

**MITSUBISHI
ELECTRIC**

Changes for the Better

AIR CONDITIONING SYSTEMS

for a greener tomorrow



CITY MULTI

CM11WD-I

Air conditioning is an ideal way of controlling the temperature, movement and cleanliness of air inside any building, large or small. With today's buildings being so well insulated and increasingly full of electronic equipment, the need for effective climate control is greater than ever. Not only does it cool in the summer months, but air conditioning can also heat, doing away with the need for separate heating systems altogether. More and more people today are enjoying the benefits of comfortable working and living environments made possible with air conditioning.

Our Latest Technologies

VRF system

VRF stands for Variable Refrigerant Flow. A VRF air conditioning system modulates the flow of refrigerant depending upon the capacity requirements of the building. In its simplest form, a VRF system comprises an air-cooled outdoor unit and a series of indoor units that regulate the air temperature inside an internal space.

Inverter driven technology

At Mitsubishi Electric we strive to continually meet the increasing demands of our customers, being the first in the industry to offer highly advanced 'inverter driven' systems. Using inverter technology our systems produce just the right amount of output to match the exact requirement of any building. These systems work so efficiently that they don't waste valuable energy by over-heating or over-cooling, resulting in greatly reduced running costs. Alternative systems that may appear cheaper, can often cost substantially more to run, making us the most cost effective choice all round.

Intelligent Power Module (IPM) technology

The CITY MULTI range from Mitsubishi Electric provides precise control of energy input, through utilization of its Intelligent Power Module (IPM) technology. By employing this technology, highly efficient operation is possible with compact units closely matching building requirements.

R410A refrigerant

As scientific evidence points to man-made chemicals for the damage caused to the ozone layer, we only use chlorine-free refrigerants that are safe with zero ODP (Ozone Depletion Potential). Accordingly, our systems require less energy to run, and have a significantly lower indirect global warming potential. In short, we produce the most efficient equipment possible, while helping to protect the environment.

Unsurpassed air conditioning from Mitsubishi Electric

Known the world over, the name **Mitsubishi** is a trusted household name associated with a variety of products and services. Founded in **1920**, the company known today as **Mitsubishi Electric**, quickly rose to the forefront of the air conditioning industry - a position we still enjoy today. We pride ourselves on offering some of the most energy efficient systems available on the market.

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VRF system

Our answer to VRF

Mitsubishi Electric sets the boundaries of VRF technology with the CITY MULTI range, which is available using R410A refrigerant with zero ODP (Ozone Depletion Potential). The range has been specifically designed for today's building requirements and addresses key market issues such as energy efficiency, adaptability and reliability. With user friendly control systems utilizing internet technology and integrated cooling and ventilation indoor units, CITY MULTI is the benchmark and market leader in VRF technology.

VRF is a multi and direct expansion type air conditioning system where by one outdoor unit can be connected with multiples indoor units. The amount of refrigerant can be regulated freely according to the load on the indoor unit by the inverter driven compressor in the outdoor unit. Zoning in a small office is possible with a small capacity indoor unit. Energy conservation is easily handled because individual indoor units can stop and start their operation as needed. There are various indoor units available in order to suit various interior design needs.

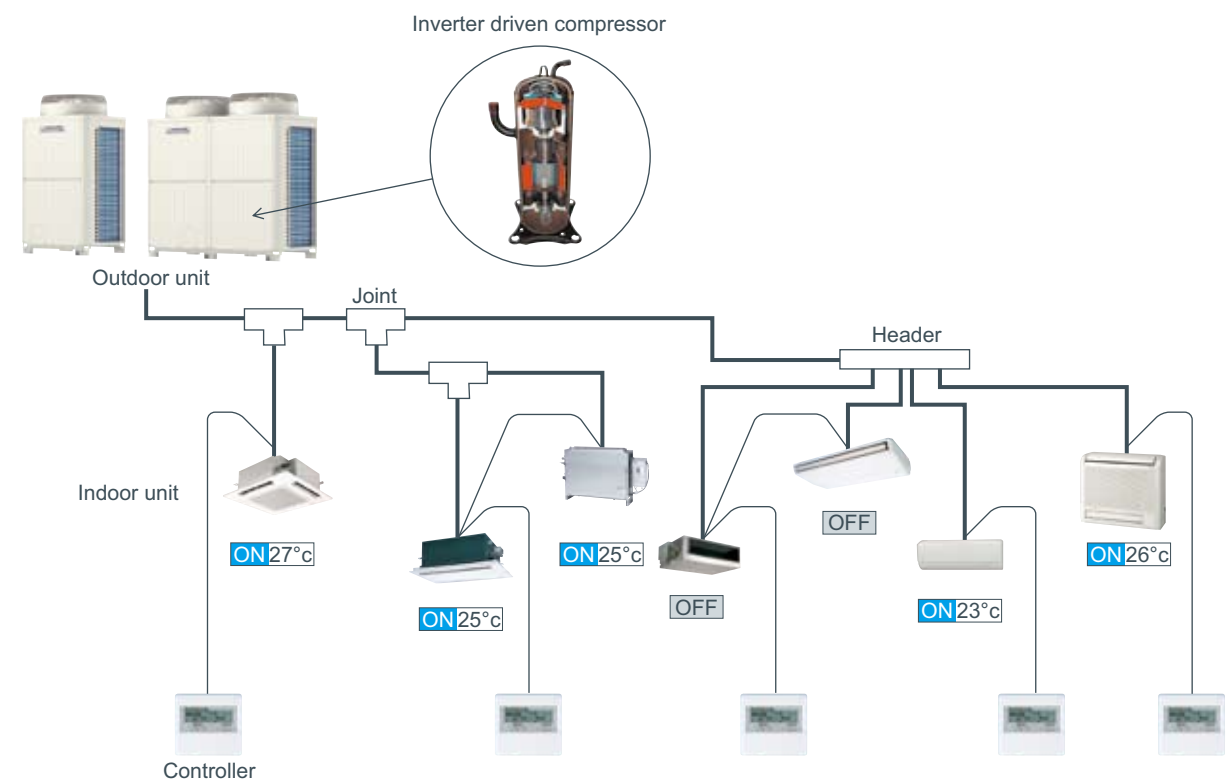
Sophisticated
yet simple technology

Reliable

Designed and manufactured to the highest standards, the CITY MULTI range offers one of the most reliable air conditioning systems available. Simple to install and easy to maintain, this range provides ideal solutions you can trust to protect your investment.



>All the CITY MULTI outdoor units are made in Japan under stringent control.

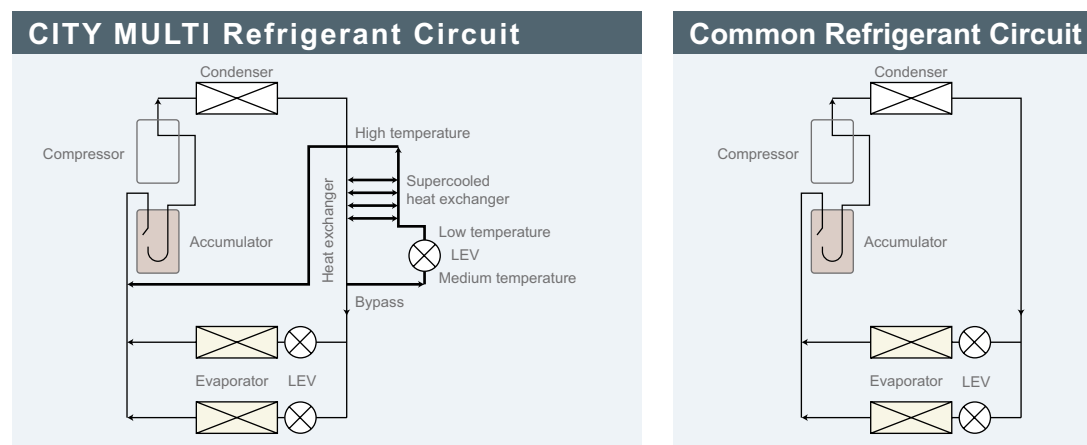




Unbeatable Efficiency

Heat Interchange Circuit

The unique Heat Interchange Circuit (HIC) enhances efficiency by providing additional sub-cooling and allows the expansion device to effectively control the refrigerant distribution, thereby increasing the operating efficiency and reducing the volume of refrigerant in each system.



Inverter Driven Compressor Technology - now up to 50HP



Low Starting Currents

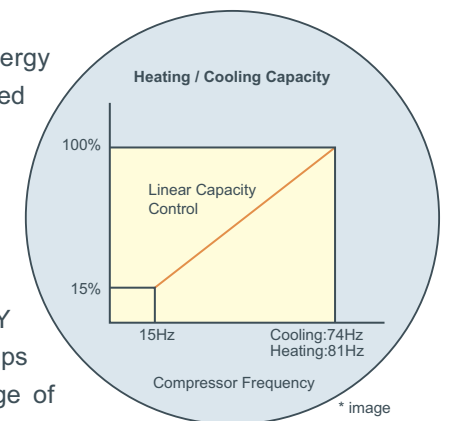
Using inverter driven technology saves energy for several reasons:

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 (only 8 amps for a 16HP YJM-A outdoor unit), and smooth transition across the range of compressor frequencies.



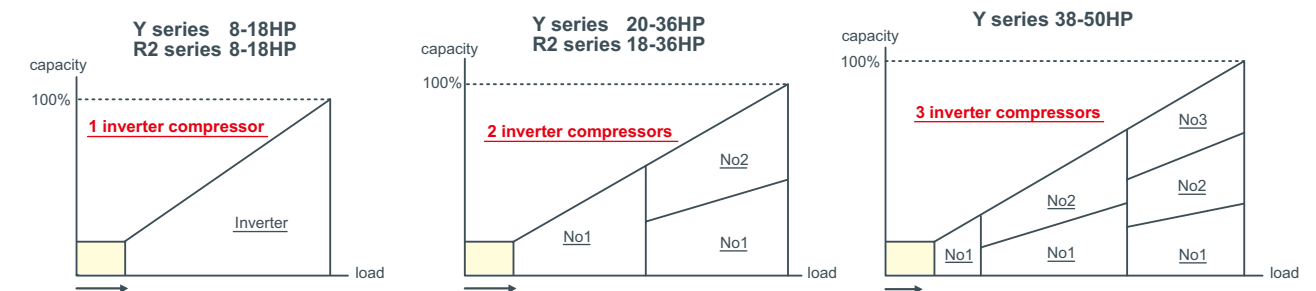
* The values vary depending on the actual conditions such as ambient temperature.

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

The outdoor unit combinations comprise 1 unit for 8-18HP systems (for Y and R2 series), 2 units for 20-36HP systems (for R2, 18-36HP) and 3 units for 38-50HP systems (Y series only). Each unit carries one inverter compressor making simple and highly reliable control possible.

Not only does it allow low starting currents, the inverter-driven compressor also provides precise indoor comfort and adapts to the air conditioning load.

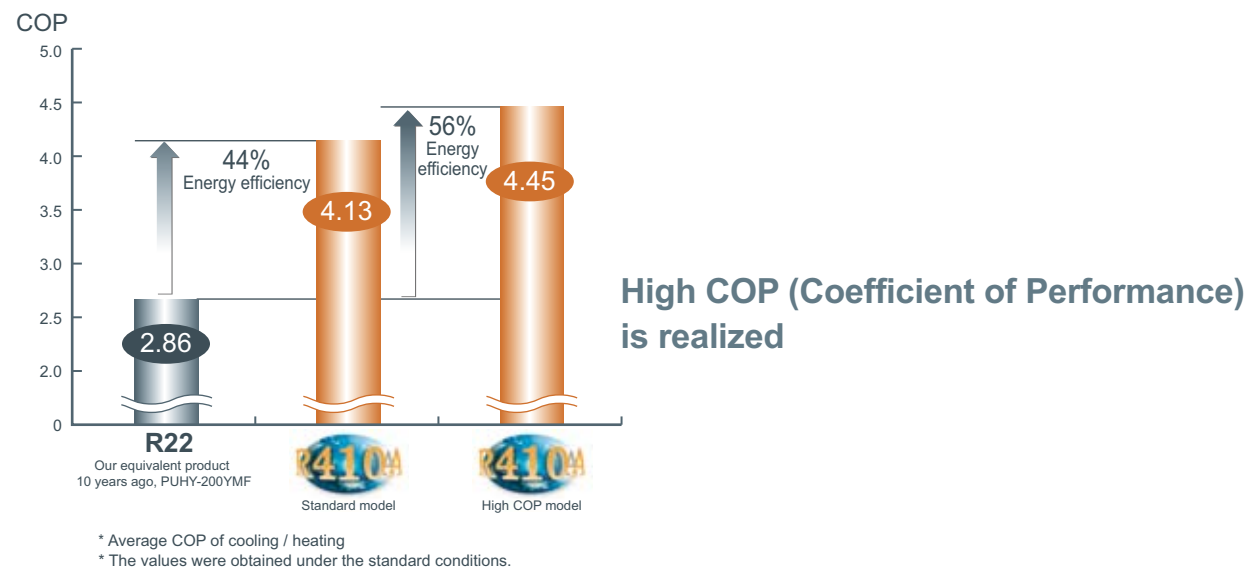
Stable and smooth operation





Total Energy Conservation

Comparison of COP (energy efficiency) – 8HP system



Intelligent Power Module (IPM) Technology

The YJM-A range from Mitsubishi Electric provides precise control of energy input, through utilization of its Intelligent Power Module (IPM) technology. By employing this technology it is possible to closely match the building requirements, achieving more accurate control of the occupied space. By using incremental 1Hz steps of capacity control, the amount of power input required is significantly reduced, resulting in greatly improved COP's.

In addition, IPM technology ensures effective performance under partial load conditions, a condition that most systems will be in for the majority of the normal working life cycle. By taking account the efficiency at both part load, and peak load conditions, R410A CITY MULTI is designed to provide unbeatable year round/seasonal efficiency.

The difference between YJM-A and previous Mitsubishi Electric models

Technology is key when increased efficiency is demanded. The CITY MULTI YJM-A range is able to deliver this in simple ways.

A highly efficient R410A scroll compressor design results in less friction losses at the motor. A simplified refrigerant circuit (low pressure loss) including a new accumulator design also adds a few more points to the efficiency scale. Enhancements to the heat interchange circuit, an inverter driven fan motor and a heat exchanger design again add vital increases to overall system efficiencies and COPs.

The importance of COP

COP stands for "Coefficient of Performance". It is a measure of the useful energy a system can deliver compared to the energy it consumes. It is calculated by dividing the energy output by the energy input of a system. The higher the figure then the more efficient the system is deemed to be. Mitsubishi Electric VRF models, the world's highest energy-efficient air-conditioners, will undoubtedly reduce millions of tons of CO₂ emissions.





For the Environment

Enhancing environmental care (measures for the RoHS Directive and the refrigerant reduction)
 Every unit is in compliance with the RoHS Directive,* which stands for the Restriction of Hazardous Substances: Lead-free soldering is used to avoid Lead Groundwater Contamination on the print board. The amount of refrigerant on the unit has also been reduced to enhance environmental care.

* RoHS Directive: the restriction of the use of certain hazardous substances in electrical and electronic equipment that has been sold in EU since July 2006

Efficient R410A refrigerant



History of refrigerant

R22, an HCFC-based refrigerant, has been a popular choice for most chillers. R22 has been targeted by the Montreal Protocol to be phased out in new equipment. Additionally, governments in many countries are enforcing a ban of HCFC-based refrigerants for new installations.

Because of these restrictions, R410A refrigerants are desirable. R410A is a blend of HFCs, which do not deplete the ozone.

Technical aspects of refrigerant

R410A is a more efficient refrigerant as it has a higher specific heat capacity when compared to R407C or R22. This higher energy carrying capacity allows for smaller pipe sizes, longer pipe runs and reduces the volume of refrigerant within a system. This is a major factor when concerning safety and environmental requirements in the design, manufacture, installation, operation, maintenance and disposal of refrigerating systems.

New Design

New fan design
Reduction of operation noise

New heat exchanger design
Improvement of COP

New inverter compressor
Improvement of COP

New Control Box design
Improvement of reliability and easy maintenance

Photo : Y series

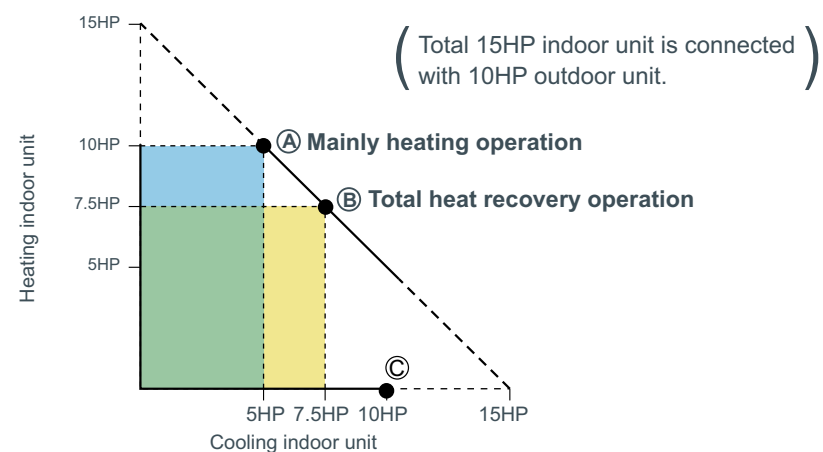




Affordable & Effective air conditioning you can rely on

By the heat recovery system, the more frequently cooling and heating simultaneous operation is carried out, the higher energy-saving effect becomes.

Operation pattern of CITY MULTI R2/WR2 System

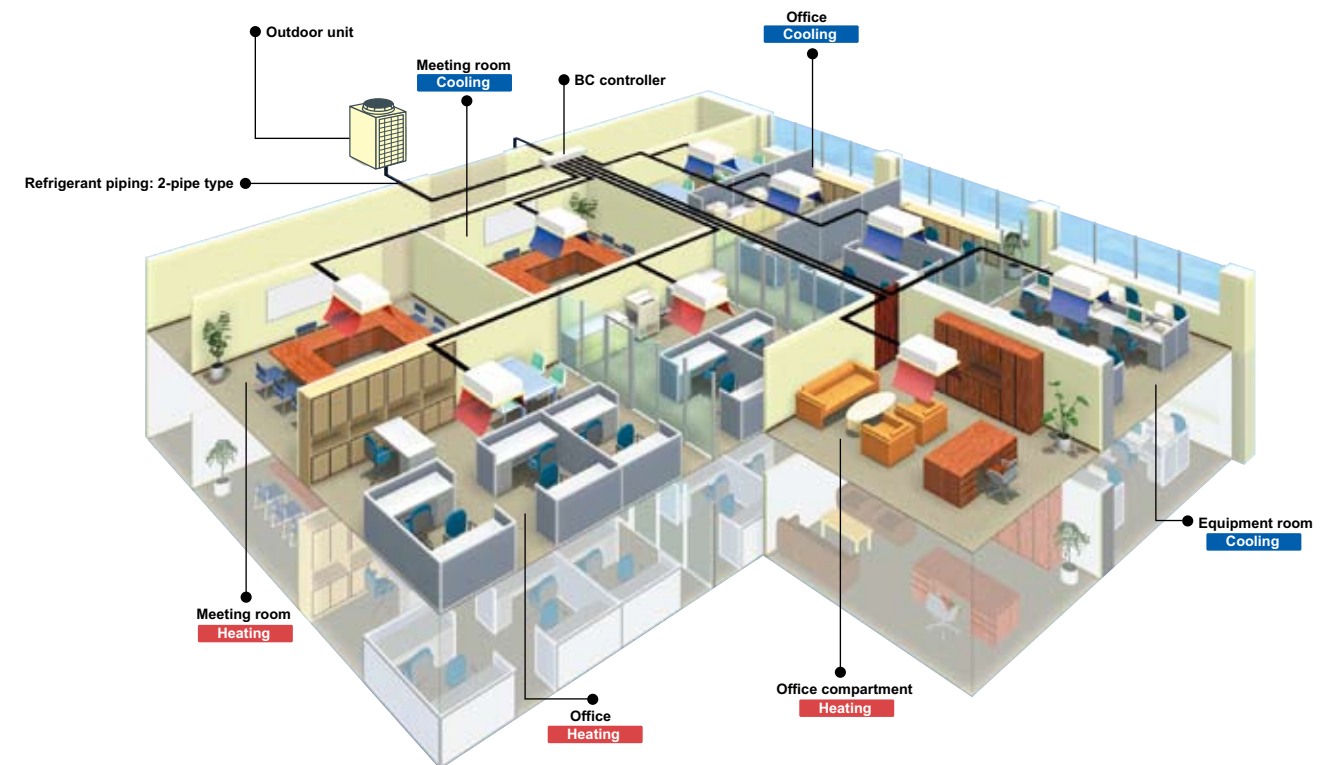


Unique technology

Unique to Mitsubishi Electric, our heat recovery technology uses just two pipes, as opposed to the market conventional three. Designed for effective simultaneous heating and cooling our R2 and WR2 systems offer substantial savings on installation and annual running costs.

Why Heat Recovery?

Flexibility and efficiency are key factors when selecting a heat recovery system. For example, while a heat pump system is adequate for a large open-plan office, an office that has a more partitioned structure will require the need to simultaneously heat or cool different sections of the office according to each user's individual preferences. The efficiency of this type of system comes from the ability to use the by-products of cooling and heating to transfer energy where it is required, thus acting as a balanced heat exchanger achieving up to 20% cost savings over a conventional heat pump system. The number of connection sites needed for a R2 / WR2 system are also significantly lower than those needed for a three pipe version. This helps to reduce installation costs, further increasing the savings associated with CITY MULTI.





“2-pipe” system provides Better Efficiency and Performance

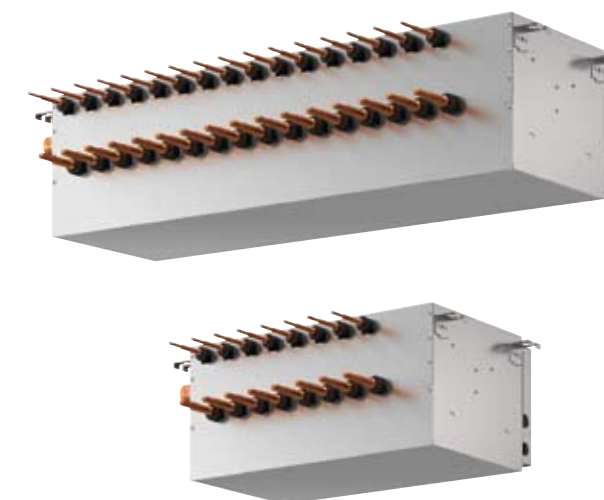
The world’s first and the only “2-pipe” system

How does the R2/WR2 Heat Recovery System operate on 2 Pipe’s?

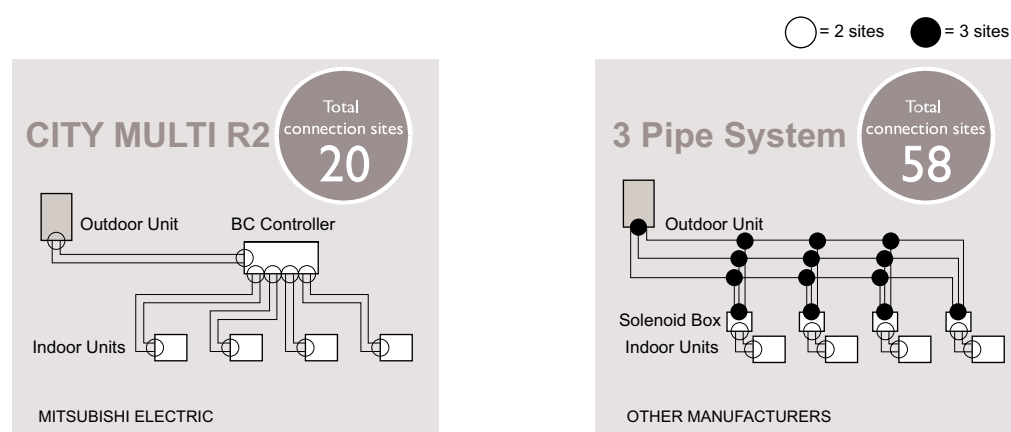
The secret of CITY MULTI heat recovery systems lies in the

BC Controller

The BC Controller houses a liquid/gas separator, allowing the outdoor unit to deliver a mixture (2 phase) of hot gas for heating and liquid for cooling, all through the same pipe. Three pipe systems allocate a pipe to each of these phases. When this mixture arrives at the BC Controller, it is separated and the correct phase delivered to each indoor unit depending on the individual requirement of either heating or cooling.



Comparison example of piping connection sites



1

High pressure and low pressure decides the compressor frequency and the mode of heat exchanger, and control the amounts of heat exchange.

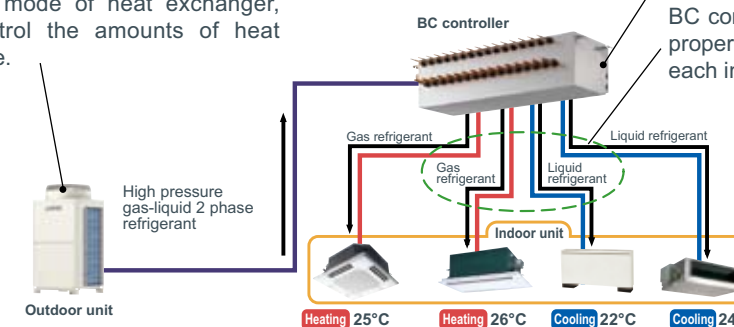
2 R2/WR2 refrigerant circuit

Gas-liquid 2-phase refrigerant from outdoor unit into gas refrigerant and liquid refrigerant is divided by gas-liquid separator in BC controller.

BC controller divides refrigerant to each indoor unit properly in compliance with the operation mode of each indoor unit.

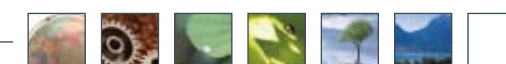
3

Adjust the refrigerant flow by temperature difference between inlet and outlet.



Meet the demand of
--- cooling / heating flexibly.

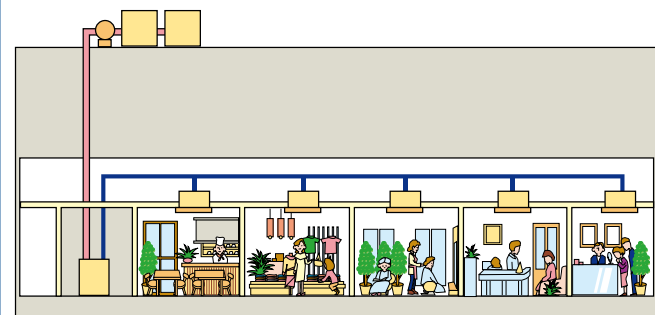
Heating=gas refrigerant
Cooling=liquid refrigerant





Water Cooled CITY MULTI Benefits

Water cooled systems are ideally suited for use in temperate and cooler climates since heat exchange with the outside air is not required.



Water cooled systems can be used even in buildings that are taller than 50m by running a main water pipe through each floor.

Any heat source system that can supply heat source water between 10°C~45°C can be used.

Simultaneous heating and cooling operation is available. (WR2 series)

It is suggested that Water-Cooled systems are used in the buildings in which there are heating and cooling needs as follows.

- Buildings that require all year cooling
Example,
 - Tenant buildings in which kitchens and offices exist together
 - Buildings in which equipment rooms and offices exist together
- Buildings in which there are large room temperature differences between sunny and unsunny rooms
- Hotels in which there are a lot of individual operation needs

Energy Saving Technology

What is Water-Cooled?

>A unique offering from Mitsubishi Electric

It is possible now to combine the features of VRF with a water circuit using CITY MULTI WR2/WY. In this case the heat is rejected to a water source rather than to the outside air.

The advantages of water cooled systems are that the water can be delivered at optimised temperatures and volumes, which allows even greater flexibility and increased COP.



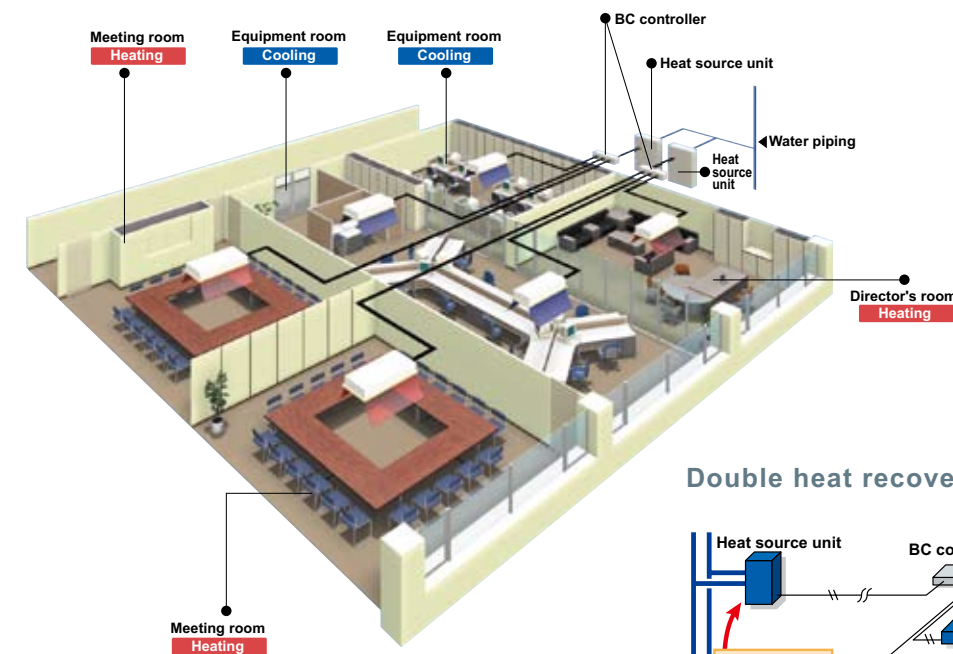
WR2(Heat recovery type)

Mitsubishi Electric now offers double heat recovery operation.

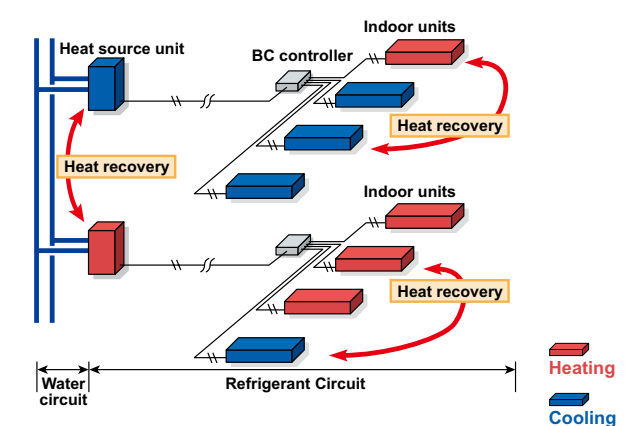
The first heat recovery is within the refrigerant system. Simultaneous cooling and heating operation is available with heat recovery performed between indoor units.

The second heat recovery is within the water loop, where heat recovery is performed between the PQRY units.

This double heat recovery operation substantially improves energy efficiency and makes the system the ideal solution to the requirements of modern office buildings, where some areas require cooling even in winter.



Double heat recovery (WR2)





Remote Controller

Individual Remote Controller

Centralized Remote Controller

The importance of control

The need for control is paramount in order to optimise the performance of any air conditioning system and minimize its running costs. Mitsubishi Electric offers a wide range of control options designed to meet such needs.

Operating an air conditioning system without the right control can prove costly. It's therefore important to ensure that every system is correctly specified to the degree of control it requires. Mitsubishi Electric have a wide range of controls available 'off-the-shelf' and individual control systems can be specifically designed to match.

Good controls will benefit any application, large or small. Air conditioning products need to react to a variety of factors: different room sizes, usage and staff levels; changes in the climate; electronic equipment and lighting ...the list goes on. So whatever the application, optimum control of air conditioning systems is essential and will result in a constant, comfortable environment, which in turn is both energy and cost efficient.

A degree of difference

When an air conditioning system is not properly controlled, it will not run as efficiently as it should. For every degree that the system deviates from the required temperature, energy costs can rise by up to 5%. Specify one of the many control options from Mitsubishi Electric to ensure air conditioning works as intended, whilst giving the optimum amount of control.

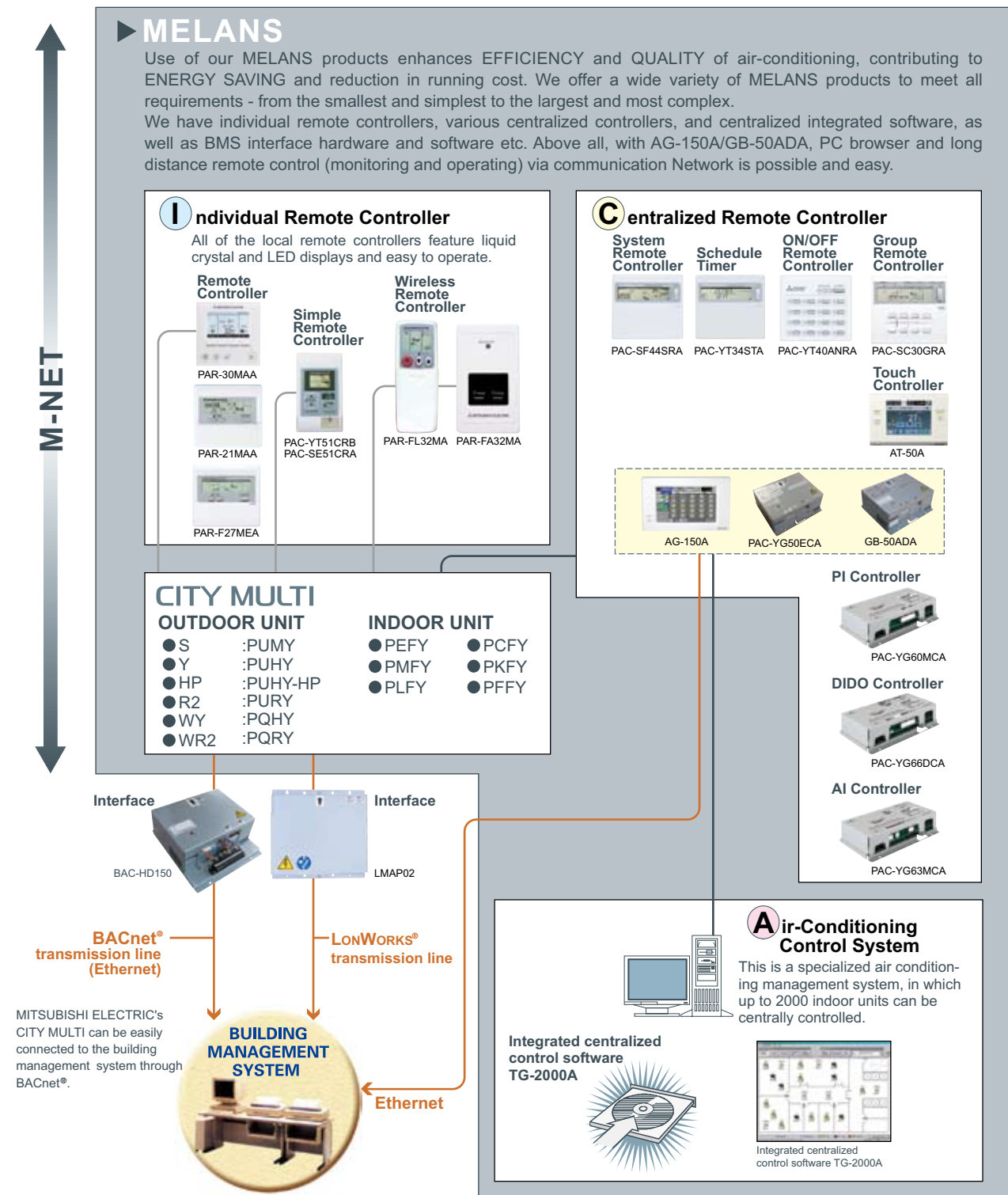
The simpler, the better

With the array of comprehensive control systems available from Mitsubishi Electric, it becomes simple to design and install air conditioning systems. From a simple hand-held controller to a AG-150A system - you are in control.



System Controller

MITSUBISHI ELECTRIC's Air-conditioner Network System (MELANS) leads air conditioner management a PC browser and Network era.



*Some controllers cannot be used in combination with certain models of devices.

Integrated Communications Control with Mitsubishi's Unique Transmission Network (M-NET)

Model	Local remote controller ^{**10}										System controller ^{**10}									
	PAR-30MAA	PAR-21MAA	PAR-F27MEA	PAC-YT51CRB	PAC-SE51CRA	PAR-FL32MA	PAC-YT40ANRA	PAC-SC30GRA	PAC-SF44SRA	PAC-YT34STA	AT-50A	AG-150A	AG-150A+PAC-YG50ECA	GB-50ADA	TG-2000A ^{*4*5}					
Controllable Groups / Indoors (Group / Indoor) ^{*9}	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	16 / 50	8 / 16	50 / 50	50 / 50	50 / 50	50 / 50	50 / 50	150 / 150	50 / 50	2000 / 2000				
■ Operating																				
ON / OFF	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎				
Mode (cool / heat / dry / fan)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Temperature-set	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Local Permit / Prohibit	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Fan speed	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Air-flow direction	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
■ Status monitoring																				
ON / OFF	○	○	○	○	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎				
Mode (cool / heat / dry / fan)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Temperature-set	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Local Permit / Prohibit	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Fan speed	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Air-flow direction	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Indoor temperature	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Filter sign	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Error flashing	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Error code	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Operation hour	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
■ Scheduling																				
One-day	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Times of ON / OFF per day	1	8	1 / 1	N	N	N	1 / 1	N	N	N	16	16	24	24	24	24				
Weekly	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Times of ON / OFF per week	8 x 7	8 x 7	N	N	N	N	N	N	N	N	16 x 7	16 x 7	24 x 7	24 x 7	24 x 7	24 x 7				
Annual	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				
Optimized start-up	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				
Auto-off timer	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Min. timer setting unit (minute)	5	1	10	N	N	10	N	N	N	N	5	5	1	1	1	1				
■ Recording																				
Error record	○	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				
Daily / monthly report	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				
Electricity charge	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				
■ Other																				
Temp-set limitation by Local R / C	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Temp-set limitation by System controller ^{*4}	○ ^{*6}	○ ^{*6}	○	○ ^{*6}	○ ^{*7}	N	N	N	N	N	N	N	N	N	N	N				
Auto-lock	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Night setback	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Sliding temperature control	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				
■ Management (Group / Interlocked)																				
Ventilation interlock	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○				
Group setting	○ ^{*1}	○ ^{*1}	○	○ ^{*1}	○	○	○	○	○	○	○	○	○	○	○	○				
Block setting	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				
Revision of electricity charge	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				
■ Operating on LOSSNAY interlocked (Group / Interlocked)																				
ON / OFF	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○				
Fan speed	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○				
Ventilation mode	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N				
■ Status monitoring on LOSSNAY interlocked (Group / Interlocked)																				
ON / OFF	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○				
Fan speed	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○	N / ○				
Ventilation mode	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N				

◎: Each group / Batched; ○: Each group; □: Block (for CITY MULTI Indoor unit, not for all Mr.SLIM); ●: AG-150A / GB-50ADA license registration possible.
 (●): License registration for the optional functions required; N: Not Available (Not Used); △: Batched only; ▲: Batched handling (for maintenance); ■: Block

*1. Group setting via wiring between Indoor units with cross-over cable;
 *2. Installation possible at Initial setting web browser;
 *3. Inter-lock is set at Local remote controller.
 *4. AG-150A/GB-50ADA license registration to AG-150A/GB-50ADA is required to monitor and operate the units by browser and TG-2000A.
 5. AG-150A connected with PAC-YG50ECA is compatible with TG-2000A Ver.6.1 or later. GB-50ADA is compatible with TG-2000A Ver. 6.3* or later.
 *6. This function can be set only on the ME/Simple MA remote controller. This function cannot be used with the MA/Simple MA remote controller.
 (But, the validity of this function with the MA/Simple MA remote controller depends on the indoor unit model, and there are possibilities that this function can be used with them.)
 *7. This function is available only when applying together with TG-2000A, AG-150A and GB-50ADA.
 *8. Inter-lock is set from system controller. (Except PAC-YT40ANRA)
 *9. The maximum number of controllable units decreases depending on the indoor unit model.
 *10. For indoor use only.

Individual Remote Controller

Wired MA remote controller PAR-30MAA NEW

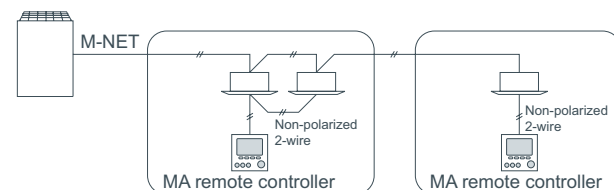


[Advanced Functions]

- Error information
- Timer
- Operation lock
- Temperature range restriction
- Language selection

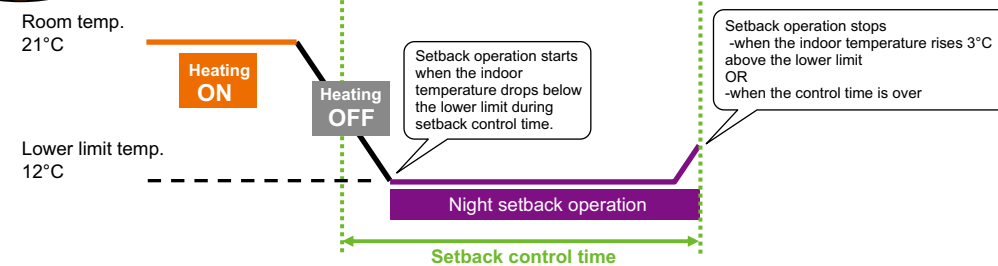
- Backlit LCD (Liquid Crystal Display)
Large, easy-to-see display
Full-dot LCD display with large characters for easy viewing
Contrast also adjustable
- Auto Return
Function to return the set temperature to the originally preset temperature after certain amount of time
Auto return can be set respectively for cooling operation and for heating operation.
Time can be set to a value from 30 and 120 in 10-minute increments.
- Night Setback
To prevent indoor dew or excessive temperature rise, this control starts heating operation when the control object group is stopped and the room temperature drops below the preset lower limit temperature. Also, this control starts cooling operation when the control object group is stopped and the room temperature rises above the preset upper limit temperature.
- Dimensions: 120(W) x 120(H) x 19(D) mm

Example of system configuration

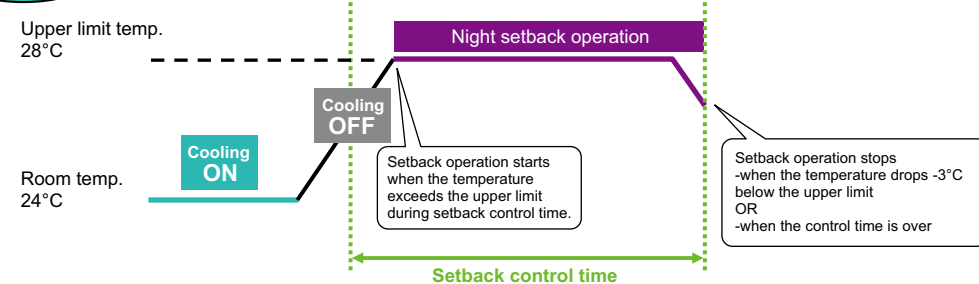


*It's not possible to connect two 30MAA (Main/Sub) to one indoor unit.

Heating



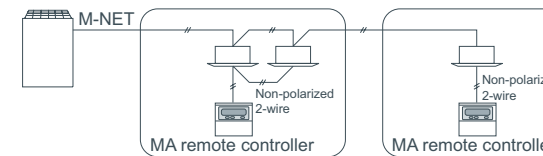
Cooling



Wired MA remote controller PAR-21MAA



Example of system configuration



New display-Larger, easier-to-see characters

Various information is displayed and conveyed clearly, enabling more accurate operation of the air conditioner.

Dot Liquid Crystal Display (LCD)

The dot liquid crystal display enables quick understanding of the operation state.

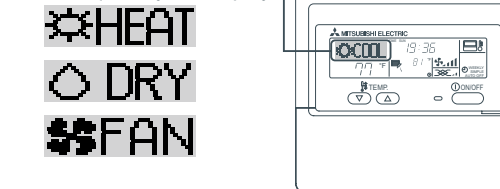
Multi-language Display

In addition to English, contents can be displayed in seven other languages.

- Dot matrix liquid crystal screen
- Set temperature in 1°C/°F increment
- Weekly timer
Up to 8 ON/OFF/temperature setting per day in 1 minute increment. Setting kept in nonvolatile memory. No need to worry about re-setting at power failure.
- Room temperature control with thermostat sensor inside the unit
- Limit set temperature (upper/lower)
- Restrict setting changes (all changes/all except ON/OFF)
- Self-diagnosis function immediately informs error code in case of malfunction
- Dimensions: 130(W) x 120(H) x 19(D) mm
: 5-1/8(W) x 4-23/32(H) x 3/4(D) in.

• Display example [Operation mode]

Dot liquid crystal display



• Display example [Cool mode]



Multi-language Display Example [Dot display table]

Language	English	German	Spanish	Russian	Italian	Chinese	French	Japanese	
Waiting for start-up	PLEASE WAIT	←	←	←	←	←	←	←	
Operation mode	Cool	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FRROID	冷房
	Dry	DRY	Trocknen	DESHUMIDIFICACIÓN	Сушка	DRY	除湿	DESHU	ドライ
	Heat	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Auto	AUTO	AUTO	AUTOMÁTICO	Автомат	AUTO	自动	AUTO	自動
	Auto(Cool)	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FRROID	冷房
	Auto(Heat)	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Fan	FAN	Lüfter	VENTILACIÓN	Вентилятор	VENTILAZIONE	送风	VENTI	送風
	Ventilation	VENTILATION	Gelüfte	VENTILACIÓN	Вентиляция	ARIA ESTERNA	换气	VENTI	换气
	Stand by (Hot adjust)	STAND BY	STAND BY	CALENTANDO	Обогрев	STAND BY	准备中	PRECHAUFFAGE	準備中
	Defrost	DEFROST	Abtauen	DESCONGELACIÓN	Оттаивание	SBRINAMENTO	除霜中	DEGIVRAGE	霜取中
Not use button	NOT AVAILABLE	nicht verfügbar	NO DISPONIBLE	НЕ ДОСТУПНО	NON DISPONIBILE	无效按钮	NON DISPONIBILE	無効ボタン	
Check (Error)	CHECK	Prüfen	COMPROBAR	ПРОВЕРКА	CHECK	检查	CONTROLE	点検	
Test run	TEST RUN	Testbetrieb	TEST FUNCIONAMIENTO	ТЕСТОВЫЙ ЗАПУСК	TEST RUN	试运行	TEST	试运行	
Self check	SELF CHECK	Selfdiagnose	AUTO REVISIÓN	Самодиагностика	SELF CHECK	自我诊断	AUTO CONTROLE	自己診断	
Unit function selection	FUNCTION SELECTION	Funktion auswählen	SELECCIÓN DE FUNCIÓN	Выбор функции	SELEZIONE FUNZIONI	功能选择	SELECTION FONCTIONS	メニュー選択	
Setting of ventilation	SETTING OF VENTILATION	Lüfterstufen wählen	CONFIG. VENTILACIÓN	Настройка вентилятора	IMPOSTAZIONE ARIA ESTERNA	换气设定	SELECTION VENTILATION	换气設定	

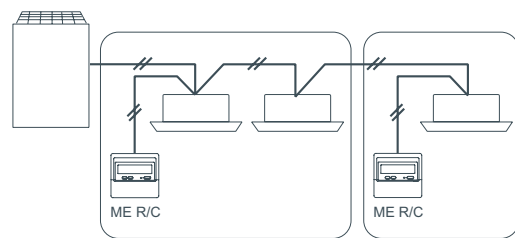
Individual Remote Controller

Wired ME remote controller PAR-F27MEA

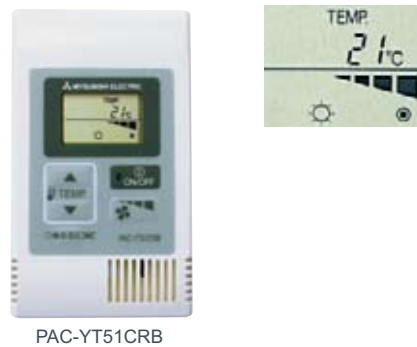


- This remote control requires non-polar wiring to only one indoor unit.
- Group operation over multiple outdoor units is possible. Grouping can be changed without re-wiring, which makes dividing rooms for tenants easier.
- **Timer operation**
 - *Daily timer operation of one ON/OFF setting everyday
 - *Auto-off timer : 0:30, 1:00, 1:30, 2:00...4:00
 - *The setting is kept in nonvolatile memory.
- **Function lock**
 - All functions or all functions except ON / OFF can be selected.
- **Set temperature range limit**
- **Interlock setting and operation of LOSSNAY**
- Dimensions:130(W) x 120(H) x 19(D) mm
:5-1/8(W) x 4-23/32(H) x 3/4(D) in.
- **LCD temperature setting and display in 1°F increments.**

Example of system configuration

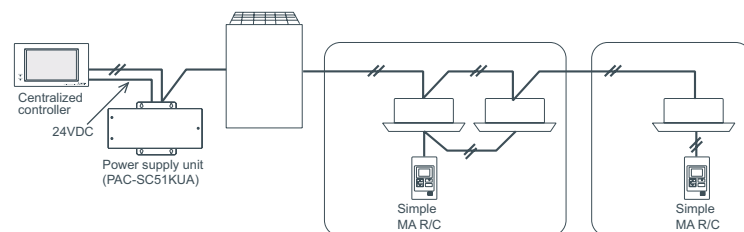


Simple remote controller PAC-YT51CRB (MA)



- **Control: START/STOP, room temperature, fan speed, and operation mode**
- The only wiring required is cross-over wiring based on two-wire signal lines.
- Room temperature sensors are built-in.
- LCD temperature setting and display in 1°C /1°F increments.
- **Set temperature range limit**
- **Can operate all types of indoor units**
 - *Since this controller has limited functions, it should always be used in conjunction with standard controller or centralized controller.
- Dimensions:70(W) x 120(H) x 41(D) mm
:2-3/4(W) x 4-23/32(H) x 1-5/8(D) in.

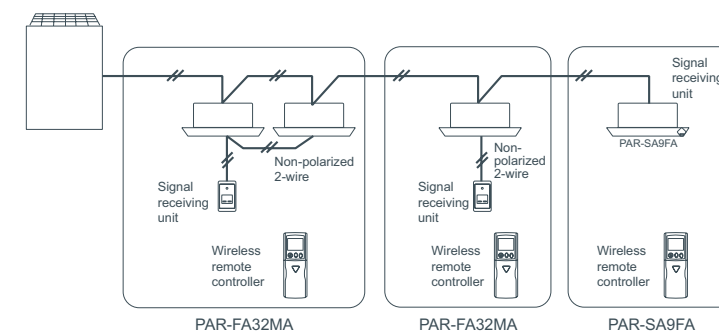
Example of system configuration



Wireless remote controller PAR-FL32MA / PAR-FA32MA



Example of system configuration



- **No need to configure addresses for group operation.**
- **Lit LED keeps you informed of operation - blinking even gives you the error code via the number of blinks.**
- **Can be used with the MA remote controller.**
 - *When used in group configurations, wiring between indoor units is required.
 - *Combining ME remote controller and/or LOSSNAY remote controller in a group is not possible.
- **LCD temperature setting and display in 1°C /1°F increments.**
- Dimensions:58(W) x 159(H) x 19(D) mm
:2-5/16(W) x 6-5/16(H) x 3/4(D) in.

Correspondence table

	receiver	transmitter	
PMFY-P VBM	PAR-FA32MA	PAR-FL32MA	
PLFY-P VCM/ VLMD			
PCFY-P VKM			
PFFY-P VKM			
PEFY-P VMR-E-L/R/ VMH			
PFFY-P VLEM/VKM/VLRM/VLRMM			
PEFY-P VMS1(L)			
PEFY-VMA(L)			
PLFY-P VBM-E			PAR-SA9FA-E
PKFY-P VBM-E			Built-in
PKFY-P VHM/VKM			

Advanced Touch Controller

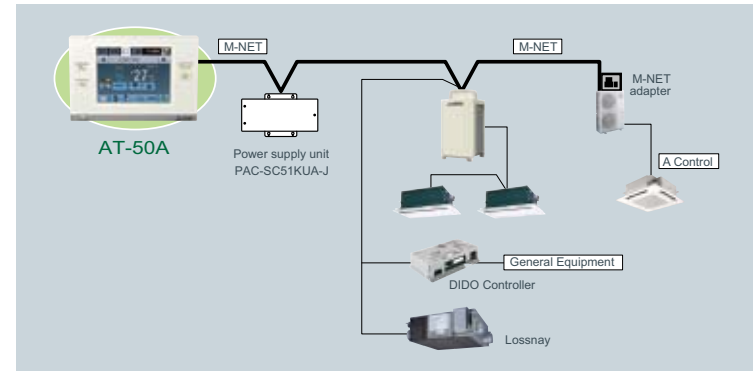
With our new Advanced Touch Controller AT-50A, easy and simple operation on the touch panel offers an optimal air environment for individual unit.

Touch controller AT-50A NEW



Dimensions: 180(W) x 120(H) x 30(D) mm
: 7-2/16(W) x 4-12/16(H) x 1-3/16(D) in.

System structure



New Design

Backlit LCD (Liquid Crystal Display) Touch Panel

5-inch color LCD touch panel enables easy and simple operation. The backlight lights up when the panel is touched, and lights off after certain period of time. The touch panel displays the operation status of the units in GRID, LIST or in GROUP.



GRID (zoom-out) screen
Displays the operation status of all groups.



GRID (zoom-in) screen
Displays the detailed operation status of each group.



LIST screen
Displays the detailed operation status of each group with group name.



GROUP screen
Displays the detailed operation status of each group. Sets group operations.

New Functions

Three in One

- The following three features are integrated into AT-50A.
- Control up to 50 indoor units from one location
 - A weekly programmable timer, being able to control up to 50 indoor units
 - Control up to 50 units/50 groups of air conditioners

Weekly and daily schedule

5 patterns of one day and 12 patterns of weekly schedule (16 settings max. per pattern). Two types of weekly schedule can be set.

System changeover

Operation mode can be switched depending on indoor temperature setting and target temperature of each group or a representative indoor unit.

Night setback function

This function allows having a two-temperature setting to keep the desired room temperature when the units are not in operation and during the time this function is effective. The unit automatically starts heating (cooling) operation when the temperature drops below (rises above) the preset lower (upper) limit temperature. This is not only for comfort environment, but also for saving energy.

Main system controller/Sub system controller

AT-50A can be set to Sub System controller. When connecting multiple system controllers, designate the system controller with many functions as the "Main", and set the system controllers with few functions as the "Sub".

Simple button arrangement

The F1 (Function 1) and the F2 (Function 2) button can be set as a run button of the following collective operation. (Setback/Schedule/Operation Mode/Temperature Correction/Remote Controller Prohibition)

Functions

[Basic Functions]

- ON/OFF
- Operation mode switching
- Temperature setting
- Fan speed setting
- Airflow direction setting
- Louver setting

Advanced Functions

Item	Description	Operations	Display
Permit / Prohibit	The ON/OFF, operation mode, setting temperature and filter sign reset operations using the local remote controllers can be prohibited. Only ON/OFF and filter reset can be prohibited for the LOSSNAY group.	○	○
Operation lock	The operation lock can be set to the input operation of AT-50A. Each button can be set. (Function Button 1, Function Button 2, Collective ON/OFF, Touch Panel) Each function can be set. (Operation mode, Setting temperature, Fan speed, Menu button) The password for the lock release can be set.	○	○
Error display	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed. * When an error occurs, the "ON/OFF" LED flashes. The operation monitor screen show abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code and source of detection.	×	□○
Ventilation (independent)	Switches the mode "Bypass/Heat recovery/Auto" for LOSSNAY groups.	○	○
Ventilation (interlocked)	The LOSSNAY will run in interlock with the operation of indoor unit. The mode cannot be changed. The LED will turn ON during operation after interlocking.	○	○
Temperature-set limitation	Batch-setting to temperature range limit at cooling, heating, and auto mode. This function cannot be used with the MA remote controller. (Depends on the indoor unit model.)	○	○
Specific mode operation prohibit (Cooling prohibit, heating prohibit, cooling/heating prohibit)	When set as the main controller, operation of the following modes with the local remote controllers can be prohibited. When cooling is prohibited: Cooling, dry, automatic can not be chosen. When heating is prohibited: Heating, automatic can not be chosen. When cooling/heating is prohibited: Cooling, dry, heating, automatic can not be chosen.	○	○
External input (Emergency stop input, etc.)	The following input with level signals or pulse signals are available. Level signal: "Emergency stop input" or "Collective ON/OFF" Pulse signal: "Collective ON/OFF" or "Local remote controller prohibit/permit" One input can be selected from those above. * An external input/output adapter (PAC-YT41HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	○	○
External output (Error output, operation output)	"ON/OFF" and "error/normal" are output with the level signal. * An external input/output adapter (PAC-YT41HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	○	○
Checking the Gas Amount	Use this function to check for refrigerant leak from the outdoor unit. * When this function is used, the gas amount checking function of the outdoor unit cannot be used. This function is for CITY MULTI R2 and Y (PUMY) is excluded.) series only.	□	□
Schedule operation	Weekly schedule setting up to 12 pattern is available. In one pattern, up to 16 setting of "ON/OFF", "Operation mode", "Set Temperature", "Fan speed", "Air flow direction" and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedule(Summer/Winter) can be set. Today's schedule setting up to 5 pattern in available.	○	○

* Depending on the installation conditions, power supply unit (PAC-SC51KUA) is required. Please contact your local distributor or MITSUBISHI ELECTRIC branch office for further information.

Centralized Remote Controller

One system controller can control up to fifty indoor units from one location. The PAC-SF44SRA also has hardwired connection available (On/Off input, fire alarm input, run output, fault output).

System remote controller PAC-SF44SRA

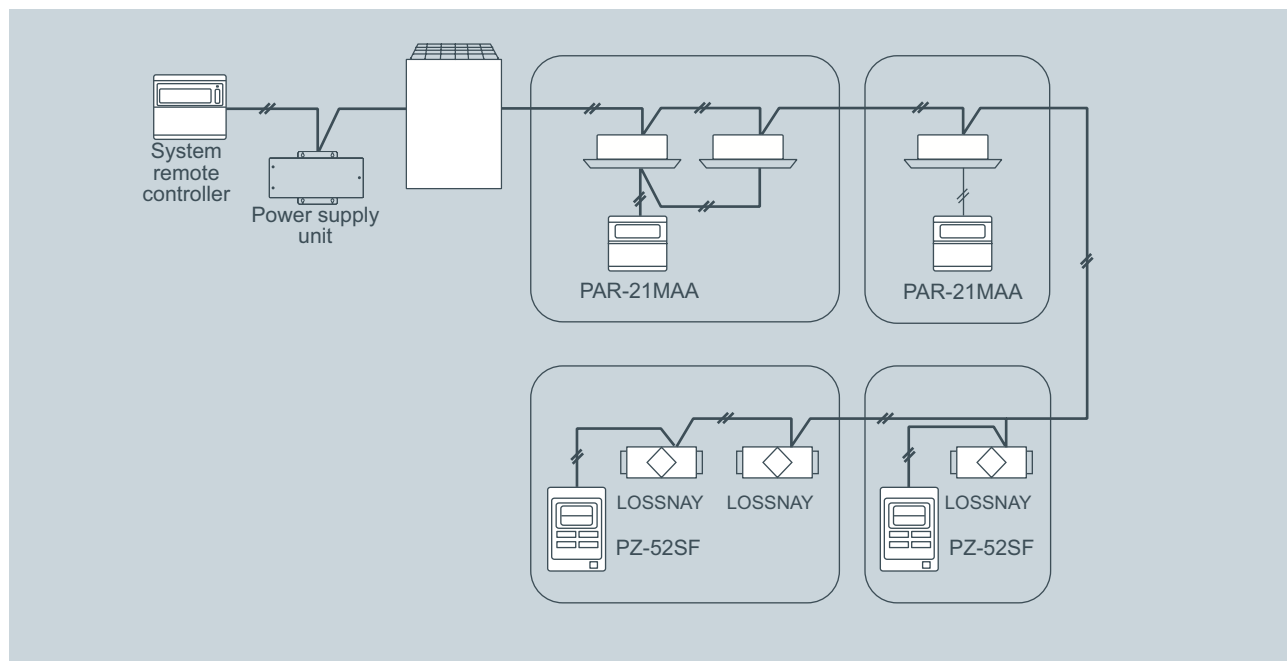


- The group setting is kept in nonvolatile memory. No need to worry about re-setting at power failure.
- No individual AC power supply is needed. The power can be supplied from one outdoor unit (R410A) or Power supply unit.

System Controller			
FUNCTION	DESCRIPTION	PAC-SF44SRA	
UNITS	Max No.Units	50 units/50 group	
		Operation	Displays
ON/OFF	Run and stop operation	✓	✓
MODE SELECTION	Switches between Cool/Dry/Auto/Fan/Heat. Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems	✓	✓
TEMPERATURE SETTING	Sets the groups temperature control. Values in parentheses are for the medium-temperature indoor unit. Cool/Dry:19-30°C [14-30°C] / 67-87°F [57-87°F] Heat :17-28°C [17-28°C] / 63-83°F [63-83°F] Auto :19-28°C [17-28°C] / 67-83°F [63-83°F]	✓	✓
FAN SPEED SETTINGS	Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings: Hi/Mid/Low Models with 2 air flow speed settings: Hi/Low Fan speed setting (including Auto) varies depending on the model.	✓	✓
AIR FLOW DIRECTION SETTING	Air flow angles: 4-angle or 5-angle, Swing, Auto, Louver ON/OFF	✓	✓
PERMIT/PROHIBIT FUNCTION	Run/Stop, Temperature Setting, Mode Selection and Filter Reset functions can be prohibited.	✓	✓
ERROR INDICATION	Displays a 4 digit code and the affected unit address	-	✓
VENTILATION INTERLOCK	Allows the group to be interlocked with a heat recovery Lossnay unit	✓	✓
EXTERNAL INPUT	On/Off/Fire Alarm	✓	-
EXTERNAL OUTPUT	On/Off/Faults	-	✓

• Dimensions:130(W) x 120(H) x 19(D) mm
:5-1/8(W) x 4-23/32(H) x 3/4(D) in.

System example



Mitsubishi Electric controllers are complimented by a weekly programmable timer, being able to control up to fifty indoor units. The PAC-YT34STA also has hardwired connection available (On/Off input, fire alarm input, run output, fault output).

Schedule timer PAC-YT34STA

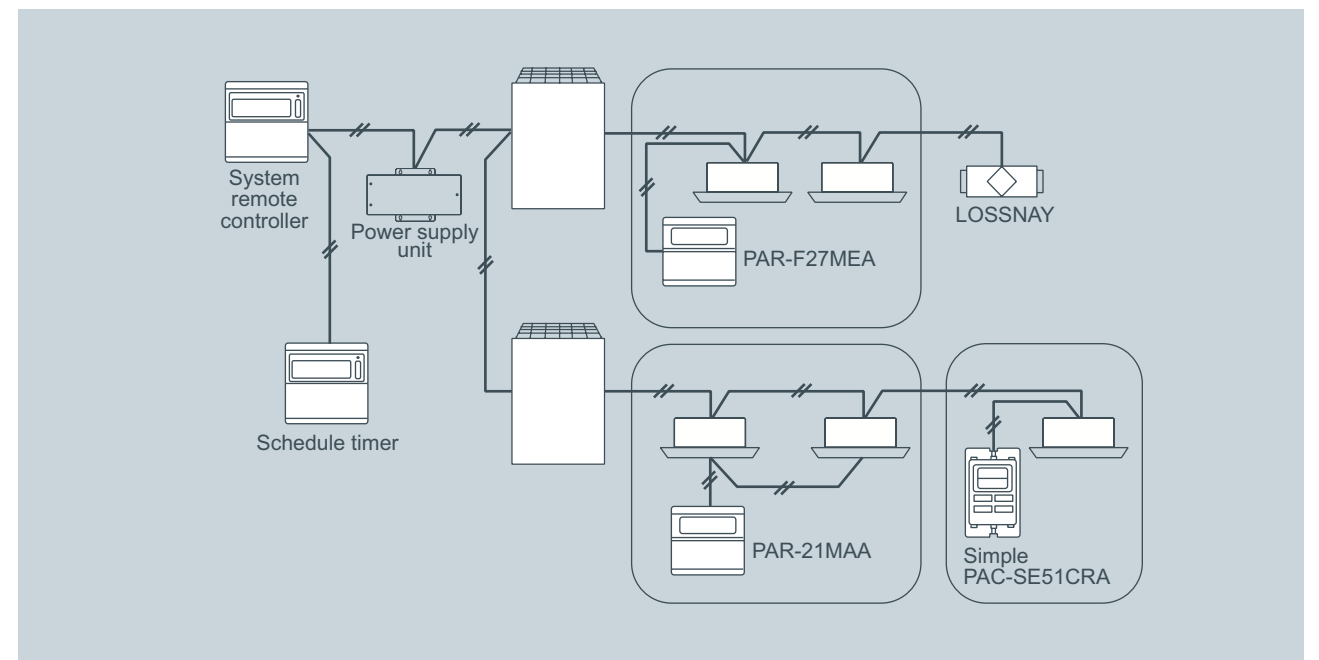


- The schedule group setting is kept in nonvolatile memory. No need to worry about re-setting at power failure.
- No individual AC power supply is needed. The power can be supplied from one outdoor unit (R410A) or Power supply unit.

Programmable Timer				
FUNCTION	DESCRIPTION	PAC-YT34STA		
UNITS	Max No.Units	50 units/50 group		
		Operation	Displays	
ON/OFF	Run and stop operation	✓	✓	
SCHEDULE FUNCTION	Content	On/Off Mode:Cool/Heat/Auto Set temperature:19°C to 28°C [67°F to 83°F] Operation Prohibit: On/Off, Mode, Set temperature	✓	✓
	Number	Weekly timer for each group 9 setting patterns + no setting 16 operations per day	✓	✓
	Unit	5 minutes	-	-
CURRENT TIME	Set the time	✓	✓	
ERROR INDICATION	Displays a 4 digit code and the affected unit address	-	✓	
EXTERNAL INPUT	On/Off/Fire Alarm	✓	-	
EXTERNAL OUTPUT	On/Off/Faults	-	✓	

• Dimensions:130(W) x 120(H) x 19(D) mm
:5-1/8(W) x 4-23/32(H) x 3/4(D) in.

System example



Centralized Remote Controller

Just press a switch to start. All of the units can be On/Off by pressing the main switch, and each unit in the group can be On/Off with individual switch. The PAC-YT40ANRA also has hardwired connection available (On/Off input, fire alarm input, run output, fault output).

ON/OFF remote controller PAC-YT40ANRA

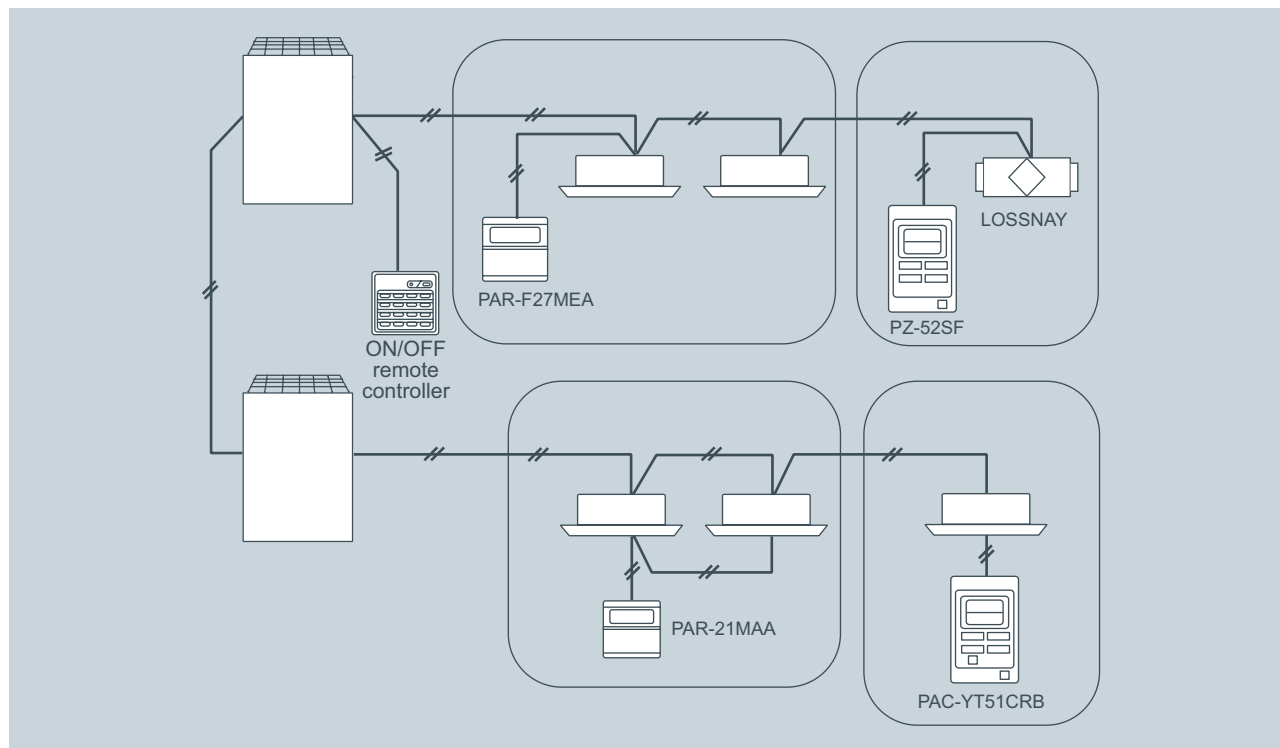


FUNCTION	DESCRIPTION	PAC-YT40ANRA	
		OPERATIONS	DISPLAY
UNITS	Max No.Units	50 units/16 groups	
ON/OFF	Run and stop operation	✓	✓
ERROR INDICATION	LED flashes during failure. (The error code can be confirmed by removing the cover.)	-	✓
VENTILATION OPERATION (INDEPENDENT)	Group operation of only LOSSNAY units possible. *Only ON/OFF of group.	✓	✓
VENTILATION OPERATION (INTERLOCKED)	The LOSSNAY will run in interlock with the operation of indoor unit. *The fan rate and mode cannot be changed. The LED will turn ON only during operation after interlocking.	✓	✓
EXTERNAL INPUT	On/Off/Fire Alarm	✓	-
EXTERNAL OUTPUT	On/Off/Faults	-	✓

• Dimensions:130(W) x 120(H) x 19(D) mm
:5-1/8(W) x 4-23/32(H) x 3/4(D) in.

- The group setting is kept in nonvolatile memory. No need to worry about re-setting at power failure.
- No individual AC power supply is needed. The power can be supplied from one outdoor unit (R410A) or Power supply unit.

System example



Up to 8 groups can be operated (maximum of 16 units). Just by pressing PAC-SC30GRA switches, groups can be On/Off as a batch. Suitable for small office and residential project.

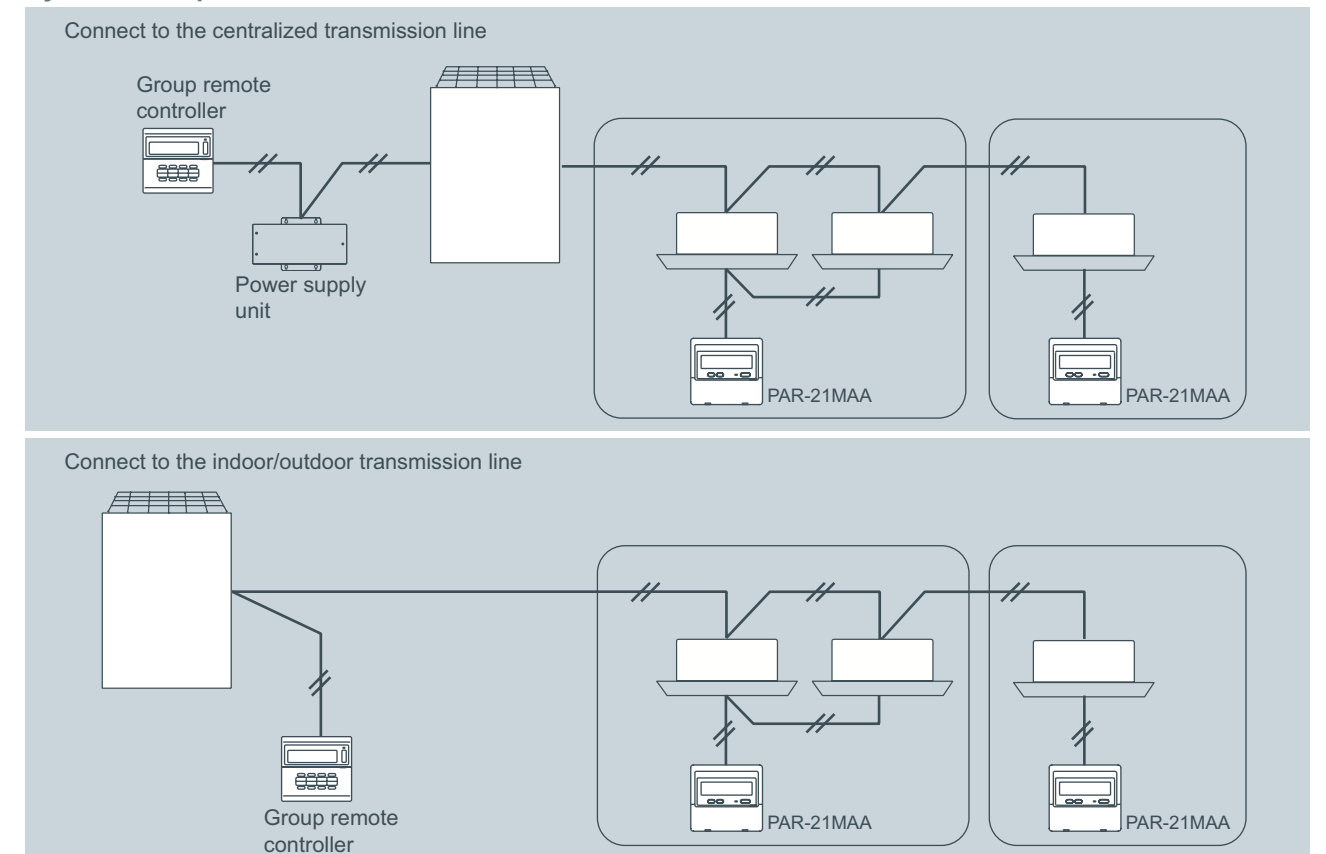
Group remote controller PAC-SC30GRA



FUNCTION	DESCRIPTION	PAC-SC30GRA	
		OPERATIONS	DISPLAY
UNITS	Max No.Units	16 units / 8 groups	
ON/OFF	Run and stop operation	✓	✓
MODE SELECTION	Switches between Cool/Dry/Auto/Fan/Heat. Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems	✓	✓
TEMPERATURE SETTING	Sets the groups temperature control. Cool/Dry:19-30°C Heat:17-28°C Auto:19-28°C	✓	✓
FAN SPEED SETTINGS	4 speed – Hi-Mid2-Mid1-Low, Auto 3 speed – Hi-Mid-Low, Auto 2 speed – Hi-Low	✓	✓
AIR FLOW DIRECTION SETTING	Air flow angles: 4-angle or 5-angle, Swing, Auto, Louver ON/OFF	✓	✓
PERMIT/PROHIBIT FUNCTION	Run/Stop, Temperature Setting, Mode Selection and Filter Reset functions can be prohibited via main system controller	-	✓
INDOOR RETURN AIR TEMPERATURE	Measures the intake temperature of the master unit within the group	-	✓
ERROR INDICATION	Displays a 4 digit code and the affected unit address	-	✓
VENTILATION INTERLOCK	Allows the group to be interlocked with a heat recovery Lossnay unit	✓	✓

• Dimensions:130(W) x 120(H) x 19(D) mm
:5-1/8(W) x 4-23/32(H) x 3/4(D) in.

System example



Centralized Remote Controller

With a new colored touch panel, and continuation of all the G-50A functions, AG-150A visualizes its functions from basic control to advanced operations and bringing an ultimate controller to reality.

Centralized controller AG-150A

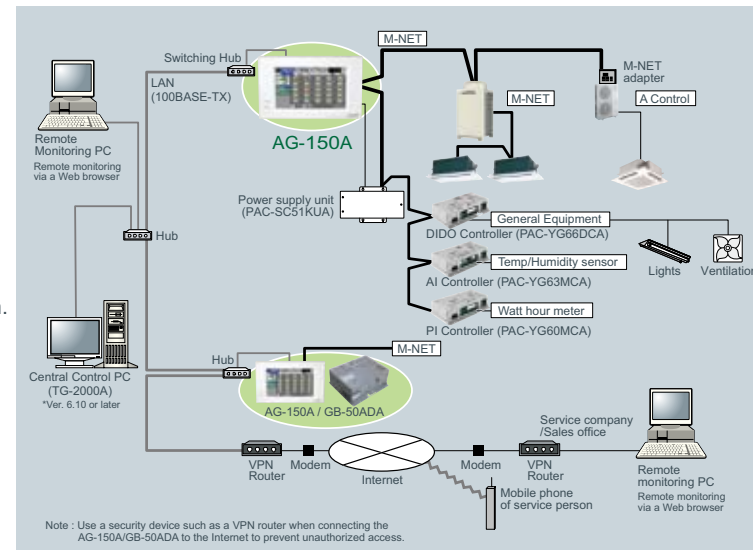


Dimensions: 300(W) x 185(H) x 70.3(D) mm
: 11-13/16(W) x 7-5/16(H) x 2-13/16(D) in.



Option : Black surface cover
PAC-YG71CBL

System structure



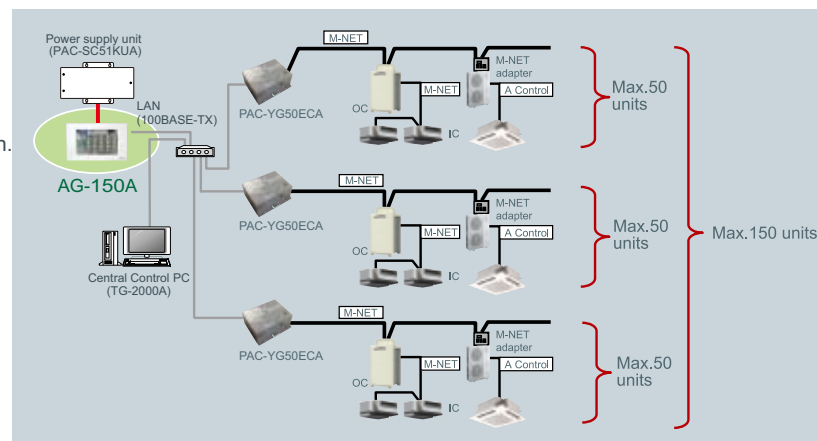
Expansion Controller PAC-YG50ECA



Dimensions: 250(W) x 217(H) x 97.2(D) mm
: 9-7/8(W) x 8-9/16(H) x 3-7/8(D) in.

With a connection of a Expansion Controller, maximum of 150 units/groups can be connected to AG-150A.

System structure



*Do not connect PAC-YG50ECA to TB3 of the outdoor unit.

*Use a security device such as a VPN router when connecting the AG-150A etc. to the Internet to prevent unauthorized access.

New Design

Backlight color liquid crystal

Backlight makes it easy to see and control units.
One can identify whether a unit is ON or OFF from a distance.
Control in the night with no lights is possible.

Touch panel

9 inch wide, high-resolution

Touch panel enables operation of units by touching with index finger.
When object unit is touched, orange box appears around the unit icon indicating the unit selected.

Flat back

Easy installation

Allows for an installation of the unit either directly to the wall surface or using the installation hole in the wall.

USB memory compatible

All measurement/initial setting CSV data extractable with USB memory.
Can save and overwrite setting data.

New Functions

Controllable units/groups

Controls up to 50 units/groups (including indoor units, LOSSNAY, DIDO/AI/PI controller)
Up to 150 units can be controlled via expansion controller; PAC-YG50ECA (AG-150A software needs to be upgraded)

Monitoring functions

Temperature/Humidity (using AI controller with WEB browser) *1
General equipment such as lights on LCD (using DIDO controller)
Interlock function from AI controller, DIDO controller to indoor units and between DIDO units are available.
AG-150A interlock with DIDO controller or free contact on an indoor unit available. * Ver. 2.30 or later

Energy saving functions

Seasonal scheduling and automatic switch over *1
Yearly scheduling on LCD *1
Scheduling fan speed and airflow direction
Optimized Start up *1
External temperature interlock control *1
Night setback control *1
*1 License required.

Functions

Item	Description	Operations	Display
Controllable unit	50 units/groups or 150 units/groups via expansion controller; PAC-YG50ECA.		
ON/OFF	Run and stop operation for the air conditioner units and general equipment. (To operate general equipment, PAC-YG66DCA is required.)	○ ○ △ ●	○ ○
Operation mode switching	Switches between Cool / Dry / Auto / Fan / Heat. (Group of LOSSNAY unit : automatic ventilation/ vent - heat interchange/ normal ventilation) depending on the air conditioner unit. Auto mode is for CITY MULTI R2 and WR2 series only.	○ ○ △ ●	○
Temperature setting	Cool/Dry : 19°C (67°F) - 30°C (87°F) [14°C (57°F) - 30°C (87°F)] Heat : 17°C (63°F) - 28°C (83°F) [17°C (63°F) - 28°C (83°F)] Auto : 19°C (67°F) - 28°C (83°F) [17°C (63°F) - 28°C (83°F)] [] in case of using middle-temperature on PDFY, PEFY-VML/VMR/VMS/VMH-by setting DipSW7-1 to ON. Yet, PEFY-P-VMH-E-F is excluded.	○ ○ △ ●	○
Fan speed setting	Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings: Hi/Mid/Low Models with 2 air flow speed settings: Hi/Low Fan speed setting (including Auto) varies depending on the model.	○ ○ △ ●	○
Air flow direction setting	Air flow direction angles, 4-angle or 5-angle Swing, Auto (Louver cannot be set)	○ ○ △ ●	○
Schedule operation	Weekly schedule can be set by groups based on daily operation pattern.	○ ○ △ ●	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Change operation mode, Set temperature, Reset filter).	○ ○ △ ●	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	×	○
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.	×	□ ○
Test run	This operates air conditioner units in test run mode.	○ ○ △ ●	○
Ventilation interlock	The ventilation unit (LOSSNAY) is able to automatically start its operation when operation of the interlocked indoor unit starts.	○ ○ △ ●	○
External input/output	By using optional external input/output adaptor (PAC-YG10HA) you can set and monitor the following. Input : By level signal : "Batch start/stop", "Batch emergency stop" By pulse signal : "Batch start/stop", "Enable/disable local remote controller" Output : "Start/stop", "Error/Normal"	○	○

*NOTE: Operation and displayed content vary depending on the indoor unit model.
◆Future release schedule is subject to change without notice.

Centralized controller GB-50ADA-J*

New



GB-50ADA (without display)

• Dimensions: 250 (W) x 217 (H) x 97.2 (D) mm
: 9-7/8 (W) x 8-9/16 (H) x 3-7/8 (D) in.

*GB-50ADA-J is indicated as GB-50ADA.

The Web Server Function enables Remote Operation or Scheduling Via a Web Browser on a Personal Computer!
Up to 50 indoor units can be controlled!

Web Browser

Enables monitoring and operation of indoor units using a PC with Microsoft® Internet Explorer (Ver.6 or 7 or 8) (Web browser function is an optional and needs license registration.)

*When connecting to the Internet, please use the VPN (Virtual Private Network).

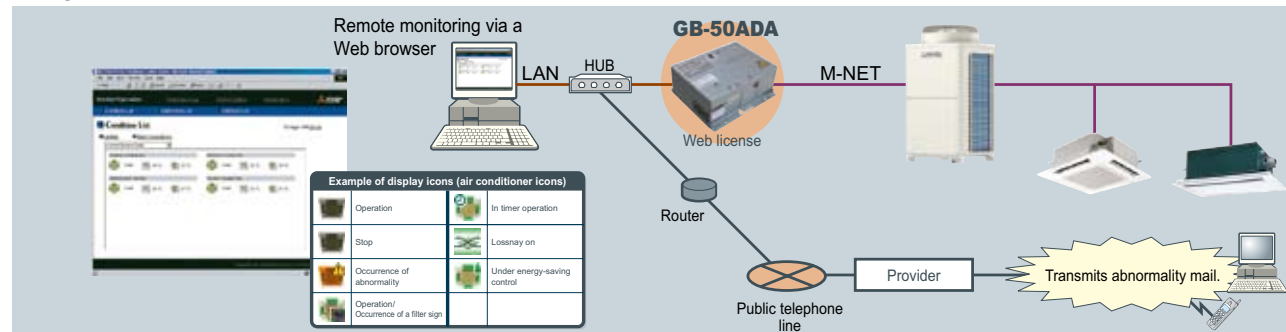
Using "Dial-up Connection"

- Enables monitoring and operation from a remote place
- Enables error notification by e-mails to a PC or to a mobile phone

Function	Description
	GB-50ADA (web browser)
Controllable unit	Up to 50 units/groups.
Dimensions W x H x D	250 (9-7/8) x 217 (8-9/16) x 97.2 (3-7/8) mm (in)
ON / OFF	Run and stop operation for the air conditioner units
Mode selection	Switches between Cool / Dry / Auto / Fan / Heat.
Temperature setting	Range of temperature setting Cool/Dry : 19-30°C [14-30°C] / 67-87°F [57-87°F] Heat : 17-28°C [17-28°C] / 63-83°F [63-83°F] Auto : 19-28°C [17-28°C] / 67-83°F [63-83°F] () in case of using middle-temperature on PEFY, PEFY-VML/VMR/VMS/VMH-by setting DipSW7-1 to ON. Yet, PEFY-P-VMH-E-F is excluded. *Range of temperature settings vary depending on model.
Air flow direction setting	Air flow direction angles, 4-angle or 5-angle Swing, Auto (Louver cannot be set)
Timer operation / Schedule	Annual/Weekly (2 types)/today schedule can be set for each group of air conditioning units. Optimized startup setting is also available.
Permit / Prohibit function	Individually prohibit operation of each local remote control function
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.
Test run	-
Ventilation interlock	Operation of indoor groups or general equipment can be interlocked by the change of state (ON/OFF, mode, error of indoor groups and general equipment).

*NOTE: Operation and displayed content vary depending on the indoor unit model. License registration is necessary to perform each function on GB-50ADA.

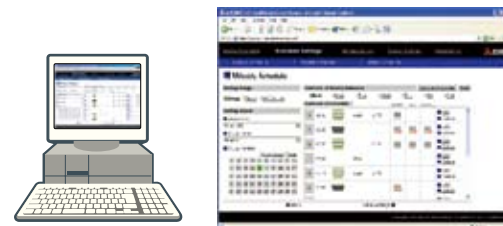
System Structure



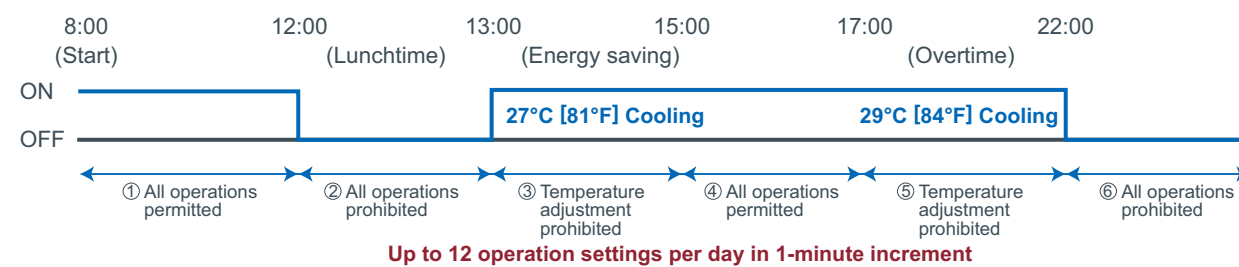
Annual / Weekly Schedule

Enables Weekly and Annual scheduling with a registering license

- ON/OFF, operation mode, temperature setting, prohibit remote controller operation can be set.
- For annual schedule, it is possible to set 50 day-long settings up to 24 months into the future.



Scheduling example in the office



Centralized Remote Controller

PI Controller PAC-YG60MCA



Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

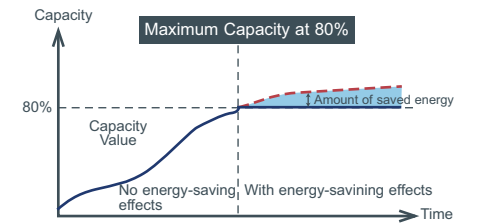
No more PLCs are needed!
Our new PI controller makes it possible to perform energy saving without PLC, which is cost saving. Maximum of 4 measurement meter (WHM, gas meter, water meter, calorie meter) can be connected to the PI controller and can be used also for charge calculation.
*24 VDC power needs to be provided on site.

Energy Saving Control

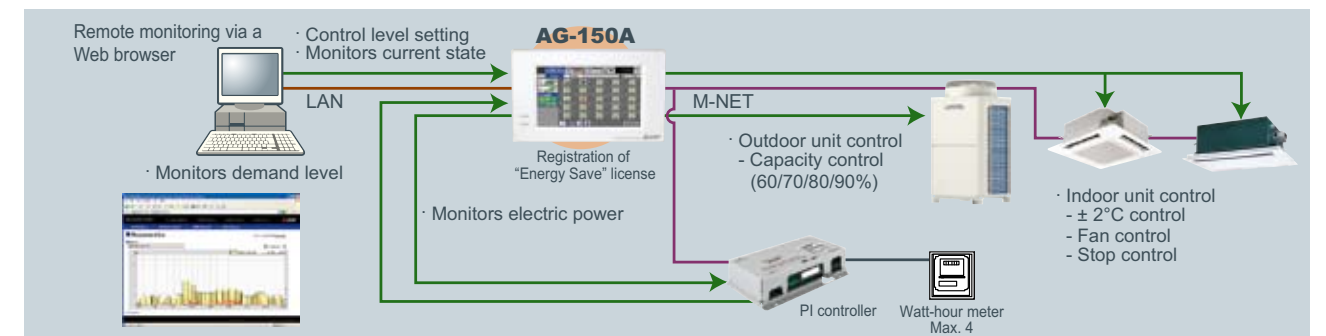
Enables Energy Saving Control with the use of our new PI controller. (Registration of "Energy Save" licence is required.)

To perform energy saving, the capacity of the outdoor unit is controlled.

*Please note that when using an energy saving control, there are no warranties to failures such as usage over the contracted electricity.



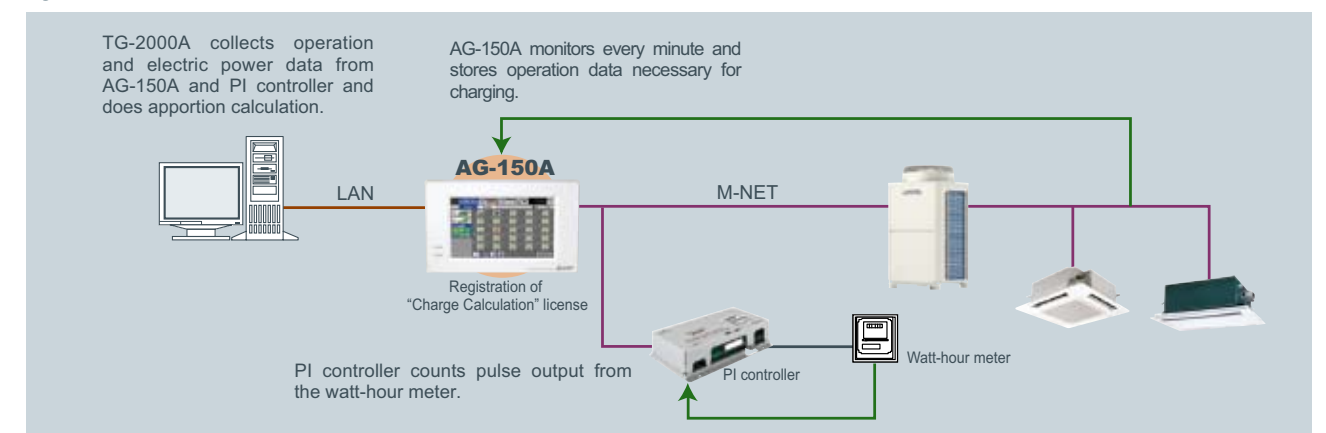
System Structure



Charge Calculation

Enables charge calculation for each tenant and output as CSV file

System Structure



Centralized Remote Controller

DIDO Controller PAC-YG66DCA



Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

No more PLCs are needed!
Our new DIDO controller makes it possible to control general-purpose equipment without PLC, which is cost saving. Up to 6 general-purpose equipment can be connected to the DIDO controller.

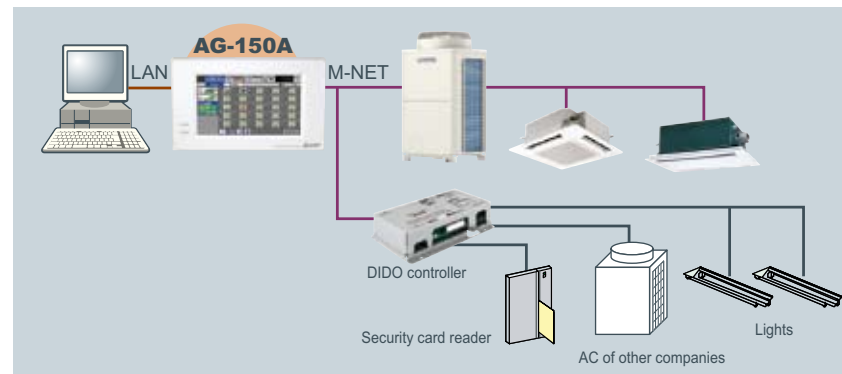
*24 VDC power needs to be provided on site.

General-purpose equipment Control

Enables to control and monitor equipment other than air-conditioners (air-conditioners of other companies, lights, ventilators, etc.)

System Structure

- In addition to above, the air-conditioners can be interlocked with general-purpose equipment. E.g. Interlock between indoor units and security system.
- The indoor units can be turned ON/OFF when the security system is activated/deactivated.



AI Controller PAC-YG63MCA



Dimension: 200(W) x 120(H) x 45(D) mm
: 7-7/8(W) x 4-3/4(H) x 1-13/16(D) in.

Our new AI controller makes it possible to monitor the values measured by the temperature/humidity sensor connected to the AI controller.

The AI controller has two input and two output channels.

*24 VDC power needs to be provided on site.

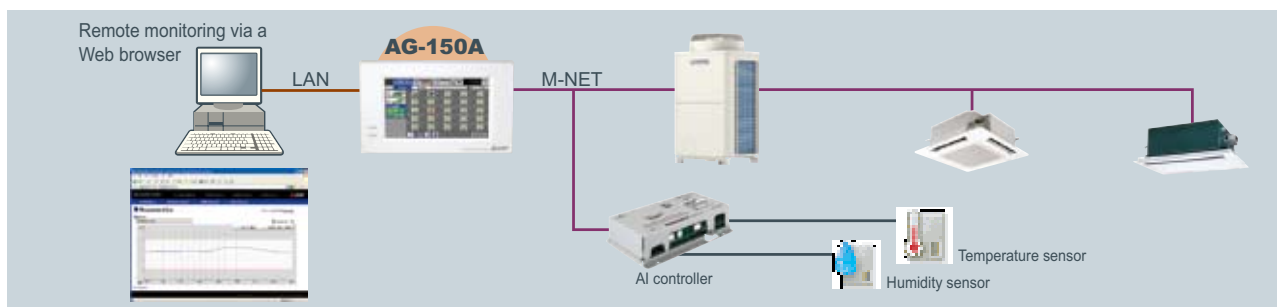
Temperature/Humidity Monitoring

Monitors the values measured by the temperature/humidity sensor connected to the AI controller

Temperature : Pt100, 4 to 20mA DC, 1 to 5 VDC, 0 to 10 VDC
Humidity : 4 to 20mA DC, 1 to 5 VDC, 0 to 10 VDC

- Trend displays of measurement data can be shown on a Web browser.
- An alarm can be output by e-mail when measurement data exceeds a preset upper or lower limit.

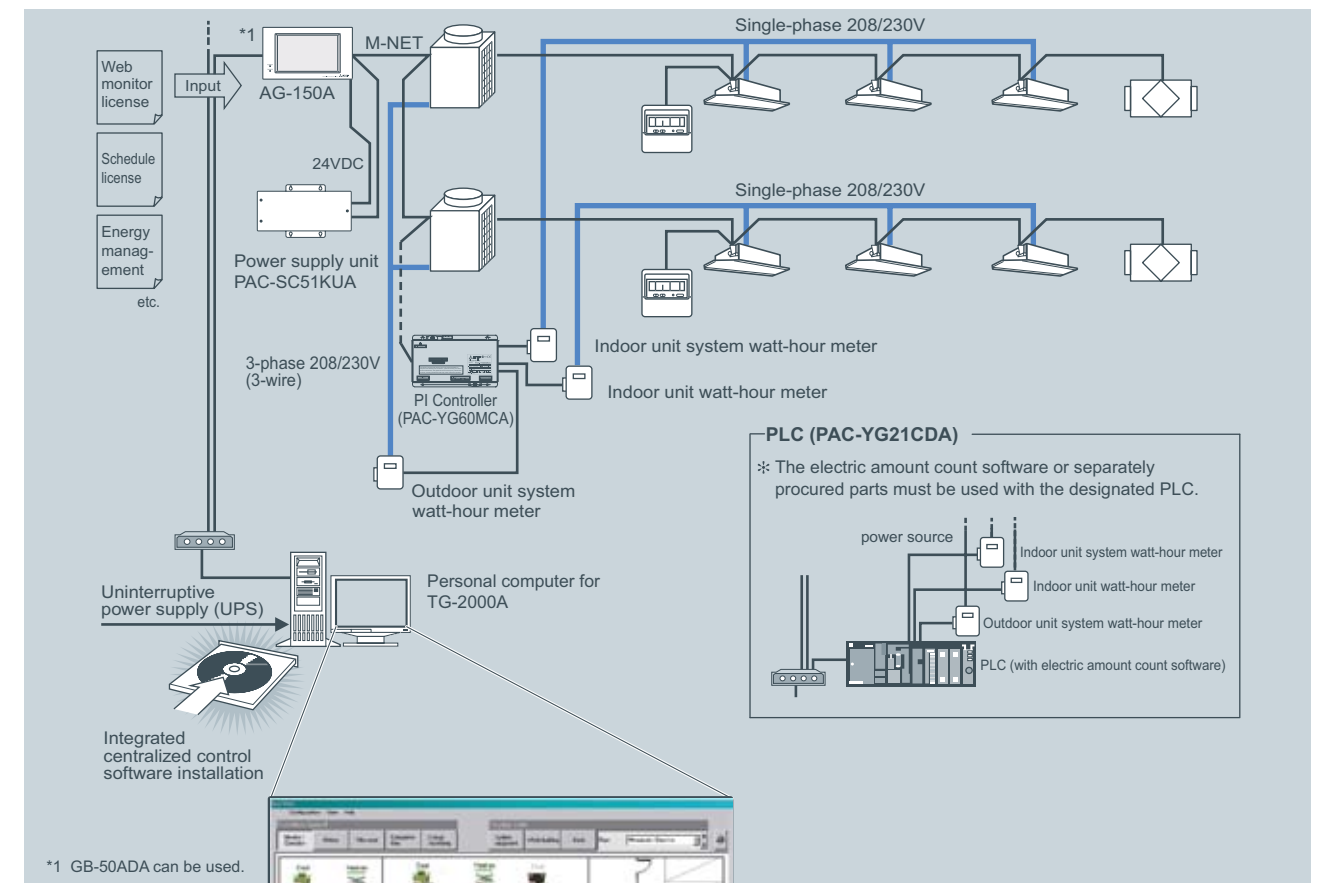
System Structure



Remote Controller

Integrated centralized control software TG-2000A

Example of Basic System Configuration



The air-conditioning layout can be displayed on the screen, making control and operation easier.

Effective use of TG-2000A

Multiple air conditioning in multiple buildings can be calculated. The power apportionment percentage data and apportioned power rate can be calculated for each unit, and can be output as a CSV file.



For example, installing TG-2000A to the system in the headquarters makes it possible to control AG-150A/GB-50ADA units that are used in branch offices.

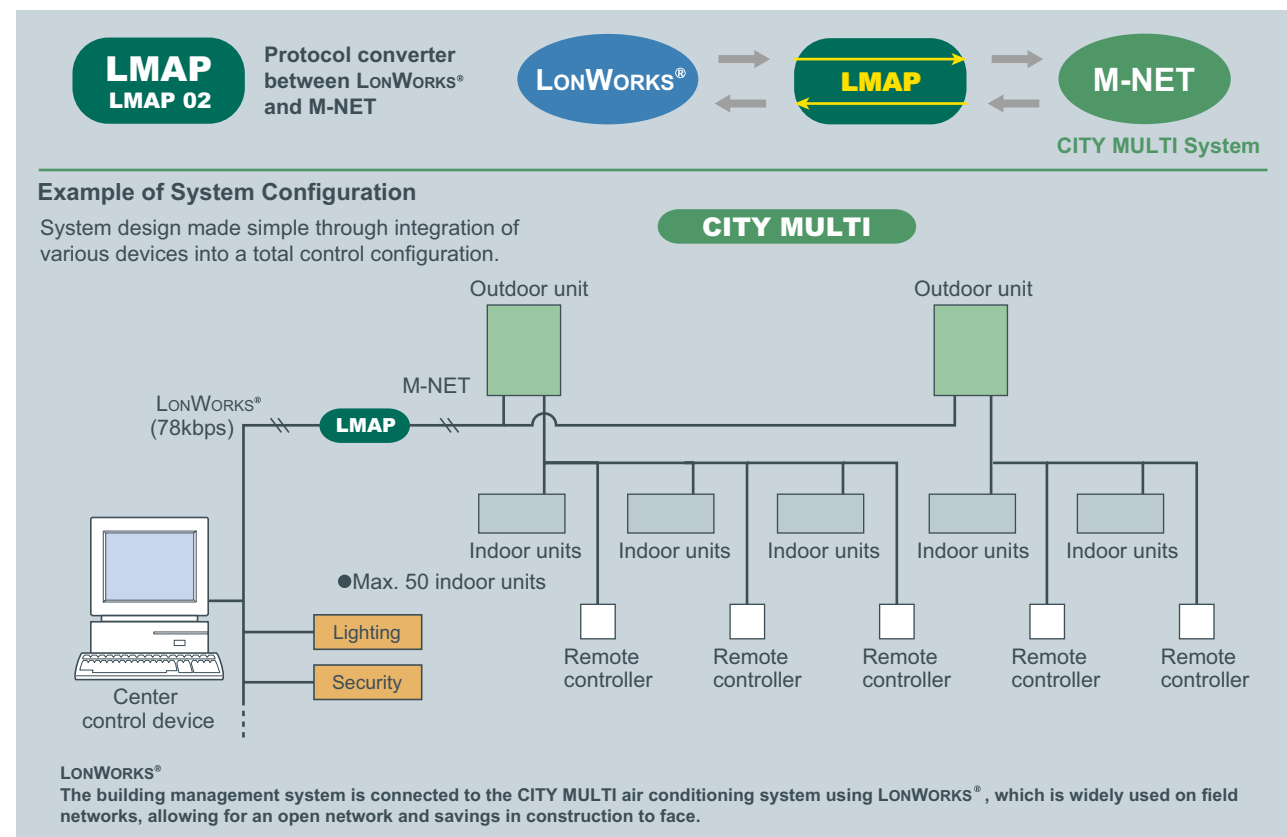
Remote Controller

LONWORKS® (LMAP02)

CITY MULTI can easily combine into a Building Management System (BMS) via the LONWORKS® and M-NET adapter LMAP02. LONWORKS® is an opened transmission protocol widely used at BMS, and related equipment control. CITY MULTI is therefore compatible with large-scaled BMS management via LONWORKS®.

One LM ADAPTER unit can connect up to 50 Groups/50 indoor units.

Using a single LONWORKS® adapter (LM ADAPTER), you can connect up to a maximum of 50 indoor units.



LON, LONWORKS® and the Echelon logo are trademarks of Echelon Corporation registered in the United States and other countries.

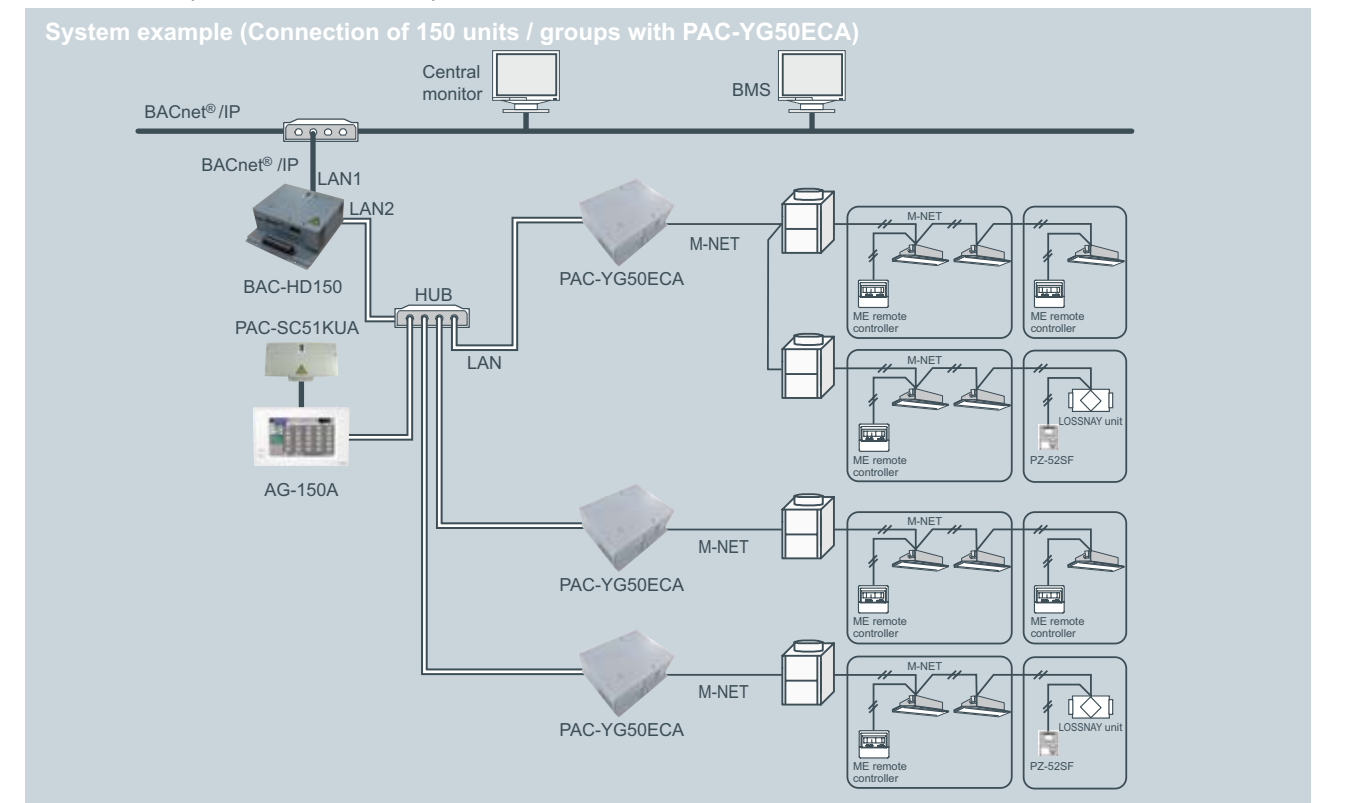
LONWORKS® INTERFACE	
FUNCTION	CONTENT
Control	
ON/OFF	Run/Stop
Mode Operation	Cool/Dry/Heat/Auto/Fan
Setpoint Adjustment	Cooling 19-30°C [67-87°F], Heating 17-28°C, [63-83°F], Auto 19-28°C [67-83°F]
Fan Speed Control	Lo-Mi1-Mi2-Hi
Permit/Prohibit	On/Off, Mode, Setpoint
Emergency Stop	-
Monitoring	
ON/OFF	Run/Stop
Mode	Cool/Dry/Heat/Auto/Fan
Setpoint	Cooling 19-30°C [67-87°F], Heating 17-28°C, [63-83°F], Auto 19-28°C [67-83°F]
Fan Speed	Lo-Mi1-Mi2-Hi
Permit/Prohibit	On/Off, Mode, Setpoint
Alarm State	-
Room Temperature	-10-50°C [14-122°F]
Thermo ON/OFF	On/Off

BACnet® (BAC-HD150)

CITY MULTI can easily combine into a Building Management System (BMS) via the BACnet® and M-NET adapter BAC-HD150. BACnet is an opened transmission protocol widely used at BMS, and related equipment control. CITY MULTI is therefore compatible with large-scaled BMS management via BACnet.

BAC-HD150 can control up to 50 units/groups (including LOSSNAY).


Up to 150 units/groups (including LOSSNAY) can be controlled from one BAC-HD150 with three expansion controllers PAC-YG50ECA. (50 units/PAC-YG50ECA)



BACnet® and M-NET adapter	
FUNCTION	CONTENT
Operation	
ON/OFF	Run/Stop
Mode	Cool/Dry/Heat/Auto/Fan
Fan Speed	Low-Mid1-Mid2-Hi
Airflow Direction	Horizontal- 60°-80°-100°swing
Set Temperature	Cooling 19-30°C [67-87°F], Heating 17-28°C [63-83°F], Auto 19-28°C [67-83°F]
Filter Sign Reset	Normal/Reset
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp.
Forced OFF	Release/Effective
Monitoring	
ON/OFF	Run/Stop
Mode	Cool/Dry/Heat/Auto/Fan
Fan Speed	Low-Mid1-Mid2-Hi
Air Direction	Horizontal- 60°-80°-100°swing
Set Temperature	Cooling 19-30°C [67-87°F], Heating 17-28°C [63-83°F], Auto 19-28°C [67-83°F]
Filter Sign	Normal/Reset
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp.
Indoor Temperature	-
Alarm Signal	Normal/Abnormal
Error Code	2 Character code- Indicates all unit alarms
Communication State	Normal/Abnormal



I ndoor unit

- Ceiling cassette type 4-way airflow
- Ceiling cassette type 2-way airflow
- Ceiling cassette type 1-way airflow
- Ceiling concealed type
- Fresh Air Intake type
- Ceiling suspended type
- Wall mounted type
- Floor standing exposed
- Floor mounted concealed type
- BC controller
-  Logsnay
- OA Processing Units

Wide selection of indoor units

Ceiling cassette (4-way air flow) Page41 - Page42

i-see Sensor **PLFY-P VBM-E**
PLFY-P VCM-E

Model	P20	P25	P32	P40	P50
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW
Model	P63	P80	P100	P125	
Capacity	7.1kW	9.0kW	11.2kW	14.0kW	

Fresh Air Intake Page55 - Page56

PEFY-P VMH-E-F

Model	P80	P140	P200	P250
Capacity	9.0kW	16.0kW	22.4kW	28.0kW

Ceiling cassette (2-way air flow) Page43 - Page44

PLFY-P VLMD-E

Model	P20	P25	P32	P40	P50
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW
Model	P63	P80	P100	P125	
Capacity	7.1kW	9.0kW	11.2kW	14.0kW	

Ceiling suspended Page57 - Page58

PCFY-P VKM-E

Model	P40	P63	P100	P125
Capacity	4.5kW	7.1kW	11.2kW	14.0kW

Ceiling cassette (1-way air flow) Page45 - Page46

PMFY-P VBM-E

Model	P20	P25	P32	P40
Capacity	2.2kW	2.8kW	3.6kW	4.5kW

Wall mounted Page59 - Page60

PKFY-P VBM-E
PKFY-P VKM-E
PKFY-P VHM-E

Model	P15	P20	P25	P32	P40	P50	P63	P100
Capacity	1.7kW	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW	7.1kW	11.2kW

Ceiling concealed Page47 - Page54

PEFY-P VMR-E-L/R **PEFY-P VMA(L)-E**
PEFY-P VMS1(L)-E **PEFY-P VMH(S)-E**

Model	P15	P20	P25	P32	P40	P50	P63
Capacity	1.7kW	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW	7.1kW
Model	P71	P80	P100	P125	P140	P200	P250
Capacity	8.0kW	9.0kW	11.2kW	14.0kW	16.0kW	22.4kW	28.0kW

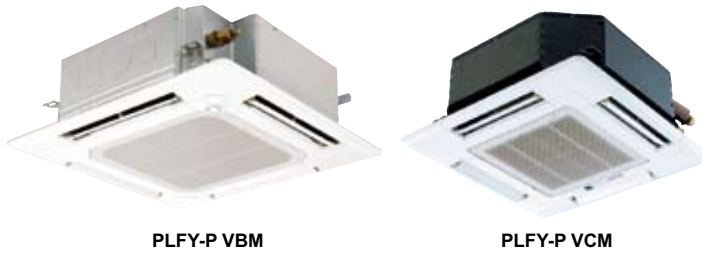
Floor standing / Floor mounted concealed Page61 - Page66

PFFY-P VLEM-E **PFFY-P VKM-E**
PFFY-P VLRM-E **PFFY-P VLRRM-E**

Model	P20	P25	P32	P40	P50	P63
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW	7.1kW

INDOOR UNIT Ceiling cassette type 4-way airflow

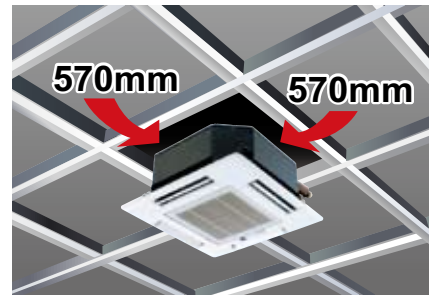
PLFY-P VBM-E *i-see Sensor* PLFY-P VCM-E



The new 4-way cassette VBM offers 72 different airflow patterns, making it ideal for applications with ceilings up to 4.2 m (13-13/16ft) in height.



Compact body to match with 2 feet (600mm) x 2 feet (600mm) ceiling design (VCM)



Automatic Air Speed Adjustment

Auto-fan-speed mode enables speedy and comfortable heating during heating startup.

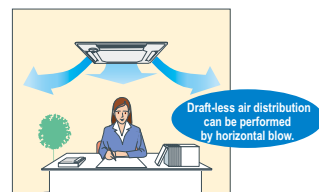
The Auto-fan-speed mode is added to the usual four steps "Low, Mid1, Mid2, High." The Auto-fan-speed mode enables speedy and comfortable air conditioning because the air flow speeds up when starting, and air flow slows down when the air conditioning becomes stable. (PLFY-P VBM-E ONLY)



* When using a wireless remote controller, initial settings are required.

Draft-less Air Distribution

The horizontal blow mode* newly employed supplies airflow horizontally not bringing cooled/warmed air directly to occupants thus preventing discomfort sensation due to excessive cooling or direct exposing of occupants to the air blow. (PLFY-P VBM-E ONLY)

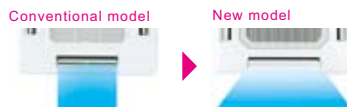


*Default
*The ceiling may be smudged at a spot where the supplied airflow is seriously disturbed.

Wide Air Flow (PLFY-P VBM-E ONLY)

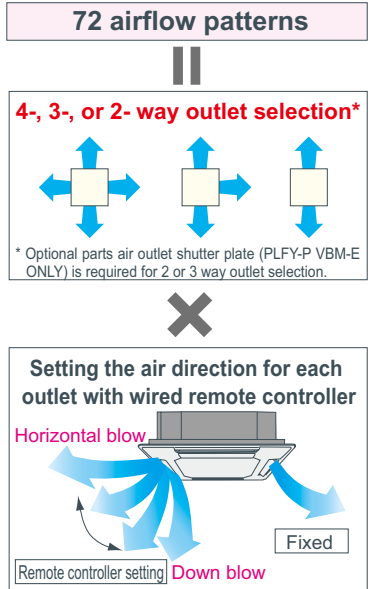
Cooling softly with Wide Air Flow

Discharge air reaches wider area and the fan speed is decreased by 20% thanks to the new wide shape air outlet.



72 patterns of airflow to accommodate any room layout are available. *First in the industry*

The number of outlet can be set to 4, 3, or 2. Flexible airflow is available by fixing the up-down airflow direction of the outlet with a wired remote controller (or manually).

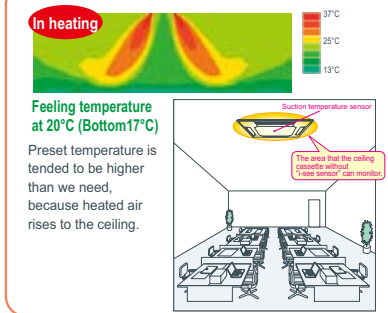


"i-see sensor" can be used with ceiling cassette type 4-way airflow unit. (Option PAC-SA1ME-E, PLYF-VBM-E ONLY)

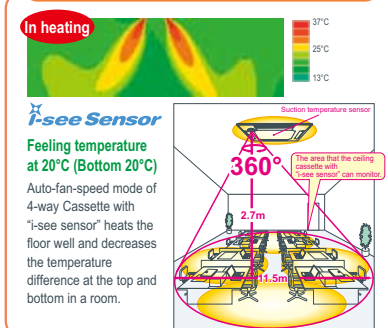
New 4-way Cassette PLYF-VBM controls the temperature difference at the top and bottom in a room by checking the floor temperature with "i-see sensor". Comfortable air conditioning can be realized smoothly with "sensible temperature control." (Option PAC-SA1ME-E, PLYF-VBM-E ONLY)

Prevents overcooling/overheating, and improves comfort/energy-efficiency

Without i-see sensor: preset temperature at 23°C



With i-see sensor*Auto fan speed: preset temperature at 20°C



Specifications

		PLFY-P32VBM-E	PLFY-P40VBM-E	PLFY-P50VBM-E	PLFY-P63VBM-E	PLFY-P80VBM-E	PLFY-P100VBM-E	PLFY-P125VBM-E
Power source		1-phase 220-240V 50Hz / 1-phase 200V 60Hz						
Cooling capacity	*1 kW	3.6	4.5	5.6	7.1	9.0	11.2	14.0
	*1 BTU/h	12,300	15,400	19,100	24,200	30,700	38,200	47,800
Heating capacity	*1 kW	4.0	5.0	6.3	8.0	10.0	12.5	16.0
	*1 BTU/h	13,600	17,100	21,500	27,300	34,100	42,700	54,600
Power consumption	Cooling kW	0.03	0.04	0.05	0.07	0.15	0.16	0.16
	Heating kW	0.02	0.03	0.04	0.06	0.14	0.15	0.15
Current	Cooling A	0.22	0.29	0.36	0.51	1.00	1.07	1.07
	Heating A	0.14	0.22	0.29	0.43	0.94	1.00	1.00
External finish (Munsell No.)		Galvanized steel sheet White (6.4Y 8.9/0.4)						
Dimension H x W x D	Unit	258 x 840 x 840 (10-3/16 x 33-8/1 x 33-8/1)						298 x 840 x 840 (11-3/4 x 33-1/8 x 33-1/8)
	Panel	35 x 950 x 950 (1-3/8 x 37-7/16 x 37-7/16)						
Net weight	Unit	22 (49)			23 (51)		27 (60)	
	Panel	6 (13)						
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)						
Fan	Type x Quantity	Turbo fan x 1						
	Airflow rate (Lo-Mid1-Mid2-Hi)	*2 m³/min	11-12-13-14	12-13-14-16	14-15-16-18	16-18-20-22	21-24-27-29	22-25-28-30
		L/s	183-200-217-233	200-217-233-267	233-250-267-300	267-300-333-367	350-400-450-483	367-417-467-500
External static pressure	Pa	388-424-459-494	424-459-494-565	494-530-565-636	565-636-706-777	742-848-953-1024	777-883-989-1059	
Motor	Type	DC motor						
	Output	0.050			0.120		0.120	
Air filter		PP Honeycomb						
Refrigerant pipe diameter	Gas (Flare)	ø12.7 (ø1/2)		ø12.7 (ø1/2) / ø15.88 (ø5/8) (Compatible)		ø15.88 (ø5/8)		ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)
	Liquid (Flare)	ø6.35 (ø1/4)		ø6.35 (ø1/4) / ø9.52 (ø3/8) (Compatible)		ø9.52 (ø3/8)		
Field drain pipe diameter		mm(in.) O.D. 32 (1-1/4)						
Sound pressure level (Lo-Mid1-Mid2-Hi) *2 *3		27-28-29-31		27-28-30-31		28-29-30-32		30-32-35-37
						34-37-39-41		35-38-41-43

		PLFY-P20VCM-E	PLFY-P25VCM-E	PLFY-P32VCM-E	PLFY-P40VCM-E	
Power source		1-phase 220-240V 50Hz				
Cooling capacity	*1 kW	2.2	2.8	3.6	4.5	
	*1 BTU/h	7,500	9,600	12,300	15,400	
Heating capacity	*1 kW	2.5	3.2	4.0	5.0	
	*1 BTU/h	8,500	10,900	13,600	17,100	
Power consumption	Cooling kW	0.05	0.05	0.06	0.06	
	Heating kW	0.05	0.05	0.06	0.06	
Current	Cooling A	0.23	0.23	0.28	0.28	
	Heating A	0.23	0.23	0.28	0.28	
External finish (Munsell No.)		Galvanized steel sheet with gray heat insulation White (6.4Y 8.9/0.4)				
Dimension H x W x D	Unit	208 x 570 x 570 (8-1/4 x 22-1/2 x 22-1/2)				
	Panel	20 x 650 x 650 (13/16 x 25-5/8 x 25-5/8)				
Net weight	Unit	15.5 (35)		17 (38)		
	Panel	3 (7)		3 (7)		
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)				
Fan	Type x Quantity	Turbo fan x 1				
	Airflow rate (Lo-Mid-Hi)	*2 m³/min	8-9-10	8-9-10	8-9-11	8-9-11
		L/s	133-150-167	133-150-167	133-150-183	133-150-183
External static pressure	Pa	283-318-353	283-318-353	283-318-388	283-318-388	
Motor	Type	1-phase induction motor				
	Output	0.011	0.015	0.02	0.02	
Air filter		PP Honeycomb (long life type)				
Refrigerant pipe diameter	Gas(Flare)	ø12.7 (ø1/2)				
	Liquid(Flare)	ø6.35 (ø1/4)				
Field drain pipe diameter		mm(in.) O.D. 32 (1-1/4)				
Sound pressure level (Lo-Mid-Hi) *2 *3		28-31-35		28-31-37		
				29-33-38		
				30-34-39		

Notes:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
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/Sound pressure level are in (low-middle-high) or (low-middle1-middle2-high).
- *3 It is measured in anechoic room at power source 230V.

INDOOR UNIT

Ceiling cassette type

2-way airflow

PLFY-P VLMD-E

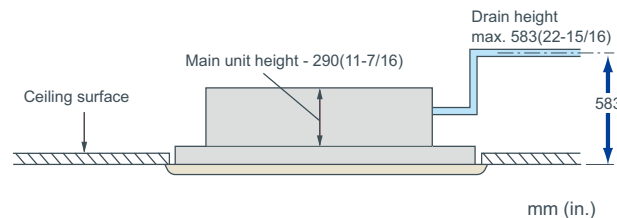


Slim body of 290mm(11-7/16in.) height



Equipped with drain pump mechanism as standard

The drain can be positioned anywhere up to 583mm(22-15/16in.) from the ceiling's surface, providing greater freedom with long cross-piping and allowing more versatility with piping layouts.



Compact unit and low noise level attained!

Sound pressure level table (Standard static pressure) at 0Pa

Sound pressure level	Capacity	dB(A)									
		Fan Speed									
		P20	P25	P32	P40	P50	P63	P80	P100	P125	
High		33	36	37	39	39	42	46			
Mid		30	33	34	37	36	39	42/44			
Low		27	29	31	32	33	36	40			

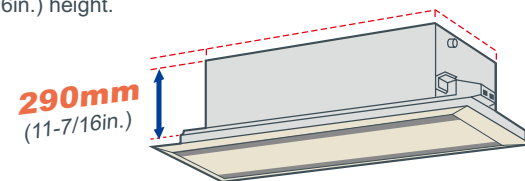
<220V,240V>

Sound pressure level	Capacity	dB(A)									
		Fan Speed									
		P20	P25	P32	P40	P50	P63	P80	P100	P125	
High		34	37	38	40	40	43	46			
Mid		31	34	35	38	37	41	42/44			
Low		28	30	32	33	34	37	40			

<230V>

Slim body - only 290mm(11-7/16in.) height

The slimline body is highly suitable for installation in narrow ceiling spaces and for replacing obsolete air-conditioning equipment in older buildings. The main unit is only 290mm(11-7/16in.) height.



Terminal block on outside of main unit makes wiring easier

Fresh air directly taken in

Fresh air can be taken in to the main unit directly (optional accessories needed.)

Long life filter equipped as standard

The antibacterial long life filter does not require maintenance for approximately a year.

Easy installation

Lighter panel and placing the electric board near the panel make installation and maintenance easier. Also, the heat exchanger is washable by displacing the center panel, filter, and fan.

Specifications

		PLFY-P20VLMD-E	PLFY-P25VLMD-E	PLFY-P32VLMD-E	PLFY-P40VLMD-E	
Power source		1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz				
Cooling capacity	*1 kW	2.2	2.8	3.6	4.5	
	*1 BTU/h	7,500	9,600	12,300	15,400	
Heating capacity	*1 kW	2.5	3.2	4.0	5.0	
	*1 BTU/h	8,500	10,900	13,600	17,100	
Power consumption	Cooling kW	0.072 / 0.075	0.072 / 0.075	0.072 / 0.075	0.081 / 0.085	
	Heating kW	0.065 / 0.069	0.065 / 0.069	0.065 / 0.069	0.074 / 0.079	
Current	Cooling A	0.36 / 0.37	0.36 / 0.37	0.36 / 0.37	0.40 / 0.42	
	Heating A	0.30 / 0.32	0.30 / 0.32	0.30 / 0.32	0.34 / 0.37	
External finish (Munsell No.)	Unit	Galvanized steel plate				
	Panel	Pure white (6.4Y 8.9/0.4)				
Dimension H x W x D	Unit mm (in.)	290 x 776 x 634 (11-7/16 x 30-9/16 x 25)				
	Panel mm (in.)	20 x 1080 x 710 (13/16 x 42-9/16 x 28)				
Net weight	Unit kg (lbs.)	23 (51)		24 (53)		
	Panel kg (lbs.)	6.5 (15)				
Heat exchanger		Cross fin				
Fan	Type x Quantity	Turbo fan x 1				
	Airflow rate *2 (Lo-Mid-Hi)	m³/min	6.5-8.0-9.5		7.0-8.5-10.5	
		L/s	108-133-158		117-142-175	
		cfm	230-283-335		247-300-371	
	External static pressure Pa	0				
Motor	Type	1-phase induction motor				
	Output kW	0.015 (at 240V)				
Air filter		PP honeycomb fabric (long life type)				
Refrigerant	Gas(Flare) mm(in.)	ø12.7 (ø1/2)				
pipe diameter	Liquid(Flare) mm(in.)	ø6.35 (ø1/4)				
Field drain pipe diameter	mm(in.)	O.D.32 (1-1/4)				
Sound pressure level (Lo-Mid-Hi) *2 *3	220V/240V dB(A)	27-30-33		29-33-36		
	230V dB(A)	28-31-34		30-34-37		

		PLFY-P50VLMD-E	PLFY-P63VLMD-E	PLFY-P80VLMD-E	PLFY-P100VLMD-E	PLFY-P125VLMD-E	
Power source		1-phase 220-240V 50Hz / 1-phase 220-230V 60Hz					
Cooling capacity	*1 kW	5.6	7.1	9.0	11.2	14.0	
	*1 BTU/h	19,100	24,200	30,700	38,200	47,800	
Heating capacity	*1 kW	6.3	8.0	10.0	12.5	16.0	
	*1 BTU/h	21,500	27,300	34,100	42,700	54,600	
Power consumption	Cooling kW	0.082 / 0.086	0.101 / 0.105	0.147 / 0.156	0.157 / 0.186	0.28 / 0.28	
	Heating kW	0.075 / 0.080	0.094 / 0.099	0.140 / 0.150	0.150 / 0.180	0.27 / 0.27	
Current	Cooling A	0.41 / 0.43	0.49 / 0.51	0.72 / 0.74	0.75 / 0.88	1.35 / 1.35	
	Heating A	0.35 / 0.38	0.43 / 0.46	0.66 / 0.69	0.69 / 0.83	1.33 / 1.33	
External finish (Munsell No.)	Unit	Galvanized steel plate					
	Panel	Pure white (6.4Y 8.9 / 0.4)					
Dimension H x W x D	Unit mm (in.)	290 x 946 x 634 (11-7/16 x 37-1/4 x 25)		290 x 1446 x 634 (11-7/16 x 56-15/16 x 25)		280 x 1708 x 606 (11-7/16 x 67-1/4 x 23-7/8)	
	Panel mm (in.)	20 x 1250 x 710 (13/16 x 49-1/4 x 28)		20 x 1750 x 710 (13/16 x 68-15/16 x 28)		20 x 2010 x 710 (13/16 x 79-3/16 x 28)	
Net weight	Unit kg (lbs.)	27 (60)	28 (62)	44 (98)	47 (104)	56 (124)	
	Panel kg (lbs.)	7.5 (17)		12.5 (28)		13.0 (29)	
Heat exchanger		Turbo fan x 1		Turbo fan x 2		Sirocco fan x 4	
Fan	Type x Quantity	Turbo fan x 1		Turbo fan x 2		Sirocco fan x 4	
	Airflow rate *2 (P50-P100:Lo-Mid-Hi) (P125:Lo-Mid2-Mid1-Hi)	m³/min	9.0-11.0-12.5	11.0-13.0-15.5	15.5-18.5-22.0	17.5-21.0-25.0	24.0-27.0-30.0-33.0
		L/s	150-183-208	167-217-258	258-308-367	292-350-417	400-450-500-550
		cfm	318-388-441	353-459-547	547-653-777	618-742-883	848-953-1,059-1,165
	External static pressure Pa	0					
Motor	Type	1-phase induction motor					
	Output kW	0.020 (at 240V)		0.020 (at 240V)		0.030 (at 240V)	
Air filter		PP honeycomb fabric (long life type)				Synthetic fiber unwoven cloth filter (long life)	
Refrigerant pipe diameter	Gas (Flare) mm(in.)	ø12.7 (ø1/2)		ø15.88 (ø5/8)			
	Liquid (Flare) mm(in.)	ø6.35 (ø1/4)		ø9.52 (ø3/8)			
Field drain pipe diameter	mm(in.)	O.D.32 (1-1/4)					
Sound pressure level (Lo-Mid-Hi) *2 *3	220V/240V dB(A)	31-34-37	32-37-39	33-36-39	36-39-42	40-42-44-46	
	230V dB(A)	32-35-38	33-38-40	34-37-40	37-41-43	(Lo-Mid2-Mid1-Hi)	

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

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/Sound pressure level are in (low-middle-high) or (low-middle2-middle1-high).

*3 It is measured in anechoic room.

INDOOR UNIT

Ceiling cassette type

1-way airflow

PMFY-P VBM-E



Compact and lightweight body perfect for limited ceiling space applications.



Compact size for smooth installation and maintenance

Unit body size has been standardized for all models at 812mm for easier installation. Body weight is only 14kg for the main unit and 3kg for the panel, making this unit one of the lightest in the industry.

Quiet operation

Newly developed airflow control technology reduces noise level to only 27dB (P20VBM) for industry-leading quiet performance.

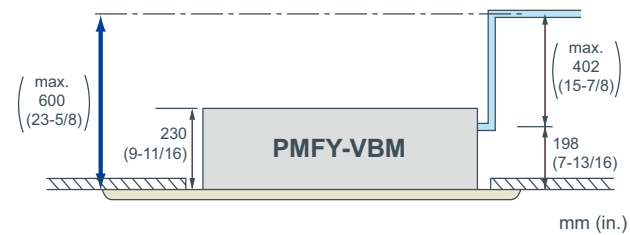
Sound pressure level table

Sound pressure level	Capacity				
	P20	P25	P32	P40	
Fan Speed	High	35	37	39	
	Mid 1	33	36	37	
	Mid 2	30	34	35	
	Low	27	32	33	

<220V,240V>

Drain pump

The drain can be positioned anywhere up to 600mm(23-5/8in.) from the ceiling's surface.



Specifications

		PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E
Power source		1-phase 220-240V 50Hz / 1-phase 220V 60Hz			
Cooling capacity	*1 kW	2.2	2.8	3.6	4.5
	*1 BTU/h	7,500	9,600	12,300	15,400
Heating capacity	*1 kW	2.5	3.2	4.0	5.0
	*1 BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling kW	0.042	0.044		0.054
	Heating kW	0.042	0.044		0.054
Current	Cooling A	0.20	0.21		0.26
	Heating A	0.20	0.21		0.26
External finish (Munsell No.)		White (0.98Y 8.99/0.63)			
Dimension	Unit mm(in.)	230 x 812 x 395 (9-1/16 x 32 x 15-9/16)			
	H x W x D Panel mm(in.)	30 x 1000 x 470 (1-3/16 x 39-3/8 x 18-9/16)			
Net weight	Unit kg(lbs.)	14 (31)			
	Panel kg(lbs.)	3 (7)			
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)			
Fan	Type	Line flow fan x 1			
	Airflow rate *2	m ³ /min	6.5-7.2-8.0-8.7	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	128-145-162-178
	(Lo-Mid2-Mid1-Hi) cfm	230-254-283-307	258-283-304-328	272-307-343-378	
External static pressure	Pa	0			
Motor	Type	1-phase induction motor			
	Output kW	0.028			
Air filter		PP Honeycomb fabric			
Refrigerant	Gas(Flare) mm(in.)	ø12.7 (ø1/2)			
	Liquid(Flare) mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter		mm(in.) O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3		dB(A) 27-30-33-35	32-34-36-37	33-35-37-39	

Notes:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
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/Sound pressure level are in (low-middle2-middle1-high).
- *3 It is measured in anechoic room.

INDOOR UNIT

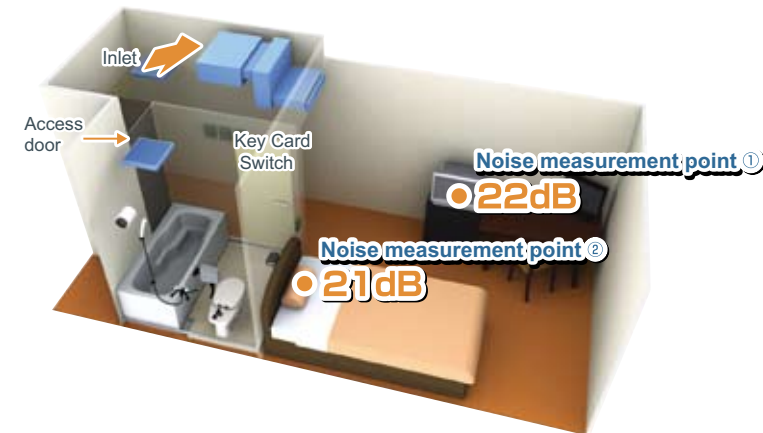
Ceiling concealed type



PEFY-P VMR-E-L/R

Static Pressure 5Pa	Width 640mm 25-6/32in.	Ultra Low Noise	Piping connection L model R model
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Problem solver for residential hotels, museums, libraries, or hospitals where low noise is especially a must!



Operable by key card switch

It is possible to operate / stop by taking a key card in and out.

Enables to install for symmetric design room

Left or right piping and control boxes are available depending on the layout of each room. Plus, as in the above figure, easy maintenance is possible from the access door in the bathroom. *Seen from the front, the pipe and control box are on the right side for -R models.

Easy Maintenance

Drain pan and heat exchangers are washable from the access door in the bathroom, making maintenance easy and cost saving.

Ultra low noise

Quiet indoor environment can be achieved with 21dB around the bed and 22dB around the desk. *The noise level may differ by the room size or the setting of the unit.

Energy saving

Energy saving can be realized by preventing us from failing to switch off of the air conditioners with a centralized system when no one is in the room. Note: Compact and simple controllers, designed specifically to control only start/stop, fan speed and temperature can be set in each room for the occupants' enhanced individual comfort.

Specifications

		PEFY-P20VMR-E-L	PEFY-P25VMR-E-L	PEFY-P32VMR-E-L
Power source		1-phase 220-230-240V 50Hz / 1-phase 220-230V 60Hz		
Cooling capacity	*1 kW	2.2	2.8	3.6
	*1 BTU/h	7,500	9,600	12,300
Heating capacity	*1 kW	2.5	3.2	4.0
	*1 BTU/h	8,500	10,900	13,600
Power consumption	Cooling kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
	Heating kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
Current	Cooling A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
	Heating A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
External finish		Galvanized		
Dimension H x W x D	Rear inlet mm (in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)		
	Bottom inlet mm (in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)		
Net weight		18 (40)		
Heat exchanger		Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity	Sirocco fan x 1		
	Airflow rate (Lo-Mid-Hi)	m ³ /min	4.8-5.8-7.9	4.8-5.8-9.3
		L/s	80-97-132	80-97-155
		cfm	170-205-279	170-205-328
External static pressure *2	Pa	5		
Motor		1-phase induction motor		
Output		kW	0.018	0.023
Air filter		PP Honeycomb fabric (washable)		
Refrigerant	Gas	mm(in.)	ø12.7 (ø1/2) Braze	
pipe diameter	Liquid	mm(in.)	ø6.35 (ø1/4) Braze	
Field drain pipe diameter		mm(in.)	O.D. 26 (1)	
Sound pressure level (Lo-Mid-Hi) *3	220V	dB(A)	20-25-30	20-25-33
	230V		21-26-32	21-26-35
	240V		22-27-30	22-27-33

		PEFY-P20VMR-E-R	PEFY-P25VMR-E-R	PEFY-P32VMR-E-R
Power source		1-phase 220-230-240V 50Hz / 1-phase 220-230V 60Hz		
Cooling capacity	*1 kW	2.2	2.8	3.6
	*1 BTU/h	7,500	9,600	12,300
Heating capacity	*1 kW	2.5	3.2	4.0
	*1 BTU/h	8,500	10,900	13,600
Power consumption	Cooling kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
	Heating kW	0.06 / 0.06	0.06 / 0.06	0.07 / 0.08
Current	Cooling A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
	Heating A	0.29 / 0.29	0.29 / 0.29	0.34 / 0.38
External finish		Galvanized		
Dimension H x W x D	Rear inlet mm (in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)		
	Bottom inlet mm (in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)		
Net weight		18 (40)		
Heat exchanger		Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity	Sirocco fan x 1		
	Airflow rate (Lo-Mid-Hi)	m ³ /min	4.8-5.8-7.9	4.8-5.8-9.3
		L/s	80-97-132	80-97-155
		cfm	170-205-279	170-205-328
External static pressure *2	Pa	5		
Motor		1-phase induction motor		
Output		kW	0.018	0.023
Air filter		PP Honeycomb fabric (washable)		
Refrigerant	Gas	mm(in.)	ø12.7 (ø1/2) Braze	
pipe diameter	Liquid	mm(in.)	ø6.35 (ø1/4) Braze	
Field drain pipe diameter		mm(in.)	O.D. 26(1)	
Sound pressure level (Lo-Mid-Hi) *3	220V	dB(A)	20-25-30	20-25-33
	230V		21-26-32	21-26-35
	240V		22-27-30	22-27-33

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
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 external static pressure is set to 5Pa (at 220V, 230V, 240V).

*3 Measured in anechoic room. Sound pressure levels of the unit with a rear air inlet. (Sound pressure levels are higher than the unit with a bottom air inlet.)

INDOOR UNIT

Ceiling concealed type



PEFY-P VMS1(L)-E

Static Pressure 5~50Pa	Height 200mm 7-28/32in.	Low Noise	Width 790mm 31-1/8in.	Width 990mm 39in.	Width 1,190mm 46-7/8in.
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The ultra thin unit of 200mm offers increased flexibility, and is particularly suitable for places where low noise operation is desired from a slim line body.



Changeable static pressure

The unit is made suitable for a variety of applications with its four static pressure settings of 5, 15, 35, 50Pa.

Changeable airflow rate

Low, middle, and high fan speed settings deliver precise comfort.

Choice for drain pump

Drain pump is an optional part for the VMS1L, and a standard for VMS1.

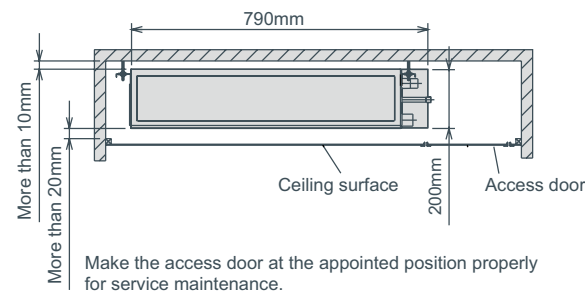
*For places where low noise operation is especially required (i.e. Hotels), VMS1L (without drain pump) is recommended.

PP Honeycomb fabric

Washable PP Honeycomb fabric filter as standard

Ultra low height unit with 200mm (7-28/32in.) high Ultra-narrow width of 790mm (P15-P32 models) [990mm for P40,50 models / 1190mm for P63 models]

Can be installed easily in tight spaces, such as ceiling cavities or drop-ceilings.



Reduced noise thanks to the use of newly designed centrifugal fan and coil

Sound pressure level table (Standard static pressure) at 15Pa

Sound pressure Level	Fan Speed	dB(A)							
		Capacity	P15	P20	P25	P32	P40	P50	P63
		High	28	29	30	32	33	35	36
Mid	24	25	26	27	30	32	33		
Low	22	23	24	24	28	30	30		

Specifications

		PEFY-P15VMS1(L)-E *	PEFY-P20VMS1(L)-E	PEFY-P25VMS1(L)-E	PEFY-P32VMS1(L)-E	PEFY-P40VMS1(L)-E	PEFY-P50VMS1(L)-E	PEFY-P63VMS1(L)-E		
Power source		1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz								
Cooling capacity	*1 kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1		
	*1 BTU/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200		
Heating capacity	*1 kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0		
	*1 BTU/h	6,500	8,500	10,900	13,600	17,100	21,500	27,300		
Power consumption	*3 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]		
	*3 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	*3 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]		
	*3 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		Galvanized								
Dimension		mm			200 x 790 x 700			200 x 990 x 700		
H x W x D		In.			7-7/8 x 31-1/8 x 27-9/16			7-7/8 x 39 x 27-9/16		
Net weight		*3 kg(lbs.)			19(42) [18(40)]			20(45) [19(42)]		
Heat exchanger		Cross fin (Aluminium fin and copper tube)								
Fan	Type x Quantity	Sirocco fan x 2			Sirocco fan x 3			Sirocco fan x 4		
	Airflow rate (Lo-Mid-Hi)	m ³ /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	
		L/s	83-100-117	91-108-133	91-117-150	100-133-167	133-158-183	158-183-217	200-233-275	
	External static press	Pa	176-212-247	194-229-282	194-247-317	212-282-353	282-335-388	335-388-459	424-494-583	
Motor	type	DC motor								
output	kW	0.096								
Air filter		PP Honeycomb fabric (washable)								
Refrigerant pipe diameter	Gas	mm(in.)						ø12.7 (ø1/2) Brazed		
	Liquid	mm(in.)						ø6.35 (ø1/4) Brazed		
Field drain pipe diameter		mm(in.)								
		O.D. 32 (1-1/4)								
Sound pressure level (Lo-Mid-Hi) (measured in anechoic room)		dB<A>		22-24-28	23-25-29	24-26-30	24-27-32	28-30-33	30-32-35	30-33-36

★PEFY-P15VMS1(L)-E can only be connected to YHM and YJM outdoor units.

	PEFY-P15VMS1(L)-E
PURY-P YHM, YJM	○
PUHY-P YHM, YJM	○
PUMY-P VHMA / VHMB	○
PUMY-P YHMA / YHMB	○
PQRY-P YGM	×
PQHY-P YGM	×
PQRY-P YHM	○
PQHY-P YHM	○

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor : 27°CDB./19°CWB. (81°FDB. / 66°FWB.) Outdoor : 35°CDB. (95°FDB.)
Heating : Indoor : 20°CDB. (68°FDB.) Outdoor : 7°CDB. / 6°CWB. (45°FDB. / 43°FWB.)
Pipe length : 7.5m (24-9/16ft) Height difference : 0m (0ft)

*2 The external static pressure is set to 15 Pa at factory shipment.

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

INDOOR UNIT Ceiling Concealed Type

PEFY-P VMA(L)-E

Middle Static Pressure
35~150Pa

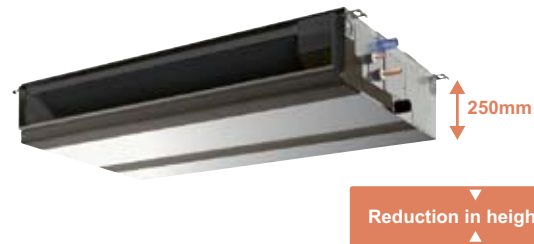
Slim Body
Height 250mm

With precise control of indoor temperature while operating with optimum energy usage, it offers a high-energy saving efficiency.



Compact Indoor Units

For all models, unit height are unified to 250mm. Compared to the previous model, the height size is reduced, allowing installation in tight spaces, such as ceiling cavities or drop-ceilings.



PEFY-P VMA(L)	20	25	32	40	50	63	71	80	100	125	140
Height mm	250										
Width mm	700		900		1,100		1,400		1,600		
Depth mm	732										

External static pressure

Five-stage external static pressure settings provide flexibility for duct extension, branching and air outlet configuration and are adjustable to meet different application conditions.

Setting ranges to a maximum of 150Pa.

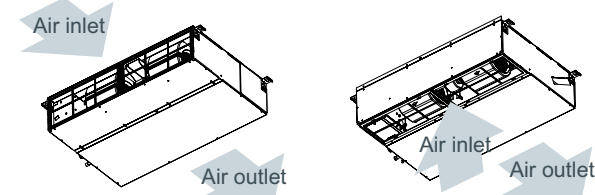
External static pressure setting

Series	20	25	32	40	50	63	71	80	100	125	140
PEFY-P VMA(L)	35/50/70/100/150Pa										



Air Inlet

- (1) Rear inlet (2) Bottom inlet



Drain Pump Option

The line-up consists of two types, models with or without a built-in drain pump allowing more freedom in piping layout design.



PEFY-P VMA-E Drain pump built-in



PEFY-P VMA(L)-E No Drain pump

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

Analogue input

Analogue input allows unit to control the fan speed setting in conjunction with damper condition.

IT terminal

IT terminal is available. For details, contact your local distributor.

Specifications

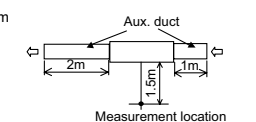
		PEFY-P20VMA(L)-E	PEFY-P25VMA(L)-E	PEFY-P32VMA(L)-E	PEFY-P40VMA(L)-E	PEFY-P50VMA(L)-E	
Power source		1-phase 220-230-240V 50 / 60Hz					
Cooling capacity (Nominal)	*1 kW	2.2	2.8	3.6	4.5	5.6	
	*1 BTU/h	7,500	9,600	12,300	15,400	19,100	
Heating capacity (Nominal)	*2 kW	2.5	3.2	4.0	5.0	6.3	
	*2 BTU/h	8,500	10,900	13,600	17,100	21,500	
Power consumption	Cooling *3 kW	0.06 [0.04]	0.06 [0.04]	0.07 [0.05]	0.09 [0.07]	0.11 [0.09]	
	Heating *3 kW	0.04	0.04	0.05	0.07	0.09	
Current	Cooling *3 A	0.53 [0.42]	0.53 [0.42]	0.55 [0.44]	0.64 [0.53]	0.74 [0.63]	
	Heating *3 A	0.42	0.42	0.44	0.53	0.63	
External finish		Galvanized steel plate					
Dimension H x W x D	mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	250 x 900 x 732	
	in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	
Net weight	kg(lbs)	23 (51) [22 (49)]	23 (51) [22 (49)]	23 (51) [22 (49)]	26 (58) [25 (56)]	26 (58) [25 (56)]	
Heat exchanger		Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity	Sirocco fan x 1					
	Airflow rate (Low-Mid-High)	m³/min	6.0 - 7.5 - 8.5	6.0 - 7.5 - 8.5	7.5 - 9.0 - 10.5	10.0 - 12.0 - 14.0	12.0 - 14.5 - 17.0
		L/s	100 - 125 - 142	100 - 125 - 142	125 - 150 - 175	167 - 200 - 233	200 - 242 - 283
	cfm	212 - 265 - 300	212 - 265 - 300	265 - 318 - 371	353 - 424 - 494	424 - 512 - 600	
External static pressure *4	Pa	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	
Motor	Type	DC motor					
	Output kW	0.085	0.085	0.085	0.085	0.085	
Air filter		PP honeycomb fabric.					
Refrigerant pipe diameter	Liquid (R410A) (R22,R407C) mm(in.)	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	
	Gas (R410A) (R22,R407C) mm(in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	
Field drain pipe diameter	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)	
Sound pressure level (measured in anechoic room)							
(Low-Mid-High) *3	*5 dB(A)	26-28-29	26-28-29	28-30-34	28-30-34	28-32-35	
	*6 dB(A)	23-25-26	23-25-26	23-26-29	23-27-30	25-29-32	

		PEFY-P63VMA(L)-E	PEFY-P71VMA(L)-E	PEFY-P80VMA(L)-E	PEFY-P100VMA(L)-E	PEFY-P125VMA(L)-E	PEFY-P140VMA(L)-E	
Power source		1-phase 220-230-240V 50 / 60Hz						
Cooling capacity (Nominal)	*1 kW	7.1	8.0	9.0	11.2	14.0	16.0	
	*1 BTU/h	24,200	27,300	30,700	38,200	47,800	54,600	
Heating capacity (Nominal)	*2 kW	8.0	9.0	10.0	12.5	16.0	18.0	
	*2 BTU/h	27,300	30,700	34,100	42,700	54,600	61,400	
Power consumption	Cooling *3 kW	0.12 [0.10]	0.14 [0.12]	0.14 [0.12]	0.24 [0.22]	0.34 [0.32]	0.36 [0.34]	
	Heating *3 kW	0.10	0.12	0.12	0.22	0.32	0.34	
Current	Cooling *3 A	1.01 [0.90]	1.15 [1.04]	1.15 [1.04]	1.47 [1.36]	2.05 [1.94]	2.21 [2.10]	
	Heating *3 A	0.90	1.04	1.04	1.36	1.94	2.10	
External finish		Galvanized steel plate						
Dimension H x W x D	mm	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,600 x 732	
	in.	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8	
Net weight	kg(lbs)	32 (71) [31(69)]	32 (71) [31 (69)]	32 (71) [31 (69)]	42 (93) [41 (91)]	42 (93) [41 (91)]	46 (102) [45 (10)]	
Heat exchanger		Cross fin (Aluminum fin and copper tube)						
Fan	Type x Quantity	Sirocco fan x 2						
	Airflow rate (Low-Mid-High)	m³/min	13.5 - 16.0 - 19.0	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	23.0 - 28.0 - 33.0	28.0 - 34.0 - 40.0	29.5 - 35.5 - 42.0
		L/s	225 - 267 - 317	242 - 300 - 350	242 - 300 - 350	383 - 467 - 550	467 - 567 - 667	492 - 592 - 700
	cfm	477 - 565 - 671	512 - 636 - 742	512 - 636 - 742	812 - 989 - 1,165	989 - 1,201 - 1,412	1,042 - 1,254 - 1,483	
External static pressure *4	Pa	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	<35> - 50 - <70> - <100> - <150>	
Motor	Type	DC motor						
	Output kW	0.121	0.121	0.121	0.244	0.244	0.244	
Air filter		PP honeycomb fabric.						
Refrigerant pipe diameter	Liquid (R410A) (R22,R407C) mm(in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	
	Gas (R410A) (R22,R407C) mm(in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	
Field drain pipe diameter	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)	O.D.32 (1-1/4)	
Sound pressure level (measured in anechoic room)								
(Low-Mid-High) *3	*5 dB(A)	29-32-36	30-34-38	30-34-38	32-37-41	35-40-44	36-41-45	
	*6 dB(A)	25-29-33	26-29-34	26-29-34	28-33-37	32-36-40	33-37-42	

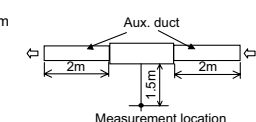
Notes:

- * [] is in case of PEFY-P VMA(L)-E
- *1 Nominal cooling conditions
Indoor: 27°CDB/19°CWB(81°FDB/66°FWB), Outdoor: 35°CDB(95°FDB)
Pipe length: 7.5m(24-9/16ft.), Level difference: 0m(0ft.)
- *2 Nominal heating conditions
Indoor: 20°CDB(68°FDB), Outdoor: 7°CDB(6°FWB)(45°FDB/43°FWB)
Pipe length: 7.5m(24-9/16ft.), Level difference: 0m(0ft.)
- *3 The values are measured at the rated external static pressure.
- *4 The rated external static pressure is shown without < >. The factory setting is the rated value.

- *5 Measured in anechoic room with a 1m air inlet duct and 2m air outlet duct attached to the unit and 1.5m below the unit.



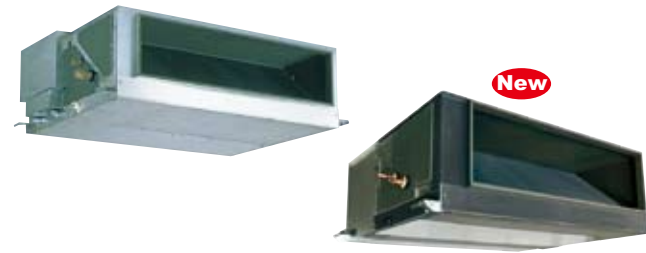
- *6 Measured in anechoic room with a 2m air inlet duct and 2m air outlet duct attached to the unit and 1.5m below the unit.



INDOOR UNIT Ceiling concealed type

PEFY-P VMH(S)-E

High Static Pressure



Increased design flexibility from sufficient external static pressure allows authentic duct air-conditioning with an elegant interior layout.



High static pressure of 200 Pa or higher

The additional external static pressure capacity provides flexibility for duct extension, branching and air outlet configuration.

PEFY-P VMH-E	P40	P50	P63	P71	P80	P100	P125	P140	P200	P250	
External static pressure (Pa)	220V	50/100/200								—	—
	230/240V	100/150/200								—	—
	380V	—								110/220	—
	400/415V	—								—	130/260

PEFY-P VMHS-E	P200	P250
External static pressure (Pa)	<50> - <100> - 150 - <200> - <250>*	—

*The rated external static pressure is shown without < >.
The factory setting is the rated value.

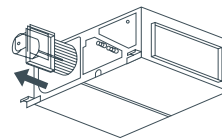
Reduced noise thanks to the use of newly designed centrifugal fan

Sound pressure level table (Standard static pressure 220V)

Sound pressure level	Capacity	Fan Speed	dB(A)								
			P40	P50	P63	P71	P80	P100	P125	P140	
High	Low	High	34	34	38	39	41	42	42	42	
		Low	27	27	32	32	35	34	34	34	

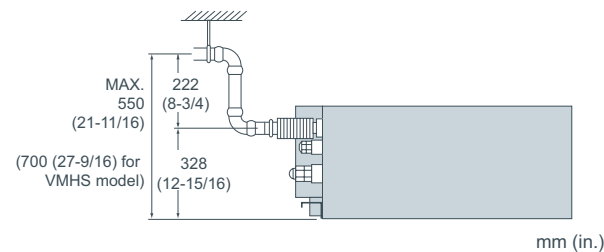
One-side maintenance

All maintenance to the unit, including fan inspection and fan motor removal, can be conducted from the inspection opening on one side. (VMH model only)



Drain pump (option) ensures up to 550mm (21-11/16in.) for VMH model / 700mm (27-9/16in.) for VMHS model of lift

The introduction of an upper drain pump allows the drain connection to be raised as high as 550mm(21-11/16in.) for VMH model/700mm (27-9/16in.) for VMHS model, allowing more freedom in piping layout design and reducing horizontal piping requirements.



Specifications

		PEFY-P40VMH-E	PEFY-P50VMH-E	PEFY-P63VMH-E	PEFY-P71VMH-E	PEFY-P80VMH-E	PEFY-P100VMH-E	PEFY-P125VMH-E	PEFY-P140VMH-E	
Power source		1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz								
Cooling capacity	*1 kW	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0	
	*1 BTU/h	15,400	19,100	24,200	27,300	30,700	38,200	47,800	54,600	
Heating capacity	*1 kW	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0	
	*1 BTU/h	17,100	21,500	27,300	30,700	34,100	42,700	54,600	61,400	
Power consumption	Cooling kW	0.19 / 0.23		0.24 / 0.30	0.26 / 0.33	0.32 / 0.40	0.48 / 0.58		0.48 / 0.59	
	Heating kW	0.19 / 0.23		0.24 / 0.30	0.26 / 0.33	0.32 / 0.40	0.48 / 0.58		0.48 / 0.59	
Current	Cooling A	0.88 / 1.06		1.12 / 1.38	1.20 / 1.51	1.47 / 1.83	2.34 / 2.66		2.35 / 2.70	
	Heating A	0.88 / 1.06		1.12 / 1.38	1.20 / 1.51	1.47 / 1.83	2.34 / 2.66		2.35 / 2.70	
External finish		Galvanized								
Dimension H x W x D	mm	380 x 750 x 900			380 x 1,000 x 900			380 x 1,200 x 900		
	in.	15 x 29-9/16 x 35-7/16			15 x 39-3/8 x 35-7/16			15 x 47-1/4 x 35-7/16		
Net weight	kg(lbs.)	44 (98)	45 (100)		50 (111)		70 (155)			
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)								
Fan	Type x Quantity	Sirocco fan x 1				Sirocco fan x 2				
	Airflow rate (Lo-Hi)	m³/min	10.0-14.0		13.5-19.0		15.5-22.0		18.0-25.0	
		L/s	167-233		225-317		300-417		442-633	
		cfm	353-494		477-671		547-777		636-883	
External static pressure*2	220V Pa	50 · 100 · 200								
	230,240V Pa	100 · 150 · 200								
Motor		1-phase induction motor								
Output	*3 kW	0.08		0.12	0.14	0.18	0.26			
Air filter (option)		Synthetic fiber unwoven cloth filter (long life)								
Refrigerant pipe diameter	Gas (Brazing) mm(in.)	ø12.7 (ø1/2)			ø15.88 (ø5/8)					
	Liquid (Brazing) mm(in.)	ø6.35 (ø1/4)			ø9.52 (ø3/8)					
Field drain pipe diameter	mm(in.)	O.D. 32 (1-1/4)								
Sound pressure level (Lo-Hi) *6	220V dB(A)	27-34		32-38	32-39	35-41	34-42			
	230,240V dB(A)	31-37		36-41	35-41	38-43	38-44			

		PEFY-P200VMH-E	PEFY-P250VMH-E	PEFY-P200VMHS-E	PEFY-P250VMHS-E	
Power source		3-phase 380-415V 50Hz / 3N ~ 380-415V 60Hz		1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz		
Cooling capacity	*1 kW	22.4	28.0	22.4	28.0	
	*1 BTU/h	76,400	95,500	76,400	95,500	
Heating capacity	*1 kW	25.0	31.5	25.0	31.5	
	*1 BTU/h	85,300	107,500	85,300	107,500	
Power consumption	Cooling kW	0.99 / 1.14		1.23 / 1.41		
	Heating kW	0.99 / 1.14		1.23 / 1.41		
Current	Cooling 380-415V A	1.62 / 1.86		2.00 / 2.30		
	220-230-240V A	—		3.47-3.32-3.18 *7		
Heating 380-415V A	380-415V A	1.62 / 1.86		2.00 / 2.30		
	220-230-240V A	—		3.47-3.32-3.18 *7		
External finish		Galvanized		Galvanized steel plate		
Dimension H x W x D	mm	470 x 1,250 x 1,120		470 x 1,250 x 1,120		
	in.	18-9/16 x 49-1/4 x 44-1/8		18-9/16 x 49-1/4 x 44-1/8		
Net weight	kg(lbs.)	100 (221)		97 (214)	100 (221)	
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)		Cross fin (Aluminum plate fin and copper tube)		
Fan	Type x Quantity	Sirocco fan x 2		Sirocco fan x 2		
	Airflow rate	m³/min	58.0		72.0	—
		L/s	967		1200	—
		cfm	2048		2543	—
Lo-Mid-Hi	m³/min	—		50.0-61.0-72.0	58.0-71.0-84.0	
	L/s	—		833-1017-1200	967-1183-1400	
	cfm	—		1766-2154-2542	2048-2507-2966	
External static pressure	380V Pa	110 · 220 *4		—		
	400,415V Pa	130 · 260 *4		—		
	Pa	—		<50>-<100>-150-<200>-<250> *8		
mmH ₂ O	—		<5.1>-<10.2>-15.3-<20.4>-<25.5> *8			
Motor		3-phase induction motor		DC motor		
Output	kW	0.76 *5		1.08 *5	0.87	
Air filter(option)		Synthetic fiber unwoven cloth filter (long life)		Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.		
Refrigerant pipe diameter	Gas (Brazing) mm(in.)	ø19.05 (ø3/4)		ø19.05 (ø3/4)		
	Liquid (Brazing) mm(in.)	ø22.2 (ø7/8)		ø22.2 (ø7/8)		
Field drain pipe diameter	mm(in.)	ø9.52 (ø3/8)		ø9.52 (ø3/8)		
Sound pressure level	380V dB(A)	42 (110Pa) / 45 (220Pa) *6		50 (110Pa) / 52 (220Pa) *6		
	400,415V dB(A)	44 (130Pa) / 47 (260Pa) *6		52 (130Pa) / 54 (260Pa) *6		
	Lo-Mid-Hi dB(A)	—		36-39-43 *9		

Notes:

- *1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
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 external static pressure is set to 100Pa (at 220V) /150Pa (at 230, 240V) at factory shipment.
- *3 The value are that at 240V.
- *4 The external static pressure is set to 220Pa (at 380V) /260Pa (at 400, 415V) at factory shipment.
- *5 The value are that at 415V.

- *6 It is measured in anechoic room.
- *7 The values are measured at the rated external static pressure.
- *8 The rated external static pressure is shown without < >.
The factory setting is the rated value.
- *9 It is measured at the rated external static pressure in anechoic room.

INDOOR UNIT Fresh Air Intake Type

PEFY-P VMH-E-F

Fresh Air Intake

Fresh Air can be taken in with temperature control.
Ideal for Offices, Stores and Restaurants.

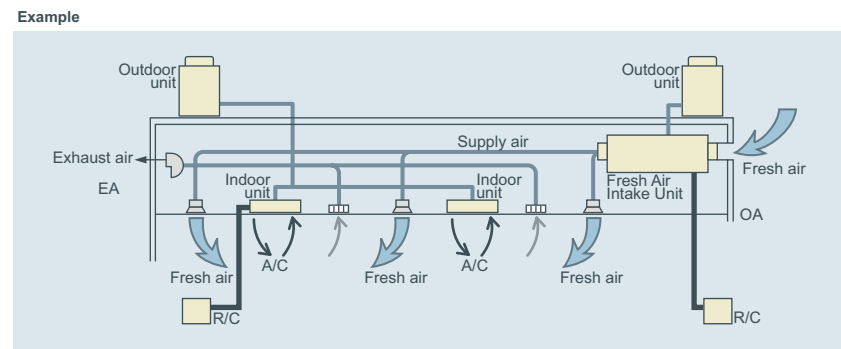


The Fresh Air intake indoor unit can be installed in any place.

The Fresh Air intake indoor unit can take fresh outdoor air into any building in any place at any time.

Office, Lobby, Workshop, Rest room, Nursing home, Smoking corner, Kitchen in restaurant

* Limits of capacity connectable to outdoor unit
Max. 110% of outdoor unit capacity, excepting heating at outdoor temperature of less than -5°C(23°F) (100%).



< Note >
Fan remains in operation during Thermo-OFF. Using this model with other type of indoor unit is recommended to prevent cold draft which is caused due to intaken fresh air.

Specifications

		PEFY-P80VMH-E-F		PEFY-P140VMH-E-F	
Power source		1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz			
Cooling capacity	*1	kW	9.0	16.0	
	*1	BTU/h	30,700	54,600	
Heating capacity	*1	kW	8.5	15.1	
	*1	BTU/h	29,000	51,500	
Power consumption	Cooling	kW	0.16 / 0.21	0.29 / 0.33	
	Heating	kW	0.16 / 0.21	0.29 / 0.33	
Current	Cooling	A	0.67 / 0.91	1.24 / 1.48	
	Heating	A	0.67 / 0.91	1.24 / 1.48	
External finish		Galvanized			
Dimension H x W x D		mm(in.)	380 x 1000 x 900 (15 x 39-3/8 x 35-7/16)	380 x 1200 x 900 (15 x 47-1/4 x 35-7/16)	
Net weight		kg(lbs.)	50 (111)	70 (155)	
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)			
Fan	Type x Quantity		Sirocco fan x 1		Sirocco fan x 2
	Airflow rate	m³/min	9.0	18.0	
		L/s	150	300	
		cfm	18	636	
	External static pressure (Lo-Mid-Hi)	208V	Pa	35 - 85 - 170	35 - 85 - 170
220V		Pa	40 - 115 - 190	50 - 115 - 190	
230V		Pa	50 - 130 - 210	60 - 130 - 220	
240V		Pa	80 - 170 - 220	100 - 170 - 240	
Motor	Type	1-phase induction motor			
	Output	kW	0.09 (at 220V)	0.14 (at 220V)	
Air filter (option)		Synthetic fiber unwoven cloth filter (long life)			
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø15.88 (ø5/8)		
	Liquid (Flare)	mm(in.)	ø9.52 (ø3/8)		
Field drain pipe diameter		mm(in.)	O.D.32 (1-1/4)		
Sound pressure level (Lo-Mid-Hi)	208, 220V	dB(A)	27 - 38 - 43	28 - 38 - 43	
	230, 240V	dB(A)	33 - 43 - 45	34 - 43 - 45	

		PEFY-P200VMH-E-F		PEFY-P250 VMH-E-F	
Power source		3-phase 380-415V 50Hz / 3N~ 380-415V 60Hz			
Cooling capacity	kW	22.4	28.0		
	BTU/h	76,400	95,500		
Heating capacity	kW	21.2	26.5		
	BTU/h	72,300	90,400		
Power consumption	Cooling	kW	0.34 / 0.42	0.39 / 0.50	
	Heating	kW	0.34 / 0.42	0.39 / 0.50	
Current	Cooling	A	0.58 / 0.74	0.68 / 0.86	
	Heating	A	0.58 / 0.74	0.68 / 0.86	
External finish		Galvanized			
Dimension H x W x D		mm(in.)	470 x 1250 x 1120 (18-9/16 x 49-1/4 x 44-1/8)		
Net weight		kg(lbs.)	100 (221)		
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)			
Fan	Type x Quantity		Sirocco fan x 2		
	Airflow rate	m³/min	28	35	
		L/s	467	583	
		cfm	989	1236	
	External static pressure	380V	Pa	140 / 200	110 / 190
400V		Pa	150 / 210	120 / 200	
415V		Pa	160 / 220	130 / 210	
Motor	Type	3-phase induction motor			
	Output	kW	0.20	0.23	
Air filter (option)		Synthetic fiber unwoven cloth filter (long life type)			
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø19.05 (ø3/4)	ø22.2 (ø7/8)	
	Liquid (Flare)	mm(in.)	ø9.52 (ø3/8)		
Field drain pipe diameter		mm(in.)	O.D.32 (1-1/4)		
Sound pressure level	380V	dB(A)	39 / 42	40 / 44	
	400V	dB(A)	40 / 43	40 / 45	
	415V	dB(A)	40 / 44	41 / 46	

Notes:

- The cooling and heating capacities are the maximum capacities that were obtained by operating in the above air conditions and with a refrigerant pipe of about 7.5m.
- The actual capacity characteristics vary with the combination of indoor and outdoor units. See the technical information.
- The operating noise is the data that was obtained by measuring it 1.5m from the bottom of the unit in an anechoic room. (Noise meter A-scale value)
- The figure of Electrical characteristic indicates at 240V 50Hz/230V60Hz (PEFY-P80, 140VMH-E-F type), at 220Pa setting at 415V (PEFY-P200, 250VMH-E-F type).
- When the 100% fresh air indoor units are connected, the maximum connectable outdoor units to 1 outdoor unit are as follows

Heat pump models	Cooling only
110%(100% in case of heating below-5°C(23°F))	110%

- Operational temp range is (Cooling : from 21°C(70°F)DB/15.5°C(60°F)WB to 43°C(109°F)DB/35°C(95°F)WB)
(Heating : from -10°C(14°F)DB to 20°C(68°F)DB)

- Thermo off(Fan) operation automatically starts either when temperature is lower than 21°C(70°F)DB in cooling mode or when the temperature exceeds 20°C(68°F)DB in heating mode.
- As the room temp in sensed by the thermo in the remote controller or the one in the room, be sure to use either remote controller or room thermo.
- Autochangeover function or Dry mode is NOT available. Fan mode operation during the thermo off in Cooling/Heating mode.
- In any case, the air flow rate should be kept lower than 110% of the above chart. Please see "Fan curves" for the details.
- When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
- Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation.
Please be careful when positioning indoor unit air outlet grilles, to take the necessary precautions for cold air, and also insulate rooms for dew condensation prevention as required.
- Air filter must be installed in the air intake side. The filter should be attached where easy maintenance is possible in case of usage of field supply filters.
- Long life cannot be used with Hi-efficiency filter together (PEFY-P80 - 140VMH-E-F type).

INDOOR UNIT

Ceiling suspended type

PCFY-P VKM-E



Designed for ultra-quiet operation and easy maintenance, provides exceptionally comfortable air-conditioning.



Extra slim, extra stylish

Sleek and slim with stylishly curved lines, the PCFY series blends right into any interior. It also features a single air outlet which allows the auto vane to act as a shutter when the unit is turned off.

Auto vane distributes air evenly

The auto vane swings up and down automatically to distribute air more evenly to every corner of the room.

Long life filter as standard

Long life filter is equipped as standard enabling up to 2,500 hours of operation (office use) without maintenance.

Keeps airflow at optimum level according to ceiling height

The most suitable airflow can be selected for ceilings up to 4.2m high, enhancing air-conditioning efficiency and comfort. (P100/P125)

	Standard	High ceiling
Ceiling height	3.0(9-13/16)	4.2(13-3/4)

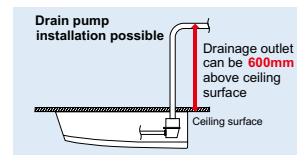
m (ft)

Greatly simplified installation

The direct suspension system eliminates the task of removing the attachment fixture from the main unit, greatly shortening installation time.

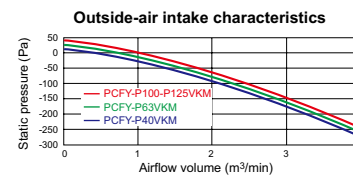
Drain pump option available with all models

The pumping height of the optional drain pump has been increased from 400 mm to 600 mm, expanding flexibility in choosing unit location during installation work.



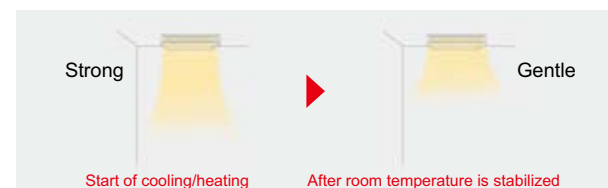
Outside-air intake

Units are equipped with a knock-out hole that enables the induction of fresh outside-air.



Equipped with automatic air-speed adjustment

In addition to the conventional 4-speed setting, units are now equipped with an automatic air-speed adjustment mode. This setting automatically adjusts the air-speed to conditions that match the room environment. At the start of heating/cooling operation, the airflow is set to high-speed to quickly heat/cool the room. When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable comfortable heating/cooling operation.



Specifications

		PCFY-P40VKM-E	PCFY-P63VKM-E	PCFY-P100VKM-E	PCFY-P125VKM-E	
Power source		1-phase 220-240V 50Hz / 1-phase 220V 60Hz				
Cooling capacity	*1 kW	4.5	7.1	11.2	14.0	
	*1 BTU/h	15,400	24,200	38,200	47,800	
Heating capacity	*1 kW	5.0	8.0	12.5	16.0	
	*1 BTU/h	17,100	27,300	42,700	54,600	
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 No.)		6.4Y 8.9/ 0.4				
Dimension H x W x D	mm	230 x 960 x 680	230 x 1,280 x 680	230 x 1,600 x 680		
	in.	9-1/16 x 37-13/16 x 26-3/4	9-1/16 x 50-3/8 x 26-3/4	9-1/16 x 63 x 26-3/4		
Net weight	kg(lbs.)	24(53)	32 (71)	36 (79)	38 (84)	
Heat exchanger		Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 4		
	Airflow rate *2 (Lo-Mid2-Mid1-Hi)	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
		cfm	353-388-424-459	494-530-565-636	742-847-918-989	742-847-953-1,095
External static pressure	Pa	0				
Motor	Type	DC motor				
	Output kW	0.090	0.095	0.160		
Air filter		PP Honeycomb (long life)				
Refrigerant pipe diameter	Gas (Flare) mm(in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)	ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)		
	Liquid (Flare) mm(in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)			
Field drain pipe diameter		mm(in.) O.D. 26 (1)				
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3	dB(A)	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44	

Notes:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB
- *2 Airflow rate/Sound pressure level are shown in (low-middle 2-middle 1-high).
- *3 It is measured in anechoic room.

INDOOR UNIT Wall mounted type

PKFY-P VBM-E PKFY-P VHM-E PKFY-P VKM-E



Elegant Design and Compact Dimensions Ideal for Offices, Stores and Residential Uses.



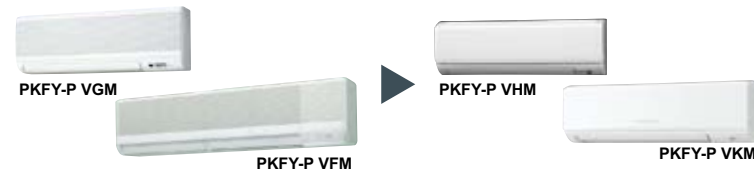
Capacity	P15	P20	P25	P32	P40	P50	P63	P100
VBM	●	●	●					
VHM				●	●	●		
VKM							●	●

4-way piping provides more flexibility in selecting installation sites

All piping including drainage can be connected from the rear, right, base, and left of the unit, providing much greater flexibility in piping and selecting installation site.

Flat panel & Pure white finish

All models have changed from the grill design, adopting the flat panel layout. Pursuing a design that harmonizes with virtually any interior, the unit color has been changed from white to pure white.



Built-in signal receiver

PKFY-P VBM features

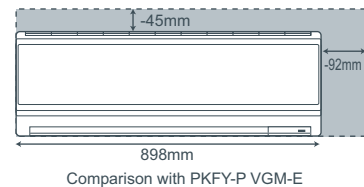
Compact profile

Quiet operation

PKFY-P VHM features

Compact size of 898mm

Width size reduced to match small size buildings and offices.



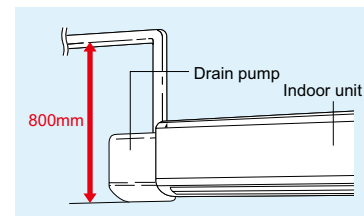
Comparison with PKFY-P VGM-E

Light unit

Approx. 3kg reduced from conventional model (P32-50). Easier installation.

Drain pump (option)

The optional drain pump allows the drain connection to be raised as high as 800mm, allowing more freedom in piping layout design.



Specifications

		PKFY-P15VBM-E	PKFY-P20VBM-E	PKFY-P25VBM-E	PKFY-P32VHM-E	PKFY-P40VHM-E	PKFY-P50VHM-E
Power source		1-phase 220-240V 50Hz / 1-phase 220V 60Hz					
Cooling capacity	*1 kW	1.7	2.2	2.8	3.6	4.5	5.6
	*1 BTU/h	5,800	7,500	9,600	12,300	15,400	19,100
Heating capacity	*1 kW	1.9	2.5	3.2	4.0	5.0	6.3
	*1 BTU/h	6,500	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling *4 kW	0.04				0.04	
	Heating kW	0.04				0.03	
Current	Cooling *4 A	0.20				0.40	
	Heating A	0.20				0.30	
External finish(Munsell No.)		Plastic (1.0Y 9.2/0.2)				Plastic (1.0Y 9.2/0.2)	
Dimension H x W x D		295 x 815 x 225 (11-5/8 x 32-1/8 x 8-7/8)			295 x 898 x 249(11-5/8 x 35-3/8 x 9-13/16)		
Net weight		10 (23)			13(29)		
Heat exchanger		Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity	Line flow fan x 1					
	Airflow rate *2	m ³ /min	4.9-5.0-5.2-5.3	4.9-5.2-5.6-5.9	9-10-11	9-10.5-11.5	9-10.5-12
		L/s	82-83-87-88	82-87-93-98	150-167-183	150-175-192	150-175-200
	(Lo-Mid2-Mid1-Hi)	cfm	173-177-184-187	173-184-198-208	318-353-388	318-371-406	318-371-424
External static pressure	Pa	0					
Motor	Type	1-phase induction motor			DC motor		
	Output kW	0.017			0.030		
Air filter		PP Honeycomb					
Refrigerant pipe diameter	Gas (Flare) mm(in.)	ø12.7 (ø1/2)				ø12.7 (ø1/2) / ø15.88 (ø5/8) (Compatible)	
	Liquid (Flare) mm(in.)	ø6.35 (ø1/4)				ø6.35 (ø1/4) / ø9.52 (ø3/8) (Compatible)	
Field drain pipe diameter		mm(in.) I.D.16 (5/8)					
Sound pressure level (Lo-Mid2-Mid1-Hi) *2 *3		29-31-32-33	29-31-34-36	34-37-41	34-38-41	34-39-43	

Notes:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
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/Sound pressure level are in (low-middle2-middle1-high).
- *3 It is measured in anechoic room.
- *4 Electrical characteristic of cooling are included optional drain-pump.

		PKFY-P63VKM-E	PKFY-P100VKM-E
Power source		1-phase 220-230-240V 50Hz / 1-phase 220V 60Hz	
Cooling capacity	*1 kW	7.1	11.2
	*1 BTU/h	24,200	38,200
Heating capacity	*1 kW	8.0	12.5
	*1 BTU/h	27,300	42,600
Power consumption	Cooling *4 kW	0.05	0.08
	Heating kW	0.04	0.07
Current	Cooling *4 A	0.37	0.58
	Heating A	0.30	0.51
External finish(Munsell No.)		Plastic (1.0Y 9.2/0.2)	
Dimension H x W x D		365 x 1,170 x 295 (14-3/8 x 46-1/16 x 11-5/8)	
Net weight		21 (46)	
Heat exchanger		Cross fin (Aluminum fin and copper tube)	
Fan	Type x Quantity	Line flow fan x 1	
	Airflow rate *2	m ³ /min	16-20
		L/s	267-333
	(Lo-Hi)	cfm	565-706
External static pressure	Pa	0	
Motor	Type	DC motor	
	Output kW	0.056	
Air filter		PP Honeycomb	
Refrigerant pipe diameter	Gas (Flare) mm(in.)	ø15.88 (ø5/8)	ø15.88 (ø5/8) / ø19.05 (ø3/4) (Compatible)
	Liquid (Flare) mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter		mm(in.) I.D. 16(5/8)	
Sound pressure level (Lo-Hi) *2 *3		39-45	41-49

Notes:

- *1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
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/Sound pressure level are in (low-high).
- *3 It is measured in anechoic room.
- *4 Electrical characteristic of cooling are included optional drain-pump.

INDOOR UNIT

Floor standing exposed

PFFY-P VKM-E

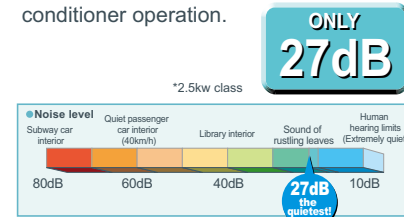


For living rooms, bed rooms, or offices where a sophisticated design is required. The latest Mitsubishi innovation – floor-standing air-conditioner sophisticated in design, rich in function.



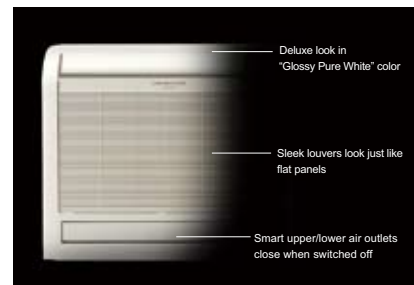
Quiet operation

Mitsubishi Electric air conditioners have always been some of the quietest models available in the market. Our new floor-standing models are no exception. It can create a silent and comfortable space where the occupants would not even recognize the existence of air conditioner operation.



Sophisticated Design

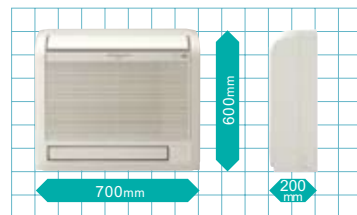
From Mitsubishi Electric, an innovative new floor-standing air-conditioner. Our pleasing mix of streamlined form and diversified function.



Engineered to keep room walls free, furnish comfy cooling in summer, toasty heating in winter. The "Glossy Pure White" colour ensures a deluxe look, the perfect match for any room. Both upper and lower air outlets remain closed when switched OFF, in a smart and striking image. A superb new air-conditioner from Mitsubishi, providing a handsome fit for your own distinctive interior.

Slim but Mighty

The unit body is slim and trim, the essence in compact. An ideal size for living rooms, bedrooms, and more. The removable and washable front panel makes cleaning a snap.



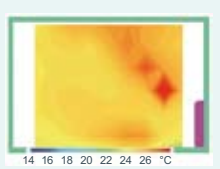
Easy and regular cleaning allows your air-conditioner stay beautiful while keeping its energy-efficient operation always possible.

Optimum Air Distribution

Comfy room temperatures are realized by the optimum, powerful and efficient air distribution through upper and lower air outlets. The upper vane angle is remote controllable, with 5 air flow direction levels (+Swing and Auto modes) and 4 wind power levels (+Auto mode). By setting the vane angle almost vertical, annoying direct wind can be avoided for your better comfort.



The air from both upper and lower air outlets is optimally controlled and distributed evenly to every corner of the room. In heating mode, the warm air is smartly controlled to stay at the floor level: Your feet do not feel chilled any more!



► Specifications

		PFFY-P20VKM-E	PFFY-P25VKM-E	PFFY-P32VKM-E	PFFY-P40VKM-E
Power source		1-phase 220-240V 50Hz			
Cooling capacity	*1 kW	2.2	2.8	3.6	4.5
	*1 BTU/h	7,500	9,600	12,300	15,400
Heating capacity	*1 kW	2.5	3.2	4.0	5.0
	*1 BTU/h	8,500	10,900	13,600	17,100
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)			
Dimension		600 x 700 x 200			
H x W x D		in. 23-5/8 x 27-9/16 x 7-7/8			
Net weight		kg(lbs.) 15 (34)			
Heat exchanger		Cross fin (Aluminium plate fin and copper tube)			
Fan	Type x Quantity	Line flow fan x 2			
	Airflow rate (Lo-Mid-Hi-SHi) 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
	External static pressure Pa	0			
Motor	Type	DC motor			
	Output kW	0.03 x 2			
Air filter		PP honeycomb fabric (Catechin Filter)			
Refrigerant pipe diameter	Gas(Flare) mm(in.)	ø12.7 (ø1/2)			
	Liquid(Flare) mm(in.)	ø6.35 (ø1/4)			
Field drain pipe diameter		I.D.16 (5/8)			
Sound pressure level (Lo-Mid-Hi-SHi)	*2 dB(A)	27-31-34-37	28-32-35-38	28-32-35-38	35-38-42-44

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
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/Sound pressure level are in (low-middle-high-shigh).

*3 It is measured in anechoic room.

INDOOR UNIT

Floor standing exposed

PFFY-P VLEM-E



Floor mounted lowboy type effective in perimeter zone.



- Standardized design with mild lines.
- Supports various types of spaces from office buildings and shop buildings to hospitals.
- Water vapor permeable film humidifier can be installed.
- Remote controller can be installed onto the main unit.

Compact unit for easy air conditioning in perimeter zone.

The compact body of 220mm(8-11/16in.) in depth can be easily installed in the perimeter zone for effective air conditioning in the perimeter zone.

Electronics dry function dehumidify refreshingly.

Optimum dehumidification depending on indoor temperature to prevent over-cooling. Refreshing dehumidification can be attained.

Specifications

		PFFY-P20VLEM-E	PFFY-P25VLEM-E	PFFY-P32VLEM-E	PFFY-P40VLEM-E	PFFY-P50VLEM-E	PFFY-P63VLEM-E
Power source		1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz					
Cooling capacity	*1 kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1 BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1 kW	2.5	3.2	4.0	5.0	6.3	8.0
	*1 BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
	Heating kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
Current	Cooling A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
	Heating A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
External finish(Munsell No.)		Acrylic paint (5Y 8/1)					
Dimension H x W x D	mm	630 x 1,050 x 220		630 x 1,170 x 220		630 x 1,410 x 220	
	in.	24-13/16 x 41-3/8 x 8-11/16		24-13/16 x 46-1/8 x 8-11/16		24-13/16 x 55-9/16 x 8-11/16	
Net weight		23 (51)		25 (56)	26 (58)	30 (67)	32 (71)
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quantity	Sirocco fan x 1			Sirocco fan x 2		
	Airflow rate (Lo-Hi)	*2 m ³ /min	5.5-6.5	7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
		L/s	92-108	117-150	150-183	200-233	200-258
	External static pressure	*2 cfm	194-230	247-318	318-388	424-494	424-547
		Pa	0				
Motor	Type	1-phase induction motor					
	Output	0.015		0.018	0.030	0.035	0.050
Air filter		PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (Flare)	mm(in.) ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare)	mm(in.) ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter		mm(in.) I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Hi)		*2 *3 *4	34-40		35-40	38-43	40-46

Notes:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
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 rate/Sound pressure level are in (Low-High)
- *3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz
· 2dB(A) lower at AC220V/50Hz
· 3dB(A) lower at 1.5m x 1.5m point
- *4 It is measured in anechoic room.

INDOOR UNIT

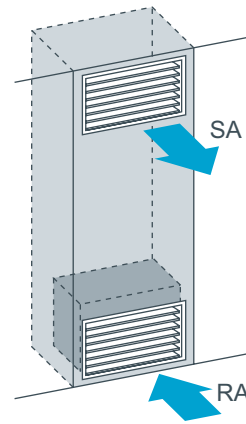
Floor mounted concealed type

PFFY-P VLRM-E

PFFY-P VLRMM-E



Neatly installed with pericover concealed.
Easy installation in perimeter zone.



installation image
(PFFY-P VLRMM-E)

Compact unit for easy air conditioning in perimeter zone.

The body is concealed in the pericover to pursue harmony with the interior.
The compact body of 220mm(8-11/16in.) in depth can be easily installed in the perimeter zone.

Electronics dry function dehumidify refreshingly to prevent over-cooling.

Optimum dehumidification depending on indoor temperature to prevent over-cooling.
Refreshing dehumidification can be attained.

Maximum external static pressure 60Pa (VLRMM model)

The additional external static pressure capacity provides flexibility for duct extension, branching, and air outlet configuration.

Specifications

		PFFY-P20VLRM-E	PFFY-P25VLRM-E	PFFY-P32VLRM-E	PFFY-P40VLRM-E	PFFY-P50VLRM-E	PFFY-P63VLRM-E
Power source		1-phase 220-240V 50Hz / 1-phase 208-230V 60Hz					
Cooling capacity	*1 kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1 BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1 kW	2.5	3.2	4.0	5.0	6.3	8.0
	*1 BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
	Heating kW	0.04 / 0.06		0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
Current	Cooling A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
	Heating A	0.19 / 0.25		0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47
External finish(Munsell No.)		Galvanized steel plate					
Dimension H x W x D	mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
	in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/16	
Net weight		kg(lbs.) 18.5 (41)		20 (45)	21 (47)	25 (56)	27 (60)
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quaity	Sirocco fan x 1			Sirocco fan x 2		
	Airflow rate (Lo-Hi)	*2 m³/min	5.5-6.5	7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
		L/s	92-108	117-150	150-183	200-233	200-258
		cfm	194-230	247-318	318-388	424-494	424-547
External static pressure	Pa	0					
Motor	Type	1-phase induction motor					
	Output	kW 0.015		0.018	0.030	0.035	0.050
Air filter		PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (Flare) mm(in.)	ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare) mm(in.)	ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter		mm(in.) I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Hi) *2 *3 *4		dB(A) 34-40		35-40	38-43	40-46	

Notes:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
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 rate/Sound pressure level are in (Low-High)
- *3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz
· 2dB(A) lower at AC220V/50Hz
· 3dB(A) lower at 1.5m x 1.5m point
- *4 It is measured in anechoic room.

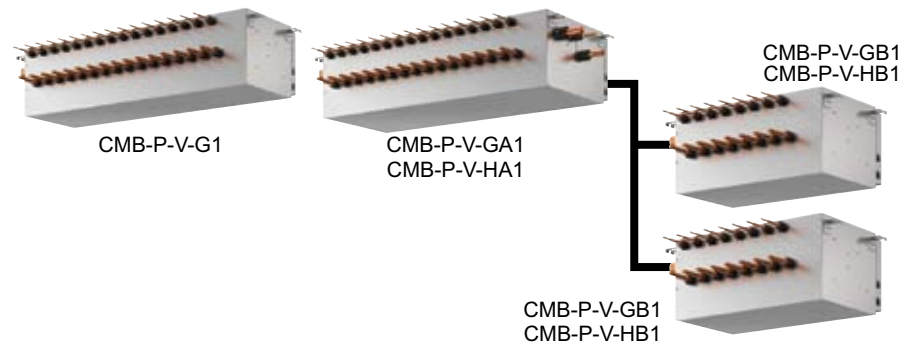
		PFFY-P20VLRMM-E	PFFY-P25VLRMM-E	PFFY-P32VLRMM-E	PFFY-P40VLRMM-E	PFFY-P50VLRMM-E	PFFY-P63VLRMM-E
Power source		1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz					
Cooling capacity	*1 kW	2.2	2.8	3.6	4.5	5.6	7.1
	*1 BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity	*1 kW	2.5	3.2	4.0	5.0	6.3	8.0
	*1 BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling kW	0.04		0.04	0.05	0.05	0.07
	Heating kW	0.04		0.04	0.05	0.05	0.07
Current	Cooling A	0.34		0.38	0.43	0.48	0.59
	Heating A	0.34		0.38	0.43	0.48	0.59
External finish(Munsell No.)		Galvanized steel plate					
Dimension H x W x D	mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
	in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/16	
Net weight		kg(lbs.) 18.5 (41)		20 (45)	21 (47)	25 (56)	27 (60)
Heat exchanger		Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quaity	Sirocco fan x 1			Sirocco fan x 2		
	Airflow rate (Lo-Mid-Hi)	m³/min	4.5-5.5-6.5	6.5-7.5-9.0	8.0-9.5-11.0	10.0-12.0-14.0	11.0-13.0-15.5
		L/s	75-92-108	108-125-150	133-158-183	167-200-233	183-217-258
		cfm	159-194-230	230-265-318	282-335-388	353-424-494	388-459-547
External static pressure *2	Pa	20/40/60					
Motor	Type	DC motor					
	Output	kW 0.096					
Air filter		PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas mm(in.)	ø12.7 (ø1/2) Brazed					ø15.88 (ø5/8) Brazed
	Liquid mm(in.)	ø6.35 (ø1/4) Brazed					ø9.52 (ø3/8) Brazed
Field drain pipe diameter		mm(in.) I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Mid-Hi)	20Pa	dB(A) 31-36-40		27-32-37	30-36-40	32-37-41	35-40-44
	40Pa	dB(A) 34-39-42		30-35-41	32-38-42	35-40-44	36-42-47
	*3 60Pa	dB(A) 35-40-43		32-37-42	35-39-44	36-41-45	38-43-48

Notes:

- *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
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
pipe length : 7.5m(24-9/16ft) Height difference : 0m(0ft)
- *2 The external static pressure is set to 20Pa at factory shipment.
- *3 The sound pressure level in operation is measured at 1m apart from the front side and the bottom side of the unit in anechoic room. (Noise meter A-scale value) Connect the duct of 1m in length to the air outlet.

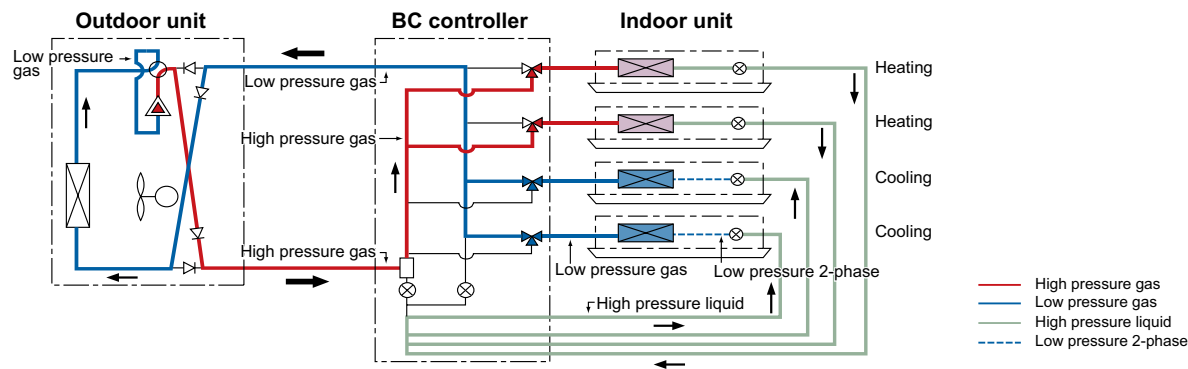
BC CONTROLLER

CMB-P-V-G1 CMB-P-V-GA1 CMB-P-V-HA1 CMB-P-V-GB1 CMB-P-V-HB1



BC CONTROLLER

In many ways, the BC Controller is the technological heart of the CITY MULTI R2/WR2. It works in unison with the outdoor unit to provide simultaneous cooling and heating, something no other two-pipe system can do. The BC Controller is connected to the outdoor unit by two pipes and to each indoor unit by a series of two refrigerant pipes, depending on the indoor unit count. The BC Controller is required for all CITY MULTI R2-Series installations. It comes in 4, 5, 6, 8, 10, 13, and 16-branch options. The BC Controller you select depends on how many indoor units will be operated from each outdoor unit and your total capacity requirements.



Specifications

Model name	CMB-P104V-G1	CMB-P105V-G1	CMB-P106V-G1	CMB-P108V-G1	CMB-P1010V-G1	CMB-P1013V-G1	CMB-P1016V-G1			
Number of branch	4	5	6	8	10	13	16			
Power source	1-phase 220/230/240V 50Hz/60Hz									
Power input	kW	50Hz	Cooling	0.067/0.076/0.085	0.082/0.093/0.104	0.097/0.110/0.123	0.127/0.144/0.161	0.156/0.177/0.198	0.201/0.228/0.255	0.246/0.279/0.312
		heating	0.030/0.034/0.038	0.038/0.043/0.048	0.045/0.051/0.057	0.060/0.068/0.076	0.075/0.085/0.095	0.097/0.110/0.123	0.119/0.135/0.151	
	60Hz	Cooling	0.054/0.061/0.067	0.066/0.074/0.082	0.078/0.088/0.097	0.102/0.115/0.127	0.126/0.141/0.156	0.162/0.182/0.201	0.198/0.222/0.246	
		heating	0.024/0.027/0.030	0.030/0.034/0.038	0.036/0.041/0.045	0.048/0.054/0.060	0.060/0.068/0.075	0.078/0.088/0.097	0.096/0.108/0.119	
Current	A	50Hz	Cooling	0.31/0.34/0.36	0.38/0.41/0.44	0.45/0.48/0.52	0.58/0.63/0.68	0.71/0.77/0.83	0.92/1.00/1.07	1.12/1.22/1.30
		heating	0.14/0.15/0.16	0.18/0.19/0.20	0.21/0.23/0.24	0.28/0.30/0.32	0.35/0.37/0.40	0.45/0.48/0.52	0.55/0.59/0.63	
	60Hz	Cooling	0.25/0.27/0.28	0.30/0.33/0.35	0.36/0.39/0.41	0.47/0.50/0.53	0.58/0.62/0.65	0.74/0.80/0.84	0.90/0.97/1.03	
		heating	0.11/0.12/0.13	0.14/0.15/0.16	0.17/0.18/0.19	0.22/0.24/0.25	0.28/0.30/0.32	0.36/0.39/0.41	0.44/0.47/0.50	
External finish	Galvanized steel plate (Lower part drain pan painting N1.5)									
Indoor unit capacity connectable to 1 branch	Model P80 or smaller (*Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)									
Connectable Outdoor unit ★	Refer to the combination chart of BC controller R2/WR2 series									
Height	mm	284					284			
Width	mm	648					1098			
Depth	mm	432					432			
Refrigerant piping diameter	To outdoor unit	Connectable outdoor unit capacity								
		P200	P250, P300		P350					
	To indoor unit	High pressure pipe	ø15.88 (ø5/8) Brazed		ø19.05 (ø3/4) Brazed		ø19.05 (ø3/4) Brazed			
		Low pressure pipe	ø19.05 (ø3/4) Brazed		ø22.2 (ø7/8) Brazed		ø28.58 (ø1-1/8) Brazed			
To another BC controller	Liquid pipe	Indoor unit Model 50 or smaller: ø6.35 brazed, Over 50: ø9.52 brazed (ø12.7 with optional joint pipe used.)								
	Gas pipe	Indoor unit Model 50 or smaller: ø12.7 brazed, Over 50: ø15.88 brazed (ø19.05 with optional joint pipe used.)								
Drain pipe	O.D. 32mm									
Net weight	kg	24	27	28	33	38	45	52		
Accessories	*Drain connection pipe (with flexible hose and insulation) *Reducer									

Indoor unit

Specifications

Model name	CMB-P108V-GA1	CMB-P1010V-GA1	CMB-P1013V-GA1	CMB-P1016V-GA1	CMB-P1016V-HA1		
Number of branch	8	10	13	16			
Power source	1-phase 220/230/240V 50Hz/60Hz						
Power input	kW	50Hz	Cooling	0.127/0.144/0.161	0.156/0.177/0.198	0.201/0.228/0.255	0.246/0.279/0.312
		heating	0.060/0.068/0.076	0.075/0.085/0.095	0.097/0.110/0.123	0.119/0.135/0.151	
	60Hz	Cooling	0.102/0.115/0.127	0.126/0.141/0.156	0.162/0.182/0.201	0.198/0.222/0.246	
		heating	0.048/0.054/0.060	0.060/0.068/0.075	0.078/0.088/0.097	0.096/0.108/0.119	
Current	A	50Hz	Cooling	0.58/0.63/0.68	0.71/0.77/0.83	0.92/1.00/1.07	1.12/1.22/1.30
		heating	0.28/0.30/0.32	0.35/0.37/0.40	0.45/0.48/0.52	0.55/0.59/0.63	
	60Hz	Cooling	0.47/0.50/0.53	0.58/0.62/0.65	0.74/0.80/0.84	0.90/0.97/1.03	
		heating	0.22/0.24/0.25	0.28/0.30/0.32	0.36/0.39/0.41	0.44/0.47/0.50	
External finish	Galvanized steel plate (Lower part drain pan painting N1.5)						
Indoor unit capacity connectable to 1 branch	Model P80 or smaller (*Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)						
Connectable Outdoor unit ★	Refer to the combination chart of BC controller R2/WR2 series						
Height	mm	289					
Width	mm	1,110					
Depth	mm	520					
Refrigerant piping diameter	To outdoor unit	Connectable outdoor unit capacity					
		P200	P250,300	P350	P400-P500	P550-P650	P700-P800/P850-P900*4
	To indoor unit	High pressure pipe	ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed/ ø28.58 (ø1-1/8) Brazed
		Low pressure pipe	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed		ø34.93 (ø1-3/8) Brazed/ ø41.28 (ø1-5/8) Brazed
To another BC controller	Liquid pipe	Indoor unit Model 50 or smaller: ø6.35 brazed, Over 50: ø9.52 brazed (ø12.7 with optional joint pipe used.)					
	Gas pipe	Indoor unit Model 50 or smaller: ø12.7 brazed, Over 50: ø15.88 brazed (ø19.05 with optional joint pipe used.)					
Drain pipe	O.D. 32mm						
Net weight	kg	43	48	55	62	69	
Accessories	*Drain connection pipe (with flexible hose and insulation) *Reducer						

Model name	CMB-P104V-GB1	CMB-P108V-GB1	CMB-P1016V-HB1			
Number of branch	4	8	16			
Power source	1-phase 220/230/240V 50Hz/60Hz					
Power input	kW	50Hz	Cooling	0.060/0.068/0.076	0.119/0.135/0.151	0.237/0.269/0.301
		heating	0.030/0.034/0.038	0.060/0.068/0.076	0.119/0.135/0.151	
	60Hz	Cooling	0.048/0.054/0.060	0.096/0.108/0.119	0.192/0.216/0.237	
		heating	0.024/0.027/0.030	0.048/0.054/0.060	0.096/0.108/0.120	
Current	A	50Hz	Cooling	0.28/0.30/0.32	0.55/0.59/0.63	1.08/1.17/1.26
		heating	0.14/0.15/0.16	0.28/0.30/0.32	0.55/0.59/0.63	
	60Hz	Cooling	0.22/0.24/0.25	0.44/0.47/0.50	0.88/0.94/0.99	
		heating	0.11/0.12/0.13	0.22/0.24/0.25	0.44/0.47/0.50	
External finish	Galvanized steel plate (Lower part drain pan painting N1.5)					
Indoor unit capacity connectable to 1 branch	Model P80 or smaller (*Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)					
Connectable Outdoor unit ★	Refer to the combination chart of BC controller R2/WR2 series					
Height	mm	284				
Width	mm	648				
Depth	mm	432				
Refrigerant piping diameter	To Main BC controller	Total indoor unit capacity connected this Sub BC controller				
		~P200	~P200, P201~P350	~P200, P201~P450		
	To indoor unit	High pressure pipe	ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	
		Low pressure pipe	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed	
To indoor unit	Liquid pipe	Indoor unit Model 50 or smaller: ø6.35 brazed, Over 50: ø9.52 brazed (ø12.7 with optional joint pipe used.)				
	Gas pipe	Indoor unit Model 50 or smaller: ø12.7 brazed, Over 50: ø15.88 brazed (ø19.05 with optional joint pipe used.)				
Drain pipe	O.D. 32mm					
Net weight	kg	22	32	55		
Accessories	*Drain connection pipe (with flexible hose and insulation) *Reducer					

★ Combination chart of BC Controller for R2 series

	P200,250,300,350	P400-650	P700-900
CMB-P V-G1	○	X	X
CMB-P V-GA1	○	○	X
CMB-P V-HA1	X	X	○
CMB-P V-GB1	○	○	○
CMB-P V-HB1	○	○	○

★ Combination chart of BC Controller for WR2 series

	P200,250,300	P400,450,500,550,600
CMB-P V-G1	○	X
CMB-P V-GA1	○	○
CMB-P V-HA1	X	X
CMB-P V-GB1	○	○
CMB-P V-HB1	○	○

Notes:

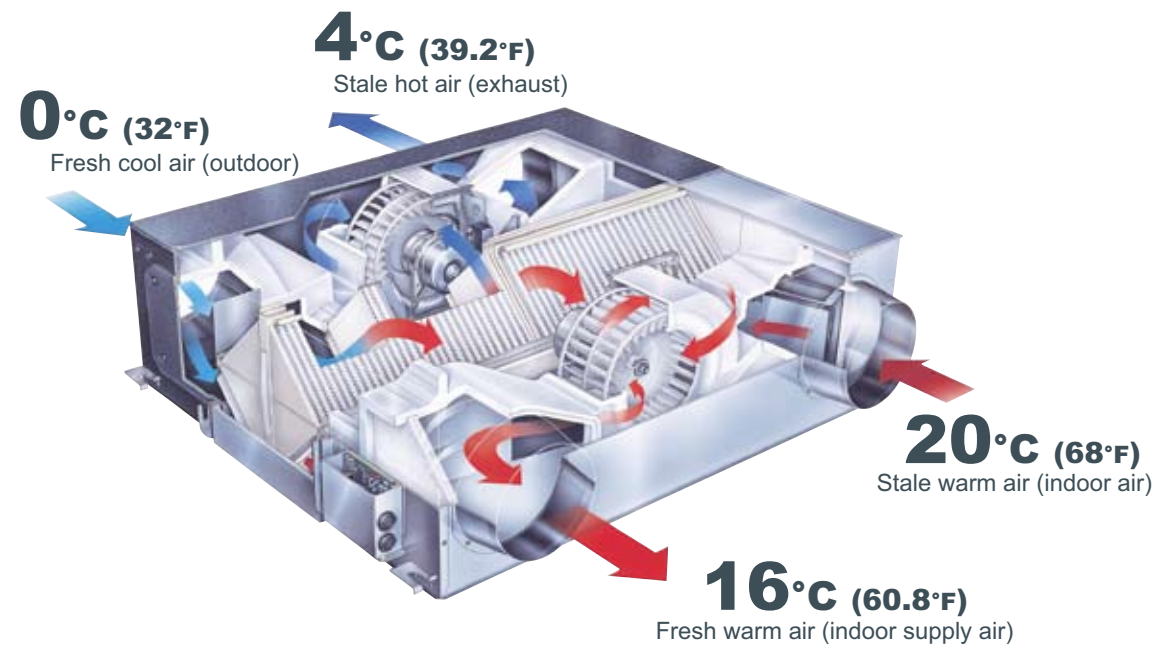
- The equipment is for R410A refrigerant.
- Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5 m away from any indoor units.)
- Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
- When using an outdoor unit - 28HP (P700) or more, use CMB-P1016V-HA1.
- For sub BC controller CMB-P-B-GB1 the connectable indoor unit capacities may sum to equal that of a P350 unit or less. However, if two sub controllers are used the TOTAL sum of connectable units connected to BOTH sub controllers must also not exceed that a P350 unit. For sub BC controller CMB-P-1016V-HB1 the connectable indoor unit capacities may sum to equal that of a P350 unit or less. However, if two sub controllers are used the TOTAL sum of connectable units connected to BOTH sub controllers must also not exceed that a P450 unit.

RX5 SERIES



The Ventilation System for Enhanced Air Quality - Lossnay

Combine with Lossnay Ventilation System Enhanced Air Quality.
Unified Control System Allows Greater Design Freedom.



- LGH-15RX5 [150m³/h Single phase 220-240V 50Hz]
- LGH-25RX5 [250m³/h Single phase 220-240V 50Hz]
- LGH-35RX5 [350m³/h Single phase 220-240V 50Hz]
- LGH-50RX5 [500m³/h Single phase 220-240V 50Hz]
- LGH-65RX5 [650m³/h Single phase 220-240V 50Hz]

- LGH-80RX5 [800m³/h Single phase 220-240V 50Hz]
- LGH-100RX5 [1000m³/h Single phase 220-240V 50Hz]
- LGH-150RX5 [1500m³/h Single phase 220-240V 50Hz]
- LGH-200RX5 [2000m³/h Single phase 220-240V 50Hz]

Heat-Exchange Efficiency Obtainable Only with Lossnay.

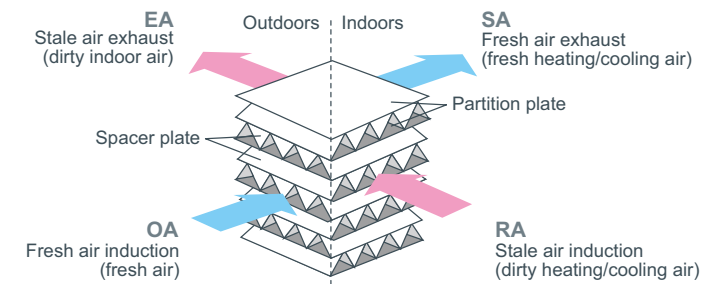
The secret to the unmatched comfort provided by Lossnay core is the cross-flow, plate-fin structure off the heat-exchange unit. A diaphragm made of a specially processed paper fully separates inducted and exhausted air supplies, ensuring that only fresh air is introduced to the indoor environment.

The superior heat-transfer and moisture permeability of the special paper assure highly effective total heat exchange (temperature and humidity) when inducted and exhausted air supplies cross in the Lossnay core.

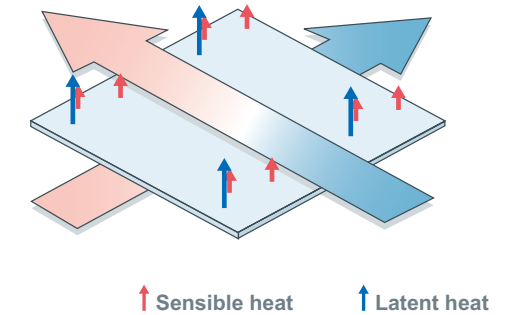
LOSSNAY Technology

- **Two paths ventilation**
LOSSNAY simultaneously intakes Fresh Air and exhausts Dirty Air.
- **Total energy recover**
LOSSNAY returns BOTH sensible heat and latent heat.

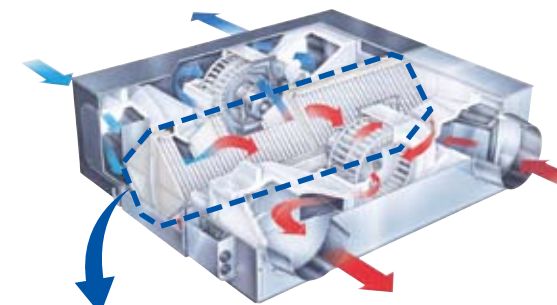
A. Two paths ventilation



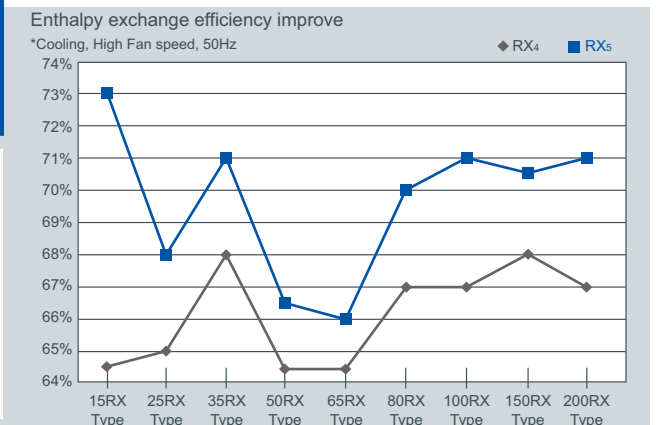
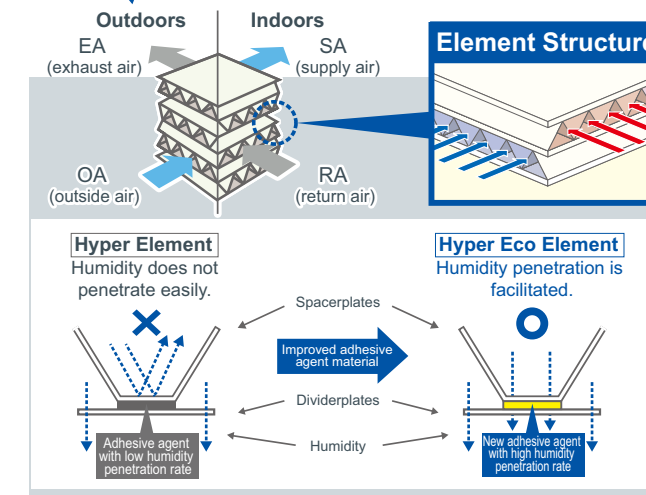
B. Total Energy transfer



- **Hyper Eco Core**
Better energy conservation by improved total heat exchange efficiency.

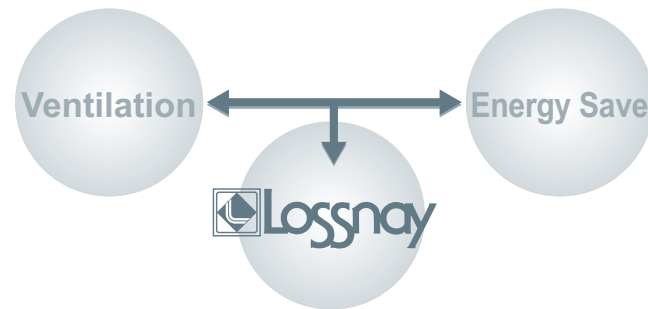


Introducing the new Hyper Eco Element
Mitsubishi's newly developed Hyper Eco Element is on board, offering the industry's best total heat exchange efficiency. Energy conservation performance has been improved not only by reducing the air conditioning load associated with ventilation, but also by facilitating humidity penetration.



Why LOSSNAY is necessary.

- **Without ventilation...**
Lack of Ventilation makes people sick by dirty indoor air including CO₂, Dust, Bacteria.
- **If just opening windows...**
Opening windows eliminates dirty air BUT wastes much air-con energy.
- **So we recommend LOSSNAY**
LOSSNAY is simultaneous pursuit of Ventilation and Energy Saving.

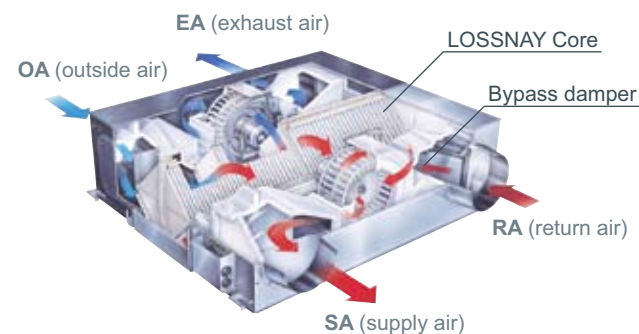


• This is LOSSNAY !

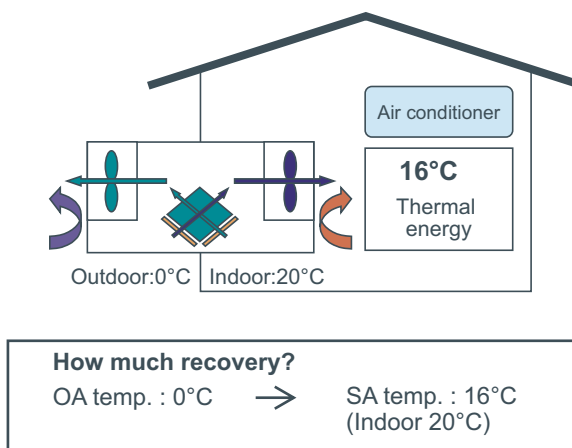
ADVANTAGES

- Clean air supply, dirty air exhaust** by Two air paths (OA → SA and RA → EA)
- Energy recovery** by LOSSNAY Core
- Free cooling** by bypass damper
- MULTI VENTILATION MODE** for multi ventilation request (Power supply, Power supply/exhaust, Power exhaust)

UNIT STRUCTURE



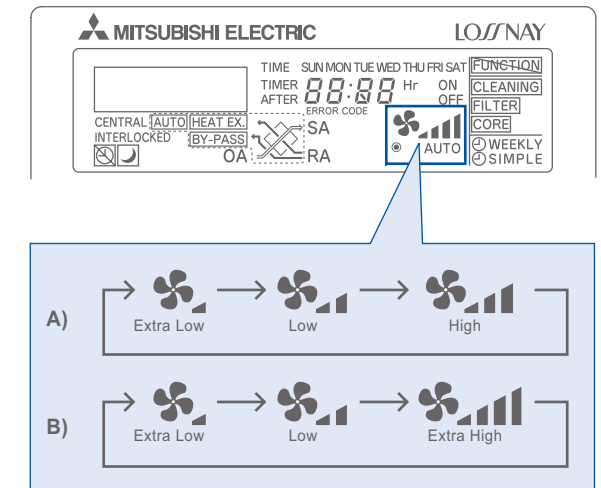
Energy Recovery Image



Extra Low Mode

- Additional energy conservation by using a four-level air volume system that allows more precise control.

In addition to the conventional Extra High, High, and Low modes, an Extra Low mode is added to provide a more dynamic range of air volume settings and versatility in a variety of installation environments, yielding much better energy conservation. Using a simplified timer function, it switches to Extra Low operation when the operation stop button is activated and it is accordingly possible to implement 24-hour energy conservation ventilation.



- * The Extra High and High ventilation modes are selectable by the initial setting.
- * Extra-Low not equipped LGH-150RXs and 200RXs.
- * The ventilation mode is actually selected in three levels, and the remote controller also displays these three levels.

Energy Saving by WEEKLY timer

Air volume level can be set hourly (max 8 times) and weekly. You can pre-set air volume according to the predictable requirement so that LOSSNAY can automatically operate at only necessary air-speed at the specified time period, which saves power consumption while maintaining the indoor air quality. Besides, once the weekly timer has been set, no switching on-off is required.

Example A (Hourly)

current RX₄ series with PZ-41SLB controller

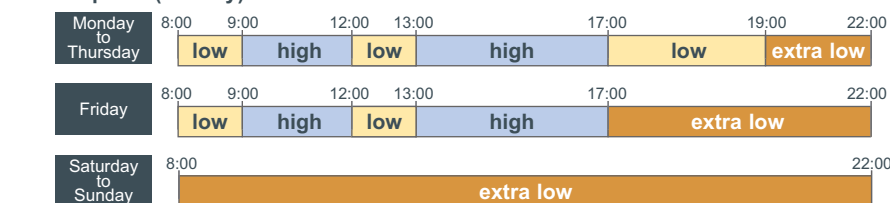


new RX₅ series with PZ-60DR-E



Total power consumption in one day : LGH-100RX₄-E : 6,600W (14 hours)
LGH-100RX₅-E : 5,390W (14 hours) → **1,210W (18%) less**

Example B (Weekly)



New function: "By-pass" Ventilation External Control Setting

In addition to the automatic damper open/close function, open/close control via external devices is now possible, delivering a "By-pass" ventilation system that is suitable to the installed environment.

Establish the wire connection by inserting the optional remote display adaptor (PAC-SA88HA-E) in the connector CN16 (Ventilation mode selector).

With SW1 is "ON", the ventilation mode of LOSSNAY is changed to the By-pass ventilation regardless of the setting on the remote controller.

•Automatic ventilation setting

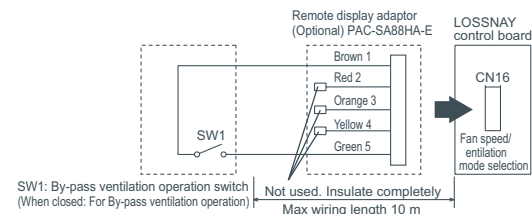
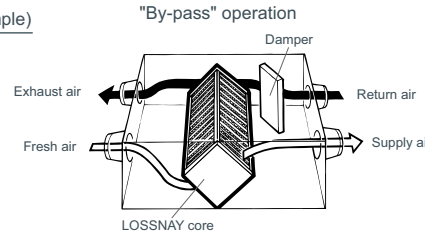
The automatic damper mode automatically provides the correct ventilation for the conditions in the room. The following shows the effect "By-pass" ventilation will have under various conditions.

1. Reduces cooling load

If the air outside is cooler than the air inside the building during the cooling season (such as early morning or at night), "By-pass" ventilation will draw in the cooler outside air and reduce the cooling load on the system.

Control devices (example)

- Temperature sensor
- Humidity sensor
- Timers



2. Night purge

"By-pass" ventilation can be used to release hot air from inside the building that has accumulated in buildings a business district during the hot summer season.

3. Office equipment room cooling

During cold season, fresh air can be drawn in and used as is to cool rooms where the temperature has risen due to the use of office equipment.

* When the outdoor air temperature drops lower than 8°C it changes to the heat exchange ventilation. (Display of the remote controller does not change.)

* In the case of "By-pass" ventilation, the supply air temperature slightly rises more than the outside air temperature because of the heat effect around the ducts or the unit motors.

New Remote Controller PZ-60DR-E

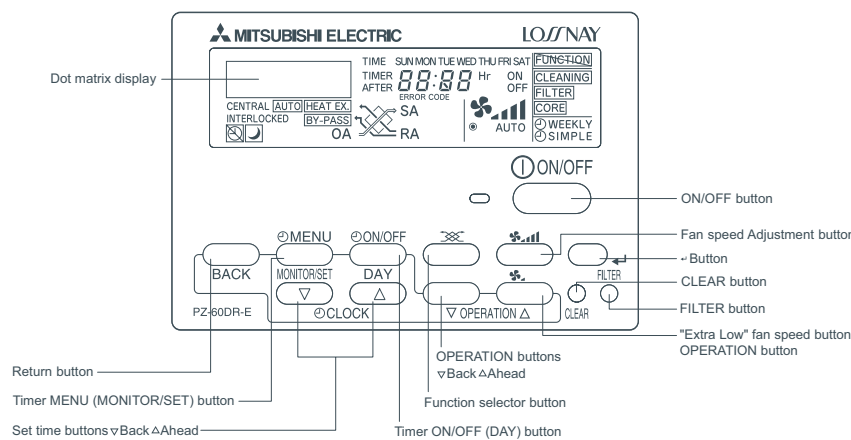
A new remote controller for the RX5 series is now available. In addition to boosting the energy conservation performance of the main unit, the remote controller features a variety of new functions which also pursue additional energy conservation.

The appearance of the remote controller conforms to Mitsubishi air conditioner interface design standards.

Functions that were set using Dip-Switch on the LOSSNAY main unit can now be configured as needed using the new remote controller.

This eliminates the need to crawl under the eaves to change operation settings.

Also, a newly adopted dot matrix display provides much more information, making it easy to check maintenance indications, operation status display, and explanations required when configuring settings.



LGH-15~100RX5-E

Model line up

■ Specification

LGH-15RX5-E

Model		LGH-15RX5-E								
Frequency / Power source		50Hz / Single phase 220-240V								
Ventilation mode		LOSSNAY ventilation				By-pass ventilation				
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low	
Current (A)		0.44-0.46	0.37-0.38	0.25-0.25	0.14-0.15	0.45-0.46	0.37-0.38	0.25-0.26	0.14-0.15	
Power consumption (W)		96-110	80-90	53-59	30-35	97-110	81-91	54-61	30-35	
Air volume		(m ³ /h)	150	150	110	70	150	150	110	70
		(L/s)	42	42	31	19	42	42	31	19
External static pressure		(mmHzO)	10.2-10.7	6.6-7.1	3.6-4.1	1.4	10.2-10.7	6.6-7.1	3.6-4.1	1.4
		(Pa)	100-105	65-70	35-40	14	100-105	65-70	35-40	14
Temperature exchange efficiency (%)		82.0				85.5				
Enthalpy exchange efficiency (%)		Heating		75.0		75.0		77.5		
		Cooling		73.0		73.0		76.5		
Noise (dB)		27.5-28		26.5-27		22-23.5		18		
Weight (kg)		20								
Starting current		Under 0.8 A Less								

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 6 dB greater than the indicated value. (at High Fan speed)

LGH-25RX5-E

Model		LGH-25RX5-E								
Frequency / Power source		50Hz / Single phase 220-240V								
Ventilation mode		LOSSNAY ventilation				By-pass ventilation				
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low	
Current (A)		0.52-0.55	0.47-0.48	0.26-0.27	0.17-0.18	0.53-0.55	0.47-0.48	0.26-0.27	0.17-0.18	
Power consumption (W)		113-129	102-114	56-62	36-42	115-131	103-115	56-63	36-42	
Air volume		(m ³ /h)	250	250	155	105	250	250	155	105
		(L/s)	69	69	43	29	69	69	43	29
External static pressure		(mmHzO)	8.2-8.7	5.1-6.1	2-2.5	0.9	8.2-8.7	5.1-6.1	2-2.5	0.9
		(Pa)	80-85	50-60	20-25	9	80-85	50-60	20-25	9
Temperature exchange efficiency (%)		79.0				83.5				
Enthalpy exchange efficiency (%)		Heating		69.5		69.5		74.0		
		Cooling		68.0		68.0		72.5		
Noise (dB)		26-27		25-26		20-21.5		18-19		
Weight (kg)		20								
Starting current		Under 0.9 A Less								

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)

LGH-35RX5-E

Model		LGH-35RX5-E								
Frequency / Power source		50Hz / Single phase 220-240V								
Ventilation mode		LOSSNAY ventilation				By-pass ventilation				
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low	
Current (A)		0.92-0.92	0.74-0.74	0.5-0.51	0.28-0.3	0.93-0.94	0.77-0.77	0.51-0.52	0.28-0.3	
Power consumption (W)		195-212	160-169	105-116	58-69	197-217	164-173	105-116	58-69	
Air volume		(m ³ /h)	350	350	210	115	350	350	210	115
		(L/s)	97	97	58	32	97	97	58	32
External static pressure		(mmHzO)	15.8-16.3	7.6-8.2	2.5-3.1	0.9	15.8-16.3	7.6-8.2	2.5-3.1	0.9
		(Pa)	155-160	75-80	25-30	9	155-160	75-80	25-30	9
Temperature exchange efficiency (%)		80.0				88.0				
Enthalpy exchange efficiency (%)		Heating		71.5		71.5		76.5		
		Cooling		71.0		71.0		75.5		
Noise (dB)		32-32		28.5-29.5		21.5-23		18		
Weight (kg)		29								
Starting current		Under 2.4 A Less								

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)



LGH-15~100RX5-E



LGH-15~100RX5-E



LGH-150/200RX5-E

LGH-50RX5-E

Model		LGH-50RX5-E								
Frequency / Power source		50Hz / Single phase 220-240V								
Ventilation mode		LOSSNAY ventilation				By-pass ventilation				
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low	
Current (A)		1.2-1.25	1.0-1.0	0.85-0.85	0.4-0.4	1.25-1.25	1.0-1.0	0.85-0.85	0.4-0.4	
Power consumption (W)		255-286	207-228	175-190	80-95	260-290	210-230	180-195	80-95	
Air volume		(m ³ /h)	500	500	390	180	500	500	390	180
		(L/s)	139	139	108	50	139	139	108	50
External static pressure		(mmH ₂ O)	15.3-15.8	6.6-9.2	4.1-6.1	1.0	15.3-15.8	6.6-9.2	4.1-6.1	1.0
		(Pa)	150-155	65-90	40-60	10	150-155	65-90	40-60	10
Temperature exchange efficiency (%)		78.0	78.0	81.0	86.0	—	—	—	—	
Enthalpy exchange efficiency (%)		Heating	69.0	69.0	71.0	78.0	—	—	—	—
		Cooling	66.5	66.5	68.0	77.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoic chamber)		33-34	30.5-32	26.5-28	19	34-35	31-32.5	27-29	19	
Weight (kg)		32								
Starting current		Under 3.0 A Less								

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 16 dB greater than the indicated value. (at High Fan speed)

LGH-65RX5-E

Model		LGH-65RX5-E								
Frequency / Power source		50Hz / Single phase 220-240V								
Ventilation mode		LOSSNAY ventilation				By-pass ventilation				
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low	
Current (A)		1.7-1.8	1.5-1.5	1.2-1.2	0.6-0.6	1.7-1.8	1.5-1.5	1.2-1.2	0.6-0.6	
Power consumption (W)		350-380	308-322	248-265	120-140	350-385	310-335	250-265	120-140	
Air volume		(m ³ /h)	650	650	520	265	650	650	520	265
		(L/s)	181	181	144	74	181	181	144	74
External static pressure		(mmH ₂ O)	11.2-12.2	6.1-8.2	4.1-5.1	0.8	11.2-12.2	6.1-8.2	4.1-5.1	0.8
		(Pa)	110-120	60-80	40-50	8	110-120	60-80	40-50	8
Temperature exchange efficiency (%)		77.0	77.0	80.0	86.0	—	—	—	—	
Enthalpy exchange efficiency (%)		Heating	68.5	68.5	70.5	78.0	—	—	—	—
		Cooling	66.0	66.0	68.5	77.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoic chamber)		34-34.5	32-33	28.5-31.5	22	34.5-35	32.5-33.5	28.5-30.5	22-22.5	
Weight (kg)		40								
Starting current		Under 4.4 A Less								

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)

LGH-80RX5-E

Model		LGH-80RX5-E								
Frequency / Power source		50Hz / Single phase 220-240V								
Ventilation mode		LOSSNAY ventilation				By-pass ventilation				
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low	
Current (A)		1.75-1.75	1.6-1.6	1.45-1.45	0.60-0.65	1.75-1.75	1.6-1.6	1.45-1.45	0.60-0.65	
Power consumption (W)		380-415	345-370	315-340	125-145	380-415	345-370	315-340	120-145	
Air volume		(m ³ /h)	800	800	700	355	800	800	700	355
		(L/s)	222	222	194	99	222	222	194	99
External static pressure		(mmH ₂ O)	14.8-15.3	10.7-12.2	8.2-9.7	2	14.8-15.3	10.7-12.2	8.2-9.7	2
		(Pa)	145-150	105-120	80-95	20	145-150	105-120	80-95	20
Temperature exchange efficiency (%)		79.0	79.0	80.5	87.5	—	—	—	—	
Enthalpy exchange efficiency (%)		Heating	71.0	71.0	72.5	79.5	—	—	—	—
		Cooling	70.0	70.0	71.5	79.5	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoic chamber)		33.5-34.5	32-33	30-31	22	34.5-35.5	33-34	31-32	22	
Weight (kg)		53								
Starting current		Under 3.8 A Less								

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 16 dB greater than the indicated value. (at High Fan speed)

LGH-100RX5-E

Model		LGH-100RX5-E								
Frequency / Power source		50Hz / Single phase 220-240V								
Ventilation mode		LOSSNAY ventilation				By-pass ventilation				
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low	
Current (A)		2.3-2.4	2.1-2.1	1.7-1.7	0.9-0.9	2.3-2.4	2.1-2.1	1.7-1.7	0.9-0.9	
Power consumption (W)		500-535	445-475	350-380	175-200	510-550	460-485	365-395	175-200	
Air volume		(m ³ /h)	1000	1000	755	415	1000	1000	755	415
		(L/s)	278	278	210	115	278	278	210	115
External static pressure		(mmH ₂ O)	16.3-17.3	10.2-11.2	5.6-6.1	1.8	16.3-17.3	10.2-11.2	5.6-6.1	1.8
		(Pa)	160-170	100-110	55-60	18	160-170	100-110	55-60	18
Temperature exchange efficiency (%)		80.0	80.0	83.0	87.0	—	—	—	—	
Enthalpy exchange efficiency (%)		Heating	72.5	72.5	74.0	80.0	—	—	—	—
		Cooling	71.0	71.0	73.0	79.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoic chamber)		36-37	34-35	31-32.5	21-22	37-38	35-36	32-33	21-22	
Weight (kg)		59								
Starting current		Under 4.6 A Less								

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 17 dB greater than the indicated value. (at High Fan speed)

LGH-150RX5-E

Model		LGH-150RX5-E						
Frequency / Power source		50Hz / Single phase 220-240V						
Ventilation mode		LOSSNAY ventilation			By-pass ventilation			
Fan speed		Extra High	High	Low	Extra High	High	Low	
Current (A)		3.5-3.5	3.2-3.2	2.9-2.9	3.5-3.5	3.2-3.2	2.9-2.9	
Power consumption (W)		760-830	690-740	630-680	765-835	695-745	635-685	
Air volume		(m ³ /h)	1500	1500	1300	1500	1500	1300
		(L/s)	417	417	361	417	417	361
External static pressure		(mmH ₂ O)	16.3-17.8	13.3-13.8	9.7-10.2	16.3-17.8	13.3-13.8	9.7-10.2
		(Pa)	160-175	130-135	95-100	160-175	130-135	95-100
Temperature exchange efficiency (%)		80.0	80.0	81.0	—	—	—	
Enthalpy exchange efficiency (%)		Heating	72.0	72.0	72.5	—	—	—
		Cooling	70.5	70.5	71.5	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoic chamber)		38-39	36-37.5	33.5-35	39-40.5	37.5-39	35.5-37	
Weight (kg)		105						
Starting current		Under 7.3 A Less						

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 19 dB greater than the indicated value. (at High Fan speed)

LGH-200RX5-E

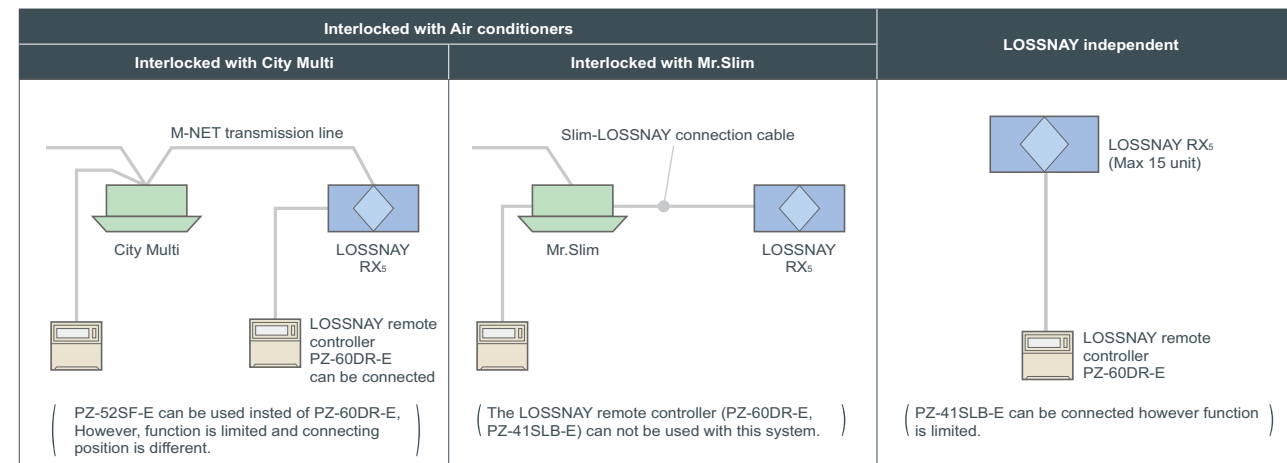
Model		LGH-200RX5-E						
Frequency / Power source		50Hz / Single phase 220-240V						
Ventilation mode		LOSSNAY ventilation			By-pass ventilation			
Fan speed		Extra High	High	Low	Extra High	High	Low	
Current (A)		4.8-4.8	4.2-4.2	3.4-3.4	4.8-4.8	4.2-4.2	3.4-3.4	
Power consumption (W)		1035-1100	910-980	715-785	1040-1110	915-980	720-785	
Air volume		(m ³ /h)	2000	2000	1580	2000	2000	1580
		(L/s)	556	556	439	556	556	439
External static pressure		(mmH ₂ O)	16.3-16.8	10.2-10.7	6.1-6.6	16.3-16.8	10.2-10.7	6.1-6.6
		(Pa)	160-165	100-105	60-65	160-165	100-105	60-65
Temperature exchange efficiency (%)		80.0	80.0	83.0	—	—	—	
Enthalpy exchange efficiency (%)		Heating	72.5	72.5	73.5	—	—	—
		Cooling	71.0	71.0	72.0	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoic chamber)		39.5-40	37-38	32.5-34	40.5-41	38-39	33.5-35	
Weight (kg)		118						
Starting current		Under 11.9A Less						

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 20 dB greater than the indicated value. (at High Fan speed)

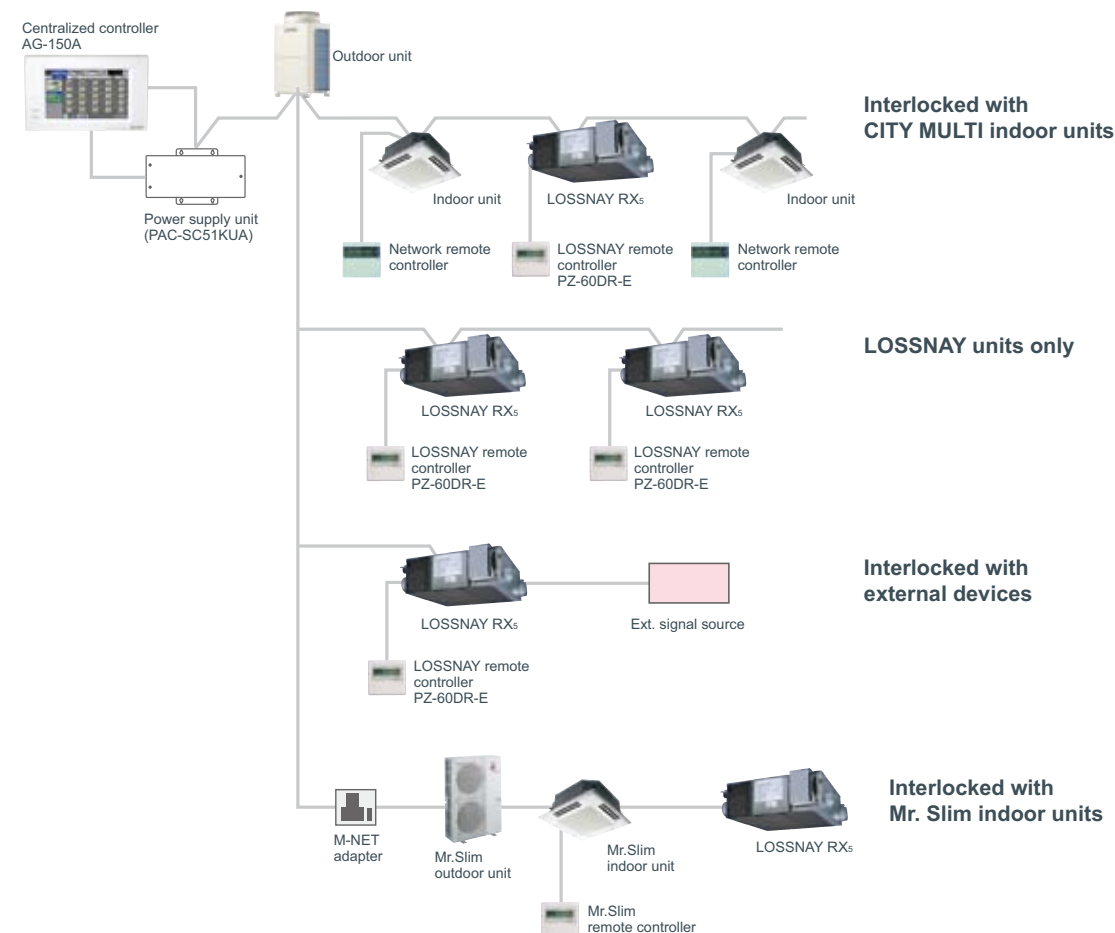


Control

■ The New Remote Controller PZ-60DR-E enable simple control setting

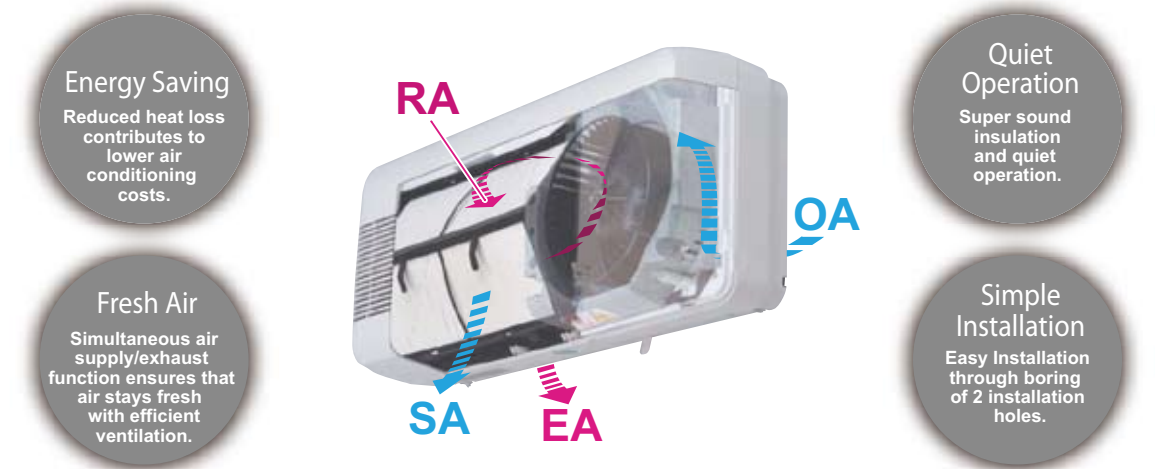


■ Centralized Controller System

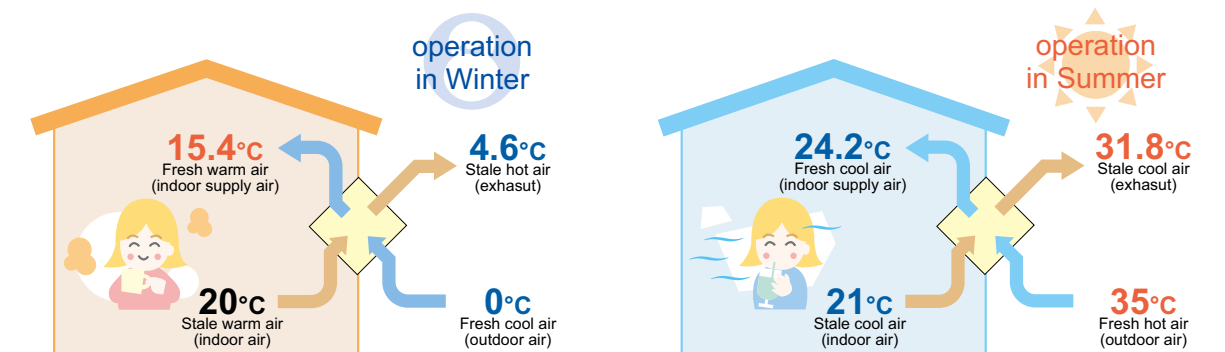


Heat Recovery Ventilators for Residential Use

Time Spent in Comfort with a Breath of Fresh Air



Total-Heat-Exchange Concept



Heat-exchange calculating equation

$$\text{Indoor supply-air temperature} (^{\circ}\text{C}) = \left\{ \text{Indoor temperature} (^{\circ}\text{C}) - \text{Outdoor temperature} (^{\circ}\text{C}) \right\} \times \text{Temp exchange efficiency} (\%) + \text{Outdoor temperature} (^{\circ}\text{C})$$

Calculation example : 15.4°C = (20°C - 0°C) x 77% + 0°C (Low notch)

Heat-exchange calculating equation

$$\text{Indoor supply-air temperature} (^{\circ}\text{C}) = \left\{ \text{Outdoor temperature} (^{\circ}\text{C}) - \left\{ \text{Indoor temperature} (^{\circ}\text{C}) - \text{Outdoor temperature} (^{\circ}\text{C}) \right\} \times \text{Temp exchange efficiency} (\%) \right\}$$

Calculation example : 35°C = (35°C - 21°C) x 77% (Low notch)

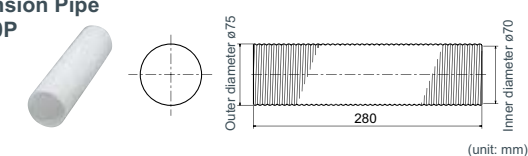
Specification

- Simple installation through boring of 2 installation holes.
- Low-noise(Less than 30dB at low notch).
- 1-motor 2-fan system. •Air-volume:low/high 2-notch.
- Air-supply/exhaust pipes and plastic weather cover are supplied as accessories.
- Equipped with an outdoor-air shutter. •Pull-string switch

Supply Voltage (V)	Power line frequency (Hz)	Notch	Air volume (m ³ /h)	Power Consumption (W)	Temp.exchange efficiency (%)	Noise (dB)	Weight (kg)
220-240	50	HI	105	26	70	39	6.5
		LO	65	23	77	29.5	
220	60	HI	90	26	73	37	
		LO	50	21	80	26	

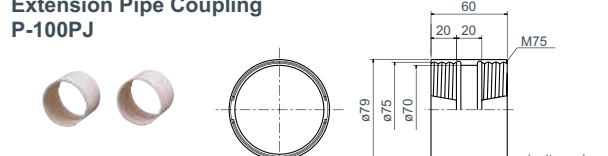
Optional parts

Extension Pipe P-100P



•Total length when connected to the pipe extension coupling is 300mm.

Extension Pipe Coupling P-100PJ



•Screw-in method

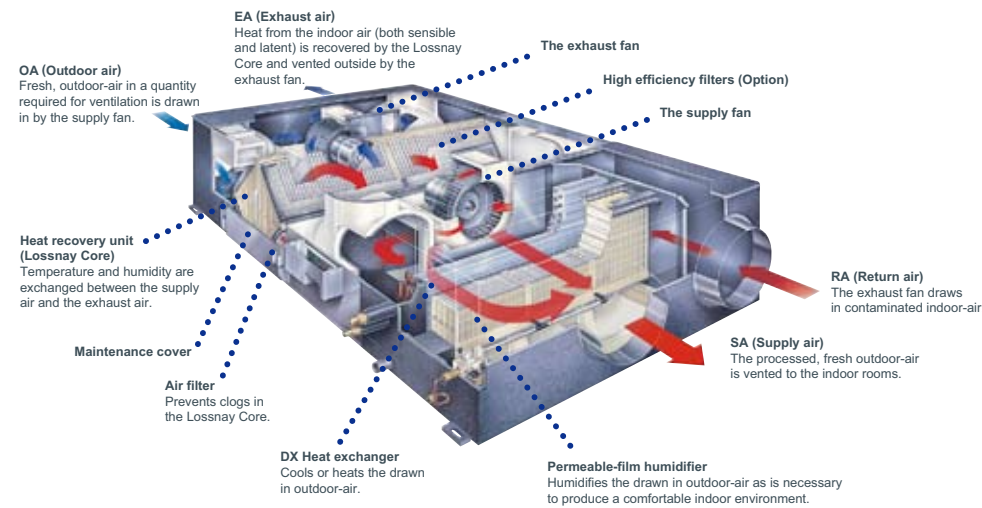
OA Processing Units

RDH3 Series



Ideal Indoor-Air Quality — For Your Comfort and Health

The OA (outdoor-air) Processing Unit creates an optimum indoor-air environment at an unparalleled rate of cost efficiency providing substantial energy savings. Forced air ventilating and humidifying functions unique to this system keep indoor-air fresh and free of contaminants preventing “sick building syndrome” and the spread of airborne viruses such as the flu. Another novel feature of the OA Processing Unit is the “Lossnay core,” a heat-exchange unit that functions to transfer heat efficiently, cutting ventilation load by as much as 70%. This special combination of functionality and performance designed to ensure users ample comfort and year-round health which cannot be found anywhere else on the market.



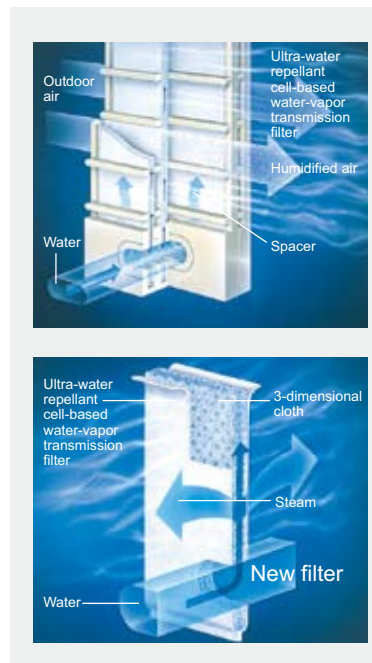
New Permeable Film Humidifier (RDH3 model)

Comfortable Level of Humidity for Exceptionable Air Quality

The OA Processing Unit is equipped with a new permeable film humidifier developed and patented by Mitsubishi Electric. Steam transmission efficiency has been improved remarkably by lowering the resistance of the material. The use of a 3-layer film that allows only the transfer of steam prevents the production of white powder, so there is no need for the use of a water purifier.

Highly Efficient Humidification

Improvements in the system of airflow patterns and water injection techniques have resulted in a substantial increase in humidifying volume.



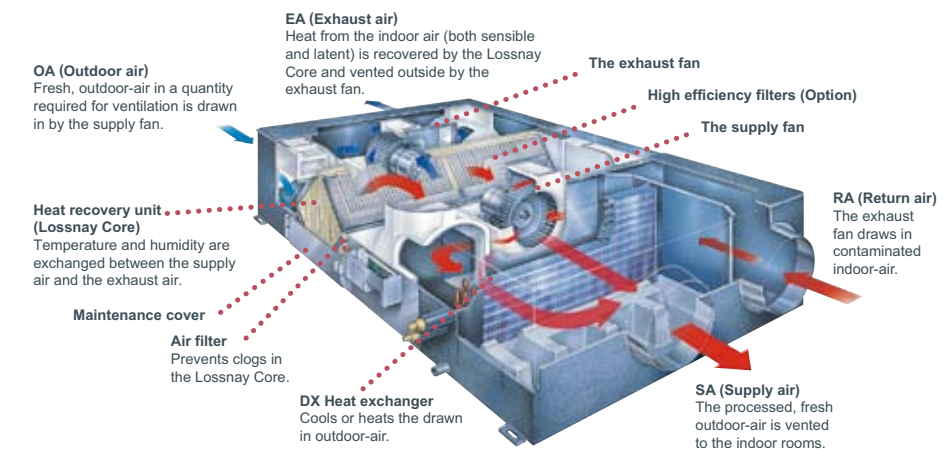
RD3 Series

A Total Air Conditioning Package Manifesting Remarkable Power

Lossnay Ventilation and Air Conditioning

1. When the load is light ⇒ Main air conditioning
2. When the load is heavy ⇒ Supplemental air conditioning

The OA (outdoor-air) Processing Unit creates an optimum environment while providing substantial energy savings. The OA Processing Unit comprises forced air ventilation, heat recovery, heating and cooling, and air purification. This total air conditioning system keeps indoor air fresh and comfortable all year round, and keeps it free of contaminants preventing ailments such as sick building syndrome. Inside the OA Processing Unit is the Lossnay Core, a heat-exchange unit that transfers heat efficiently, cutting ventilation load by as much as 70%. A remarkable product found nowhere else, this special combination of functionality and performance contained within a single unit ensures users ample comfort, good health, and energy savings.



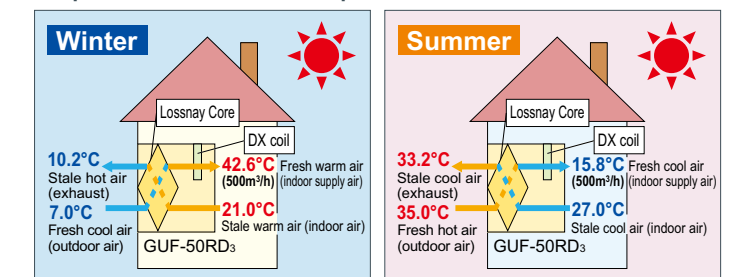
The Air Conditioning Function

Two Units in One

Along with Lossnay ventilation, the OA Processing Unit is really two units in one, functioning as the main air conditioner when the load is light and adding supplemental air conditioning when the load is heavy. Also, with ventilation and air conditioning integrated, space is saved and installation expense kept to a minimum. What's more, the air temperature in any room can be perfectly adjusted to the desired

temperature of the occupants via the OA Processing Unit, which can be used as the indoor unit of the CITY MULTI air conditioning system. The heat recovery function maximizes efficiency and saves energy, benefiting the environment and helping companies cut costs. It also reduces the refrigerant load and lowers the amount of horsepower required by the outdoor unit.

Temperature simulation (Example : GUF-50RD3)



Specification

Model			GUF-50RDH ₃ *3	GUF-100RDH ₃ *3	GUF-50RD ₃	GUF-100RD ₃					
Power source			1-phase 220-240V 50Hz, 1-phase 220V 60Hz								
Cooling capacity	*1	kW	5.46	<1.83>	11.17	<3.85>	5.46	<1.83>	11.17	<3.85>	
	*1	kcal / h	4,700	<1,600>	9,600	<3,300>	4,700	<1,600>	9,600	<3,300>	
	*1	BTU / h	18,600	<6,200>	38,100	<13,100>	18,600	<6,200>	38,100	<13,100>	
		Power input	235-265		480-505		235-265		480-505		
		Current input	1.15		2.20		1.15		2.20		
Heating capacity	*2	kW	6.18	<2.01>	12.50	<4.20>	6.18	<2.01>	12.50	<4.20>	
	*2	kcal / h	5,300	<1,700>	10,800	<3,600>	5,300	<1,700>	10,800	<3,600>	
	*2	BTU / h	21,100	<6,900>	42,700	<14,300>	21,100	<6,900>	42,700	<14,300>	
		Power input	235-265		480-505		235-265		480-505		
		Current input	1.15		2.20		1.15		2.20		
Capacity equivalent to indoor unit			P32		P63		P32		P63		
Humidifying capacity		kg / h	2.7		5.4		-		-		
		lbs / h	6.0		12.0		-		-		
Humidifier			Permeable film humidifier				-				
External finish			Galvanized, with grey insulation sheet								
External dimension H x W x D		mm	317 x 1,016 x 1,288		398 x 1,231 x 1,580		317 x 1,016 x 1,288		398 x 1,231 x 1,580		
		in.	12-1/2 x 40 x 50-3/4		15-11/16 x 48-1/2 x 62-1/4		12-1/2 x 40 x 50-3/4		15-11/16 x 48-1/2 x 62-1/4		
Net weight		kg (lbs)	57 (126)		98 (217)		54 (120)		92 (203)		
Heat exchanger		LOSSNAY core	Partition, Cross-flow structure, Special preserved paper-plate.								
		Refrigerant coil	Cross fin (Aluminum fin and copper tube)								
FAN		Type x Quantity		SA: Centrifugal fan (Sirocco fan) x 1				EA: Centrifugal fan (Sirocco fan) x 1			
		External static press.	Pa	125		135		140		140	
			mmH ₂ O	12.7		13.8		14.3		14.3	
		Motor type	Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 2units								
		Motor output	kW		-		-		-		
		Driving mechanism	Direct-driven by motor								
Airflow rate (High value)		m ³ / h	500		1,000		500		1,000		
		L / s	139		139		139		139		
		cfm	294		589		294		589		
Sound pressure level (Low-High) (measured in anechoic room)		dB <A>	33.5-34.5		38-39		33.5-34.5		38-39		
Insulation material			Polyester sheet								
Air filter		Supplying air	Non-woven fabrics filter (Gravitational method 82%) & Optional part: High efficiency filter (Colorimetric method 65%)								
		Exhausting air	Non-woven fabrics filter (Gravitational method 82%)								
Protection device			Fuse								
Refrigerant control device			LEV								
Diameter of refrigerant pipe	Liquid	mm (in.)	ø6.35 (ø1/4) Flare		ø9.52 (ø3/8) Flare		ø6.35 (ø1/4) Flare		ø9.52 (ø3/8) Flare		
	Gas	mm (in.)	ø12.7 (ø1/2) Flare		ø15.88 (ø5/8) Flare		ø12.7 (ø1/2) Flare		ø15.88 (ø5/8) Flare		
Diameter of drain pipe		mm (in.)	VP25								

Notes:

- *1 Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB/24°CWB
- *2 Heating : Indoor 20°CDB/13.8°CWB, Outdoor 7°CDB/16°CWB
- *3 Available for limited countries. Please contact your local distributor for further information.



O outdoor unit

- **Heat Pump Series (S)**
- **Heat Pump Series (Y)**
- **Heat Pump Series - High COP (Y)**
- **Heat Pump Series - ZUBADAN (Y)**
- **Water cooled Heat Pump Series (WY)**
- **Heat Recovery Series (R2)**
- **Heat Recovery Series - High COP (R2)**
- **Water Cooled Heat Recovery Series (WR2)**



S (Heat Pump) series Y (Heat Pump) series Cooling or Heating

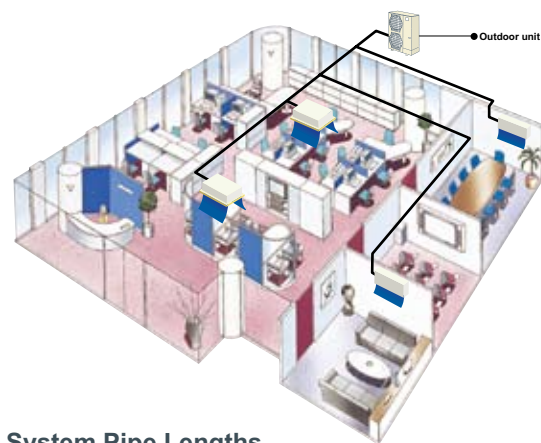
S series — PUMY-P VHMB(-BS)
PUMY-P YHMB(-BS) Y series — PUHY-P YJM-A(-BS)
PUHY-P YSJM-A(-BS) PUHY-EP YJM-A(-BS)
PUHY-EP YSJM-A(1)(-BS)

The two-pipe zoned system designed for Heat Pump Operation

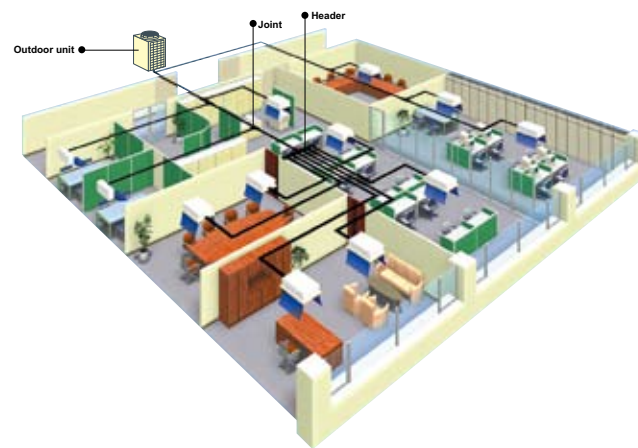
The CITY MULTI S series (for small applications) and Y series (for large applications) make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant 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 12 (S series) or 50 (Y series) 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.

Small Offices (S series)



Large Offices (Y series)

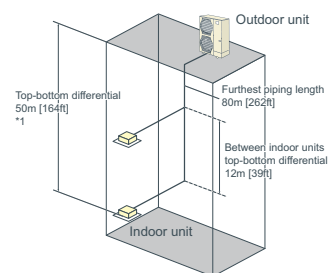


System Pipe Lengths

[4-6HP (S series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length.....	120 [393]
Maximum allowable length.....	80 [262]
Farthest indoor from first branch.....	30 [98]

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher).....	50 [164]
Indoor/outdoor (outdoor lower).....	20 [65]
Indoor/indoor.....	12 [39]

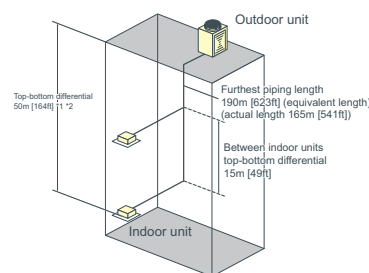


*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 20m [65ft].

[8-50HP (Y series)]
[8-36HP (High COP Y series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length.....	1,000 [3,280]
Maximum allowable length.....	165 (190equivalent) [541(623)]
Farthest indoor from first branch.....	40 [131]

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher).....	50 [164]*1
Indoor/outdoor (outdoor lower).....	40 [131]*1
Indoor/indoor.....	15 [49]



*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131 ft].
*2 Depending on the model and installation conditions, top-bottom differential 90m [295ft] (o/u above) and 60m [196ft] (o/u below) is available. For more detailed information, please contact your nearest sales office or distributor.

R2 (Heat Recovery) series Simultaneous Cooling and Heating

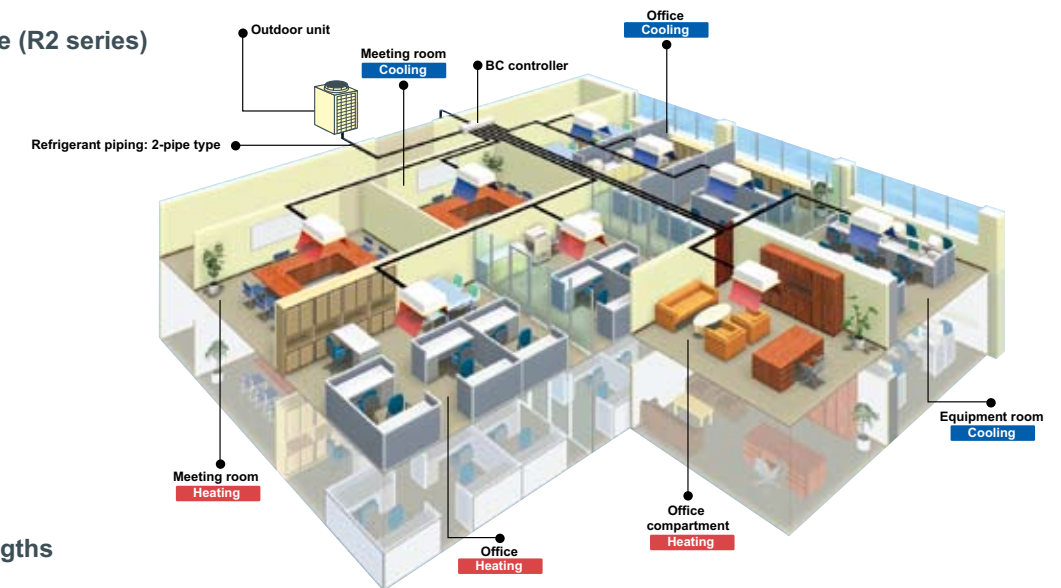
R2 series — PURY-P YJM-A(-BS)
PURY-P YSJM-A(1)(-BS) PURY-EP YJM-A(-BS)
PURY-EP YSJM-A(1)(-BS)

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

CITY MULTI R2 series 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

Installation image (R2 series)



System Pipe Lengths

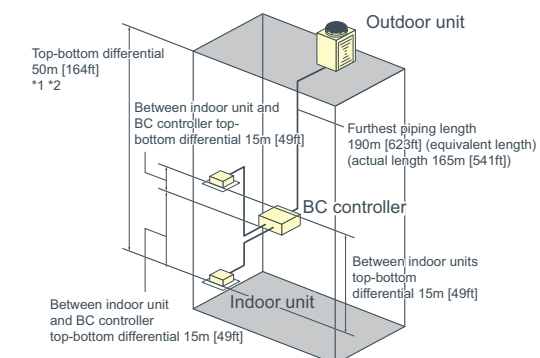
[8-36HP (R2 series)]
[8-28HP (High COP R2 series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length.....	550-800 [1,804-2,624] (P600,P650 models only; Refer to the Data book for other models.)
Maximum allowable length.....	165 (190equivalent) [541(623)]

Maximum length between outdoor and single/main BC controller..... 110 [360]
*Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC Controller.
Maximum length between single/main BC controller and indoor..... 40-60 [131-196]

Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher).....	50 [164]*2
Indoor/outdoor (outdoor lower).....	40 [131]*2
Indoor/BC controller (single/main).....	15 [49]

*Maximum length between single/main BC controller and indoor is dependent upon the vertical differential between the single/main BC controller and the indoor unit.
Indoor/indoor..... 15 [49]
Main BC Controller/Sub BC Controller... 15 [49]



*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131ft].
*2 Depending on the model and installation conditions, top-bottom differential 90m [295ft] (o/u above) and 60m [196ft] (o/u below) is available. For more detailed information, please contact your nearest sales office or distributor.

Common Features in Y (Heat Pump) series & R2 (Heat Recovery) series

New Lineup Y/R2 series(YJM)



In addition to outdoor unit "S" and "L" module, a new "XL" module is introduced. The three modular form can be combined to create systems up to 50HP in Y series and up to 36HP in R2 series.

<Y Series-Standard>

HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
Capacity	Cooling 22.4	28	33.5	40	45	50	56	63	69	73	80	85	90	96	101	108	113	118	124	130	136	140
	Heating 25	31.5	37.5	45	50	56	63	69	76.5	81.5	88	95	100	108	113	119.5	127	132	140	145	150	156.5
Module (Pattern 1)	S module	●	●	●			●+●	●+●	●	●	●+●	●+●	●	●		●+●	●+●	●	●+●	●+●	●+●	●+●
	L module			●	●				●	●	●+●	●+●	●	●		●+●	●+●	●	●+●	●+●	●+●	●+●
	XL module					●					●	●	●	●	●+●	●+●	●	●+●	●+●	●+●	●+●	●+●
Module (Pattern 2)	S module					●+●	●+●	●+●	●													
	L module								●		●+●											
	XL module									●		●										

<R2 Series-Standard>

HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Capacity	Cooling 22.4	28	33.5	40	45	50	56	63	69	73	80	85	90	96	101
	Heating 25	31.5	37.5	45	50	56	63	69	76.5	81.5	88	95	100	108	113
Module (Pattern 1)	S module	●	●	●	●	●	●+●	●+●	●+●	●	●	●+●	●+●	●	●
	L module			●	●				●	●	●+●	●+●	●	●	
	XL module					●					●	●	●	●	●+●
Module (Pattern 2)	S module				●+●	●+●	●+●	●							
	L module								●		●+●		●		
	XL module									●		●			

Improved performance

Improved heating capacity at low ambient temperature ensures 70% capacity at -15°C [5°F].

Cooling operation range is extended up to 46°C [115°F] from 43°C [109°F] with conventional model.

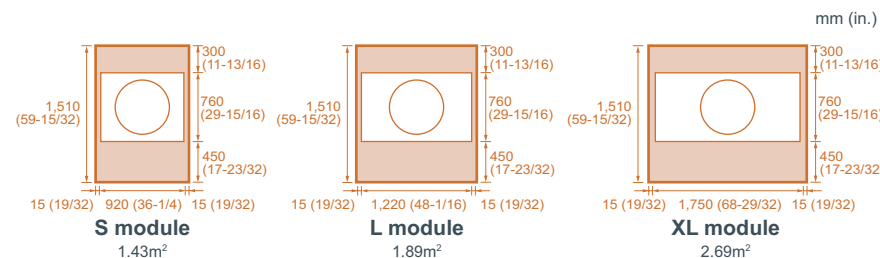
Compact Design Industry leading weight saving

The manageability of the outdoor unit has been improved due to a drastic reduction in its weight, leading to easy transportation, installation, and reduction in withstand load.

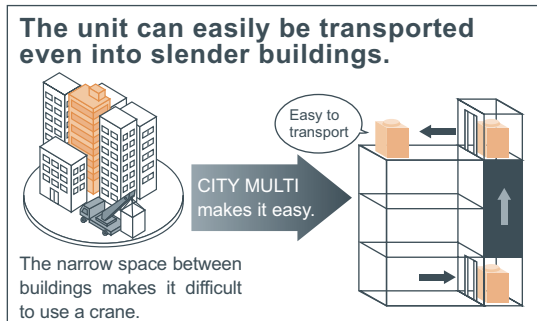
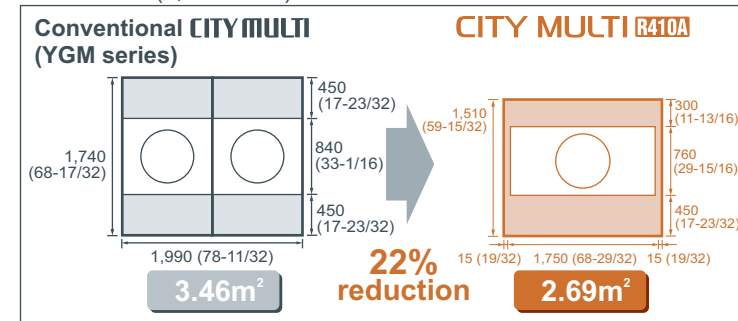


Effective Use of Space

The new models have a smaller foot print and service space requirement than previous models.



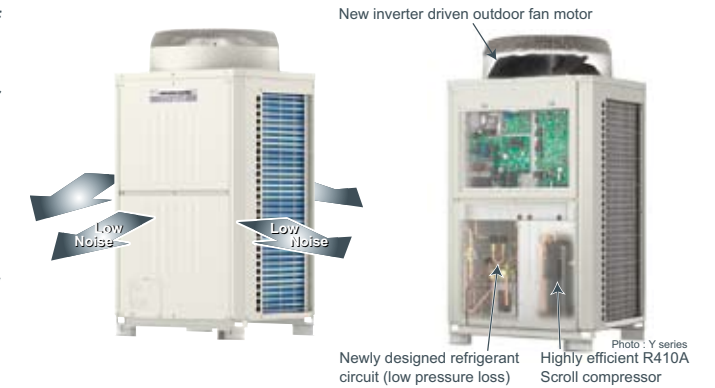
P450 model (Y,R2 series)



Low Noise Levels New Fan Design

CITY MULTI VRF systems led the introduction of larger single fan motors some ten years ago, achieving substantially lower noise levels over multiple designs.

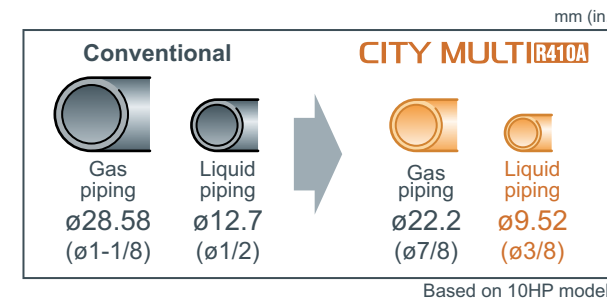
Continuing the development in the areas of blade shape and weight, Mitsubishi Electric have managed to achieve even higher performance and lower noise levels. To reduce noise levels further and comply with inner city residential noise regulations, all outdoor units include low noise mode. This function works by lowering the fan speed and compressor frequency proportionally with reduction in demand.



The compressor compartment is sealed by metal panels to attain low noise levels in all directions.

R410A Pipe Sizing

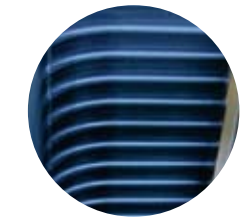
As R410A has a higher specific heat capacity than R22, the pipework is smaller. This means the pipe itself is cheaper, easier to install and less riser space is required within the building.



Blue Fin Treatment

The anti-corrosion Blue Fin treatment of the heat exchanger is especially effective in urban environments where the traffic pollutions can damage the aluminum fins reducing the capacity and life expectancy of the unit. All CITY MULTI R410A outdoor units have been treated with Blue Fin.

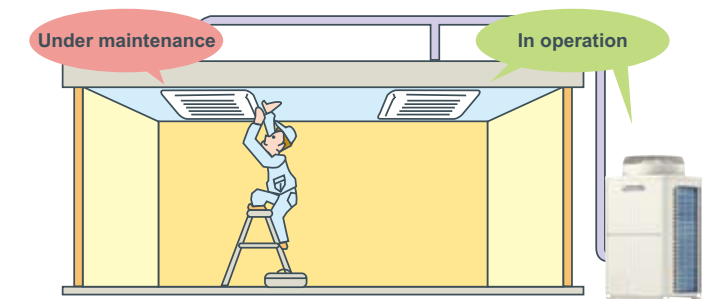
*Standard:Anti-corrosion Blue Fin treatment & copper tube. BS type (optional):salt-resistant cross fin & copper tube.



Easy Maintenance

Even when one of the indoor units in the system is under maintenance, the other indoor unit can still operate.

* Not applicable to all situations.
* Be sure to turn off the power to the indoor unit when repairing or servicing the unit.



System Check

Ensuring simple and easy maintenance, system tests are available to check wiring, sensors and the refrigerant amount.

60Pa High Static Pressure as standard

Both Y and R2 series correspond to high static pressure of 60Pa, ideal and flexible for any type of application.

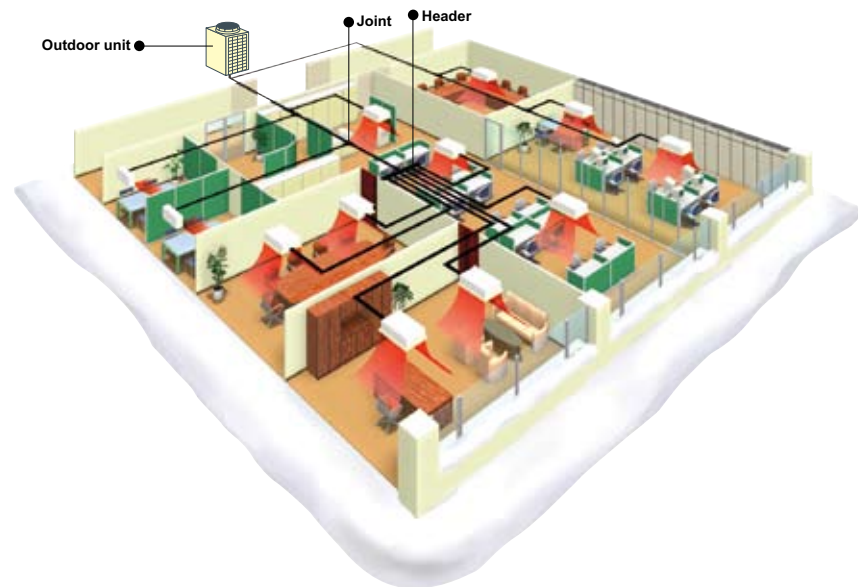
Cooling or Heating

ZUBADAN series — PUHY-HP YHM-A(-BS)
PUHY-HP YSHM-A(-BS)

Bringing a year round comfort solutions to extreme climates

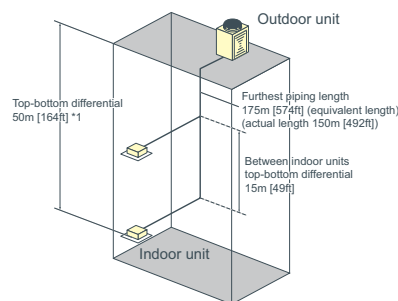
CITY MULTI ZUBADAN series combines the ultimate in application flexibility and powerful cooling and heating capabilities to deliver precise comfort even in the coldest days of the year down to -25°C. The technology behind this is a Flash Injection circuit which provides optimum amount of refrigerant to the system via a compressor through a specially designed injection port to ensure a particularly stable operation. With this, ZUBADAN can provide a full heating performance even at -15°C and continuous heating for up to 250 minutes in one continuous cycle, ensuring a phenomenal heating performance at low temperatures.

Installation image



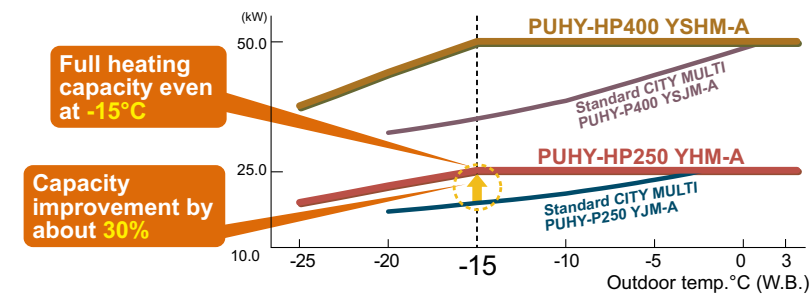
System Pipe Lengths

[8-10HP]	
Refrigerant Piping Lengths	Maximum meters [Feet]
Total length.....	300 [984]
Maximum allowable length.....	150 (175equivalent) [492 (574)]
Farthest indoor from first branch.....	40 [131]
Vertical differentials between units	
Indoor/outdoor (outdoor higher).....	50 [164]
Indoor/outdoor (outdoor lower).....	40 [131]
Indoor/indoor.....	15 [49]



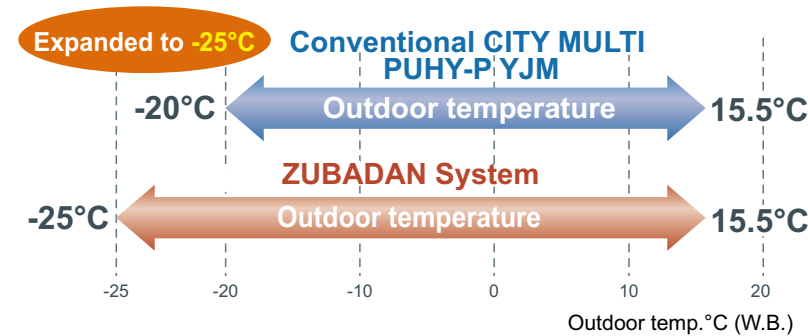
*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131 ft].

Stable Heating Performance even at -15°C

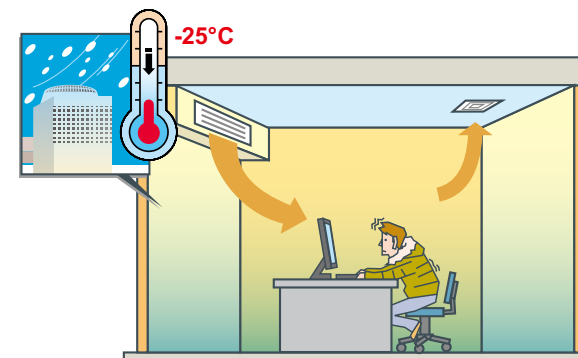


Using an industry first 'Flash-injection Circuit', the ZUBADAN System is able to provide FULL heating performance in ambient temperatures as low as -15°C.

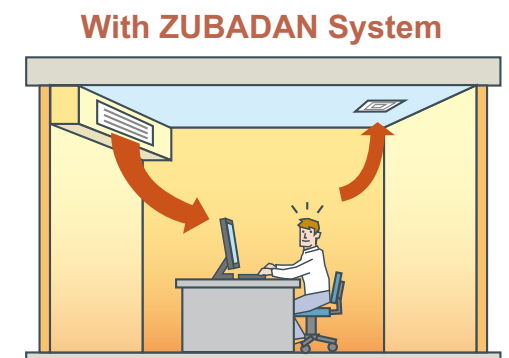
Expanded Heating Operation down to -25°C



...furthermore, from a previous LOWEST operating ambient temperature of -20°C, the ZUBADAN System pushes the boundaries of technology to give heating in ambient temperatures as low as -25°C.



Previously, heating performance drops off when the temperature falls below -20°C!



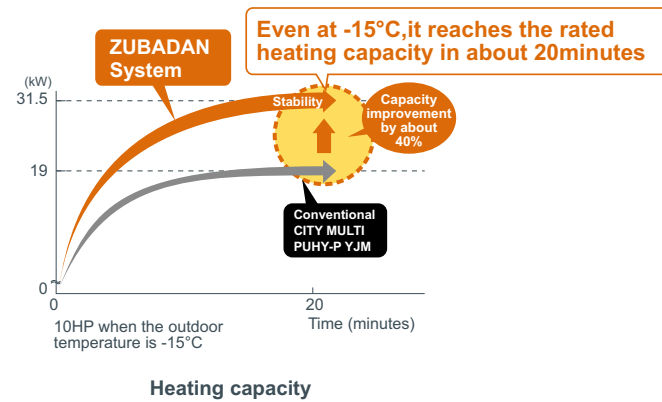
...however, even at such temperatures, the new ZUBADAN System has no trouble keeping the occupants nice and toasty!

High Static Pressure Setting

High Static Pressure Setting up to 60Pa is available. With our new ZUBADAN model, high static pressure setting up to 60Pa is available by setting the dip switch (0Pa at factory setting) making it ideal and flexible for any type of application.

Shorter Warm-up in about 20 Min.

With its new improved startup performance, the ZUBADAN system achieves full heating capacity even when outdoor temperature is as low as -15°C. Heating capacity, about 20 minutes after startup is improved by 40% compared to the conventional model; ensuring occupants an immediate comfortable air solution.



Reliable and Long Product Life Cycle

Backup Function (HP400 and HP500 models)

ZUBADAN system ensures an exceptionally high level of reliability by utilizing a new backup function, which can be easily operated in the case of a malfunction from an indoor unit remote controller.



Rotation Function (HP400 and HP500 models)

Running outdoor units alternatively using its newly developed 'Rotation Function', the system is able to ensure an optimum product life cycle for both of its component units.



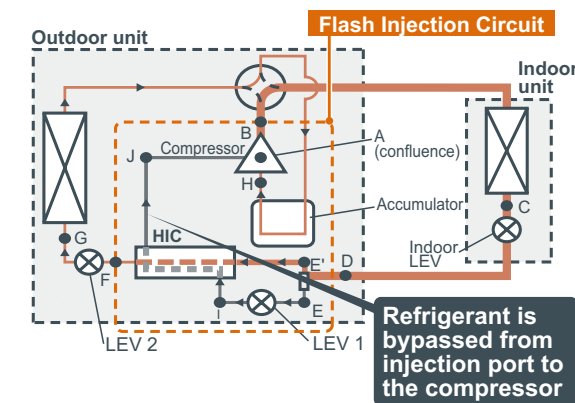
Maximum Stable Operation

By utilizing our advanced Flash Injection Circuit, the system can not only provide continuous heating for up to 250 minutes in one continuous cycle, but also significantly lessens defrost time to give an exceptionally stable heating operation.

Heating up to 250 min. straight
Reduced Defrosting time

Startup Comfort

One of the key factors of the units newly designed Flash Injection Circuit is that the optimal amount of refrigerant can be provided to the system via the compressor through a specially designed injection port to ensure a particularly stable operation. In simple terms, the system allows a quick startup time and continuous heating; even in low ambient conditions.

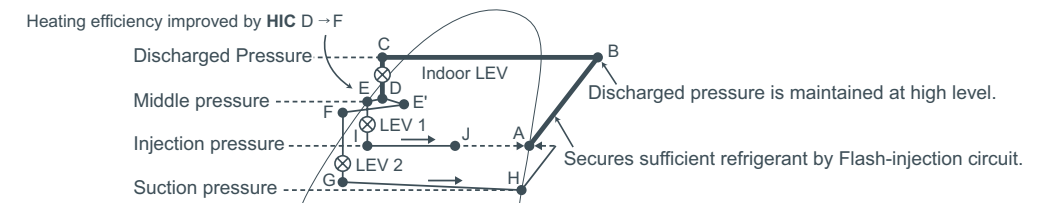


Note: Heat Interchange Circuit (HIC)
Heating efficiency is improved by enhancing the recollection of heat at the outdoor unit with the low temperature refrigerant from the HIC.

Constant Comfort

With its new highly effective defrost feature (which prevents automatic defrosting when it is not required), the ZUBADAN System can deliver conditioned heating operation up to 250 minutes in one continuous cycle!

Heating capacity is maintained by the Flash-injection circuit.



[Pressure Enthalpy diagram showing HIC]

Water Cooled Series

Cooling or Heating

WY series — PQHY-P YHM-A
PQHY-P YSHM-A

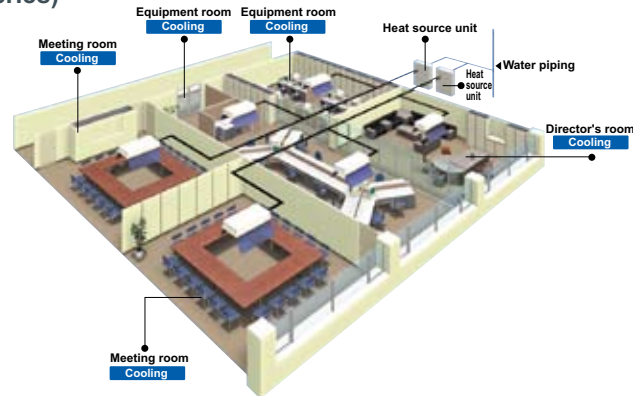
WR2 series — PQRY-P YHM-A
PQRY-P YSHM-A

[WY(Heat Pump) series]

Water energy source system allows switching between cooling and heating.

The WY-Series 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.

Installation image (WY series)



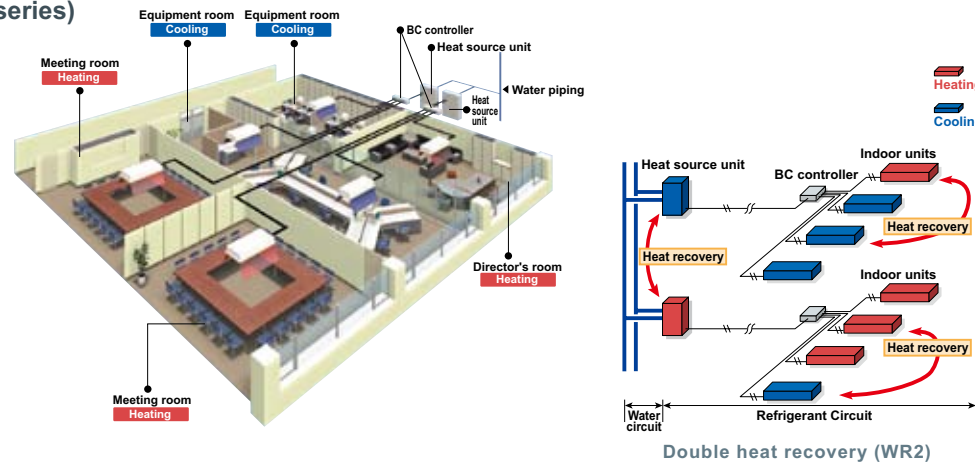
[WR2(Heat Recovery) series]

Advanced water heat source unit enjoying the benefits of R2 series

The CITY MULTI WR2 series 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.

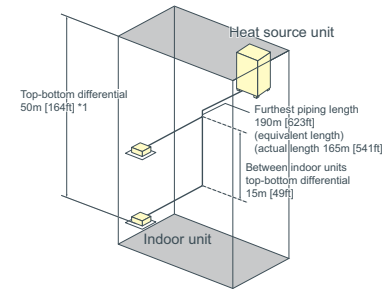
Installation image (WR2 series)



System Pipe Lengths

[8-36HP (WY series)]

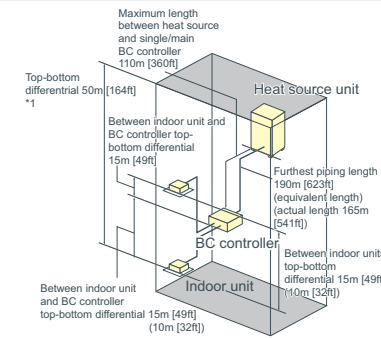
Refrigerant Piping Lengths	Maximum meters [Feet]
Total length (8-12HP)	300 [984]
Total length (16-36HP)	500 [1,640]
Maximum allowable length	165 (190equivalent) [541 (623)]
Farthest indoor from first branch	40 [131]
Vertical differentials between units	Maximum meters [Feet]
Indoor/heat source (heat source higher)	50 [164]
Indoor/heat source (heat source lower)	40 [131]
Indoor/indoor	15 [49]



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

[8-24HP (WR2 series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length (8-12HP)	300-550 [984-1,804]
Total length (16-24HP)	500-750 [1,640-2,460]
Maximum allowable length	165 (190equivalent) [541 (623)]
Maximum length between heat source and single/main BC controller	110 [360]
*Maximum total length is dependent upon the distance between the outdoor unit and the single/main BC Controller.	
Maximum length between single/main BC controller and indoor	40-60 [131-196]
Vertical differentials between units	Maximum meters [Feet]
Indoor/heat source (heat source higher)	50 [164]
Indoor/heat source (heat source lower)	40 [131]
Indoor/BC controller (single/main)	15 [49]
Indoor/indoor	15 (10) [49 (32)]
Main BC Controller/Sub BC Controller	15 (10) [49 (32)]



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

COP comparison (energy efficiency)

The new water cooled outdoor unit offers a greater efficiency with a higher COP compared to our YGM conventional model.

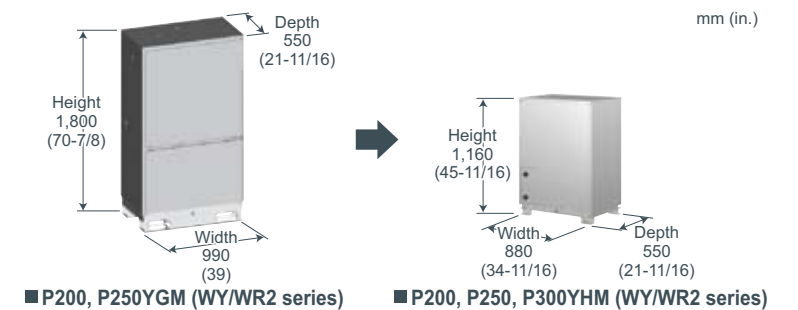
COP comparison

		HP	COP													
			8	10	12	16	18	20	22	24	26	28	30	32	34	36
PQHY	YGM	Cooling	4.68	4.71	-	3.96	-	3.72	-	-	-	-	-	-	-	-
	YGM	Heating	4.68	4.71	-	3.96	-	3.72	-	-	-	-	-	-	-	
PQHY	YHM	Cooling	5.71	5.13	4.55	5.45	5.08	4.89	4.68	4.45	5.22	5.13	4.94	4.69	4.52	4.34
	NEW	Heating	6.06	5.43	4.60	5.78	5.37	5.22	4.70	4.46	5.52	5.33	5.19	4.82	4.65	4.40
PQRY	YGM	Cooling	4.68	4.71	-	3.96	-	3.72	-	-	-	-	-	-	-	
	YGM	Heating	5.33	5.43	-	4.54	-	4.63	-	-	-	-	-	-	-	
PQRY	YHM	Cooling	5.65	5.08	4.50	5.40	5.03	4.84	4.63	4.41	-	-	-	-	-	
	NEW	Heating	6.06	5.43	4.60	5.78	5.37	5.22	4.70	4.46	-	-	-	-	-	

Compact design

Downsized by approximately 57%*, the new models enable an effective use of space.

*8/10/12HP



Weight saving

The reduction in weight leads to easy transportation and installation.

Weight comparison


		HP	unit : kg													
			8	10	12	16	18	20	22	24	26	28	30	32	34	36
PQHY	YGM		272	275	-	452	-	456	-	-	-	-	-	-	-	
	YHM	NEW	195	195	195	390	390	390	390	390	585	585	585	585	585	
PQRY	YGM		263	266	-	440	-	444	-	-	-	-	-	-		
	YHM	NEW	181	181	181	362	362	362	362	362	-	-	-	-		

Wide selection of outdoor units

Heat Pump Series

S Series (4HP-6HP) Page98,99


PUMY-P VHMB(-BS)
PUMY-P YHMB(-BS)



Model	4HP	5HP	6HP
Model Name	PUMY-P100VHMB(-BS) PUMY-P100YHMB(-BS)	PUMY-P125VHMB(-BS) PUMY-P125YHMB(-BS)	PUMY-P140VHMB(-BS) PUMY-P140YHMB(-BS)

Y Series (8HP-12HP) Page100


PUHY-P YJM-A(-BS)



Model	8HP	10HP	12HP
Model Name	PUHY-P200YJM-A(-BS)	PUHY-P250YJM-A(-BS)	PUHY-P300YJM-A(-BS)

Y Series (44HP-48HP) Page107

PUHY-P YSJM-A(-BS)



Model	44HP	46HP	48HP
Model Name	PUHY-P1100YSJM-A(-BS)	PUHY-P1150YSJM-A(-BS)	PUHY-P1200YSJM-A(-BS)

Y Series (50HP) Page108


PUHY-P YSJM-A(-BS)



Model	50HP
Model Name	PUHY-P1250YSJM-A(-BS)

Y Series (14HP-18HP) Page101


PUHY-P YJM-A(-BS)



Model	14HP	16HP	18HP
Model Name	PUHY-P350YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P450YJM-A(-BS)

Y Series (20HP-24HP) Page102

PUHY-P YSJM-A(-BS)
PUHY-P YSJM-A1(-BS)




Model	20HP	20HP	22HP	24HP
Model Name	PUHY-P500YSJM-A(-BS)	PUHY-P500YSJM-A1(-BS)	PUHY-P650YSJM-A(-BS)	PUHY-P600YSJM-A1(-BS)

Heat Pump Series - High COP

Y Series - High COP (8HP-12HP) Page109


PUHY-EP YJM-A(-BS)



Model	8HP	10HP	12HP
Model Name	PUHY-EP200YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP300YJM-A(-BS)

Y Series - High COP (16HP-20HP) Page110


PUHY-EP YSJM-A(-BS)



Model	16HP	18HP	20HP
Model Name	PUHY-EP400YSJM-A(-BS)	PUHY-EP450YSJM-A(-BS)	PUHY-EP500YSJM-A(-BS)

Y Series (24HP-28HP) Page103


PUHY-P YSJM-A(-BS)
PUHY-P YSJM-A1(-BS)



Model	24HP	26HP	28HP
Model Name	PUHY-P600YSJM-A(-BS)	PUHY-P650YSJM-A(-BS)	PUHY-P700YSJM-A1(-BS)

Y Series (28HP-32HP) Page104


PUHY-P YSJM-A(-BS)
PUHY-P YSJM-A1(-BS)



Model	28HP	30HP	32HP
Model Name	PUHY-P700YSJM-A(-BS)	PUHY-P750YSJM-A(-BS)	PUHY-P800YSJM-A1(-BS)

Y Series - High COP (20HP-24HP) Page111


PUHY-EP YSJM-A(-BS)
PUHY-EP YSJM-A1(-BS)



Model	20HP	22HP	24HP
Model Name	PUHY-EP500YSJM-A1(-BS)	PUHY-EP550YSJM-A(-BS)	PUHY-EP600YSJM-A(-BS)

Y Series - High COP (26HP-28HP) Page112


PUHY-EP YSJM-A(-BS)



Model	26HP	28HP
Model Name	PUHY-EP650YSJM-A(-BS)	PUHY-EP700YSJM-A(-BS)

Y Series (32HP-36HP) Page105


PUHY-P YSJM-A(-BS)



Model	32HP	34HP	36HP
Model Name	PUHY-P800YSJM-A(-BS)	PUHY-P850YSJM-A(-BS)	PUHY-P900YSJM-A(-BS)

Y Series (38HP-42HP) Page106


PUHY-P YSJM-A(-BS)



Model	38HP	40HP	42HP
Model Name	PUHY-P950YSJM-A(-BS)	PUHY-P1000YSJM-A(-BS)	PUHY-P1050YSJM-A(-BS)

Y Series - High COP (28HP-30HP) Page113


PUHY-EP YSJM-A(-BS)
PUHY-EP YSJM-A1(-BS)



Model	28HP	30HP
Model Name	PUHY-EP700YSJM-A1(-BS)	PUHY-EP750YSJM-A(-BS)

Y Series - High COP (30HP-32HP) Page114

PUHY-EP YSJM-A(-BS)
PUHY-EP YSJM-A1(-BS)



Model	30HP	32HP
Model Name	PUHY-EP750YSJM-A1(-BS)	PUHY-EP800YSJM-A(-BS)


*The PUHY-P-YSJM-A(1) series requires a Twinning kit (optional). Refer to the data book for details.

* The PUHY-P-YSJM-A(1) and PUHY-EP-YSJM-A(1) series requires a Twinning kit (optional). Refer to the data book for details.
* Unit photos are all standard models.

Wide selection of outdoor units

Y Series - High COP (32HP-34HP) Page115


PUHY-EP YSJM-A(-BS)
PUHY-EP YSJM-A1(-BS)



Model	32HP	34HP
Model Name	PUHY-EP800YSJM-A1(-BS)	PUHY-EP850YSJM-A(-BS)

Y Series - High COP (36HP) Page116

PUHY-EP YSJM-A(-BS)



Model	36HP
Model Name	PUHY-EP900YSJM-A(-BS)

Heat Pump Series - ZUBADAN (Y)

ZUBADAN Series (8HP-20HP) Page117

PUHY-HP YHM-A(-BS)
PUHY-HP YSHM-A(-BS)




Model	8HP	10HP	16HP	20HP
Model Name	PUHY-HP200YHM-A(-BS)	PUHY-HP250YHM-A(-BS)	PUHY-HP400YSHM-A(-BS)	PUHY-HP500YSHM-A(-BS)

Water Cooled Heat Pump Series

WY (Heat Pump) Series (8HP-24HP) Page118~120


PQHY-P YHM-A
PQHY-P YSHM-A



Model	8HP	10HP	12HP	16HP
Model Name	PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A	PQHY-P400YSHM-A
Model	18HP	20HP	22HP	24HP
Model Name	PQHY-P450YSHM-A	PQHY-P500YSHM-A	PQHY-P550YSHM-A	PQHY-P600YSHM-A

WY (Heat Pump) Series (26HP-36HP) Page121~123

PQHY-P YSHM-A



Model	26HP	28HP	30HP	32HP
Model Name	PQHY-P650YSHM-A	PQHY-P700YSHM-A	PQHY-P750YSHM-A	PQHY-P800YSHM-A
Model	34HP	36HP		
Model Name	PQHY-P850YSHM-A	PQHY-P900YSHM-A		


* The PUHY-EP-YSJM-A(1), PUHY-HP-YSHM-A and PQHY-P-YSHM-A series requires a Twinning kit (optional). Refer to the data book for details.
* Unit photos are all standard models.

Wide selection of outdoor units

Heat Recovery Series

R2 Series (8HP-12HP) Page124


PURY-P YJM-A(-BS)



Model	8HP	10HP	12HP
Model Name	PURY-P200YJM-A(-BS)	PURY-P250YJM-A(-BS)	PURY-P300YJM-A(-BS)

R2 Series (14HP-18HP) Page125

PURY-P YJM-A(-BS)



Model	14HP	16HP	18HP
Model Name	PURY-P350YJM-A(-BS)	PURY-P400YJM-A(-BS)	PURY-P450YJM-A(-BS)

R2 Series (16HP-20HP) Page126


PURY-P YSJM-A(-BS)
PURY-P YSJM-A1(-BS)



Model	16HP	18HP	20HP
Model Name	PURY-P400YSJM-A1(-BS)	PURY-P450YSJM-A1(-BS)	PURY-P500YSJM-A(-BS)

R2 Series (20HP-24HP) Page127


PURY-P YSJM-A(-BS)
PURY-P YSJM-A1(-BS)



Model	20HP	22HP	24HP
Model Name	PURY-P500YSJM-A1(-BS)	PURY-P550YSJM-A(-BS)	PURY-P600YSJM-A(-BS)

R2 Series (24HP-28HP) Page128


PURY-P YSJM-A(-BS)
PURY-P YSJM-A1(-BS)



Model	24HP	26HP	28HP
Model Name	PURY-P600YSJM-A1(-BS)	PURY-P650YSJM-A(-BS)	PURY-P700YSJM-A(-BS)

R2 Series (28HP-32HP) Page129


PURY-P YSJM-A(-BS)
PURY-P YSJM-A1(-BS)



Model	28HP	30HP	32HP
Model Name	PURY-P700YSJM-A1(-BS)	PURY-P750YSJM-A(-BS)	PURY-P800YSJM-A(-BS)

R2 Series (32HP-36HP) Page130

PURY-P YSJM-A(-BS)
PURY-P YSJM-A1(-BS)



Model	32HP	34HP	36HP
Model Name	PURY-P800YSJM-A1(-BS)	PURY-P850YSJM-A(-BS)	PURY-P900YSJM-A(-BS)


* The PURY-P-YSJM-A(1) series requires a Twinning kit (optional). Refer to the data book for details.

Wide selection of outdoor units

Heat Recovery Series - High COP

R2 Series - High COP (8HP-14HP) Page131


PURY-EP YJM-A(-BS)



Model	8HP	10HP	12HP	14HP
Model Name	PURY-EP200YJM-A(-BS)	PURY-EP250YJM-A(-BS)	PURY-EP300YJM-A(-BS)	PURY-EP350YJM-A(-BS)

R2 Series - High COP (16HP-20HP) Page132


PURY-EP YSJM-A(-BS)



Model	16HP	18HP	20HP
Model Name	PURY-EP400YSJM-A(-BS)	PURY-EP450YSJM-A(-BS)	PURY-EP500YSJM-A(-BS)

R2 Series - High COP (20HP-24HP) Page133


PURY-EP YSJM-A(-BS)
PURY-EP YSJM-A1(-BS)



Model	20HP	22HP	24HP
Model Name	PURY-EP500YSJM-A1(-BS)	PURY-EP550YSJM-A(-BS)	PURY-EP600YSJM-A(-BS)

R2 Series - High COP (24HP-28HP) Page134

PURY-EP YSJM-A(-BS)
PURY-EP YSJM-A1(-BS)




Model	24HP	26HP	28HP
Model Name	PURY-EP600YSJM-A1(-BS)	PURY-EP650YSJM-A(-BS)	PURY-EP700YSJM-A(-BS)

Water Cooled Heat Recovery Series

WR2 (Heat Recovery) Series (8HP-24HP) Page135~137

PQRY-P YHM-A
PQRY-P YSHM-A



Model	8HP	10HP	12HP	16HP
Model Name	PQRY-P200YHM-A	PQRY-P250YHM-A	PQRY-P300YHM-A	PQRY-P400YSHM-A
Model	18HP	20HP	22HP	24HP
Model Name	PQRY-P450YSHM-A	PQRY-P500YSHM-A	PQRY-P550YSHM-A	PQRY-P600YSHM-A

* The PURY-EP-YSJM-A(1) and PQRY-P-YSHM-A series requires a Twinning kit (optional). Refer to the data book for details.
* Unit photos are all standard models.

OUTDOOR UNIT S Series PUMY-P VHMB(-BS)



► Specifications

		PUMY-P100VHMB(-BS)	PUMY-P125VHMB(-BS)	PUMY-P140VHMB(-BS)
Power source		1-phase 220-230-240V 50Hz, 1-phase 220V 60Hz		
Cooling capacity (Nominal)	*1 kW	11.2	14.0	15.5
	*1 BTU/h	38,200	47,800	52,900
	Power input kW	3.34	4.32	5.35
	Current input A	15.4-14.8-14.1, 15.4	20.0-19.1-18.3, 20.0	24.7-23.6-22.7, 24.7
COP (kW/kW)		3.35	3.24	2.9
Temp. range of cooling	Indoor	W.B. 15 ~ 24°C (59 ~ 75°F)		
	Outdoor	D.B. - 5 ~ 46°C (23 ~ 115°F)		
10 to 46°C D.B. (50 to 115°F D.B.) : in case of connecting PKFY-P15 / P20 / P25 type indoor unit.				
Heating capacity (Nominal)	*2 kW	12.5	16.0	18.0
	*2 BTU/h	42,700	54,600	61,400
	Power input kW	3.66	4.33	5.58
	Current input A	16.9-16.2-15.5, 16.9	20.0-19.1-18.3, 20.0	25.8-24.7-23.6, 25.8
COP (kW/kW)		3.42	3.69	3.23
Temp. range of heating	Indoor temp.	D.B. 15 ~ 27°C (59 ~ 81°F)		
	Outdoor temp.	W.B. -15 ~ 15°C (5 ~ 59°F)		
Indoor unit connectable Total capacity 50 ~ 130% of outdoor unit capacity				
Model/Quantity		P15 ~ P125 / 1 ~ 8	P15 ~ P140 / 1 ~ 10	P15 ~ P140 / 1 ~ 12
Sound pressure level (measured in anechoic room)		dB<A> 49 / 51		51 / 53
Diameter of refrigerant pipe	Liquid (High press.)	mm(in.) ø9.52 (ø3/8)		
	Gas (Low press.)	mm(in.) ø15.88 (ø5/8)		
External finish Galvanized steel sheet <MUNSELL 3Y 7.8/1.1>				
External dimension H x W x D		mm (in.) 1,350 x 950 x 330 (53-3/16 x 37-7/16 x 13)		
Net weight		kg (lbs) 129 (284)		
Heat exchanger Salt-resistant cross fin & copper tube				
Compressor Type Inverter scroll hermetic comp.				
Starting method		Inverter		
FAN	Motor output kW	2.2	2.9	3.3
	Air flow rate	m³/min	100	100
		L/s	1,667	1,667
	cfm	3,532	3,532	
Type x Quantity		Propeller fan x 2		
Motor output		kW 0.06 x 2		
Protection High pressure protection High pressure sensor, High pressure switch 4.15 MPa				
Inverter circuit (COMP./FAN) Over-heat protection, Over-current protection				
Compressor Discharge thermo protection, Over-current protection				
Refrigerant Type x Original charge		R410A x 8.5kg (19 lbs)		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT S Series PUMY-P YHMB(-BS)



► Specifications

		PUMY-P100YHMB(-BS)	PUMY-P125YHMB(-BS)	PUMY-P140YHMB(-BS)
Power source		3-phase, 380-400-415V, 50Hz		
Cooling capacity (Nominal)	*1 kW	11.2	14.0	15.5
	*1 BTU/h	38,200	47,800	52,900
	Power input kW	3.30	4.27	5.32
	Current input A	5.28-5.02-4.84	6.83-6.49-6.26	8.51-8.09-7.80
COP (kW/kW)		3.39	3.28	2.91
Temp. range of cooling	Indoor W.B.	15 ~ 24°C (59~75°F)		
	Outdoor D.B.	- 5 ~ 46°C (23~115°F) 10 to 46°C D.B.(50 to 115°F D.B.) : in case of connecting PKFY-P15/P20/P25 type indoor unit.		
Heating capacity (Nominal)	*2 kW	12.5	16.0	18.0
	*2 BTU/h	42,700	54,600	61,400
	Power input kW	3.63	4.29	5.32
	Current input A	5.81-5.52-5.32	6.87-6.52-6.29	8.51-8.09-7.80
COP (kW/kW)		3.44	3.73	3.38
Temp. range of heating	Indoor temp. D.B.	15~27°C (59~81°F)		
	Outdoor temp. W.B.	-15~15°C (5~59°F)		
Indoor unit connectable	Total capacity	50 ~ 130% of outdoor unit capacity		
	Model/Quantity	P15 ~ P125 / 1 ~ 8	P15 ~ P140 / 1 ~ 10	P15 ~ P140 / 1 ~ 12
Sound pressure level (measured in anechoic room)	dB<A>	49/51	50/52	51/53
	Diameter of refrigerant pipe	Galvanized steel sheet<MUNSELL 3Y 7.8/1.1>		
External finish	External dimension H x W x D mm (in.)	1,350 x 950 x 330 (53-3/16 x 37-7/16 x 13)		
	Net weight kg (lbs)	142 (312)		
Heat exchanger		Salt-resistant cross fin & copper tube Inverter scroll hermetic compressor		
Compressor	Type	Mitsubishi Electric Corporation		
	Starting method	Inverter		
	Motor output kW	1.9	2.4	2.9
	Case heater kW	-	-	-
FAN	Lubricant	FV508		
	Air flow rate m ³ /min	100		
	External static press.	0 Pa		
	Type x Quantity	Propeller fan x 2		
HIC circuit (HIC: Heat Inter-Changer)	Control, Driving mechanism	DC-control, Direct-driven by motor		
	Motor output kW	0.06 x 2		
Protection	High pressure protection	High pressure sensor, High pressure switch 4.15 MPa		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		
	Compressor	Discharge thermo protection, Over-current protection		
	Fan motor	Over-heat protection, Voltage protection		
Defrosting method		Auto-defrost mode (Reversed refrigerant circle)		
Refrigerant	Type x Original charge	R410A x 8.5kg (19 lbs)		
	Control	LEV circuit		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT Y Series PUHY-P YJM-A(-BS)



► Specifications

Model		PUHY-P200YJM-A(-BS)	PUHY-P250YJM-A(-BS)	PUHY-P300YJM-A(-BS)
Power source		3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	22.4	28.0	33.5
	*1 BTU / h	76,400	95,500	114,300
	Power input kW	5.62	7.40	9.00
	Current input A	9.4-9.0-8.6	12.4-11.8-11.4	15.1-14.4-13.9
COP		3.98	3.78	3.72
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)		
	Outdoor D.B.	-5.0~46.0°C(23~115°F)		
Heating capacity (Nominal)	*2 kW	25.0	31.5	37.5
	*2 BTU / h	85,300	107,500	128,000
	Power input kW	5.84	7.34	9.25
	Current input A	9.8-9.3-9.0	12.3-11.7-11.3	15.6-14.8-14.2
COP		4.28	4.29	4.05
Temp. range of heating	Indoor D.B.	15.0~27.0°C(59~81°F)		
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)		
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity		
	Model / Quantity	P15~P250 / 1~17	P15~P250 / 1~21	P15~P250 / 1~26
Sound pressure level (measured in anechoic room)	dB <A>	56	58	59
	Power pressure level (measured in anechoic room)	dB <A>	76	78
Refrigerant piping diameter	Liquid pipe mm (in.)	9.52(3/8) Braze	9.52(3/8) Braze (12.7(1/2) Braze, total length >= 90m)	9.52(3/8) Braze (12.7(1/2) Braze, total length >= 40m)
	Gas pipe mm (in.)	19.05(3/4) Braze	22.2(7/8) Braze	22.2(7/8) Braze
FAN	Type x Quantity	Propeller fan x 1		
	Air flow rate m ³ /min	170		
	L/s	2,833		
	cfm	6,003		
Compressor	Driving mechanism	Inverter-control, Direct-driven by motor		
	Motor output kW	0.46 x 1	0.46 x 1	0.46 x 1
	*3 External static press.	0 Pa (0 mmH ₂ O)		
	Type x Quantity	Inverter scroll hermetic compressor		
External finish	Starting method	Inverter		
	Motor output kW	5.4	6.8	7.7
	Case heater kW	0.035	0.035	0.045
	Type x Quantity	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor	Thermal switch	Thermal switch	Thermal switch
Refrigerant	Type x original charge	R410A x 6.5kg (15lbs)	R410A x 8.0kg (18lbs)	R410A x 8.0kg (18lbs)
	Net weight kg (lbs)	190(419)	200(441)	215(474)
Heat exchanger		Salt-resistant cross fin & copper tube		
Optional parts		Joint: CMY-Y102SS-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT Y Series PUHY-P YJM-A(-BS)



► Specifications

Model	PUHY-P350YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P450YJM-A(-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	40.0	45.0	50.0
	*1 BTU / h	136,500	153,500	170,600
	Power input kW	11.01	13.11	15.47
	Current input A	18.5-17.6-17.0	22.1-21.0-20.2	26.1-24.8-23.9
	COP	3.63	3.43	3.23
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	45.0	50.0	56.0
	*2 BTU / h	153,500	170,600	191,100
	Power input kW	11.19	12.82	14.62
	Current input A	18.8-17.9-17.2	21.6-20.5-19.8	24.6-23.4-22.5
	COP	4.02	3.90	3.83
Temp. range of heating	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
	Model / Quantity	P15~P250 / 1~30	P15~P250 / 1~34	P15~P250 / 1~39
Sound pressure level (measured in anechoic room)	dB <A>	60	61	62
Power pressure level (measured in anechoic room)	dB <A>	80	81	82
Refrigerant piping diameter	Liquid pipe mm (in.)	12.7(1/2) Braze	12.7(1/2) Braze	15.88(5/8) Braze
	Gas pipe mm (in.)	28.58(1-1/8) Braze	28.58(1-1/8) Braze	28.58(1-1/8) Braze
FAN	Type x Quantity	Propeller fan x 1		
	Air flow rate	m³/min		
		210	210	370
		L/s	3,500	6,167
		cfm	7,415	13,065
	Driving mechanism	Inverter-control, Direct-driven by motor		
	Motor output kW	0.46 x 1		
	*3 External static press.	0 Pa (0 mmH ₂ O)		
	Compressor	Inverter scroll hermetic compressor		
	Starting method	Inverter		
Motor output kW	9.9			
Case heater kW	0.045			
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		
	Compressor	Over-heat protection, Over-current protection		
	Fan motor	Over-heat protection		
Refrigerant	Type x original charge	R410A x 11.5kg (26lbs)		
Net weight	kg (lbs)	250(552)		
Heat exchanger	Salt-resistant cross fin & copper tube			
Optional parts	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G			

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

Outdoor unit

OUTDOOR UNIT Y Series PUHY-P YSJM-A(1)(-BS)



► Specifications

Model	PUHY-P500YSJM-A(-BS)	PUHY-P500YSJM-A1(-BS)	PUHY-P550YSJM-A(-BS)	PUHY-P600YSJM-A1(-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity (Nominal)	*1 kW	56.0	56.0	63.0	69.0	
	*1 BTU / h	191,100	191,100	215,000	235,400	
	Power input kW	15.38	15.05	17.16	19.00	
	Current input A	25.9-24.6-23.7	25.4-24.1-23.2	28.9-27.5-26.5	32.0-30.4-29.3	
	COP	3.64	3.72	3.67	3.63	
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	
Heating capacity (Nominal)	*2 kW	63.0	63.0	69.0	76.5	
	*2 BTU / h	215,000	215,000	235,400	261,000	
	Power input kW	15.03	15.51	16.87	19.26	
	Current input A	25.3-24.1-23.2	26.1-24.8-23.9	28.4-27.0-26.0	32.5-30.8-29.7	
	COP	4.19	4.06	4.09	3.97	
Temp. range of heating	Indoor D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	
Indoor unit connectable	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	P15~P250 / 1~43	P15~P250 / 1~43	P15~P250 / 1~47	P15~P250 / 1~50	
Sound pressure level (measured in anechoic room)	dB <A>	61	61	61.5	62	
Power pressure level (measured in anechoic room)	dB <A>	81	81	81.5	82	
Refrigerant piping diameter	Liquid pipe mm (in.)	15.88(5/8) Braze	15.88(5/8) Braze	15.88(5/8) Braze	15.88(5/8) Braze	
	Gas pipe mm (in.)	28.58(1-1/8) Braze	28.58(1-1/8) Braze	28.58(1-1/8) Braze	28.58(1-1/8) Braze	
Set Model						
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m³/min				
		170	170	170	170	
		L/s	2,833	2,833	2,833	2,833
		cfm	6,003	6,003	6,003	6,003
	Driving mechanism	Inverter-control, Direct-driven by motor				
	Motor output kW	0.46 x 1				
	*3 External static press.	0 Pa (0 mmH ₂ O)				
	Compressor	Inverter scroll hermetic compressor				
	Starting method	Inverter				
Motor output kW	6.8					
Case heater kW	0.035					
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)				
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection				
	Compressor	Over-heat protection, Over-current protection				
	Fan motor	Over-heat protection				
Refrigerant	Type x original charge	R410A x 8.0kg (18lbs)				
Net weight	kg (lbs)	200(441)				
Heat exchanger	Salt-resistant cross fin & copper tube					
Optional parts	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G					

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

Outdoor Unit

OUTDOOR UNIT Y Series PUHY-P YSJM-A(1)(-BS)



► Specifications

Model		PUHY-P600YSJM-A(-BS)	PUHY-P650YSJM-A(-BS)	PUHY-P700YSJM-A(-BS)
Power source		3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1 kW	69.0	73.0	80.0
	*1 BTU/h	235,400	249,100	273,000
	Power input kW	18.75	20.39	23.05
	Current input A	31.6-30.0-28.9	34.4-32.7-31.5	38.9-36.9-35.6
	COP kW/kW	3.68	3.58	3.47
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	76.5	81.5	88.0
	*2 BTU/h	261,000	278,100	300,300
	Power input kW	18.88	20.47	23.09
	Current input A	31.8-30.2-29.1	34.5-32.8-31.6	38.9-37.0-35.6
	COP kW/kW	4.05	3.98	3.81
Temp. range of heating	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
Sound pressure level (measured in anechoic room)	Model / Quantity	P15~P250 / 1~50	P15~P250 / 1~50	P15~P250 / 1~50
Power pressure level (measured in anechoic room)	Model / Quantity	P15~P250 / 1~50	P15~P250 / 1~50	P15~P250 / 1~50
Refrigerant piping diameter	Liquid pipe	15.88(5/8) Brazed	15.88(5/8) Brazed	19.05(3/4) Brazed
	Gas pipe	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed	34.93(1-3/8) Brazed

Set Model		PUHY-P250YJM-A(-BS)	PUHY-P300YJM-A(-BS)	PUHY-P350YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P450YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m ³ /min	170	210	170	210	210
		L/s	2,833	3,500	2,833	3,500	3,500
		cfm	6,003	7,415	6,003	7,415	7,415
	Driving mechanism	Inverter-control, Direct-driven by motor					
	Motor output kW	0.46 x 1					
*3 External static press.	0 Pa (0 mmH ₂ O)						
Compressor	Type x Quantity	Inverter scroll hermetic compressor					
	Starting method	Inverter					
	Motor output kW	6.8	9.9	7.7	9.9	10.1	10.1
	Case heater kW	0.035	0.045	0.045	0.045	0.045	0.045
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>						
	External dimension HxWxD	1,710(1,650 without legs) x 920 x 760					
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)					
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection					
Refrigerant	Type x original charge	R410A x 8.0kg (18lbs)	R410A x 11.5kg (26lbs)	R410A x 8.0kg (18lbs)	R410A x 11.5kg (26lbs)	R410A x 8.0kg (18lbs)	R410A x 11.5kg (26lbs)
	Net weight	200(441)		250(552)		250(552)	
Heat exchanger and distributor	Liquid pipe	Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
	Gas pipe	9.52(3/8) Brazed		12.7(1/2) Brazed		15.88(5/8) Brazed	
Optional parts	Outdoor Twinning kit	CMY-Y100VBK2		CMY-Y100VBK2		CMY-Y200VBK2	
	Joint	CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2	
	Header	CMY-Y104/108/1010-G		CMY-Y104/108/1010-G		CMY-Y104/108/1010-G	

Notes:
*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH₂O, 6.1mmH₂O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

Outdoor unit

OUTDOOR UNIT Y Series PUHY-P YSJM-A(1)(-BS)



► Specifications

Model		PUHY-P700YSJM-A(-BS)	PUHY-P750YSJM-A(-BS)	PUHY-P800YSJM-A(-BS)
Power source		3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1 kW	80.0	85.0	90.0
	*1 BTU/h	273,000	290,000	307,100
	Power input kW	22.47	24.70	26.86
	Current input A	37.9-36.0-34.7	41.6-39.6-38.1	45.3-43.0-41.5
	COP kW/kW	3.56	3.44	3.35
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	88.0	95.0	100.0
	*2 BTU/h	300,300	324,100	341,200
	Power input kW	22.27	24.67	27.02
	Current input A	37.5-35.7-34.4	41.6-39.5-38.1	45.6-43.3-41.7
	COP kW/kW	3.95	3.85	3.70
Temp. range of heating	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
Sound pressure level (measured in anechoic room)	Model / Quantity	P15~P250 / 1~50	P15~P250 / 1~50	P15~P250 / 1~50
Power pressure level (measured in anechoic room)	Model / Quantity	P15~P250 / 1~50	P15~P250 / 1~50	P15~P250 / 1~50
Refrigerant piping diameter	Liquid pipe	19.05(3/4) Brazed	19.05(3/4) Brazed	19.05(3/4) Brazed
	Gas pipe	34.93(1-3/8) Brazed	34.93(1-3/8) Brazed	34.93(1-3/8) Brazed

Set Model		PUHY-P350YJM-A(-BS)	PUHY-P350YJM-A(-BS)	PUHY-P350YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P400YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m ³ /min	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415
	Driving mechanism	Inverter-control, Direct-driven by motor					
	Motor output kW	0.46 x 1					
*3 External static press.	0 Pa (0 mmH ₂ O)						
Compressor	Type x Quantity	Inverter scroll hermetic compressor					
	Starting method	Inverter					
	Motor output kW	9.9	9.9	9.9	10.1	10.1	10.1
	Case heater kW	0.045	0.045	0.045	0.045	0.045	0.045
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>						
	External dimension HxWxD	1,710(1,650 without legs) x 1,220 x 760					
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)					
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection					
Refrigerant	Type x original charge	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	
	Net weight	250(552)		250(552)		250(552)	
Heat exchanger and distributor	Liquid pipe	Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
	Gas pipe	12.7(1/2) Brazed		12.7(1/2) Brazed		15.88(5/8) Brazed	
Optional parts	Outdoor Twinning kit	CMY-Y200VBK2		CMY-Y200VBK2		CMY-Y200VBK2	
	Joint	CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2	
	Header	CMY-Y104/108/1010-G		CMY-Y104/108/1010-G		CMY-Y104/108/1010-G	

Notes:
*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH₂O, 6.1mmH₂O).
*Nominal condition *1,*2 are subject to JIS B8615-1.
*Due to continuing improvement, above specification may be subject to change without notice.

Outdoor Unit

OUTDOOR UNIT Y Series PUHY-P YSJM-A (-BS)

> Specifications



Model	PUHY-P800YSJM-A(-BS)		PUHY-P850YSJM-A(-BS)		PUHY-P900YSJM-A(-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity (Nominal)	*1 kW	90.0	96.0	101.0		
	*1 BTU/h	307,100	327,600	344,600		
	Power input kW	27.10	29.62	32.06		
	Current input A	45.7-43.4-41.8	50.0-47.5-45.7	54.1-51.4-49.5		
COP	kW / kW	3.32	3.24	3.15		
	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)		
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)		
Heating capacity (Nominal)	*2 kW	100.0	108.0	113.0		
	*2 BTU/h	341,200	368,500	385,600		
	Power input kW	25.70	28.42	30.05		
	Current input A	43.3-41.2-39.7	47.9-45.5-43.9	50.7-48.1-46.4		
COP	kW / kW	3.89	3.80	3.76		
	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)		
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)		
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity		50~130 % of outdoor unit capacity		
	Model / Quantity	P15~P250 / 1~50		P15~P250 / 1~50		
Sound pressure level (measured in anechoic room)	dB <A>	64	64.5	65		
Power pressure level (measured in anechoic room)	dB <A>	84	84.5	85		
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05(3/4) Brazed		19.05(3/4) Brazed		
	Gas pipe mm (in.)	34.93(1-3/8) Brazed		41.28(1-5/8) Brazed		

Set Model

Model	PUHY-P350YJM-A(-BS)	PUHY-P450YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P450YJM-A(-BS)	PUHY-P450YJM-A(-BS)	PUHY-P450YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 2	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	
	Air flow rate	m³/min	210	370	210	370	370
		L/s	3,500	6,167	3,500	6,167	6,167
		cfm	7,415	13,065	7,415	13,065	13,065
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output kW	0.46 x 1	0.46 x 2	0.46 x 1	0.46 x 2	0.46 x 2	0.46 x 2
*3 External static press.	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method	Inverter		Inverter		Inverter	
	Motor output kW	9.9	11.6	10.1	11.6	11.6	
Case heater kW	0.045	0.045	0.045	0.045	0.045	0.045	
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	1,710(1,650 without legs) x 1,750 x 760	
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection	
	Fan motor	Thermal switch		Thermal switch		Thermal switch	
Refrigerant	Type x original charge	R410A x 11.5kg (26lbs)	R410A x 11.8kg (27lbs)	R410A x 11.5kg (26lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	
Net weight	kg (lbs)	250(552)	290(640)	250(552)	290(640)	290(640)	
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe mm (in.)	12.7(1/2) Brazed	15.88(5/8) Brazed	15.88(5/8) Brazed	15.88(5/8) Brazed	15.88(5/8) Brazed	
	Gas pipe mm (in.)	28.58(1-1/8) 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	
Optional parts	Outdoor Twinning kit:	CMY-Y200VBK2		CMY-Y200VBK2		CMY-Y200VBK2	
	Joint:	CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2	
	Header:	CMY-Y104/108/1010-G		CMY-Y104/108/1010-G		CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

Outdoor unit

OUTDOOR UNIT Y Series PUHY-P YSJM-A(-BS)

> Specifications



Model	PUHY-P950YSJM-A(-BS)		PUHY-P1000YSJM-A(-BS)		PUHY-P1050YSJM-A(-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity (Nominal)	*1 kW	108.0	113.0	118.0		
	*1 BTU/h	368,500	385,600	402,600		
	Power input kW	30.50	32.10	33.81		
	Current input A	51.4-48.9-47.1	54.1-51.4-49.6	57.0-54.2-52.2		
COP	kW / kW	3.54	3.52	3.49		
	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)		
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)		
Heating capacity (Nominal)	*2 kW	119.5	127.0	132.0		
	*2 BTU/h	407,700	433,300	450,400		
	Power input kW	30.02	33.15	34.10		
	Current input A	50.6-48.1-46.4	55.9-53.1-51.2	57.5-54.6-52.7		
COP	kW / kW	3.98	3.83	3.87		
	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)		
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)		
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity		50~130 % of outdoor unit capacity		
	Model / Quantity	P15~P250 / 1~50		P15~P250 / 2~50		
Sound pressure level (measured in anechoic room)	dB <A>	64.5	64.5	65		
Power pressure level (measured in anechoic room)	dB <A>	84.5	84.5	85		
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05(3/4) Brazed		19.05(3/4) Brazed		
	Gas pipe mm (in.)	41.28(1-5/8) Brazed		41.28(1-5/8) Brazed		

Set Model

Model	PUHY-P250YJM-A(-BS)	PUHY-P300YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P300YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P300YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P400YJM-A(-BS)
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m³/min	170	170	210	170	170	210	210
		L/s	2,833	2,833	3,500	2,833	2,833	3,500	3,500
		cfm	6,003	6,003	7,415	6,003	6,003	7,415	7,415
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output kW	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 1
*3 External static press.	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method	Inverter		Inverter		Inverter		Inverter	
	Motor output kW	6.8	7.7	10.1	7.7	7.7	10.1	10.1	
Case heater kW	0.035	0.045	0.045	0.045	0.045	0.045	0.045	0.045	
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		Over-heat protection	
	Fan motor	Thermal switch		Thermal switch		Thermal switch		Thermal switch	
Refrigerant	Type x original charge	R410A x 8.0kg (18lbs)	R410A x 8.0kg (18lbs)	R410A x 11.5kg (26lbs)	R410A x 8.0kg (18lbs)	R410A x 8.0kg (18lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	
Net weight	kg (lbs)	200(441)	215(474)	250(552)	215(474)	215(474)	250(552)	250(552)	
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe mm (in.)	9.52(3/8) Brazed	12.7(1/2) Brazed	15.88(5/8) Brazed	12.7(1/2) Brazed	12.7(1/2) Brazed	15.88(5/8) Brazed	15.88(5/8) Brazed	
	Gas pipe mm (in.)	22.2(7/8) Brazed	22.2(7/8) Brazed	28.58(1-1/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed	
Optional parts	Outdoor Twinning kit:	CMY-Y300VBK2		CMY-Y300VBK2		CMY-Y300VBK2		CMY-Y300VBK2	
	Joint:	CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2	
	Header:	CMY-Y104/108/1010-G		CMY-Y104/108/1010-G		CMY-Y104/108/1010-G		CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

Outdoor Unit

OUTDOOR UNIT Y Series PUHY-P YSJM-A (-BS)

> Specifications



Model	PUHY-P1100YSJM-A(-BS)			PUHY-P1150YSJM-A(-BS)			PUHY-P1200YSJM-A(-BS)				
Power source	3-phase 4-wire 380-400-415V 50/60Hz										
Cooling capacity (Nominal)	*1 kW	124.0			130.0			136.0			
	*1 BTU / h	423,100			443,600			464,000			
	Power input kW	35.73			38.34			40.84			
	Current input A	60.3-57.3-55.2			64.7-61.4-59.2			68.9-65.4-63.1			
Temp. range of cooling	COP	3.47			3.39			3.33			
	Indoor W.B.	15.0~24.0°C(59~75°F)			15.0~24.0°C(59~75°F)			15.0~24.0°C(59~75°F)			
	Outdoor D.B.	-5.0~46.0°C(23~115°F)			-5.0~46.0°C(23~115°F)			-5.0~46.0°C(23~115°F)			
Heating capacity (Nominal)	*2 kW	140.0			145.0			150.0			
	*2 BTU / h	477,700			494,700			511,800			
	Power input kW	36.08			37.27			39.26			
	Current input A	60.9-57.8-55.7			62.9-59.7-57.6			66.2-62.9-60.6			
Temp. range of heating	COP	3.88			3.89			3.82			
	Indoor W.B.	15.0~27.0°C(59~81°F)			15.0~27.0°C(59~81°F)			15.0~27.0°C(59~81°F)			
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)			-20.0~15.5°C(-4~60°F)			-20.0~15.5°C(-4~60°F)			
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity			50~130 % of outdoor unit capacity			50~130 % of outdoor unit capacity			
	Model / Quantity	P15~P250 / 2~50			P15~P250 / 2~50			P15~P250 / 2~50			
Sound pressure level (measured in anechoic room)	dB <A>	65			65.5			66			
Power pressure level (measured in anechoic room)	dB <A>	85			85.5			86			
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05(3/4) Braze			19.05(3/4) Braze			19.05(3/4) Braze			
	Gas pipe mm (in.)	41.28(1-5/8) Braze			41.28(1-5/8) Braze			41.28(1-5/8) Braze			
Set Model											
Model	PUHY-P350YJM-A(-BS)	PUHY-P350YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P350YJM-A(-BS)	PUHY-P350YJM-A(-BS)	PUHY-P450YJM-A(-BS)	PUHY-P350YJM-A(-BS)	PUHY-P400YJM-A(-BS)	PUHY-P450YJM-A(-BS)		
FAN	Type x Quantity	Propeller fan x 1			Propeller fan x 1			Propeller fan x 2			
	Air flow rate	m ³ /min	210			210			370		
		L/s	3,500			3,500			6,167		
		cfm	7,415			7,415			13,065		
	Driving mechanism	Inverter-control, Direct-driven by motor									
	*3 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor									
	Starting method	Inverter									
	Motor output kW	9.9			9.9			11.6			
	Case heater kW	0.045			0.045			0.045			
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>										
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760			1,710(1,650 without legs) x 1,220 x 760			1,710(1,650 without legs) x 1,750 x 760			
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16			67-3/8(65 without legs) x 48-1/16 x 29-15/16			67-3/8(65 without legs) x 68-15/16 x 29-15/16			
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)									
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection									
	Compressor	Over-heat protection									
	Fan motor	Over-heat protection									
Refrigerant	Type x original charge	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.8kg (27lbs)		
	Net weight kg (lbs)	250(552)	250(552)	250(552)	250(552)	250(552)	290(640)	250(552)	290(640)		
Heat exchanger	Type	Salt-resistant cross fin & copper tube									
	Pipe between unit and distributor	12.7(1/2) Braze			12.7(1/2) Braze			15.88(5/8) Braze			
Optional parts	Liquid pipe mm (in.)	12.7(1/2) Braze			12.7(1/2) Braze			15.88(5/8) Braze			
	Gas pipe mm (in.)	28.58(1-1/8) Braze			28.58(1-1/8) Braze			28.58(1-1/8) Braze			

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT Y Series PUHY-P YSJM-A(-BS)

> Specifications



Model	PUHY-P1250YSJM-A(-BS)			
Power source	3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	140.0		
	*1 BTU / h	477,700		
	Power input kW	42.94		
	Current input A	72.4-68.8-66.3		
Temp. range of cooling	COP	3.26		
	Indoor W.B.	15.0~24.0°C(59~75°F)		
	Outdoor D.B.	-5.0~46.0°C(23~115°F)		
Heating capacity (Nominal)	*2 kW	156.5		
	*2 BTU / h	534,000		
	Power input kW	40.86		
	Current input A	68.9-65.5-63.1		
Temp. range of heating	COP	3.83		
	Indoor W.B.	15.0~27.0°C(59~81°F)		
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)		
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity		
	Model / Quantity	P15~P250 / 2~50		
Sound pressure level (measured in anechoic room)	dB <A>	66		
Power pressure level (measured in anechoic room)	dB <A>	86		
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05(3/4) Braze		
	Gas pipe mm (in.)	41.28(1-5/8) Braze		
Set Model				
Model	PUHY-P350YJM-A(-BS)	PUHY-P450YJM-A(-BS)	PUHY-P450YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1		
	Air flow rate	m ³ /min	370	
		L/s	6,167	
		cfm	13,065	
	Driving mechanism	Inverter-control, Direct-driven by motor		
	*3 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor		
	Starting method	Inverter		
	Motor output kW	11.6		
	Case heater kW	0.045		
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		
	Fan motor	Over-heat protection		
Refrigerant	Type x original charge	R410A x 11.5kg (26lbs)	R410A x 11.8kg (27lbs)	
	Net weight kg (lbs)	250(552)	290(640)	
Heat exchanger	Type	Salt-resistant cross fin & copper tube		
	Pipe between unit and distributor	12.7(1/2) Braze	15.88(5/8) Braze	
Optional parts	Liquid pipe mm (in.)	12.7(1/2) Braze	15.88(5/8) Braze	
	Gas pipe mm (in.)	28.58(1-1/8) Braze	28.58(1-1/8) Braze	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT Y Series - High COP PUHY-EP YJM-A(-BS)

> Specifications



Model	PUHY-EP200YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	22.4	33.5	
	*1 BTU / h	76,400	114,300	
	Power input kW	5.09	8.03	
	Current input A	8.5-8.1-7.8	11.3-10.7-10.4	
COP	kW / kW	4.40	4.17	
	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	
Heating capacity (Nominal)	*2 kW	25.0	31.5	
	*2 BTU / h	85,300	107,500	
	Power input kW	5.54	7.15	
	Current input A	9.3-8.8-8.5	12.0-11.4-11.0	
COP	kW / kW	4.51	4.48	
	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	
	Model / Quantity	P15~P250 / 1~17	P15~P250 / 1~21	
Sound pressure level (measured in anechoic room)	dB <A>	57	61	
	Power pressure level (measured in anechoic room)	dB <A>	77	81
Refrigerant piping diameter	Liquid pipe mm (in.)	9.52(3/8) Braze	9.52(3/8) Braze (12.7(1/2) Braze, total length >= 90m)	
	Gas pipe mm (in.)	19.05(3/4) Braze	22.2(7/8) Braze	
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m ³ /min	170	210
		L/s	2,833	3,500
		cfm	6,003	7,415
	Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	
	Motor output kW	0.46 x 1	0.46 x 2	
	*3 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	
	Compressor	Type x Quantity	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
		Starting method	Inverter	Inverter
		Motor output kW	5.4	7.7
Case heater kW		0.035	0.045	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	
External dimension HxWxD	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	
	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	
	Compressor	Over-heat protection	Over-heat protection	
	Fan motor	Thermal switch	Thermal switch	
Refrigerant	Type x original charge	R410A x 8.0kg (18lbs)	R410A x 11.8kg (27lbs)	
Net weight	kg (lbs)	200(441)	250(552)	
Heat exchanger		Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	
Optional parts	Joint: CMY-Y102SS-G2	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G	
	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

Outdoor unit

OUTDOOR UNIT Y Series - High COP PUHY-EP YSJM-A (-BS)

> Specifications



Model	PUHY-EP400YSJM-A(-BS)	PUHY-EP450YSJM-A(-BS)	PUHY-EP500YSJM-A(-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	45.0	56.0	
	*1 BTU / h	153,500	191,100	
	Power input kW	10.34	11.87	
	Current input A	17.4-16.5-15.9	20.0-19.0-18.3	
COP	kW / kW	4.35	4.21	
	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	
Heating capacity (Nominal)	*2 kW	50.0	63.0	
	*2 BTU / h	170,600	215,000	
	Power input kW	11.41	12.90	
	Current input A	19.2-18.2-17.6	21.7-20.6-19.9	
COP	kW / kW	4.38	4.41	
	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	
	Model / Quantity	P15~P250 / 1~35	P15~P250 / 1~39	
Sound pressure level (measured in anechoic room)	dB <A>	60	62.5	
	Power pressure level (measured in anechoic room)	dB <A>	80	82.5
Refrigerant piping diameter	Liquid pipe mm (in.)	12.7(1/2) Braze	15.88(5/8) Braze	
	Gas pipe mm (in.)	28.58(1-1/8) Braze	28.58(1-1/8) Braze	
Set Model				
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m ³ /min	170	210
		L/s	2,833	3,500
		cfm	6,003	7,415
	Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	
	Motor output kW	0.46 x 1	0.46 x 2	
	*3 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	
	Compressor	Type x Quantity	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
		Starting method	Inverter	Inverter
		Motor output kW	5.4	6.8
Case heater kW		0.035	0.045	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	
External dimension HxWxD	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	
	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	
	Compressor	Over-heat protection	Over-heat protection	
	Fan motor	Thermal switch	Thermal switch	
Refrigerant	Type x original charge	R410A x 8.0kg (18lbs)	R410A x 11.8kg (27lbs)	
Net weight	kg (lbs)	200(441)	250(552)	
Heat exchanger		Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	
Optional parts	Joint: CMY-Y102SS-G2	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G	
	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

Outdoor Unit

OUTDOOR UNIT Y Series - High COP PUHY-EP YSJM-A(1) (-BS)



> Specifications

Model	PUHY-EP500YSJM-A(-BS)	PUHY-EP550YSJM-A(-BS)	PUHY-EP600YSJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	56.0	63.0
	*1 BTU / h	191,100	215,000
	Power input kW	13.65	15.36
	Current input A	23.0-21.8-21.0	25.9-24.6-23.7
COP	kW / kW	4.10	4.10
	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	63.0	69.0
	*2 BTU / h	215,000	235,400
	Power input kW	14.54	15.78
	Current input A	24.5-23.3-22.4	26.6-25.3-24.3
COP	kW / kW	4.33	4.37
	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Temp. range of heating	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
	Model / Quantity	P15~P250 / 1~43	P15~P250 / 1~47
Sound pressure level (measured in anechoic room)	dB <A>	63	63.5
	Power pressure level (measured in anechoic room)	dB <A>	83
Refrigerant piping diameter	Liquid pipe mm (in.)	15.88(5/8) Braze	15.88(5/8) Braze
	Gas pipe mm (in.)	28.58(1-1/8) Braze	28.58(1-1/8) Braze

Set Model	PUHY-EP250YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	PUHY-EP300YJM-A(-BS)		
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1		Propeller fan x 2		
	Air flow rate	m³/min	210	210	210	370	370	
		L/s	3,500	3,500	3,500	6,167	6,167	
		cfm	7,415	7,415	7,415	13,065	13,065	
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output kW	0.46 x 1		0.46 x 1		0.46 x 2		
	*3 External static press.	0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		
	Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
		Starting method	Inverter		Inverter		Inverter	
		Motor output kW	6.8		6.8		7.7	
Case heater kW		0.045		0.045		0.045		
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
	External dimension HxWxD	1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,750 x 760		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		
	Fan motor	Thermal switch		Thermal switch		Thermal switch		
Refrigerant	Type x original charge	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)		
Net weight	kg (lbs)	250(552)	250(552)	250(552)	290(640)	290(640)		
Heat exchanger	Liquid pipe	Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
	Pipe between unit and distributor	mm (in.)	9.52(3/8) Braze	9.52(3/8) Braze	12.7(1/2) Braze	12.7(1/2) Braze		
Optional parts	Outdoor Twinning kit	CMY-Y100VBK2		CMY-Y100VBK2		CMY-Y100VBK2		
	Joint	CMY-Y102SS/LS-G2, CMY-Y202S-G2		CMY-Y102SS/LS-G2, CMY-Y202S-G2		CMY-Y102SS/LS-G2, CMY-Y202S-G2		
Header	CMY-Y104/108/1010-G		CMY-Y104/108/1010-G		CMY-Y104/108/1010-G			

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT Y Series - High COP PUHY-EP YSJM-A (-BS)



> Specifications

Model	PUHY-EP650YSJM-A(-BS)	PUHY-EP700YSJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW	73.0
	*1 BTU / h	249,100
	Power input kW	17.46
	Current input A	29.4-28.0-26.9
COP	kW / kW	4.18
	Indoor W.B.	15.0~24.0°C(59~75°F)
	Outdoor D.B.	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	81.5
	*2 BTU / h	278,100
	Power input kW	18.56
	Current input A	31.3-29.7-28.6
COP	kW / kW	4.39
	Indoor W.B.	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)
Temp. range of heating	Indoor W.B.	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity
	Model / Quantity	P15~P250 / 1~50
Sound pressure level (measured in anechoic room)	dB <A>	63
	Power pressure level (measured in anechoic room)	dB <A>
Refrigerant piping diameter	Liquid pipe mm (in.)	15.88 (5/8) Braze
	Gas pipe mm (in.)	28.58 (1-1/8) Braze

Set Model	PUHY-EP200YJM-A(-BS)	PUHY-EP200YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	PUHY-EP300YJM-A(-BS)		
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1		Propeller fan x 2		
	Air flow rate	m³/min	170	170	210	170	370	
		L/s	2,833	2,833	3,500	2,833	6,167	
		cfm	6,003	6,003	7,415	6,003	13,065	
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output kW	0.46 x 1		0.46 x 1		0.46 x 2		
	*3 External static press.	0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		0 Pa (0 mmH₂O)		
	Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
		Starting method	Inverter		Inverter		Inverter	
		Motor output kW	5.4		5.4		6.8	
Case heater kW		0.035		0.035		0.045		
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
	External dimension HxWxD	1,710(1,650 without legs) x 920 x 760		1,710(1,650 without legs) x 920 x 760		1,710(1,650 without legs) x 1,750 x 760		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		
	Fan motor	Thermal switch		Thermal switch		Thermal switch		
Refrigerant	Type x original charge	R410A x 8.0kg (18lbs)	R410A x 8.0kg (18lbs)	R410A x 11.5kg (26lbs)	R410A x 8.0kg (18lbs)	R410A x 11.8kg (27lbs)		
Net weight	kg (lbs)	200(441)	200(441)	250(552)	200(441)	290(640)		
Heat exchanger	Liquid pipe	Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
	Pipe between unit and distributor	mm (in.)	9.52(3/8) Braze	9.52(3/8) Braze	9.52(3/8) Braze	9.52(3/8) Braze		
Optional parts	Outdoor Twinning kit	CMY-Y300VBK2		CMY-Y300VBK2		CMY-Y300VBK2		
	Joint	CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2		
Header	CMY-Y104/108/1010-G		CMY-Y104/108/1010-G		CMY-Y104/108/1010-G			

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT Y Series - High COP PUHY-EP YSJM-A(1) (-BS)



> Specifications

Model		PUHY-EP700YSJM-A(-BS)			PUHY-EP750YSJM-A(-BS)			
Power source		3-phase 4-wire 380-400-415V 50/60Hz			3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	80.0			85.0			
	*1 BTU / h	273,000			290,000			
	Power input kW	19.41			20.43			
	Current input A	32.7-31.1-30.0			34.4-32.7-31.5			
COP	kW / kW	4.12			4.16			
	Indoor W.B.	15.0~24.0°C(59~75°F)			15.0~24.0°C(59~75°F)			
	Outdoor D.B.	-5.0~46.0°C(23~115°F)			-5.0~46.0°C(23~115°F)			
Heating capacity (Nominal)	*2 kW	88.0			95.0			
	*2 BTU / h	300,300			324,100			
	Power input kW	20.32			21.93			
	Current input A	34.3-32.5-31.4			37.0-35.1-33.8			
COP	kW / kW	4.33			4.33			
	Indoor W.B.	15.0~27.0°C(59~81°F)			15.0~27.0°C(59~81°F)			
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)			-20.0~15.5°C(-4~60°F)			
Temp. range of heating		50~130 % of outdoor unit capacity			50~130 % of outdoor unit capacity			
Indoor unit connectable	Model / Quantity	P15~P250 / 1~50			P15~P250 / 1~50			
Sound pressure level (measured in anechoic room)	dB <A>	64			64.5			
Power pressure level (measured in anechoic room)	dB <A>	84			84.5			
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05(3/4) Brazed			19.05(3/4) Brazed			
	Gas pipe mm (in.)	34.93(1-3/8) Brazed			34.93(1-3/8) Brazed			
Set Model								
Model		PUHY-EP200YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP200YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1	Propeller fan x 1		Propeller fan x 2	
	Air flow rate	m³/min	170	210	210	170	210	370
		L/s	2,833	3,500	3,500	2,833	3,500	6,167
		cfm	6,003	7,415	7,415	6,003	7,415	13,065
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor
	Motor output kW	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 2	
*3 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)		
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	
	Motor output kW	5.4	6.8	6.8	5.4	6.8	7.7	
	Case heater kW	0.035	0.045	0.045	0.035	0.045	0.045	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		
Fan motor	Thermal switch	Thermal switch		Thermal switch		Thermal switch		
	Type x original charge	R410A x 8.0kg (18lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 8.0kg (18lbs)	R410A x 11.5kg (26lbs)	R410A x 11.8kg (27lbs)	
	Net weight kg (lbs)	200(441)	250(552)	250(552)	200(441)	250(552)	290(640)	
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe mm (in.)	9.52(3/8) Brazed	9.52(3/8) Brazed	9.52(3/8) Brazed	9.52(3/8) Brazed	9.52(3/8) Brazed	12.7(1/2) Brazed	
	Gas pipe mm (in.)	19.05(3/4) Brazed	22.2 (7/8) Brazed	22.2(7/8) Brazed	19.05(3/4) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT Y Series - High COP PUHY-EP YSJM-A(1) (-BS)



> Specifications

Model		PUHY-EP750YSJM-A(-BS)			PUHY-EP800YSJM-A(-BS)		
Power source		3-phase 4-wire 380-400-415V 50/60Hz			3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	85.0			90.0		
	*1 BTU / h	290,000			307,100		
	Power input kW	20.93			21.63		
	Current input A	35.3-33.5-32.3			36.5-34.6-33.4		
COP	kW / kW	4.06			4.16		
	Indoor W.B.	15.0~24.0°C(59~75°F)			15.0~24.0°C(59~75°F)		
	Outdoor D.B.	-5.0~46.0°C(23~115°F)			-5.0~46.0°C(23~115°F)		
Heating capacity (Nominal)	*2 kW	95.0			100.0		
	*2 BTU / h	324,100			341,200		
	Power input kW	21.78			22.77		
	Current input A	36.7-34.9-33.6			38.4-36.5-35.1		
COP	kW / kW	4.36			4.39		
	Indoor W.B.	15.0~27.0°C(59~81°F)			15.0~27.0°C(59~81°F)		
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)			-20.0~15.5°C(-4~60°F)		
Temp. range of heating		50~130 % of outdoor unit capacity			50~130 % of outdoor unit capacity		
Indoor unit connectable	Model / Quantity	P15~P250 / 1~50			P15~P250 / 1~50		
Sound pressure level (measured in anechoic room)	dB <A>	65			65		
Power pressure level (measured in anechoic room)	dB <A>	85			85		
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05(3/4) Brazed			19.05(3/4) Brazed		
	Gas pipe mm (in.)	34.93(1-3/8) Brazed			34.93(1-3/8) Brazed		
Set Model							
Model		PUHY-EP250YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP200YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	PUHY-EP300YJM-A(-BS)
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1	Propeller fan x 1		Propeller fan x 2
	Air flow rate	m³/min	210	210	210	170	370
		L/s	3,500	3,500	3,500	2,833	6,167
		cfm	7,415	7,415	7,415	6,003	13,065
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output kW	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 1	0.46 x 2	
*3 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output kW	6.8	6.8	6.8	5.4	7.7	
	Case heater kW	0.045	0.045	0.045	0.035	0.045	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,750 x 760	1,710(1,650 without legs) x 1,750 x 760
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection	
Fan motor	Thermal switch	Thermal switch		Thermal switch		Thermal switch	
	Type x original charge	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 8.0kg (18lbs)	R410A x 11.8kg (27lbs)	
	Net weight kg (lbs)	250(552)	250(552)	250(552)	200(441)	290(640)	
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe mm (in.)	9.52(3/8) Brazed	9.52(3/8) Brazed	9.52(3/8) Brazed	9.52(3/8) Brazed	12.7(1/2) Brazed	
	Gas pipe mm (in.)	22.2(7/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed	19.05(3/4) Brazed	22.2(7/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT Y Series - High COP PUHY-EP YSJM-A(1) (-BS)



► Specifications

Model		PUHY-EP800YSJM-A1(-BS)			PUHY-EP850YSJM-A(-BS)			
Power source		3-phase 4-wire 380-400-415V 50/60Hz			3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	90.0			96.0			
	*1 BTU / h	307,100			327,600			
	Power input kW	22.16			23.58			
	Current input A	37.4-35.5-34.2			39.8-37.8-36.4			
COP	kW / kW	4.06			4.07			
	W.B.	15.0~24.0°C(59~75°F)			15.0~24.0°C(59~75°F)			
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)			15.0~24.0°C(59~75°F)			
	Outdoor D.B.	-5.0~46.0°C(23~115°F)			-5.0~46.0°C(23~115°F)			
Heating capacity (Nominal)	*2 kW	100.0			108.0			
	*2 BTU / h	341,200			368,500			
	Power input kW	22.98			24.65			
	Current input A	38.7-36.8-35.5			41.6-39.5-38.1			
COP	kW / kW	4.35			4.38			
	W.B.	15.0~27.0°C(59~81°F)			15.0~27.0°C(59~81°F)			
Temp. range of heating	Indoor D.B.	-20.0~15.5°C(-4~60°F)			-20.0~15.5°C(-4~60°F)			
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)			-20.0~15.5°C(-4~60°F)			
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity			50~130 % of outdoor unit capacity			
	Model / Quantity	P15~P250 / 1~50			P15~P250 / 1~50			
Sound pressure level (measured in anechoic room)	dB <A>	65			65.5			
Power pressure level (measured in anechoic room)	dB <A>	85			85.5			
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05(3/4) Brazed			19.05(3/4) Brazed			
	Gas pipe mm (in.)	34.93(1-3/8) Brazed			41.28(1-5/8) Brazed			
Set Model								
Model		PUHY-EP250YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	PUHY-EP250YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 2	Propeller fan x 1		Propeller fan x 2	
	Air flow rate	m³/min	210	210	370	210	370	370
		L/s	3,500	3,500	6,167	3,500	6,167	6,167
		cfm	7,415	7,415	13,065	7,415	13,065	13,065
	Driving mechanism	Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor			
	Motor output	kW	0.46 x 1	0.46 x 1	0.46 x 2	0.46 x 1	0.46 x 2	0.46 x 2
		*3 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Compressor	Type x Quantity	Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
		Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
		Motor output kW	6.8	6.8	7.7	6.8	7.7	7.7
Case heater kW		0.045	0.045	0.045	0.045	0.045	0.045	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	1,710(1,650 without legs) x 1,750 x 760	
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)			High pressure sensor, High pressure switch at 4.15MPa (601 psi)			
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection			Over-heat protection, Over-current protection			
	Compressor	Over-heat protection			Over-heat protection			
	Fan motor	Thermal switch			Thermal switch			
Refrigerant	Type x original charge	R410A x 11.5kg (26lbs)	R410A x 11.5kg (26lbs)	R410A x 11.8kg (27lbs)	R410A x 11.5kg (26lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	
Net weight	kg (lbs)	250(552)	250(552)	290(640)	250(552)	290(640)	290(640)	
Heat exchanger		Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube			
Pipe between unit and distributor	Liquid pipe mm (in.)	9.52(3/8) Brazed	9.52(3/8) Brazed	12.7(1/2) Brazed	9.52(3/8) Brazed	12.7(1/2) Brazed	12.7(1/2) Brazed	
	Gas pipe mm (in.)	22.2(7/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G			

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT Y Series - High COP PUHY-EP YSJM-A(-BS)



► Specifications

Model		PUHY-EP900YSJM-A(-BS)			
Power source		3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	101.0			
	*1 BTU / h	344,600			
	Power input kW	24.81			
	Current input A	41.8-39.7-38.3			
COP	kW / kW	4.07			
	W.B.	15.0~24.0°C(59~75°F)			
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)			
	Outdoor D.B.	-5.0~46.0°C(23~115°F)			
Heating capacity (Nominal)	*2 kW	113.0			
	*2 BTU / h	385,600			
	Power input kW	25.50			
	Current input A	43.0-40.8-39.4			
COP	kW / kW	4.43			
	W.B.	15.0~27.0°C(59~81°F)			
Temp. range of heating	Indoor D.B.	-20.0~15.5°C(-4~60°F)			
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)			
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity			
	Model / Quantity	P15~P250 / 1~50			
Sound pressure level (measured in anechoic room)	dB <A>	66			
Power pressure level (measured in anechoic room)	dB <A>	86			
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05(3/4) Brazed			
	Gas pipe mm (in.)	41.28(1-5/8) Brazed			
Set Model					
Model		PUHY-EP300YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	PUHY-EP300YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 2		Propeller fan x 2	
	Air flow rate	m³/min	370	370	370
		L/s	6,167	6,167	6,167
		cfm	13,065	13,065	13,065
	Driving mechanism	Inverter-control, Direct-driven by motor			
	Motor output	kW	0.46 x 2	0.46 x 2	0.46 x 2
		*3 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Compressor	Type x Quantity	Inverter scroll hermetic compressor		
		Starting method	Inverter	Inverter	Inverter
		Motor output kW	7.7	7.7	7.7
Case heater kW		0.045	0.045	0.045	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,750 x 760	1,710(1,650 without legs) x 1,750 x 760	1,710(1,650 without legs) x 1,750 x 760	
	in.	67-3/8(65 without legs) x 68-15/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)			
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection			
	Compressor	Over-heat protection			
	Fan motor	Thermal switch			
Refrigerant	Type x original charge	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	
Net weight	kg (lbs)	290(640)	290(640)	290(640)	
Heat exchanger		Salt-resistant cross fin & copper tube			
Pipe between unit and distributor	Liquid pipe mm (in.)	12.7(1/2) Brazed	12.7(1/2) Brazed	12.7(1/2) Brazed	
	Gas pipe mm (in.)	22.2(7/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed	
Optional parts		Outdoor Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G			

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

OUTDOOR UNIT ZUBADAN (Heat Pump) Series(Y) PUHY-HP Y(S)HM-A(-BS)



► Specifications

Set name	PUHY-HP200YHM-A(-BS)	PUHY-HP250YHM-A(-BS)	PUHY-HP400YSHM-A(-BS)	PUHY-HP500YSHM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW 22.4	28.0	45.0	56.0
	*1 BTU/h 76,400	95,500	153,500	191,100
Power input	kW 6.40	9.06	12.86	18.16
Current input	A 10.8-10.2-9.8	15.2-14.5-14.0	21.7-20.6-19.8	30.6-29.1-28.0
COP	kW/kW 3.50	3.09	3.49	3.08
Temp. range of cooling	Indoor W.B. 15 ~ 24°C (59 ~ 75°F)			
	Outdoor D.B. - 5 ~ 43°C (23 ~ 109°F)			
Heating capacity (Nominal)	*2 kW 25.0	31.5	50.0	63.0
	*2 BTU/h 85,300	107,500	170,600	215,000
Power input	kW 6.52	8.94	13.35	18.04
Current input	A 11.0-10.4-10.0	15.0-14.3-13.8	22.5-21.4-20.6	30.4-28.9-27.8
COP	kW/kW 3.83	3.52	3.74	3.49
Temp. range of heating	Indoor D.B. 15 ~ 27°C (59 ~ 81°F)			
	Outdoor W.B. -25 ~ 15.5°C (-13 ~ 60°F)			
Indoor unit connectable	Total capacity 50 ~ 130% of outdoor unit capacity			
	Model/Quantity	P15~P250 / 1~17	P15 ~ P250 / 1 ~ 21	P15 ~ P250 / 1 ~ 34
Sound pressure level (measured in anechoic room)	dB<A>	56	57	59
Diameter of refrigerant pipe	Liquid pipe mm(in.)	ø12.7 (ø1/2) Braze	ø12.7 (ø1/2) Braze	ø15.88 (ø5/8) Braze
	Gas pipe mm(in.)	ø19.05 (ø3/4) Braze	ø22.2 (ø7/8) Braze	ø28.58 (ø1-1/8) Braze
Model	-			
External finish	Pre-coated galvanized steel sheets <MUNSELL 5Y 8/1 or similar>			
External dimension H x W x D	mm	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760	1,710 (without legs 1,650) x 920 x 760
	in.	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16	67-3/8 (without legs 65) x 36-1/4 x 29-15/16
Net weight	kg(lbs)	220 (486)	220 (486)	220 (486)
Heat exchanger	Salt-resistant cross fin & copper tube			
Compressor	Type	Inverter scroll hermetic compressor		
	Starting method	Inverter		
	Motor output kW	5.3	6.7	6.7
FAN	*3 Air flow rate	m ³ /min 225	225	225
		L/s 3,750	3,750	3,750
		cfm 7,945	7,945	7,945
	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1
	External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		
Refrigerant	Type x Original charge	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)
Pipe between unit distributor	Liquid pipe mm(in.)	-	-	ø9.52 (ø3/8) Flare
	Gas pipe mm(in.)	-	-	ø19.05 (ø3/4) Braze
Optional parts	Joint : CMY-Y102SS-G2 Header : CMY-Y104/108/1010-G		Outdoor Twinning kit : CMY-Y100VBK2 Joint : CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header : CMY-Y104/108/1010-G	

Notes:

*1,*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

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

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

Outdoor unit

HEAT SOURCE UNIT WY (Heat Pump) Series PQHY-P YHM-A



► Specifications

Model	PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW 22.4	28.0	33.5
	*1 BTU / h 76,400	95,500	114,300
Power input	kW 3.92	5.45	7.36
Current input	A 6.6-6.2-6.0	9.2-8.7-8.4	12.4-11.8-11.3
COP	kW / kW 5.71	5.13	4.55
Temp. range of cooling	Indoor W.B. 15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Circulating water °C 10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Heating capacity (Nominal)	*2 kW 25.0	31.5	37.5
	*2 BTU / h 85,300	107,500	128,000
Power input	kW 4.12	5.80	8.15
Current input	A 6.9-6.6-6.3	9.7-9.3-8.9	13.7-13.0-12.5
COP	kW / kW 6.06	5.43	4.60
Temp. range of heating	Indoor D.B. 15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Circulating water °C 10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)
Indoor unit connectable	Total capacity	50~130 % of heat source unit capacity	50~130 % of heat source unit capacity
	Model / Quantity	P15~P250 / 1~17	P15~P250 / 1~21
Sound pressure level (measured in anechoic room)	dB <A>	47	49
Refrigerant piping diameter [O.D.]	Liquid pipe mm (in.)	9.52(3/8) Braze	9.52(3/8) Braze (12.7(1/2) Braze, total length >= 90m)
	Gas pipe mm (in.)	19.05(3/4) Braze	22.2(7/8) Braze (22.2(7/8) Braze, total length >= 40m)
Circulating water	Water flow rate	m ³ / h 5.76	5.76
		L/min 96	96
		cfm 3.4	3.4
	Pressure drop	kPa 17	17
	Operating volume range	m ³ / h 4.5 ~ 7.2	4.5 ~ 7.2
Compressor	Type x Quantity	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method	Inverter	Inverter
	Motor output	kW 4.6	6.3
	Case heater	kW 0.035(240 V)	0.035(240 V)
External finish	Acrylic painted steel plate		
External dimension HxWxD	mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550
	in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP.)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor	Over-heat protection	Over-heat protection
Refrigerant	Type x original charge	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)
Net weight	kg (lbs)	195(430)	195(430)
Heat exchanger		plate type	plate type
	Water volume in plate	L 5.0	5.0
	Water pressure Max.	MPa 2.0	2.0
Optional parts	Joint: CMY-Y102SS-G2 Header: CMY-Y104/108/1010-G		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°C DB, 19°C WB (81°F DB, 66°F WB)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB (68°F DB)	20°C (68°F)		

*3 The ambient temperature of the heat source unit needs to be kept below 40°C DB.

*4 The ambient relative humidity of the heat source unit needs to be kept below 80%.

*5 The heat source Unit should not be installed at outdoor.

*6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.

*7 Be sure to provide interlocking for the unit operation and water circuit.

*Nominal condition *1,*2 are subject to JIS B8615-1.

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

Outdoor Unit

HEAT SOURCE UNIT WY (Heat Pump) Series PQHY-P YSHM-A



► Specifications

Model	PQHY-P400YSHM-A		PQHY-P450YSHM-A		PQHY-P500YSHM-A	
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1	kW	45.0		50.0	
	*1	BTU / h	153,500		170,600	
		Power input	8.25		9.84	
		Current input	13.9-13.2-12.7		16.6-15.7-15.2	
		COP	5.45		5.08	
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)	
	Circulating water	°C	10.0~45.0°C(50~113°F)		10.0~45.0°C(50~113°F)	
Heating capacity (Nominal)	*2	kW	50.0		63.0	
	*2	BTU / h	170,600		215,000	
		Power input	8.65		10.42	
		Current input	14.6-13.8-13.3		17.5-16.7-16.1	
		COP	5.78		5.22	
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)	
	Circulating water	°C	10.0~45.0°C(50~113°F)		10.0~45.0°C(50~113°F)	
Indoor unit connectable	Total capacity	50~130 % of heat source unit capacity		50~130 % of heat source unit capacity		
	Model / Quantity	P15~P250 / 1~34		P15~P250 / 1~39		
Sound pressure level (measured in anechoic room)	dB <A>	50		51		
Refrigerant piping diameter [O.D.]	Liquid pipe	12.7(1/2) Brazed		15.88(5/8) Brazed		
	Gas pipe	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		

Model	PQHY-P200YHM-A		PQHY-P200YHM-A		PQHY-P250YHM-A		PQHY-P250YHM-A	
Circulating water	Water flow rate	m ³ / h	5.76 + 5.76		5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	17	17	17	17	17	17
Operating volume range	m ³ / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	4.6		6.3		6.3		
	Case heater	0.035(240 V)		0.035(240 V)		0.035(240 V)		
External finish	Acrylic painted steel plate		Acrylic painted steel plate		Acrylic painted steel plate		Acrylic painted steel plate	
External dimension HxWxD	mm	1,160(1,100 without legs) x 880 x 550		1,160(1,100 without legs) x 880 x 550		1,160(1,100 without legs) x 880 x 550		
		45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP.)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		
Refrigerant	Type x original charge	R410A x 5.0kg (12lbs)		R410A x 5.0kg (12lbs)		R410A x 5.0kg (12lbs)		
Net weight	kg (lbs)	195(430)		195(430)		195(430)		
Heat exchanger	Water volume in plate	L		5.0		5.0		
	Water pressure Max.	MPa		2.0		2.0		
Optional parts	Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G			

Notes:

*1, *2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C D.B. (68°F D.B.)	20°C (68°F)		

- *3 The ambient temperature of the heat source unit needs to be kept below 40°C D.B.
- *4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
- *5 The heat source Unit should not be installed at outdoor.
- *6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
- *7 Be sure to provide interlocking for the unit operation and water circuit.
- *Nominal condition *1, *2 are subject to JIS B8615-1.
- *Due to continuing improvement, above specification may be subject to change without notice.

Outdoor unit

HEAT SOURCE UNIT WY (Heat Pump) Series PQHY-P YSHM-A



► Specifications

Model	PQHY-P550YSHM-A		PQHY-P600YSHM-A		
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1	kW	63.0		
	*1	BTU / h	215,000		
		Power input	13.46		
		Current input	22.7-21.5-20.8		
		COP	4.68		
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)		
	Circulating water	°C	10.0~45.0°C(50~113°F)		
Heating capacity (Nominal)	*2	kW	69.0		
	*2	BTU / h	235,400		
		Power input	14.65		
		Current input	24.7-23.4-22.6		
		COP	4.70		
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)		
	Circulating water	°C	10.0~45.0°C(50~113°F)		
Indoor unit connectable	Total capacity	50~130 % of heat source unit capacity		50~130 % of heat source unit capacity	
	Model / Quantity	P15~P250 / 2~47		P15~P250 / 2~50	
Sound pressure level (measured in anechoic room)	dB <A>	52.5		53	
Refrigerant piping diameter [O.D.]	Liquid pipe	15.88(5/8) Brazed		15.88(5/8) Brazed	
	Gas pipe	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed	

Model	PQHY-P300YHM-A		PQHY-P250YHM-A		PQHY-P300YHM-A		PQHY-P300YHM-A	
Circulating water	Water flow rate	m ³ / h	5.76 + 5.76		5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96		96 + 96	
		cfm	3.4 + 3.4		3.4 + 3.4		3.4 + 3.4	
	Pressure drop	kPa	17	17	17	17	17	17
Operating volume range	m ³ / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter		Inverter		
	Motor output	7.4		6.3		7.4		
	Case heater	0.035(240 V)		0.035(240 V)		0.035(240 V)		
External finish	Acrylic painted steel plate		Acrylic painted steel plate		Acrylic painted steel plate		Acrylic painted steel plate	
External dimension HxWxD	mm	1,160(1,100 without legs) x 880 x 550		1,160(1,100 without legs) x 880 x 550		1,160(1,100 without legs) x 880 x 550		
		45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP.)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		
Refrigerant	Type x original charge	R410A x 5.0kg (12lbs)		R410A x 5.0kg (12lbs)		R410A x 5.0kg (12lbs)		
Net weight	kg (lbs)	195(430)		195(430)		195(430)		
Heat exchanger	Water volume in plate	L		5.0		5.0		
	Water pressure Max.	MPa		2.0		2.0		
Optional parts	Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Heat Source Twinning kit: CMY-Y100VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G			

Notes:

*1, *2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C D.B. (68°F D.B.)	20°C (68°F)		

- *3 The ambient temperature of the heat source unit needs to be kept below 40°C D.B.
- *4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
- *5 The heat source Unit should not be installed at outdoor.
- *6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
- *7 Be sure to provide interlocking for the unit operation and water circuit.
- *Nominal condition *1, *2 are subject to JIS B8615-1.
- *Due to continuing improvement, above specification may be subject to change without notice.

Outdoor Unit

HEAT SOURCE UNIT WY (Heat Pump) Series PQHY-P YSHM-A



> Specifications

Model	PQHY-P650YSHM-A		PQHY-P700YSHM-A	
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW	73.0	80.0	
	*1 BTU / h	249,100	273,000	
	Power input kW	13.96	15.58	
	Current input A	23.5-22.3-21.5	26.3-24.9-24.0	
COP	kW / kW	5.22	5.13	
	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
Temp. range of cooling	Circulating water °C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	
	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
Heating capacity (Nominal)	*2 kW	81.5	88.0	
	*2 BTU / h	278,100	300,300	
	Power input kW	14.74	16.51	
	Current input A	24.8-23.6-22.7	27.8-26.4-25.5	
COP	kW / kW	5.52	5.33	
	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
Temp. range of heating	Circulating water °C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	
	Indoor D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
Indoor unit connectable	Total capacity	50~130 % of heat source unit capacity		50~130 % of heat source unit capacity
Sound pressure level (measured in anechoic room)	Model / Quantity	P15~P250 / 2~50		P15~P250 / 2~50
Refrigerant piping diameter [O.D.]	Liquid pipe mm (in.)	19.05(3/4) Brazed		19.05(3/4) Brazed
	Gas pipe mm (in.)	34.93(1-3/8) Brazed		34.93(1-3/8) Brazed

Model	PQHY-P250YHM-A	PQHY-P200YHM-A	PQHY-P200YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A	PQHY-P200YHM-A	
Circulating water	Water flow rate m ³ / h	5.76 + 5.76 + 5.76			5.76 + 5.76 + 5.76		
	L/min	96 + 96 + 96			96 + 96 + 96		
	cfm	3.4 + 3.4 + 3.4			3.4 + 3.4 + 3.4		
	Pressure drop kPa	17	17	17	17	17	
Operating volume range	m ³ / h 4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			m ³ / h 4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			
Compressor	Type x Quantity	Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output kW	6.3	4.6	4.6	6.3	6.3	4.6
	Case heater kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish	Acrylic painted steel plate			Acrylic painted steel plate			
External dimension HxWxD	mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	
	in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)			High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP.)	Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor	Over-heat protection			Over-heat protection		
Refrigerant	Type x original charge	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	
Net weight	kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	
Heat exchanger	Water volume in plate	L	5.0	5.0	5.0	5.0	
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	
	Optional parts	Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010-G			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1, *2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C D.B. (68°F D.B.)	20°C (68°F)		

- *3 The ambient temperature of the heat source unit needs to be kept below 40°C D.B.
- *4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
- *5 The heat source Unit should not be installed at outdoor.
- *6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
- *7 Be sure to provide interlocking for the unit operation and water circuit.
- *Nominal condition *1, *2 are subject to JIS B8615-1.
- *Due to continuing improvement, above specification may be subject to change without notice.

Outdoor unit

HEAT SOURCE UNIT WY (Heat Pump) Series PQHY-P YSHM-A



> Specifications

Model	PQHY-P750YSHM-A		PQHY-P800YSHM-A	
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW	85.0	90.0	
	*1 BTU / h	290,000	307,100	
	Power input kW	17.19	19.18	
	Current input A	29.0-27.5-26.5	32.3-30.7-29.6	
COP	kW / kW	4.94	4.69	
	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
Temp. range of cooling	Circulating water °C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	
	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
Heating capacity (Nominal)	*2 kW	95.0	100.0	
	*2 BTU / h	324,100	341,200	
	Power input kW	18.27	20.74	
	Current input A	30.8-29.3-28.2	35.0-33.2-32.0	
COP	kW / kW	5.19	4.82	
	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
Temp. range of heating	Circulating water °C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	
	Indoor D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
Indoor unit connectable	Total capacity	50~130 % of heat source unit capacity		50~130 % of heat source unit capacity
Sound pressure level (measured in anechoic room)	Model / Quantity	P15~P250 / 2~50		P15~P250 / 2~50
Refrigerant piping diameter [O.D.]	Liquid pipe mm (in.)	19.05(3/4) Brazed		19.05(3/4) Brazed
	Gas pipe mm (in.)	34.93(1-3/8) Brazed		34.93(1-3/8) Brazed

Model	PQHY-P250YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A	PQHY-P300YHM-A	PQHY-P250YHM-A	PQHY-P250YHM-A	
Circulating water	Water flow rate m ³ / h	5.76 + 5.76 + 5.76			5.76 + 5.76 + 5.76		
	L/min	96 + 96 + 96			96 + 96 + 96		
	cfm	3.4 + 3.4 + 3.4			3.4 + 3.4 + 3.4		
	Pressure drop kPa	17	17	17	17	17	
Operating volume range	m ³ / h 4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			m ³ / h 4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			
Compressor	Type x Quantity	Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	
	Motor output kW	6.3	6.3	6.3	7.4	6.3	
	Case heater kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	
External finish	Acrylic painted steel plate			Acrylic painted steel plate			
External dimension HxWxD	mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	
	in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)			High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP.)	Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
	Compressor	Over-heat protection			Over-heat protection		
Refrigerant	Type x original charge	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	
Net weight	kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	
Heat exchanger	Water volume in plate	L	5.0	5.0	5.0	5.0	
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	
	Optional parts	Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010-G			Heat Source Twinning kit: CMY-Y300VBK2 Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2 Header: CMY-Y104/108/1010-G		

Notes:

*1, *2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C D.B. (68°F D.B.)	20°C (68°F)		

- *3 The ambient temperature of the heat source unit needs to be kept below 40°C D.B.
- *4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
- *5 The heat source Unit should not be installed at outdoor.
- *6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
- *7 Be sure to provide interlocking for the unit operation and water circuit.
- *Nominal condition *1, *2 are subject to JIS B8615-1.
- *Due to continuing improvement, above specification may be subject to change without notice.

Outdoor Unit

HEAT SOURCE UNIT WY (Heat Pump) Series PQHY-P YSHM-A



> Specifications

Model	PQHY-P850YSHM-A		PQHY-P900YSHM-A	
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW	96.0	101.0	
	*1 BTU / h	327,600	344,600	
	Power input kW	21.20	23.22	
	Current input A	35.7-33.9-32.7	39.1-37.2-35.8	
COP	kW / kW	4.52	4.34	
	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
Temp. range of cooling	Circulating water °C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	
	Indoor °C	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
Heating capacity (Nominal)	*2 kW	108.0	113.0	
	*2 BTU / h	368,500	385,600	
	Power input kW	23.21	25.67	
	Current input A	39.1-37.2-35.8	43.3-41.1-39.6	
COP	kW / kW	4.65	4.40	
	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
Temp. range of heating	Circulating water °C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	
	Indoor °C	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
Indoor unit connectable	Total capacity	50~130 % of heat source unit capacity		50~130 % of heat source unit capacity
	Model / Quantity	P15~P250 / 2~50		P15~P250 / 2~50
Sound pressure level (measured in anechoic room)	dB <A>	54.5		55
Refrigerant piping diameter [O.D.]	Liquid pipe mm (in.)	19.05(3/4) Brazed		19.05(3/4) Brazed
	Gas pipe mm (in.)	41.28(1-5/8) Brazed		41.28(1-5/8) Brazed

Model	PQHY-P300YHM-A			PQHY-P300YHM-A			
Circulating water	Water flow rate m ³ / h	5.76 + 5.76 + 5.76			5.76 + 5.76 + 5.76		
	L/min	96 + 96 + 96			96 + 96 + 96		
	cfm	3.4 + 3.4 + 3.4			3.4 + 3.4 + 3.4		
	Pressure drop kPa	17	17	17	17	17	17
Operating volume range	m ³ / h	4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2			4.5 + 4.5 + 4.5 ~ 7.2 + 7.2 + 7.2		
	Compressor	Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
External finish	Type x Quantity	Inverter			Inverter		
	Starting method	Inverter			Inverter		
	Motor output kW	7.4	7.4	6.3	7.4	7.4	7.4
	Case heater kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External dimension HxWxD	mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	
	in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)			High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP.)	Over-heat protection, Over-current protection			Over-heat protection, Over-current protection		
Refrigerant	Type x original charge	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	R410A x 5.0kg (12lbs)	
	Net weight kg (lbs)	195(430)	195(430)	195(430)	195(430)	195(430)	
Heat exchanger	Water volume in plate L	5.0	5.0	5.0	5.0	5.0	
	Water pressure Max. MPa	2.0	2.0	2.0	2.0	2.0	
Optional parts	Heat Source Twinning kit: CMY-Y300VBK2	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2			Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2		
	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G			Header: CMY-Y104/108/1010-G		

Notes:

*1, *2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB (68°F DB)	20°C (68°F)		

- *3 The ambient temperature of the heat source unit needs to be kept below 40°C DB.
- *4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
- *5 The heat source Unit should not be installed at outdoor.
- *6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
- *7 Be sure to provide interlocking for the unit operation and water circuit.
- *Nominal condition *1, *2 are subject to JIS B8615-1.
- *Due to continuing improvement, above specification may be subject to change without notice.

Outdoor unit

OUTDOOR UNIT R2 Series PURY-P YJM-A(-BS)



> Specifications

Model	PURY-P200YJM-A(-BS)		PURY-P250YJM-A(-BS)		PURY-P300YJM-A(-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW	22.4	28.0		33.5	
	*1 BTU / h	76,400	95,500		114,300	
	Power input kW	5.18	7.05		8.67	
	Current input A	8.7-8.3-8.0	11.9-11.3-10.8		14.6-13.9-13.4	
COP	kW / kW	4.32	3.97		3.86	
	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)	
Temp. range of cooling	Indoor °C	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)	
	Outdoor °C	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)	
Heating capacity (Nominal)	*2 kW	25.0	31.5		37.5	
	*2 BTU / h	85,300	107,500		128,000	
	Power input kW	5.69	7.32		8.78	
	Current input A	9.6-9.1-8.7	12.3-11.7-11.3		14.8-14.0-13.5	
COP	kW / kW	4.39	4.30		4.27	
	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)	
Temp. range of heating	Indoor °C	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)	
	Outdoor °C	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)	
Indoor unit connectable	Total capacity	50~150 % of outdoor unit capacity		50~150 % of outdoor unit capacity		
	Model / Quantity	P15~P250 / 1~20		P15~P250 / 1~25		
Sound pressure level (measured in anechoic room)	dB <A>	56		57		
Power pressure level (measured in anechoic room)	dB <A>	76		77		
Refrigerant piping diameter	High pressure mm (in.)	15.88(5/8) Brazed		19.05(3/4) Brazed		
	Low pressure mm (in.)	19.05(3/4) Brazed		22.2(7/8) Brazed		
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1		
	Air flow rate m ³ /min	185		185		
	L/s	3,083		3,083		
	cfm	6,532		6,532		
Driving mechanism	Type x Quantity	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1		0.92 x 1		
	External static press.	0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		
	Compressor	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter		
	Motor output kW	5.4		6.8		
	Case heater kW	0.035(240 V)		0.045(240 V)		
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
	External dimension HxWxD mm	1,710(1,650 without legs) x 920 x 760		1,710(1,650 without legs) x 920 x 760		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
Refrigerant	Type x original charge	R410A x 9.5kg (21lbs)		R410A x 9.5kg (21lbs)		
	Net weight kg (lbs)	240(530)		245(541)		
Heat exchanger	Water volume in plate L	5.0		5.0		
	Water pressure Max. MPa	2.0		2.0		
Optional parts	Heat Source Twinning kit: CMY-Y300VBK2	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-Y302S-G2		
	Header: CMY-Y104/108/1010-G	Header: CMY-Y104/108/1010-G		Header: CMY-Y104/108/1010-G		

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)		

- *3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.
- *4 External static pressure option is available (30Pa, 60Pa / 3.1mmH₂O, 6.1mmH₂O).
- *Nominal condition *1, *2 are subject to JIS B8615-1.
- *Due to continuing improvement, above specification may be subject to change without notice.

Outdoor Unit

OUTDOOR UNIT R2 Series PURY-P YJM-A(-BS)



► Specifications

Model	PURY-P350YJM-A(-BS)	PURY-P400YJM-A(-BS)	PURY-P450YJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW 40.0	*1 kW 45.0	*1 kW 50.0
	*1 BTU/h 136,500	*1 BTU/h 153,500	*1 BTU/h 170,600
Power input	kW 11.33	kW 13.55	kW 14.49
Current input	A 19.1-18.1-17.5	A 22.8-21.7-20.9	A 24.4-23.2-22.3
COP	kW/kW 3.53	kW/kW 3.32	kW/kW 3.45
Temp. range of cooling	*3 Indoor W.B. 15.0~24.0°C(59~75°F)	*3 Indoor W.B. 15.0~24.0°C(59~75°F)	*3 Indoor W.B. 15.0~24.0°C(59~75°F)
	*3 Outdoor D.B. -5.0~46.0°C(23~115°F)	*3 Outdoor D.B. -5.0~46.0°C(23~115°F)	*3 Outdoor D.B. -5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW 45.0	*2 kW 50.0	*2 kW 56.0
	*2 BTU/h 153,500	*2 BTU/h 170,600	*2 BTU/h 191,100
Power input	kW 10.89	kW 12.75	kW 14.58
Current input	A 18.3-17.4-16.8	A 21.5-20.4-19.7	A 24.6-23.3-22.5
COP	kW/kW 4.13	kW/kW 3.92	kW/kW 3.84
Temp. range of heating	*3 Indoor W.B. 15.0~27.0°C(59~81°F)	*3 Indoor W.B. 15.0~27.0°C(59~81°F)	*3 Indoor W.B. 15.0~27.0°C(59~81°F)
	*3 Outdoor W.B. -20.0~15.5°C(-4~60°F)	*3 Outdoor W.B. -20.0~15.5°C(-4~60°F)	*3 Outdoor W.B. -20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity Model / Quantity 50~150 % of outdoor unit capacity P15~P250 / 1~35	Total capacity Model / Quantity 50~150 % of outdoor unit capacity P15~P250 / 1~40	Total capacity Model / Quantity 50~150 % of outdoor unit capacity P15~P250 / 1~45
Sound pressure level (measured in anechoic room)	dB <A> 60	dB <A> 61	dB <A> 62
Power pressure level (measured in anechoic room)	dB <A> 80	dB <A> 81	dB <A> 82
Refrigerant piping diameter	High pressure mm (in.) 19.05(3/4) Braze	High pressure mm (in.) 22.2(7/8) Braze	High pressure mm (in.) 22.2(7/8) Braze
	Low pressure mm (in.) 28.58(1-1/8) Braze	Low pressure mm (in.) 28.58(1-1/8) Braze	Low pressure mm (in.) 28.58(1-1/8) Braze
FAN	Type x Quantity Propeller fan x 1	Type x Quantity Propeller fan x 1	Type x Quantity Propeller fan x 2
Air flow rate	m ³ /min 225	m ³ /min 225	m ³ /min 360
	L/s 3,750	L/s 3,750	L/s 6,000
	cfm 7,945	cfm 7,945	cfm 12,712
Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
Motor output	kW 0.92 x 1	kW 0.92 x 1	kW 0.92 x 2
*4 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity Inverter scroll hermetic compressor	Type x Quantity Inverter scroll hermetic compressor	Type x Quantity Inverter scroll hermetic compressor
Starting method	Inverter	Inverter	Inverter
Motor output	kW 9.9	kW 10.2	kW 11.6
Case heater	kW 0.045(240 V)	kW 0.045(240 V)	kW 0.045(240 V)
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD	mm 1,710(1,650 without legs) x 1,220 x 760	mm 1,710(1,650 without legs) x 1,220 x 760	mm 1,710(1,650 without legs) x 1,750 x 760
	in. 67-3/8(65 without legs) x 48-1/16 x 29-15/16	in. 67-3/8(65 without legs) x 48-1/16 x 29-15/16	in. 67-3/8(65 without legs) x 68-15/16 x 29-15/16
Protection devices	High pressure protection High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure protection High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure protection High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP./FAN) Over-heat protection, Over-current protection	Inverter circuit (COMP./FAN) Over-heat protection, Over-current protection	Inverter circuit (COMP./FAN) Over-heat protection, Over-current protection
	Compressor Over-heat protection	Compressor Over-heat protection	Compressor Over-heat protection
	Fan motor Thermal switch	Fan motor Thermal switch	Fan motor Thermal switch
Refrigerant	Type x original charge R410A x 11.8kg (27lbs)	Type x original charge R410A x 11.8kg (27lbs)	Type x original charge R410A x 11.8kg (27lbs)
Net weight	kg (lbs) 270(596)	kg (lbs) 270(596)	kg (lbs) 320(706)
Heat exchanger	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor unit

OUTDOOR UNIT R2 Series PURY-P YSJM-A(1)(-BS)



► Specifications

Model	PURY-P400YSJM-A1(-BS)	PURY-P450YSJM-A1(-BS)	PURY-P500YSJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW 45.0	*1 kW 50.0	*1 kW 56.0
	*1 BTU/h 153,500	*1 BTU/h 170,600	*1 BTU/h 191,100
Power input	kW 10.73	kW 12.50	kW 14.85
Current input	A 18.1-17.2-16.5	A 21.1-20.0-19.3	A 25.0-23.8-22.9
COP	kW/kW 4.19	kW/kW 4.00	kW/kW 3.77
Temp. range of cooling	*3 Indoor W.B. 15.0~24.0°C(59~75°F)	*3 Indoor W.B. 15.0~24.0°C(59~75°F)	*3 Indoor W.B. 15.0~24.0°C(59~75°F)
	*3 Outdoor D.B. -5.0~46.0°C(23~115°F)	*3 Outdoor D.B. -5.0~46.0°C(23~115°F)	*3 Outdoor D.B. -5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW 50.0	*2 kW 56.0	*2 kW 63.0
	*2 BTU/h 170,600	*2 BTU/h 191,100	*2 BTU/h 215,000
Power input	kW 11.62	kW 13.30	kW 15.10
Current input	A 19.6-18.6-17.9	A 22.4-21.3-20.5	A 25.4-24.2-23.3
COP	kW/kW 4.30	kW/kW 4.21	kW/kW 4.17
Temp. range of heating	*3 Indoor W.B. 15.0~27.0°C(59~81°F)	*3 Indoor W.B. 15.0~27.0°C(59~81°F)	*3 Indoor W.B. 15.0~27.0°C(59~81°F)
	*3 Outdoor W.B. -20.0~15.5°C(-4~60°F)	*3 Outdoor W.B. -20.0~15.5°C(-4~60°F)	*3 Outdoor W.B. -20.0~15.5°C(-4~60°F)
Indoor unit connectable	Total capacity Model / Quantity 50~150 % of outdoor unit capacity P15~P250 / 1~40	Total capacity Model / Quantity 50~150 % of outdoor unit capacity P15~P250 / 1~45	Total capacity Model / Quantity 50~150 % of outdoor unit capacity P15~P250 / 1~50
Sound pressure level (measured in anechoic room)	dB <A> 59	dB <A> 59.5	dB <A> 60
Power pressure level (measured in anechoic room)	dB <A> 79	dB <A> 79.5	dB <A> 80
Refrigerant piping diameter	High pressure mm (in.) 22.2(7/8) Braze	High pressure mm (in.) 22.2(7/8) Braze	High pressure mm (in.) 22.2(7/8) Braze
	Low pressure mm (in.) 28.58(1-1/8) Braze	Low pressure mm (in.) 28.58(1-1/8) Braze	Low pressure mm (in.) 28.58(1-1/8) Braze
Set Model	PURY-P200YJM-A(-BS)	PURY-P200YJM-A(-BS)	PURY-P250YJM-A(-BS)
FAN	Type x Quantity Propeller fan x 1	Type x Quantity Propeller fan x 1	Type x Quantity Propeller fan x 1
Air flow rate	m ³ /min 185	m ³ /min 185	m ³ /min 185
	L/s 3,083	L/s 3,083	L/s 3,083
	cfm 6,532	cfm 6,532	cfm 6,532
Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
Motor output	kW 0.92 x 1	kW 0.92 x 1	kW 0.92 x 1
*4 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type x Quantity Inverter scroll hermetic compressor	Type x Quantity Inverter scroll hermetic compressor	Type x Quantity Inverter scroll hermetic compressor
Starting method	Inverter	Inverter	Inverter
Motor output	kW 5.4	kW 5.4	kW 6.8
Case heater	kW 0.035(240 V)	kW 0.035(240 V)	kW 0.035(240 V)
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD	mm 1,710(1,650 without legs) x 920 x 760	mm 1,710(1,650 without legs) x 920 x 760	mm 1,710(1,650 without legs) x 920 x 760
	in. 67-3/8(65 without legs) x 36-1/4 x 29-15/16	in. 67-3/8(65 without legs) x 36-1/4 x 29-15/16	in. 67-3/8(65 without legs) x 36-1/4 x 29-15/16
Protection devices	High pressure protection High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure protection High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure protection High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP./FAN) Over-heat protection, Over-current protection	Inverter circuit (COMP./FAN) Over-heat protection, Over-current protection	Inverter circuit (COMP./FAN) Over-heat protection, Over-current protection
	Compressor Over-heat protection	Compressor Over-heat protection	Compressor Over-heat protection
	Fan motor Thermal switch	Fan motor Thermal switch	Fan motor Thermal switch
Refrigerant	Type x original charge R410A x 9.5kg (21lbs)	Type x original charge R410A x 9.5kg (21lbs)	Type x original charge R410A x 9.5kg (21lbs)
Net weight	kg (lbs) 240(530)	kg (lbs) 240(530)	kg (lbs) 240(530)
Heat exchanger	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Pipe between unit and distributor	High pressure mm (in.) 15.88(5/8) Braze	High pressure mm (in.) 15.88(5/8) Braze	High pressure mm (in.) 19.05(3/4) Braze
	Low pressure mm (in.) 19.05(3/4) Braze	Low pressure mm (in.) 19.05(3/4) Braze	Low pressure mm (in.) 22.2(7/8) Braze
Optional parts	Outdoor Twinning kit: CMY-R100VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	Outdoor Twinning kit: CMY-R100VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1	Outdoor Twinning kit: CMY-R100VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor Unit

OUTDOOR UNIT R2 Series PURY-P YSJM-A(1)(-BS)



► Specifications

Model	PURY-P500YSJM-A1(-BS)	PURY-P550YSJM-A(-BS)	PURY-P600YSJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	56.0	63.0
	*1 BTU / h	191,100	215,000
	Power input kW	14.73	17.30
	Current input A	24.8-23.6-22.7	29.2-27.7-26.7
	COP	3.80	3.64
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	63.0	69.0
	*2 BTU / h	215,000	235,400
	Power input kW	15.07	16.95
	Current input A	25.4-24.1-23.2	28.6-27.1-26.2
	COP	4.18	4.07
Temp. range of heating	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	50~150 % of outdoor unit capacity		
Sound pressure level (measured in anechoic room)	61		
Power pressure level (measured in anechoic room)	81		
Refrigerant piping diameter	High pressure	22.2(7/8) Brazed	
	Low pressure	28.58(1-1/8) Brazed	

Model	PURY-P200YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P250YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P300YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1					
	Air flow rate	m³/min	185	185	185	185	185
		L/s	3,083	3,083	3,083	3,083	3,083
		cfm	6,532	6,532	6,532	6,532	6,532
	Driving mechanism	Inverter-control, Direct-driven by motor					
Motor output kW	0.92 x 1						
*4 External static press.	0 Pa (0 mmH ₂ O)						
Compressor	Type x Quantity	Inverter scroll hermetic compressor					
	Starting method	Inverter					
	Motor output kW	5.4					
	Case heater kW	0.035(240 V)					
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>						
	External dimension HxWxD	1,710(1,650 without legs) x 920 x 760					
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)					
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection					
	Compressor	Over-heat protection					
	Fan motor	Thermal switch					
Refrigerant	Type x original charge	R410A x 9.5kg (21lbs)					
Net weight	kg (lbs)	240(530)					
Heat exchanger	High pressure	Salt-resistant cross fin & copper tube					
	Low pressure	19.05(3/4) Brazed					
Optional parts	Outdoor Twinning kit	CMY-R100VBK					
	Joint	CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1					

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor unit

OUTDOOR UNIT R2 Series PURY-P YSJM-A(1)(-BS)



► Specifications

Model	PURY-P600YSJM-A1(-BS)	PURY-P650YSJM-A(-BS)	PURY-P700YSJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	69.0	73.0
	*1 BTU / h	235,400	249,100
	Power input kW	19.16	21.53
	Current input A	32.3-30.7-29.6	36.3-34.5-33.2
	COP	3.60	3.39
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	76.5	81.5
	*2 BTU / h	261,000	278,100
	Power input kW	18.61	20.47
	Current input A	31.4-29.8-28.7	34.5-32.8-31.6
	COP	4.11	3.98
Temp. range of heating	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	50~150 % of outdoor unit capacity		
Sound pressure level (measured in anechoic room)	62		
Power pressure level (measured in anechoic room)	82		
Refrigerant piping diameter	High pressure	28.58(1-1/8) Brazed	
	Low pressure	28.58(1-1/8) Brazed	

Model	PURY-P250YJM-A(-BS)	PURY-P350YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P350YJM-A(-BS)	PURY-P300YJM-A(-BS)	PURY-P400YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1					
	Air flow rate	m³/min	185	225	185	225	185
		L/s	3,083	3,750	3,083	3,750	3,083
		cfm	6,532	7,945	6,532	7,945	6,532
	Driving mechanism	Inverter-control, Direct-driven by motor					
Motor output kW	0.92 x 1						
*4 External static press.	0 Pa (0 mmH ₂ O)						
Compressor	Type x Quantity	Inverter scroll hermetic compressor					
	Starting method	Inverter					
	Motor output kW	6.8					
	Case heater kW	0.045(240 V)					
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>						
	External dimension HxWxD	1,710(1,650 without legs) x 920 x 760					
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)					
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection					
	Compressor	Over-heat protection					
	Fan motor	Thermal switch					
Refrigerant	Type x original charge	R410A x 9.5kg (21lbs)					
Net weight	kg (lbs)	240(530)					
Heat exchanger	High pressure	Salt-resistant cross fin & copper tube					
	Low pressure	19.05(3/4) Brazed					
Optional parts	Outdoor Twinning kit	CMY-R100VBK					
	Joint	CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1					

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor Unit

OUTDOOR UNIT

R2 Series

PURY-P YSJM-A(1)(-BS)

> Specifications



Model	PURY-P700YSJM-A1(-BS)	PURY-P750YSJM-A(-BS)	PURY-P800YSJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	80.0	85.0
	*1 BTU/h	273,000	290,000
	Power input kW	23.39	26.47
	Current input A	39.4-37.5-36.1	44.6-42.4-40.9
	COP kW / kW	3.42	3.21
Temp. range of cooling *3	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	88.0	95.0
	*2 BTU/h	300,300	324,100
	Power input kW	21.78	24.05
	Current input A	36.7-34.9-33.6	40.6-38.5-37.1
	COP kW / kW	4.04	3.95
Temp. range of heating *3	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	50~150 % of outdoor unit capacity		
Sound pressure level (measured in anechoic room)	dB <A>		
Power pressure level (measured in anechoic room)	dB <A>		
Refrigerant piping diameter	High pressure mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed
	Low pressure mm (in.)	34.93(1-3/8) Brazed	34.93(1-3/8) Brazed

Set Model

Model	PURY-P350YJM-A(-BS)	PURY-P350YJM-A(-BS)	PURY-P350YJM-A(-BS)	PURY-P400YJM-A(-BS)	PURY-P400YJM-A(-BS)	PURY-P400YJM-A(-BS)		
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 1			
	Air flow rate	m³/min	225	225	225	225		
		L/s	3,750	3,750	3,750	3,750		
		cfm	7,945	7,945	7,945	7,945		
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1		0.92 x 1		0.92 x 1		
	*4 External static press.	0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		
	Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
		Starting method	Inverter		Inverter		Inverter	
		Motor output kW	9.9		9.9		10.2	
Case heater kW		0.045(240 V)		0.045(240 V)		0.045(240 V)		
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>							
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,220 x 760		
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16		67-3/8(65 without legs) x 48-1/16 x 29-15/16		67-3/8(65 without legs) x 48-1/16 x 29-15/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		
	Fan motor	Thermal switch		Thermal switch		Thermal switch		
Refrigerant	Type x original charge	R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		
Net weight	kg (lbs)	270(596)		270(596)		270(596)		
Heat exchanger	Salt-resistant cross fin & copper tube							
Pipe between unit and distributor	High pressure mm (in.)	19.05(3/4) Brazed		19.05(3/4) Brazed		22.2(7/8) Brazed		
	Low pressure mm (in.)	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		
Optional parts	Outdoor Twinning kit: CMY-R200VBK		Outdoor Twinning kit: CMY-R200VBK		Outdoor Twinning kit: CMY-R200VBK			
	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1			
	Main BC controller: CMB-P1016V-HA1		Main BC controller: CMB-P1016V-HA1		Main BC controller: CMB-P1016V-HA1			
Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor unit

OUTDOOR UNIT

R2 Series

PURY-P YSJM-A(1)(-BS)

> Specifications



Model	PURY-P800YSJM-A1(-BS)	PURY-P850YSJM-A(-BS)	PURY-P900YSJM-A(-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	90.0	101.0
	*1 BTU/h	307,100	344,600
	Power input kW	26.62	29.26
	Current input A	44.9-42.6-41.1	49.3-46.9-45.2
	COP kW / kW	3.38	3.28
Temp. range of cooling *3	Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)
	Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)
Heating capacity (Nominal)	*2 kW	108.0	113.0
	*2 BTU/h	341,200	385,600
	Power input kW	25.77	28.42
	Current input A	43.5-41.3-39.8	47.9-45.5-43.9
	COP kW / kW	3.88	3.80
Temp. range of heating *3	Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)
Indoor unit connectable	50~150 % of outdoor unit capacity		
Sound pressure level (measured in anechoic room)	dB <A>		
Power pressure level (measured in anechoic room)	dB <A>		
Refrigerant piping diameter	High pressure mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed
	Low pressure mm (in.)	34.93(1-3/8) Brazed	41.28(1-5/8) Brazed

Set Model

Model	PURY-P350YJM-A(-BS)	PURY-P450YJM-A(-BS)	PURY-P400YJM-A(-BS)	PURY-P450YJM-A(-BS)	PURY-P450YJM-A(-BS)	PURY-P450YJM-A(-BS)		
FAN	Type x Quantity		Propeller fan x 1		Propeller fan x 2			
	Air flow rate	m³/min	225	360	225	360		
		L/s	3,750	6,000	3,750	6,000		
		cfm	7,945	12,712	7,945	12,712		
	Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1		0.92 x 2		0.92 x 2		
	*4 External static press.	0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)		
	Compressor	Type x Quantity		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
		Starting method	Inverter		Inverter		Inverter	
		Motor output kW	9.9		11.6		11.6	
Case heater kW		0.045(240 V)		0.045(240 V)		0.045(240 V)		
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>							
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760		1,710(1,650 without legs) x 1,750 x 760		1,710(1,650 without legs) x 1,750 x 760		
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16		67-3/8(65 without legs) x 68-15/16 x 29-15/16		67-3/8(65 without legs) x 68-15/16 x 29-15/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		Over-heat protection		Over-heat protection		
	Fan motor	Thermal switch		Thermal switch		Thermal switch		
Refrigerant	Type x original charge	R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		R410A x 11.8kg (27lbs)		
Net weight	kg (lbs)	270(596)		320(706)		320(706)		
Heat exchanger	Salt-resistant cross fin & copper tube							
Pipe between unit and distributor	High pressure mm (in.)	19.05(3/4) Brazed		22.2(7/8) Brazed		22.2(7/8) Brazed		
	Low pressure mm (in.)	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		
Optional parts	Outdoor Twinning kit: CMY-R100XLBK		Outdoor Twinning kit: CMY-R200XLBK		Outdoor Twinning kit: CMY-R200XLBK			
	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1			
	Main BC controller: CMB-P1016V-HA1		Main BC controller: CMB-P1016V-HA1		Main BC controller: CMB-P1016V-HA1			
Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1		

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor Unit

OUTDOOR UNIT R2 Series - High COP PURY-EP YJM-A(-BS)



> Specifications

Model		PURY-EP200YJM-A(-BS)	PURY-EP250YJM-A(-BS)	PURY-EP300YJM-A(-BS)	PURY-EP350YJM-A(-BS)	
Power source		3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW	22.4	28.0	33.5	40.0	
	*1 BTU / h	76,400	95,500	114,300	136,500	
	Power input kW	5.07	6.76	8.25	10.28	
	Current input A	8.5-8.1-7.8	11.4-10.8-10.4	13.9-13.2-12.7	17.3-16.4-15.8	
COP	kW / kW	4.41	4.14	4.06	3.89	
	kW / kW	4.41	4.14	4.06	3.89	
Temp. range of cooling	*3 Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	
	*3 Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	
Heating capacity (Nominal)	*2 kW	25.0	31.5	37.5	45.0	
	*2 BTU / h	85,300	107,500	128,000	153,500	
	Power input kW	5.56	7.15	8.60	10.58	
	Current input A	9.3-8.9-8.5	12.0-11.4-11.0	14.5-13.7-13.2	17.8-16.9-16.3	
COP	kW / kW	4.49	4.40	4.36	4.25	
	kW / kW	4.49	4.40	4.36	4.25	
Temp. range of heating	*3 Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	
	*3 Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	
Indoor unit connectable	Total capacity	50~150 % of outdoor unit capacity	50~150 % of outdoor unit capacity	50~150 % of outdoor unit capacity	50~150 % of outdoor unit capacity	
	Model / Quantity	P15~P250 / 1~20	P15~P250 / 1~25	P15~P250 / 1~30	P15~P250 / 1~35	
Sound pressure level (measured in anechoic room)	dB <A>	57	60	60	61	
Power pressure level (measured in anechoic room)	dB <A>	77	80	80	81	
Refrigerant piping diameter	High pressure mm (in.)	15.88(5/8) Braze	19.05(3/4) Braze	19.05(3/4) Braze	19.05(3/4) Braze	
	Low pressure mm (in.)	19.05(3/4) Braze	22.2(7/8) Braze	22.2(7/8) Braze	28.58(1-1/8) Braze	
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	
	Air flow rate	m³/min	185	225	225	360
		L/s	3,083	3,750	3,750	6,000
		cfm	6,532	7,945	7,945	12,712
	Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2	
	*4 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	
	Compressor	Type x Quantity	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method	Inverter	Inverter	Inverter	Inverter	
	Motor output kW	5.4	6.8	7.8	9.9	
Case heater kW	0.035(240 V)	0.045(240 V)	0.045(240 V)	0.045(240 V)		
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	
	Compressor	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	
	Fan motor	Thermal switch	Thermal switch	Thermal switch	Thermal switch	
Refrigerant	Type x original charge	R410A x 9.5kg (21lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	
Net weight	kg (lbs)	240(530)	270(596)	270(596)	320(706)	
Heat exchanger		Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	
Optional parts	Joint	CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	
	BC controller	CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1	BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1	BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1	BC controller: CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1	
	Main BC controller	CMB-P108, 1010, 1013, 1016V-GA1	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1	
	Sub BC controller	CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	
	Outdoor Twinning kit	CMY-R100VBK	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	
	Sub BC controller	CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor unit

OUTDOOR UNIT R2 Series - High COP PURY-EP YSJM-A(-BS)



> Specifications

Model		PURY-EP400YSJM-A(-BS)	PURY-EP450YSJM-A(-BS)	PURY-EP500YSJM-A(-BS)				
Power source		3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz				
Cooling capacity (Nominal)	*1 kW	45.0	50.0	56.0				
	*1 BTU / h	153,500	170,600	191,100				
	Power input kW	10.41	11.99	13.62				
	Current input A	17.5-16.6-16.0	20.2-19.2-18.5	22.9-21.8-21.0				
COP	kW / kW	4.32	4.17	4.11				
	kW / kW	4.32	4.17	4.11				
Temp. range of cooling	*3 Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)				
	*3 Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)				
Heating capacity (Nominal)	*2 kW	50.0	56.0	63.0				
	*2 BTU / h	170,600	191,100	215,000				
	Power input kW	11.36	12.87	14.38				
	Current input A	19.1-18.2-17.5	21.7-20.6-19.8	24.2-23.0-22.2				
COP	kW / kW	4.40	4.35	4.38				
	kW / kW	4.40	4.35	4.38				
Temp. range of heating	*3 Indoor D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)				
	*3 Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)				
Indoor unit connectable	Total capacity	50~150 % of outdoor unit capacity	50~150 % of outdoor unit capacity	50~150 % of outdoor unit capacity				
	Model / Quantity	P15~P250 / 1~40	P15~P250 / 1~40	P15~P250 / 1~50				
Sound pressure level (measured in anechoic room)	dB <A>	60	62	62				
Power pressure level (measured in anechoic room)	dB <A>	80	82	82				
Refrigerant piping diameter	High pressure mm (in.)	22.2(7/8) Braze	22.2(7/8) Braze	22.2(7/8) Braze				
	Low pressure mm (in.)	28.58(1-1/8) Braze	28.58(1-1/8) Braze	28.58(1-1/8) Braze				
Set Model	FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
		Air flow rate	m³/min	185	185	185	225	225
			L/s	3,083	3,083	3,083	3,750	3,750
	cfm		6,532	6,532	6,532	7,945	7,945	
	Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1		
	*4 External static press.	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)		
	Compressor	Type x Quantity	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter	Inverter			
	Motor output kW	5.4	5.4	5.4	6.8			
Case heater kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.045(240 V)				
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension HxWxD	mm	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 920 x 760	1,710(1,650 without legs) x 1,220 x 760			
	in.	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 36-1/4 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16			
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)			
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection			
	Compressor	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection			
	Fan motor	Thermal switch	Thermal switch	Thermal switch	Thermal switch			
Refrigerant	Type x original charge	R410A x 9.5kg (21lbs)	R410A x 9.5kg (21lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)			
Net weight	kg (lbs)	240(530)	240(530)	240(530)	270(596)			
Heat exchanger		Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube			
Optional parts	Joint	CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1			
	BC controller	CMB-P108, 1010, 1013, 1016V-G1	BC controller: CMB-P108, 1010, 1013, 1016V-G1	BC controller: CMB-P108, 1010, 1013, 1016V-G1	BC controller: CMB-P108, 1010, 1013, 1016V-GA1			
	Main BC controller	CMB-P108, 1010, 1013, 1016V-GA1	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1	Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1			
	Sub BC controller	CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1			
	Outdoor Twinning kit	CMY-R100VBK	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1			
	Sub BC controller	CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1	Sub BC controller: CMB-P104, 108V, GB1, CMB-P1016V-HB1			

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor Unit

OUTDOOR UNIT R2 Series - High COP PURY-EP YSJM-A(1)(-BS)

> Specifications



Model	PURY-EP500YSJM-A1(-BS)		PURY-EP550YSJM-A(-BS)		PURY-EP600YSJM-A(-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz						
Cooling capacity (Nominal)	*1 kW	56.0	63.0	69.0			
	*1 BTU/h	191,100	215,000	235,400			
	Power input kW	13.96	15.40	16.87			
	Current input A	23.5-22.3-21.5	25.9-24.6-23.8	28.4-27.0-26.0			
	COP kW/kW	4.01	4.09	4.09			
Temp. range of cooling	*3 Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)			
	*3 Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)			
Heating capacity (Nominal)	*2 kW	63.0	69.0	76.5			
	*2 BTU/h	215,000	235,400	261,000			
	Power input kW	14.78	15.93	17.38			
	Current input A	24.9-23.7-22.8	26.8-25.5-24.6	29.3-27.8-26.8			
	COP kW/kW	4.26	4.33	4.40			
Temp. range of heating	*3 Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)			
	*3 Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)			
Indoor unit connectable	Total capacity	50~150 % of outdoor unit capacity		50~150 % of outdoor unit capacity			
	Model / Quantity	P15~P250 / 1~50		P15~P250 / 2~50			
Sound pressure level (measured in anechoic room)	dB <A>	63	63	63			
Power pressure level (measured in anechoic room)	dB <A>	83	83	83			
Refrigerant piping diameter	High pressure mm (in.)	22.2(7/8) Braze	28.58(1-1/8) Braze	28.58(1-1/8) Braze			
	Low pressure mm (in.)	28.58(1-1/8) Braze	28.58(1-1/8) Braze	28.58(1-1/8) Braze			
Set Model							
Model	PURY-EP250YJM-A(-BS)	PURY-EP250YJM-A(-BS)	PURY-EP250YJM-A(-BS)	PURY-EP300YJM-A(-BS)	PURY-EP300YJM-A(-BS)	PURY-EP300YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m³/min	225	225	225	225	
		L/s	3,750	3,750	3,750	3,750	
		cfm	7,945	7,945	7,945	7,945	
	Driving mechanism	Inverter-control, Direct-driven by motor					
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	
	*4 External static press.	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor					
	Starting method	Inverter					
	Motor output kW	6.8	6.8	6.8	7.8	7.8	
	Case heater kW	0.045(240 V)	0.045(240 V)	0.045(240 V)	0.045(240 V)	0.045(240 V)	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,220 x 760	
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)					
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection					
	Compressor	Over-heat protection					
	Fan motor	Thermal switch					
Refrigerant	Type x original charge	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	
Net weight	kg (lbs)	270(596)	270(596)	270(596)	270(596)	270(596)	
Heat exchanger		Salt-resistant cross fin & copper tube					
Pipe between unit and distributor	High pressure mm (in.)	19.05(3/4) Braze	19.05(3/4) Braze	19.05(3/4) Braze	19.05(3/4) Braze	19.05(3/4) Braze	
	Low pressure mm (in.)	22.2(7/8) Braze	22.2(7/8) Braze	22.2(7/8) Braze	22.2(7/8) Braze	22.2(7/8) Braze	
Optional parts		Outdoor Twinning kit: CMY-R100VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1					

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor unit

OUTDOOR UNIT R2 Series - High COP PURY-EP YSJM-A(1)(-BS)

> Specifications



Model	PURY-EP600YSJM-A1(-BS)		PURY-EP650YSJM-A(-BS)		PURY-EP700YSJM-A(-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz						
Cooling capacity (Nominal)	*1 kW	69.0	73.0	80.0			
	*1 BTU/h	235,400	249,100	273,000			
	Power input kW	17.82	19.01	21.22			
	Current input A	30.0-28.5-27.5	32.0-30.4-29.3	35.8-34.0-32.8			
	COP kW/kW	3.87	3.84	3.77			
Temp. range of cooling	*3 Indoor W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)			
	*3 Outdoor D.B.	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)	-5.0~46.0°C(23~115°F)			
Heating capacity (Nominal)	*2 kW	76.5	81.5	88.0			
	*2 BTU/h	261,000	278,100	300,300			
	Power input kW	18.30	19.73	22.05			
	Current input A	30.8-29.3-28.2	33.3-31.6-30.4	37.2-35.3-34.0			
	COP kW/kW	4.18	4.13	3.99			
Temp. range of heating	*3 Indoor W.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)			
	*3 Outdoor W.B.	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)	-20.0~15.5°C(-4~60°F)			
Indoor unit connectable	Total capacity	50~150 % of outdoor unit capacity		50~150 % of outdoor unit capacity			
	Model / Quantity	P15~P250 / 2~50		P15~P250 / 2~50			
Sound pressure level (measured in anechoic room)	dB <A>	63.5	63.5	64			
Power pressure level (measured in anechoic room)	dB <A>	83.5	83.5	84			
Refrigerant piping diameter	High pressure mm (in.)	28.58(1-1/8) Braze	28.58(1-1/8) Braze	28.58(1-1/8) Braze			
	Low pressure mm (in.)	28.58(1-1/8) Braze	28.58(1-1/8) Braze	34.93(1-3/8) Braze			
Set Model							
Model	PURY-EP350YJM-A(-BS)	PURY-EP350YJM-A(-BS)	PURY-EP350YJM-A(-BS)	PURY-EP350YJM-A(-BS)	PURY-EP350YJM-A(-BS)	PURY-EP350YJM-A(-BS)	
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 2	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	
	Air flow rate	m³/min	225	360	225	360	
		L/s	3,750	6,000	3,750	6,000	
		cfm	7,945	12,712	7,945	12,712	
	Driving mechanism	Inverter-control, Direct-driven by motor					
	Motor output kW	0.92 x 1	0.92 x 2	0.92 x 1	0.92 x 2	0.92 x 2	
	*4 External static press.	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	0 Pa (0 mmH₂O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor					
	Starting method	Inverter					
	Motor output kW	6.8	9.9	7.8	9.9	9.9	
	Case heater kW	0.045(240 V)	0.045(240 V)	0.045(240 V)	0.045(240 V)	0.045(240 V)	
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension HxWxD	mm	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	1,710(1,650 without legs) x 1,220 x 760	1,710(1,650 without legs) x 1,750 x 760	1,710(1,650 without legs) x 1,750 x 760	
	in.	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	67-3/8(65 without legs) x 48-1/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	67-3/8(65 without legs) x 68-15/16 x 29-15/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)					
	Inverter circuit (COMP./FAN)	Over-heat protection, Over-current protection					
	Compressor	Over-heat protection					
	Fan motor	Thermal switch					
Refrigerant	Type x original charge	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	R410A x 11.8kg (27lbs)	
Net weight	kg (lbs)	270(596)	320(706)	270(596)	320(706)	320(706)	
Heat exchanger		Salt-resistant cross fin & copper tube					
Pipe between unit and distributor	High pressure mm (in.)	19.05(3/4) Braze	19.05(3/4) Braze	19.05(3/4) Braze	19.05(3/4) Braze	19.05(3/4) Braze	
	Low pressure mm (in.)	22.2(7/8) Braze	22.2(7/8) Braze	22.2(7/8) Braze	22.2(7/8) Braze	22.2(7/8) Braze	
Optional parts		Outdoor Twinning kit: CMY-R100XLVBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-R160-J1 Main BC controller: CMB-P108, 1010, 1013, 1016V-GA1 Sub BC controller: CMB-P104, 108V-GB1, CMB-P1016V-HB1					

Notes:

*1, *2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27°C DB/19°C WB (81°F DB/66°F WB)	35°C DB(95°F DB)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C DB(68°F DB)	7°C DB/6°C WB(45°F DB/43°F WB)	7.5m (24-9/16ft.)	0m (0ft.)

*3 -5°C DB (23°F DB) / -6°C WB (21°F WB) to 21°C DB (70°F DB) / 15.5°C WB (60°F WB) with cooling/heating mixed operation.

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

*Nominal condition *1, *2 are subject to JIS B8615-1.

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

Outdoor unit

HEAT SOURCE UNIT WR2 (Heat Recovery) Series PQRY-P YHM-A



► Specifications

Model	PQRY-P200YHM-A		PQRY-P250YHM-A		PQRY-P300YHM-A		
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5		
	*1	BTU / h	76,400	95,500	114,300		
		Power input	kW	3.96	5.51	7.44	
		Current input	A	6.6-6.3-6.1	9.3-8.8-8.5	12.5-11.9-11.5	
		COP	kW / kW	5.65	5.08	4.50	
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)		
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)		
Heating capacity (Nominal)	*2	kW	25.0	31.5	37.5		
	*2	BTU / h	85,300	107,500	128,000		
		Power input	kW	4.12	5.80	8.15	
		Current input	A	6.9-6.6-6.3	9.7-9.3-8.9	13.7-13.0-12.5	
		COP	kW / kW	6.06	5.43	4.60	
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)		
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)		
Indoor unit connectable	Total capacity	50~150 % of heat source unit capacity		50~150 % of heat source unit capacity		50~150 % of heat source unit capacity	
	Model / Quantity	P15~P250 / 1~20		P15~P250 / 1~25		P15~P250 / 1~30	
Sound pressure level (measured in anechoic room)		dB <A>	47	49	50		
Refrigerant piping diameter [O.D.]	High pressure	mm (in.)	15.88(5/8) Brazed	19.05(3/4) Brazed	19.05(3/4) Brazed		
	Low pressure	mm (in.)	19.05(3/4) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed		
Circulating water	Water flow rate	m³ / h	5.76	5.76	5.76		
		L/min	96	96	96		
	Pressure drop	cfm	3.4	3.4	3.4		
		kPa	17	17	17		
Operating volume range	m³ / h	4.5 ~ 7.2		4.5 ~ 7.2			
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method	Inverter		Inverter		Inverter	
	Motor output	kW	4.6	6.3	7.4		
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)		
External finish	Acrylic painted steel plate		Acrylic painted steel plate		Acrylic painted steel plate		
External dimension HxWxD	mm	1,160(1,100 without legs) x 880 x 550		1,160(1,100 without legs) x 880 x 550		1,160(1,100 without legs) x 880 x 550	
	in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP.)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
Compressor		Over-heat protection		Over-heat protection		Over-heat protection	
Refrigerant	Type x original charge	R410A x 5.0kg (12lbs)		R410A x 5.0kg (12lbs)		R410A x 5.0kg (12lbs)	
Net weight	kg (lbs)	181(400)		181(400)		181(400)	
Heat exchanger		plate type		plate type		plate type	
	Water volume in plate	L	5.0	5.0	5.0		
	Water pressure Max.	MPa	2.0	2.0	2.0		
Optional parts	Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1		Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1		

Notes:

*1, *2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C D.B. (68°F D.B.)	20°C (68°F)		

- *3 The ambient temperature of the heat source unit needs to be kept below 40°C D.B.
- *4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
- *5 The heat source Unit should not be installed at outdoor.
- *6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
- *7 Be sure to provide interlocking for the unit operation and water circuit.
- *Nominal condition *1, *2 are subject to JIS B8615-1.
- *Due to continuing improvement, above specification may be subject to change without notice.

Outdoor unit

HEAT SOURCE UNIT WR2 (Heat Recovery) Series PQRY-P YSHM-A



► Specifications

Model	PQRY-P400YSHM-A		PQRY-P450YSHM-A		PQRY-P500YSHM-A		
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1	kW	45.0	50.0	56.0		
	*1	BTU / h	153,500	170,600	191,100		
		Power input	kW	8.32	9.94	11.57	
		Current input	A	14.0-13.3-12.8	16.7-15.9-15.3	19.5-18.5-17.8	
		COP	kW / kW	5.40	5.03	4.84	
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)	15.0~24.0°C(59~75°F)		
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)		
Heating capacity (Nominal)	*2	kW	50.0	56.0	63.0		
	*2	BTU / h	170,600	191,100	215,000		
		Power input	kW	8.65	10.42	12.06	
		Current input	A	14.6-13.8-13.3	17.5-16.7-16.1	20.3-19.3-18.6	
		COP	kW / kW	5.78	5.37	5.22	
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)	15.0~27.0°C(59~81°F)		
	Circulating water	°C	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)	10.0~45.0°C(50~113°F)		
Indoor unit connectable	Total capacity	50~150 % of heat source unit capacity		50~150 % of heat source unit capacity		50~150 % of heat source unit capacity	
	Model / Quantity	P15~P250 / 1~40		P15~P250 / 1~45		P15~P250 / 1~50 (Connectable branch pipe number is max. 48.)	
Sound pressure level (measured in anechoic room)		dB <A>	50	51	52		
Refrigerant piping diameter [O.D.]	High pressure	mm (in.)	22.2(7/8) Brazed	22.2(7/8) Brazed	22.2(7/8) Brazed		
	Low pressure	mm (in.)	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed	28.58(1-1/8) Brazed		
Set Model							
Circulating water	Water flow rate	m³ / h	5.76 + 5.76	5.76 + 5.76	5.76 + 5.76		
		L/min	96 + 96	96 + 96	96 + 96		
	Pressure drop	cfm	3.4 + 3.4	3.4 + 3.4	3.4 + 3.4		
		kPa	17	17	17		
Operating volume range	m³ / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2			
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method	Inverter		Inverter		Inverter	
	Motor output	kW	4.6	4.6	6.3	4.6	6.3
	Case heater	kW	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)	0.035(240 V)
External finish	Acrylic painted steel plate		Acrylic painted steel plate		Acrylic painted steel plate		
External dimension HxWxD	mm	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	1,160(1,100 without legs) x 880 x 550	
	in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16	
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP.)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		Over-heat protection, Over-current protection	
Compressor		Over-heat protection		Over-heat protection		Over-heat protection	
Refrigerant	Type x original charge	R410A x 5.0kg (12lbs)		R410A x 5.0kg (12lbs)		R410A x 5.0kg (12lbs)	
Net weight	kg (lbs)	181(400)		181(400)		181(400)	
Heat exchanger		plate type		plate type		plate type	
	Water volume in plate	L	5.0	5.0	5.0	5.0	
	Water pressure Max.	MPa	2.0	2.0	2.0	2.0	
Optional parts	Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1		Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1		Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2, CMY-R160-J1		

Notes:

*1, *2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C D.B. (68°F D.B.)	20°C (68°F)		

- *3 The ambient temperature of the heat source unit needs to be kept below 40°C D.B.
- *4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
- *5 The heat source Unit should not be installed at outdoor.
- *6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
- *7 Be sure to provide interlocking for the unit operation and water circuit.
- *Nominal condition *1, *2 are subject to JIS B8615-1.
- *Due to continuing improvement, above specification may be subject to change without notice.

Outdoor Unit

HEAT SOURCE UNIT WR2 (Heat Recovery) Series PQRY-P YSHM-A



► Specifications

Model		PQRY-P550YSHM-A		PQRY-P600YSHM-A		
Power source		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	63.0		69.0		
	*1 BTU / h	215,000		235,400		
	Power input kW	13.60		15.62		
	Current input A	22.9-21.8-21.0		26.3-25.0-24.1		
COP		4.63		4.41		
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		
	Circulating water °C	10.0~45.0°C(50~113°F)		10.0~45.0°C(50~113°F)		
Heating capacity (Nominal)	*2 kW	69.0		76.5		
	*2 BTU / h	235,400		261,000		
	Power input kW	14.65		17.12		
	Current input A	24.7-23.4-22.6		28.9-27.4-26.4		
COP		4.70		4.46		
Temp. range of heating	Indoor D.B.	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		
	Circulating water °C	10.0~45.0°C(50~113°F)		10.0~45.0°C(50~113°F)		
Indoor unit connectable	Total capacity	50~150 % of heat source unit capacity		50~150 % of heat source unit capacity		
	Model / Quantity	P15~P250 / 2~50 (Connectable branch pipe number is max. 48.)		P15~P250 / 2~50 (Connectable branch pipe number is max. 48.)		
Sound pressure level (measured in anechoic room)	dB <A>	52.5		53		
Refrigerant piping diameter [O.D.]	High pressure	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		
	Low pressure	28.58(1-1/8) Brazed		28.58(1-1/8) Brazed		
Set Model						
Model		PQRY-P300YHM-A		PQRY-P250YHM-A		
Circulating water	Water flow rate	m ³ / h	5.76 + 5.76		5.76 + 5.76	
		L/min	96 + 96		96 + 96	
	cfm	3.4 + 3.4		3.4 + 3.4		
	Pressure drop	kPa	17		17	
Operating volume range	m ³ / h	4.5 + 4.5 ~ 7.2 + 7.2		4.5 + 4.5 ~ 7.2 + 7.2		
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
	Starting method	Inverter		Inverter		
	Motor output	7.4		6.3		
	Case heater	0.035(240 V)		0.035(240 V)		
External finish		Acrylic painted steel plate				
External dimension HxWxD	mm	1,160(1,100 without legs) x 880 x 550		1,160(1,100 without legs) x 880 x 550		
	in.	45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		45-11/16(43-5/16 without legs) x 34-11/16 x 21-11/16		
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP.)	Over-heat protection, Over-current protection		Over-heat protection, Over-current protection		
	Compressor	Over-heat protection		Over-heat protection		
Refrigerant	Type x original charge	R410A x 5.0kg (12lbs)		R410A x 5.0kg (12lbs)		
Net weight	kg (lbs)	181(400)		181(400)		
Heat exchanger	plate type		plate type		plate type	
	Water volume in plate	L	5.0		5.0	
	Water pressure Max.	MPa	2.0		2.0	
Optional parts		Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202SS-G2,CMY-R160-J1		Heat Source Twinning kit: CMY-Q100VBK Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-Y202SS-G2,CMY-R160-J1		

Notes:

*1,*2 Nominal conditions

	Indoor	Water temperature	Pipe length	Level difference
Cooling	27°C D.B./19°C W.B. (81°F D.B./66°F W.B.)	30°C (86°F)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20°C D.B. (68°F D.B.)	20°C (68°F)		

- *3 The ambient temperature of the heat source unit needs to be kept below 40°C D.B.
- *4 The ambient relative humidity of the heat source unit needs to be kept below 80%.
- *5 The heat source Unit should not be installed at outdoor.
- *6 Be sure to mount a strainer (more than 50 meshes) at the water inlet piping of the unit.
- *7 Be sure to provide interlocking for the unit operation and water circuit.
- *Nominal condition *1,*2 are subject to JIS B8615-1.
- *Due to continuing improvement, above specification may be subject to change without notice.

Outdoor unit

OPTIONAL PARTS FOR OUTDOOR UNITS

>>For PUMY series

Description	Model
Branch Pipe (2 Branch)	CMY-Y62-G-E
Header	CMY-Y64-G-E
Header	CMY-Y68-G-E
Drain Socket	PAC-SG61DS-E
Centralized Drain Pan	PAC-SG64DP-E
Port Connector (ø9.52 → ø12.7)	PAC-SG73RJ-E
Port Connector (ø15.88 → ø19.05)	PAC-SG75RJ-E
Air Protect Guide (2 pcs required)	PAC-SH63AG-E

>>For PUHY series

Description	Model	Remarks
Twinning kit	CMY-Y100VBK2	For PUHY-P500~P650 / EP400~EP600YSJM
	CMY-Y200VBK2	For PUHY-P700~P900YSHM
	CMY-Y300VBK2	For PUHY-P950~P1250 / EP650~EP900YSJM
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The 1st branch of P450~P650
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit) The 1st branch of P700~P1250
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

>>For PUHY-HP series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The 1st branch of P400,P500
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Twinning kit	CMY-Y100VBK2	For PUHY-HP400,HP500YSHM-A(BS)

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

>>For PURY series

Description	Model	Remarks
Twinning kit	CMY-R100VBK	For PURY-P400~P650 / EP400~EP600YSHM
	CMY-R200VBK	For PURY-P700~P800YSHM
	CMY-R100XLVBK	For PURY-P800 / EP600~650YSJM
	CMY-R200XLVBK	For PURY-P850~900 / EP700YSJM
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The 1st branch of P450~P650

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

>>For PQHY series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The first branch of P400-P600
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Twinning kit	CMY-Y100VBK2	For PQHY-P400-P900YSHM-A

>>For PQR series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The first branch of P400-P600
Twinning kit	CMY-Q100VBK	For PQR-P400-P600YSHM-A

OPTIONAL PARTS FOR CONTROL

Model	Description	Model	Description
PAC-SE41TS-E	Remote Sensor for A/J/K/M-Net Control	PAC-YT41HAA	External input/output adapter for AT-50A
PAC-SE55RA-E	Remote ON/OFF adaptor for Indoor Unit	PAC-YG10HA	External input/output adapter for AG-150A
PAC-SA88HA-EP	Remote Display Adaptor for Indoor Unit	PAC-YG50ECA	Expansion controller for AG-150A
PAC-SA89TA-EP	Timer Adaptor for remote controller	PAC-SC51KUA	Power supply unit for AG-150A / GB-50ADA-J
PAC-SC37SA-E	Output signal connector	PAC-YG81TB	Mounting attachment B type for AG-150A wall-mount installations
PAC-SC36NA-E	Input signal connector	PAC-YG83UTB	Electric box for AG-150A wall-embed installations
PAC-SF46EPA	Transmission booster	PAC-YG85KTB	Mounting attachment A type for AG-150A/PAC-SC51KUA wall-mount installations
LMAF02	Air conditioner interface	PAC-YG71CBL	Black surface cover for AG-150A
PAC-YG11CDA	Electric amount count software		
PAC-YG31CDA	BAC net® interface		
BAC-HD150	BAC net® and M-NET adapter		

OPTIONAL EQUIPMENT FOR BC CONTROLLER

BC Controller Model	Junction pipe kit	Branch pipe
CMB-P104V-G1, GB1	CMY-R160-J1	CMY-Y102SS-G2
CMB-P105V-G1		
CMB-P106V-G1		
CMB-P108V-G1, GA1, GB1		
CMB-P1010V-G1, GA1		
CMB-P1013V-G1, GA1		
CMB-P1016V-G1, GA1, HA1, HB1		

Maintenance equipment

Maintenance cycle [Note that maintenance cycle does not mean guarantee period.]

The following tables are applicable when using equipment under the conditions below.

- Normal use without frequent START/STOPS (The number of START/STOPS is assumed to be less than 6 times per hour in normal use.)
- Operating hours are assumed to be 10 hours per day/2500 hours per year.

Under the following conditions, equipment may not be able to be used at all, or the maintenance cycle and replacement cycle of equipment may need to be shortened.

- When using equipment in high temperature and humidity or in rapid changes in temperature and humidity
- When using equipment in a big electric change of power voltage, frequency, and waveform distortion (They cannot be used outside of acceptable range.)
- When using equipment installed in a place where there is a lot of vibration
- When using equipment in the air with hazardous gas or oil mist as well as dust, salinity, and sulfur dioxide/hydrogen sulfide
- When using equipment with frequent START/STOP or long operating hours

Table 1. Maintenance cycle

Major components	Checking cycle	Maintenance cycle	Major components	Checking cycle	Maintenance cycle
Compressor	1 year	20,000 hours	Expansion valve	1 year	20,000 hours
Motor (Fan, Louver, drain pump)		20,000 hours	Valve (solenoid valve, four-way valve)		20,000 hours
Bearing		15,000 hours	Sensor (thermistor, presser sensor)		5 years
Electric board		25,000 hours	Drain pan		8 years
Heat exchanger		5 years			

Note1 This table shows major components. Refer to the maintenance contract for details.

Note2 This maintenance cycle shows a period in which products are expected to require no maintenance. Use this cycle for planning maintenance (budgeting the maintenance expense etc.) Checking/ Maintenance cycle may be shorter than the one on this table depending on the contents of maintenance check contract.

- Sudden unpredictable accident may occur even if check-up is performed.

Replacement cycle of consumable components

[Note that replacement cycle does not mean guarantee period.]

Table 2. Replacement cycle

Major components	Checking cycle	Replacement cycle
Long-life filter	1 year	5 years
High-performance filter		1 year
Fan belt		5,000 hours
Smoothing capacitor		10 years
Fuse		10 years
Crank case heater		8 years

Note1 This table shows major components. Refer to the maintenance contract for details.

Note2 This replacement cycle shows a period in which products are expected to require no replacements. Use this cycle for planning maintenance (budgeting expenses for replacing equipments etc.)

OPTIONAL PARTS FOR OUTDOOR UNITS

>>For PUMY series

Description	Model
Branch Pipe (2 Branch)	CMY-Y62-G-E
Header	CMY-Y64-G-E
Header	CMY-Y68-G-E
Drain Socket	PAC-SG61DS-E
Centralized Drain Pan	PAC-SG64DP-E
Port Connector (ø9.52 → ø12.7)	PAC-SG73RJ-E
Port Connector (ø15.88 → ø19.05)	PAC-SG75RJ-E
Air Protect Guide (2 pcs required)	PAC-SH63AG-E

>>For PUHY series

Description	Model	Remarks
Twinning kit	CMY-Y100VBK2	For PUHY-P500~P650 / EP400~EP600YSJM
	CMY-Y200VBK2	For PUHY-P700~P900YSHM
	CMY-Y300VBK2	For PUHY-P950~P1250 / EP650~EP900YSJM
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The 1st branch of P450~P650
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit) The 1st branch of P700~P1250
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

>>For PUHY-HP series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The 1st branch of P400,P500
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Twinning kit	CMY-Y100VBK2	For PUHY-HP400,HP500YSHM-A(BS)

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

>>For PURY series

Description	Model	Remarks
Twinning kit	CMY-R100VBK	For PURY-P400~P650 / EP400~EP600YSHM
	CMY-R200VBK	For PURY-P700~P800YSHM
	CMY-R100XLVBK	For PURY-P800 / EP600~650YSJM
	CMY-R200XLVBK	For PURY-P850~900 / EP700YSJM
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The 1st branch of P450~P650

Note : Indoor unit capacities: the capacity of an indoor unit is the same as the number used for its type identification.

>>For PQHY series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The first branch of P400-P600
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches
Twinning kit	CMY-Y100VBK2	For PQHY-P400-P900YSHM-A

>>For PQR series

Description	Model	Remarks
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit) The first branch of P400-P600
Twinning kit	CMY-Q100VBK	For PQR-P400-P600YSHM-A

OPTIONAL PARTS FOR CONTROL

Model	Description	Model	Description
PAC-SE41TS-E	Remote Sensor for A/J/K/M-Net Control	PAC-YT41HAA	External input/output adapter for AT-50A
PAC-SE55RA-E	Remote ON/OFF adaptor for Indoor Unit	PAC-YG10HA	External input/output adapter for AG-150A
PAC-SA88HA-EP	Remote Display Adaptor for Indoor Unit	PAC-YG50ECA	Expansion controller for AG-150A
PAC-SA89TA-EP	Timer Adaptor for remote controller	PAC-SC51KUA	Power supply unit for AG-150A / GB-50ADA-J
PAC-SC37SA-E	Output signal connector	PAC-YG81TB	Mounting attachment B type for AG-150A wall-mount installations
PAC-SC36NA-E	Input signal connector	PAC-YG83UTB	Electric box for AG-150A wall-embed installations
PAC-SF46EPA	Transmission booster	PAC-YG85KTB	Mounting attachment A type for AG-150A/PAC-SC51KUA wall-mount installations
LMAF02	Air conditioner interface	PAC-YG71CBL	Black surface cover for AG-150A
PAC-YG11CDA	Electric amount count software		
PAC-YG31CDA	BAC net® interface		
BAC-HD150	BAC net® and M-NET adapter		

OPTIONAL EQUIPMENT FOR BC CONTROLLER

BC Controller Model	Junction pipe kit	Branch pipe
CMB-P104V-G1, GB1	CMY-R160-J1	CMY-Y102SS-G2
CMB-P105V-G1		
CMB-P106V-G1		
CMB-P108V-G1, GA1, GB1		
CMB-P1010V-G1, GA1		
CMB-P1013V-G1, GA1		
CMB-P1016V-G1, GA1, HA1, HB1		

Maintenance equipment

Maintenance cycle [Note that maintenance cycle does not mean guarantee period.]

The following tables are applicable when using equipment under the conditions below.

- Normal use without frequent START/STOPS (The number of START/STOPS is assumed to be less than 6 times per hour in normal use.)
- Operating hours are assumed to be 10 hours per day/2500 hours per year.

Under the following conditions, equipment may not be able to be used at all, or the maintenance cycle and replacement cycle of equipment may need to be shortened.

- When using equipment in high temperature and humidity or in rapid changes in temperature and humidity
- When using equipment in a big electric change of power voltage, frequency, and waveform distortion (They cannot be used outside of acceptable range.)
- When using equipment installed in a place where there is a lot of vibration
- When using equipment in the air with hazardous gas or oil mist as well as dust, salinity, and sulfur dioxide/hydrogen sulfide
- When using equipment with frequent START/STOP or long operating hours

Table 1. Maintenance cycle

Major components	Checking cycle	Maintenance cycle	Major components	Checking cycle	Maintenance cycle
Compressor	1 year	20,000 hours	Expansion valve	1 year	20,000 hours
Motor (Fan, Louver, drain pump)		20,000 hours	Valve (solenoid valve, four-way valve)		20,000 hours
Bearing		15,000 hours	Sensor (thermistor, presser sensor)		5 years
Electric board		25,000 hours	Drain pan		8 years
Heat exchanger		5 years			

Note1 This table shows major components. Refer to the maintenance contract for details.

Note2 This maintenance cycle shows a period in which products are expected to require no maintenance. Use this cycle for planning maintenance (budgeting the maintenance expense etc.) Checking/ Maintenance cycle may be shorter than the one on this table depending on the contents of maintenance check contract.

- Sudden unpredictable accident may occur even if check-up is performed.

Replacement cycle of consumable components

[Note that replacement cycle does not mean guarantee period.]

Table 2. Replacement cycle

Major components	Checking cycle	Replacement cycle
Long-life filter	1 year	5 years
High-performance filter		1 year
Fan belt		5,000 hours
Smoothing capacitor		10 years
Fuse		10 years
Crank case heater		8 years

Note1 This table shows major components. Refer to the maintenance contract for details.

Note2 This replacement cycle shows a period in which products are expected to require no replacements. Use this cycle for planning maintenance (budgeting expenses for replacing equipments etc.)



for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.



FM33568 / ISO 9001;2008

The Air Conditioning & Refrigeration Systems Works acquired ISO 9001 certification under Series 9000 of the International Standard Organization (ISO) based on a review of Quality management for the production of refrigeration and air conditioning equipment.

ISO Authorization System

The ISO 9000 series is a plant authorization system relating to quality management as stipulated by the ISO. ISO 9001 certifies quality management based on the "design, development, production, installation and auxiliary services" for products built at an authorized plant.



The Air Conditioning & Refrigeration Systems Works acquired environmental management system standard ISO 14001 certification.

The ISO 14000 series is a set of standards applying to environmental protection set by the International Standard Organization (ISO). Registered on March 10, 1998.

△ NOTICE

- When installing or relocating the air conditioners, use only the specified refrigerant (R410A) to charge the refrigerant lines. Do not mix any other refrigerant and do not allow air to remain the lines. If air is mixed with refrigerant, then it can be the cause of abnormal high pressure in the refrigerant lines, and may result in an explosion and other hazards. The use of any refrigerant other than that specified for the system will cause mechanical failure or system malfunction or unit breakdown. In the worse case, this could lead to a serious impediment to securing product safety. MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.

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