	Ø 15.88	Ø 15.88
	Liquid (swaged)	mm	Ø 9.52	Ø 9.52	Ø 9.52	Ø 9.52	Ø 9.52
Local drain pipe diameter	Grille		O.D.32	O.D.32	O.D.32	O.D.32	O.D.32
Sound pressure*2*3		dB(A)	27 - 30 - 32 - 43(Cooling) 27 - 30 - 32 - 46(Heating)	28 - 31 - 35 - 46	28 - 33 - 37 - 46	29 - 35 - 41 - 46	30 - 37 - 45 - 46

*1 Cooling/Heating capacity is the maximum value measured in the following conditions.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) BS. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

*2 High-mid1-mid2-low setting

*3 Measured in anechoic chamber with 230V power supply.

Optional parts	DESCRIPTION
PAC-SK51FT-E	Plasma Quad Connect
PAC-SE1ME-E	Corner 3D I-see Sensor for PLFY-M VEM-E
PLP-6EALM	Panel with wireless remote controller
PLP-6EA	Panel
PLP-6EAB	Black Panel

PLFY-P VLMD-E

INDOOR UNITS - 2-way cassette



Ideal for...

The slimline housing is ideal for installation in small ceiling spaces and for replacing obsolete equipment in old buildings. In fact, the unit is just 290 mm high.

General characteristics

Terminal block

The terminal block is positioned on the outside of the main unit for easier wiring.

Direct external air intake

Clean air can enter the main unit directly (optional accessories required).

Long-life filter supplied as standard

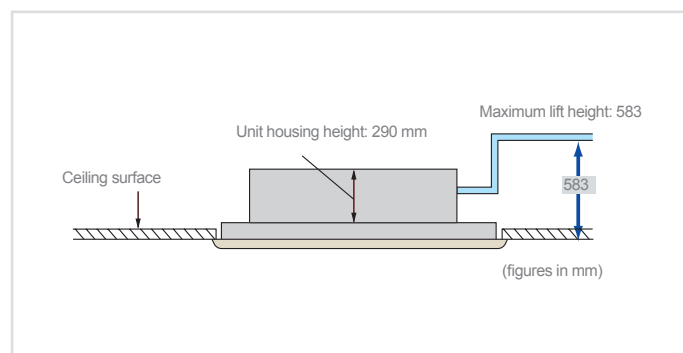
The long-life antibacterial filter requires no maintenance for approximately one year.

Compact unit and low noise levels

15Pa noise levels (standard static pressure).

Condensate lift pump

The standard version is equipped with a mechanism with condensate lift pump. The drain can be positioned anywhere up to 583mm from the ceiling surface, allowing greater freedom of movement due to long transverse pipes and greater pipe layout versatility.



Noise level

dB(A)

Capacity		P20	P25	P32	P40	P50	P63	P80	P100	P125
Fan speed	High		33		36	37	39	39	42	46
	Medium		30		33	34	37	36	39	42/44
	Low		27		29	31	32	33	36	40

Easy installation

Installation and maintenance are made easier by the use of a lighter panel and the positioning of the switchboard close to the panel. In addition, the heat exchanger can be flushed by moving the central panel, filter and fan within the pipe layouts themselves.



Key Technologies

Technical specifications

MODEL			PLFY-P20VLMD-E	PLFY-P25VLMD-E	PLFY-P32VLMD-E	PLFY-P40VLMD-E
Power			Single phase, 220-240V 50Hz			
Capacity in cooling mode*1		kW	2.2	2.8	3.6	4.5
		Btu/h	7500	9600	12300	15400
Capacity in heating mode*1		kW	2.5	3.2	4.0	5.0
		Btu/h	8500	10900	13600	17100
Power consumption	Cooling	kW	0.072	0.072	0.072	0.081
	Heating	kW	0.065	0.065	0.065	0.074
Current	Cooling	A	0.36	0.36	0.36	0.40
	Heating	A	0.30	0.30	0.30	0.34
External finish	Unit		Galvanized steel plate			
	Grille		Nr. Munsel 6.4Y 8.9/0.4 (white)			
Dimensions AxLxP	Unit	mm	290x776x634	290x776x634	290x776x634	290x776x634
	Grille	mm	20x1080x710	20x1080x710	20x1080x710	20x1080x710
Net weight	Unit	kg	23	23	24	24
	Grille	kg	6.5	6.5	6.5	6.5
Heat exchanger			Cross fin (Al/Cu)			
Fan	Type x Quantity		Turbo fan x 1			
	Air flow*2	m³/min	6.5-8.0-9.5	6.5-8.0-9.5	6.5-8.0-9.5	7.0-8.5-10.5
		l/s	108-133-158	108-133-158	108-133-158	117-142-175
		cfm	230-283-335	230-283-335	230-283-335	247-300-371
	Ext. Static pressure	Pa	0	0	0	0
Motor	Type		1-phase induction motor			
	Ext. Static pressure	kW	0.015 (a 240V)	0.015 (a 240V)	0.015 (a 240V)	0.015 (a 240V)
Air filter			Polypropylen honeycomb (long life)			
Refrigerant pipe diameter	Gas (swaged)	mm	ø12.7	ø12.7	ø12.7	ø12.7
	Liquid (swaged)	mm	ø6.35	ø6.35	ø6.35	ø6.35
Local drain pipe diameter		mm	O.D. 32	O.D. 32	O.D. 32	O.D. 32
Sound pressure*2*3		dB(A)	28-31-34	28-31-34	28-31-34	30-34-37

*1 The heating/cooling capacity indicates the maximum values during operation under the following conditions.

Cooling: indoor 27°C (81 °F) DB/19°C(66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

*2 Airflow rate/noise levels are expressed as (low-middle1-middle2-high).

*3 Measured in an anechoic chamber.

Technical specifications

MODEL			PLFY-P50VLMD-E	PLFY-P63VLMD-E	PLFY-P80VLMD-E	PLFY-P100VLMD-E
Power	Single phase, 220-240V 50Hz					
Capacity in cooling mode*1	kW		5,6	7,1	9,0	11,2
	Btu/h		19100	24200	30700	38200
Capacity in heating mode*1	kW		6,3	8,0	10,0	12,5
	Btu/h		21500	27300	34100	42700
Power consumption	Cooling	kW	0,082	0,101	0,147	0,157
	Heating	kW	0,075	0,094	0,140	0,150
Current	Cooling	A	0,41	0,49	0,72	0,75
	Heating	A	0,35	0,43	0,66	0,69
External finish	Unit	Galvanized steel plate				
	Grille	Nr. Munsel 6.4Y 8.9/0.4 (white)				
Dimensions AxLxP	Unit	mm	290x946x634	290x946x634	290x1446x634	290x1446x634
	Grille	mm	20x1250x710	20x1250x710	20x1750x710	20x1750x710
Net weight	Unit	kg	23	28	44	47
	Grille	kg	7.5	7.5	12.5	12.5
Heat exchanger	Cross fin					
Fan	Type x Quantity		Turbo fan x 1	Turbo fan x 1	Turbo fan x 2	Turbo fan x 2
	Air flow*2	m³/min	6,5-8,0-9,5	11,0-13,0-15,5	15,5-18,5-22,0	17,5-21,0-25,0
		l/s	108-133-158	167-217-258	258-308-367	292-350-417
		cfm	230-283-335	353-459-547	547-653-777	618-742-883
Ext. Static pressure	Pa	0	0	0	0	
Motor	Type	1-phase induction motor				
	Ext. Static pressure	kW	0,020 (a 240V)	0,020 (a 240V)	0,020 (a 240V)	0,030 (a 240V)
Air filter	Polypropylen honeycomb (long life)					
Refrigerant pipe diameter	Gas (swaged)	mm	ø12,7	ø15,88	ø15,88	ø15,88
	Liquid (swaged)	mm	ø6,35	ø9,52	ø9,52	ø9,52
Local drain pipe diameter		mm	O.D.32	O.D.32	O.D.32	O.D.32
Sound pressure*2*3		dB(A)	32-35-38	33-38-40	34-37-40	37-41-43

*1 The heating/cooling capacity indicates the maximum values during operation under the following conditions.

Cooling: indoor 27°C (81°F) DB/19°C(66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68° F) DB, outdoor 7°C (45° F) DB/6°C (43°F) WB.

*2 Airflow rate/noise levels are expressed as (low-middle1-middle2-high).

*3 Measured in an anechoic chamber.



PMFY-P VBM-E

INDOOR UNITS - 1-way cassette



Ideal for...

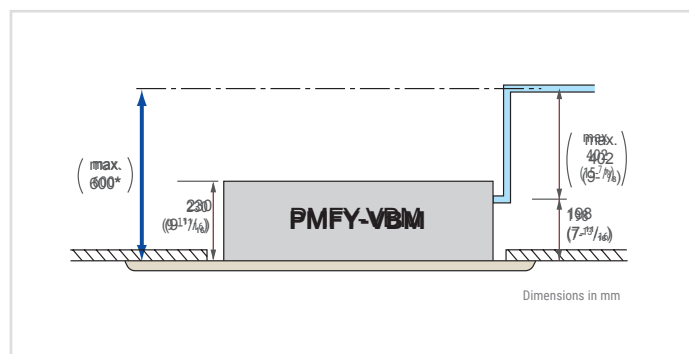
Compact and light housing, perfect for applications in premises with a limited ceiling space.

Easy installation and maintenance

The dimensions of the unit housing have been standardised for all models at 854 mm to facilitate installation. The weight of the body is only 14 kg for the main unit and 3 kg for the panel, making this unit one of the lightest on the market.

Condensate lift pump

The condensate drain can be positioned anywhere up to 600 mm from the ceiling surface.

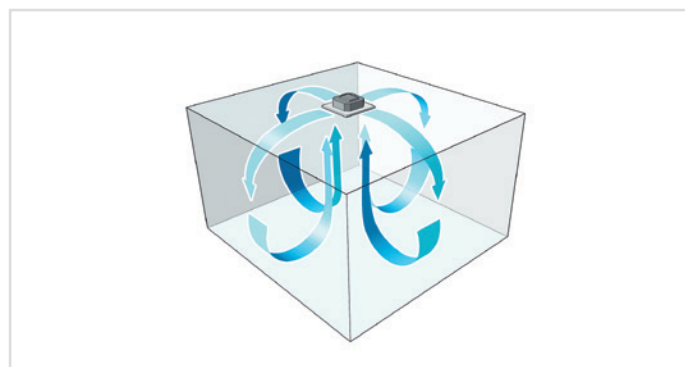


Silent operation

New airflow control technology reduces noise levels to just 27dB (P20VBM) for industry-leading quiet performance.

Improved Coanda effect

Thanks to this effect, the air tends to follow a trajectory that allows it to circulate more evenly in the air-conditioned environment.





Key Technologies

Technical specifications

MODEL			PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E
Power	Single phase, 220-240V 50Hz					
Capacity in cooling mode*1		kW	2,2	2,8	3,6	4,5
		Btu/h	7500	9600	12300	15400
Capacity in heating mode*1		kW	2,5	3,2	4,0	5,0
		Btu/h	8500	10900	13600	17100
Power consumption	Cooling	kW	0,042	0,044	0,044	0,054
	Heating	kW	0,042	0,044	0,044	0,054
Current	Cooling	A	0,20	0,21	0,21	0,26
	Heating	A	0,20	0,21	0,21	0,26
External finish	Unit	Galvanized steel plate				
	Grille	Nr. Munsel 0.98Y 8.99/0.63				
Dimensions AxLxP	Unit	mm	230x812x395	230x812x395	230x812x395	230x812x395
	Grille	mm	30x1000x470	30x1000x470	30x1000x470	30x1000x470
Net weight	Unit	kg	14	14	14	14
	Grille	kg	3	3	3	3
Heat exchanger	Cross fin					
Fan	Type x Quantity	Linear Flow fan x 1				
	Air flow*2	m³/min	6,5-7,2-8,0-8,7	7,3-8,0-8,6-9,3	7,3-8,0-8,6-9,3	7,7-8,7-9,7-10,7
		l/s	108-120-133-145	122-133-143-155	122-133-143-155	128-145-162-178
		cfm	230-254-283-307	258-283-304-328	258-283-304-328	272-307-343-378
Ext. Static pressure	Pa	0	0	0	0	
Motor	Type	Single-phase induction motor				
	Ext. Static pressure	kW	0,028	0,028	0,028	0,028
Air filter	Polypropylen honeycomb (long life)					
Refrigerant pipe diameter	Gas (swaged)	mm	ø12,7	ø12,7	ø12,7	ø12,7
	Liquid (swaged)	mm	ø6,35	ø6,35	ø6,35	ø6,35
Local drain pipe diameter		mm	O.D. 26	O.D. 26	O.D. 26	O.D. 26
Sound pressure*2*3		dB(A)	27-30-33-35	32-34-36-37	32-34-36-37	33-35-37-39

*1 The heating/cooling capacity indicates the maximum values during operation under the following conditions.

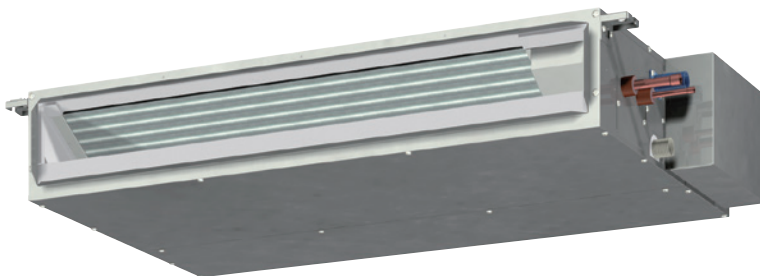
Cooling: indoor 27°C (81 °F) DB/19°C(66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43° F) WB.

*2 Airflow rate/noise levels are expressed as (low-middle1-middle2-high).

*3 Measured in an anechoic chamber.

PEFY-P VMS1-E

INDOOR UNITS - Ceiling concealed medium to low static pressure



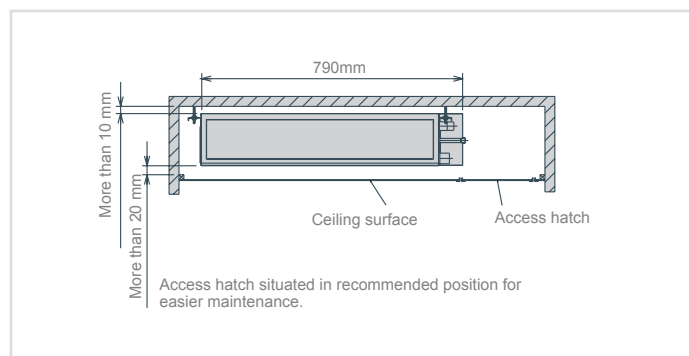
CITY MULTI

Ideal for...

This **ultra-slim 200 mm** unit offers extraordinary flexibility and is particularly suitable for use in rooms where low noise and compact vertical dimensions are essential.

Ultra-slim

These units are extremely thin, at just 200 mm in height. Extremely compact width and lengths of:
 7790 mm for P15 and P32 models
 990 mm for P40 and P50 models
 1190 mm for P63 models
 May be installed easily in cramped spaces such as ceiling recesses or double ceilings.



Condensate lift pump

The VMS1 is equipped with a condensate lift pump as standard.

Adjustable static pressure

L'unità è adatta per diverse applicazioni, grazie alle sue 4 impostazioni di presWith 4 selectable static pressure settings (5, 15, 25 and 50Pa), this unit is ideal for a variety of different applications.

Adjustable air flow

Three different fan speed settings - "low", "medium" and "high" – ensure the desired levels of comfort.

Low noise

The new design of the centrifugal fan and coil reduces noise levels.

Noise level dB(A)

Capacity		P15	P20	P25	P32	P40	P50	P63
Fan speed	High		28		32	33	35	36
	Medium		24		27	30	32	33
	Low		22		24	28	30	30



Key Technologies

Technical specifications

MODEL		PEFY-P15VMS1-E	PEFY-P20VMS1-E	PEFY-P25VMS1-E	PEFY-P32VMS1-E	PEFY-P40VMS1-E	PEFY-P50VMS1-E	PEFY-P63VMS1-E
Power		A single-phase, 220-240V 50Hz / a 1 fase, 220-240V 60Hz						
Capacity in cooling mode*1	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
	Btu/h	5800	7500	9600	12300	15400	19100	24200
Capacity in heating mode*1	kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
	Btu/h	6500	8500	10900	13600	17100	21500	27300
Power consumption	Cooling kW	0.05 [0.03]	0.05 [0.03]	0.06 [0.04]	0.07 [0.05]	0.07 [0.05]	0.09 [0.07]	0.09 [0.07]
	Heating kW	0.03 [0.03]	0.03 [0.03]	0.04 [0.04]	0.05 [0.05]	0.05 [0.05]	0.07 [0.07]	0.07 [0.07]
Current	Cooling A	0.42 [0.31]	0.47 [0.36]	0.50 [0.39]	0.50 [0.39]	0.56 [0.45]	0.67 [0.56]	0.72 [0.61]
	Heating A	0.31 [0.31]	0.36 [0.36]	0.39 [0.39]	0.39 [0.39]	0.45 [0.45]	0.56 [0.56]	0.61 [0.61]
External finish		Galvanised						
Dimensions HxLxW		mm 200x790x700	200x790x700	200x790x700	200x790x700	200x990x700	200x990x700	200x1190x700
Net weight		kg 19 [18]	19 [18]	19 [18]	20 [19]	24 [23]	24 [23]	28 [27]
Heat exchanger		Cross fins (sheet aluminium fins and copper piping)						
Fan	Type x Quantity	Sirocco x 2				Sirocco x 3		Sirocco x 4
	Air flow (low-medium-high) m³/min	5-6-7	5.5-6.5-8	5.5-7-9	6-8-10	8-9.5-11	9.5-11-13	12-14-16.5
	Static external press 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
Motor	Type	Brushless DC motor						
	Power output kW	0.096	0.096	0.096	0.096	0.096	0.096	0.096
Air filter		Polypropylene honeycomb fabric (washable)						
Refrigerant pipe diameter	Gas (swaged) mm	ø12.7 brazed	ø12.7 brazed	ø12.7 brazed	ø12.7 brazed	ø12.7 brazed	ø12.7 brazed	ø15.88 brazed
	Liquid (swaged) mm	ø6.35 brazed	ø6.35 brazed	ø6.35 brazed	ø6.35 brazed	ø6.35 brazed	ø6.35 brazed	ø9.52 brazed
Local drain pipe diameter		O.D. 32	O.D. 32	O.D. 32	O.D. 32	O.D. 32	O.D. 32	O.D. 32
Sound pressure (low-medium-high) dB(A)		22-24-28	23-25-29	24-26-30	24-27-32	28-30-33	30-32-35	30-33-36

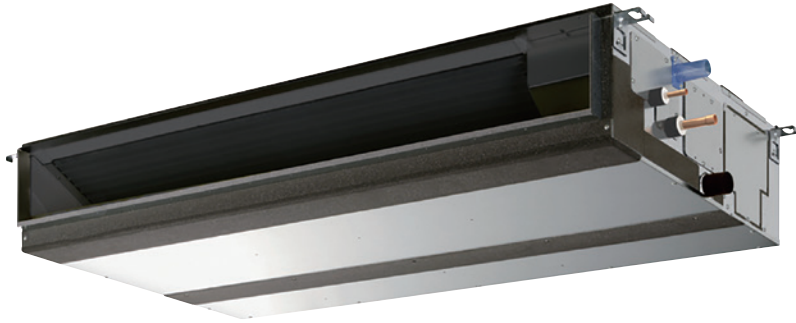
*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.
 Cooling: indoor 27°C DB/19°C WB, outdoor 35°C DB.
 Heating: indoor 20°C DB (68°F DB), outdoor 7°C DB (45°F DB/43°F WB). Pipe length: 7.5 m (24-9/16 feet).
 Height difference: 0 m (0 feet).

*2 Static external pressure is set to 15 Pa by default.

*3 [] in case of PEFY-P15-63VMS1L-E.

PEFY-M VMA-A1

INDOOR UNITS - Ceiling concealed medium to high static pressure



CITY MULTI

Five levels of external static pressure settings

Five-stage external static pressure settings provide flexibility for duct extension, branching, and air outlet configuration and are adjustable to meet different application conditions. Settings range to a maximum of 150Pa.

External static pressure setting

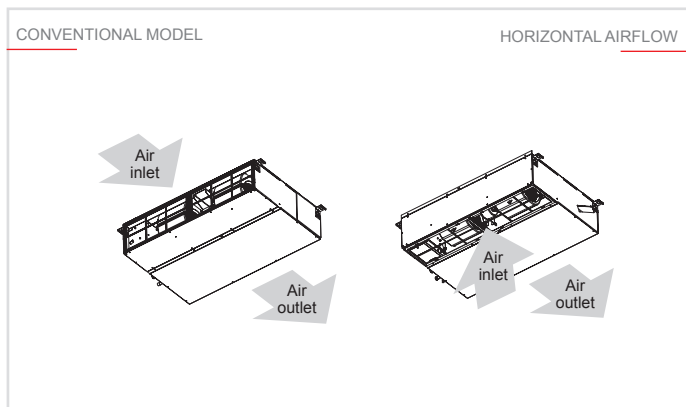
Series	20	25	32	40	50	63	71	80	100	125	140	
PEFY-M VMA-A1	35/50/70/100/150 Pa						40/50/70/100/150 Pa					

Four fan speeds to choose from

The conventional models had three levels of fan speed, but the new models offer four levels (Low/Mid2/Mid1/High). Combined with a wider selection of external static pressure levels, the new models offer optimal operation settings to suit the air-conditioning load of the installation space.

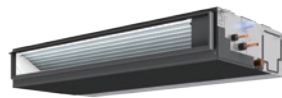
Air inlet direction can be easily changed

By simply switching the closing board and air filter, the inlet layout can be changed from the rear inlet to the bottom inlet. (At factory shipment: Rear inlet)

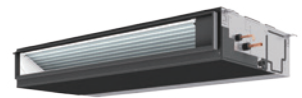


Optional drain pump

The lineup consists of two types of models, with or without a built-in drain pump, for more flexibility in piping layout design.

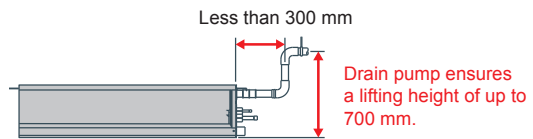


Built-in drain pump
PEFY-M VMA-A1



No drain pump
PEFY-M VMAL-A1

*Units with an "L" at the end of the model name are not equipped with a drain pump.



Connectable to Plasma Quad Connect

The optional Plasma Quad Connect MAC-100FT-E can be installed on the indoor unit's air inlet side. For installation, PQ attachment or PQ box is required.



Key Technologies

Technical specifications

MODEL			PEFY-M20VMA-A1	PEFY-M25VMA-A1	PEFY-M32VMA-A1	PEFY-M40VMA-A1	
Power	1-phase 220-230-240 V 50 Hz						
Capacity in cooling mode *1	kW	2.2	2.8	3.6	4.5		
	Btu/h	7,500	9,600	12,300	15,400		
Capacity in heating mode*1	kW	2.5	3.2	4.0	5.0		
	Btu/h	8,500	10,900	13,600	17,100		
Power consumption	Cooling kW	0.039	0.039	0.060	0.087		
	Heating kW	0.037	0.037	0.058	0.085		
Current	Cooling A	0.34-0.33-0.32	0.34-0.33-0.32	0.50-0.48-0.46	0.70-0.67-0.64		
	Heating A	0.34-0.33-0.32	0.34-0.33-0.32	0.50-0.48-0.46	0.70-0.67-0.64		
External finish	Galvanized steel plate						
Dimensions HxLxW	mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732		
Net weight	kg	21	21	21	25		
Heat exchanger	Cross fin (Aluminum fin and copper tube)						
Fan	Type x Quantity	Sirocco fan x 1		Sirocco fan x 1		Sirocco fan x 2	
	Air flow (low-medium-high)	m³/min	6.0 - 7.5 - 8.5 - 10.0	6.0 - 7.5 - 8.5 - 10	7.4 - 9.0 - 10.5 - 12.5	10.0 - 11.5 - 13.5 - 19.0	
		l/s	100 - 125 - 142 - 166	100 - 125 - 142 - 166	123 - 150 - 175 - 208	166 - 191 - 225 - 316	
		cfm	212 - 265 - 300 - 353	212 - 265 - 300 - 353	261 - 317 - 370 - 441	353 - 406 - 476 - 670	
External static press *2	Pa	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>		
Motor	Type	DC Motor					
	Power output kW	0.085	0.085	0.085	0.121		
Air filter	Polypropylene honeycomb fabric (washable)						
Refrigerant pipe diameter	Gas (brazed) mm	12.7	12.7	12.7	12.7		
	Liquid (brazed) mm	6.35	6.35	6.35	6.35		
Local drain pipe diameter	O.D.32 (1-1/4")						
Sound pressure (Low-Mid2-Mid1-High)*3	Cooling dB(A)	21.5 - 23.0 - 26.5 - 30.0	21.5 - 23.0 - 26.5 - 30.0	23.0 - 26.5 - 29.5 - 33.5	23.5-25.5-28.5-37.0		
	Heating dB(A)	21.5 - 23.0 - 26.5 - 30.0	21.5 - 23.0 - 26.5 - 30.0	23.0 - 26.5 - 29.5 - 33.5	23.5-25.5-28.5-37.0		

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

*2 The factory setting of airflow mode and external static pressure mode is shown without < >.

*3 Measured in anechoic chamber with 230V mains power and at the factory setting of external static pressure.

Technical specifications

MODEL			PEFY-M50VMA-A1	PEFY-M63VMA-A1	PEFY-M71VMA-A1	PEFY-M80VMA-A1
Power	1-phase 220-230-240 V 50 Hz					
Capacity in cooling mode *1	kW		5.6	7.1	8.0	9.0
	Btu/h		19,100	24,200	27,300	30,700
Capacity in heating mode*1	kW		6.3	8.0	9.0	10.0
	Btu/h		21,500	27,300	30,700	34,100
Power consumption	Cooling	kW	0.131	0.139	0.165	0.165
	Heating	kW	0.129	0.231	0.216	0.216
Current	Cooling	A	0.94-0.90-0.86	0.99-0.95-0.91	1.16-1.11-1.06	1.16-1.11-1.06
	Heating	A	0.94-0.90-0.86	1.55-1.48-1.42	1.47-1.41-1.35	1.47-1.41-1.35
External finish	Galvanized steel plate					
Dimensions HxLxW	mm		250 x 1100 x 732	250 x 1100 x 732	250 x 1400 x 732	250 x 1400 x 732
Net weight	kg		30	30	37	37
Heat exchanger	Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 3
	Air flow (low-medium-high)	m³/min	12.0 - 14.5 - 16.5 - 25.6	13.5 - 16.0 - 19.2 - 26.2	14.5 - 18.0 - 21.0 - 33.1	14.5 - 18.0 - 21.0 - 33.1
		l/s	208 - 241 - 275 - 426	225 - 266 - 320 - 436	241 - 300 - 350 - 518	241 - 300 - 350 - 518
		cfm	441 - 511 - 582 - 903	476 - 564 - 677 - 925	511 - 635 - 741 - 1098	511 - 635 - 741 - 1098
External static press ²	Pa	35 - <50> - <70> - <100> - <150>	35 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	
Motor	Type		DC Motor			
	Power output	kW	0.121	0.121	0.300	0.300
Air filter	Polypropylene honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (brazed)	mm	12.7	15.88	15.88	15.88
	Liquid (brazed)	mm	6.35	9.52	9.52	9.52
Local drain pipe diameter	O.D.32 (1-1/4")					
Sound pressure (Low-Mid2-Mid1-High) ³	Cooling	dB(A)	22.0-24.0-26.5-37.0	23.0-26.0-30.0-37.5	22.0-25.0-27.5-38.5	22.0-25.0-27.5-38.5
	Heating	dB(A)	22.0-24.0-26.5-37.0	23.0-26.0-30.0-41.5	22.0-25.0-27.5-40.5	22.0-25.0-27.5-40.5

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.
 Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.
² The factory setting of airflow mode and external static pressure mode is shown without < >.
³ Measured in anechoic chamber with 230V mains power

Technical specifications

MODEL			PEFY-M100VMA-A1	PEFY-M125VMA-A1	PEFY-M140VMA-A1
Power	1-phase 220-230-240 V 50 Hz				
Capacity in cooling mode *1	kW		11.2	14.0	16.0
	Btu/h		38,200	47,800	54,600
Capacity in heating mode*1	kW		12.5	16.0	18.0
	Btu/h		42,700	54,600	61,400
Power consumption	Cooling	kW	0.211	0.218	0.282
	Heating	kW	0.140	0.197	0.206
Current	Cooling	A	1.44-1.38-1.32	1.40-1.33-1.28	1.84 - 1.76 - 1.69
	Heating	A	1.44-1.38-1.32	1.40-1.33-1.28	1.84 - 1.76 - 1.69
External finish	Galvanized steel plate				
Dimensions HxLxW	mm		250 x 1400 x 732	250 x 1400 x 732	250 x 1600 x 732
Net weight	kg		37	38	42
Heat exchanger	Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity		Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 3
	Air flow (low-medium-high)	m³/min	23.0 - 28.0 - 32.0 - 37.0	25.5 - 31.0 - 34.0 - 37.0	29.5 - 35.5 - 40.0 - 44.0
		l/s	383 - 466 - 533 - 616	425 - 516 - 566 - 616	491 - 591 - 666 - 733
		cfm	812 - 988 - 1129 - 1306	900 - 1094 - 1200 - 1306	1041 - 1253 - 1412 - 1553
External static press ²	Pa	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	
Motor	Type		DC Motor		
	Power output	kW	0.300	0.300	0.300
Air filter	Polypropylene honeycomb fabric (washable)				
Refrigerant pipe diameter	Gas (swaged)	mm	15.88	15.88	15.88
	Liquid (swaged)	mm	9.52	9.52	9.52
Local drain pipe diameter	O.D.32 (1-1/4")				
Sound pressure (Low-Mid2-Mid1-High) ³	Cooling	dB(A)	29.5 - 34.0 - 37.5 - 40.0	31.5 - 36.5 - 38.5 - 40.5	34.0 - 38.0 - 40.5 - 43.0
	Heating	dB(A)	29.5 - 34.0 - 37.5 - 40.0	31.5 - 36.5 - 38.5 - 40.5	34.0 - 38.0 - 40.5 - 43.0

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.
 Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.
² The factory setting of airflow mode and external static pressure mode is shown without < >.
³ Measured in anechoic chamber with 230V mains power



PEFY-P VMHS-E

INDOOR UNITS - Ceiling concealed high static pressure



CITY MULTI

Four levels of external static pressure settings

Although the conventional models only had three levels of external static pressure, the new models offer four levels of external static pressure. The additional external static pressure capacity provides flexibility for duct extension, branching and air outlet configuration.

PEFY-P VMHS-E	P40	P50	P63	P71	P80	P100	P125	P140
External static pressure (Pa)	50-<100>-<150>-<200>							

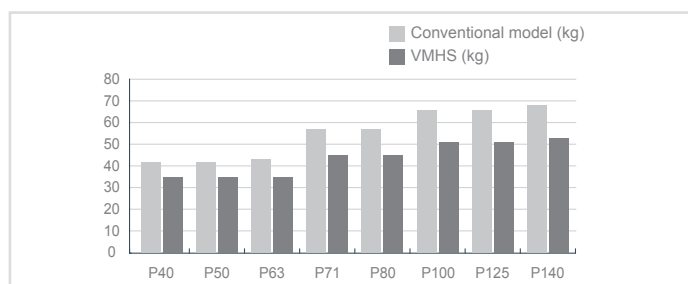
The factory setting of external static pressure is shown without < > . Refer to "Fan characteristics curves", according to the external static pressure, in DATA BOOK for the usable range of air flow rate.

Three fan speeds (Low/Mid/High) to choose from

The conventional models had two levels of fan speed, the new models offer three levels of fan speed (Low/Mid/High). Combined with a wider selection of external static pressure levels, the new models offer optimal operation settings to suit the air-conditioning load of an Installation space.

Reduction weight

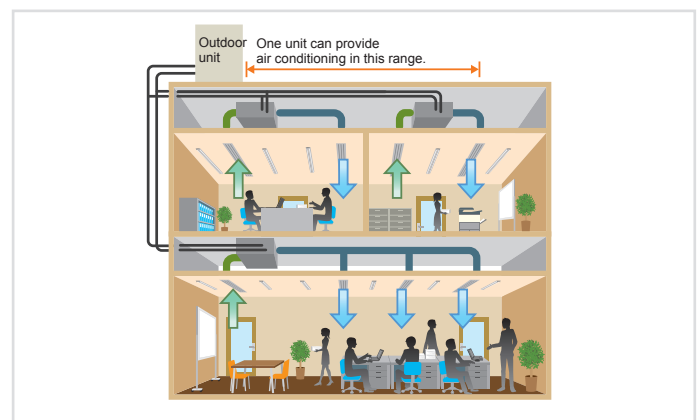
Downsizing of the motor helped reduce unit weight, offering easier installation.



The use of DC motor

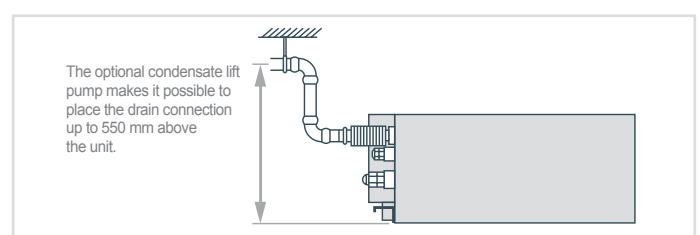
The new models are equipped with high-efficiency DC motors as compared to the AC motors on older models, which reduced power consumption. On the P80 models, power consumption is reduced by 59%*.

*Comparison made at 50 Hz, 220 V, 100 Pa Low fan speed



Optional drain pump

Use of high-efficiency DC motor for the drain pump motor on the new models reduces power consumption by 90%, in comparison to that on the conventional models. The pump head height of 550 mm provides for greater piping design flexibility.





Key Technologies

Technical specifications

MODEL		PEFY-P40VMHS-E	PEFY-P50VMHS-E	PEFY-P63VMHS-E	PEFY-P71VMHS-E	PEFY-P80VMHS-E	PEFY-P100VMHS-E	PEFY-P125VMHS-E	PEFY-P140VMHS-E	
Power		A single-phase, 220-230-240V 50/60 Hz								
Capacity in cooling mode *1	kW	4,5	5,6	7,1	8,0	9,0	11,2	14,0	16,0	
	Btu/h	15,400	19,100	24,200	27,300	30,700	38,200	47,800	54,600	
Capacity in heating mode*1	kW	5,0	6,3	8,0	9,0	10,0	12,5	16,0	18,0	
	Btu/h	17,100	21,500	27,300	30,700	34,100	42,700	54,600	61,400	
Power consumption	Cooling kW	0,055	0,055	0,090	0,075	0,090	0,160	0,160	0,190	
	Heating kW	0,055	0,055	0,090	0,075	0,090	0,160	0,160	0,190	
Current	Cooling A	0,41-0,39-0,38	0,41-0,39-0,38	0,64-0,62-0,59	0,54-0,52-0,50	0,63-0,61-0,58	1,05-1,01-0,96	1,05-1,01-0,96	1,24-1,19-1,14	
	Heating A	0,41-0,39-0,38	0,41-0,39-0,38	0,64-0,62-0,59	0,54-0,52-0,50	0,63-0,61-0,58	1,05-1,01-0,96	1,05-1,01-0,96	1,24-1,19-1,14	
External finish		Galvanized								
Dimensions HxLxW	mm	380x745x900	380x745x900	380x745x900	380x1030x900	380x1030x900	380x1195x900	380x1195x900	380x1195x900	
Net weight	kg	35	35	35	45	45	51	51	53	
Heat exchanger		Cross fins (aluminium fins and copper piping)								
Fan	Type x Quantity	Sirocco x 1		Sirocco x 1	Sirocco x 2	Sirocco x 2	Sirocco x 2	Sirocco x 2	Sirocco x 2	
	Air flow (low-medium-high)	m³/min	10,0-12,0-14,0	10,0-12,0-14,0	13,5-16,0-19,0	15,5-18,0-22,0	18,0-21,5-25,0	26,5-32,0-38,0	26,5-32,0-38,0	28,0-34,0-40,0
		l/s	167-200-233	167-200-233	225-267-317	258-300-367	300-358-417	442-533-633	442-533-633	467-567-667
	cfm	353-424-494	353-424-494	477-565-671	547-636-777	636-759-883	936-1130-1342	936-1130-1342	989-1201-1412	
Static external press	Pa	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	50 - 100 -150 - 200	
Motor	Type	Motor DC								
	Power output	kW	0,121	0,121	0,121	0,244	0,244	0,375	0,375	0,375
Air filter		-								
Refrigerant pipe diameter	Gas (swaged)	mm	12,7	12,7	15,88	15,88	15,88	15,88	15,88	15,88
	Liquid (swaged)	mm	6,35	6,35	9,52	9,52	9,52	9,52	9,52	9,52
Local drain pipe diameter		O.D 32								
Sound pressure (low-medium-high)*2	dB(A)	20-23-27	20-23-27	24-27-32	24-26-30	25-27-30	27-31-34	27-31-34	27-32-36	

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given:

Cooling: 27°C DB / 19°C WB, outdoor 35°C DB.

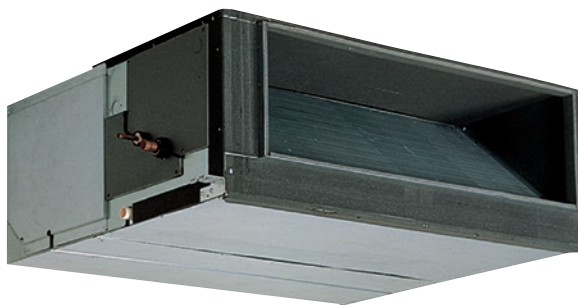
Heating: 27°C DB, outdoor 7°C DB / 6°C WB.

*2 Static pressure is set to 50 Pa by default.

*3 Measured in anechoic chamber.

PEFY-P VMHS-E

INDOOR UNITS - Ceiling concealed high static pressure



CITY MULTI

Ideal for...

The new VMHS series: improved **installation flexibility** and superior performance.

DC Inverter motor

The new VMHS ducted indoor units are equipped with a single-phase DC Inverter electric motor, a solution that offers more precise electronic control and less noise.

Remotely settable static overpressure

The static overpressure may be modified from a remote control. In addition to a dip switch on the unit, the PAR-41MAA remote control may also be used to modify static external pressure, making installation significantly simpler.

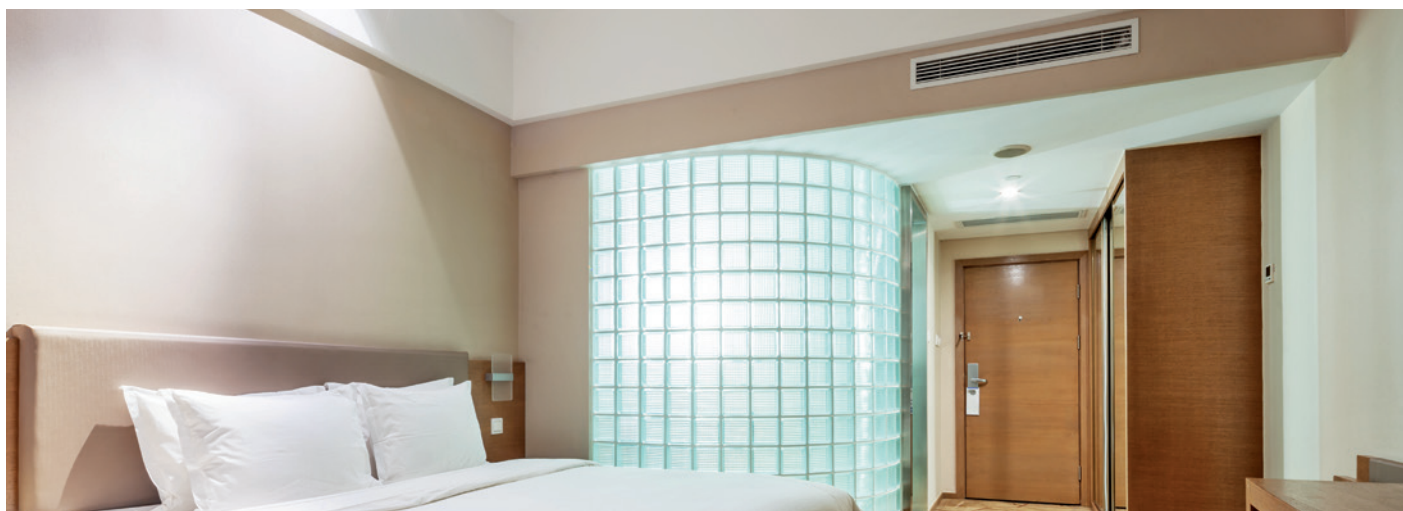
A choice of up to five different settings is available: 50, 100, 150, 200 or 250 Pa.

Automatic fan speed adjustment

The automatic fan speed adjustment mode ensures fast, comfortable heating as soon as heating mode is activated. Automatic fan speed control is included in the three standard modes "Low", "Medium" and "High", and ensures faster, comfortable air conditioning by increasing the air flow speed on activation and then reducing speed once stable comfort levels are attained.

Quieter

The VMHS series is 15% quieter than the previous VMH model.



Key Technologies

Technical specifications

MODEL			PEFY-P200VMHS-E	PEFY-P250VMHS-E
Power	A single-phase, 220-240V, 50Hz			
Capacity in cooling mode *1		kW	22.4	28.0
		Btu/h	76,000	95,500
Capacity in heating mode*1		kW	25.0	31.5
		Btu/h	72,300	90,400
Power consumption	Cooling	kW	0.63/0.63/0.63	0.82/0.82/0.82
	Heating	kW	0.63/0.63/0.63	0.82/0.82/0.82
Current	Cooling	A	3.47/3.32/3.18	4.72/4.43/4.14
	Heating	A	3.47/3.32/3.18	4.72/4.43/4.14
External finish	Galvanised			
Dimensions HxLxW		mm	470 x 1250 x 1120	470 x 1250 x 1120
Net weight		kg	97	100
Heat exchanger	Cross Fin			
Fan	Type x Quantity		Sirocco x 2	
	Air flow (low-medium-high)	m³/min	50-61-72	
	Static external press*2	Pa	(50)/(100)/150/(200)/(250)	
Motor	Type		Single-phase induction motor	
	Power output	kW	0.87	0.87
Air filter			-	-
Refrigerant pipe diameter	Gas (swaged)	mm	19.05	22.2
	Liquid (swaged)	mm	9.52	9.52
Local drain pipe diameter			32	32
Sound pressure (low-medium-high)*3		dB(A)	36-39-43	39-42-46

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given:

Cooling: 27°C DB / 19°C WB, outdoor 35°C DB.

Heating: 27°C DB, outdoor 7°C DB / 6°C WB.

*2 Static pressure is set to 150 Pa by default.

*3 Measured in anechoic chamber.

PCFY-P VKM-E

INDOOR UNITS - Ceiling-suspended



CITY MULTI

Ideal for...

Designed and built for quiet operation and simple maintenance, these units deliver efficient, comfortable air conditioning performance.

Optimised air flow

Air flow speed is optimised for the height of the ceiling. The ideal air flow setting may be selected for ceilings up to 4.2m in height, maximising both air conditioning efficacy and comfort.

Extremely simple installation

With the direct mount system, it is not necessary to remove the mounting from the main unit, cutting installation times.

The condensate drain pipes may be connected on the left or right of the unit.

Automatic fan speed adjustment

As well as the 4 manual fan speed settings, the PCFY series may also be set to automatically adjust fan speed in relation to ambient conditions: the fan speed is always set to the highest setting when the unit is switched on, to reach the desired conditions more quickly, and is reduced automatically near the setpoint for stable comfort.

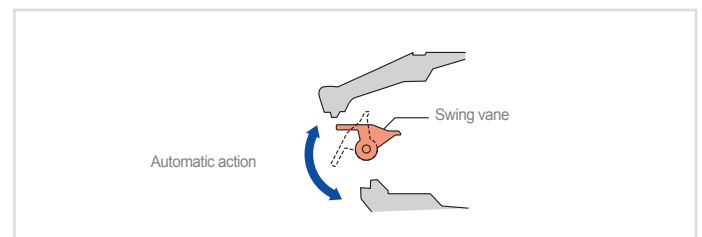
Extra slim

Extremely slim and with elegant curves, the PCFY series is perfectly suited to any interior. The unit also features a single air outlet, meaning that the automatic swing vane also doubles as a shutter when the unit is off.



Automatic swing vane

The automatic swing vane mode distributes air more uniformly. The vane swings upwards and downwards automatically to distribute air effectively into every corner of the room.





Key Technologies

Technical specifications

MODEL			PCFY-P40VKM-E	PCFY-P63VKM-E	PCFY-P100VKM-E	PCFY-P125VKM-E	
Power	A single-phase, 220-230-240VAC 50Hz						
Capacity in cooling mode*1	kW		4.5	7.1	11.2	14.0	
	Btu/h		15400	24200	38200	47800	
Capacity in heating mode*1	kW		5.0	8.0	12.5	16.0	
	Btu/h		17100	27300	42700	54600	
Power consumption	Cooling	kW	0.04	0.05	0.09	0.11	
	Heating	kW	0.04	0.05	0.09	0.11	
Current	Cooling	A	0.28	0.33	0.65	0.76	
	Heating	A	0.28	0.33	0.65	0.76	
External finish	Munsell 6.4Y 8.9/ 0.4						
Dimensions HxLxW	mm		230x960x680	230x1280x680	230x1600x680	230x1600x680	
Net weight	kg		24	32	36	38	
Heat exchanger	Cross fins (aluminium fins and copper piping)						
Fan	Type x Quantity		Sirocco x 2	Sirocco x 3	Sirocco x 4	Sirocco x 4	
	Air flow (low-medium-high)	m³/min	10-11-12-13	14-15-16-18	21-24-26-28	21-24-27-31	
		l/s	167-183-200-217	233-250-267-300	350-400-433-467	350-400-450-517	
	Static external press	Pa	0	0	0	0	
Motor	Type	Single-phase DC motor					
	Power output	kW	0.090	0.095	0.160	0.160	
Air filter	Polypropylene honeycomb fabric (long life)						
Refrigerant pipe diameter	Gas (swaged)	mm	ø12.7	ø15.88	ø15.88 / ø19.05 (compatible)	ø15.88 / ø19.05 (compatible)	
	Liquid (swaged)	mm	ø6.35	ø9.52	ø9.52	ø9.52	
Local drain pipe diameter	O.D. 26 (1)						
Sound pressure (low-medium-high)*2		dB(A)	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44	

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

*2 Air flow/noise levels given for operation in low-medium1-medium2-high modes.

*3 Measured in anechoic chamber.

PKFY-P VLM-E

INDOOR UNITS - Wall-mounted



CITY MULTI

New design

A sharp and simple form that combines beauty and function. The simple square design harmonizes beautifully with the straight lines created by the intersection of the walls, floor and ceiling of the space. With a new white body color, it is the ideal solution for residential applications, offices and large stores.

New line-up

New exclusive P10 model is added in wall mounted lineup. P10 size allows to respond to the needs of narrow spaces conditioning them finely. In addition, miniaturization of conventional P32 model has been realized. It contributes to space saving of installation area.

Capacity	P10	P15	P20	P25	P32	P40	P50	P63	P100
VLM	NEW	•	•	•	•	•	•		

Horizontal airflow

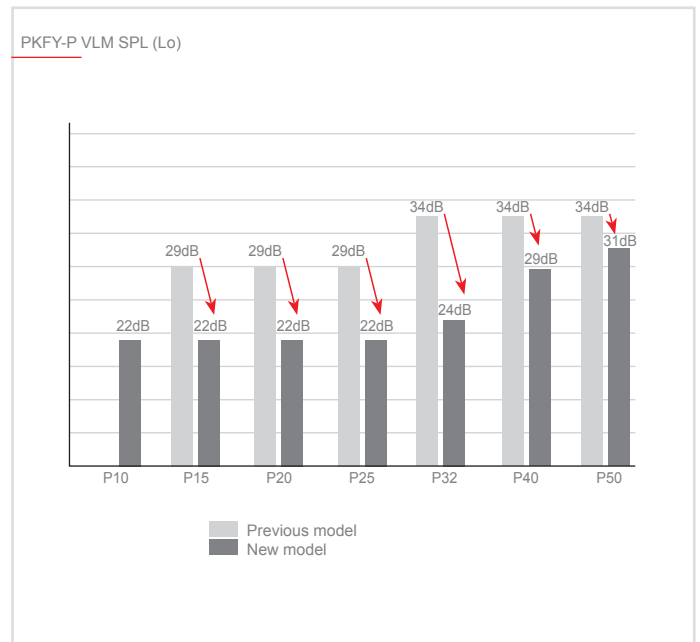
The vane angle can be set to five steps, including the one that allows horizontal air flow, reducing the feeling of draft. Besides, 4 steps of air speed are available.

		Fan Speed 	Vane Control	
			Vane Angle 	Swing mode
Conventional	PKFY-P** VBM	4 speeds	4 steps	---
	PKFY-P** VHM	3 speeds + AUTO	5 steps	✓

NEW	PKFY-P** VLM-E	4 speeds + AUTO	5 steps	✓
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Quietness...

The noise level has been significantly reduced compared to the conventional model by reviewing the unit structure and improving the line flow fan.





Key Technologies

Technical specifications

MODEL		PKFY-P10VLM-E	PKFY-P15VLM-E	PKFY-P20VLM-E	PKFY-P25VLM-E	PKFY-P32VLM-E	PKFY-P40VLM-E	PKFY-P50VLM-E	
Power		A single-phase, 220-240V 50Hz, A single-phase, 220-230V 60Hz							
Capacity in cooling mode*1	kW	1.2	1.7	2.2	2.8	3.6	4.5	5.6	
	Btu/h	4100	5800	7500	9600	12300	15400	19100	
Capacity in heating mode*1	kW	1.4	1.9	2.5	3.2	4.0	5.0	6.3	
	Btu/h	4800	6500	8500	10900	13600	17100	21500	
Power consumption	Cooling kW	0.02	0.02	0.02	0.03	0.04	0.04	0.05	
	Heating kW	0.01	0.01	0.01	0.02	0.03	0.03	0.04	
Current	Cooling A	0.20	0.20	0.20	0.25	0.35	0.35	0.45	
	Heating A	0.15	0.15	0.15	0.20	0.30	0.30	0.40	
External finish		Plastic (0.7PB 9.2/0.4)							
Dimensions HxLxW	mm	299 x 773 x 237					299 x 898 x 237		
Net weight	kg	11 (25)					13 (29)		
Heat exchanger		Cross fin (Aluminium fin and copper tube)							
Fan	Type x Quantity	Line flow fan x 1							
	Air flow *2	m³/min	3.3-3.5-3.8-4.2	4.0-4.2-4.4-4.7	4.0-4.4-4.9-5.4	4.0-4.6-5.4-6.7	4.3-5.4-6.9-8.4	6.3-7.4-8.6-10.0	6.8-8.3-10.2-12.4
		l/s	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
	cfm	117-124-134-148	141-148-155-166	141-155-173-191	141-162-191-237	152-191-244-297	222-261-304-353	240-293-360-438	
Static external press	Pa	0 (0)							
Motor	Type	DC motor							
	Power output kW	0.03							
Air filter		PP Honeycomb							
Refrigerant pipe diameter	Gas (swaged) mm	Ø 12.7 (Ø1/2)							
	Liquid (swaged) mm	Ø 6.35 (Ø1/4)							
Local drain pipe diameter		I.D. 16 (5/8)							
Sound pressure *2 *3	dB(A)	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	

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.
Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.
*2 Air flow/noise levels given for operation in low-medium1-medium2-high modes.
*3 Measured in anechoic chamber.



Technical specifications

MODEL			PKFY-P63VKM-E	PKFY-P100VKM-E
Power	A single-phase, 220-230-240VAC 50Hz			
Capacity in cooling mode*1	kW		7.1	11.2
	Btu/h		24200	38200
Capacity in heating mode*1	kW		8.0	12.5
	Btu/h		27300	42600
Power consumption	Cooling	kW	0.05	0.08
	Heating	kW	0.04	0.07
Current	Cooling	A	0.37	0.58
	Heating	A	0.30	0.51
External finish	Munsell plastic 1.0Y 9.2/0.2			
Dimensions HxLxW		mm	365x1170x295	365x1170x295
Net weight		kg	21	21
Heat exchanger	Cross fins (aluminium fins and copper piping)			
Fan	Type x Quantity	Linear flow fan x 1		
	Air flow (low-medium-high)	m ³ /min	16-20	20-26
		l/s	267-333	333-433
		cfm	565-706	706-918
Static external press	Pa	0	0	
Motor	Type			
	Power output	kW	0.056	0.056
Air filter	Polypropylene honeycomb fabric (washable)			
Refrigerant pipe diameter	Gas (swaged)	mm	ø15.88	ø15.88 / 19.05
	Liquid (swaged)	mm	ø9.52	ø9.52
Local drain pipe diameter	I.D. 16 (5/8)			I.D. 16 (5/8)
Sound pressure (low-medium-high)*2		dB(A)	39-45	41-49

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

*2 Air flow/noise levels given for operation in low-medium1-medium2-high modes, in low-medium-high modes or in low-high modes, depending on model. Measured in anechoic chamber.

PAC-LV11-E

INDOOR UNITS - Wall-mounted design indoor unit LEV Kit



CITY MULTI

Ideal for...

The new LEV Kit may be used to connect both standard VRF indoor units and Residential line indoor units in the same CITY MULTI VRF system.

The new LEV Kit makes it possible to connect stylish residential indoor units, with looks that are perfectly suited for large installations in applications such as residential buildings and hotels, where design is a decisive factor in the choice of indoor units.


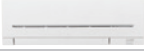
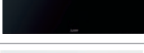



Easy installation and maintenance

The new LEV Kit is easy to install in double ceilings or dedicated niches not only because of its compact size (183 mm H x 355 mm L x 142 mm W), but also and especially because it can be installed vertically or horizontally with no condensate drain.

Additionally, a maximum permissible piping length of 15 m between indoor units and the LEV Kit offers the freedom to install the kit in the most effective position possible.

Residential indoor units

The following residential indoor units may be connected to the LEV Kit:






Types and Sizes available Residential indoor units	15	18	20	22	25	35	42	50
MSZ-LN_VG(2) 		•			•	•		•
MSZ-AP_VG(K) 	•		•		•	•	•	•
MSZ-EF_VE/VG 		•		•	•	•	•	•
MSZ-SF_VAVE3 	•		•	•	•	•	•	•
MFZ-KJ_VE 					•	•		•
MFZ-KT_VG 					•	•		•

ATTENTION !!

FOR DETAILS ON COMPATIBILITY BETWEEN EACH MODEL OF INDOOR UNITS AND OUTDOOR UNITS PLEASE CONTACT YOUR LOCAL DISTRIBUTOR

Unparalleled comfort and air quality

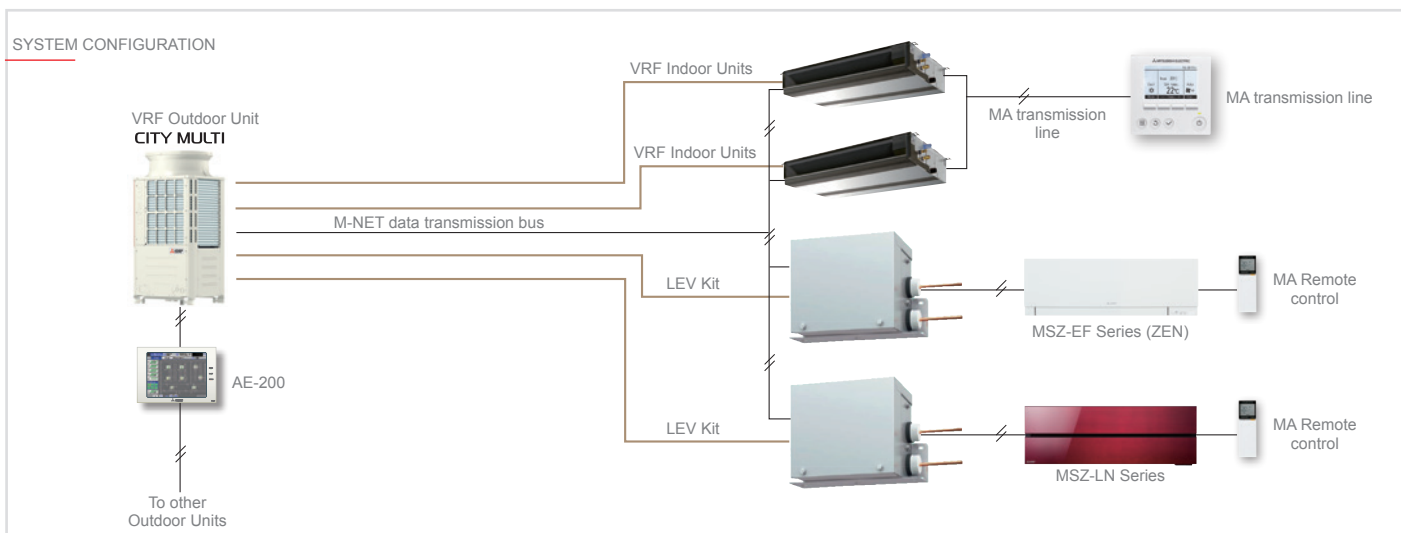
The quality of an environment also depends on perceived noise levels. Mitsubishi Electric air conditioners connected to a VRF CITY MULTI system using the LEV Kit offer the highest levels of acoustic comfort available today on the market.

Interior of a train  80dB(A)	Interior of a quiet car (40 km/h)  60dB(A)	Inside a library  40dB(A)	Sound of rustling leaves  22dB(A) SEZ-KD	Limit of human hearing  10dB(A)
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The residential indoor units also contribute to higher air quality levels with the superior filtration power of air filters with nanoplatinum treatment.



Key Technologies



Technical specifications

MODEL			PAC-LV11-E
Power			A single-phase, 220-240VAC 50Hz
Compatible Family series residential indoor units			MSZ-EF, MSZ-LN, MSZ-SF, MSZ-KJ
Number of branches			1 way
Maximum distance between indoor unit and LEV Kit	m		15
Compatible CITY MULTI outdoor units			Small Y Line - Small Y Compact Line - Y Lines (Ecostandard/ Standard Efficiency/High Efficiency) - Y Line Zubadan (YHM) - Y Line Replace Multi (YJM), R2 Lines (Standard Efficiency/High Efficiency) - R2 Line Replace Multi (YJM), WY Line (YHM) - WR2 Line (YHM)
Dimensions (HxLxW)	mm		180x355x142
Net weight	kg		3.5
Condensate drain			Not necessary
Installation			Vertical Horizontal
Refrigeration pipe diameter	Liquid	mm	6.35 (brazed)
	Gas	mm	-
Compatible remote controls			Standard: Remote control included with optional residential indoor units (purchased separately): 1. MA wired remote control interfaced via MAC-397IF board (optional, for installation in indoor units - purchased separately). 2. ME wired remote control, interfaced via LEV Kit terminal board.

PFFY-P VKM-E

INDOOR UNITS - Design floor-standing unit



CITY MULTI

Ideal for...

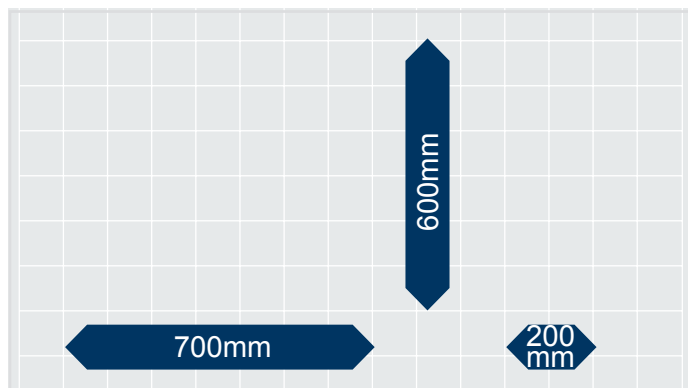
A high performance floor-standing air conditioner unit with an **elegant design** for lounges, bedrooms or offices where style is imperative.

Sophisticated design

A floor-standing air conditioner unit by Mitsubishi Electric boasting an innovative design and combining simple, linear lines with a wide choice of functions. Conceived to leave the walls free, a unit that delivers comfortable cooling performance in summer and pleasant heat in winter. The gloss pure white finish lends the unit a premium look suitable for any interior space. Both the upper and lower air vents are closed when the air conditioner is switched off, giving the unit an elegantly stylish feel. A beautifully stylish and innovative air conditioner from Mitsubishi that suits your most elegant interior spaces to perfection.

Slim but powerful

The slimline housing of the unit expresses the essence of compactness. The ideal size for a lounge, bedroom and many other rooms. The front panel is removable and washable, making the unit extremely simple to clean. Cleaning your air conditioner simply and regularly will keep it looking great and working perfectly for maximum energy efficiency.

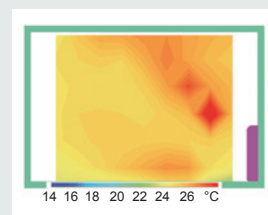


Ideal air distribution

Air is distributed powerfully and effectively via the upper and lower air vents, ensuring a comfortable temperature throughout the room. The angle of the upper vent is settable into 5 different positions (+ swing and automatic modes) from a remote control, while 4 different air speed settings are available. Setting the vane to an almost vertical position prevents undesirable draughts, for even greater comfort.



The air delivered from the upper and lower vents is controlled for optimum comfort and distributed evenly into every corner of the room. In heating mode, the warm air flow is controlled intelligently to reach floor level, making cold feet a thing of the past!





Key Technologies

Technical specifications

MODEL			PFFY-P20VKM-E	PFFY-P25VKM-E	PFFY-P32VKM-E	PFFY-P40VKM-E
Power			A single-phase, 220-240V 50Hz			
Capacity in cooling mode*1		kW	2.2	2.8	3.6	4.5
		Btu/h	7500	9600	12300	15400
Capacity in heating mode*1		kW	2.5	3.2	4.0	5.0
		Btu/h	8500	10900	13600	17100
Power consumption	Cooling	kW	0.025	0.025	0.025	0.028
	Heating	kW	0.025	0.025	0.025	0.028
Current	Cooling	A	0.20	0.20	0.20	0.24
	Heating	A	0.20	0.20	0.20	0.24
External finish			Plastic (pure white)			
Dimensions HxLxW		mm	600x700x200	600x700x200	600x700x200	600x700x200
Net weight		kg	15	15	15	15
Heat exchanger			Cross fins (aluminium fins and copper piping)			
Fan	Type x Quantity		Linear flow fan x 2			
	Air flow (low-medium-high-extra high)	m ³ /min	5.9-6.8-7.6-8.7	6.1-7.0-8.0-9.1	6.1-7.0-8.0-9.1	8.0-9.0-9.5-10.7
	Static external pres.	Pa	0	0	0	0
Motor	Type		DC motor			
	Power output	kW	0.03x2	0.03x2	0.03x2	0.03x2
Air filter			Polypropylene honeycomb fabric (catechin filter)			
Refrigerant pipe diameter	Gas (swaged)	mm	ø12.7	ø12.7	ø12.7	ø12.7
	Liquid (swaged)	mm	ø6.35	ø6.35	ø6.35	ø6.35
Local drain pipe diameter			D.I. 16 (PVC pipe connectable to VP-16)			
Sound pressure (low-medium-high)*2		dB(A)	27-31-34-37	28-32-35-38	28-32-35-38	35-38-42-44

*1 For heating/cooling capacity, the maximum value with the unit operating in the following conditions is given.

Cooling: indoor 27°C (81°F) DB/19°C (66°F) WB, outdoor 35°C (95°F) DB. Heating: indoor 20°C (68°F) DB, outdoor 7°C (45°F) DB/6°C (43°F) WB.

*2 Measured in anechoic chamber.

PFFY-P VEM-E NEW

INDOOR UNITS - Design floor-standing unit



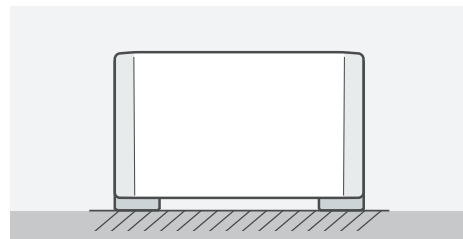
New design

The new sophisticated design in clear white and pearl grey blends in with any interior. With a depth of 217 mm, the compact unit is ideal for installation in the perimeter zone of a room.

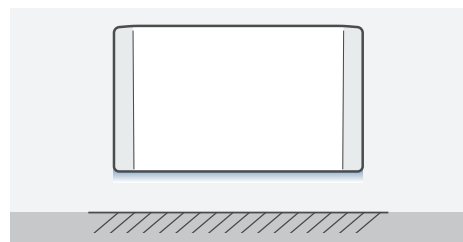
Three installation options are available to suit a wide range of applications.



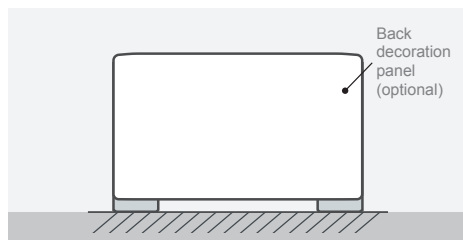
INSTALLATION OPTIONS



Floorstanding
Conventional floorstanding
installation is possible.



Wall-mounted
Wall-mounted installation
allows for a stylish interior
design.

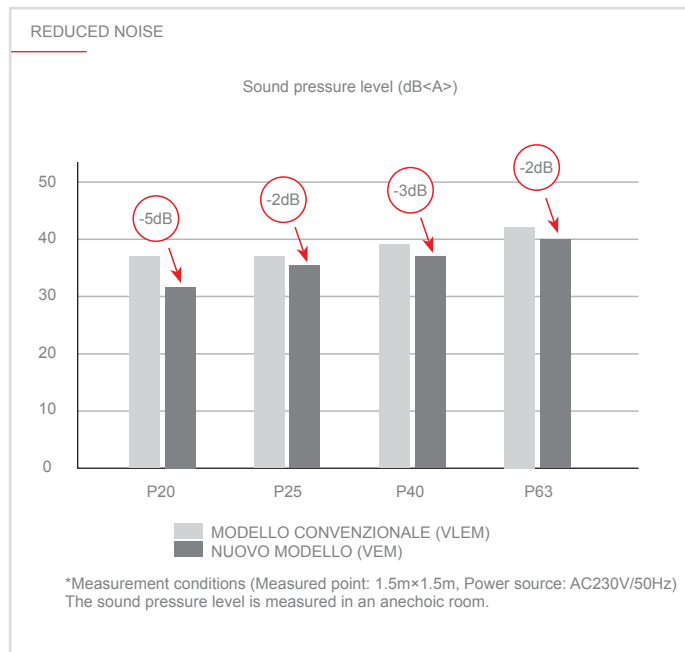
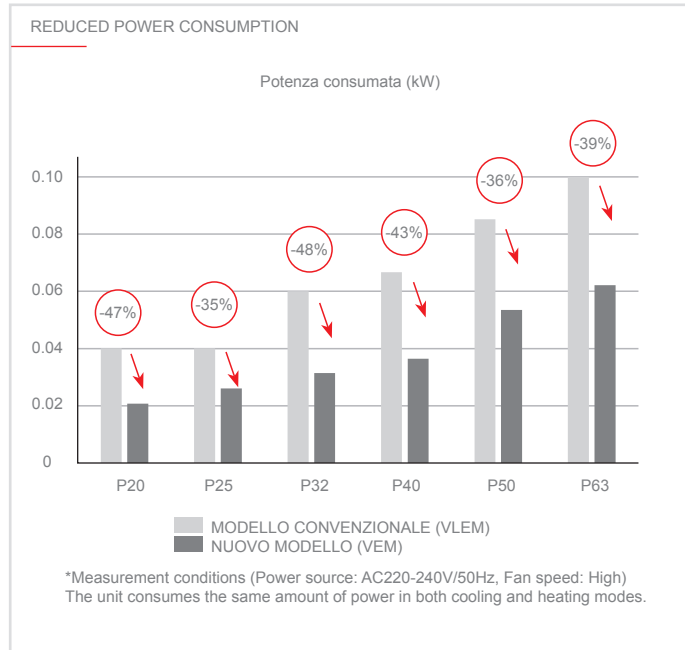


Freestanding
With the optional back decoration panel, the unit can be
installed away from the wall for more design flexibility.

Reduced power consumption and noise

PFFY-P VEM-E features new components and an optimized structure for more efficient and comfortable operation.

- A high-efficiency DC fan motor is equipped.
- The inner pipes of the heat exchanger have been downsized from $\varnothing 9.52$ to $\varnothing 7.0$ to fit in more pipings.
- The new structure realizes smooth airflow and reduces pressure loss in the air pathway.

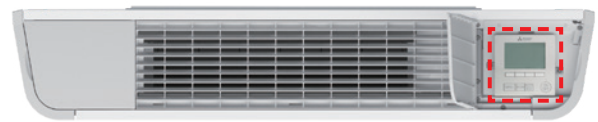


Flexible airflow rate setting

Airflow rate can be set to three levels to suit various installation conditions and maintain a comfortable room temperature.

Airflow rate setting	Model	Airflow rate
New	PFFY-P VEM	Low-Mid-High
Conventional	PFFY-P VLEM	Low-High

REMOTE CONTROLLER STORAGE IN THE MAIN UNIT



MA remote controller can be stored on the right side of the main unit.

Easy maintenance

The air filter can be easily removed from the front bottom of the unit for regular cleaning.



Optional parts	Model	Remarks
Back decoration panel*	PAC-BP32VEM-E	For PFFY-P20, 25, 32VEM-E
	PAC-BP50VEM-E	For PFFY-P40, 50VEM-E
	PAC-BP63VEM-E	For PFFY-P63VEM-E

*The back decoration panel is required for freestanding installation. When it is attached to the main unit, the pipes must run under the floor. Please contact Italian Branch for availability

BACK DECORATION PANEL



Key Technologies

Specifications

MODEL		PFFY-P20VEM-E	PFFY-P25VEM-E	PFFY-P32VEM-E	PFFY-P40VEM-E	PFFY-P50VEM-E	PFFY-P63VEM-E	
Power source		1-phase 220-230-240 V 50/60 Hz						
Cooling capacity (Nominal) ^{*1}	kW	2.2	2.8	3.6	4.5	5.6	7.1	
	Btu/h	7500	9600	12300	15400	19100	24200	
Heating capacity (Nominal) ^{*2}	kW	2.5	3.2	4.0	5.0	6.3	8.0	
	Btu/h	8500	10900	13600	17100	21500	27300	
Power input	Cooling kW	0.021	0.026	0.031	0.037	0.054	0.061	
	Heating kW	0.021	0.026	0.031	0.037	0.054	0.061	
Current input	Cooling A	0.26-0.25-0.24	0.31-0.30-0.29	0.37-0.35-0.34	0.39-0.38-0.36	0.58-0.56-0.55	0.52-0.50-0.48	
	Heating A	0.26-0.25-0.24	0.31-0.30-0.29	0.37-0.35-0.34	0.39-0.38-0.36	0.58-0.56-0.55	0.52-0.50-0.48	
External finish		Galvanized steel plate, MUNSELL (1.0Y 9.2/0.2)/ABS, MUNSELL (5.32GY 8.75/0.37)						
External dimension H x W x D ^{*3}	mm	669(726)x1142x217	669(726)x1142x217	669(726)x1142x217	669(726)x1342x217	669(726)x1342x217	669(726)x1542x217	
Net weight	kg	29.5	29.5	30	35	35	39.5	
Heat exchanger		Cross fin (Aluminum fin and copper tube)						
FAN	Type x Quantity	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 3	Sirocco fan x 4	
	Air flow rate	m ³ /min	5.0 - 6.0 - 7.0	5.5 - 6.5 - 8.0	5.5 - 7.0 - 8.5	8.0 - 9.5 - 11.0	10.0 - 11.5 - 13.5	12.0 - 14.0 - 16.5
		l/s	83 - 100 - 117	92 - 108 - 133	92 - 117 - 142	133 - 158 - 183	167 - 192 - 225	200 - 233 - 275
	cfm	177 - 212 - 247	194 - 230 - 282	194 - 247 - 300	282 - 335 - 388	353 - 406 - 477	424 - 494 - 583	
External static press.	Pa	0	0	0	0	0	0	
Motor	Type	DC motor						
	Output kW	0.096						
Air filter		PP honeycomb fabric.						
Refrigerant piping diameter	Gas (R410)	mm	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	
	Liquid (R410)	mm	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	9.52 (3/8) Brazed	
Field drain pipe size		O.D.32 (1-1/4)						
Sound pressure level	dB(A)	23.0-27.0-31.0	25.0-29.0-34.0	25.0-31.0-36.0	29.0-33.0-36.0	34.0-37.0-41.0	32.0-36.0-40.0	

1.Nominal cooling conditions
Indoor: 27° CD.B./19° CW.B. (81° FD.B./66° FW.B.), Outdoor: 35° CD.B. (95° FD.B.), Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

2.Nominal heating conditions
Indoor: 20° CD.B. (68° FD.B.), Outdoor: 7° CD.B./6° CW.B. (45° FD.B./43° FW.B.), Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)

3.The values in () show the height of unit with leg.
* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
* Due to continuing improvement, above specifications may be subject to change without notice.

**WHAT'S
NEW**

What has changed on PFFY-M VEM-E Design floor-standing units?

- New design and chassis and dimension
- Added the possibility to installation freestanding
- Three levels of Air flow rate
- Reduced noise