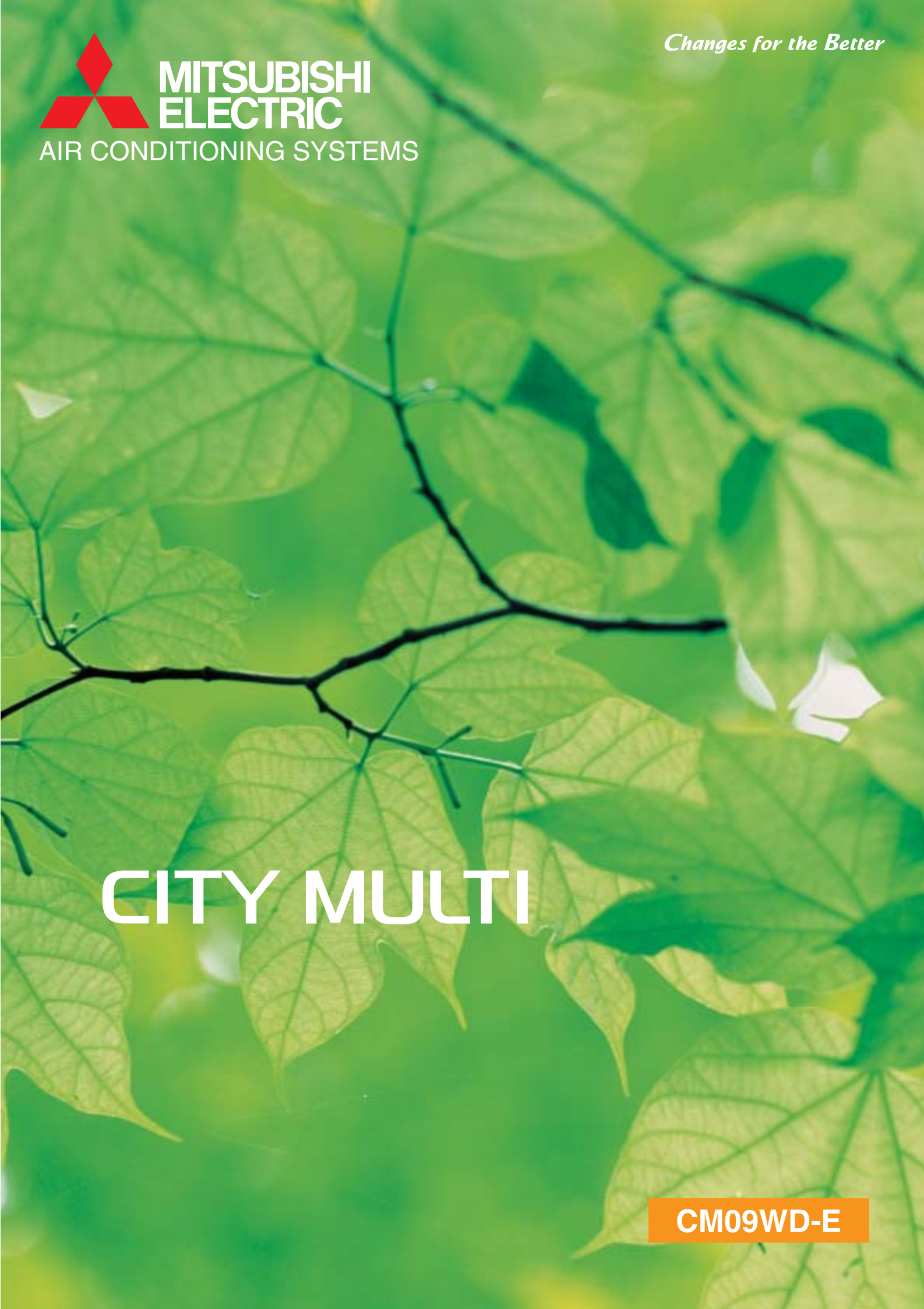

Changes for the Better
MITSUBISHI ELECTRIC
AIR CONDITIONING SYSTEMS
CITY MULTI
CM09WD-E

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.

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 1907, 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.

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

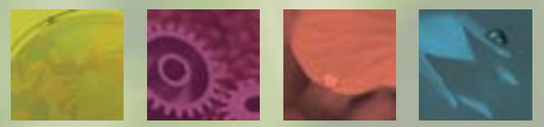
At Mitsubishi Electric we strive to continually meet the increasing demands of our customers, being the first in the industry to offer highly advanced ‘inverter driven’ systems. Using inverter technology our systems produce just the right amount of output to match the exact requirement of any building. 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.



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.

PEFY-VMS1

PEFY-VMR

PFFY-VKM

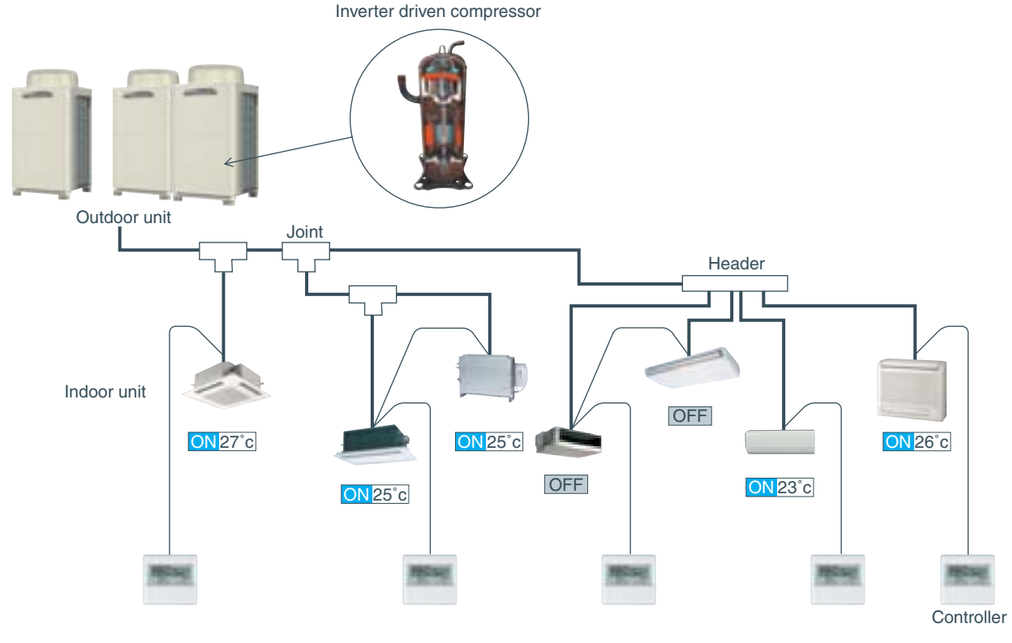
>All the City Multi outdoor units are made in Japan under stringent control.

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.

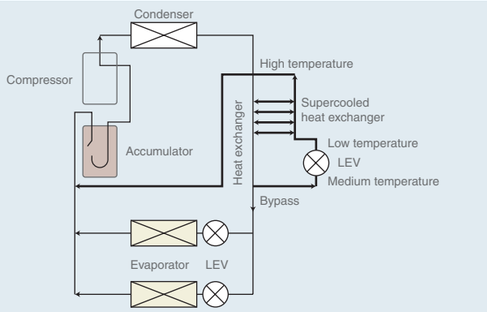


Unbeatable Efficiency

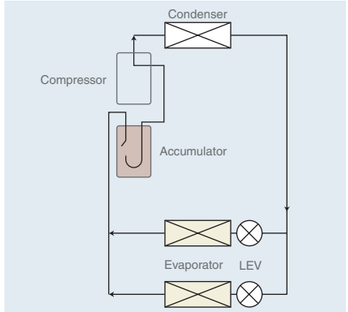
Heat Interchange Circuit

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.

City Multi Refrigerant Circuit



Common Refrigerant Circuit



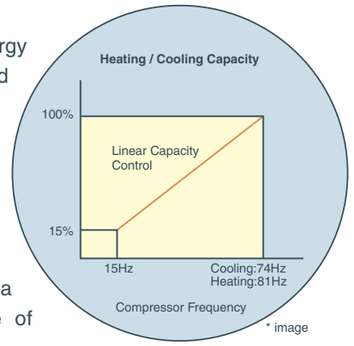
Inverter Driven Compressor Technology **- now up to 50HP**

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.

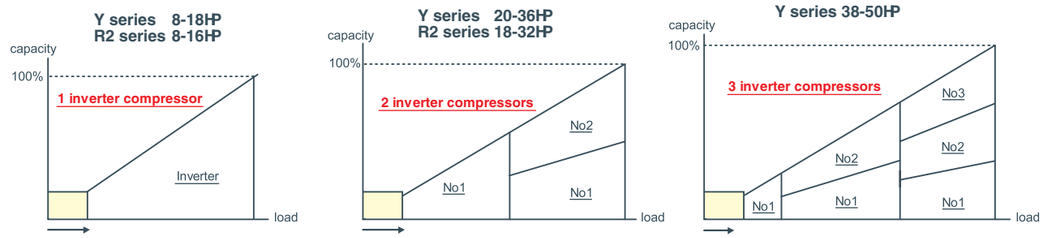


Using proven single inverter driven compressor technology, the City Multi range is favored by the industry for low starting currents (only 8 amps for a 16HP YHM-A outdoor unit), and smooth transition across the range of compressor frequencies.

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

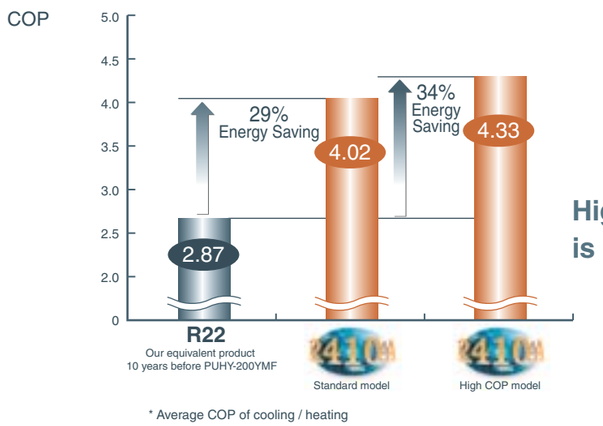
The outdoor unit combinations comprise 1unit for 8-18HP systems (for R2 up to 16HP), 2 units for 20-36HP systems (for R2, 18-32HP) and 3 units for 38-50HP systems (Y series only). Each unit carries one inverter compressor making simple and highly reliable control possible.
Not only does it allow low 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



* Average COP of cooling / heating

High COP (Coefficient of Performance) is realized

Intelligent Power Module (IPM) Technology

The YHM-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 YHM-A and previous Mitsubishi Electric models

Technology is key when increased efficiency is demanded.
The City Multi YHM-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 CO_2 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

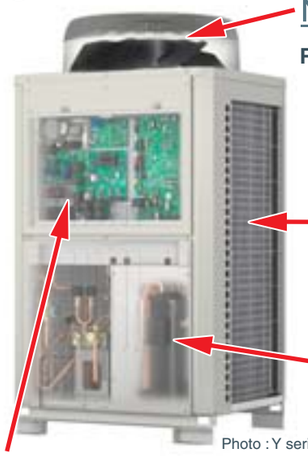
R22, an HCFC-based refrigerant, has been a popular choice for most chillers. R22 has been targeted by the Montreal Protocol to be phased out in new equipment. Additionally, governments in many countries are enforcing a ban of HCFC-based refrigerants for new installations.

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 or refrigerating systems.

New Design



New fan design

Reduction of operation noise

New heat exchanger design

Improvement of COP

New inverter compressor

Improvement of COP

Photo : Y series

New Control Box design

Improvement of reliability and easy maintenance

Compact Design of New Outdoor Unit

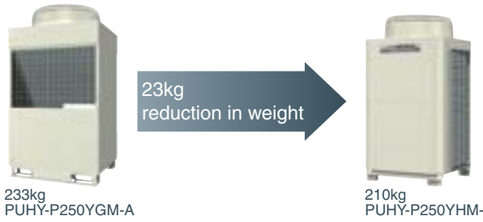
Industry leading weight saving is realized.

As of September, 2006 (based on internal survey)

Industry Leader

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

10HP outdoor unit



		8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP
Weight(kg)	Y	185	210	215	245	245	245	400	415	445	460	490
	R2	220	235	240	265	265	455	455	470	475	480	505

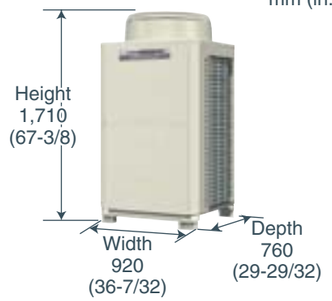
		30HP	32HP	34HP	36HP	38HP	40HP	42HP	44HP	46HP	48HP	50HP
Weight(kg)	Y	490	490	490	490	660	675	705	735	735	735	735
	R2	530	530	-	-	-	-	-	-	-	-	-

Due to the compact design of the outdoor unit, industry leading space saving is realized.

The downsized outdoor unit can be transported through a 800mm wide door.

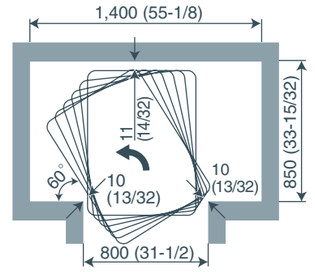
■8-12HP outdoor units

mm (in.)



■Example of 6-people elevator.

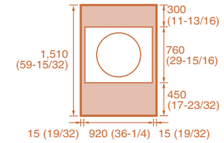
mm (in.)



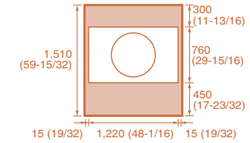
Effective Use of Space

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

mm (in.)



8-12HP systems (Y/R2 series)
1.43m²

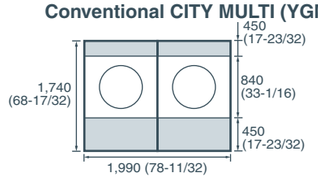


14-18HP systems (Y series)
14-16HP systems (R2 series)
1.89m²

18HP (Yseries)

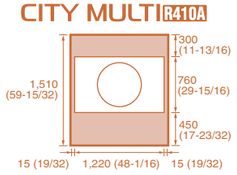
mm (in.)

Conventional CITY MULTI (YGM series)



3.46m²

CITY MULTI R410A



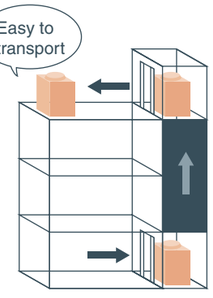
1.89m²

45% reduction

The unit can easily be transported even into slender buildings.

The narrow space between buildings makes it difficult to use a crane.

City Multi makes it easy.



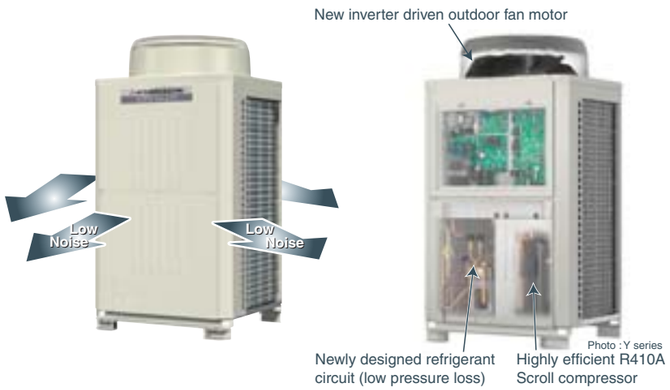
The Strength of City Multi

Low Noise Levels

New Fan Design

CITY MULTI VRF systems led the introduction of larger single fan rotors 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.

Features and Benefits

New Improved Figures

Increased Pipe Lengths

Total system pipe lengths of up to 1,000m(3,280ft) and furthest pipe lengths of 165m(541ft) make the CITY MULTI Y series system one of the most flexible VRF systems in the market

Y Series

Two-pipe VRF System

The Y series two-pipe system offers great piping design flexibility. Two pipes run from the Y series outdoor unit to connect up to 50 indoor units via simple T-branches, headers, or combination of both. A Y series system may have a total combined length of refrigerant piping up to 3,280 feet one way. The farthest distance between the Y series outdoor unit and any one of the 50 indoor units is 541 feet. The outdoor unit can be placed 164 feet vertically above the lowest indoor unit or 131 feet vertically below the highest indoor unit. The Y series offers exceptional line lengths that will accommodate just about any commercial application, including multi-story office buildings, assisted living facilities, universities, and many, many more.

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]*2
Indoor/outdoor (outdoor lower)	40 [131]*2
Indoor/indoor	15 [49]

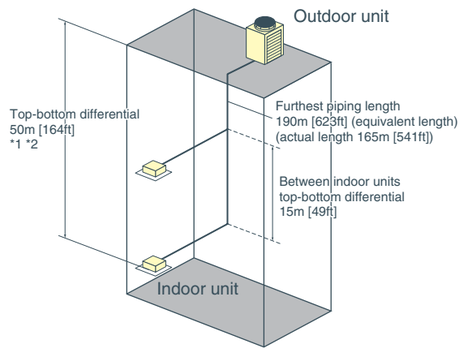
R2 Series

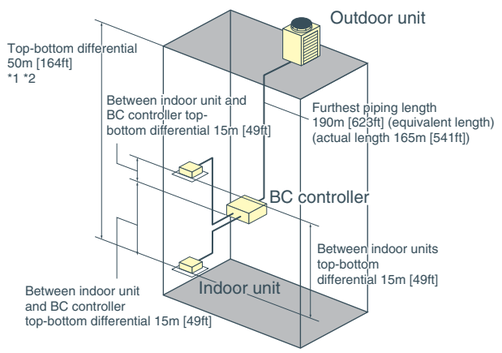
Two-pipe VRF System

The R2 system offers flexibility and reduced costs for refrigerant piping.

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].

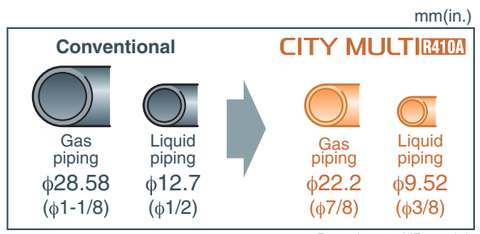
*2 Depending on the model and installation conditions, top-bottom differential 90m [295ft] (o/u above) and 60m [196ft] (o/u below) is available. For more detailed information, please contact your nearest sales office or distributor.

The Strength of New City Multi

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.

mm(in.)



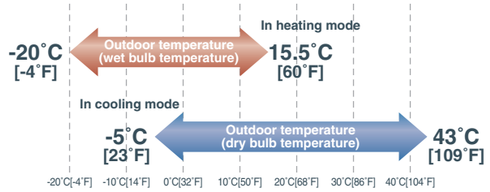
Based on 10HP model

Cooling Operation Set Temperature of 14˚C[57˚F]

Gyms, laboratories etc. often require the ability to cool lower than the standard comfort cooling setpoint. By selecting a dip switch on the unit, a cooling operation set temperature of 14˚C[57˚F] DB is possible on PDFY/PEFY/PFFY series. (PEFY-P-VMH-E-F is excluded.) The indoor unit fan will be fixed at high speed during this operation. (except PUMY)

* CITY MULTI is an air conditioning system designed for rooms and areas where people work or relax, not for machine rooms.

Heating Operation Range

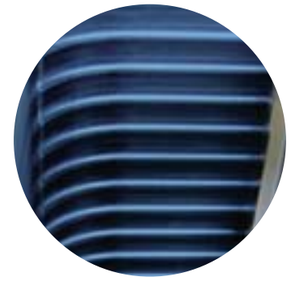


* -5˚C (23˚F) DB / -6˚C (21˚F) WB ~ 21˚C (70˚F) DB / 15.5˚C (60˚F) WB with cooling/heating mixed operation

At low ambient temperature the guaranteed operating range is now expanded to **–20˚C[–4˚F]** in heating and **43˚C[109˚F]** in cooling.
Operating range in cooling is from an outdoor temperature of -5˚C[23˚F], while that in heating has expanded to an outdoor temperature of -20˚C[-4˚F]

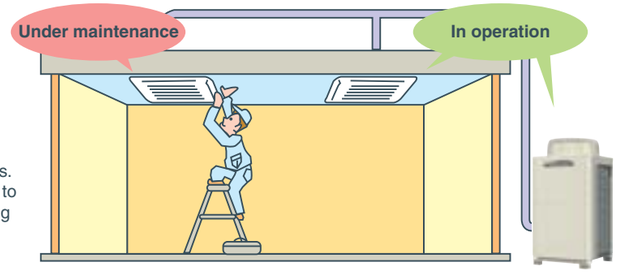
Blue Fin Treatment

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.



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

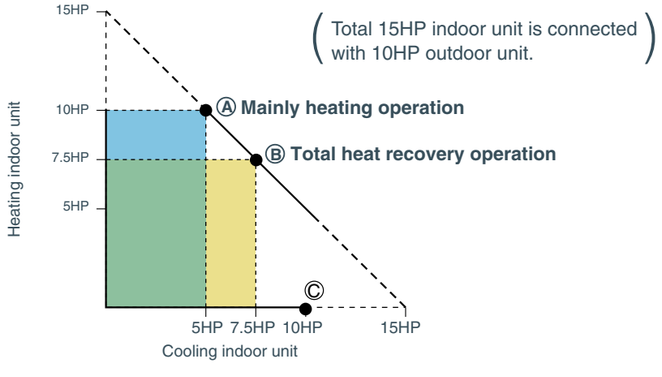
Both Y and R2 series correspond to high static pressure of 60Pa, ideal and flexible for any type of application.

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

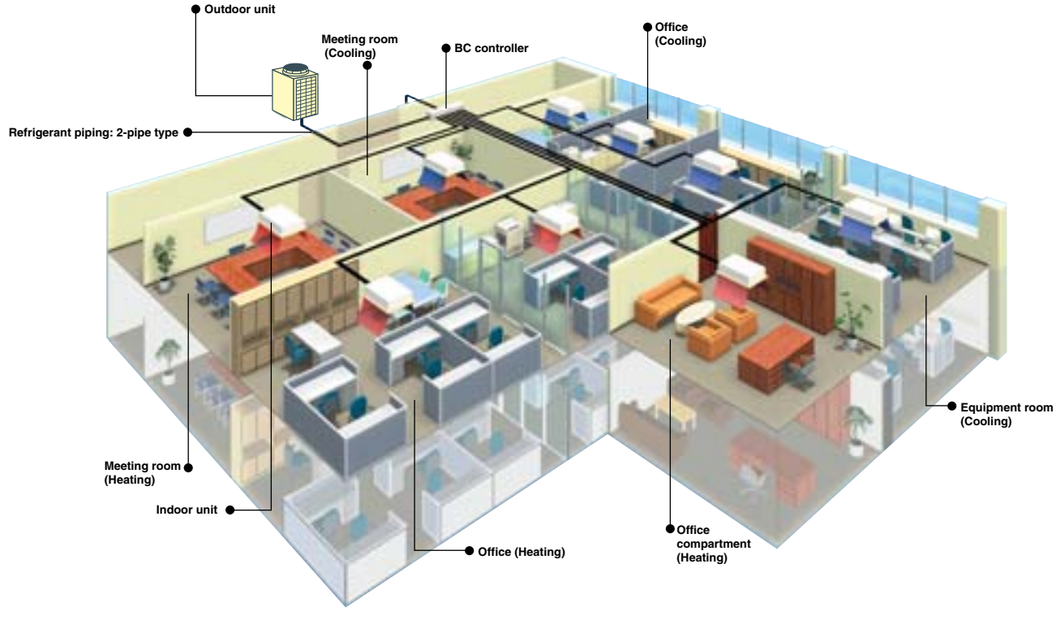


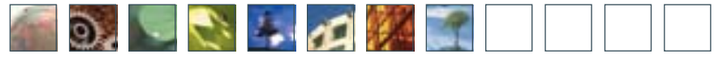
Unique technology

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?

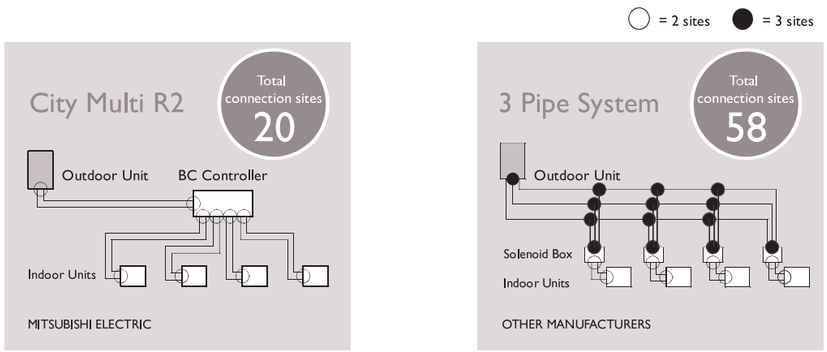
Flexibility and efficiency are key factors when selecting a heat recovery system. For example, while a heat pump system is adequate for a large open-plan office, an office that has a more partitioned structure will require the need to simultaneously heat or cool different sections of the office according 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

Comparison example of piping connection sites



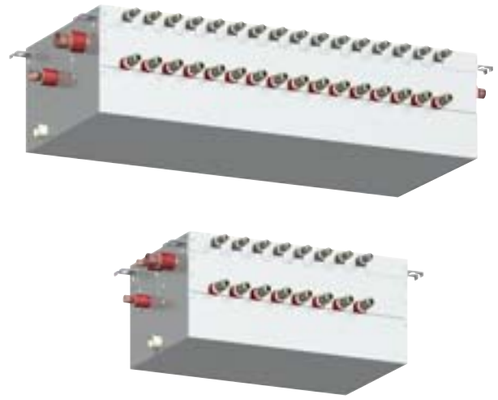
The world’s first and the only “2-pipe” system

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.

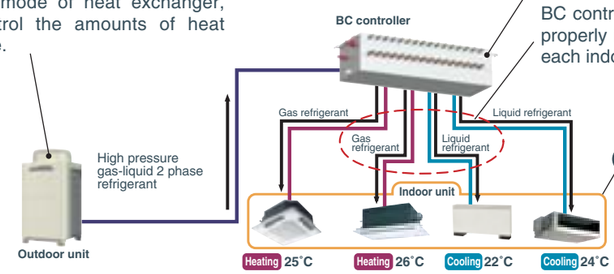


1 High pressure and low pressure decides the compressor frequency and the mode of heat exchanger, and control the amounts of heat exchange.

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.

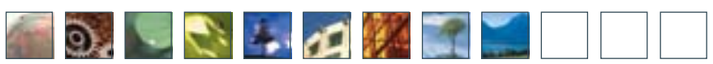
BC controller divides refrigerant to each indoor unit properly in compliance with the operation mode of each indoor unit.



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

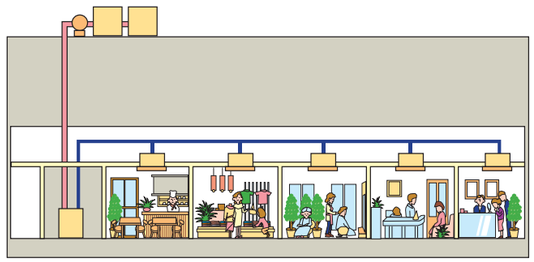
Meet the demand of
– – – cooling / heating flexibly.

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

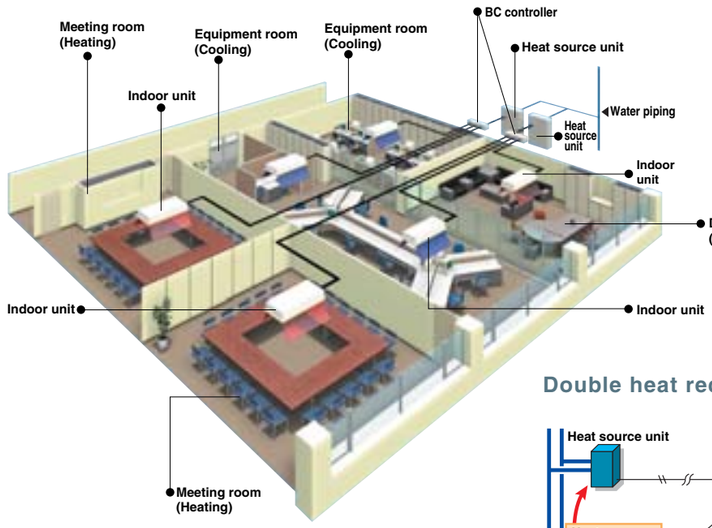
What is Water-Cooled?

>A unique offering from Mitsubishi Electric

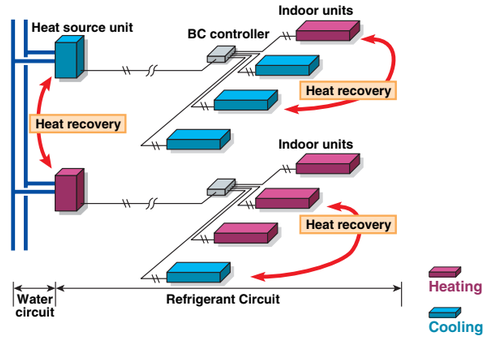
It is possible now to combine the features of VRF with a water circuit using City Multi WR2/WY. In this case the heat is rejected to a water source rather than to the outside air.
The advantages of water cooled systems are that the water can be delivered at optimised temperatures and volumes, which allows 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 buldings, where some areas require cooling even in winter.



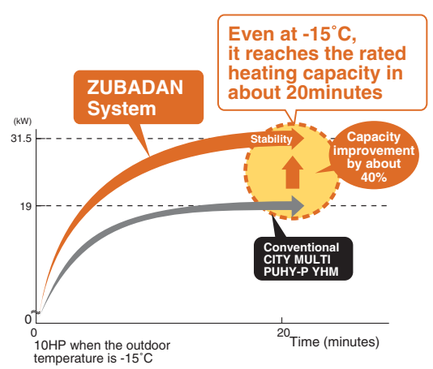
Double heat recovery (WR2)



ZUBADAN

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.



Heating capacity

Advanced Heating Operation

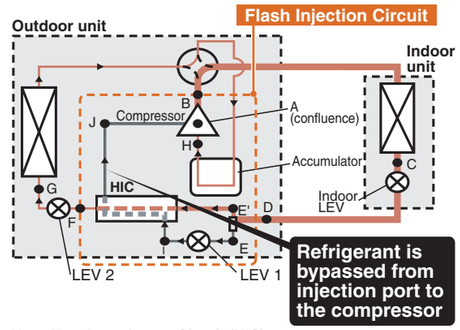
Maximum Stable Operation

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

Features and Benefits of Flash Injection Circuit



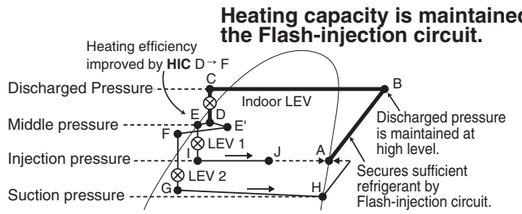
Note : **Heat Interchange Circuit (HIC)**
Heating efficiency is improved by enhancing the recollection of heat at the outdoor unit with the low temperature refrigerant from the HIC.

Startup Comfort

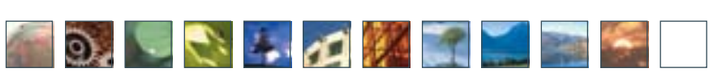
One of the key factors of the units newly designed Flash Injection Circuit is that the optimal amount of refrigerant can be provided to the system via the compressor through a specially designed injection port to ensure a particularly stable operation. In simple terms, the system allows a quick startup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

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!



[Pressure Enthalpy diagram showing HIC]



ZUBADAN

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.

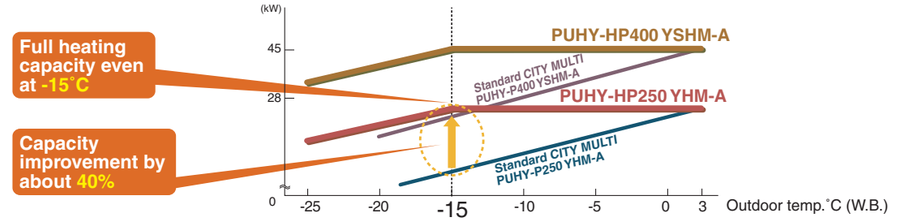
Rotation Function (HP400 and HP500 models)

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.

Advanced Heating Operation

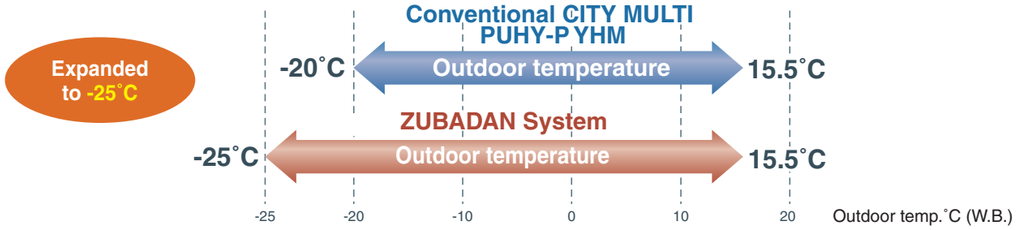
Excellent Heating Performance

Stable Heating Performance even at -15˚C

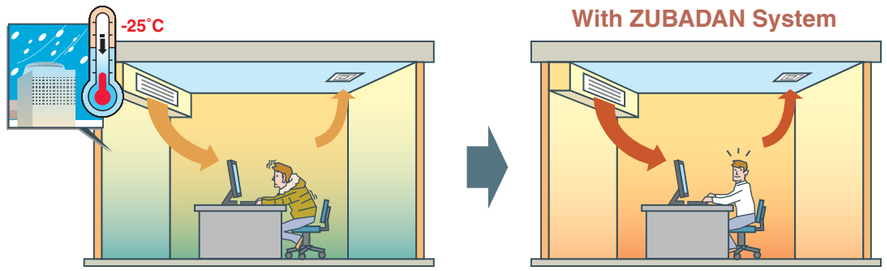


Using an industry first 'Flash-injection Circuit', the ZUBADAN System is able to provide FULL heating performance in ambient temperatures as low as -15˚C.

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.

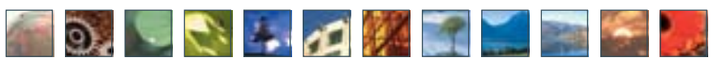


Previously, heating performance drops off when the temperature falls below -20˚C!

...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.



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

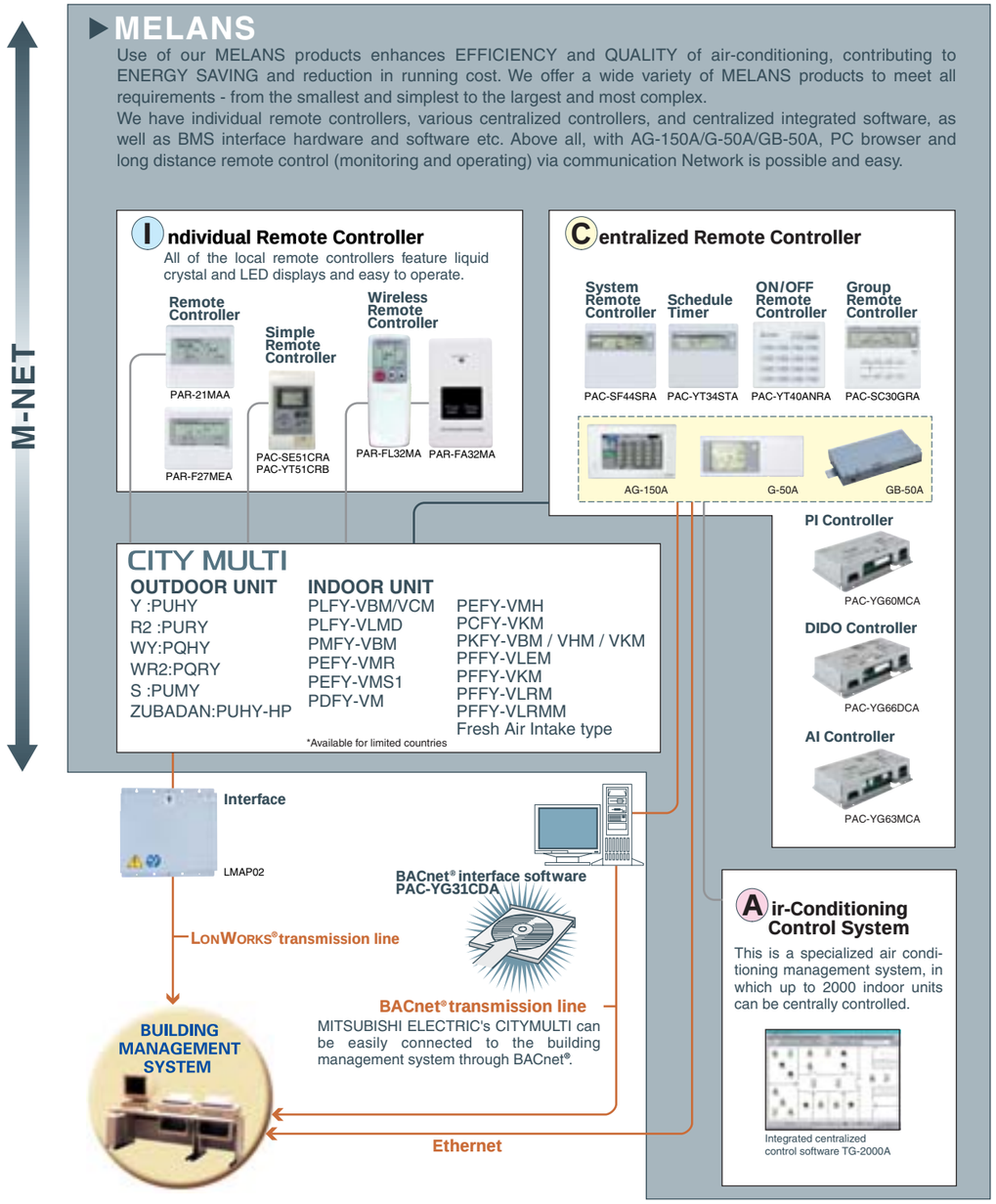
When an air conditioning system is not properly controlled, it will not run as efficiently as it should. For every degree that the system deviates from the required temperature, energy costs can rise by up to 5%. Specify one of the many control options from Mitsubishi Electric to ensure air conditioning 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/G-50A 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.



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

Model	Local remote controller					System controller										
	PAR-21MAA	PAR-F27MEA	PAC-SE51CRA	PAC-YT51CRB	PAR-FL32MA	PAC-YT40ANRA	PAC-SC30GRA	PAC-SF44SRA	PAC-YT34STA	AG-150A		G-50A		GB-50A		TG-2000A*4*9
Controllable Groups/Indoors (Group / Indoor) *8	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	16 / 50	8 / 16	50 / 50	50 / 50	50 / 50		50 / 50		50 / 50		2000 / 2000
										AG-150A	Browser*9	G-50A	Browser*4	GB-50A	Browser*4	
■Operating																
ON/OFF	○	○	○	○	○	◎	◎	◎	◎	◎■	◎■	◎	◎■	▲	◎■	◎■
Mode(cool/heat/dry/fan)	○	○	N	○	○	N	◎	◎	N	◎■	◎■	◎	◎■	N	◎■	◎■
Temperature-set	○	○	○	○	○	N	◎	◎	N	◎■	◎■	◎	◎■	N	◎■	◎■
Local Permit/Prohibit	N	N	N	N	N	N	N	◎	◎	◎■	◎■	◎	◎■	N	◎■	◎■
Fan speed	○	○	○	○	○	N	◎	◎	N	◎■	◎■	◎	◎■	N	◎■	◎■
Air-flow direction	○	○	N	N	○	N	◎	◎	N	◎■	◎■	◎	◎■	N	◎■	◎■
■Status monitoring																
ON/OFF	○	○	○	○	○	◎	◎	◎	◎	◎	○	◎	○	▲	○	○■
Mode(cool/heat/dry/fan)	○	○	○	○	○	N	○	○	N	○	○	○	○	N	○	○
Temperature-set	○	○	○	○	○	N	○	○	N	○	○	○	○	N	○	○
Local Permit / Prohibit	○	○	○	○	○	○	○	○	○	○	○	○	○	N	○	○
Fan speed	○	○	○	○	○	N	○	○	N	○	○	○	○	N	○	○
Air-flow direction	○	○	N	N	○	N	○	○	N	○	○	○	○	N	○	○
Indoor temperature	○	○	N	N	N	N	○	N	N	○	○	○	○	N	○	○
Filter sign	○	○	N	N	N	N	○	○	N	○	○	○	○	N	○	○
Error flashing	○	○	○	○	○	○	○	○	○	○	○	○	○	▲	○	○■
Error code	○	○	○	○	N	○	○	○	○	○	○	○	○	N	○	○
Operation hour	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	●
■Scheduling																
One-day	○	○	N	N	N	N	N	N	N	●	●	N	●	N	●	●
Times of ON/OFF per day	8	1/1	N	N	1/1	N	N	N	16	24	24	3/3	12	N	12	12 or 24
Weekly	○	N	N	N	N	N	N	N	○	○	●	○	●	N	●	●
Times of ON/OFF per week	8x7	N	N	N	N	N	N	N	16x7	24x7	24x7	21/21	12x7	N	12x7	12x7 or 24x7
Annual	N	N	N	N	N	N	N	N	N	●	●	N	●	N	●	●
Auto-off timer	○	○	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Min. timer setting unit (minute)	1	10	N	N	10	N	N	N	5	1	1	10	1	N	1	1
■Recording																
Error record	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	◎
Electricity charge	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	●
■Other																
Temp-set limitation by Local R/C	○	○	N	○	N	N	N	N	N	N	N	N	N	N	N	N
Temp-set limitation by System controller*4	N*5	○	○*6	N*5	N	N	N	△	N	N	○*2	N	○*2	N	○*2	◎■
Auto-lock	○	○	N	N	N	N	N	N	N	△	N	N	N	N	N	N
■Management (Group/Interlocked)																
Ventilation interlock	N/O	N/O	N/O	N/O	N	○	N/O	○	○	○	○/○*2	○	○/○*2	N	○/○*2	○/○
Group setting	○*1	○	○	○*1	N	○	○	○	○	○	○*2	○	○*2	N	○*2	○
Block setting	N	N	N	N	N	N	N	N	N	○	○*2	N	○*2	N	○*2	○
Revision of electricity charge	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	□●
■Operating on LOSSNAY interlocked (Group/Interlocked)																
ON/OFF	N/O	N/O	N/O*7	N/O	N/O*7	◎/◎*3	N/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	▲/▲	◎/◎	◎/◎
Fan speed	N/O	N	N	N	N	N	N/O	◎/◎	N	◎/◎	◎/◎	◎/◎	◎/◎	N/N	◎/◎	◎/◎
Ventilation mode	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/O	N	N	N	N	N	N/O	○/○	○/○	◎/◎	◎/◎	◎/◎	◎/◎	▲/▲	◎/◎	◎/○
Fan speed	N/O	N	N	N	N	N	N/O	○/○	N	○/○	○/○	○/○	○/○	N/N	○/○	○/○
Ventilation mode	N	N	N	N	N	N	N	○/N	N	○/N	○/N	○/N	○/N	N/N	○/N	○/N

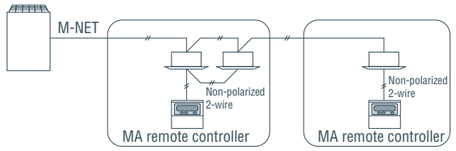
◎: Each group / Batched; ○: Each group; □: Block (for CITY MULTI Indoor unit, not for all Mr.SLIM);
●: AG-150A / G(B)-50A license registration possible. N: Not Available (Not Used.) △: Batched only;
▲:Batched handling (for maintenance) ■: Block

*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. G(B)-50A license registration to G(B)-50A is required to monitor and operate the units by web browser and TG-2000A.
*5. This function can be set only on the remote controller. This function cannot be used with the System controller (G(B)-50A, TG-2000A, and PAC-SF44SRA). (But, the validity of this function from System controller depends on the indoor unit model.)
*6. This function is available only when applying together with TG-2000A and G(B)-50A / AG-150A.
*7. Inter-lock is set from system controller. (Except PAC-YT40ANRA)
*8. The maximum number of controllable units decreases depending on the indoor unit model.
*9. AG-150A license registration to AG-150A is required to monitor and operate the units by web browser and TG-2000A.

Individual Remote Controller

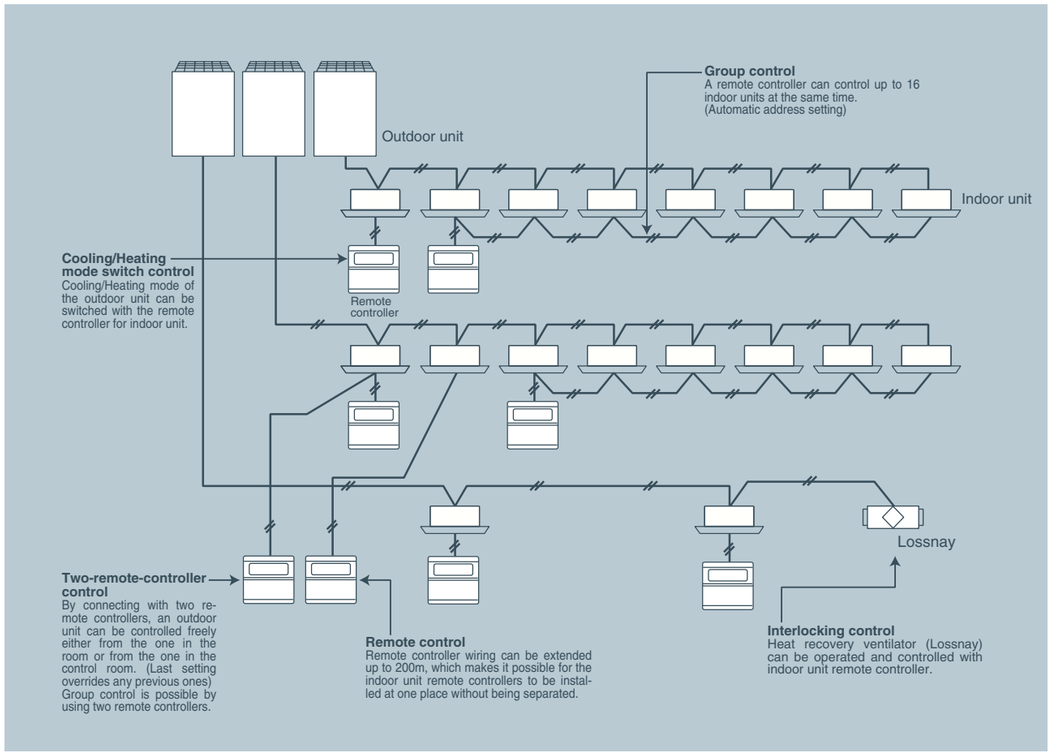
Wired MA remote controller PAR-21MAA

Example of system configuration



- Dot matrix liquid crystal screen displays complete operating status.
- Digital display lets you set temperature in 1˚C/˚F increments.
- Weekly Timer: up to 8 ON/OFF/Temperature Settings can be made per day. The time can be set in 1-minute increments. The setting is kept in nonvolatile memory. No need to worry about re-setting at power failure.
- Equipped with a thermostat sensor in the remote controller that makes possible more comfortable room temperature control.
- Ability to limit the set temperature (upper and lower temperature can be set.)
- Ability to restrict setting changes (either all changes or all except ON/OFF)
- Constantly monitors for malfunctions in the system, and is equipped with a “self-diagnosis function” that lets you know by error code immediately when a malfunction occurs.
- Dimensions: 130(W) x 120(H) x 19(D) mm
  : 5-1/8(W) x 4-23/32(H) x 3/4(D) in.

■Various control systems can be offered with indoor unit remote controller.



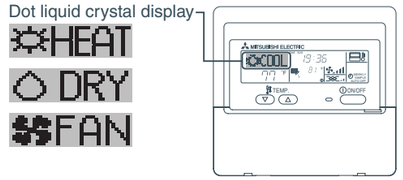
New display-Larger,easier-to-see characters

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.

● Display example [Operation mode]



Multi-language Display

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

● Display example [Cool mode]

Multi Language Display Example

[Dot display table]

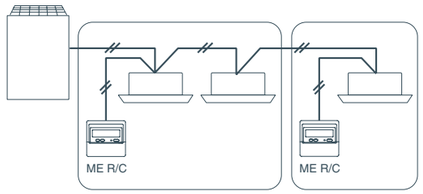
Language		English	German	Spanish	Russian	Italian	Chinese	French	Japanese
Waiting for start-up		PLEASE WAIT	←	←	←	←	←	←	←
Operation mode	Cool	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FROID	冷房
	Dry	DRY	Trocknen	DESHUMI-DIFICACION	Сушка	DRY	除湿	DESHU	ドライ
	Heat	HEAT	Heizen	CALOR	Тепло	HEAT	制熱	CHAUD	暖房
	Auto	AUTO	AUTO	AUTO-MÁTICO	Авто	AUTO	自动	AUTO	自動
	Auto(Cool)	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FROID	冷房
	Auto(Heat)	HEAT	Heizen	CALOR	Тепло	HEAT	制熱	CHAUD	暖房
	Fan	FAN	Lüfter	VENTI-LACIÓN	Вент	VENTI LAZIONE	送风	VENTI LATION	送風
	Ventilation	VENTI LATION	Gebläse Betrieb	VENTI-LACIÓN	Вентиляция	ARIA ESTERNA	换气	VENTI LATION	換気
	Stand by (Hot adjust)	STAND BY	STAND BY	CALENTANDO	ОБОГРЕВ: пауза	STAND BY	准备中	PRE CHAUFFAGE	準備中
	Defrost	DEFROST	Abtauen	DESCONGE-LACIÓN	Оттаивание	SBRINA MENTO	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 DISPONIBLE	無効ボタン
Check (Error)		CHECK	Prüfen	COMPROBAR	Проверка	CHECK	检查	CONTROLE	点検
Test run		TEST RUN	Testbetrieb	TEST FUNCIO NAMIENTO	Тестовый запуск	TEST RUN	试运转	TEST	試ウンテン
Self check		SELF CHECK	Selbst-diagnose	AUTO REVISIÓN	Самодиагностика	SELF CHECK	自我诊断	AUTO CONTROLE	自己シンダン
Unit function selection		FUNCTION SELECTION	Funktion Auswahl	SELECCIÓN DE FUNCION	Выбор функции	SELEZIONE FUNZIONI	功能选择	SELECTION FONCTIONS	キノウ選択
Setting of ventilation		SETTING OF VENTILATION	Lüfterstufen Wahlen	CONFIG. VENTILACIÓN	Настройка вентустан.	IMPOSTAZIONE ARIA ESTERNA	换气设定	SELECTION VENTILATION	換気設定

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 2˚F increments.**

Example of system configuration

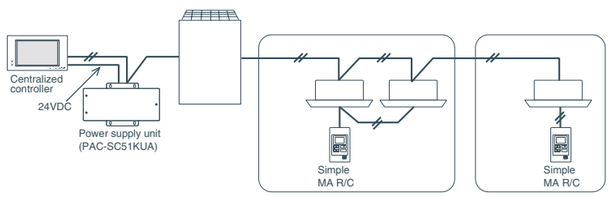


Simple remote controller PAC-YT51CRB (MA)

PAC-YT51CRB

- **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



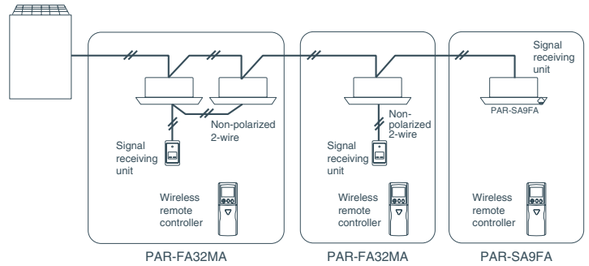
Wireless remote controller PAR-FL32MA / PAR-FA32MA

PAR-FL32MA

PAR-FA32MA

PAR-SA9FA
(4-way Cassette signal receiver)

Example of system configuration



Correspondence table

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

- **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
  :2.28(W) x 6.26(H) x 0.75(D) in.

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

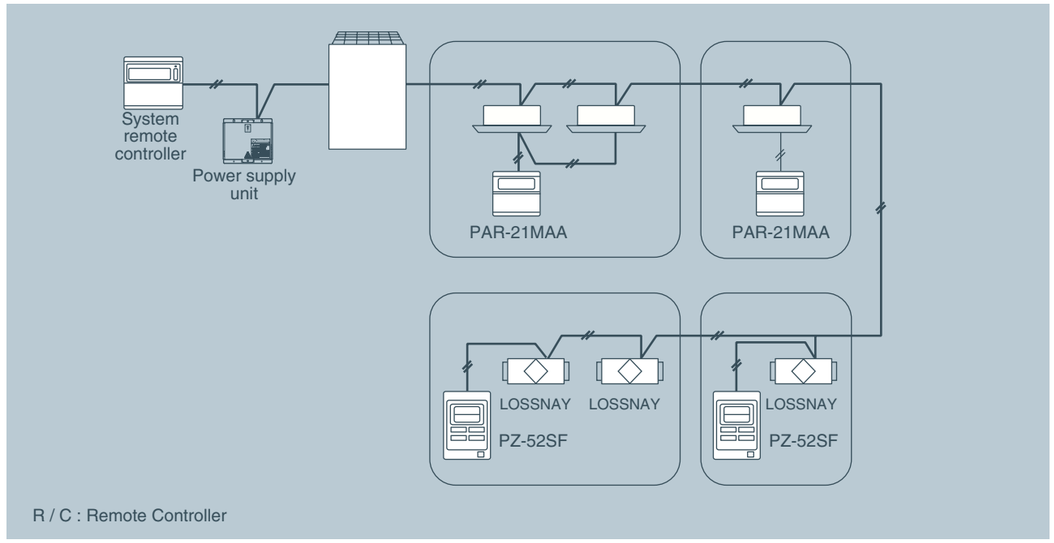
- **The group setting is kept in nonvolatile memory. No need to worry about re-setting at power failure.**
- **No individual AC power supply is needed. The power can be supplied from one outdoor unit (R410A) or Power supply unit.**

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



R / C : Remote Controller

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

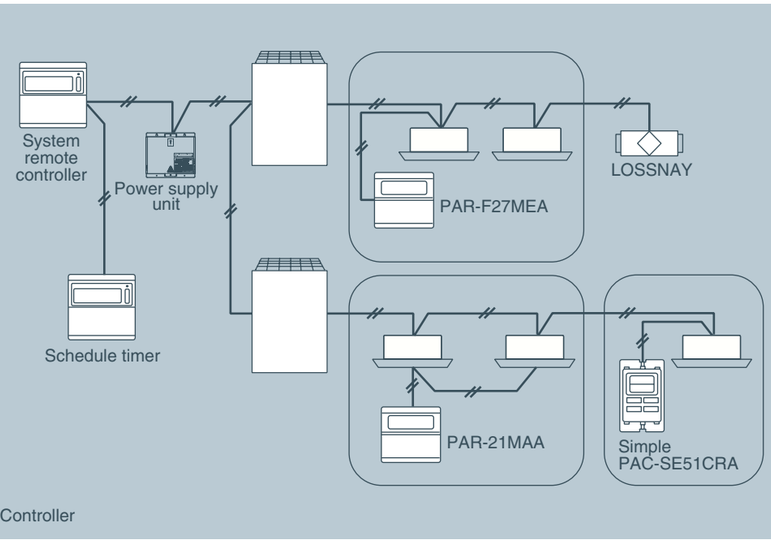
- **The schedule group setting is kept in nonvolatile memory. No need to worry about re-setting at power failure.**
- **No individual AC power supply is needed. The power can be supplied from one outdoor unit (R410A) or Power supply unit.**

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 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



R / C : Remote Controller

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).

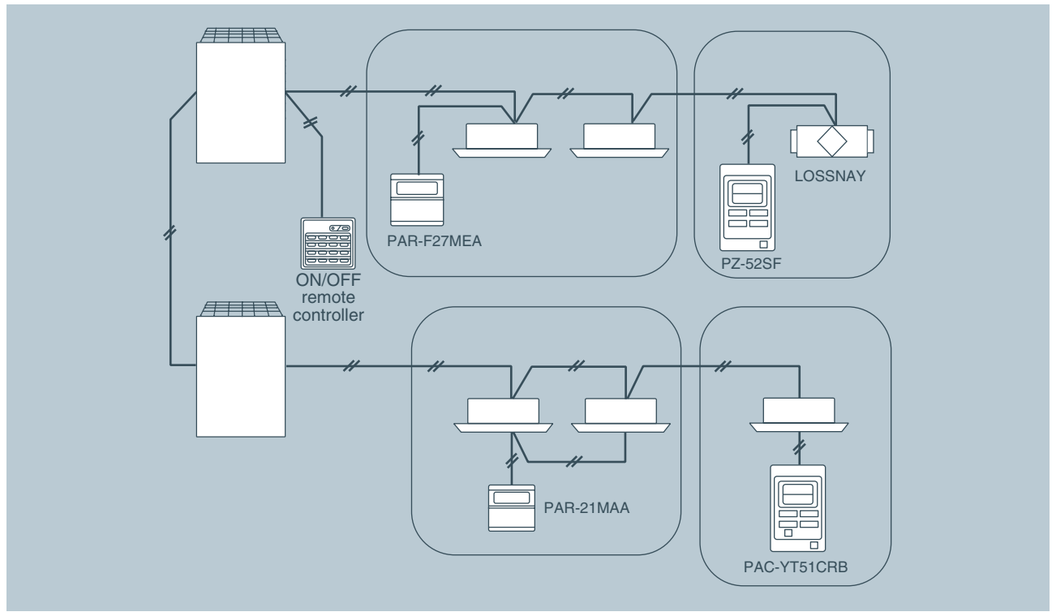
ON/OFF remote controller PAC-YT40ANRA

FUNCTION	DESCRIPTION	PAC-YT40ANRA	
UNITS	Max No.Units	50 units/16 groups	
		OPERATIONS	DISPLAY
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.

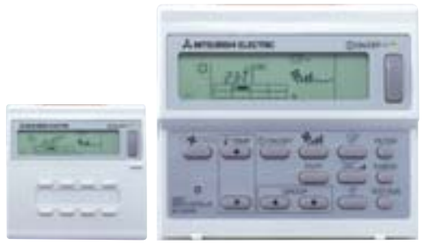
- **The group setting is kept in nonvolatile memory. No need to worry about re-setting at power failure.**
- **No individual AC power supply is needed. The power can be supplied from one outdoor unit (R410A) or Power supply unit.**

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

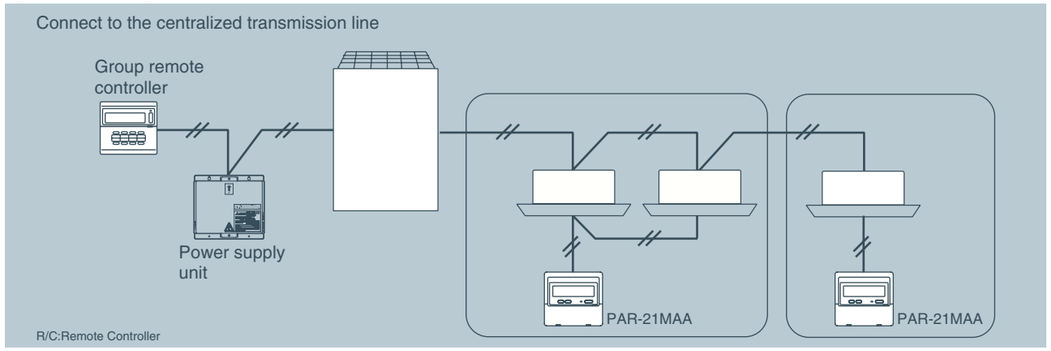


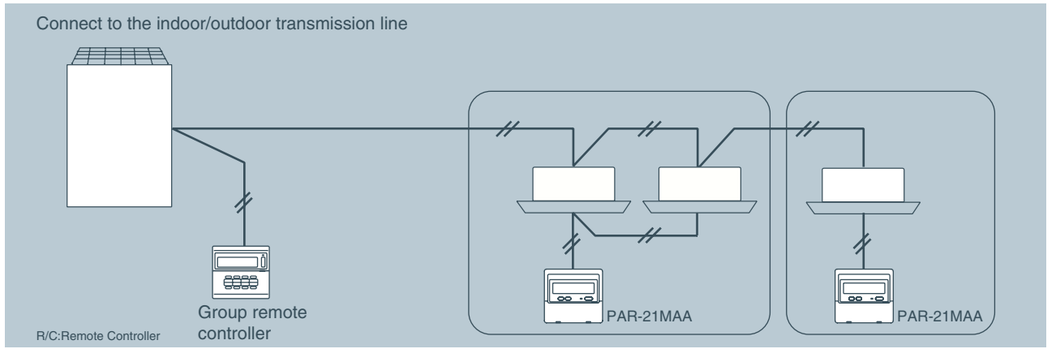
FUNCTION	DESCRIPTION	PAC-SC30GRA	
UNITS	Max No.Units	16 units / 8 groups	
		OPERATIONS	DISPLAY
ON/OFF	Run and stop operation	✓	✓
MODESELECTION	Switches betweenCool/Dry/Auto/Fan/Heat. Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems	✓	✓
TEMPERATURE 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.

- **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





Centralized Remote Controller

With a new colored touch panel, and continuation of all the current 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

Option : Black surface cover
PAC-YG71CBL

New Design

Backlight Color liquid crystal display
9 inch wide, high-resolution.
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
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.

Easy installation
Allows for an installation of the unit either directly to the wall surface or using the installation hole in the wall.
(For wall surface installation, PAC-YG85KTB or PAC-YG81TB is required.)

USB memory compatible
Initial setting data extractable with USB memory.
Can save operation and setting data.

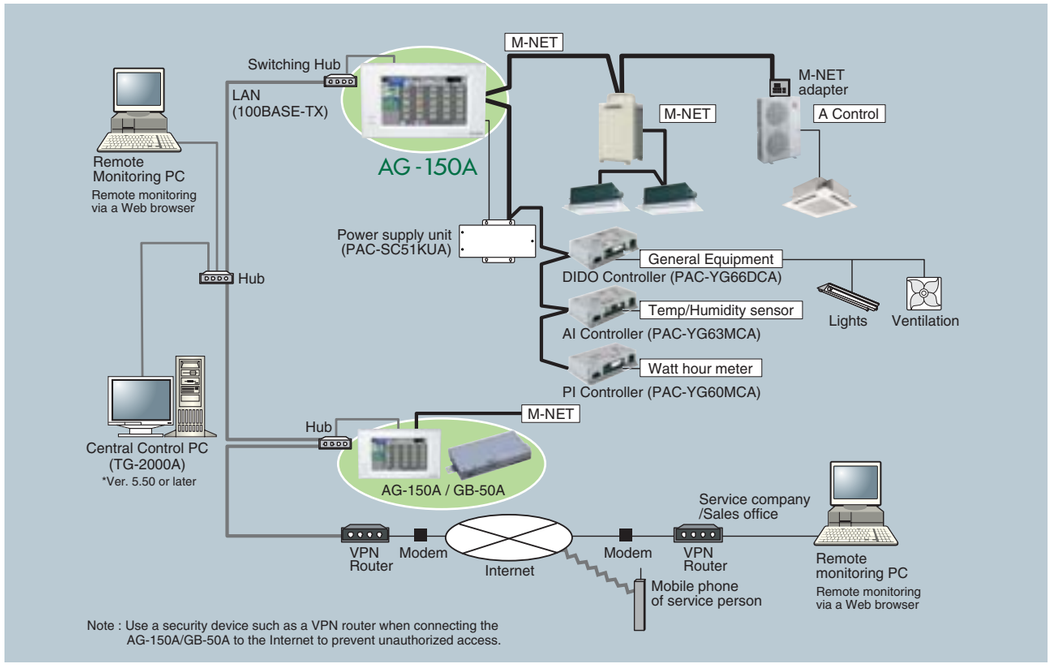
New Functions

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)
*From April 2009

Monitoring functions
Temperature/Humidity (using AI controller with WEB browser) *1
General equipment such as lights on LCD (using DIDO controller)
Interlock function between indoor units and AI controller, DIDO controller available *From April 2009 *1

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.

System structure



Note : Use a security device such as a VPN router when connecting the AG-150A/GB-50A to the Internet to prevent unauthorized access.

Functions

□ : Each unit ○ : Each group ● : Each block △ : Each floor ◎ : Collective × : Not available

Item	Description	Operations	Display
Controllable unit	Up to 50 units/50 groups.		
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 G-50A / GB-50A

G-50A (with display)
• Dimensions:11-13/16 (W) x 4-3/4 (H) x 3/4 (D) in.
:300 (W) x 120 (H) x 19 (D) mm

GB-50A (without display)
• Dimensions:9-7/8 (W) x 5-1/8 (H) x 1-1/2 (D) in.
:250 (W) x 130 (H) x 38 (D) mm

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.5 or upper) (Web browser function is an optional and needs license registration.)

*Use a security device such as a VPN (Virtual Private Network) router when connecting the G-50A/GB-50A to the Internet to prevent unauthorized access.

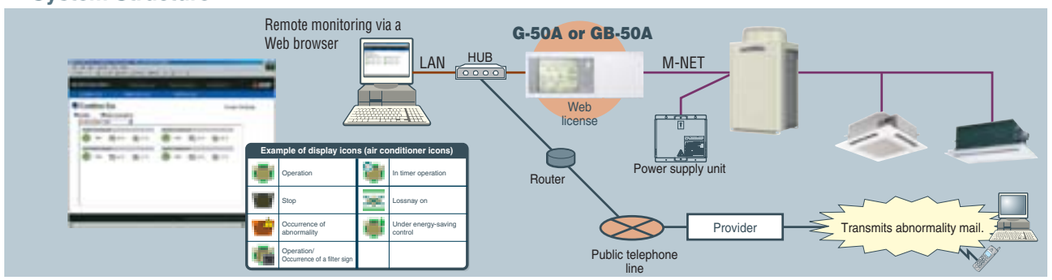
Using "Dial-up Connection"

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

Function	Description	
	G-50A (unit)	GB-50A (web browser)
Controllable unit	Up to 50 units/groups.	
Dimension W x H x D	300 (11-13/16) x 120 (4-3/4) x 79 (3-2/16) [22] (14/16) mm (in) *[ ] indicates exposed depth after embedding.	250 (9-7/8) x 130 (5-1/8) x 38 (1-1/2) mm (in)
ON / OFF	Run and Stop operation	
Mode selection	Cool / Dry / Auto / Fan / Heat mode varies depending on the indoor unit.	
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] [ ] For PDFY/PEFY/PFFY by setting DipSW 7-1 to ON and limits to NI6H fan speed only. ※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	Maximum of 3 time sequences with 3 Start/Stop times per day for all groups can be allocated	Annual/weekly/day schedule can be set. (Up to 12 events can be set per day for each group.) *License required.
Permit / Prohibit function	Individually prohibit operation of each local remote control function	
Indoor return air temperature	Displays the measured intake temperature from each group	
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.	
Test run	Allows each unit within the group to operate in test mode.	-
Ventilation interlock	The ventilation unit (LOSSNAY) is able to automatically start its operation when operation of the interlocked indoor unit starts.	

*NOTE: Operation and displayed content vary depending on the indoor unit model.

System Structure

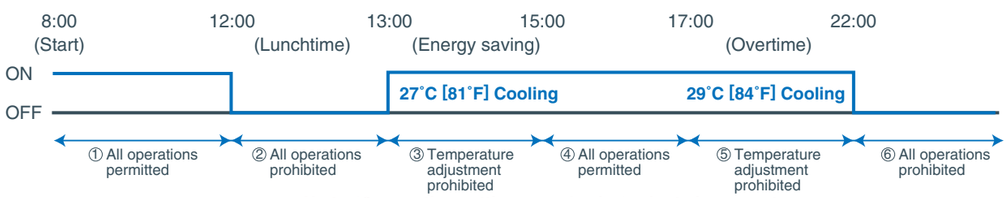


Annual / Weekly Schedule

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



Up to 12 operation settings per day in 1-minute increment

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.

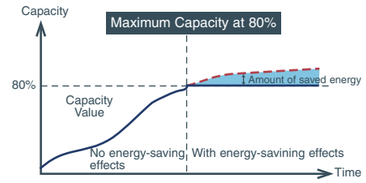
No more PLCs are needed!
Our new PI controller makes it possible to perform energy saving without PLC, which is cost saving.
Maximum of 4 measurement meter (WHM, gas meter, water meter, calorie meter) can be connected to the PI controller and can be used also for charge calculation.
*24 VDC power needs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

Energy Saving Control

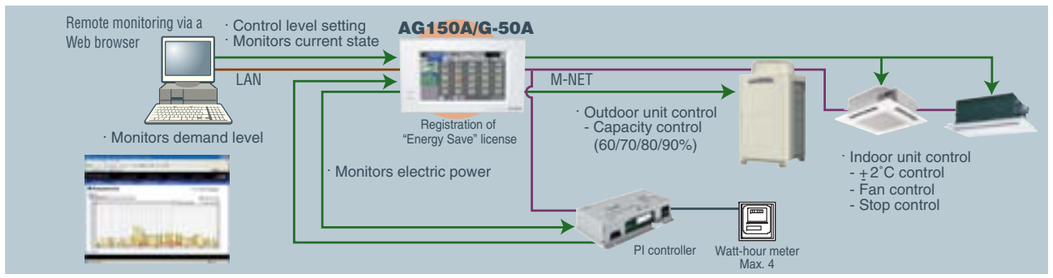
Enables Energy Saving Control with the use of our new PI controller. (Registration of "Energy Save" licence is required.)

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.



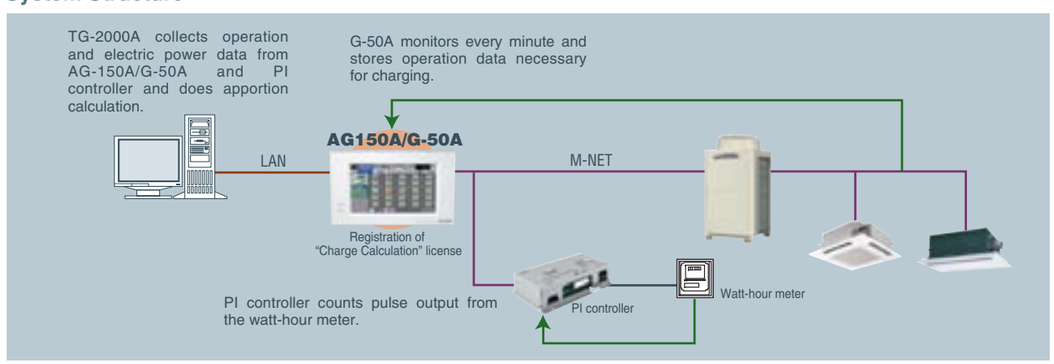
System Structure



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.

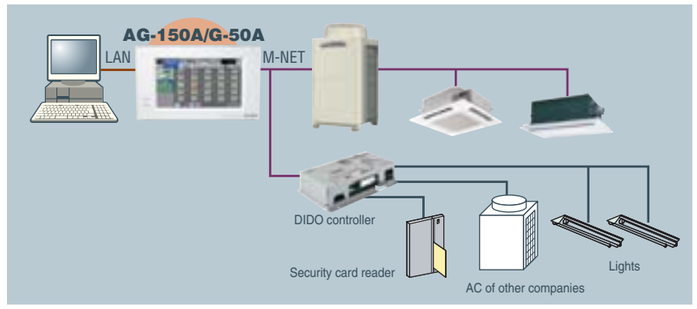
General-purpose equipment Control

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

- 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.

Icon display (Lights)

System Structure



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.

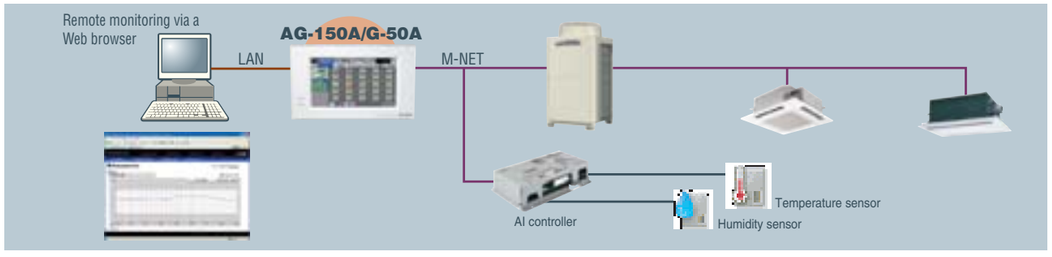
Temperature/Humidity Monitoring

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.

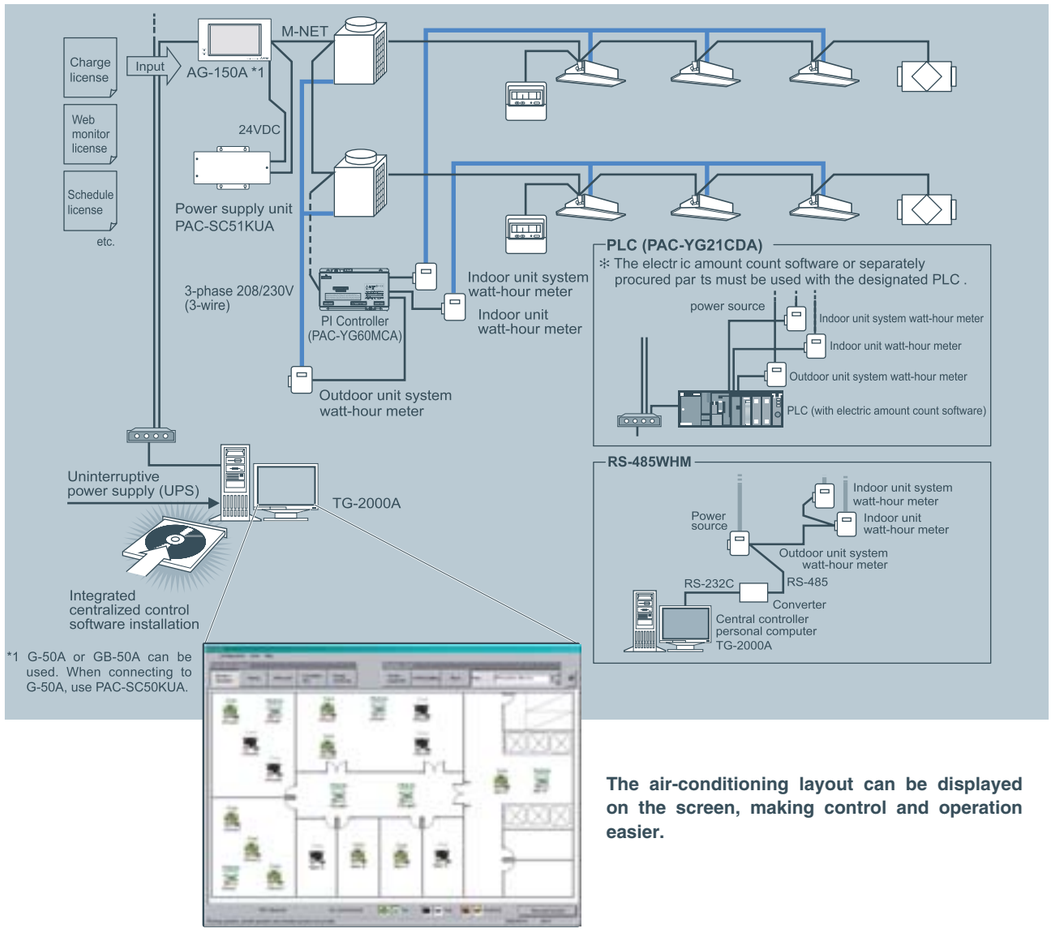
System Structure



Integrated centralized control software TG-2000A

Up to 40 AG-150A*1/G-50A/GB-50A units or 2000 indoor units can be controlled with the use of TG-2000A. *1: Up to 50 AG-150A units can be controlled.

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

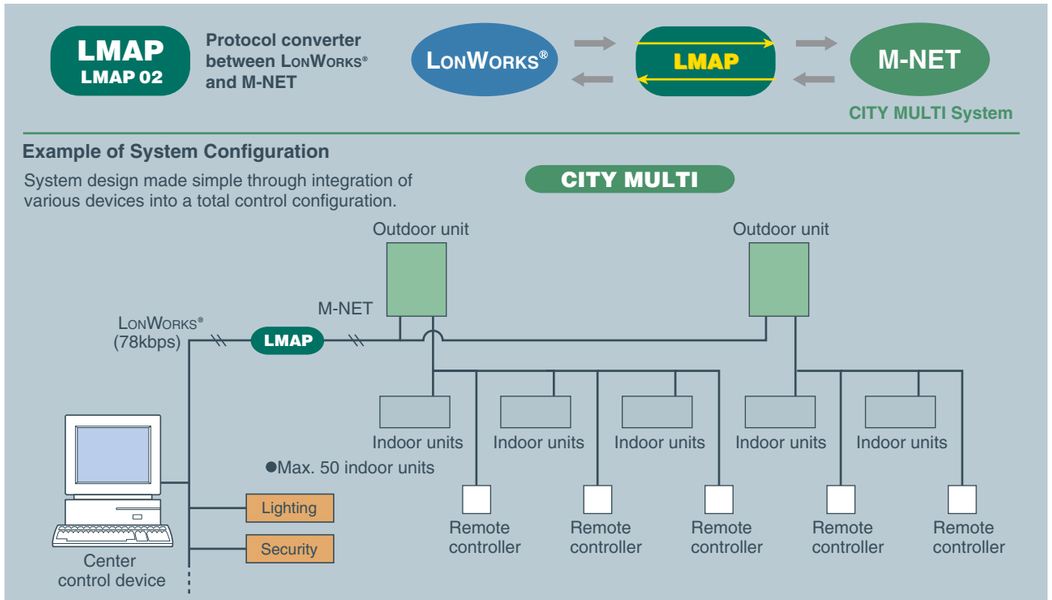
Multiple air conditioning charges in multiple buildings can be calculated. The power apportionment percentage data and apportioned power rate can be calculated for each unit, and can be output as a CSV file.

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

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.



LonWorks®
The building management system is connected to the CITY MULTI air conditioning system using LonWorks® , which is widely used on field networks, allowing for an open network and savings in construction to face.

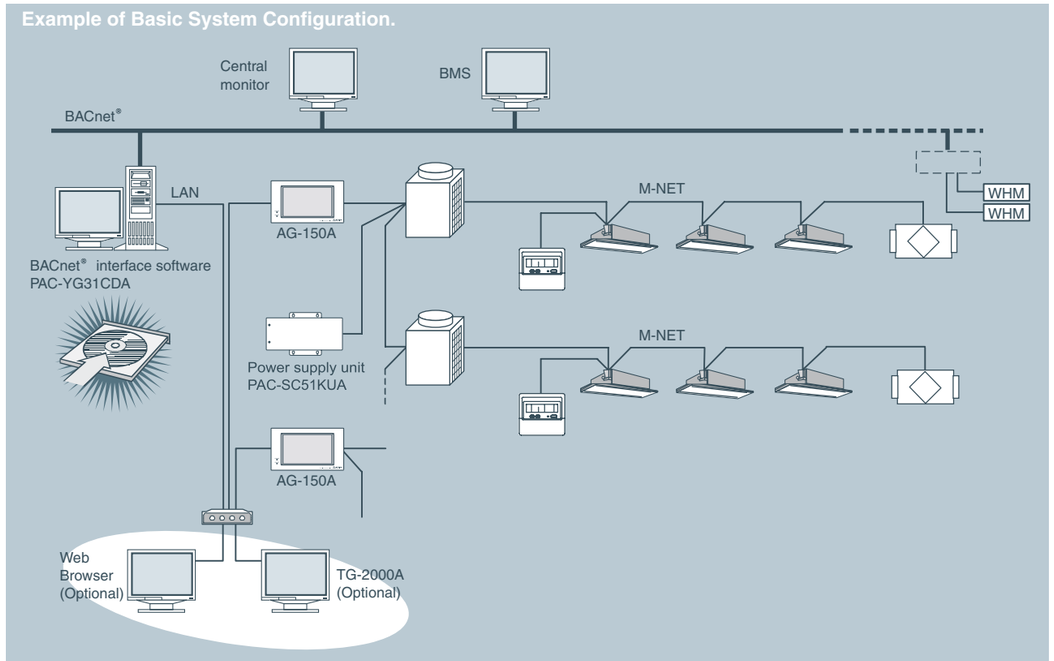
LonWorks® INTERFACE

FUNCTION	CONTENT
Control	
ON/OFF	Run/Stop
MODE OPERATION	Cooling/Drying/Heating/Auto/Fan
SETPOINT ADJUSTMENT	Cooling 19-30˚C,Heating 17-28˚C,Auto 19-28˚C
FAN SPEED CONTROL	Lo-Mi1-Mi2-Hi
PERMIT / PROHIBIT	On/Off,Mode,Setpoint
EMERGENCY STOP	-
Monitoring	
ON/OFF	Run/Stop
MODE	Cooling/Drying/Heating/Auto/Fan
SETPOINT	Cooling 19-30˚C,Heating 17-28˚C,Auto 19-28˚C
FAN SPEED	Lo-Mi1-Mi2-Hi
PERMIT / PROHIBIT	On/Off,Mode,Setpoint
ALARM STATE	-
ROOM TEMPERATURE	-10˚C~50˚C
THERMO ON/OFF	On/Off

BACnet® interface(PAC-YG31CDA)

MITSUBISHI ELECTRIC's CITYMULTI can be easily connected to the building management system through BACnet®. BACnet® is the appropriate transmission method and used in many of the backbone networks and also it is easy to combine with other equipment corresponding to BACnet®.

One BACnet® interface software manages up to 500 Groups/500 Indoor units. (10 AG-150A/G-50A/GB-50A units).
* Up to 50 AG-150A units can be controlled.



BACnet® INTERFACE

FUNCTION	CONTENT
Control	
ON/OFF	Run/Stop
MODE OPERATION	Cool/Dry/Heat/Auto/Fan
SETPOINT ADJUSTMENT	Cooling 19-30˚C,Heating 17-28˚C,Auto 19-28˚C
FAN SPEED CONTROL	Lo-Mi1-Mi2-Hi
PERMIT / PROHIBIT	On/Off,Mode,Setpoint,Filter sign reset, Air flow direction
AIRFLOW DIRECTION	Horizontal - 60˚-80˚-100˚ swing
FILTER DIRTY RESET	Normal/Reset,Emergency stop
Monitoring	
ON/OFF	Run/Stop
MODE	Cool/Dry/Heat/Fan
SETPOINT	Cooling 19-30˚C,Heating 17-28˚C,Auto 19-28˚C
FAN SPEED	Lo-Mi1-Mi2-Hi
PERMIT / PROHIBIT	On/Off,Mode,Setpoint,Filter sign reset
AIRFLOW DIRECTION	Horizontal - 60˚-80˚-100˚ swing
FAULT CODE	2 Character code - Indicates all unit alarms
FILTER SIGN	-
ROOM TEMPERATURE	-
COMMUNICATION STATUS	-

Indoor 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 type
- BC controller
- Lossnay
- OA Processing Units

Wide selection of indoor units

Ceiling cassette (4-way air flow)
Page49 - Page50

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

Ceiling cassette (2-way air flow)
Page51 - Page52

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 cassette (1-way air flow)
Page53 - Page54

PMFY-P VBM-E

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

Ceiling concealed
Page55 - Page62

PEFY-P VMR-E-L/R

PDFY-P VM-E
*Available for limited countries

PEFY-P VMS1(L)-E

PEFY-P VMH-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

Fresh Air Intake
Page63 - Page64

PEFY-P VMH-E-F

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

Ceiling suspended
Page65 - Page66

New

PCFY-P VKM-E

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

Wall mounted
Page67 - Page68

New

PKFY-P VBM-E

New

PKFY-P VKM-E

New

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

Floor standing
Page69 - Page74

PFFY-P VLEM-E

PFFY-P VKM-E

PFFY-P VLRM-E
PFFY-P VLRMM-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
PLFY-P VCM-E

i-see Sensor

PLFY-P VBM

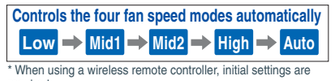
PLFY-P VCM

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.

Automatic Air Speed Adjustment

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

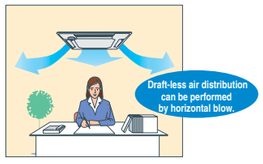
The Auto-fan-speed mode is added to the usual four steps “Low, Mid1, Mid2, High.”
The Auto-fan-speed mode enables speedy and comfortable air conditioning because the air flow speeds up when starting, and air flow slows down when the air conditioning becomes stable. (PLFY-P VBM-E ONLY)



* 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

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.

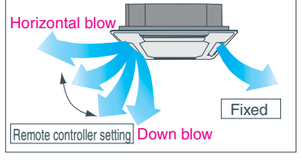
First in the industry
*On the commercial air conditioners (According to the survey by Mitsubishi Electric)

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).

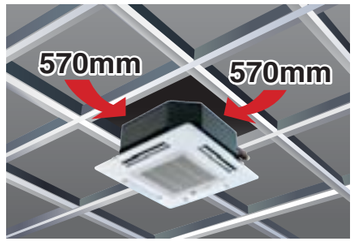
72 airflow patterns

4-, 3-, or 2- way outlet selection

Setting the air direction for each outlet with wired remote controller



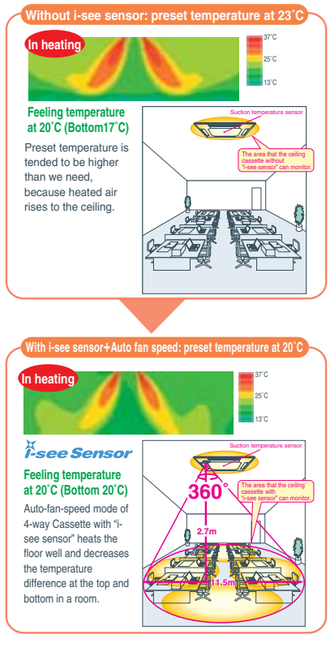
Compact body to match with 2 feets (600mm) x 2 feets (600mm) ceiling design (VCM)



“i-see sensor” can be used with ceiling cassette type 4-way airflow unit. (Option PAC-SA1ME-E, PLFY-VBM only)

New 4-way Cassette PLFY-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, PLFY-VBM only)

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



▸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
	Heating	kW	0.02	0.03		0.04	0.06	0.14	0.15
Current	Cooling	A	0.22	0.29		0.36	0.51	1.00	1.07
	Heating	A	0.14	0.22		0.29	0.43	0.94	1.00
External finish (Munsell No.)	Unit		Galvanized steel sheet						
	Panel		White (6.4Y 8.9/0.4)						
Dimension H×W×D	Unit	mm(in.)	258×840×840 (10-3/16×33-8/1×33-8/1)					298×840×840 (11-3/4×33-1/8×33-1/8)	
	Panel	mm(in.)	35×950×950 (1-3/8×37-7/16×37-7/16)						
Net weight	Unit	kg(lbs.)	22 (49)			23 (51)		27 (60)	
	Panel	kg(lbs.)	6 (13)						
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)						
Fan	Type×Quantity		Turbo fan×1						
	Airflow rate ※2 (Lo-Mid1-Mid2-Hi)	m^3/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
		cfm	388-424-459-494	424-459-494-565		494-530-565-636	565-636-706-777	742-848-953-1024	777-883-989-1059
	External static pressure	Pa	0						
Motor	Type		DC motor						
	Output	kW	0.050					0.120	
Air filter			PP Honeycomb						
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	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)	mm(in.)	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		dB(A)	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.)	Unit		Galvanized steel sheet with gray heat insulation			
	Panel		White (6.4Y 8.9/0.4)			
Dimension H×W×D	Unit	mm(in.)	208×570×570 (8-1/4×22-1/2×22-1/2)			
	Panel	mm(in.)	20×650×650 (13/16×25-5/8×25-5/8)			
Net weight	Unit	kg(lbs.)	15.5 (35)		17 (38)	
	Panel	kg(lbs.)	3 (7)		3 (7)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)			
Fan	Type×Quantity		Turbo fan×1			
	Airflow rate ※2 (Lo-Mid-Hi)	m^3/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
		cfm	283-318-353	283-318-353	283-318-388	283-318-388
	External static pressure	Pa	0 (direct blow)			
Motor	Type		1-phase induction motor			
	Output	kW	0.011	0.015	0.02	0.02
Air filter			PP Honeycomb (long life type)			
Refrigerant pipe diameter	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)			
	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		dB(A)	28-31-35	28-31-37	29-33-38	30-34-39

Note:

※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).

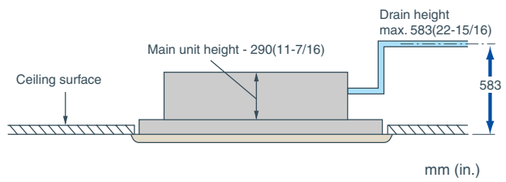
※3 It is measured in anechoic room at power source 230V.

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

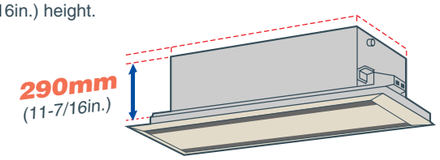
dB(A)

	Capacity		P20	P25	P32	P40	P50	P63	P80	P100	P125
Sound pressure Level	Fan Speed	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>

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		White (0.7Y 8.59/0.97)			
Dimension H × W × D	Unit	mm (in.)	290 × 776 × 634 (11-7/16 × 30-9/16 × 25)			
	Panel	mm (in.)	20 × 1080 × 710 (13/16 × 42-9/16 × 28)			
Net weight	Unit	kg(lbs.)	23 (51)		24 (53)	
	Panel	kg(lbs.)	6.5 (15)			
Heat exchanger			Cross fin			
Fan	Type × Quantity		Turbo fan × 1			
	Airflow rate ※2 (Lo-Mid-Hi)	m^3/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 pipe diameter	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)			
	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		White (0.7Y 8.59 / 0.97)				
Dimension H × W × D	Unit	mm (in.)	290 × 946 × 634 (11-7/16 × 37-1/4 × 25)		290 × 1446 × 634 (11-7/16 × 56-15/16 × 25)		290 X 1708 X 606 (11-7/16 X 67-1/4 X 23-7/8)
	Panel	mm (in.)	20 × 1250 × 710 (13/16 × 49-1/4 × 28)		20 × 1750 × 710 (13/16 × 68-15/16 × 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			Cross fin				
Fan	Type × Quantity		Turbo fan × 1		Turbo fan × 2		Sirocco fan × 4
	Airflow rate ※2	m^3/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
	(P50-P100:Lo-Mid-Hi)	L/s	150-183-208	167-217-258	258-308-367	292-350-417	400-450-500-550
	(P125:Lo-Mid2-Mid1-Hi)	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)	0.078 × 2 (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 (Lo-Mid2-Mid1-Hi)
	230V	dB(A)	32-35-38	33-38-40	34-37-40	37-41-43	

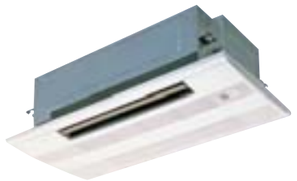
Note:

※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

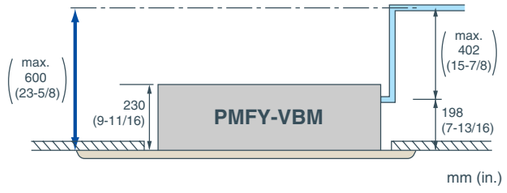
Unit body size has been standardized for all models at 854mm for easier installation. Body weight is only 14kg for the main unit and 3kg for the panel, making this unit one of the lightest in the industry.

Quiet operation

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

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 H × W × D	Unit	mm(in.)	230 × 812 × 395 (9-1/16 × 32 × 15-9/16)			
	Panel	mm(in.)	30 × 1000 × 470 (1-3/16 × 39-3/8 × 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 × 1			
	Airflow rate (Lo-Mid2-Mid1-Hi) ※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
		cfm	230-254-283-307	258-283-304-328		272-307-343-378
	External staticpressure	Pa	0			
Motor	Type		1-phase induction motor			
	Output	kW	0.028			
Air filter			PP Honeycomb fabric			
Refrigerant pipe diameter	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

Note:

※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).

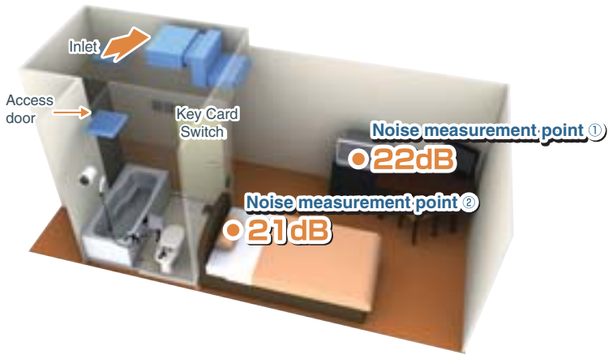
※3 It is measured in anechoic room.

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

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.

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.

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.

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.

Easy Maintenance

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

▸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 × W × D	Rear inlet		mm (in.)	292 × 640 × 580 (11-1/2 × 25-1/4 × 22-7/8)		
	Bottom inlet		mm (in.)	300 × 640 × 570 (11-7/8 × 25-1/4 × 22-1/2)		
Net weight			kg(lbs.)	18 (40)		
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
Fan	Type × Quantity			Sirocco fan × 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	Type			1-phase induction motor		
	Output		kW	0.018		0.023
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. 26 (1)		
Sound pressure level (Lo-Mid-Hi)	220V		dB(A)	20-25-30		20-25-33
	230V			21-26-32		21-26-35
	240V	※3		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 × W × D	Rear inlet		mm (in.)	292 × 640 × 580 (11-1/2 × 25-1/4 × 22-7/8)		
	Bottom inlet		mm (in.)	300 × 640 × 570 (11-7/8 × 25-1/4 × 22-1/2)		
Net weight			kg(lbs.)	18 (40)		
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
Fan	Type × Quantity			Sirocco fan × 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	Type			1-phase induction motor		
	Output		kW	0.018		0.023
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. 26(1)		
Sound pressure level (Lo-Mid-Hi)	220V		dB(A)	20-25-30		20-25-33
	230V			21-26-32		21-26-35
	240V	※3		22-27-30		22-27-33

Note:

※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.

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

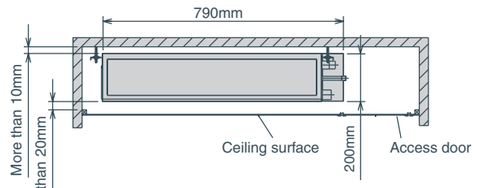
Drain pump is an optional part for the VMS1L, and a standard for VMS1.
*For places where low noise operation is especially required (i.e. Hotels), VMS1L (without drain pump) is recommended.

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.



Make the access door at the appointed position properly for service maintenance.

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

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

dB(A)

	Capacity		P15	P20	P25	P32	P40	P50	P63
Sound pressure Level	Fan Speed	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]
	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]
	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 H × W × D		mm	200 × 790 × 700				200 × 990 × 700		200 × 1,190 × 700
		In.	7-7/8 × 31-1/8 × 27-9/16				7-7/8 × 39 × 27-9/16		7-7/8 × 46-7/8 × 27-9/16
Net weight ※3		kg(lbs.)	19(42) [18(40)]			20(45) [19(42)]	24(53) [23(51)]		28(62) [27(60)]
Heat exchanger			Cross fin (Aluminium fin and copper tube)						
Fan	Type × Quantity		Sirocco fan × 2				Sirocco fan × 3		Sirocco fan × 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
		cfm	176-212-247	194-229-282	194-247-317	212-282-353	282-335-388	335-388-459	424-494-583
	External static press	Pa	5-15-35-50						
Motor	type		DC brushless 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.)	O.D. 32 (1-1/4)						
Sound pressure level (Lo-Mid-Hi) (mesured 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 outdoor units.

	PEFY-P15VMS1(L)-E
PURY-P YHM	○
PUHY-P YHM	○
PUMY-P VHMA	○
PUMY-P YHMA	○
PQRY-P YGM	×
PQHY-P YGM	×

Note:

※1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor : 27˚CD.B./19˚CW.B. (81˚FD.B. / 66˚FW.B.) Outdoor : 35˚CD.B. (95˚FD.B.)
Heating : Indoor : 20˚CD.B. (68˚FD.B.) Outdoor : 7˚CD.B. / 6˚CW.B. (45˚FD.B. / 43˚FW.B.)
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

PDFY-P VM-E

*Available for limited countries

Middle Static Pressure
30~130Pa

Achieving creative air conditioning design through a rich array of system materials.

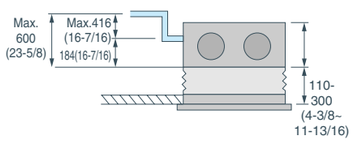
Air outlet side compatible with a variety of ducts (optional)

Adjustable setting of external static pressure to meet system configuration and installation conditions

Static pressure settings can be increased to adjust to all kinds of ducts as well as functional upgrade option (high performance filter etc). An increase from the standard 50Pa to 130 Pa is possible to cope with various layout configurations.

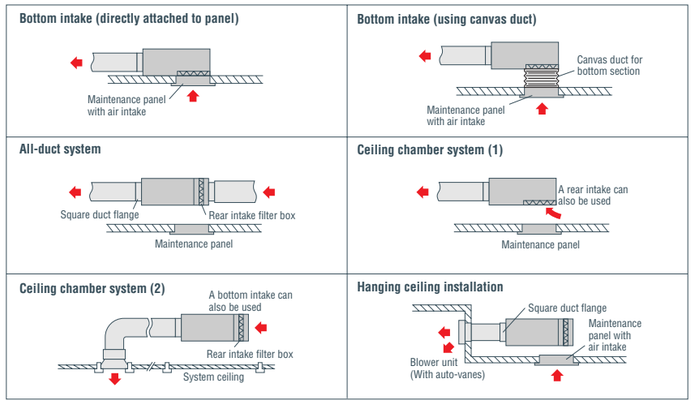
*For P100~P125

Slim 295mm main unit with optional drain pump ensures up to 600 mm(23-5/8in.) of lift

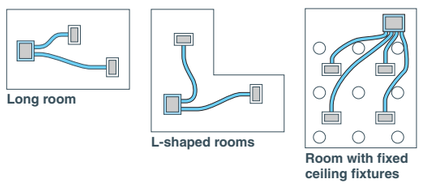


mm (in.)

Multiple installation patterns for assorted applications and locations



Flexible installation for a variety of layouts



▸Specifications

			PDFY-P20VM-E	PDFY-P25VM-E	PDFY-P32VM-E	PDFY-P40VM-E	PDFY-P50VM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220V 60Hz				
Cooling capacity	※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	※1	kW	2.5	3.2	4.0	5.0	6.3
	※1	BTU/h	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling	kW	0.11 / 0.12			0.13 / 0.15	
	Heating	kW	0.11 / 0.12			0.13 / 0.15	
Current	Cooling	A	0.53 / 0.58			0.60 / 0.71	
	Heating	A	0.53 / 0.58			0.60 / 0.71	
External finish			Galvanized steel plate				
Dimension H × W × D		mm	295 × 710 × 735			295 × 960 × 735	
		in.	11-5/8 × 28 × 28-15/16			11-5/8 × 37-13/16 × 28-15/16	
Net weight		kg(lbs)	25.5 (57)		27 (60)	32 (71)	34 (75)
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)				
Fan	Type × Quantity		Sirocco fan × 1			Sirocco fan × 2	
	Airflow rate ※2 (Lo-Mid2-Mid1-Hi)	m^3/min	6.0-6.5-7.5-8.5			10.0-11.0-12.5-14.0	
		L/s	100-108-125-142			167-183-208-233	
		cfm	212-230-265-300			353-388-441-494	
	External static pressure ※2	Pa	30 / 50 / 100				
Motor	Type		1-phase induction motor				
	Output	kW	0.075 (at 240V)				
Air filter			Synthethic fiber unwoven cloth filter (long life)				
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)				
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)				
Field drain pipe diameter		mm(in.)	O.D. 32 (1-1/4)				
Sound pressure level (Lo-Mid2-Mid1-Hi) ※2,※4		dB(A)	28-30-33-36			34-36-37-39	

			PDFY-P63VM-E	PDFY-P71VM-E	PDFY-P80VM-E	PDFY-P100VM-E	PDFY-P125VM-E
Power source			1-phase 220-240V 50Hz / 1-phase 220V 60Hz				
Cooling capacity	※1	kW	7.1	8.0	9.0	11.2	14.0
	※1	BTU/h	24,200	27,300	30,700	38,200	47,800
Heating capacity	※1	kW	8.0	9.0	10.0	12.5	16.0
	※1	BTU/h	27,300	30,700	34,100	42,700	54,600
Power consumption	Cooling	kW	0.14 / 0.17	0.15 / 0.18	0.17 / 0.21	0.27-0.31 / 0.29	0.33-0.38 / 0.39
	Heating	kW	0.14 / 0.17	0.15 / 0.18	0.17 / 0.21	0.27-0.31 / 0.29	0.33-0.38 / 0.39
Current	Cooling	A	0.68 / 0.82	0.72 / 0.88	0.82 / 1.01	1.28-1.34 / 1.36	1.55-1.63 / 1.84
	Heating	A	0.68 / 0.82	0.72 / 0.88	0.82 / 1.01	1.28-1.34 / 1.36	1.55-1.63 / 1.84
External finish			Galvanized steel plate				
Dimension H × W × D		mm	295 × 1,160 × 735			335 × 1,510 × 775	
		in.	11-5/8 × 45-11/16 × 28-15/16			13-1/4 × 59-1/2 × 30-9/16	
Net weight		kg(lbs)	39 (86)			52 (115)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)				
Fan	Type × Quantity		Sirocco fan × 2				
	Airflow rate ※2	m^3/min	12.5-14.0-16.0-18.0	13.5-15.5-17.5-19.5	14.5-16.5-18.5-21.0	19.5-28.0	24.0-34.0
	(Lo-Mid2-Mid1-Hi)	L/s	208-233-267-300	225-258-292-325	242-275-308-350	325-467	400-567
	(Lo-Hi)	cfm	441-494-565-636	477-547-618-689	512-583-653-742	689-989	848-1201
	External static pressure ※2	Pa	30 / 50 / 100			50 / 100 / 130	
Motor	Type		1-phase induction motor				
	Output	kW	0.078 (at 240V)			0.140 (at 240V)	0.190 (at 240V)
Air filter			Synthethic 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-Mid2-Mid1-Hi) ※2 (Lo-Hi) ※4		dB(A)	30-34-36-39	32-35-37-40	34-37-40-42	34-42 (37-44) ※3	40-45 (42-46) ※3

Note:

Cooling/heating capacity indicates the maximum value at operation under the following condition.

※1 Cooling Indoor: 27˚C(81˚F)DB/19˚C(66˚F)WB, Outdoor: 35˚C(95˚F)DB/24˚C(75˚F)WB
Heating Indoor: 20˚C(68˚F)DB, Outdoor: 7˚C(45˚F)DB/6˚C(43˚F)WB

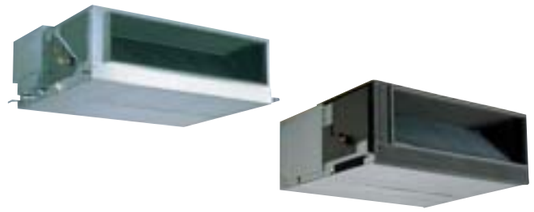
※2 The external static pressure is set to 50Pa at factory shipment.

※3 The figure in ( ) indicates sound pressure level at 240V/50Hz.

※4 It is measured in anechoic room.

INDOOR UNIT
Ceiling concealed type
PEFY-P VMH-E

High Static Pressure



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

Maximum external static pressure 260Pa

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

		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	

Reduced noise thanks to the use of newly designed centrifugal fan

Sound pressure level table (Standard static pressure 220V)

dB(A)

	Capacity		P40	P50	P63	P71	P80	P100	P125	P140
Sound pressure Level	Fan Speed	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.

Drain pump (option) ensures up to 550mm (21-11/16in.) of lift

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

mm (in.)

▸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 × W × D		mm	380 × 750 × 900			380 × 1,000 × 900		380 × 1,200 × 900		
		in.	15 × 29-9/16 × 35-7/16			15 × 39-3/8 × 35-7/16		15 × 47-1/4 × 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 × Quantity		Sirocco fan × 1					Sirocco fan × 2		
	Airflow rate (Lo-Hi)	m^3/min	10.0-14.0		13.5-19.0	15.5-22.0	18.0-25.0	26.5-38.0	28.0-40.0	
		L/s	167-233		225-317	258-367	300-417	442-633	467-667	
		cfm	353-494		477-671	547-777	636-883	936-1342	989-1413	
	External static pressure ※2 220V	Pa	50 · 100 · 200							
	External static pressure ※2 230,240V	Pa	100 · 150 · 200							
Motor	Type		1-phase induction motor							
	Output ※3	kW	0.08		0.12	0.14	0.18	0.26		
Air filter (option)			Synthethic 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
Power source			3N ~ 380-415V 50Hz / 3N ~ 380-415V 60Hz	
Cooling capacity	※1	kW	22.4	28.0
	※1	BTU/h	76,400	95,500
Heating capacity	※1	kW	25.0	31.5
	※1	BTU/h	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	A	1.62 / 1.86	2.00 / 2.30
	Heating	A	1.62 / 1.86	2.00 / 2.30
External finish			Galvanized	
Dimension H × W × D		mm	470 × 1,250 × 1,120	
		in.	18-9/16 × 49-1/4 × 44-1/8	
Net weight		kg(lbs.)	100 (221)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)	
Fan	Type × Quantity		Sirocco fan × 2	
	Airflow rate	m^3/min	58.0	72.0
		L/s	967	1200
		cfm	2048	2543
	External static pressure ※4 380V	Pa	110 · 220	
	External static pressure ※4 400,415V	Pa	130 · 260	
Motor	Type		3-phase induction motor	
	Output ※5	kW	0.76	1.08
Air filter(option)			Synthethic fiber unwoven cloth filter (long life)	
Refrigerant pipe diameter	Gas (Brazing)	mm(in.)	ø19.05 (ø3/4)	ø22.2 (ø7/8)
	Liquid (Brazing)	mm(in.)	ø9.52 (ø3/8)	
Field drain pipe diameter		mm(in.)	O.D. 32 (1-1/4)	
Sound pressure level ※6	380V	dB(A)	42 (110Pa) / 45 (220Pa)	50 (110Pa) / 52 (220Pa)
	400,415V	dB(A)	44 (130Pa) / 47 (260Pa)	52 (130Pa) / 54 (260Pa)

Note:

※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, Outdoo r: 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.

INDOOR UNIT
Fresh Air Intake Type

PEFY-P VMH-E-F

Fresh Air Intake

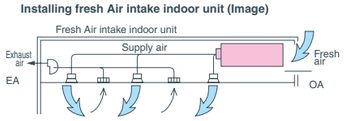
Fresh Air can be taken in with temperature control.
Ideal for Offices, Stores and Restaurants.

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.

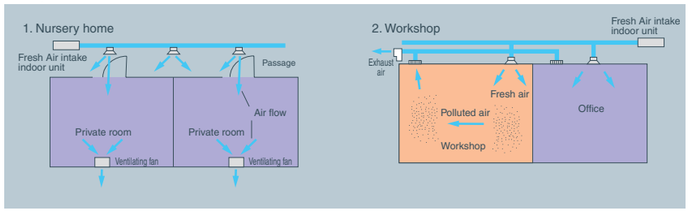
Office, Lobby, Workshop, Rest room, Nursing home, Smoking corner, Kitchen in restaurant

Installing fresh Air intake indoor unit (Image)



*** 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%).

Example



< 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 × W × D			mm(in.)	380 × 1000 × 900 (15 × 39-3/8 × 35-7/16)	380 × 1200 × 900 (15 × 47-1/4 × 35-7/16)
Net weight			kg(lbs.)	50 (111)	70 (155)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)	
Fan	Type × Quautity			Sirocco fan × 1	Sirocco fan × 2
	Airflow rate		m^3/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)	※2	208, 220V	dB(A)	27 - 38 - 43	28 - 38 - 43
	※2	230, 240V	dB(A)	33 - 43 - 45	34 - 43 - 45

			PEFY-P200VMH-E-F	PEFY-P250 VMH-E-F
Power source			3N~ 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 × W × D		mm(in.)	470 × 1250 × 1120 (18-9/16 × 49-1/4 × 44-1/8)	
Net weight		kg(lbs.)	100 (221)	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)	
Fan	Type × Quautity		Sirocco fan × 2	
	Airflow rate	m^3/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 unmoven 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 ※2	380V	dB(A)	39 / 42	40 / 44
	400V	dB(A)	40 / 43	40 / 45
	415V	dB(A)	40 / 44	41 / 46

Note:

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

6. 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.
7. 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.
8. Autochangeover function or Dry mode is NOT available. Fan mode operation during the thermo off in Cooling/Heating mode.
9. In any case, the air flow rate should be kept lower than 110% of the above chart. Please see "Fan curves" for the details.
10. When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
11. 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, ie take the necessary precautions for cold air, and also insulate rooms for dew condensation prevention as required.
12. Air filter must be installed in the air intake side. The filter should be attached where easy maintenance in possible in case of usage of fild supply filters.
13. 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

New

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)

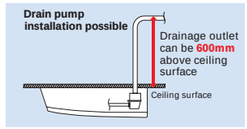
m (ft)

Greatly simplified installation

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

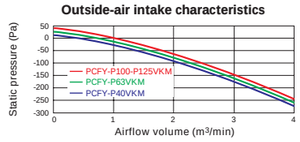
Drain pump option available with all models

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.



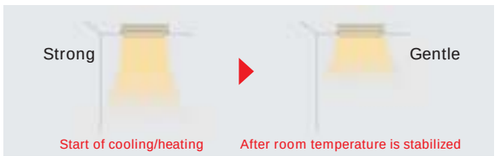
Outside-air intake

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 and 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 × W × D		mm	230× 960× 680	230× 1,280 × 680	230× 1,600× 680	
		in.	9-1/16 × 37-13/16× 26-3/4	9-1/16 × 50-3/8 × 26-3/4	9-1/16 × 63× 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 × Quantity		Sirocco fan × 2	Sirocco fan × 3	Sirocco fan × 4	
	Airflow rate (Lo-Mid2-Mid1-Hi) ※2	m^3/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			

Note:

※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 Airflw 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

PKFY-P VHM

PKFY-P VKM

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 range

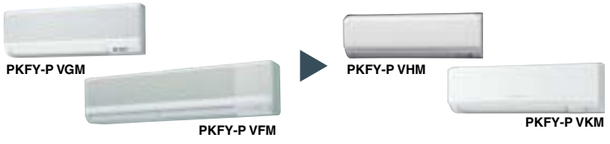
Capacity	P15	P20	P25	P32	P40	P50	P63	P100
VBM	●	●	●					
VHM				●	●	●		
VKM							●	●

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.



PKFY-P VBM features

Compact profile

Built-in signal receiver

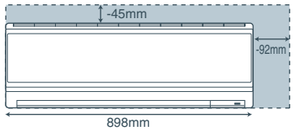
Quiet operation

Auto-flap shutter enhances good looks

PKFY-P VHM features

Compact size of 898mm

Width size reduced to match small size buildings and offices.



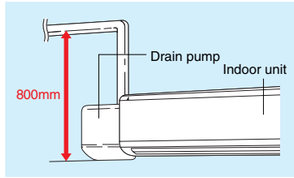
Comparison with PKFY-P VGM-E

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 × W × D		mm(in.)	295 × 815 × 225 (11-5/8 × 32-1/8 × 8-7/8)			295× 898× 249(11-5/8 × 35-3/8 × 9-13/16)		
Net weight		kg(lbs.)	10 (23)			13(29)		
Heat exchanger			Cross fin (Aluminum fin and copper tube)					
Fan	Type × Quantity		Line flow fan × 1					
	Airflow rate (Lo-Mid2-Hi) ※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
		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		dB(A)	29-31-32-33	29-31-34-36		34-37-41	34-38-41	34-39-43

Note:

※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 × W × D		mm(in.)	365× 1,170 × 295 (14-3/8 × 46-1/16 × 11-5/8)	
Net weight		kg(lbs.)	21 (46)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)	
Fan	Type × Quantity		Line flow fan × 1	
	Airflow rate (Lo-Hi) ※2	m^3/min	16-20	20-26
		L/s	267-333	333-433
		cfm	565-706	706-918
	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		dB(A)	39-45	41-49

Note:

※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 Type

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.

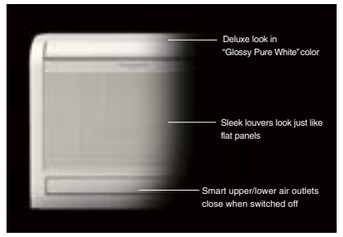
Quiet operation

Mitsubishi Electric air conditioners have always been some of the quietest models available in the market. Our new floorstanding 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.

ONLY 27dB

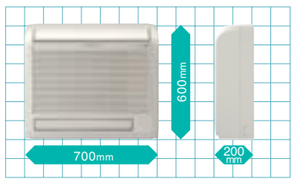
※2.5kw class

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.

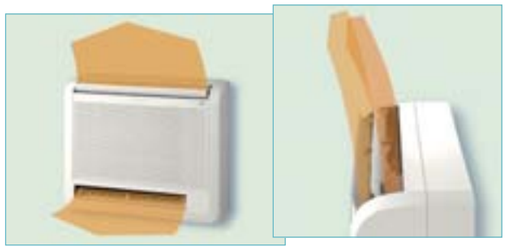
Slim but Mighty



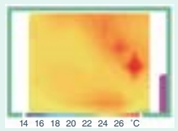
The unit body is slim and trim, the essence in compact. An ideal size for living rooms, bedrooms, and more.
The removable and washable front panel makes cleaning a snap.
Easy and regular cleaning allows your air-conditioner stay beautiful while keeping its energy-efficient operation always possible.

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 H × W × D		mm	600 × 700 × 200			
		in.	23-5/8 × 27-9/16 × 7-7/8			
Net weight		kg(lbs.)	15 (34)			
Heat exchanger			Cross fin (Alminium plate fin and copper tube)			
Fan	Type × Quantity		Line flow fan × 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
	Eaternal static pressure	Pa	0			
Motor	Type		DC motor			
	Output	kW	0.03 × 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

Note:

※1Cooling/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 type

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 × W × D			mm	630 × 1,050 × 220		630 × 1,170 × 220		630 × 1,410 × 220	
			in.	24-13/16 × 41-3/8 × 8-11/16		24-13/16 × 46-1/8 × 8-11/16		24-13/16 × 55-9/16 × 8-11/16	
Net weight			kg(lbs.)	23 (51)		25 (56)	26 (58)	30 (67)	32 (71)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)					
Fan	Type × Quantity			Sirocco fan × 1		Sirocco fan × 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
		※2	L/s	92-108		117-150	150-183	200-233	200-258
		※2	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

Note:

※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)

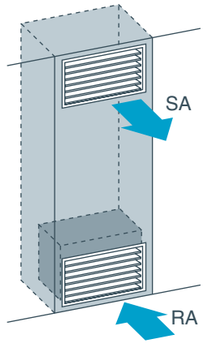
※3 Measured point : 1m × 1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz
· 2dB(A) lower at AC220V/50Hz
· 3dB(A) lower at 1.5m × 1.5m point

※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 × W × D			mm	639 × 886 × 220		639 × 1,006 × 220		639 × 1,246 × 220	
			in.	25-3/16 × 34-15/16 × 8-11/16		25-3/16 × 39-5/8 × 8-11/16		25-3/16 × 49-1/16 × 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 Quautity			Sirocco fan × 1		Sirocco fan × 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
			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

Note:

※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×1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz
· 2dB(A) lower at AC220V/50Hz
· 3dB(A) lower at 1.5m×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 × W × D			mm	639 × 886 × 220		639 × 1,006 × 220		639 × 1,246 × 220	
			in.	25-3/16 × 34-15/16 × 8-11/16		25-3/16 × 39-5/8 × 8-11/16		25-3/16 × 49-1/16 × 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 Quautity			Sirocco fan × 1		Sirocco fan × 2			
	Airflow rate (Lo-Mid-Hi)		m^3/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 brushless 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	3.5-39-44	36-41-45	38-43-48

Note:

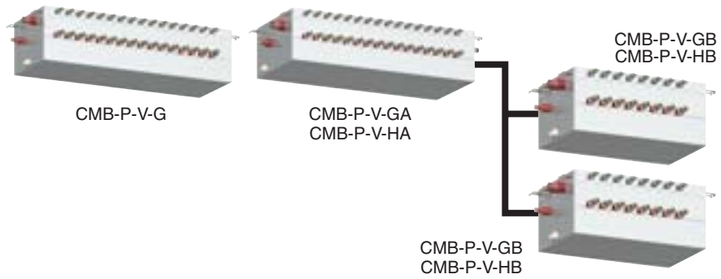
※1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27˚C(81˚F)DB/19˚C(66˚F)WB, Outdoor 35˚C(95˚F)DB
Heating Indoor : 20˚C(68˚F)DB, Outdoor 7˚C(45˚F)DB/6˚C(43˚F)WB
pipe length : 7.5m(24-9/16ft) Height difference : 0m(0ft)

※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.

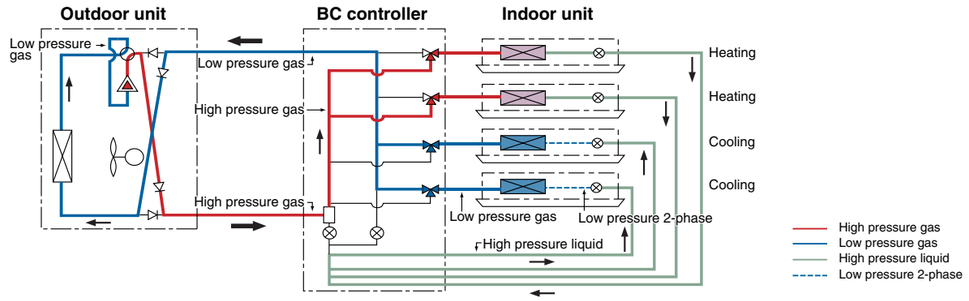
BC CONTROLLER

CMB-P-V-G
CMB-P-V-GA
CMB-P-V-HA
CMB-P-V-GB
CMB-P-V-HB



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 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-G	CMB-P105V-G	CMB-P106V-G	CMB-P108V-G	CMB-P1010V-G	CMB-P1013V-G	CMB-P1016V-G
Number of branch				4	5	6	8	10	13	16
Power source				~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						
Indoor unit capacity connectable to 1 branch *				R2 : Model P80 or smaller WR2 : Model P140 or smaller						
Connectable Outdoor unit ★				Refer to the combination chart of BC controller R2/WR2 series						
Height	mm			284						
Width	mm			648					1098	
Depth	mm			432						
Refrigerant piping diameter	To outdoor unit			Connectable outdoor unit capacity						
				P200		P250, P300			P350	
		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 indoor unit	Liquid pipe		ø9.52 (ø5/8) Flare (ø6.35 (ø1/4) with attached reducer used, ø12.7 (ø1/2) with optional joint pipe used.)						
		Gas pipe		ø15.88 (ø5/8) Flare (ø12.7 (ø1/2) with attached reducer used, ø19.05 (ø3/4) with optional joint pipe used.)						
Drain pipe				VP-25						
Net weight				24	27	29	34	39	47	54
Accessories				•Drain connection pipe (with flexible hose and insulation) •Reducer						

▸Specifications

Model name				CMB-P108V-GA	CMB-P1010V-GA	CMB-P1013V-GA	CMB-P1016V-GA	CMB-P1016V-HA
Number of branch				8	10	13	16	
Power source				~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				Galvanized steel plate
Indoor unit capacity connectable to 1 branch *				R2 : Model P80 or smaller WR2 : Model P140 or smaller				Model P80 or smaller
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 ※3
		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
		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
	To indoor unit	Liquid pipe		ø9.52 (ø5/8) Flare (ø6.35 (ø1/4) with attached reducer used, ø12.7 (ø1/2) with optional joint pipe used.)					
		Gas pipe		ø15.88 (ø5/8) Flare (ø12.7 (ø1/2) with attached reducer used, ø19.05 (ø3/4) with optional joint pipe used.)					
	To another BC controller			Total indoor unit capacity connected to this Sub BC controller					
				~P200	P201~P300	P301~P350	P351~P400	P401~P450	
		High press gas pipe		ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed		ø22.2 (ø7/8) Brazed		
		Low press gas pipe		ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed			
		Liquid pipe		ø9.52 (ø3/8) Brazed		ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed	
Drain pipe				VP-25					
Net weight				44	49	57	64	73	
Accessories				•Drain connection pipe (with flexible hose and insulation) •Reducer					

Model name				CMB-P104V-GB	CMB-P108V-GB	CMB-P1016V-HB
Number of branch				4	8	16
Power source				~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		Galvanized steel plate
Indoor unit capacity connectable to 1 branch *				R2 : Model P80 or smaller WR2 : Model P140 or smaller		Model P80 or smaller
Connectable Outdoor unit ★				Refer to the combination chart of BC controller R2/WR2 series		
Height	mm			284		284
Width	mm			648		1,098
Depth	mm			432		432
Refrigerant piping diameter	To Main BC controller			Total indoor unit capacity connected this Sub BC controller		
				~P200, P201~P350		~P200, P201~P450
				~P200	P201~P300	P301~P350	P351~P400	P401~P450
		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		
		Liquid pipe		ø9.52 (ø3/8) Brazed		ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed
	To indoor unit	Liquid pipe		ø9.52 (ø5/8) Flare (ø6.35 (ø1/4) with attached reducer used, ø12.7 (ø1/2) with optional joint pipe used.)				
		Gas pipe		ø15.88 (ø5/8) Flare (ø12.7 (ø1/2) with attached reducer used, ø19.05 (ø3/4) with optional joint pipe used.)				
Drain pipe				VP-25				
Net weight				22	32	57		
Accessories				•Drain connection pipe (with flexible hose and insulation) •Reducer				

★Combination chart of BC Controller for R2 series

	P200,250,300,350	P400-650	P700-800
CMB-P V-G	○	X	X
CMB-P V-GA	○	○	X
CMB-P V-HA	X	X	○
CMB-P V-GB	○	○	○
CMB-P V-HB	○	○	○

★Combination chart of BC Controller for WR2 series

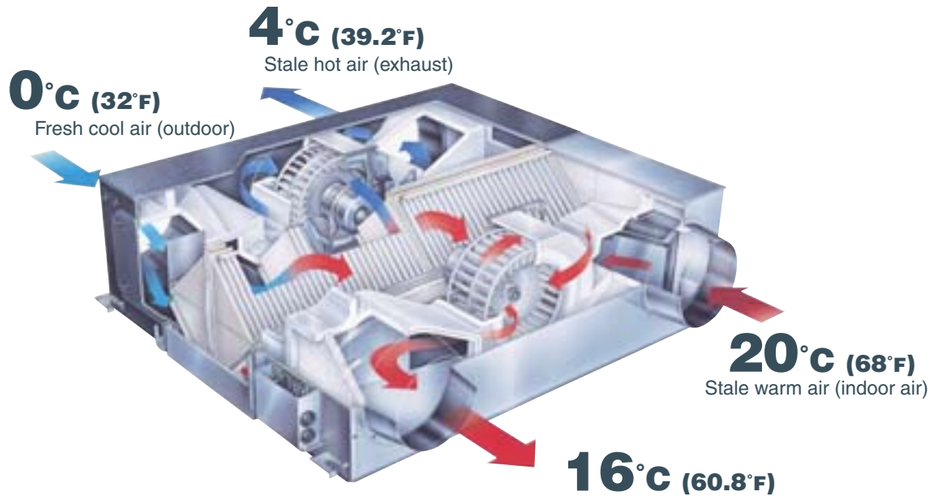
	P200,250	P400,500
CMB-P V-G	○	X
CMB-P V-GA	○	○
CMB-P V-HA	X	X
CMB-P V-GB	○	○
CMB-P V-HB	X	X

Note:

※1 Use optional joint pipe combining 2-branch when the total unit capacity exceeds P140.
Use the reducer(standard accessory) when the indoor unit Model P50 or smaller is connected.
※2 Additional pipework is needed to connect with P300 type or lower outdoor unit.
※3 CMB-P1016V-HA is ONLY for P700~P800.

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]

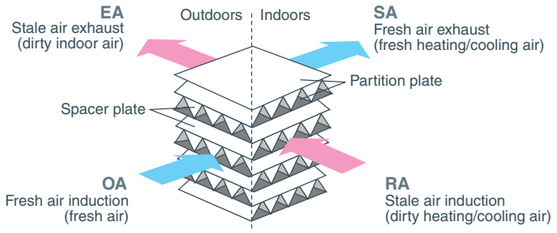
Heat-Exchange Efficiency Obtainable Only with Lossnay.

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.

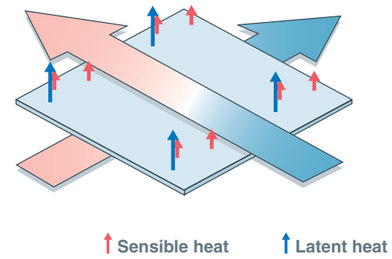
LOSSNAY Technology

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

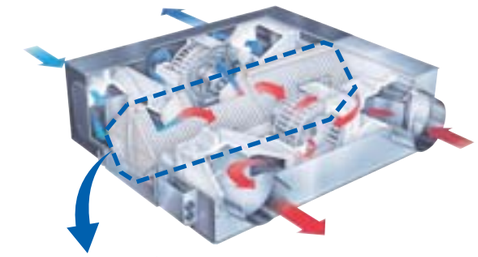
A. Two paths ventilation



B. Total Energy transfer

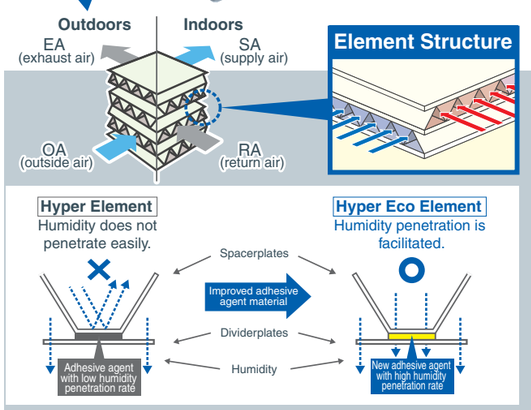


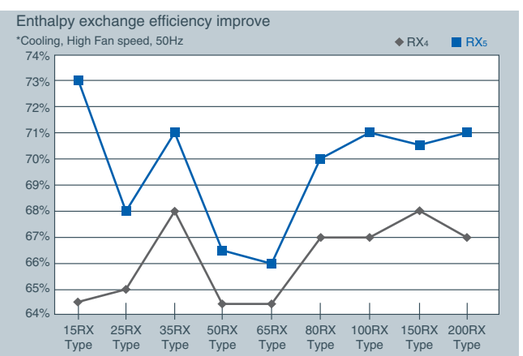
- **Hyper Eco Core**
  Better energy conservation by improved total heat exchange efficiency.



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.

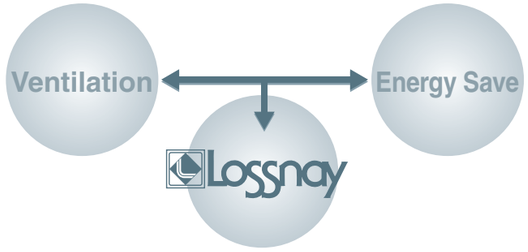




RX5 SERIES

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.

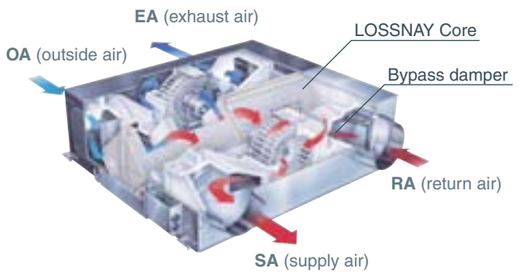


- **This is LOSSNAY !**

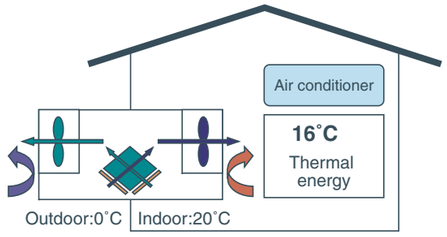
ADVANTAGES

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

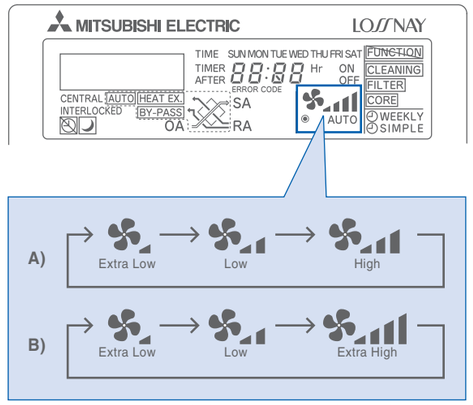


How much recovery?
OA temp. : 0˚C → SA temp. : 16˚C (Indoor 20˚C)

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-150RX5 and 200RX5.
* 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

8:00 — high — 22:00

new RX5 series with PZ-60DR-E

8:00	9:00	12:00	13:00	17:00	19:00	22:00
low	high	low	high	low	extra low	

Tolal 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)

	8:00	9:00	12:00	13:00	17:00	19:00	22:00
Monday to Thursday	low	high	low	high	low	extra low	
Friday	low	high	low	high	extra low		
Saturday to Sunday	extra low						

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).

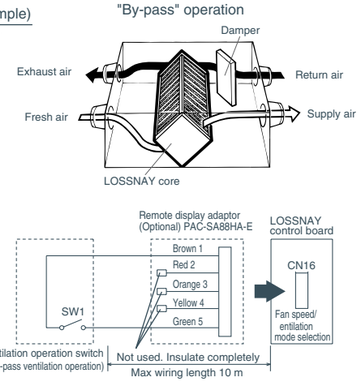
With SW1 is “ON”, the ventilation mode of LOSSNAY is changed to the By-pass ventilation regardless of the setting on the remote controller.

•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

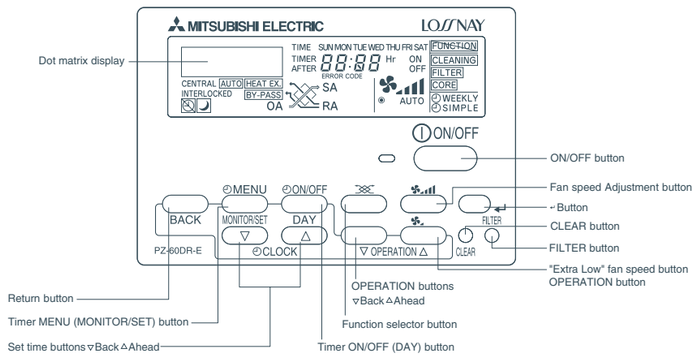


2. Night purge
   “By-pass” ventilation can be used to release hot air from inside the building that has accumulated in buildings a business district during the hot summer season.
3. Office equipment room cooling
   During cold season, fresh air can be drawn in and used as is to cool rooms where the temperature has risen due to the use of office equipment.

* When the outdoor air tempereture 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.



Model line up

■ Appearance

LGH-15~100RX5-E

LGH-150 / 200RX5-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	(mmH_2O)	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	82.0	84.0	85.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	75.0	75.0	77.5	81.0	—	—	—	—
	Cooling	73.0	73.0	76.5	81.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		27.5-28	26.5-27	22-23.5	18	28.5-29	27-28	23-24	18-19
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	(mmH_2O)	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	79.0	81.5	83.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	69.5	69.5	74.0	77.5	—	—	—	—
	Cooling	68.0	68.0	72.5	76.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		26-27	25-26	20-21.5	18-19	26.5-27.5	25.5-26.5	20.5-22	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	(mmH_2O)	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	80.0	85.0	88.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	71.5	71.5	76.5	81.5	—	—	—	—
	Cooling	71.0	71.0	75.5	81.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		32-32	28.5-29.5	21.5-23	18	32.5-32.5	29.5-30.5	21.5-24	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-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_2O)	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 anechoeic 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_2O)	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 anechoeic 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_2O)	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 anechoeic 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_2O)	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 anechoeic 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_2O)	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 anechoeic 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)

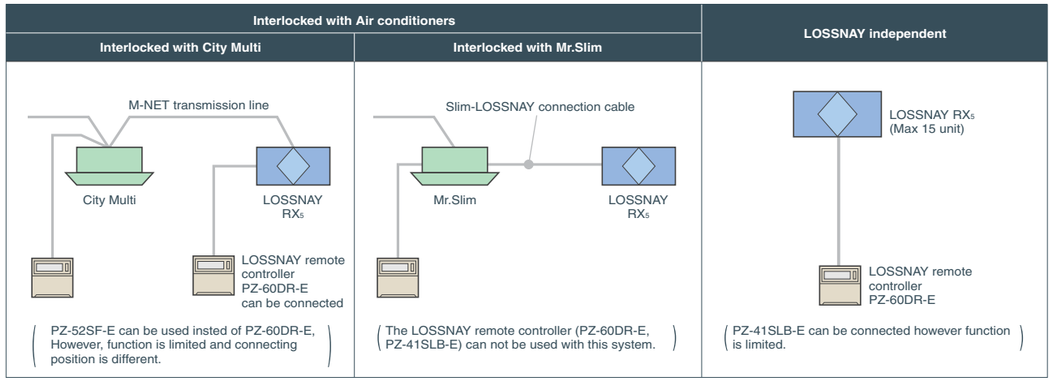
LGH-200RX5-E

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_2O)	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 anechoeic 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					

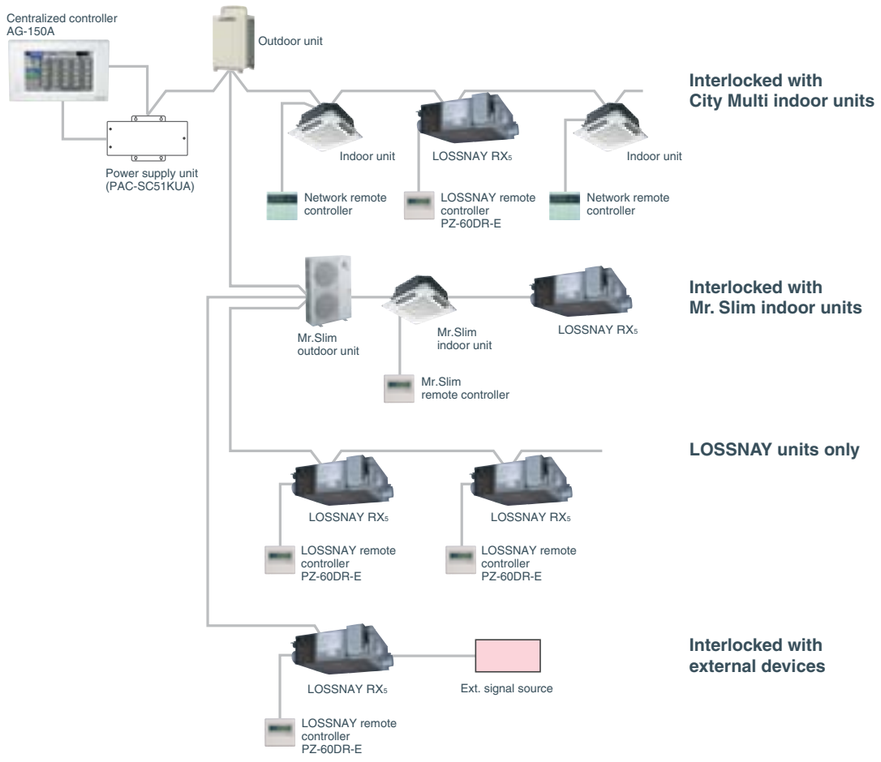
*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 20 dB greater than the indicated value. (at High Fan speed)

Control

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



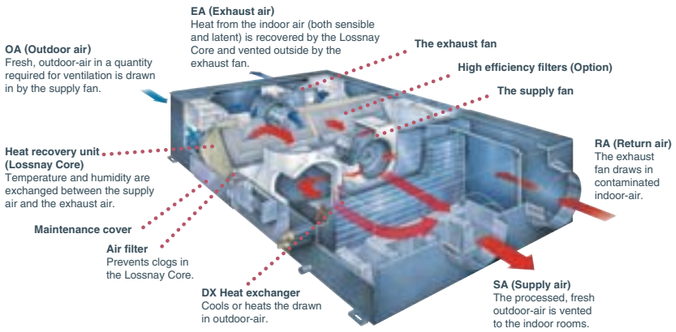
■Centralized Controller System



OA Processing Units

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.



GUF-50RD(H)$_3$ *1
[Cooling Capacity
5.46 (DX coil:3.63, Lossnay:1.83)KW
Heating capacity
6.18 (DX coil:4.17, Lossnay:2.01)KW
500m^3/h Single phase 220-240V 50Hz]

GUF-100RD(H)$_3$ *1
[Cooling Capacity
11.17 (DX coil:7.32, Lossnay3.85)KW
Heating capacity
12.50 (DX coil:8.30, Lossnay:4.20)KW
1000m^3/h Single phase 220-240V 50Hz]
*1 H : Humidifying Type

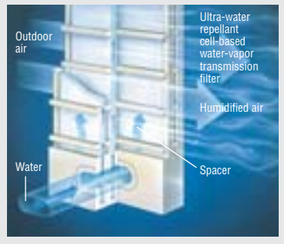
New Permeable Film Humidifier (RDH3 model)

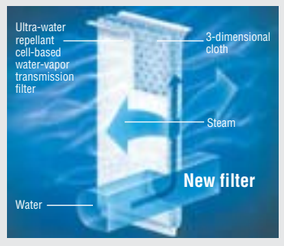
Comfortable Level of Humidity for Exceptionable Air Quality

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.

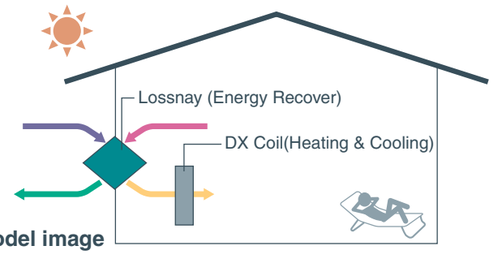




RDH3 SERIES
OUTDOOR AIR PROCESSING UNIT GUF type

General

GUF - For the finest indoor quality
GUF = [LOSSNAY] + [HEATING & COOLING]



GUF model image

Specification

Model			GUF-50RDH3		GUF-100RDH3		GUF-50RD3		GUF-100RD3	
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>
Figure in < > is the recovery	※1	kcal / h	4,700	<1,600>	9,600	<3,300>	4,700	<1,600>	9,600	<3,300>
capacity by LOSSNAY core.	※1	BTU / h	18,600	<6,200>	38,100	<13,100>	18,600	<6,200>	38,100	<13,100>
Power input		kW	235-265		480-505		235-265		480-505	
Current input		A	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>
Figure in < > is the recovery	※2	kcal / h	5,300	<1,700>	10,800	<3,600>	5,300	<1,700>	10,800	<3,600>
capacity by LOSSNAY core.	※2	BTU / h	21,100	<6,900>	42,700	<14,300>	21,100	<6,900>	42,700	<14,300>
Power input		kW	235-265		480-505		235-265		480-505	
Current input		A	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		-		-	
		lb / h	6.0		12.0		-		-	
Humidifier			Permeable film humidifier				-			
External finish			Galvanized, with grey insulation sheet							
External dimension H × W × D		mm	317 × 1,016 × 1,288		398 × 1,231 × 1,580		317 × 1,016 × 1,288		398 × 1,231 × 1,580	
		in.	12-1/2 × 40 × 50-3/4		15-11/16 × 48-1/2 × 62-1/4		12-1/2 × 40 × 50-3/4		15-11/16 × 48-1/2 × 62-1/4	
Net weight		kg (lb)	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 × Quantity		SA: Centrifugal fan (Sirocco fan) × 1							
			EA: Centrifugal fan (Sirocco fan) × 1							
	External	Pa	125		135		140		140	
	static press.	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	m^3 / h	500		1,000		500		1,000	
	(High value)	L / s	139		139		139		139	
		cfm	294		589		294		589	
Noise 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	Liquid	mm (in.)	ø6.35 (ø1/4) Flare		ø9.52 (ø3/8) Flare		ø6.35 (ø1/4) Flare		ø9.52 (ø3/8) Flare	
refrigerant pipe	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							

Note:

※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

Outdoor unit

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

Wide selection of outdoor units

Heat Pump Series

S Series (4HP-6HP)
Page95~97

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

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

Y Series (28HP-36HP)
Page98,102,103

PUHY-P YSHM-A(-BS)

Model	28HP	30HP	32HP	34HP	36HP
Model Name	PUHY-P700YSHM-A(-BS)	PUHY-P750YSHM-A(-BS)	PUHY-P800YSHM-A(-BS)	PUHY-P850YSHM-A(-BS)	PUHY-P900YSHM-A(-BS)

Y Series (8HP-12HP)
Page98,99

PUHY-P YHM-A(-BS)

Model	8HP	10HP	12HP
Model Name	PUHY-P200YHM-A(-BS)	PUHY-P250YHM-A(-BS)	PUHY-P300YHM-A(-BS)

Y Series (38HP-40HP)
Page98,104

PUHY-P YSHM-A(-BS)

Model	38HP	40HP
Model Name	PUHY-P950YSHM-A(-BS)	PUHY-P1000YSHM-A(-BS)

Y Series (14HP-18HP)
Page98,100

PUHY-P YHM-A(-BS)

Model	14HP	16HP	18HP
Model Name	PUHY-P350YHM-A(-BS)	PUHY-P400YHM-A(-BS)	PUHY-P450YHM-A(-BS)

Y Series (42HP)
Page98,104

PUHY-P YSHM-A(-BS)

Model	42HP
Model Name	PUHY-P1050YSHM-A(-BS)

Y Series (20HP-26HP)
Page98,101

PUHY-P YSHM-A(-BS)

Model	20HP	22HP	24HP	26HP
Model Name	PUHY-P500YSHM-A(-BS)	PUHY-P550YSHM-A(-BS)	PUHY-P600YSHM-A(-BS)	PUHY-P650YSHM-A(-BS)

Y Series (44HP-50HP)
Page98,105,106

PUHY-P YSHM-A(-BS)

Model	44HP	46HP	48HP	50HP
Model Name	PUHY-P1100YSHM-A(-BS)	PUHY-P1150YSHM-A(-BS)	PUHY-P1200YSHM-A(-BS)	PUHY-P1250YSHM-A(-BS)

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

Wide selection of outdoor units

Heat Pump Series - High COP

Y Series - High COP (8HP-12HP)
Page98,107

PUHY-EP YHM-A(-BS)

Model	8HP	12HP
Model Name	PUHY-EP200YHM-A(-BS)	PUHY-EP300YHM-A(-BS)

Y Series - High COP (28HP-30HP)
Page98,110

PUHY-EP YSHM-A(-BS)

Model	28HP	30HP
Model Name	PUHY-EP700YSHM-A(-BS)	PUHY-EP750YSHM-A(-BS)

Y Series - High COP (16HP-20HP)
Page98,108

PUHY-EP YSHM-A(-BS)

Model	16HP	18HP	20HP
Model Name	PUHY-EP400YSHM-A(-BS)	PUHY-EP450YSHM-A(-BS)	PUHY-EP500YSHM-A(-BS)

Y Series - High COP (32HP-34HP)
Page98,111

PUHY-EP YSHM-A(-BS)

Model	32HP	34HP
Model Name	PUHY-EP800YSHM-A(-BS)	PUHY-EP850YSHM-A(-BS)

Y Series - High COP (22HP-26HP)
Page98,109

PUHY-EP YSHM-A(-BS)

Model	22HP	24HP	26HP
Model Name	PUHY-EP550YSHM-A(-BS)	PUHY-EP600YSHM-A(-BS)	PUHY-EP650YSHM-A(-BS)

Y Series - High COP (36HP)
Page98,112

PUHY-EP YSHM-A(-BS)

Model	36HP
Model Name	PUHY-EP900YSHM-A(-BS)

Heat Pump Series - ZUBADAN (Y)

ZUBADAN Series (8,10,16,20HP)
Page113,114

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 Series

WY (Heat Pump) Series (8,10,16,20HP)
Page115,116

PQHY-P YGM-A

Model	8HP	10HP	16HP	20HP
Model Name	PQHY-P200YGM-A	PQHY-P250YGM-A	PQHY-P400YSGM-A	PQHY-P500YSGM-A

※The PUHY-EP-YSHM-A and PUHY-HP-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)
Page117,118

PURY-P YHM-A(-BS)

Model	8HP	10HP	12HP
Model Name	PURY-P200YHM-A(-BS)	PURY-P250YHM-A(-BS)	PURY-P300YHM-A(-BS)

R2 Series (26HP-28HP)
Page117,122

PURY-P YSHM-A(-BS)

Model	26HP	28HP
Model Name	PURY-P650YSHM-A(-BS)	PURY-P700YSHM-A(-BS)

R2 Series (14HP-16HP)
Page117,119

PURY-P YHM-A(-BS)

Model	14HP	16HP
Model Name	PURY-P350YHM-A(-BS)	PURY-P400YHM-A(-BS)

R2 Series (30HP-32HP)
Page117,123

PURY-P YSHM-A(-BS)

Model	30HP	32HP
Model Name	PURY-P750YSHM-A(-BS)	PURY-P800YSHM-A(-BS)

R2 Series (18HP-24HP)
Page117,120,121

PURY-P YSHM-A(-BS)

Model	18HP	20HP	22HP	24HP
Model Name	PURY-P450YSHM-A(-BS)	PURY-P500YSHM-A(-BS)	PURY-P550YSHM-A(-BS)	PURY-P600YSHM-A(-BS)

※The PURY-P-YSHM-A 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-12HP)
Page117,124

PURY-EP YHM-A(-BS)

Model	8HP	12HP
Model Name	PURY-EP200YHM-A(-BS)	PURY-EP300YHM-A(-BS)

R2 Series - High COP (20HP-22HP)
Page117,126

PURY-EP YSHM-A(-BS)

Model	20HP	22HP
Model Name	PURY-EP500YSHM-A(-BS)	PURY-EP550YSHM-A(-BS)

R2 Series - High COP (16HP-18HP)
Page117,125

PURY-EP YSHM-A(-BS)

Model	16HP	18HP
Model Name	PURY-EP400YSHM-A(-BS)	PURY-EP450YSHM-A(-BS)

R2 Series - High COP (24HP)
Page117,127

PURY-EP YSHM-A(-BS)

Model	24HP
Model Name	PURY-EP600YSHM-A(-BS)

Water Cooled Series

WR2 (Heat Recovery) Series (8,10,16,20,HP)
Page129,130

PQRY-P YGM-A

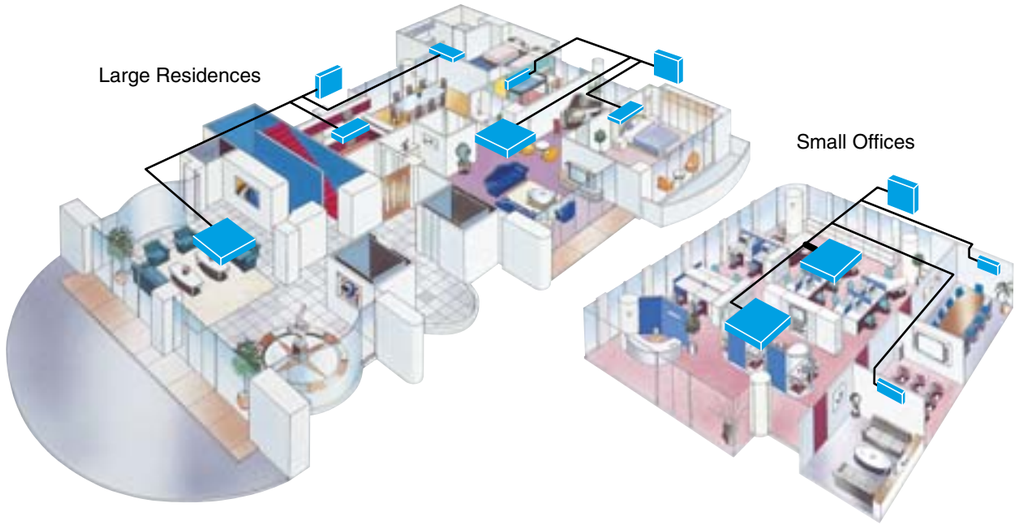
Model	8HP	10HP	16HP	20HP
Model Name	PQRY-P200YGM-A	PQRY-P250YGM-A	PQRY-P400YSGM-A	PQRY-P500YSGM-A

※The PURY-(E)P-YSHM-A series requires a Twinning kit (optional). Refer to the data book for details.
※Unit photos are all standard models.

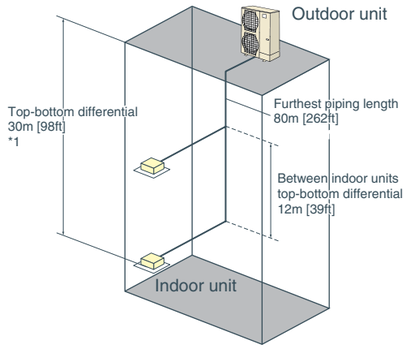
OUTDOOR UNIT
S (Heat Pump) series
Cooling or Heating
PUMY-P VHMB(-BS)
PUMY-P YHMB(-BS)

Building Comfort solutions in the home or small office

The CITY MULTI S-Series for homes and small offices offers all the features and benefits of our large commercial CITY MULTI S-Series. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively. A maximum of 12 CITY MULTI indoor units can be connected with up to 130% connected capacity, depending on diversity.



[4-6HP]



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)	30 [98]
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].

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˚CD.B. (50 to 115˚FD.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	50 / 52	51 / 53
Diameter of refrigerant pipe	Liquid (High press.)	mm(in.)	ø9.52 (ø3/8)	ø9.52 (ø3/8)	ø9.52 (ø3/8)
	Gas (Low press.)	mm(in.)	ø15.88 (ø5/8)	ø15.88 (ø5/8)	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)	1,350 X 950 X 330 (53-3/16 X 37-7/16 X 13)	1,350 X 950 X 330 (53-3/16 X 37-7/16 X 13)
Net weight		kg (lb)	127 (280 lb)	127 (280 lb)	127 (280 lb)
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic comp.		
	Starting method		Inverter		
	Motor output	kW	2.2	2.9	3.3
FAN	Air flow rate	m^3/min	100	100	100
		L/s	1,667	1,667	1,667
		cfm	3,532	3,532	3,532
	Type X Quantity		Propeller fan X 2	Propeller fan X 2	Propeller fan X 2
	Motor output	kW	0.06 X 2	0.06 X 2	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 lb)	R410A X 8.5kg (19 lb)	R410A X 8.5kg (19 lb)

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

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˚FD.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	Liquid	mm(in.)	ø9.52 (ø3/8) Flare		
	Gas	mm(in.)	ø15.88 (ø5/8) Flare		
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 (lb)	140 (309)		
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic compressor		
	Maker		Mitsubishi Electric Corporation		
	Starting method		Inverter		
	Motor output	kW	1.9	2.4	2.9
	Case heater	kW	-	-	-
	Lubricant		FV508		
FAN	Air flow rate	m^3/min	100		
	External static press.		0 Pa		
	Type X Quantity		Propeller fan X 2		
	Control, Driving mechanism		DC-control, Direct-driven by motor		
	Motor output	kW	0.06 x 2		
HIC circuit (HIC: Heat Inter-Changer)			-		
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 lb)		
	Control		LEV circuit		

Note:

※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˚CWB
Pipe length 7.5m (24-9/16ft), Level difference 0 m (0 ft)

OUTDOOR UNIT
Y (Heat Pump) series
Cooling or Heating
PUHY-P Y(S)HM-A(-BS)
PUHY-EP Y(S)HM-A(-BS)

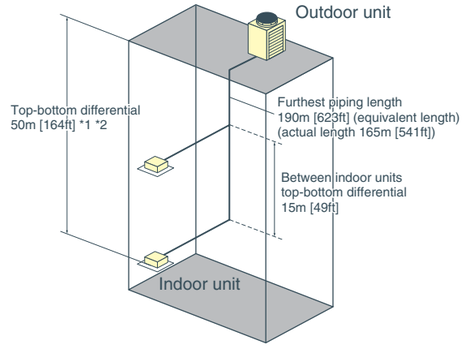
The two-pipe zoned system designed for Heat Pump Operation

The CITY MULTI Y series makes 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. With a wide line-up of indoor units in connection with a flexible piping system, the CITY MULTI Y series can be configured for all applications. Depending on capacity, up to 50 indoor units can be connected with up to 130% connected capacity to maximize an engineer's design options. This feature allows easy air conditioning in each area with convenient individual controllers.

[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.

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

▸Specifications

			PUHY-P200YHM-A(-BS)	PUHY-P250YHM-A(-BS)	PUHY-P300YHM-A(-BS)
Power source			3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity ※1 (Nominal) ※1		kW	22.4	28.0	33.5
		BTU/h	76,400	95,500	114,300
	Power input	kW	5.72	7.73	9.07
	Current input	A	9.6-9.1-8.8	13.0-12.3-11.9	15.3-14.5-14.0
	COP (kW/kW)		3.91	3.62	3.69
Temp. ※3 range of cooling	Indoor	W.B.	15~24˚C(59~75˚F)		
	Outdoor	D.B.	- 5~43˚C(23~109˚F)		
Heating capacity ※2 (Nominal) ※2		kW	25.0	31.5	37.5
		BTU/h	85,300	107,500	128,000
	Power input	kW	6.03	7.83	9.39
	Current input	A	10.1-9.6-9.3	13.2-12.5-12.1	15.8-15.0-14.5
	COP (kW/kW)		4.14	4.02	3.99
Temp. ※3 range of heating	Indoor temp.	D.B.	15~27˚C(59~81˚F)		
	Outdoor temp.	W.B.	-20~15.5˚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	57	59
Diameter of refrigerant pipe	Liquid	mm(in.)	ø9.52 (ø3/8) Brazed	ø9.52 (ø3/8) Brazed (ø12.7 (ø1/2) Brazed , total length >=90m)	ø9.52 (ø3/8) Brazed (ø12.7 (ø1/2) Brazed , total length>=40m)
	Gas	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <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(lb)	185 (408)	210 (463)	215 (474)
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic compressor		
	Starting method		Inverter		
	Motor output	kW	5.4	6.7	8.2
FAN	Air flow rate	m^3/min	185	185	185
		L/s	3,083	3,083	3,083
		cfm	6,532	6,532	6,532
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.46 X 1	0.46 X 1	0.46 X 1
Protection	High pressure protection		High pressure sensor, High pressure switch 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 6.5kg (15 lb)	R410A X 9.0kg (20 lb)	R410A X 9.0kg (20 lb)
Optional parts			joint : CMY-Y102S-G2 Header : CMY-Y104 / 108 / 1010-G	joint : CMY-Y102S / L-G2 Header : CMY-Y104 / 108 / 1010-G	

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

			PUHY-P350YHM-A(-BS)	PUHY-P400YHM-A(-BS)	PUHY-P450YHM-A(-BS)
Power source			3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity ※1 (Nominal) ※1		kW	40.0	45.0	50.0
		BTU/h	136,500	153,500	170,600
	Power input	kW	11.20	13.23	16.28
	Current input	A	18.9-17.9-17.3	22.3-21.2-20.4	27.4-26.1-25.1
	COP (kW/kW)		3.57	3.40	3.07
Temp. ※3 range of cooling	Indoor	W.B.	15~24˚C (59~75˚F)		
	Outdoor	D.B.	- 5~43˚C (23~109˚F)		
Heating capacity ※2 (Nominal) ※2		kW	45.0	50.0	56.0
		BTU/h	153,500	170,600	191,100
	Power input	kW	12.09	13.47	15.38
	Current input	A	20.4-19.3-18.6	22.7-21.6-20.8	25.9-24.6-23.7
	COP (kW/kW)		3.72	3.71	3.64
Temp. ※3 range of heating	Indoor temp.	D.B.	15~27˚C (59~81˚F)		
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)		
Indoor unit connectable	Total 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
Diameter of refrigerant pipe	Liquid	mm(in.)	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension H X W X D		mm	1,710(without legs 1,650) X 1220 X 760	1,710(without legs 1,650) X 1220 X 760	1,710(without legs 1,650) X 1220 X 760
		in.	67-3/8(without legs 65) 5 48-1/16 5 29-15/16	67-3/8(without legs 65) 5 48-1/16 5 29-15/16	67-3/8(without legs 65) 5 48-1/16 5 29-15/16
Net weight		kg(lb)	245 (541)	245 (541)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic compressor		
	Starting method		Inverter		
	Motor output	kW	10.3	10.5	12.0
FAN	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	0.46 X 1	0.46 X 1	0.46 X 1
Protection	High pressure protection		High pressure sensor, High pressure switch 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 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)
Optional parts			joint : CMY-Y102S / L-G2, CMY-Y202-G2 Header : CMY-Y104 / 108 / 1010-G		

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-P500YSHM-A(-BS)		PUHY-P550YSHM-A(-BS)		PUHY-P600YSHM-A(-BS)		PUHY-P650YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz							
Cooling capacity ※1			56.0		63.0		69.0		73.0	
(Nominal) ※1		kW	191,100		215,000		235,400		249,100	
	Power input	BTU/h	16.47		18.36		18.75		20.79	
	Current input	kW	27.8-26.4-25.4		30.9-29.4-28.3		31.6-30.0-28.9		35.0-33.3-32.1	
	COP (kW / kW)	A	3.40		3.43		3.68		3.51	
Temp. ※4 range of cooling	Indoor		15~24˚C (59~75˚F)							
	Outdoor	W.B.	- 5~43˚C (23~109˚F)							
		D.B.								
Heating capacity ※2			63.0		69.0		76.5		81.5	
(Nominal) ※2		kW	215,000		235,400		261,000		278,100	
	Power input	BTU/h	16.40		18.06		19.92		21.90	
	Current input	kW	27.6-26.3-25.3		30.4-28.9-27.9		33.6-31.9-30.7		36.9-35.1-33.8	
	COP (kW/kW)	A	3.84		3.82		3.84		3.72	
Temp. ※4 range of heating	Indoor temp.		15~27˚C (59~81˚F)							
	Outdoor temp.	D.B.	-20~15.5˚C (-4~60˚F)							
		W.B.								
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity							
	Model/Quantity		P15~P250 / 1~43		P15~P250 / 1~47		P15~P250 / 1~50		P15~P250 / 1~50	
Sound pressure level (measured in anechoic room)		dB <A>	60		61		62		62.5	
Diameter of refrigerant pipe	Liquid	mm(in.)	ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed	
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Outdoor unit 1 and Outdoor unit 2			PUHY-P250YHM-A (-BS)	PUHY-P250YHM-A (-BS)	PUHY-P250YHM-A (-BS)	PUHY-P300YHM-A (-BS)	PUHY-P250YHM-A (-BS)	PUHY-P350YHM-A (-BS)	PUHY-P300YHM-A (-BS)	PUHY-P350YHM-A (-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>							
External dimension H X W X D ※3		mm	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 1220 X 760	1,710 X 920 X 760	1,710 X 1220 X 760
		in.	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg(lb)	215 (474)	215 (474)	215 (474)	215 (474)	215 (474)	245 (541)	215 (474)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube							
Compressor	Type		Inverter scroll hermetic compressor							
	Starting method		Inverter							
	Motor output	kW	6.7	6.7	6.7	8.2	6.7	10.3	8.2	10.3
FAN	Air flow rate	m^3/min	185	185	185	185	185	225	185	225
		L/s	3,083	3,083	3,083	3,083	3,083	3,750	3,083	3,750
		cfm	6,532	6,532	6,532	6,532	6,532	7,945	6,532	7,945
	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
	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
Protection	High pressure protection		High pressure sensor, High pressure switch 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 lb)	R410A X 9.0kg (20 lb)	R410A X 9.0kg (20 lb)	R410A X 9.0kg (20 lb)	R410A X 9.0kg (20 lb)	R410A X 11.5kg (26 lb)	R410A X 9.0kg (20 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø9.52 (ø3/8) Brazed		ø9.52 (ø3/8) Brazed	ø12.7 (ø1/2) Brazed	ø9.52 (ø3/8) Brazed	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed
	Gas	mm(in.)	ø22.2 (ø7/8) Brazed		ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed
Optional parts			Outdoor Twinning Kit : CMY-Y100VBK2 joint : CMY-Y102S / L-G2, CMY-Y202-G2 Header : CMY-Y104 / 108 / 1010-G		Outdoor Twinning Kit : CMY-Y100VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G					

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-P700YSHM-A(-BS)		PUHY-P750YSHM-A(-BS)		PUHY-P800YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity ※1		kW	80.0		85.0		90.0	
(Nominal) ※1		BTU/h	273,000		290,000		307,100	
	Power input	kW	22.47		25.07		27.69	
	Current input	A	37.9-36.0-34.7		42.3-40.2-38.7		46.7-44.4-42.8	
	COP (kW/kW)		3.56		3.39		3.25	
Temp. ※4 range of cooling	Indoor	W.B.	15~24˚C (59~75˚F)					
	Outdoor	D.B.	- 5~43˚C (23~109˚F)					
Heating capacity ※2		kW	88.0		95.0		100.0	
(Nominal) ※2		BTU/h	300,300		324,100		341,200	
	Power input	kW	23.71		25.46		25.70	
	Current input	A	40.0-38.0-36.6		42.9-40.8-39.3		43.3-41.2-39.7	
	COP (kW/kW)		3.71		3.73		3.89	
Temp. ※4 range of heating	Indoor temp.	D.B.	15~27˚C (59~81˚F)					
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)					
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity					
	Model/Quantity		P15~P250 / 1~50		P15~P250 / 1~50		P15~P250 / 1~50	
Sound pressure level (measured in anechoic room)		dB<A>	63		63.5		64	
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed		ø19.05 (ø3/4) Brazed		ø19.05 (ø3/4) Brazed	
	Gas	mm(in.)	ø34.93 (ø1-3/8) Brazed		ø34.93 (ø1-3/8) Brazed		ø34.93 (ø1-3/8) Brazed	
Outdoor unit 1 and Outdoor unit 2			PUHY-P350YHM-A(-BS)	PUHY-P350YHM-A(-BS)	PUHY-P350YHM-A(-BS)	PUHY-P400YHM-A(-BS)	PUHY-P350YHM-A(-BS)	PUHY-P450YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension H X W X D ※3		mm	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760
		in.	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg(lb)	245 (541)	245 (541)	245 (541)	245 (541)	245 (541)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube					
Compressor	Type		Inverter scroll hermetic compressor					
	Starting method		Inverter					
	Motor output	kW	10.3	10.3	10.3	10.5	10.3	12.0
FAN	Air flow rate	m^3/min	225	225	225	225	225	225
		L/s	3,750	3,750	3,750	3,750	3,750	3,750
		cfm	7,945	7,945	7,945	7,945	7,945	7,945
	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
	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
Protection	High pressure protection		High pressure sensor, High pressure switch 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 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø12.7 (ø1/2) Brazed		ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed
Optional parts			Outdoor Twinning Kit : CMY-Y200VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G					

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB, Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-P850YSHM-A(-BS)		PUHY-P900YSHM-A(-BS)	
Power source			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	30.18		33.33	
	Current input	A	50.9-48.4-46.6		56.2-53.4-51.5	
	COP (kW/kW)		3.18		3.03	
Temp. range of cooling ※3	Indoor	W.B.	15~24˚C (59~75˚F)			
	Outdoor	D.B.	- 5~43˚C (23~109˚F)			
Heating capacity (Nominal)	※2	kW	108.0		113.0	
	※2	BTU/h	368,500		385,600	
	Power input	kW	28.42		30.29	
	Current input	A	47.9-45.5-43.9		51.1-48.5-46.8	
	COP (kW/kW)		3.80		3.73	
Temp. range of heating ※3	Indoor temp.	D.B.	15~27˚C (59~81˚F)			
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)			
Indoor unit connectable	Total 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>	64.5		65	
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed		ø19.05 (ø3/4) Brazed	
	Gas	mm(in.)	ø41.28 (ø1-5/8) Brazed		ø41.28 (ø1-5/8) Brazed	
Outdoor unit 1 and Outdoor unit 2			PUHY-P400YHM-A(-BS)	PUHY-P450YHM-A(-BS)	PUHY-P450YHM-A(-BS)	PUHY-P450YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension H X W X D		mm	1,710(without legs 1,650) X 1220 X 760	1,710(without legs 1,650) X 1220 X 760	1,710(without legs 1,650) X 1220 X 760	1,710(without legs 1,650) X 1220 X 760
		in.	67-3/8(without legs 65) X 48-1/16 X 29-15/16	67-3/8(without legs 65) X 48-1/16 X 29-15/16	67-3/8(without legs 65) X 48-1/16 X 29-15/16	67-3/8(without legs 65) X 48-1/16 X 29-15/16
Net weight		kg(lb)	245 (541)	245 (541)	245 (541)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor			
	Starting method		Inverter			
	Motor output	kW	10.5	12.0	12.0	12.0
FAN	Air flow rate	m^3/min	225	225	225	225
		L/s	3,750	3,750	3,750	3,750
		cfm	7,945	7,945	7,945	7,945
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.46 X 1	0.46 X 1	0.46 X 1	0.46 X 1
Protection	High pressure protection		High pressure sensor, High pressure switch 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 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø15.88 (ø5/8) Brazed			
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed			
Optional parts			Outdoor Twinning kit : CMY-Y200VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G			

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-P950YSHM-A(-BS)	PUHY-P1000YSHM-A(-BS)	PUHY-P1050YSHM-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	30.68	32.47	33.90
	Current input	A	51.7-49.2-47.4	54.8-52.0-50.1	57.2-54.3-52.4
	COP (kW/kW)		3.52	3.48	3.48
Temp. range of cooling ※4	Indoor	W.B.	15~24˚C (59~75˚F)		
	Outdoor	D.B.	- 5~43˚C (23~109˚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	35.01
	Current input	A	50.6-48.1-46.4	55.9-53.1-51.2	59.1-56.1-54.1
	COP (kW/kW)		3.98	3.83	3.77
Temp. range of heating ※4	Indoor temp.	D.B.	15~27˚C (59~81˚F)		
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		
	Model/Quantity		P15~P250 / 1~50	P15~P250 / 2~50	P15~P250 / 2~50
Sound pressure level (measured in anechoic room)		dB<A>	64.0	64.5	65
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed	ø19.05 (ø3/4) Brazed	ø19.05 (ø3/4) Brazed
	Gas	mm(in.)	ø41.28 (ø1-5/8) Brazed	ø41.28 (ø1-5/8) Brazed	ø41.28 (ø1-5/8) Brazed
Outdoor unit 1 , Outdoor unit 2 , and Outdoor unit 3			PUHY -P250YHM-A (-BS)	PUHY -P300YHM-A (-BS)	PUHY -P400YHM-A (-BS)	PUHY -P300YHM-A (-BS)	PUHY -P300YHM-A (-BS)	PUHY -P400YHM-A (-BS)	PUHY -P300YHM-A (-BS)	PUHY -P350YHM-A (-BS)	PUHY -P400YHM-A (-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>								
External dimension H X W X D ※3		mm	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 1220 X 760	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 1220 X 760	1,710 X 920 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760
		in.	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg(lb)	215 (474)	215 (474)	245 (541)	215 (474)	215 (474)	245 (541)	215 (474)	245 (541)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube								
Compressor	Type		Inverter scroll hermetic compressor								
	Starting method		Inverter								
	Motor output	kW	6.7	8.2	10.5	8.2	8.2	10.5	8.2	10.3	10.5
FAN	Air flow rate	m^3/min	185	185	225	185	185	225	185	225	225
		L/s	3,083	3,083	3,750	3,083	3,083	3,750	3,083	3,750	3,750
		cfm	6,532	6,532	7,945	6,532	6,532	7,945	6,532	7,945	7,945
	Type X Quantity		Propeller fan X 1			Propeller fan X 1			Propeller fan X 1		
	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	0.46 X 1
Protection	High pressure protection		High pressure sensor, High pressure switch 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 lb)	R410A X 9.0kg (20 lb)	R410A X 11.5kg (26 lb)	R410A X 9.0kg (20 lb)	R410A X 9.0kg (20 lb)	R410A X 11.5kg (26 lb)	R410A X 9.0kg (20 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø9.52 (ø3/8) Brazed	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed	ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed	ø12.7 (ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed
	Gas	mm(in.)	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø22.2 (ø7/8) Brazed		ø28.58 (ø1-1/8) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed
Optional parts			Outdoor Twinning kit : CMY-Y300VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G								

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-P1100YSHM-A(-BS)			PUHY-P1150YSHM-A(-BS)		
Power source			3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity ※1 (Nominal) ※1		kW	124.0			130.0		
		BTU/h	423,100			443,600		
	Power input	kW	35.83			39.39		
	Current input	A	60.4-57.4-55.3			66.4-63.1-60.8		
	COP (kW/kW)		3.46			3.30		
Temp. ※4 range of cooling	Indoor	W.B.	15~24˚C (59~75˚F)					
	Outdoor	D.B.	- 5~43˚C (23~109˚F)					
Heating capacity ※2 (Nominal) ※2		kW	140.0			145.0		
		BTU/h	477,700			494,700		
	Power input	kW	36.93			39.08		
	Current input	A	62.3-59.2-57.0			65.9-62.6-60.4		
	COP (kW/kW)		3.79			3.71		
Temp. ※4 range of heating	Indoor temp.	D.B.	15~27˚C (59~81˚F)					
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)					
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity					
	Model/Quantity		P15~P250 / 2~50			P15~P250 / 2~50		
Sound pressure level (measured in anechoic room)		dB<A>	65			65.5		
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed		
	Gas	mm(in.)	ø41.28 (ø1-5/8) Brazed			ø41.28 (ø1-5/8) Brazed		
Outdoor unit 1 , Outdoor unit 2 , and Outdoor unit 3			PUHY-P350YHM-A(-BS)	PUHY-P350YHM-A(-BS)	PUHY-P400YHM-A(-BS)	PUHY-P350YHM-A(-BS)	PUHY-P350YHM-A(-BS)	PUHY-P450YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension H X W X D		mm	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760
※3		in.	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg (lb)	245(541)	245(541)	245(541)	245(541)	245(541)	245(541)
Heat exchanger			Salt-resistant cross fin & copper tube					
Compressor	Type		Inverter scroll hermetic compressor					
	Starting method		Inverter					
	Motor output	kW	10.3	10.3	10.5	10.3	10.3	12.0
FAN	Air flow rate	m^3/min	225	225	225	225	225	225
		L/s	3,750	3,750	3,750	3,750	3,750	3,750
		cfm	7,945	7,945	7,945	7,945	7,945	7,945
	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
	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
Protection	High pressure protection		High pressure sensor, High pressure switch 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 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed	ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed
Optional parts			Outdoor Twinning Kit : CMY-Y300VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G					

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-P1200YSHM-A(-BS)			PUHY-P1250YSHM-A(-BS)		
Power source			3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity ※1 (Nominal) ※1		kW	136.0			140.0		
		BTU/h	464,000			477,700		
	Power input	kW	41.71			45.01		
	Current input	A	70.4-66.8-64.4			75.9-72.1-69.5		
	COP (kW/kW)		3.26			3.11		
Temp. ※4 range of cooling	Indoor	W.B.	15~24˚C (59~75˚F)					
	Outdoor	D.B.	- 5~43˚C (23~109˚F)					
Heating capacity ※2 (Nominal) ※2		kW	150.0			156.5		
		BTU/h	511,800			534,000		
	Power input	kW	40.10			42.06		
	Current input	A	67.6-64.3-61.9			71.0-67.4-65.0		
	COP (kW/kW)		3.74			3.72		
Temp. ※4 range of heating	Indoor temp.	D.B.	15~27˚C (59~81˚F)					
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)					
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity					
	Model/Quantity		P15~P250 / 2~50			P15~P250 / 2~50		
Sound pressure level (measured in anechoic room)		dB<A>	66			66		
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed		
	Gas	mm(in.)	ø41.28 (ø1-5/8) Brazed			ø41.28 (ø1-5/8) Brazed		
Outdoor unit 1 , Outdoor unit 2 , and Outdoor unit 3			PUHY-P350YHM-A(-BS)	PUHY-P400YHM-A(-BS)	PUHY-P450YHM-A(-BS)	PUHY-P350YHM-A(-BS)	PUHY-P450YHM-A(-BS)	PUHY-P450YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension H X W X D		mm	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760
※3		in.	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg (lb)	245 (541)	245 (541)	245 (541)	245 (541)	245 (541)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube					
Compressor	Type		Inverter scroll hermetic compressor					
	Starting method		Inverter					
	Motor output	kW	10.3	10.5	12.0	10.3	12.0	12.0
FAN	Air flow rate	m^3/min	225	225	225	225	225	225
		L/s	3,750	3,750	3,750	3,750	3,750	3,750
		cfm	7,945	7,945	7,945	7,945	7,945	7,945
	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
	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
Protection	High pressure protection		High pressure sensor, High pressure switch 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 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed		ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed	
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed	
Optional parts			Outdoor Twinning Kit : CMY-Y300VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G					

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

			PUHY-EP200YHM-A(-BS)	PUHY-EP300YHM-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	5.18	8.25
	Current input	A	8.7-8.3-8.0	13.9-13.2-12.7
	COP (kW/kW)		4.32	4.06
Temp. range of cooling	※3 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	37.5
	※2	BTU/h	85,300	128,000
	Power input	kW	5.77	9.28
	Current input	A	9.7-9.2-8.9	15.6-14.8-14.3
	COP (kW/kW)		4.33	4.04
Temp. range of heating	※3 Indoor temp.	D.B.	15~27˚C (59~81˚F)	
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	
	Model/Quantity		P15~P250 / 1~17	P15~P250 / 1~26
Sound pressure level (measured in anechoic room)		dB<A>	57	60
Diameter of refrigerant pipe	Liquid	mm(in.)	ø9.52 (ø3/8) Brazed	ø9.52 (ø3/8) Brazed (ø12.7 (ø1/2) Brazed , total length>=40m)
	Gas	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <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 1220 X 760
		in.	67-3/8 (without legs 65) X 36-1/4 X 29-15/16	67-3/8 (without legs 65) X 48-1/16 X 29-15/16
Net weight		kg(lb)	200 (441)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube	
Compressor	Type		Inverter scroll hermetic compressor	
	Starting method		Inverter	
	Motor output	kW	5.4	8.3
FAN	Air flow rate	m^3/min	185	225
		L/s	3,083	3,750
		cfm	6,532	7,945
	Type X Quantity		Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.46 X 1	0.46 X 1
Protection	High pressure protection		High pressure sensor, High pressure switch 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 lb)	R410A X 11.5kg (26 lb)
Optional parts			joint : CMY-Y102S-G2 Header : CMY-Y104 / 108 / 1010-G	joint : CMY-Y102S / L-G2 Header : CMY-Y104 / 108 / 1010-G

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-EP400YSHM-A(-BS)		PUHY-EP450YSHM-A(-BS)		PUHY-EP500YSHM-A(-BS)	
Power source			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		13.15		13.46	
	Current input	A	17.5-16.6-16.0		22.1-21.0-20.3		22.7-21.5-20.8	
	COP (kW/kW)		4.32		3.80		4.16	
Temp. range of cooling	※4 Indoor	W.B.	15~24˚C (59~75˚F)					
	Outdoor	D.B.	- 5~43˚C (23~109˚F)					
Heating capacity (Nominal)	※2	kW	50.0		56.0		63.0	
	※2	BTU/h	170,600		191,100		215,000	
	Power input	kW	11.54		13.05		15.14	
	Current input	A	19.4-18.5-17.8		22.0-20.9-20.1		25.5-24.2-23.4	
	COP (kW/kW)		4.33		4.29		4.16	
Temp. range of heating	※4 Indoor temp.	D.B.	15~27˚C (59~81˚F)					
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)					
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity					
	Model/Quantity		P15~P250 / 1~35		P15~P250 / 1~39		P15~P250 / 1~43	
Sound pressure level (measured in anechoic room)		dB<A>	60		60		62	
Diameter of refrigerant pipe	Liquid	mm(in.)	ø12.7 (ø1/2) Brazed		ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed	
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Outdoor unit 1 and Outdoor unit 2			PUHY-EP200YHM-A(-BS)	PUHY-EP200YHM-A(-BS)	PUHY-EP200YHM-A(-BS)	PUHY-P250YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-EP300YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension H X W X D		mm	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 1220 X 760
	※3	in.	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg(lb)	200 (441)	200 (441)	200 (441)	200 (441)	200 (441)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube					
Compressor	Type		Inverter scroll hermetic compressor					
	Starting method		Inverter					
	Motor output	kW	5.4	5.4	5.4	6.7	5.4	8.3
FAN	Air flow rate	m^3/min	185	185	185	185	185	225
		L/s	3,083	3,083	3,083	3,083	3,083	3,750
		cfm	6,532	6,532	6,532	6,532	6,532	7,945
	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
	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
Protection	High pressure protection		High pressure sensor, High pressure switch 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 lb)	R410A X 9.0kg (20 lb)	R410A X 9.0kg (20 lb)	R410A X 9.0kg (20 lb)	R410A X 9.0kg (20 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø9.52 (ø3/8) Brazed					ø12.7 (ø1/2) Brazed
	Gas	mm(in.)	ø22.2 (ø7/8) Brazed					ø22.2 (ø7/8) Brazed
Optional parts			Outdoor Twinning kit : CMY-Y100VBK2 joint : CMY-Y102S / L-G2, CMY-Y202-G2 Header : CMY-Y104 / 108 / 1010-G					

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-EP550YSHM-A(-BS)		PUHY-EP600YSHM-A(-BS)		PUHY-EP650YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity ※1 (Nominal) ※1		kW	63.0		69.0		73.0	
		BTU/h	215,000		235,400		249,100	
	Power input	kW	16.32		16.99		18.34	
	Current input	A	27.5-26.1-25.2		28.6-27.2-26.2		30.9-29.4-28.3	
	COP (kW/kW)		3.86		4.06		3.98	
Temp. ※4 range of cooling	Indoor	W.B.	15~24˚C (59~75˚F)					
	Outdoor	D.B.	- 5~43˚C (23~109˚F)					
Heating capacity ※2 (Nominal) ※2		kW	69.0		76.5		81.5	
		BTU/h	235,400		261,000		278,100	
	Power input	kW	17.12		18.93		19.13	
	Current input	A	28.9-27.4-26.4		31.9-30.3-29.2		32.2-30.6-29.5	
	COP (kW/kW)		4.03		4.04		4.26	
Temp. ※4 range of heating	Indoor temp.	D.B.	15~27˚C (59~81˚F)					
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)					
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity					
	Model/Quantity		P15~P250 / 1~47		P15~P250 / 1~50		P15~P250 / 1~50	
Sound pressure level (measured in anechoic room)		dB<A>	62		63		63.5	
Diameter of refrigerant pipe	Liquid	mm(in.)	ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed	
	Gas	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Outdoor unit 1 and Outdoor unit 2			PUHY-P250YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-P350YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension H X W X D ※3		mm	1,710 X 920 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760
		in.	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg(lb)	200 (441)	245 (541)	245 (541)	245 (541)	245 (541)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube					
Compressor	Type		Inverter scroll hermetic compressor					
	Starting method		Inverter					
	Motor output	kW	6.7	8.3	8.3	8.3	8.3	10.3
FAN	Air flow rate	m^3/min	185	225	225	225	225	225
		L/s	3,083	3,750	3,750	3,750	3,750	3,750
		cfm	6,532	7,945	7,945	7,945	7,945	7,945
	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
	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
Protection	High pressure protection		High pressure sensor, High pressure switch 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 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø9.52 (ø3/8) Brazed		ø12.7 (ø1/2) Brazed			ø12.7 (ø1/2) Brazed
	Gas	mm(in.)	ø22.2 (ø7/8) Brazed		ø22.2 (ø7/8) Brazed			ø28.58 (ø1-1/8) Brazed
Optional parts			Outdoor Twinning kit : CMY-Y100VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G					

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-EP700YSHM-A(-BS)			PUHY-EP750YSHM-A(-BS)		
Power source			3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity ※1 (Nominal) ※1		kW	80.0			85.0		
		BTU/h	273,000			290,000		
	Power input	kW	20.99			21.79		
	Current input	A	35.4-33.6-32.4			36.7-34.9-33.6		
	COP (kW/kW)		3.81			3.90		
Temp. ※4 range of cooling	Indoor	W.B.	15~24˚C (59~75˚F)					
	Outdoor	D.B.	- 5~43˚C (23~109˚F)					
Heating capacity ※2 (Nominal) ※2		kW	88.0			95.0		
		BTU/h	300,300			324,100		
	Power input	kW	20.00			22.19		
	Current input	A	33.7-32.0-30.9			37.4-35.5-34.3		
	COP (kW/kW)		4.40			4.28		
Temp. ※4 range of heating	Indoor temp.	D.B.	15~27˚C (59~81˚F)					
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)					
Indoor unit connectable	Total 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>	63			63		
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed		
	Gas	mm(in.)	ø34.93 (ø1-3/8) Brazed			ø34.93 (ø1-3/8) Brazed		
Outdoor unit 1 , Outdoor unit 2 , and Outdoor unit 3			PUHY-EP200YHM-A(-BS)	PUHY-EP200YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-EP200YHM-A(-BS)	PUHY-P250YHM-A(-BS)	PUHY-EP300YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension H X W X D ※3		mm	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 1220 X 760	1,710 X 920 X 760	1,710 X 920 X 760	1,710 X 1220 X 760
		in.	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg(lb)	200 (441)	200 (441)	245 (541)	200 (441)	200 (441)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube					
Compressor	Type		Inverter scroll hermetic compressor					
	Starting method		Inverter					
	Motor output	kW	5.4	5.4	8.3	5.4	6.7	8.3
FAN	Air flow rate	m^3/min	185	185	225	185	185	225
		L/s	3,083	3,083	3,750	3,083	3,083	3,750
		cfm	6,532	6,532	7,945	6,532	6,532	7,945
	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
	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
Protection	High pressure protection		High pressure sensor, High pressure switch 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 lb)	R410A X 9.0kg (20 lb)	R410A X 11.5kg (26 lb)	R410A X 9.0kg (20 lb)	R410A X 9.0kg (20 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø9.52 (ø3/8) Brazed		ø12.7 (ø1/2) Brazed	ø9.52 (ø3/8) Brazed		ø12.7 (ø1/2) Brazed
	Gas	mm(in.)	ø22.2 (ø7/8) Brazed		ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed		ø22.2 (ø7/8) Brazed
Optional parts			Outdoor Twinning kit : CMY-Y300VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G					

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-EP800YSHM-A(-BS)			PUHY-EP850YSHM-A(-BS)		
Power source			3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity ※1 (Nominal) ※1		kW	90.0			96.0		
		BTU/h	307,100			327,600		
	Power input	kW	22.00			24.67		
	Current input	A	37.1-35.2-34.0			41.6-39.5-38.1		
	COP (kW/kW)		4.09			3.89		
Temp. ※4 range of cooling	Indoor	W.B.	15~24˚C (59~75˚F)					
	Outdoor	D.B.	- 5~43˚C (23~109˚F)					
Heating capacity ※2 (Nominal) ※2		kW	100.0			108.0		
		BTU/h	341,200			368,500		
	Power input	kW	23.41			25.59		
	Current input	A	39.5-37.5-36.1			43.1-41.0-39.5		
	COP (kW/kW)		4.27			4.22		
Temp. ※4 range of heating	Indoor temp.	D.B.	15~27˚C (59~81˚F)					
	Outdoor temp.	W.B.	-20~15.5˚C (-4~60˚F)					
Indoor unit connectable	Total 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		
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed			ø19.05 (ø3/4) Brazed		
	Gas	mm(in.)	ø34.93 (ø1-3/8) Brazed			ø41.28 (ø1-5/8) Brazed		
Outdoor unit 1 , Outdoor unit 2 , and Outdoor unit 3			PUHY-EP200YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-P250YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-EP300YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>					
External dimension H X W X D ※3		mm	1,710 X 920 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 920 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760
		in.	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 36-1/4 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg(lb)	200 (441)	245 (541)	245 (541)	200 (441)	245 (541)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube					
Compressor	Type		Inverter scroll hermetic compressor					
	Starting method		Inverter					
	Motor output	kW	5.4	8.3	8.3	6.7	8.3	8.3
FAN	Air flow rate	m^3/min	185	225	225	185	225	225
		L/s	3,083	3,750	3,750	3,083	3,750	3,750
		cfm	6,532	7,945	7,945	6,532	7,945	7,945
	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
	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
Protection	High pressure protection		High pressure sensor, High pressure switch 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 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 9.0kg (20 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø9.52 (ø3/8) Brazed	ø12.7 (ø1/2) Brazed		ø9.52 (ø3/8) Brazed	ø12.7 (ø1/2) Brazed	
	Gas	mm(in.)	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed		ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed	
Optional parts			Outdoor Twinning kit : CMY-Y300VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G					

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PUHY-EP900YSHM-A(-BS)		
Power source			3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity ※1 (Nominal) ※1		kW	101.0		
		BTU/h	344,600		
	Power input	kW	24.87		
	Current input	A	41.9-39.8-38.4		
	COP (kW/kW)		4.06		
Temp. ※4 range of cooling	Indoor	W.B.	15~24˚C (59~75˚F)		
	Outdoor	D.B.	- 5~43˚C (23~109˚F)		
Heating capacity ※2 (Nominal) ※2		kW	113.0		
		BTU/h	385,600		
	Power input	kW	27.90		
	Current input	A	47.0-44.7-43.1		
	COP (kW/kW)		4.05		
Temp. ※4 range of heating	Indoor temp.	D.B.	15~27˚C (59~81˚F)		
	Outdoor temp.	W.B.	-20~15.5˚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>	65		
Diameter of refrigerant pipe	Liquid	mm(in.)	ø19.05 (ø3/4) Brazed		
	Gas	mm(in.)	ø41.28 (ø1-5/8) Brazed		
Outdoor unit 1 , Outdoor unit 2 , and Outdoor unit 3			PUHY-EP300YHM-A(-BS)	PUHY-EP300YHM-A(-BS)	PUHY-EP300YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension H X W X D ※3		mm	1,710 X 1220 X 760	1,710 X 1220 X 760	1,710 X 1220 X 760
		in.	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16	67-3/8 X 48-1/16 X 29-15/16
Net weight		kg(lb)	245 (541)	245 (541)	245 (541)
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic compressor		
	Starting method		Inverter		
	Motor output	kW	8.3	8.3	8.3
FAN	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	0.46 X 1	0.46 X 1	0.46 X 1
Protection	High pressure protection		High pressure sensor, High pressure switch 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 11.5kg (26 lb)	R410A X 11.5kg (26 lb)	R410A X 11.5kg (26 lb)
Pipe between unit distributor	Liquid	mm(in.)	ø12.7 (ø1/2) Brazed		
	Gas	mm(in.)	ø22.2 (ø7/8) Brazed		
Optional parts			Outdoor Twinning kit : CMY-Y300VBK2 joint : CMY-Y102S / L-G2, CMY-Y202 / 302-G2 Header : CMY-Y104 / 108 / 1010-G		

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

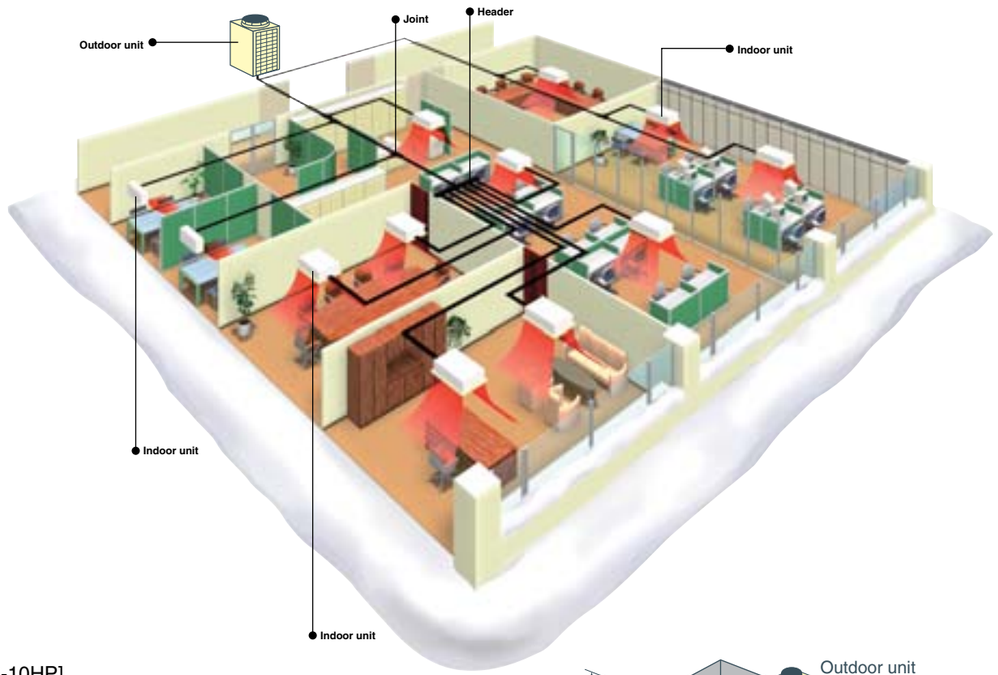
※3 Height without legs 1650mm
(65 in.)

※4 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

OUTDOOR UNIT
ZUBADAN (Heat Pump) series(Y)
Cooling or Heating
PUHY-HP Y(S)HM-A(-BS)

Bringing a year round comfort solutions to extreme climates

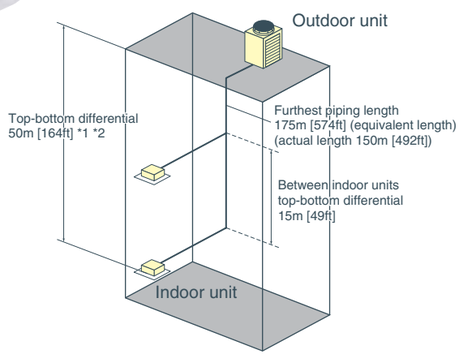
CITY MULTI ZUBADAN series combines the ultimate in application flexibility and powerful cooling and heating capabilities to deliver precise comfort even in the coldest days of the year down to -25℃.
The technology behind this is a Flash Injection circuit which provides optimum amount of refrigerant to 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.



[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	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]*2
Indoor/outdoor (outdoor lower)	40 [131]*2
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.

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		P15 ~ P250 / 1 ~ 43	
Sound pressure level (measured in anechoic room)		dB<A>	56	57	59		60	
Diameter of refrigerant pipe	Liquid pipe	mm(in.)	ø12.7(ø1/2) Brazed	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed		ø15.88 (ø5/8) Brazed	
	Gas pipe	mm(in.)	ø19.05(ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Model					PUHY-HP200YHM-A(-BS)	PUHY-HP200YHM-A(-BS)	PUHY-HP250YHM-A(-BS)	PUHY-HP250YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets <MUNSELL 5Y 8/1 or similar>			
External dimension H X W X D		mm	1,650 X 920 X 760	1,650 X 920 X 760	1,650 X 920 X 760	1,650 X 920 X 760	1,650 X 920 X 760	1,650 X 920 X 760
		in.	65 X 36-1/4 X 29-15/16	65 X 36-1/4 X 29-15/16	65 X 36-1/4 X 29-15/16	65 X 36-1/4 X 29-15/16	65 X 36-1/4 X 29-15/16	65 X 36-1/4 X 29-15/16
Net weight		kg(lb)	220 (486)	220 (486)	220 (486)	220 (486)	220 (486)	220 (486)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor			
	Starting method		Inverter		Inverter			
	Motor output	kW	5.3	6.7	5.3	5.3	6.7	6.7
FAN ※3	Air flow rate	m^3/min	225	225	225	225	225	225
		L/s	3,750	3,750	3,750	3,750	3,750	3,750
		cfm	7,945	7,945	7,945	7,945	7,945	7,945
	Type × Quantity		Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1
	Motor output	kW	0.92 × 1	0.92 × 1	0.92 × 1	0.92 × 1	0.92 × 1	0.92 × 1
	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		High pressure sensor, High pressure switch at 4.15 MPa (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			
Refrigerant	Type × Original charge		R410A x 9.0kg (20lbs)	R410A × 9.0kg (20 lbs)	R410A X 9.0kg (20 lbs)	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	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare
	Gas pipe	mm(in.)	-	-	ø19.05 (ø3/4) Brazed	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed
Optional parts			Joint : CMY-Y102S-G2 Header : CMY-Y104/108/1010-G		Outdoor Twinning kit : CMY-Y100VBK2 Joint : CMY-Y102S/L-G2, CMY-Y202-G2 Header : CMY-Y104/108/1010-G			

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

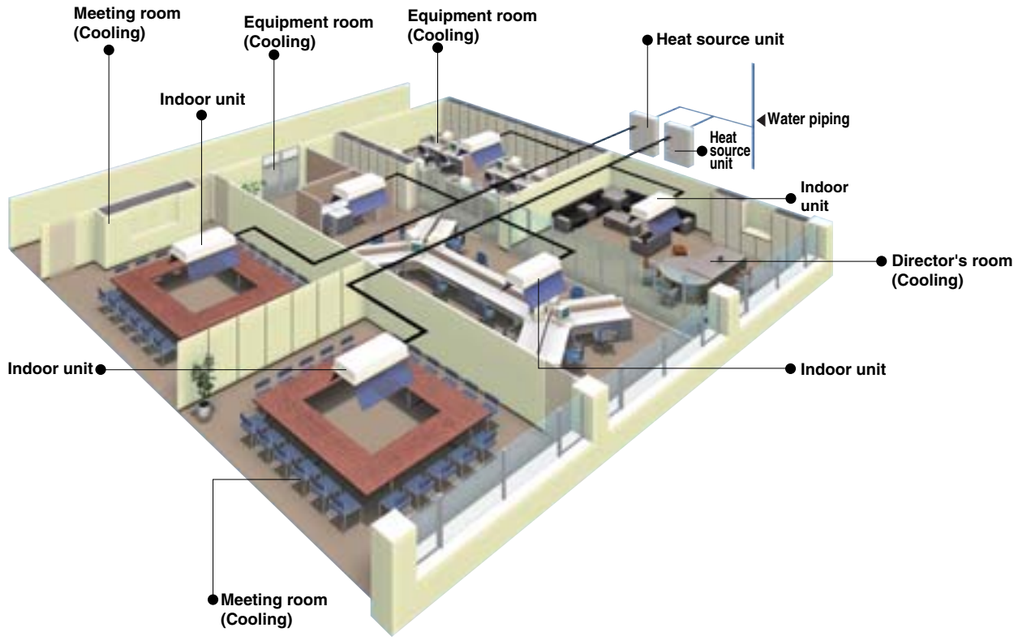
※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

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

OUTDOOR UNIT
WY (Heat Pump) series
Cooling or Heating
PQHY-P Y(S)GM-A

Water energy source system allows switching between heating and cooling.

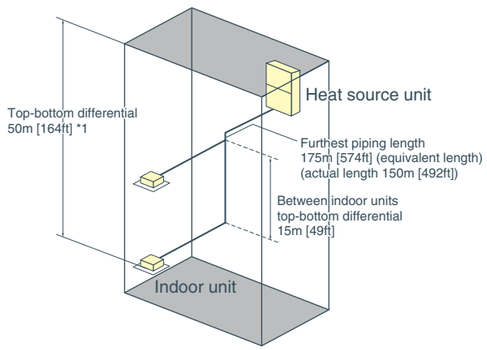
The WY-Series has all the benefits of the Y-Series using water source condensing units.
Condensing units can be situated indoors allowing greater design flexibility and no limitation on building size. Depending on capacity, up to 13 to 24 indoor units can be connected to a single condensing unit with 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.



[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	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].

HEAT SOURCE UNIT
WY (Heat Pump) Series
PQHY-P Y(S)GM-A

▸Specifications

			PQHY-P200YGM-A		PQHY-P250YGM-A	
			Cooling	Heating	Cooling	Heating
Capacity		kW	22.4	25.0	28.0	31.5
		BTU/h	76,400	85,300	95,500	107,500
Power source			3N~ 380/400/415V 50/60Hz			
Power input		kW	4.79	4.69	5.95	5.80
Current		A	8.0/7.6/7.4	7.9/7.5/7.2	10.0/9.5/9.1	9.7/9.3/8.9
COP		(kW/kW)	4.68		4.71	
Compressor	Type		Hermetic		Hermetic	
	Motor output	kW	5.0		6.0	
Heat exchanger	Type		Double coil		Double coil	
	Water volume in the coil	ℓ	9.5		10.5	
Circulating water	Volume	m^3/h	4.56		5.76	
		cfh	161		203	
	Pressure drop	kPa	16.5		19.5	
Refrigerant / Lubricant			R410A/MEL32			
External finish			Steel plate acrylic paint			
External dimension H x W x D		mm(in.)	1,800 (70-7/8) x 990 (39) x 550 (21-11/16)			
Protection devices	High pressure protection		4.15MPa			
	Compressor		Over-current protection, Over-heat protection			
	Inverter		Over-current protection, Thermal protection			
Refrigerant piping diameter	Liquid pipe		ø9.52 Flare		ø9.52 Flare (ø12.7 for over 90m)	
	Gas pipe		ø19.05 Brazed		ø22.2 Brazed	
Indoor unit	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		Model P20~P250/1~13		Model P20~P250/1~16	
Sound pressure level		dB<A>	46		47	
Net weight		kg(lbs.)	272(600)		275(607)	
Operating temperature range			Indoor :15˚CWB~24˚CWB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CDB~27˚CDB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CWB~24˚CWB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CDB~27˚CDB Circulating Water :10˚CDB~45˚CDB

Set name			PQHY-P400YSGM-A		PQHY-P500YSGM-A	
			Cooling	Heating	Cooling	Heating
Capacity		kW	45.0	50.0	56.0	63.0
		BTU/h	153,500	170,600	191,100	215,000
Power source			3N~ 380/400/415V 50/60Hz			
Power input		kW	11.35	11.01	15.06	13.60
Current		A	19.1/18.2/17.5	18.5/17.6/17.0	25.4/24.2/23.3	22.9/21.8/21.0
COP		(kW/kW)	3.96		3.72	
Refrigerant piping diameter		Liquid / Gas	ø12.7 Flare/ø28.58 Brazed		ø15.88 Flare/ø28.58 Brazed	
Compressor	Type		Hermetic		Hermetic	
	Motor output	kW	9.7		11.6	
Heat exchanger	Type		Double coil		Double coil	
	Water volume in the coil	ℓ	17.5		19.5	
Circulating water	Volume	m^3/h	9.12		11.52	
		cfh	322		407	
	Pressure drop	kPa	16.5		19.5	
Indoor unit	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		Model P20~P250/1~22		Model P20~P250/1~24	
Sound pressure level		dB<A>	50		53	
Operating temperature range			Indoor :15˚CWB~24˚CWB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CDB~27˚CDB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CWB~24˚CWB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CDB~27˚CDB Circulating Water :10˚CDB~45˚CDB
Model			PQY-P01YGM-A (Comp Unit)	PQHY-P400YGM-A (Heat exchanger Unit)	PQY-P01YGM-A (Comp Unit)	PQRY-P500YGM-A (Heat exchanger Unit)
Refrigerant / Lubricant			R410A/MEL32	-	R410A/MEL32	-
External finish			Steel plate acrylic paint			
External dimension H x W x D		mm(in.)	1,800 (70-7/8) x 990 (39) x 550 (21-11/16)			
Protection devices	High pressure protection		4.15MPa	-	4.15MPa	-
	Compressor		-	-	Over-current protection Over-heat protection	-
	Inverter		Over-current protection Thermal protection	-	Over-current protection Thermal protection	-
Refrigerant piping diameter	Heat source unit connection Pipe		9.52 Flare/ø19.05 Flare/ø28.58 Brazed			
Net weight		kg(lbs.)	208(459)	244(538)	208(459)	248(547)

Note:

1.Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27˚C (81˚F) DB/19˚CWB Circulating Water : 30˚C (80˚F)
Heating Indoor : 20˚C (68˚F) DB Circulating Water : 20˚C (68˚F)
Pipe length : 7.5m (24-9/16 ft) Height difference:0m

2.The ambient temperature of heat source unit has to be kept below 40˚C (104˚F) (dry bulb).
The ambient relative humidity of heat source unit has to be kept below 80%.

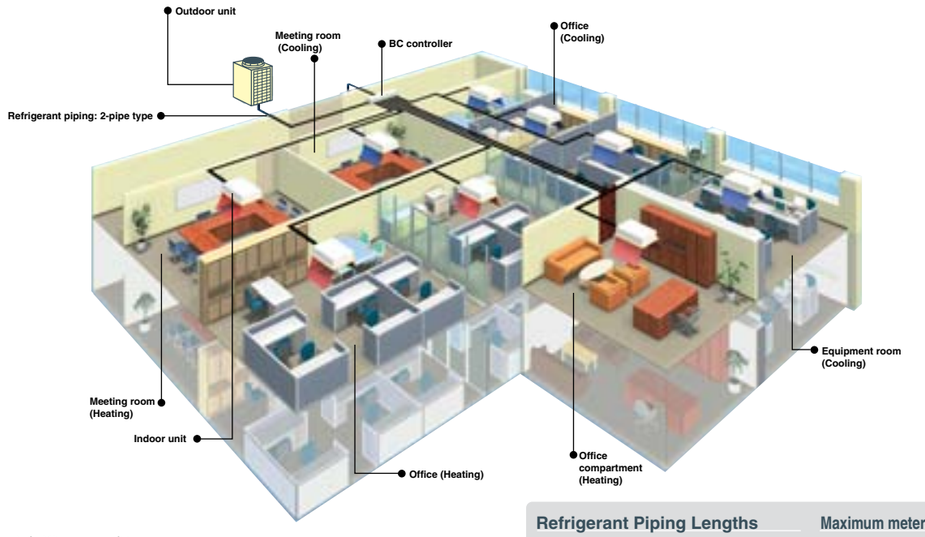
3.This unit can not be installed in the outdoor. (No protection against the weather.)

OUTDOOR UNIT
R2 (Heat recovery) Series
Simultaneous Cooling and Heating

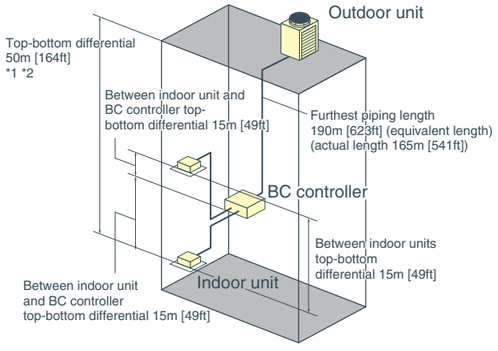
PURY-P Y(S)HM-A(-BS)
PURY-EP Y(S)HM-A(-BS)

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.



[8-32HP (R2 series)]
[8-24HP (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.

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

▸Specifications

			PURY-P200YHM-A(-BS)	PURY-P250YHM-A(-BS)	PURY-P300YHM-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	5.77	7.73	9.25
	Current input	A	9.7-9.2-8.9	13.0-12.3-11.9	15.6-14.8-14.2
	COP (kW/kW)		3.88	3.62	3.62
Temp. range of cooling ※3	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	37.5
	※2	BTU/h	85,300	107,500	128,000
	Power input	kW	6.14	7.83	9.58
	Current input	A	10.3-9.8-9.4	13.2-12.5-12.1	16.1-15.3-14.8
	COP (kW/kW)		4.07	4.02	3.91
Temp. range of heating ※3	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)		
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)		
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor 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>	56	57	59
Diameter of refrigerant pipe	High pressure	mm(in.)	ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed	ø19.05 (ø3/4) Brazed
	Low pressure	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) <MUNSELL 5Y 8/1>		
External dimension H X W X D		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
Net weight		kg (lb)	220 (485)	235 (518)	240 (529)
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic compressor		
	Starting method		Inverter		
	Motor output	kW	5.4	6.7	8.2
FAN	Air flow rate	m^3/min	185	185	185
		L/s	3,083	3,083	3,083
		cfm	6,532	6,532	6,532
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)		
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		
	Compressor		Over-heat protection, Over-current protection		
Refrigerant	Type X Original charge		R410A X 8.0kg (18 lb)	R410A X 10.5kg (24 lb)	R410A X 10.5kg (24 lb)
Optional parts			joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-R160-J BC controller : CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB		joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J BC controller : CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

			PURY-P350YHM-A(-BS)	PURY-P400YHM-A(-BS)
Power source			3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	※1	kW	40.0	45.0
	※1	BTU/h	136,500	153,500
	Power input	kW	12.47	13.74
	Current input	A	21.0-19.9-19.2	23.1-22.0-21.2
	COP (kW/kW)		3.20	3.27
Temp. range of cooling ※3	Indoor	W.B.	15 ~ 24˚C (59 ~ 75˚F)	
	Outdoor	D.B.	- 5 ~ 43˚C (23 ~ 109˚F)	
Heating capacity (Nominal)	※2	kW	45.0	50.0
	※2	BTU/h	153,500	170,600
	Power input	kW	12.47	13.71
	Current input	A	21.0-19.9-19.2	23.1-21.9-21.1
	COP (kW/kW)		3.60	3.64
Temp. range of heating ※3	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)	
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)	
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor unit capacity	
	Model/Quantity		P15 ~ P250 / 1 ~ 35	P15 ~ P250 / 1 ~ 40
Sound pressure level (measured in anechoic room)		dB<A>	60	61
Diameter of refrigerant pipe	High pressure	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed
	Low pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) <MUNSELL 5Y 8/1>	
External dimension H X W X D		mm	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
Net weight		kg (lb)	265 (584)	265 (584)
Heat exchanger			Salt-resistant cross fin & copper tube	
Compressor	Type		Inverter scroll hermetic compressor	
	Starting method		Inverter	
	Motor output	kW	10.3	10.5
FAN	Air flow rate	m^3/min	225	225
		L/s	3,750	3,750
		cfm	7,945	7,945
	Type X Quantity		Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection, Over-current protection	
Refrigerant	Type X Original charge		R410A X 13.0kg (29 lb)	R410A X 13.0kg (29 lb)
Optional parts			joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J BC controller : CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB	joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PURY-P450YSHM-A(-BS)		PURY-P500YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	※1	kW	50.0		56.0	
	※1	BTU/h	170,600		191,100	
	Power input	kW	14.14		16.75	
	Current input	A	23.8-22.6-21.8		28.2-26.8-25.8	
	COP (kW/kW)		3.53		3.34	
Temp. range of cooling ※3	Indoor	W.B.	15 ~ 24˚C (59 ~ 75˚F)			
	Outdoor	D.B.	- 5 ~ 43˚C (23 ~ 109˚F)			
Heating capacity (Nominal)	※2	kW	56.0		63.0	
	※2	BTU/h	191,100		215,000	
	Power input	kW	14.71		16.79	
	Current input	A	24.8-23.5-22.7		28.3-26.9-25.9	
	COP (kW/kW)		3.80		3.75	
Temp. range of heating ※3	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)			
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)			
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor unit capacity			
	Model/Quantity		P15 ~ P250 / 1 ~ 45		P15 ~ P250 / 1 ~ 50 (Connectable branch pipe number is max. 48.)	
Sound pressure level (measured in anechoic room)		dB<A>	60		60	
Diameter of refrigerant pipe	High pressure	mm(in.)	ø22.2 (ø7/8) Brazed		ø22.2 (ø7/8) Brazed	
	Low pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Model			PURY-P200YHM-A(-BS)	PURY-P250YHM-A(-BS)	PURY-P250YHM-A(-BS)	PURY-P250YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1>			
External dimension H X W X D		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
Net weight		kg(lb)	220 (485)	235 (518)	235 (518)	235 (518)
Heat exchanger			Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor			
	Starting method		Inverter			
	Motor output	kW	5.4	6.7	6.7	6.7
FAN	Air flow rate	m^3/min	185	185	185	185
		L/s	3,083	3,083	3,083	3,083
		cfm	6,532	6,532	6,532	6,532
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			
	Compressor		Over-heat protection, Over-current protection			
Refrigerant	Type X Original charge		R410A X 8.0kg (18 lb)	R410A X 10.5kg (24 lb)	R410A X 10.5kg (24 lb)	R410A X 10.5kg (24 lb)
Pipe between unit distributor	High pressure	mm(in.)	ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed		
	Low pressure	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed		
Optional parts			Outdoor Twinning kit : CMY-R100VBK joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB			

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PURY-P550YSHM-A(-BS)		PURY-P600YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity ※1 (Nominal) ※1		kW	63.0		69.0	
		BTU/h	215,000		235,400	
	Power input	kW	18.68		19.64	
	Current input	A	31.5-29.9-28.8		33.1-31.4-30.3	
	COP (kW/kW)		3.37		3.51	
Temp. ※3 range of cooling	Indoor	W.B.	15 ~ 24˚C (59 ~ 75˚F)			
	Outdoor	D.B.	- 5 ~ 43˚C (23 ~ 109˚F)			
Heating capacity ※2 (Nominal) ※2		kW	69.0		76.5	
		BTU/h	235,400		261,000	
	Power input	kW	18.81		20.83	
	Current input	A	31.7-30.1-29.0		35.1-33.4-32.1	
	COP (kW/kW)		3.66		3.67	
Temp. ※3 range of heating	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)			
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)			
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor unit capacity			
	Model/Quantity		P15 ~ P250 / 2 ~ 50 (Connectable branch pipe number is max. 48.)			
Sound pressure level (measured in anechoic room)		dB<A>	61		62	
Diameter of refrigerant pipe	High pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
	Low pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Model			PURY-P250YHM-A(-BS)	PURY-P300YHM-A(-BS)	PURY-P300YHM-A(-BS)	PURY-P300YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1>			
External dimension H X W X D		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
Net weight		kg(lb)	235 (518)	240 (529)	240 (529)	240 (529)
Heat exchanger			Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor			
	Starting method		Inverter			
	Motor output	kW	6.7	8.2	8.2	8.2
FAN	Air flow rate	m^3/min	185	185	185	185
		L/s	3,083	3,083	3,083	3,083
		cfm	6,532	6,532	6,532	6,532
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			
	Compressor		Over-heat protection, Over-current protection			
Refrigerant	Type X Original charge		R410A X 10.5kg (24 lb)	R410A X 10.5kg (24 lb)	R410A X 10.5kg (24 lb)	R410A X 10.5kg (24 lb)
Pipe between unit distributor	High pressure	mm(in.)	ø19.05 (ø3/4) Brazed			
	Low pressure	mm(in.)	ø22.2 (ø7/8) Brazed			
Optional parts			Outdoor Twinning kit : CMY-R100VBK joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB			

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PURY-P650YSHM-A(-BS)		PURY-P700YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity ※1 (Nominal) ※1		kW	73.0		80.0	
		BTU/h	249,100		273,000	
	Power input	kW	22.80		24.72	
	Current input	A	38.4-36.5-35.2		41.7-39.6-38.2	
	COP (kW/kW)		3.20		3.23	
Temp. ※3 range of cooling	Indoor	W.B.	15 ~ 24˚C (59 ~ 75˚F)			
	Outdoor	D.B.	- 5 ~ 43˚C (23 ~ 109˚F)			
Heating capacity ※2 (Nominal) ※2		kW	81.5		88.0	
		BTU/h	278,100		300,300	
	Power input	kW	22.55		24.30	
	Current input	A	38.0-36.1-34.8		41.0-38.9-37.5	
	COP (kW/kW)		3.61		3.62	
Temp. ※3 range of heating	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)			
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)			
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor unit capacity			
	Model/Quantity		P15 ~ P250 / 2 ~ 50 (Connectable branch pipe number is max. 48.)			
Sound pressure level (measured in anechoic room)		dB<A>	62.5		63	
Diameter of refrigerant pipe	High pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
	Low pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø34.93 (ø1-3/8) Brazed	
Model			PURY-P300YHM-A(-BS)	PURY-P350YHM-A(-BS)	PURY-P300YHM-A(-BS)	PURY-P400YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1>			
External dimension H X W X D		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 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 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
Net weight		kg(lb)	240 (529)	265 (584)	240 (529)	265 (584)
Heat exchanger			Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor			
	Starting method		Inverter			
	Motor output	kW	8.2	10.3	8.2	10.5
FAN	Air flow rate	m^3/min	185	225	185	225
		L/s	3,083	3,750	3,083	3,750
		cfm	6,532	7,945	6,532	7,945
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			
	Compressor		Over-heat protection, Over-current protection			
Refrigerant	Type X Original charge		R410A X 10.5kg (24 lb)	R410A X 13.0kg (29 lb)	R410A X 10.5kg (24 lb)	R410A X 13.0kg (29 lb)
Pipe between unit distributor	High pressure	mm(in.)	ø19.05 (ø3/4) Brazed	ø19.05 (ø3/4) Brazed	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed
	Low pressure	mm(in.)	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø22.2 (ø7/8) Brazed	ø28.58 (ø1-1/8) Brazed
Optional parts			Outdoor Twinning kit : CMY-R100VBK joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB		Outdoor Twinning kit : CMY-R200VBK joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J Main BC controller : CMB-P1016V-HA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB	

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

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

▸Specifications

Set name			PURY-P750YSHM-A(-BS)		PURY-P800YSHM-A(-BS)	
Power source			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	27.86		29.75	
	Current input	A	47.0-44.6-43.0		50.2-47.7-45.9	
	COP (kW/kW)		3.05		3.02	
Temp. range of cooling ※3	Indoor	W.B.	15 ~ 24˚C (59 ~ 75˚F)			
	Outdoor	D.B.	- 5 ~ 43˚C (23 ~ 109˚F)			
Heating capacity (Nominal)	※2	kW	95.0		100.0	
	※2	BTU/h	324,100		341,200	
	Power input	kW	26.36		27.64	
	Current input	A	44.4-42.2-40.7		46.6-44.3-42.7	
	COP (kW/kW)		3.60		3.61	
Temp. range of heating ※3	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)			
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)			
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor unit capacity			
	Model/Quantity		P15 ~ P250 / 2 ~ 50 (Connectable branch pipe number is max. 48.)			
Sound pressure level (measured in anechoic room)		dB<A>	63.5		64	
Diameter of refrigerant pipe	High pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
	Low pressure	mm(in.)	ø34.93 (ø1-3/8) Brazed		ø34.93 (ø1-3/8) Brazed	
Model			PURY-P350YHM-A(-BS)	PURY-P400YHM-A(-BS)	PURY-P400YHM-A(-BS)	PURY-P400YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1>			
External dimension H X W X D		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
		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
Net weight		kg(lb)	265 (584)	265 (584)	265 (584)	265 (584)
Heat exchanger			Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor			
	Starting method		Inverter			
	Motor output	kW	10.3	10.5	10.5	10.5
FAN	Air flow rate	m^3/min	225	225	225	225
		L/s	3,750	3,750	3,750	3,750
		cfm	7,945	7,945	7,945	7,945
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			
	Compressor		Over-heat protection, Over-current protection			
Refrigerant	Type X Original charge		R410A X 13.0kg (29 lb)	R410A X 13.0kg (29 lb)	R410A X 13.0kg (29 lb)	R410A X 13.0kg (29 lb)
Pipe between unit distributor	High pressure	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed	ø22.2 (ø7/8) Brazed	
	Low pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed	ø28.58 (ø1-1/8) Brazed	
Optional parts			Outdoor Twinning kit : CMY-R200VBK joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J Main BC controller : CMB-P1016V-HA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB			

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

OUTDOOR UNIT
R2 Series
PURY-EP YHM-A(-BS)

▸Specifications

			PURY-EP200YHM-A(-BS)	PURY-EP300YHM-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	5.23	8.33
	Current input	A	8.8-8.3-8.0	14.0-13.3-12.8
	COP (kW/kW)		4.28	4.02
Temp. range of cooling ※3	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	37.5
	※2	BTU/h	85,300	128,000
	Power input	kW	5.81	9.37
	Current input	A	9.8-9.3-8.9	15.8-15.0-14.4
	COP (kW/kW)		4.30	4.00
Temp. range of heating ※3	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)	
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)	
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor unit capacity	
	Model/Quantity		P15 ~ P250 / 1 ~ 20	P15 ~ P250 / 1 ~ 30
Sound pressure level (measured in anechoic room)		dB<A>	57	60
Diameter of refrigerant pipe	High pressure	mm(in.)	ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed
	Low pressure	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1>	
External dimension H X W X D		mm	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 48-1/16 X 29-15/16
Net weight		kg(lb)	235 (518)	265 (584)
Heat exchanger			Salt-resistant cross fin & copper tube	
Compressor	Type		Inverter scroll hermetic compressor	
	Starting method		Inverter	
	Motor output	kW	5.4	8.0
FAN	Air flow rate	m^3/min	185	225
		L/s	3,083	3,750
		cfm	6,532	7,945
	Type X Quantity		Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection, Over-current protection	
Refrigerant	Type X Original charge		R410A X 10.5kg (24 lb)	R410A X 13.0kg (29 lb)
Optional parts			joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-R160-J BC controller : CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB	

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

OUTDOOR UNIT
R2 Series
PURY-EP YSHM-A(-BS)

▸ Specifications

Set name			PURY-EP400YSHM-A(-BS)		PURY-EP450YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal) ※1		kW	45.0		50.0	
		BTU/h	153,500		170,600	
	Power input	kW	10.57		13.09	
	Current input	A	17.8-16.9-16.3		22.0-20.9-20.2	
	COP (kW/kW)		4.25		3.81	
Temp. range of cooling ※3	Indoor	W.B.	15 ~ 24˚C (59 ~ 75˚F)			
	Outdoor	D.B.	- 5 ~ 43˚C (23 ~ 109˚F)			
Heating capacity (Nominal) ※2		kW	50.0		56.0	
		BTU/h	170,600		191,100	
	Power input	kW	11.73		13.77	
	Current input	A	19.8-18.8-18.1		23.2-22.0-21.2	
	COP (kW/kW)		4.26		4.06	
Temp. range of heating ※3	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)			
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)			
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor unit capacity			
	Model/Quantity		P15 ~ P250 / 1 ~40		P15 ~ P250 / 1 ~ 45	
Sound pressure level (measured in anechoic room)		dB<A>	60		60	
Diameter of refrigerant pipe	High pressure	mm(in.)	ø22.2 (ø7/8) Brazed		ø22.2 (ø7/8) Brazed	
	Low pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Model			PURY-EP200YHM-A(-BS)	PURY-EP200YHM-A(-BS)	PURY-EP200YHM-A(-BS)	PURY-P250YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1>			
External dimension H X W X D		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
Net weight		kg(lb)	235 (518)	235 (518)	235 (518)	235 (518)
Heat exchanger			Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor			
	Starting method		Inverter			
	Motor output	kW	5.4	5.4	5.4	6.7
FAN	Air flow rate	m^3/min	185	185	185	185
		L/s	3,083	3,083	3,083	3,083
		cfm	6,532	6,532	6,532	6,532
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			
	Compressor		Over-heat protection, Over-current protection			
Refrigerant	Type X Original charge		R410A X 10.5kg (24 lb)	R410A X 10.5kg (24 lb)	R410A X 10.5kg (24 lb)	R410A X 10.5kg (24 lb)
Pipe between unit distributor	High pressure	mm(in.)	ø15.88 (ø5/8) Brazed			ø19.05 (ø3/4) Brazed
	Low pressure	mm(in.)	ø19.05 (ø3/4) Brazed			ø22.2 (ø7/8) Brazed
Optional parts			Outdoor Twinning kit : CMY-R100VBK joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB			

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

OUTDOOR UNIT
R2 Series
PURY-EP YSHM-A(-BS)

▸ Specifications

Set name			PURY-EP500YSHM-A(-BS)		PURY-EP550YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal) ※1		kW	56.0		63.0	
		BTU/h	191,100		215,000	
	Power input	kW	13.70		16.38	
	Current input	A	23.1-21.9-21.1		27.6-26.2-25.3	
	COP (kW/kW)		4.08		3.84	
Temp. range of cooling ※3	Indoor	W.B.	15 ~ 24˚C (59 ~ 75˚F)			
	Outdoor	D.B.	- 5 ~ 43˚C (23 ~ 109˚F)			
Heating capacity (Nominal) ※2		kW	63.0		69.0	
		BTU/h	215,000		235,400	
	Power input	kW	15.33		17.37	
	Current input	A	25.8-24.5-23.6		29.3-27.8-26.8	
	COP (kW/kW)		4.10		3.97	
Temp. range of heating ※3	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)			
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)			
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor unit capacity			
	Model/Quantity		P15 ~ P250 / 1 ~ 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>	62		62	
Diameter of refrigerant pipe	High pressure	mm(in.)	ø22.2 (ø7/8) Brazed		ø28.58 (ø1-1/8) Brazed	
	Low pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed		ø28.58 (ø1-1/8) Brazed	
Model			PURY-EP200YHM-A(-BS)	PURY-EP300YHM-A(-BS)	PURY-P250YHM-A(-BS)	PURY-EP300YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1>			
External dimension H X W X D		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 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 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
Net weight		kg(lb)	235 (518)	265 (584)	235 (518)	265 (584)
Heat exchanger			Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic compressor			
	Starting method		Inverter			
	Motor output	kW	5.4	8.0	6.7	8.0
FAN	Air flow rate	m^3/min	185	225	185	225
		L/s	3,083	3,750	3,083	3,750
		cfm	6,532	7,945	6,532	7,945
	Type X Quantity		Propeller fan X 1	Propeller fan X 1	Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			
	Compressor		Over-heat protection, Over-current protection			
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)			
Refrigerant	Type X Original charge		R410A X 10.5kg (24 lb)	R410A X 13.0kg (29 lb)	R410A X 10.5kg (24 lb)	R410A X 13.0kg (29 lb)
Pipe between unit distributor	High pressure	mm(in.)	ø15.88 (ø5/8) Brazed	ø19.05 (ø3/4) Brazed		
	Low pressure	mm(in.)	ø19.05 (ø3/4) Brazed	ø22.2 (ø7/8) Brazed		
Optional parts			Outdoor Twinning kit : CMY-R100VBK joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB			

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

OUTDOOR UNIT
R2 Series
PURY-EP YSHM-A(-BS)

▸ Specifications

Set name			PURY-EP600YSHM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal) ※1		kW	69.0	
		BTU/h	235,400	
	Power input	kW	17.00	
	Current input	A	28.6-27.2-26.2	
	COP (kW/kW)		4.05	
Temp. range of cooling ※3	Indoor	W.B.	15 ~ 24˚C (59 ~ 75˚F)	
	Outdoor	D.B.	- 5 ~ 43˚C (23 ~ 109˚F)	
Heating capacity (Nominal) ※2		kW	76.5	
		BTU/h	261,000	
	Power input	kW	19.12	
	Current input	A	32.2-30.6-29.5	
	COP (kW/kW)		4.00	
Temp. range of heating ※3	Indoor temp.	D.B.	15 ~ 27˚C (59 ~ 81˚F)	
	Outdoor temp.	W.B.	-20 ~ 15.5˚C (-4 ~ 60˚F)	
Indoor unit connectable	Total capacity		50 ~ 150% of outdoor unit capacity	
	Model/Quantity		P15 ~ P250 / 2 ~ 50 (Connectable branch pipe number is max. 48.)	
Sound pressure level (measured in anechoic room)		dB<A>	63	
Diameter of refrigerant pipe	High pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed	
	Low pressure	mm(in.)	ø28.58 (ø1-1/8) Brazed	
Model			PURY-EP300YHM-A(-BS)	PURY-EP300YHM-A(-BS)
External finish			Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 5Y 8/1>	
External dimension H X W X D		mm	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
Net weight		kg(lb)	265 (584)	265 (584)
Heat exchanger			Salt-resistant cross fin & copper tube	
Compressor	Type		Inverter scroll hermetic compressor	
	Starting method		Inverter	
	Motor output	kW	8.0	8.0
FAN	Air flow rate	m^3/min	225	225
		L/s	3,750	3,750
		cfm	7,945	7,945
	Type X Quantity		Propeller fan X 1	Propeller fan X 1
	Motor output	kW	0.92	0.92
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection, Over-current protection	
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)	
Refrigerant	Type X Original charge		R410A X 13.0kg (29 lb)	R410A X 13.0kg (29 lb)
Pipe between unit distributor	High pressure	mm(in.)	ø19.05 (ø3/4) Brazed	
	Low pressure	mm(in.)	ø22.2 (ø7/8) Brazed	
Optional parts			Outdoor Twinning kit : CMY-R100VBK joint : CMY-Y102S-G2, CMY-Y102L-G2, CMY-Y202-G2, CMY-R160-J Main BC controller : CMB-P108, 1010, 1013, 1016V-GA Sub BC controller : CMB-P104, 108V-GB, CMB-P1016V-HB	

Note:

※1 Nominal cooling conditions
Indoor 27˚C (81˚F) DB/19˚C (66˚F) WB, Outdoor 35˚C (95˚F) DB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

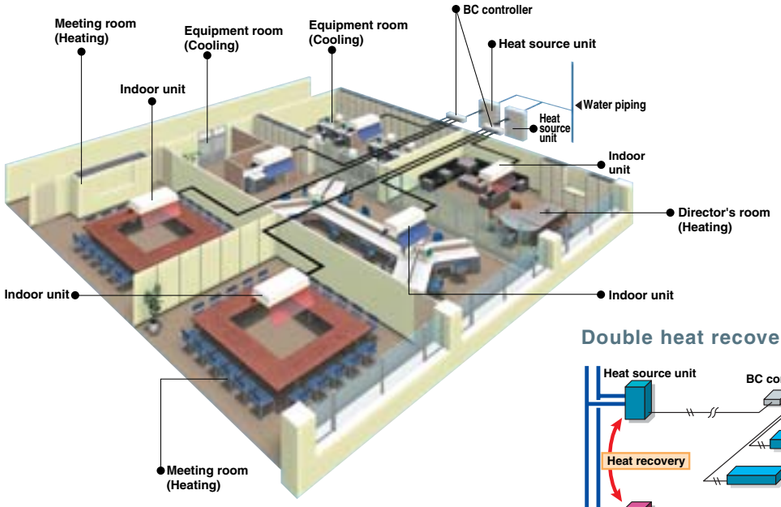
※2 Nominal heating conditions
Indoor 20˚C (68˚F) DB,Outdoor 7˚C (45˚F) DB/6˚C (43˚F) WB
Pipe length 7.5 m (24-9/16 ft), Level difference 0 m (0 ft)

※3 -5˚C (23˚F) DB/-6˚C (21˚F) WB~21˚C (70˚F) DB/15.5˚C (60˚F) WB with cooling/heating mixed operation.

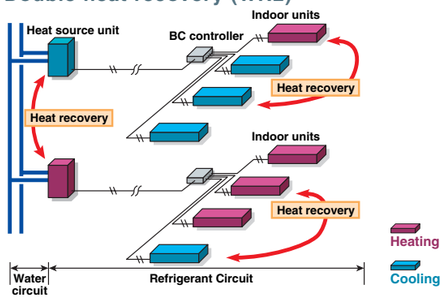
OUTDOOR UNIT
WR2 (Heat Recovery) series
Simultaneous Cooling and Heating
PQRY-P Y(S)GM-A

Advanced water heat source unit enjoying the benefits of R2 series

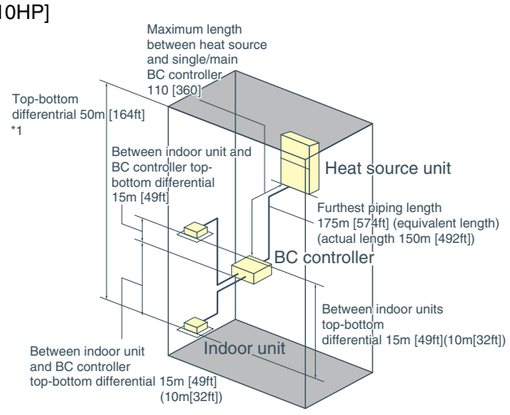
The City Multi WR2 series provides all of the advantages of the R2 series with the added advantages of a water heat source system, making it suitable for wider range of applications in high rises, frigid climates, coastal areas, etc.
Not only does it produce heat recovery from the indoor units on the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



Double heat recovery (WR2)



[8-10HP]



Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	300-400 [984-1,312]
Maximum allowable length	150 (175equivalent) [492 (574)]
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].

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

▸Specifications

			PQRY-P200YGM-A		PQRY-P250YGM-A	
			Cooling	Heating	Cooling	Heating
Capacity		kW	22.4	25.0	28.0	31.5
		BTU/h	76,400	85,300	95,500	107,500
Power source			3N~ 380/400/415V 50/60Hz			
Power input		kW	4.79	4.69	5.95	5.80
Current		A	8.0/7.6/7.4	7.9/7.5/7.2	10.0/9.5/9.1	9.7/9.3/8.9
COP		kW/kW	4.68	5.33	4.71	5.43
Compressor	Type		Hermetic		Hermetic	
	Motor output	kW	5.0		6.0	
Heat exchanger	Type		Double coil		Double coil	
	Water volume in the coil	ℓ	9.5		10.5	
Circulating water	Volume	m^3/h	4.56		5.76	
		cfh	161		203	
	Pressure drop	kPa	16.5		19.5	
Refrigerant / Lubricant			R410A/MEL32			
External finish			Steel plate acrylic paint			
External dimension H x W x D		mm(in.)	1,800 (70-7/8) x 990 (39) x 550 (21-11/16)			
Protection devices	High pressure protection		4.15MPa			
	Compressor		Over-current protection, Over-heat protection			
	Inverter		Over-current protection, Thermal protection			
Refrigerant piping diameter	High press. pipe		ø15.88 Brazed		ø19.05 Brazed	
	Low press. pipe		ø19.05 Brazed		ø22.2 Brazed	
Indoor unit	Total capacity		50~150% of outdoor unit capacity		50~150% of outdoor unit capacity	
	Model / Quantity		Model P20~P250/1~15		Model P20~P250/1~19	
Sound pressure level		dB<A>	46		47	
Net weight		kg(lbs.)	263(580)		266(587)	
Operating temperature range			Indoor :15˚CWB~24˚CWB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CDB~27˚CDB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CWB~24˚CWB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CDB~27˚CDB Circulating Water :10˚CDB~45˚CDB

Set name			PQRY-P400YSGM-A		PQRY-P500YSGM-A	
			Cooling	Heating	Cooling	Heating
Capacity		kW	45.0	50.0	56.0	63.0
		BTU/h	153,500	170,600	191,100	215,000
Power source			3N~ 380/400/415V 50/60Hz			
Power input		kW	11.35	11.01	15.06	13.60
Current		A	19.1/18.2/17.5	18.5/17.6/17.0	25.4/24.2/23.3	22.9/21.8/21.0
COP		kW/kW	3.96	4.54	3.72	4.63
Refrigerant piping diameter			ø22.2 Brazed/ø28.58 Brazed			
Compressor	Type		Hermetic		Hermetic	
	Motor output	kW	9.7		11.6	
Heat exchanger	Type		Double coil		Double coil	
	Water volume in the coil	ℓ	17.5		19.5	
Circulating water	Volume	m^3/h	9.12		11.52	
		cfh	322		407	
	Pressure drop	kPa	16.5		19.5	
Indoor unit	Total capacity		50~150% of outdoor unit capacity			
	Model / Quantity		Model P20~P250/1~24			
Sound pressure level		dB<A>	50		53	
Operating temperature range			Indoor :15˚CWB~24˚CWB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CDB~27˚CDB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CWB~24˚CWB Circulating Water :10˚CDB~45˚CDB	Indoor :15˚CDB~27˚CDB Circulating Water :10˚CDB~45˚CDB
Model			PQY-P01YGM-A (Comp Unit)	PQRY-P400YGM-A (Heat exchanger Unit)	PQY-P01YGM-A (Comp Unit)	PQRY-P500YGM-A (Heat exchanger Unit)
Refrigerant / Lubricant			R410/MEL32	-	R410/MEL32	-
External finish			Steel plate acrylic paint			
External dimension H x W x D		mm(in.)	1,800 (70-7/8) x 990 (39) x 550 (21-11/16)			
Protection devices	High pressure protection		4.15MPa	-	4.15MPa	-
	Compressor		Over-current protection Over-heat protection	-	Over-current protection Over-heat protection	-
	Inverter		Over-current protection Thermal protection	-	Over-current protection Thermal protection	-
Refrigerant piping diameter	Heat source unit connection Pipe		9.52 Flare/ø19.05 Flare/ø28.58 Brazed			
Net weight		kg(lbs.)	208(459)	232(512)	208(459)	236(521)

Note:

1.Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27˚C (81˚F) DB/19˚CWB Circulating Water : 30˚C (80˚F)
Heating Indoor : 20˚C (68˚F) DB Circulating Water : 20˚C (68˚F)
Pipe length : 7.5m (24-9/16 ft) Height difference : 0m

2.The ambient temperature of heat source unit has to be kept below 40˚C (104˚F) (dry bulb).
The ambient relative humidity of heat source unit has to be kept below 80%.

3.This unit can not be installed in the outdoor. (No protection against the weather.)

Optional parts

OPTIONAL PARTS FOR INDOOR UNITS

>>4-way cassette type (PLFY-VBM)

Description	Model	Applicable capacity	
		VBM	VCM
Decoration panel	SLP-2AA	–	P20, P25, P32, P40
	PLP-6BA	P32, P40, P50, P63, P80, P100, P125	–
Automatic Filter Elevation Panel	PLP-6BAJ	P32, P40, P50, P63, P80, P100, P125	–
Multi-functional casement	PAC-SH53TM-E	P32, P40, P50, P63, P80, P100, P125	–
High-efficiency filter element	PAC-SH59KF-E	P32, P40, P50, P63, P80, P100, P125	–
Wireless signal receiver	PAR-SA9FA-E	P32, P40, P50, P63, P80, P100, P125	–
Space panel	PAC-SH48AS-E	P32, P40, P50, P63, P80, P100, P125	–
"i-see" sensor	PAC-SA1ME-E	P32, P40, P50, P63, P80, P100, P125	–
Duct flange for fresh air intake	PAC-SH650F-E	P32, P40, P50, P63, P80, P100, P125	–
Shutter plate	PAC-SH51SP-E	P32, P40, P50, P63, P80, P100, P125	–

>>2-way cassette type (PLFY-VLMD)

Description	Model	Applicable capacity
		PLFY-VLMD-B
Decoration panel	CMP-40VLW-B	P20, P25, P32, P40
	CMP-63VLW-B	P50, P63
	CMP-100VLW-B	P80, P100
	CMP-125VLW-B	P125
OA duct flange	PAC-KH11OF	P20, P25, P32, P40, P50, P63, P80, P100

>>1-way cassette type(PMFY-VBM)

Description	Model	Applicable capacity
Decoration panel	PMP-40BM	P20, P25, P32, P40

>>Ceiling concealed type (PEFY-VMH)

Description	Model	Applicable capacity	Remarks
		PEFY-VMH	
Drain pump	PAC-KE04DM-F	P40~P250	
Long life filter	PAC-KE86LAF	P40, P50, P63	
	PAC-KE88LAF	P71, P80	
	PAC-KE89LAF	P100, P125, P140	
	PAC-KE85LAF	P200, P250	
Filter box	PAC-KE63TB-F	P40, P50, P63	Necessary when long life filter is used
	PAC-KE80TB-F	P71, P80	
	PAC-KE140TB-F	P100, P125, P140	
	PAC-KE250TB-F	P200, P250	

>>Ceiling concealed type (PDFY-VM) *Available for limited countries

Description	Model	Applicable capacity	Remarks
Drain pump	PAC-KD02DM-FA	P20-P125	
Square shape duct flange	PAC-KD60KDF	P20, P25, P32	
	PAC-KD61KDF	P40, P50	
	PAC-KD63KDF	P63, P71, P80	
	PAC-KD64KDF	P100, P125	
Round shape duct flange	PAC-KD32EDF-F	P20, P25, P32	
	PAC-KD50EDF-F	P40, P50	
	PAC-KD80EDF-F	P63, P71, P80	
	PAC-KD125EDF-F	P100, P125	
Filter box for rear suction	PAC-KD80RTB	P20, P25, P32	Necessary when air intake duct or high efficiency filter is used at the rear of the indoor unit
	PAC-KD81RTB	P40, P50	
	PAC-KD83RTB	P63, P71, P80	
	PAC-KD84RTB	P100, P125	
Canvas duct for bottom suction	PAC-KD85DF	P20, P25, P32	
	PAC-KD86DF	P40, P50	
	PAC-KD88DF	P63, P71, P80	
	PAC-KD89DF	P100, P125	

Description	Model	Applicable capacity	Remarks
Filter box for bottom suction	PAC-KD70TB	P20, P25, P32	Nesessary when efficiency filter is used at the bottom of the indoor unit
	PAC-KD71TB	P40, P50	
	PAC-KD73TB	P63, P71, P80	
	PAC-KD74TB	P100, P125	
High efficiency filter 65%	PAC-KD30AF	P20, P25, P32	
	PAC-KD31AF	P40, P50	
	PAC-KD33AF	P63, P71, P80	
	PAC-KD34AF	P100, P125	
High efficiency filter 90%	PAC-KD40AF	P20, P25, P32	
	PAC-KD41AF	P40, P50	
	PAC-KD43AF	P63, P71, P80	
	PAC-KD44AF	P100, P125	
Maintenance panel with air intake	MCMP-P36DSWH	P20, P25, P32	
	MCMP-P56DSWH	P40, P50	
	MCMP-P90DSWH	P63, P71, P80	
	MCMP-P160DSWH	P100, P125	

>>Fresh air intake type (PEFY-VMH-E-F)

Description	Model	Applicable capacity
Long life filter	PAC-KE88LAF	P80
	PAC-KE89LAF	P140
	PAC-KE85LAF	P200, P250
Filter box	PAC-KE80TB-F	P80
	PAC-KE140TB-F	P140
	PAC-KE250TB-F	P200/P250
Drain pump	PAC-KE04DM-F	P80, P140, P200, P250

>>Ceiling suspended type (PCFY-VKM)

Description	Model	Applicable capacity
Drain pump kit	PAC-SH83DM-E	P40
	PAC-SH84DM-E	P63,100,125
High efficiency filter	PAC-SH88KF-E	P40
	PAC-SH89KF-E	P63
	PAC-SH90KF-E	P100,125
Wireless remote controller kit	PAR-SL94B-E	P40,63,100,125

>>Ceiling concealed type (PEFY-VMS1)

Description	Model	Applicable capacity	
Drain pump	PAC-KE07DM-E	P15, 20, 25, 32, 40, 50, 63	*For PEFY-VMS1L only
Control box replace kit	PAC-KE70HS-E	P15, 20, 25, 32, 40, 50, 63	

>>Wall mounted type (PKFY-VBM/VHM/VKM)

Description	Model	Applicable capacity
External LEV Box	PAC-SG95LE-E	P15, 20, 25
Drain pump kit	PAC-SH75DM-E	P32, 40, 50
	PAC-SH94DM-E	P63,100

OPTIONAL PARTS FOR OUTDOOR UNITS

>>For PUMY-P100 , P125 , P140 VHM

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~EP650YSHM
	CMY-Y200VBK2	For PUHY-P700~P900YSHM
	CMY-Y300VBK2	For PUHY-P950~P1250 / EP700~EP900YSHM
Branch pipe (Joint)	CMY-Y102S-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102L-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202-G2	401-650 (Total capacity of indoor unit)
		The 1st branch of P450~P650
	CMY-Y302-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-Y102S-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102L-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202-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-P450~P650 / EP400~EP600YSHM
	CMY-R200VBK	For PURY-P700~P800YSHM
Branch pipe (Joint)	CMY-Y102S-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102L-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202-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.

OPTIONAL PARTS FOR CONTROL

Model	Description
PAC-SE41TS-E	Remote Sensor for A/J/K/M-Net Control
PAC-SE55RA-E	Remote ON/OFF adaptor for Indoor Unit
PAC-YG10HA	Cable for AG-150A/G-50A I/O
PAC-SC50KUA	Power supply unit for G-50A / GB-50A
PAC-SC51KUA	Power supply unit for AG-150A / GB-50A
PAC-SA88HA-EP	Remote Display Adaptor for Indoor Unit
PAC-SA89TA-EP	Timer Adaptor for remote controller
PAC-SC37SA-E	Output signal connector
PAC-SC36NA-E	Input signal connector
PAC-SF46EPA	Transmission booster
LMAP02	Air conditioner interface
PAC-YG11CDA	Electric amount count software
PAC-YG31CDA	BAC net™ interface

OPTIONAL EQUIPMENT FOR BC CONTROLLER

BC Controller Model	Junction pipe kit	Branch pipe
CMB-P104V-G, GB	CMY-R160-J	CMY-Y102S-G2
CMB-P105V-G		
CMB-P106V-G		
CMB-P108V-G, GA, GB		
CMB-P1010V-G, GA		
CMB-P1013V-G, GA		
CMB-P1016V-G, GA, HA, HB		

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.)

FM33568 / ISO 9001;2000

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).

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