



#1 SELLING BRAND OF VRF TECHNOLOGY

[www.mitsubishielectric.com](http://www.mitsubishielectric.com)

## MITSUBISHI ELECTRIC MULTIPLE SPLIT TYPE AIR CONDITIONERS R410A Series



for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.



FM33568 / ISO 9001;2008

The Air Conditioning & Refrigeration Systems Works acquired ISO 9001 certification under Series 9000 of the International Standard Organization (ISO) based on a review of Quality management for the production of refrigeration and air conditioning equipment.

### ISO Authorization System

The ISO 9000 series is a plant authorization system relating to quality management as stipulated by the ISO. ISO 9001 certifies quality management based on the "design, development, production, installation and auxiliary services" for products built at an authorized plant.



The Air Conditioning & Refrigeration Systems Works acquired environmental management system standard ISO 14001 certification.

The ISO 14000 series is a set of standards applying to environmental protection set by the International Standard Organization (ISO).

Registered on March 10, 1998.

### ⚠ Warning

- Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
  - Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, during repair, or at the time of disposal of the unit.
  - It may also be in violation of applicable laws.
  - MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.

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<http://Global.MitsubishiElectric.com>

## HEAT PUMP

For high outdoor temperature up to 54 C

CITY  
MULTI

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Air condition is an ideal way of controlling the temperature,movement and cleanliness of air inside any building large or small.with today.s building 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 altogether.more and more people today ar enjoying the of comfortable working and living environments made possible air conditioning.

## Our Latest Technologiïies

### **VRF system**

Vrf stand for vanable refrigerant flow a vrf air conditioning system modulates the flow of refrigerant depending upon the capacity requiremmts 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 continually meet the increasing demands ofour customers.being the first in the industry to offer hightly.advanced inverler driven systems.using inverter teahnology our system produce just the right amount of output to match the exact requirement of any building these sysmts work so efficiently that they don't waste valuable energy by over-heating or over-cooling resulting in greatly reduced running costs.alternative system that may appear cheaper.can often cost substantianlly more to run.making us the most cost effective choice all found.

### **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 teahnology highly efficient operation is possible with compact units closely matching building requirements.

### **R410 refrigerant**

As scientific evidence points to man-made chemicals for the damage caused to th ozone layer we only use chiorne-free refrigerants. That are safe with zero ODP ozone deption potential.accordingly our system require less energy to run.and have a significantly lower indirect global warning potential.in short we produse the most efficient equipment possibl,while helping to protect the environment.

### **Unsurpassed air conditioning from Mitsubishi electric**

Known the world over,the nam Mitsubishi is a trusted household name associated with a variety of products and services founded in 1920 the company know today as Mitsubishi electric.quickly rose to the forefront of the air condittin industry a position we still enjoy today.We pride ourselves on offening,some of the energy efficient.  
Systems available on the market.

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For high outdoor temperature up to 54 C  
**HEAT PUMP**



# The New Heat pump Models

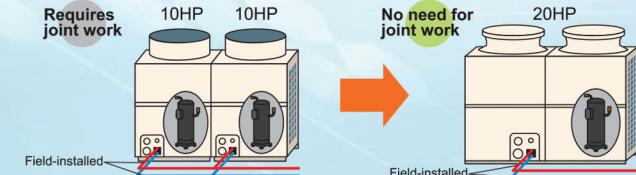
Mitsubishi Electric offers a wide lineup of new heat pump models with the maximum capacity of 60 HP\*. Different patterns of combinations of basic modules provide either standard or high COP.

\*Applicable to standard model combinations only

## New features

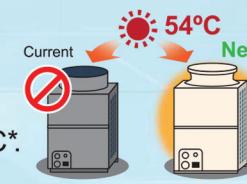
### Single module up 20 HP

Capable of covering up to 20 HP with a single module and a single compressor. Reduced piping work.



### Compatibility to outdoor temperature of up to 54°C<sup>1</sup>

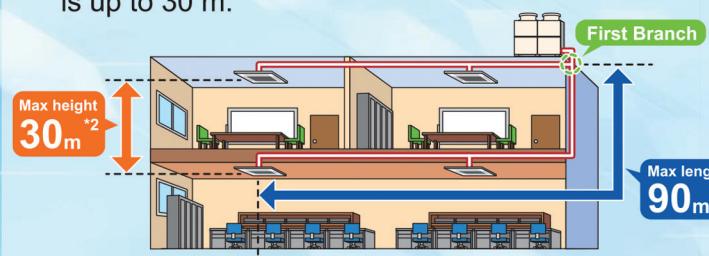
Capable of running cooling operations in the outdoor temperature of up to 54°C\*.



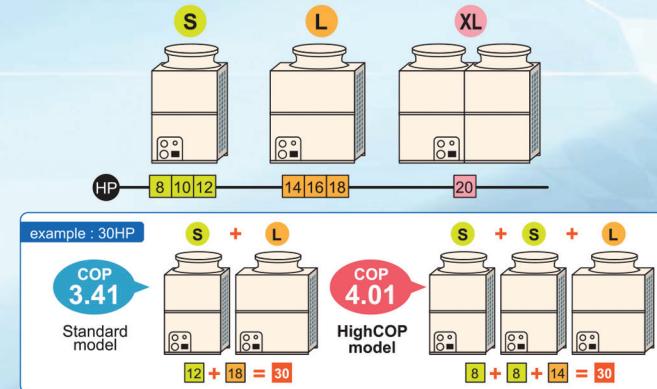
### All modules feature inverter-driven compressors. Maximum combined horse power: 60 HP

### Increase in the limit of piping length

Farthest indoor from first branch: 90 m  
Height difference between indoor and indoor units is up to 30 m.



### Standard or high COP options are available by different combinations of modules.



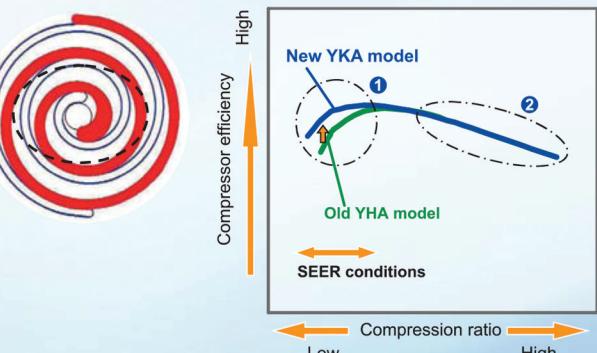
## Energy saving

### Compressor

- Improved efficiency by the use of DC brushless motor.
- Improved partial-load characteristics achieved by the optimized scroll shape.



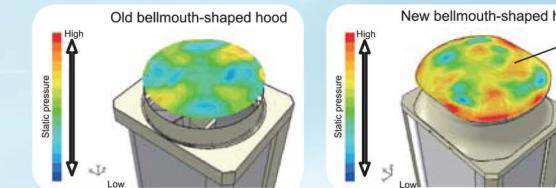
Improved SEER performance  
Optimized scroll shape (improved volumetric capacity ratio)



- Reduced standby power consumption by heating the compressor instead of a crankcase heater.

### Unit casing

- Improved static pressure at the exhaust air outlet that allows for a reduction in fan input power by the changed shape of the bellmouth hood.

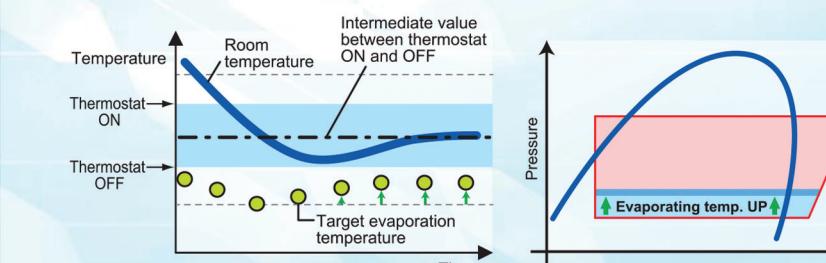


The new bellmouth-shaped hood achieves reduction in fan rotation and increases the pressure at the hood outlet compared to that of the old one, resulting in reduced input power to the fan.

### Control

#### ET control (Evaporating Temperature control)

Reduced energy consumption in cooling by controlling the refrigerant temperature according to the operation load and raising evaporating temperature.



#### Current control method

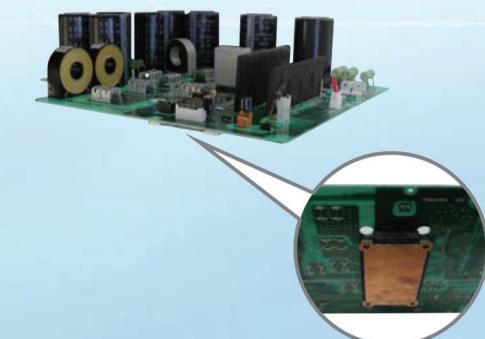
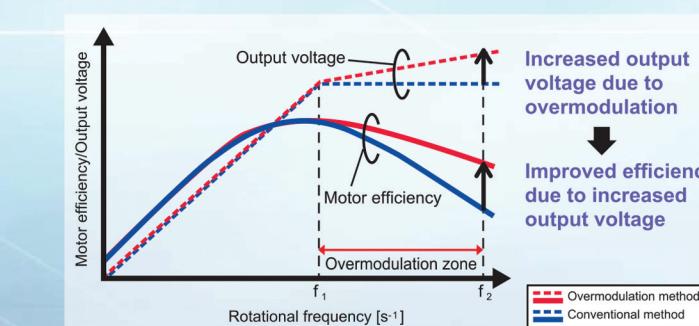
Evaporating temperature was kept constant.

#### New control method

Evaporating temperature is raised according to the operation load, decreasing compressor input power and increasing operation efficiency.

#### Original PWM overmodulation control

Improved total efficiency of motor and inverter with the use of our original PWM overmodulation control, increasing the output voltage during high-load operation (when the motor is rotating at high speed).



<sup>1</sup>: Any continuous operation over 46°C may require an increased frequency of maintenance.

<sup>2</sup>: When the height difference is 15m or greater, use the one size larger liquid pipe between the indoor unit and the indoor unit.

<sup>3</sup>: When the piping length is 40m or longer, use the one size larger liquid pipe between the indoor unit and the first branch.



## Sophisticated yet simple technology

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### 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-VMR



PFFY-VKM

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



## VRF system

### Our answer to VRF

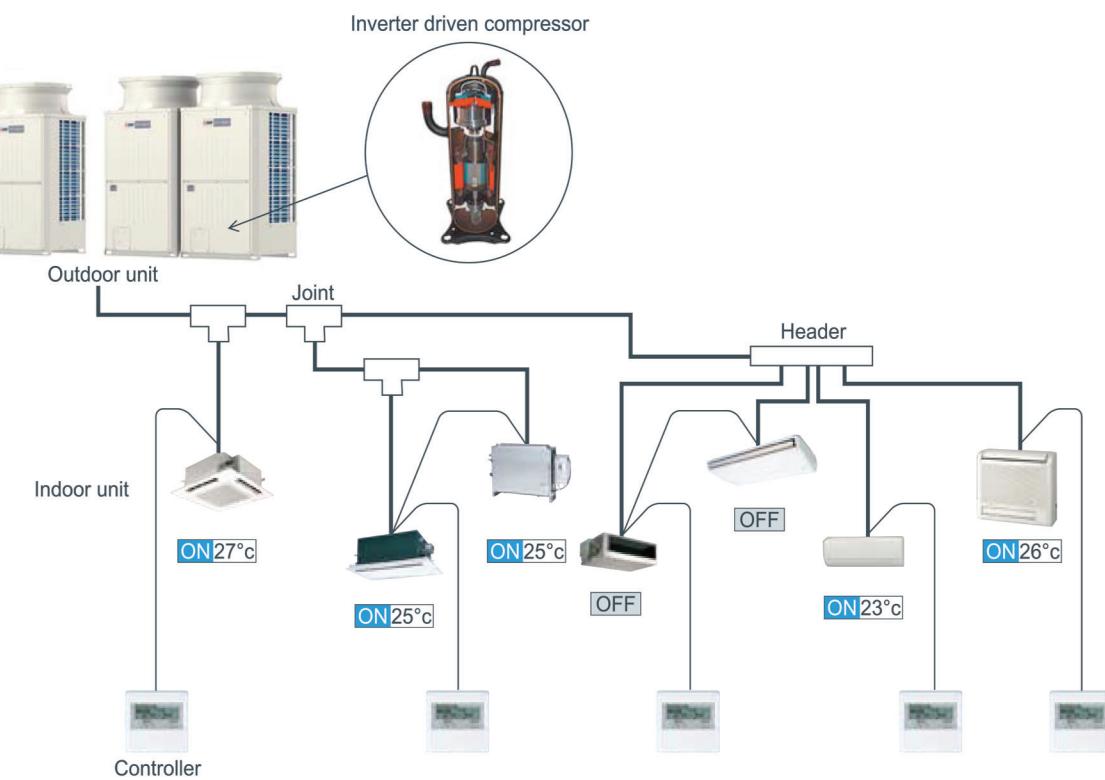
Mitsubishi Electric sets the boundaries of VRF technology with the CITY MULTI range, which is available using R410A refrigerant with zero ODP (Ozone Depletion Potential). The range has been specifically designed for today's building requirements and addresses key market issues such as energy efficiency, 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.

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## For the Environment

Enhancing environmental care (measures for the RoHS Directive and the refrigerant reduction)

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

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

## Efficient R410A refrigerant

### History of refrigerant

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

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

### Technical aspects of refrigerant

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



Low Starting Currents

## Inverter Driven Compressor Technology Now Up to 60HP

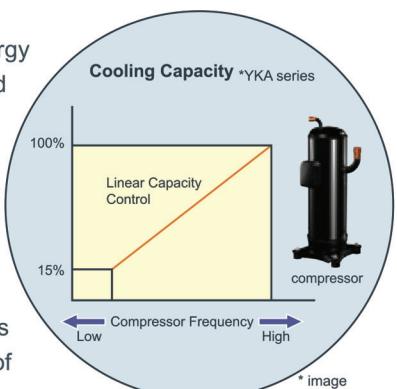
**Using inverter driven technology saves energy for several reasons:**

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 YKA outdoor unit), and smooth transition across the range of compressor frequencies.

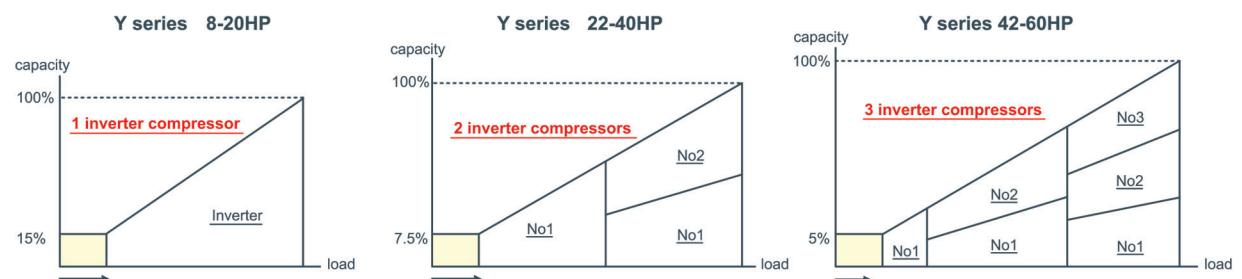


\* The values vary depending on the actual conditions such as ambient temperature.

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

The outdoor unit combinations comprise 1 unit for 8-20HP systems, 2 units for 22-40HP systems and 3 units for 42-60HP systems. 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.

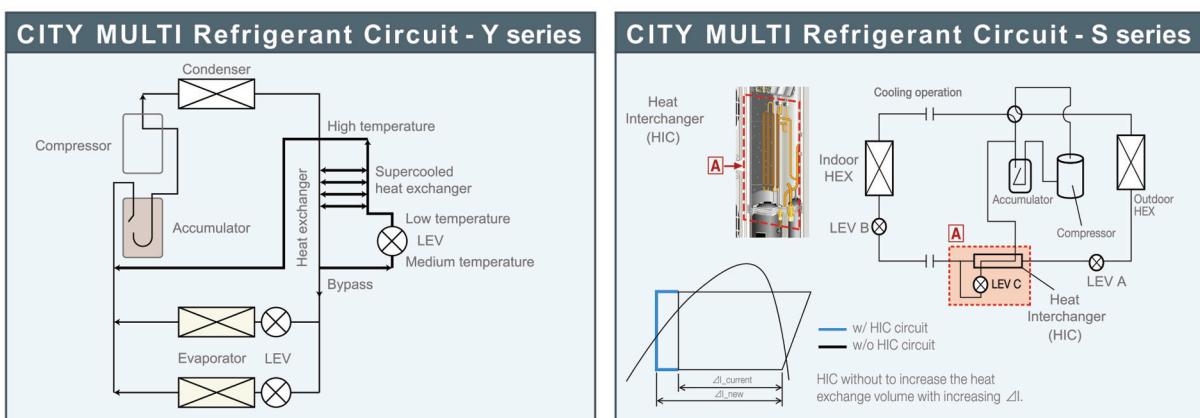
### Stable and smooth operation (for standard models)



# 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.



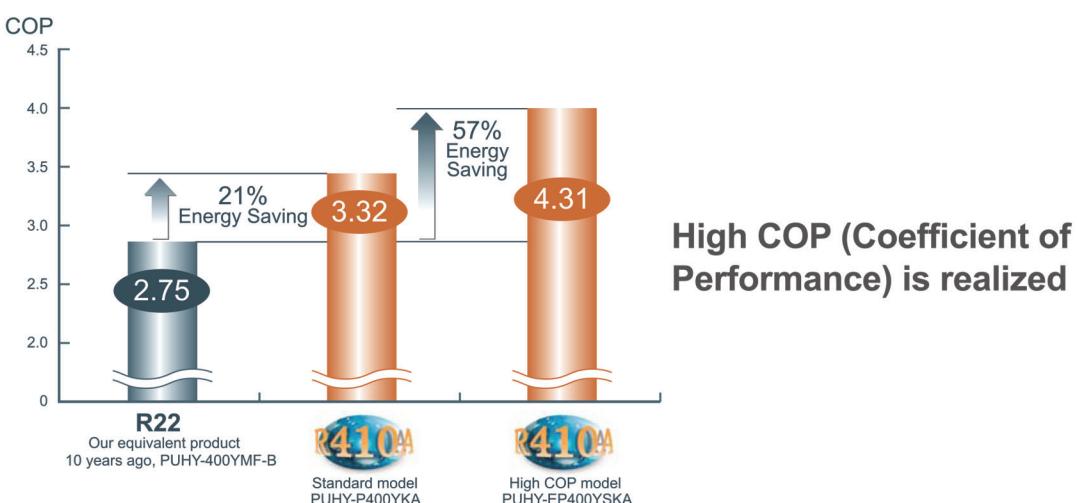
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# Total Energy Conservation

## Comparison of COP (energy efficiency) – 16HP system



\* COP of cooling

\* The values were obtained under the standard conditions.

# Intelligent Power Module(IPM) Technology

The YKA 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 and to achieve more accurate control of the occupied space. By using incremental 1Hz steps of capacity control, the amount of required power input is significantly reduced, resulting in greatly improved EER'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 YKA and previous Mitsubishi Electric models

Technology is a key when increased efficiency is demanded.  
The CITY MULTI YKA 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 EERs.

## The importance of EER

EER stands for "Energy Efficiency Ratio". 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<sub>2</sub> emissions.

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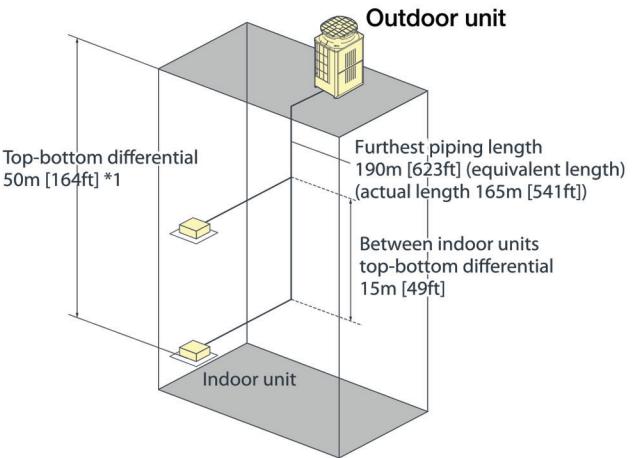


# The Strength of CITY MULTI

## Increased Pipe Lengths

Total system pipe lengths of up to 1000m(3280ft) and furthest pipe lengths of 165m(541ft) make the CITY MULTI series system one of the most flexible VRF systems in the market.

### System Pipe Lengths - Y series



### [8-60HP (Heat Pump Y series)] [16-44HP (Heat Pump High COP Y series)]

Refrigerant Piping Lengths	Maximum meters [Feet]
Total length	1,000 [3,280]
Maximum allowable length	165 (190 equivalent) [541(623)]
Farthest indoor from first branch	40 [131]*1
Vertical differentials between units	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]*3
Indoor/outdoor (outdoor lower)	40 [131]*3, *4
Indoor/indoor	15 [49]*2

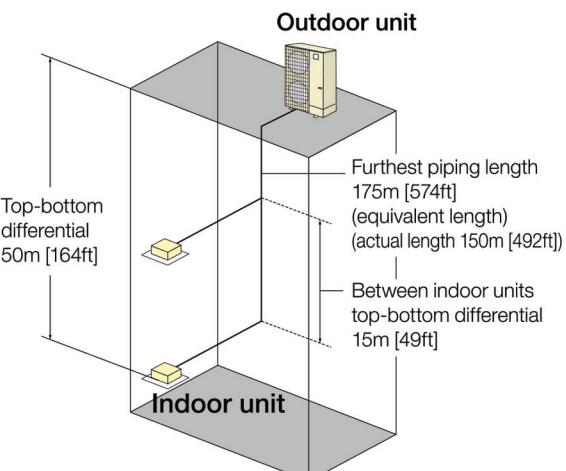
\*1 90m is available. When the piping length is 40m or longer, use the one size larger liquid pipe between the indoor unit and the first branch.

\*2 30m is available. When the height difference is 15m or greater, use the one size larger liquid pipe between the indoor unit and the indoor unit.

\*3 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.

\*4 4m or less in cooling at outdoor temperature 10°C.

### System Pipe Lengths - S series



### [P112~140YKM] [P175~225(YKM)]

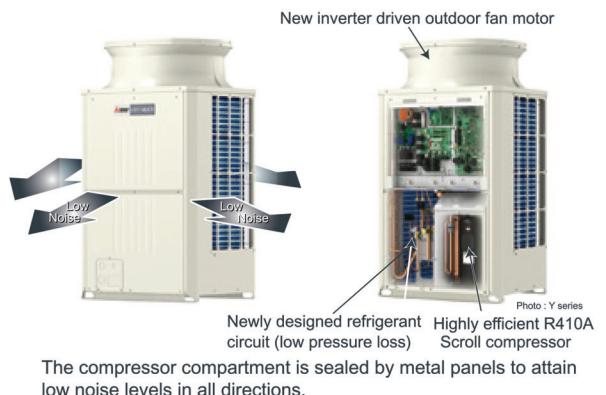
Refrigerant Piping Lengths	Maximum meters [Feet]	Maximum meters [Feet]
Total length	300 [984]	150 [492]
Maximum allowable length	150 (175 equivalent) [492(574)]	80(90 equivalent) [262(295)]
Farthest indoor from first branch	30 [98]	30 [98]
Vertical differentials between units	Maximum meters [Feet]	Maximum meters [Feet]
Indoor/outdoor (outdoor higher)	50 [164]	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]	40 [131]
Indoor/indoor	15 [49]	15 [49]

# Features

## Low Noise Levels New Fan Design

CITY MULTI VRF systems led the introduction of larger single fan motors some decades 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.



## 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.

## Back-up Function & Outdoor unit rotation

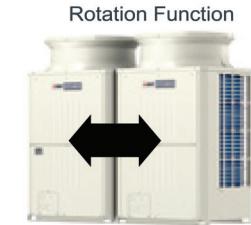
### Back-up Function (combined module systems)

The combined modular outdoor unit design ensures an exceptionally high level of reliability by utilizing a back-up function, which can be easily operated in the unlikely case of a malfunction from an indoor unit remote controller.



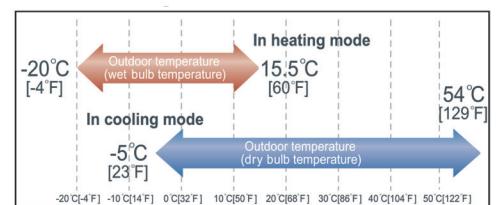
### Rotation Function (combined module systems)

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



## Operating range up to 54°C outdoor temp.

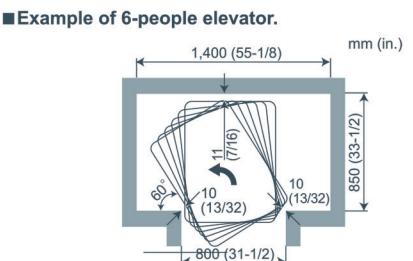
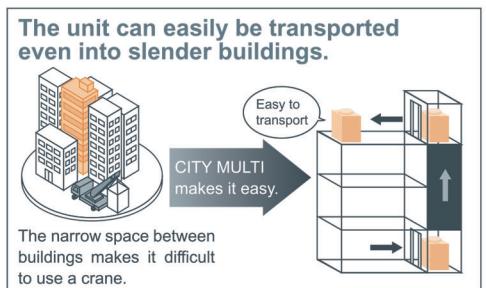
At high ambient temperature the guaranteed operating range in cooling is now raised to 54°C (129°F). Operation range in cooling is from an outdoor temperature of -5°C (23°F), while that in heating has expanded to an outdoor temperature of -20°C (-4°F).



# Features

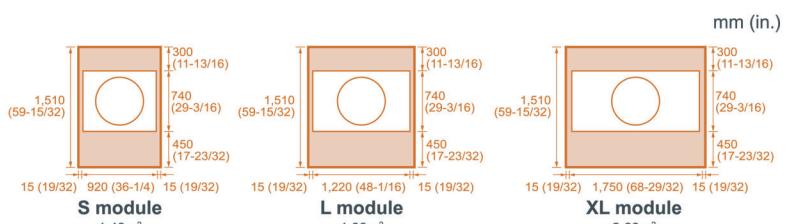
## Compact Design Industry leading weight saving

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



## Effective Use of Space

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



## 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.

Conventional		CITY MULTI R410A	
Gas piping	Ø28.58 (Ø1-1/8)	Gas piping	Ø22.2 (Ø7/8)
Based on 10HP model			
Liquid piping	Ø12.7 (Ø1/2)	Liquid piping	Ø9.52 (Ø3/8)



## 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

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

## Wide Selection of Outdoor Units

	HP	4.5	5	6	7	8	9	8	10	12	14	16	18	20	XL
	Model Name							(S)		(L)					
S-Series	PUMY-P112YKM	4.5													
	PUMY-P125YKM		5												
	PUMY-P140YKM			6											
	PUMY-P175YKM				7										
	PUMY-P200YKM					8									
	PUMY-P225YKM						9								
Y-Series	PUHY-P200YKA							8							
	PUHY-P250YKA								10						
	PUHY-P300YKA									12					
	PUHY-P350YKA										14				
	PUHY-P400YKA											16			
	PUHY-P450YKA												18		
	PUHY-P500YSKA							10	12						20
	PUHY-P600YSKA						10			14					
	PUHY-P650YSKA						10				16				
	PUHY-P700YSKA						10					18			
	PUHY-P750YSKA							12					18		
	PUHY-P800YSKA								16	16					
	PUHY-P850YSKA								16		18				
	PUHY-P900YSKA									18	18				
	PUHY-P950YSKA									18		20			
	PUHY-P1000YSKA										20	20			
	PUHY-P1050YSKA							12	12				18		
	PUHY-P1100YSKA						12		14				18		
	PUHY-P1150YSKA							14		16	16				
	PUHY-P1200YSKA								16	16	16				
	PUHY-P1250YSKA								16	16	18				
	PUHY-P1300YSKA								16	18	18				
	PUHY-P1350YSKA									18	18				
	PUHY-P1400YSKA									18	18	20			
	PUHY-P1450YSKA									18	20	20			
	PUHY-P1500YSKA										20	20	20		
Y-Series (High CoP)	PUHY-EP400YKA						8	8							
	PUHY-EP450YKA						8	10							
	PUHY-EP500YSKA						10	10							
	PUHY-EP650YSKA							12	14						
	PUHY-EP700YSKA								14	14					
	PUHY-EP750YSKA						8	8			14				
	PUHY-EP800YSKA						8	10			14				
	PUHY-EP850YSKA						10	10			14				
	PUHY-EP900YSKA						10		12	14					
	PUHY-EP950YSKA							12	12	14					
	PUHY-EP1000YSKA							12	14	14					
	PUHY-EP1050YSKA								14	14	14				
	PUHY-EP1100YSKA								14	14	16				

\*1. The circled numbers in the table indicate the horse power, and the combination of S, L, and XL modules.



# Outdoor Unit S Series

## PUMY-P YKM(-BS)

### ► Specifications

Model	PUMY-P112YKM(-BS)	PUMY-P125YKM(-BS)	PUMY-P140YKM(-BS)	
Power source	3-phase 380-415V 50Hz	3-phase 380-415V 50Hz	3-phase 380-415V 50Hz	
Cooling capacity (Nominal)	*1 kW *1 BTU / h Power input Current input EER	12.5 42,700 2.79 A 4.46-4.24-4.09	14.0 47,800 3.46 5.53-5.26-5.07	15.5 52,900 4.52 7.23-6.87-6.62
Temp. range of cooling	Indoor temp. Outdoor temp.	W.B. D.B.	15.0-24.0°C(59-75°F) -5.0-52.0°C(23-125°F)	15.0-24.0°C(59-75°F) -5.0-52.0°C(23-125°F)
Heating capacity (Nominal)	*2 kW *2 BTU / h Power input Current input COP	14.0 47,800 3.04 A 4.86-4.62-4.45	16.0 54,600 3.74 5.98-5.68-5.48	18.0 61,400 4.47 7.15-6.79-6.55
Temp. range of heating	Indoor temp. Outdoor temp.	D.B. W.B.	15.0-27.0°C(59-81°F) -20.0-15.5°C(-4-60°F)	15.0-27.0°C(59-81°F) -20.0-15.5°C(-4-60°F)
Indoor unit connectable	Total capacity	50-130 % of outdoor unit capacity	50-130 % of outdoor unit capacity	50-130 % of outdoor unit capacity
Sound pressure level (measured in anechoic room)	dB <A>	49 / 51	50 / 52	51 / 53
Refrigerant piping diameter	Liquid pipe Gas pipe	9.52(3/8) Flare 15.88(5/8) Flare	9.52(3/8) Flare 15.88(5/8) Flare	9.52(3/8) Flare 15.88(5/8) Flare
FAN	Type x Quantity	Propeller Fan x 2	Propeller Fan x 2	Propeller Fan x 2
	Air flow rate	m³/min L/s cfm	110 1,833 3,884	110 1,833 3,884
	Motor output	kW	0.06 + 0.06	0.06 + 0.06
Compressor	Type x Quantity	Scroll hermetic compressor x 1	Scroll hermetic compressor x 1	Scroll hermetic compressor x 1
	Starting method	Inverter	Inverter	Inverter
	Motor output	kW	2.9	3.5
External finish	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension HxWxD	mm	1,338 x 1,050 x 330 (+25)	1,338 x 1,050 x 330 (+25)	1,338 x 1,050 x 330 (+25)
	in.	52-11/16 x 41-11/32 x 13 (+1)	52-11/16 x 41-11/32 x 13 (+1)	52-11/16 x 41-11/32 x 13 (+1)
Protection devices	High pressure protection Inverter circuit (COMP/FAN) Compressor Fan motor	High pressure Switch Overcurrent detection, Overheat detection (Heatsink thermistor) Compressor thermistor, Over current detection Overheating, Voltage protection	High pressure Switch Overcurrent detection, Overheat detection (Heatsink thermistor) Compressor thermistor, Over current detection Overheating, Voltage protection	High pressure Switch Overcurrent detection, Overheat detection (Heatsink thermistor) Compressor thermistor, Over current detection Overheating, Voltage protection
Refrigerant	Type x original charge	R410A 4.8kg	R410A 4.8kg	R410A 4.8kg
Net weight	kg (lbs)	125(276)	125(276)	125(276)
Heat exchanger	Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube
Defrosting method	Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E



## PUMY-P YKM(-BS)

### ► Specifications

# Outdoor Unit S Series

## PUMY-P YKM(-BS)

### ► Specifications



Model	PUMY-P175YKM(-BS)	PUMY-P200YKM(-BS)	PUMY-P225YKM(-BS)
Power source	3-phase 380-415V 50Hz	3-phase 380-415V 50Hz	3-phase 380-415V 50Hz
Cooling capacity (Nominal)	*1 kW *1 BTU / h Power input Current input EER	20.0 68,200 5.48 A 8.95-8.51-8.20	22.4 76,400 6.91 11.29-10.72-10.34
Temp. range of cooling	Indoor temp. Outdoor temp.	W.B. D.B.	15.0-24.0°C(59-75°F) -5.0-52.0°C(23-125°F)
Heating capacity (Nominal)	*2 kW *2 BTU / h Power input Current input COP	22.4 76,400 5.73 A 9.36-8.89-8.57	25.0 85,300 7.65 12.50-11.87-11.44
Temp. range of heating	Indoor temp. Outdoor temp.	D.B. W.B.	15.0-27.0°C(59-81°F) -20.0-15.0°C(-4-59°F)
Indoor unit connectable	Total capacity	50-130 % of outdoor unit capacity	50-130 % of outdoor unit capacity
Sound pressure level (measured in anechoic room)	dB <A>	56 / 61	56 / 61
Refrigerant piping diameter	Liquid pipe Gas pipe	9.52(3/8) Flare *3 22.2(7/8) Brazed	9.52(3/8) Flare *3 22.2(7/8) Brazed
FAN	Type x Quantity	Propeller Fan x 2	Propeller Fan x 2
	Air flow rate	m³/min L/s cfm	134 2,233 4,732
	Motor output	kW	0.2 + 0.2
Compressor	Type x Quantity	Scroll hermetic compressor x 1	Scroll hermetic compressor x 1
	Starting method	Inverter	Inverter
	Motor output	kW	4.7
External finish	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1	Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1
External dimension HxWxD	mm	1,338 x 1,050 x 330 (+25)	1,338 x 1,050 x 330 (+25)
	in.	52-11/16 x 41-11/32 x 13 (+1)	52-11/16 x 41-11/32 x 13 (+1)
Protection devices	High pressure protection Inverter circuit (COMP/FAN) Compressor Fan motor	High pressure Switch Overcurrent detection, Overheat detection (Heatsink thermistor) Compressor thermistor, Over current detection Overheating, Voltage protection	High pressure Switch Overcurrent detection, Overheat detection (Heatsink thermistor) Compressor thermistor, Over current detection Overheating, Voltage protection
Refrigerant	Type x original charge	R410A 7.3kg	R410A 7.3kg
Net weight	kg (lbs)	138(304)	138(304)
Heat exchanger	Cross Fin and Copper tube	Cross Fin and Copper tube	Cross Fin and Copper tube
Defrosting method	Reversed refrigerant circuit	Reversed refrigerant circuit	Reversed refrigerant circuit
Optional parts	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E

### Notes:

\*1,\*2 Nominal conditions

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

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

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

### Notes:

\*1,\*2 Nominal conditions

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

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

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

\*3 Liquid pipe diameter:12.7mm in case of farthest piping length is longer than 60m.

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YKA(-BS)



#### ► Specifications

Model	PUHY-P200YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P300YKA (-BS)	PUHY-P350YKA (-BS)
Power source	3-phase 4-wire 380~400~415 V 50/60 Hz			
Cooling capacity (Nominal) *1 kW	22.4	28.0	33.5	40.0
*1 kcal/h	20,000	25,000	30,000	35,000
*1 BTU / h	76,400	95,500	114,300	136,500
Power input kW	5.19	6.89	8.86	11.69
Current input A	8.7-8.3-8.0	11.6-11.0-10.6	14.9-14.2-13.6	19.7-18.7-18.0
EER kW / kW	4.31	4.06	3.78	3.42
Cooling capacity *4 kW	22.7	28.4	34.0	40.6
Temp. range of cooling Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor D.B.	-5.0~54.0°C (23~129°F)	-5.0~54.0°C (23~129°F)	-5.0~54.0°C (23~129°F)	-5.0~54.0°C (23~129°F)
Heating capacity (Nominal) *2 kW	22.4	28.0	33.5	40.0
kcal/h	20,000	25,000	30,000	35,000
*2 BTU / h	76,400	95,500	114,300	136,500
Power input kW	5.05	6.33	8.11	9.61
Current input A	8.5-8.0-7.8	10.6-10.1-9.7	13.6-13.0-12.5	16.2-15.4-14.8
COP kW / kW	4.43	4.42	4.13	4.16
Temp. range of heating Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity 50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
Model / Quantity	P15-P250/1~17	P15-P250/1~21	P15-P250/1~26	P15-P250/1~30
Sound pressure level (measured in anechoic room)	dB <A>	57	58	61
Refrigerant piping diameter	Liquid pipe mm (in.)	9.52 (3/8) Braze	9.52 (3/8) Braze (12.7 (1/2)) Brazed, farthest length >= 90 m	9.52 (3/8) Braze (12.7 (1/2)) Brazed, farthest length >= 40 m
	Gas pipe mm (in.)	22.2 (7/8) Braze	22.2 (7/8) Braze	22.2 (7/8) Braze
FAN	Type x Quantity Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
Air flow rate	m³/min 175	175	185	210
	L/s 2,917	2,917	3,083	3,500
	cfm 6,179	6,179	6,532	7,415
Control, Driving mechanism	Inverter-control, Direct-driven by motor			
Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)			
Compressor	Type x Quantity Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
Starting method	Inverter	Inverter	Inverter	Inverter
Motor output kW	5.5	6.9	8.1	10.4
Case heater kW	—	—	—	—
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740
	in. 65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16
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)	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	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Refrigerant	Type x original charge R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)
Net weight kg (lbs)	195 (430)	195 (430)	211 (466)	256 (565)
Heat exchanger	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & copper tube
Optional parts	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

#### Notes:

\*1, \*2 Nominal conditions

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

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*4 Reference data under condition of Indoor 27°C DB/19.5°C WB(81°F DB/67°F WB) Outdoor 35°C DB(95°F DB)

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

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

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YKA(-BS)



#### ► Specifications

Model	PUHY-P400YKA (-BS)	PUHY-P450YKA (-BS)	PUHY-P500YKA (-BS)
Power source	3-phase 4-wire 380~400~415 V 50/60 Hz	3-phase 4-wire 380~400~415 V 50/60 Hz	3-phase 4-wire 380~400~415 V 50/60 Hz
Cooling capacity (Nominal) *1 kW	45.0	48.0	55.0
*1 kcal/h	40,000	43,000	49,000
*1 BTU / h	153,500	163,800	187,700
Power input kW	13.55	15.78	18.39
Current input A	22.8-21.7-20.9	26.6-25.3-24.3	31.0-29.4-28.4
EER kW / kW	3.32	3.04	2.99
Cooling capacity *4 kW	45.9	49.0	56.2
Temp. range of cooling Indoor W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
Outdoor D.B.	-5.0~54.0°C (23~129°F)	-5.0~54.0°C (23~129°F)	-5.0~54.0°C (23~129°F)
Heating capacity (Nominal) *2 kW	45.0	48.0	55.0
kcal/h	40,000	43,000	49,000
*2 BTU / h	153,500	163,800	187,700
Power input kW	10.92	13.33	15.71
Current input A	18.4-17.5-16.8	22.5-21.3-20.6	26.5-25.1-24.2
COP kW / kW	4.12	3.60	3.50
Temp. range of heating Indoor D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
Outdoor W.B.	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity 50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
Model / Quantity	P15-P250/1~34	P15-P250/1~39	P15-P250/1~43
Sound pressure level (measured in anechoic room)	dB <A>	63	65
Refrigerant piping diameter	Liquid pipe mm (in.)	12.7 (1/2) Braze	15.88 (5/8) Braze
	Gas pipe mm (in.)	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze
FAN	Type x Quantity Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
Air flow rate	m³/min 210	210	360
	L/s 3,500	3,500	6,000
	cfm 7,415	7,415	12,712
Control, Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
Motor output kW	0.92 x 1	0.92 x 1	0.92 x 2
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
Starting method	Inverter	Inverter	Inverter
Motor output kW	10.8	12.4	13.3
Case heater kW	—	—	—
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740
	in. 65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 68-15/16 x 29-3/16
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)	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	Over-heat protection, Over-current protection
Refrigerant	Type x original charge R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)
Net weight kg (lbs)	253 (558)	253 (558)	288 (635)
Heat exchanger	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

#### Notes:

\*1, \*2 Nominal conditions

	Indoor	Outdoor	Pipe length	Level difference


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# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSKA(-BS)

#### ► Specifications



Model	PUHY-P550YSKA (-BS)	PUHY-P600YSKA (-BS)	PUHY-P650YSKA (-BS)
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1 kW 63.0 kcal/h 55,000 *1 BTU / h 215,000	68.0 60,000 232,000	73.0 65,000 249,100
Power input	kW 16.07	kW 18.18	kW 19.78
Current input	A 27.1-25.7-24.8	A 30.6-29.1-28.1	A 33.3-31.7-30.5
EER	kW / kW 3.92	kW / kW 3.74	kW / kW 3.69
Cooling capacity	*4 kW 63.9	kW 69.4	kW 74.5
Temp. range of cooling	Indoor W.B. 15.0~24.0°C (59~75°F) Outdoor D.B. -5.0~54.0°C (23~129°F)	15.0~24.0°C (59~75°F) -5.0~54.0°C (23~129°F)	15.0~24.0°C (59~75°F) -5.0~54.0°C (23~129°F)
Heating capacity (Nominal)	*2 kW 63.0 kcal/h 55,000 *2 BTU / h 215,000	68.0 60,000 232,000	73.0 65,000 249,100
Power input	kW 15.51	kW 16.70	kW 18.02
Current input	A 26.1-24.8-23.9	A 28.1-26.7-25.8	A 30.4-28.8-27.8
COP	kW / kW 4.06	kW / kW 4.07	kW / kW 4.05
Temp. range of heating	Indoor D.B. 15.0~27.0°C (59~81°F) Outdoor W.B. -20.0~15.5°C (-4~60°F)	15.0~27.0°C (59~81°F) -20.0~15.5°C (-4~60°F)	15.0~27.0°C (59~81°F) -20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity 50~130% of outdoor unit capacity Model / Quantity P15-P250/2~47	50~130% of outdoor unit capacity P15-P250/2~50	50~130% of outdoor unit capacity P15-P250/2~50
Sound pressure level (measured in anechoic room)	dB <A> 63	dB <A> 63	dB <A> 64.5
Refrigerant piping	Liquid pipe mm (in.) 15.88 (5/8) Braze	Liquid pipe mm (in.) 15.88 (5/8) Braze	Liquid pipe mm (in.) 15.88 (5/8) Braze
diameter	Gas pipe mm (in.) 28.58 (1-1/8) Braze	Gas pipe mm (in.) 28.58 (1-1/8) Braze	Gas pipe mm (in.) 28.58 (1-1/8) Braze

Model	PUHY-P250YKA (-BS)	PUHY-P300YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P400YKA (-BS)
FAN	Type x Quantity Propeller fan x 1					
Air flow rate	m³/min 175 L/s 2,917 cfm 6,179	m³/min 185 L/s 3,083 cfm 6,532	m³/min 175 L/s 2,917 cfm 6,179	m³/min 210 L/s 3,500 cfm 7,415	m³/min 175 L/s 2,917 cfm 6,179	m³/min 210 L/s 3,500 cfm 7,415
Control, Driving mechanism	Inverter-control, Direct-driven by motor					
Motor output	kW 0.92 x 1					
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)					
Compressor	Type x Quantity Inverter scroll hermetic compressor	Type x Quantity Inverter scroll hermetic compressor	Type x Quantity Inverter scroll hermetic compressor	Type x Quantity Inverter scroll hermetic compressor	Type x Quantity Inverter scroll hermetic compressor	Type x Quantity Inverter scroll hermetic compressor
Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Motor output	kW 6.9	kW 8.1	kW 6.9	kW 10.4	kW 6.9	kW 10.8
Case heater	kW -					
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD	mm 1,650 x 920 x 740 in. 65 x 36-1/4 x 29-3/16	mm 1,650 x 920 x 740 in. 65 x 36-1/4 x 29-3/16	mm 1,650 x 920 x 740 in. 65 x 48-1/16 x 29-3/16	mm 1,650 x 920 x 740 in. 65 x 36-1/4 x 29-3/16	mm 1,650 x 920 x 740 in. 65 x 48-1/16 x 29-3/16	mm 1,650 x 920 x 740 in. 65 x 48-1/16 x 29-3/16
Protection devices	High pressure protection High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure protection High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure protection High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure protection High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure protection High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure protection High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection					
Refrigerant	Type x original charge R410A x 8.0 kg (18 lbs)	Type x original charge R410A x 8.0 kg (18 lbs)	Type x original charge R410A x 8.0 kg (18 lbs)	Type x original charge R410A x 11.5 kg (26 lbs)	Type x original charge R410A x 8.0 kg (18 lbs)	Type x original charge R410A x 11.5 kg (26 lbs)
Net weight	kg (lbs) 195 (430)	kg (lbs) 211 (466)	kg (lbs) 195 (430)	kg (lbs) 256 (565)	kg (lbs) 195 (430)	kg (lbs) 253 (558)
Heat exchanger	Salt-resistant cross fin & copper tube					
Pipe between unit and distributor	Liquid pipe mm (in.) 9.52 (3/8) Braze Gas pipe mm (in.) 22.2 (7/8) Braze	Liquid pipe mm (in.) 12.7 (1/2) Braze Gas pipe mm (in.) 22.2 (7/8) Braze	Liquid pipe mm (in.) 9.52 (3/8) Braze Gas pipe mm (in.) 22.2 (7/8) Braze	Liquid pipe mm (in.) 15.88 (5/8) Braze Gas pipe mm (in.) 28.58 (1-1/8) Braze	Liquid pipe mm (in.) 15.88 (5/8) Braze Gas pipe mm (in.) 28.58 (1-1/8) Braze	Liquid pipe mm (in.) 15.88 (5/8) Braze Gas pipe mm (in.) 28.58 (1-1/8) Braze
Optional parts	Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G					

#### Notes:

\*1,\*2 Nominal conditions

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

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*4 Reference data under condition of Indoor 27°C DB/19.5°C WB(81°F DB/67°F WB) Outdoor 35°C DB(95°F DB)

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

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

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSKA(-BS)

#### ► Specifications



Model	PUHY-P700YSKA (-BS)	PUHY-P750YSKA (-BS)	PUHY-P800YSKA (-BS)
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz	3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1 kW 76.0 kcal/h 68,000 *1 BTU / h 259,300	81.5 73,000 278,100	90.0 80,000 307,100
Power input	kW 21.40	kW 23.90	kW 27.10
Current input	A 36.1-34.3-33.0	A 40.3-38.3-36.9	A 45.7-43.4-41.8
EER	kW / kW 3.55	3.41	3.32
Cooling capacity	*4 kW 77.6	83.2	91.3
Temp. range of cooling	Indoor W.B. 15.0~24.0°C (59~75°F) Outdoor D.B. -5.0~54.0°C (23~129°F)	15.0~24.0°C (59~75°F) -5.0~54.0°C (23~129°F)	15.0~24.0°C (59~75°F) -5.0~54.0°C (23~129°F)
Heating capacity (Nominal)	*2 kW 76.0 kcal/h 68,000 *2 BTU / h 259,300	81.5 73,000 278,100	90.0 80,000 307,100
Power input	kW 20.00	kW 22.20	kW 23.01
Current input	A 33.7-32.0-30.9	A 37.4-35.6-34.3	A 38.8-36.9-35.5
EER	kW / kW 3.80	3.67	3.91
Temp. range of heating	Indoor D.B. 15.0~27.0°C (59~81°F) Outdoor W.B. -20.0~15.5°C (-4~60°F)	15.0~27.0°C (59~81°F) -20.0~15.5°C (-4~60°F)	15.0~27.0°C (59~81°F) -20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity 50~130% of outdoor unit capacity Model / Quantity P15-P250/2~50	50~130% of outdoor unit capacity P15-P250/2~50	50~130% of outdoor unit capacity P15-P250/2~50
Sound pressure level (measured in anechoic room)	dB <A> 64.5	dB <A> 65.5	dB <A> 66
Refrigerant piping	Liquid pipe mm (in.) 19.05 (3/4) Braze	Liquid pipe mm (in.) 19.05 (3/4) Braze	Liquid pipe mm (in.) 19.05 (3/4) Braze
diameter	Gas pipe mm (in.) 34.93 (1-3/8) Braze	Gas pipe mm (in.) 34.93 (1-3/8) Braze	Gas pipe mm (in.) 34.93 (1-3/8) Braze

Model	PUHY-P250YKA (-BS)	PUHY-P450YKA

# Outdoor Unit Y Series Heat Pump

## PUHY-P YSKA(-BS)

### ► Specifications

Model	PUHY-P850YSKA (-BS)		PUHY-P900YSKA (-BS)	
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal) *1	kW 93.0	kcal/h 83,000	kW 96.0	kcal/h 86,000
	*1 BTU / h 317,300			327,600
Power input	kW 29.24			31.57
Current input	A 49.3-46.8-45.1			53.2-50.6-48.8
EER	kW / kW 3.18			3.04
Cooling capacity *4	kW 94.4			97.4
Temp. range of cooling	Indoor W.B. 15.0-24.0°C (59-75°F)		15.0-24.0°C (59-75°F)	
	Outdoor D.B. -5.0-54.0°C (23-129°F)			-5.0-54.0°C (23-129°F)
Heating capacity (Nominal) *2	kW 93.0		kW 96.0	
	kcal/h 83,000			86,000
	*2 BTU / h 317,300			327,600
Power input	kW 25.40			28.07
Current input	A 42.8-40.7-39.2			47.3-45.0-43.3
COP	kW / kW 3.66			3.42
Temp. range of heating	Indoor D.B. 15.0-27.0°C (59-81°F)		15.0-27.0°C (59-81°F)	
	Outdoor W.B. -20.0-15.5°C (-4-60°F)			-20.0-15.5°C (-4-60°F)
Indoor unit connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15-P250/2~50		50~130% of outdoor unit capacity P15-P250/2~50
Sound pressure level (measured in anechoic room)	dB <A>	66		66
Refrigerant piping	Liquid pipe mm (in.) Gas pipe mm (in.)	19.05 (3/4) Braze 41.28 (1-5/8) Braze		19.05 (3/4) Braze 41.28 (1-5/8) Braze



### Notes:

\*1,\*2 Nominal conditions

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

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*4 Reference data under condition of Indoor 27°C DB/19.5°C WB(81°F DB/67°F WB) Outdoor 35°C DB(95°F DB)

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

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

# Outdoor Unit Y Series Heat Pump

## PUHY-P YSKA(-BS)

### ► Specifications



Model	PUHY-P950YSKA (-BS)		PUHY-P1000YSKA (-BS)	
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal) *1	kW 103.0		kW 110.0	
	kcal/h 89,000			98,000
	*1 BTU / h 351,400			375,300
Power input	kW 34.21			36.78
Current input	A 57.7-54.8-52.8			62.0-58.9-56.8
EER	kW / kW 3.01			2.99
Cooling capacity *4	kW 105.2			112.3
Temp. range of cooling	Indoor W.B. 15.0-24.0°C (59-75°F)		15.0-24.0°C (59-75°F)	
	Outdoor D.B. -5.0-54.0°C (23-129°F)			-5.0-54.0°C (23-129°F)
Heating capacity (Nominal) *2	kW 103.0		kW 110.0	
	kcal/h 89,000			98,000
	*2 BTU / h 351,400			375,300
Power input	kW 30.56			33.13
Current input	A 51.5-49.0-47.2			55.9-53.1-51.2
COP	kW / kW 3.37			3.32
Temp. range of heating	Indoor D.B. 15.0-27.0°C (59-81°F)		15.0-27.0°C (59-81°F)	
	Outdoor W.B. -20.0-15.5°C (-4-60°F)			-20.0-15.5°C (-4-60°F)
Indoor unit connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15-P250/2~50		50~130% of outdoor unit capacity P15-P250/2~50
Sound pressure level (measured in anechoic room)	dB <A>	67.5		68
Refrigerant piping	Liquid pipe mm (in.) Gas pipe mm (in.)	19.05 (3/4) Braze 41.28 (1-5/8) Braze		19.05 (3/4) Braze 41.28 (1-5/8) Braze

Model	PUHY-P400YKA (-BS)	PUHY-P500YKA (-BS)	PUHY-P500YKA (-BS)	PUHY-P500YKA (-BS)
FAN	Type x Quantity Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate m <sup>3</sup> /min L/s cfm	210 3,500 7,415	360 6,000 12,712	360 6,000 12,712
	Control, Driving mechanism Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output kW 0.92 x 1	0.92 x 1	0.92 x 2	0.92 x 2
	*3 External static press. 0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method Inverter	Inverter	Inverter	Inverter
	Motor output kW 10.8	12.4	12.4	13.3
	Case heater kW —	—	—	—
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <UNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <UNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <UNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <UNSELL 5Y 8/1 or similar>
External dimension HxWxD	mm 1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	mm 1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	mm 1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	mm 1,650 x 1,750 x 740 65 x 68-15/16 x 29-3/16
Protection devices	High pressure protection High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure protection, Over-current protection Over-heat protection, Over-current protection	High pressure protection, High pressure switch at 4.15 MPa (601 psi)	High pressure protection, High pressure switch at 4.15 MPa (601 psi)
Refrigerant	Type x original charge R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)
Net weight	kg (lbs) 253 (558)	253 (558)	253 (558)	288 (635)
Heat exchanger	Salt-resistant cross fin & copper tube			
Pipe between unit and distributor	Liquid pipe mm (in.) 15.88 (5/8) Braze Gas pipe mm (in.) 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze
Optional parts	Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G			

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

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*4 Reference data under condition of Indoor 27°C DB/19.5°C WB(81°F DB/67°F WB) Outdoor 35°C DB(95°F DB)

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

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

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSKA(-BS)

#### ► Specifications



Model	PUHY-P1050YSKA (-BS)			PUHY-P1100YSKA (-BS)		
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW kcal/h *1 BTU / h	115.0 103,000 392,400		121.5 108,000 414,600		
	Power input Current input EER	kW A kW / kW	32.57 54.9-52.2-50.3 3.53	35.63 60.1-57.1-55.0 3.41		
Cooling capacity *4	kW	117.4		124.1		
Temp. range of cooling	Indoor Outdoor	W.B. D.B.	15.0-24.0°C (59-75°F) -5.0-54.0°C (23-129°F)	15.0-24.0°C (59-75°F) -5.0-54.0°C (23-129°F)		
Heating capacity (Nominal)	*2 kW kcal/h *2 BTU / h	115.0 103,000 392,400		121.5 108,000 414,600		
	Power input Current input COP	kW A kW / kW	31.50 53.1-50.5-48.6 3.65	33.80 57.0-54.2-52.2 3.59		
Temp. range of heating	Indoor Outdoor	D.B. W.B.	15.0-27.0°C (59-81°F) -20.0-15.5°C (-4-60°F)	15.0-27.0°C (59-81°F) -20.0-15.5°C (-4-60°F)		
Indoor unit connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15-P250/3-50		50~130% of outdoor unit capacity P15-P250/3-50		
Sound pressure level (measured in anechoic room)	dB <A>	66.5		66.5		
Refrigerant piping	Liquid pipe diameter	mm (in.)	19.05 (3/4) Braze	19.05 (3/4) Braze		
	Gas pipe diameter	mm (in.)	41.28 (1-5/8) Braze	41.28 (1-5/8) Braze		

Set Model	Model	PUHY-P300YKA (-BS)	PUHY-P300YKA (-BS)	PUHY-P450YKA (-BS)	PUHY-P300YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P450YKA (-BS)
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m³/min L/s cfm	185 3,083 6,532	185 3,083 6,532	210 3,500 7,415	185 3,083 6,532	210 3,500 7,415
	Control, Driving mechanism	Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity	Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	8.1	12.4	8.1	10.4
	Case heater	kW	-	-	-	-	-
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm in.	1,650 x 920 x 740 65 x 36-1/4 x 29-3/16	1,650 x 920 x 740 65 x 36-1/4 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16
Protection devices	High pressure protection Inverter circuit (COMP./FAN)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
Refrigerant	Type x original charge	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight	kg (lbs)	211 (466)	211 (466)	253 (558)	211 (466)	256 (565)	253 (558)
Heat exchanger	Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube			
Pipe between unit	Liquid pipe and distributor	mm (in.) Gas pipe mm (in.)	12.7 (1/2) Braze 22.2 (7/8) Braze	12.7 (1/2) Braze 28.58 (1-1/8) Braze	12.7 (1/2) Braze 22.2 (7/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze
Optional parts	Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			

#### Notes:

\*1,\*2 Nominal conditions

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

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*4 Reference data under condition of Indoor 27°C DB/19.5°C WB(81°F DB/67°F WB) Outdoor 35°C DB(95°F DB)

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

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

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSKA(-BS)

#### ► Specifications



Model	PUHY-P1150YSKA (-BS)			PUHY-P1200YSKA (-BS)		
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW kcal/h *1 BTU / h	130.0 115,000 443,600		135.0 120,000 460,600		
	Power input Current input EER	kW A kW / kW	38.80 65.5-62.2-59.9 3.35	40.66 68.6-65.2-62.8 3.32		
Cooling capacity *4	kW	132.7		137.8		
Temp. range of cooling	Indoor Outdoor	W.B. D.B.	15.0-24.0°C (59-75°F) -5.0-54.0°C (23-129°F)	15.0-24.0°C (59-75°F) -5.0-54.0°C (23-129°F)		
Heating capacity (Nominal)	*2 kW kcal/h *2 BTU / h	130.0 115,000 443,600		135.0 120,000 460,600		
	Power input Current input COP	kW A kW / kW	35.51 59.9-56.9-54.8 3.66	37.70 63.6-60.4-58.2 3.58		
Temp. range of heating	Indoor Outdoor	D.B. W.B.	15.0-27.0°C (59-81°F) -20.0-15.5°C (-4-60°F)	15.0-27.0°C (59-81°F) -20.0-15.5°C (-4-60°F)		
Indoor unit connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15-P250/3-50		50~130% of outdoor unit capacity P15-P250/3-50		
Sound pressure level (measured in anechoic room)	dB <A>	67.5		68		
Refrigerant piping	Liquid pipe diameter	mm (in.)	19.05 (3/4) Braze	19.05 (3/4) Braze		
	Gas pipe diameter	mm (in.)	41.28 (1-5/8) Braze	41.28 (1-5/8) Braze		

Set Model	Model	PUHY-P350YKA (-BS)	PUHY-P400YKA (-BS)	PUHY-P400YKA (-BS)	PUHY-P400YKA (-BS)	PUHY-P400YKA (-BS)	
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
	Air flow rate	m³/min L/s cfm	210 3,500 7,415	210 3,500 7,415	210 3,500 7,415	210 3,500 7,415	
	Control, Driving mechanism	Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	
	*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity	Inverter scroll hermetic compressor			In		

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSKA(-BS)

#### ► Specifications



Model	PUHY-P1250YSKA (-BS)			PUHY-P1300YSKA (-BS)		
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW kcal/h *1 BTU / h	138.0 123,000 470,900		141.0 126,000 481,100		
	Power input kW Current input A EER kW / kW	43.12 72.7-69.1-66.6 3.20		45.77 77.2-73.4-70.7 3.08		
Cooling capacity *4 kW		140.9		144.0		
Temp. range of cooling	Indoor W.B. Outdoor D.B.	15.0~24.0°C (59~75°F) -5.0~54.0°C (23~129°F)		15.0~24.0°C (59~75°F) -5.0~54.0°C (23~129°F)		
Heating capacity (Nominal)	*2 kW kcal/h *2 BTU / h	138.0 123,000 470,900		141.0 126,000 481,100		
	Power input kW Current input A COP kW / kW	40.35 68.1-64.7-62.3 3.42		42.98 72.5-68.9-66.4 3.28		
Temp. range of heating	Indoor D.B. Outdoor W.B.	15.0~27.0°C (59~81°F) -20.0~15.5°C (-4~60°F)		15.0~27.0°C (59~81°F) -20.0~15.5°C (-4~60°F)		
Indoor unit connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15-P250/3-50		50~130% of outdoor unit capacity P15-P250/3-50		
Sound pressure level (measured in anechoic room)	dB <A>	68		68		
Refrigerant piping diameter	Liquid pipe mm (in.) Gas pipe mm (in.)	19.05 (3/4) Braze 41.28 (1-5/8) Braze		19.05 (3/4) Braze 41.28 (1-5/8) Braze		

Model	PUHY-P400YKA (-BS)	PUHY-P400YKA (-BS)	PUHY-P450YKA (-BS)	PUHY-P400YKA (-BS)	PUHY-P450YKA (-BS)	PUHY-P450YKA (-BS)
FAN	Type x Quantity Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate m³/min L/s cfm	210 3,500 7,415	210 3,500 7,415	210 3,500 7,415	210 3,500 7,415	210 3,500 7,415
	Control, Driving mechanism Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output kW	10.8	10.8	12.4	10.8	12.4
	Case heater kW	—	—	—	—	—
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm in.	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16
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)		
Refrigerant	Type x original charge R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight	kg (lbs)	253 (558)	253 (558)	253 (558)	253 (558)	253 (558)
Heat exchanger	Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe mm (in.) Gas pipe mm (in.)	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze
Optional parts	Outdoor Twinning kit: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

#### Notes:

\*1,2 Nominal conditions

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

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*4 Reference data under condition of Indoor 27°C DB/19.5°C WB(81°F DB/67°F WB) Outdoor 35°C DB(95°F DB)

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

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

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSKA(-BS)

#### ► Specifications



Model	PUHY-P1350YSKA (-BS)			PUHY-P1400YSKA (-BS)		
Power source	3-phase 4-wire 380-400-415 V 50/60 Hz			3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW kcal/h *1 BTU / h	144.0 129,000 491,300		151.0 135,000 515,200		
	Power input kW Current input A EER kW / kW	48.64 82.1-78.0-75.1 2.96		52.24 88.1-83.7-80.7 2.89		
Cooling capacity *4 kW		147.0		154.2		
Temp. range of cooling	Indoor W.B. Outdoor D.B.	15.0~24.0°C (59~75°F) -5.0~54.0°C (23~129°F)		15.0~24.0°C (59~75°F) -5.0~54.0°C (23~129°F)		
Heating capacity (Nominal)	*2 kW kcal/h *2 BTU / h	144.0 129,000 491,300		151.0 135,000 515,200		
	Power input kW Current input A COP kW / kW	46.15 77.9-74.0-71.3 3.12		49.50 83.5-79.3-76.5 3.05		
Temp. range of heating	Indoor D.B. Outdoor W.B.	15.0~27.0°C (59~81°F) -20.0~15.5°C (-4~60°F)		15.0~27.0°C (59~81°F) -20.0~15.5°C (-4~60°F)		
Indoor unit Total capacity connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15-P250/3-50		50~130% of outdoor unit capacity P15-P250/3-50		
Sound pressure level (measured in anechoic room)	dB <A>	68		68		
Refrigerant piping diameter	Liquid pipe mm (in.) Gas pipe mm (in.)	19.05 (3/4) Braze 41.28 (1-5/8) Braze		19.05 (3/4) Braze 41.28 (1-5/8) Braze		

Model	PUHY-P450YKA (-BS)	PUHY-P450YKA (-BS)	PUHY-P450YKA (-BS)	PUHY-P450YKA (-BS)	PUHY-P450YKA (-BS)	PUHY-P500YKA (-BS)
FAN	Type x Quantity Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate m³/min L/s cfm	210 3,500 7,415	210 3,500 7,415	210 3,500 7,415	210 3,500 7,415	360 6,000 12,712
	Control, Driving mechanism Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
*3 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output kW	12.4	12.4	12.4	12.4	13.3
	Case heater kW	—	—	—	—	—
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm in.	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16
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)		
Refrigerant	Type x original charge R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)		

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSKA(-BS)

#### ► Specifications

Model		PUHY-P1450YSKA (-BS)		
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW kcal/h *1 BTU / h	156.0 141,000 539,100		
Power input Current input EER	kW A kW / kW	55.83 94.2-89.5-86.3 2.83		
Cooling capacity	*4 kW	161.3		
Temp. range of cooling	Indoor Outdoor	W.B. D.B.	15.0-24.0°C (59-75°F) -5.0-54.0°C (23-129°F)	
Heating capacity (Nominal)	*2 kW kcal/h *2 BTU / h	158.0 141,000 539,100		
Power input Current input COP	kW A kW / kW	52.49 88.6-84.1-81.1 3.01		
Temp. range of heating	Indoor Outdoor	D.B. W.B.	15.0-27.0°C (59-81°F) -20.0-15.5°C (-4-60°F)	
Indoor unit connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15~P250/3~50		
Sound pressure level (measured in anechoic room)	dB <A>	69.5		
Refrigerant piping diameter	Liquid pipe Gas pipe	mm (in.) mm (in.)	19.05 (3/4) Brazed 41.28 (1-5/8) Brazed	
<b>Set Model</b>				
Model		PUHY-P450YKA (-BS)	PUHY-P500YKA (-BS)	PUHY-P500YKA (-BS)
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min L/s cfm	210 3,500 7,415	360 6,000 12,712
	Control, Driving mechanism	Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 2
Compressor	External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
	Type x Quantity	Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter
	Motor output	kW	12.4	13.3
Case heater				
External finish				
Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension HxWxD		mm in.	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,750 x 740 65 x 68-15/16 x 29-3/16
Protection devices				
High pressure protection Inverter circuit (COMP/FAN)				
High pressure sensor, High pressure switch at 4.15 MPa (601 psi) Over-heat protection, Over-current protection				
Refrigerant Type x original charge				
R410A x 11.5 kg (26 lbs)				
Net weight kg (lbs)				
253 (558)				
Heat exchanger				
Salt-resistant cross fin & copper tube				
Pipe between unit and distributor		Liquid pipe Gas pipe	mm (in.) mm (in.)	15.88 (5/8) Brazed 28.58 (1-1/8) Brazed
Optional parts				
Outdoor Twinning kit: CMY-Y300V рр Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				

#### Notes:

\*1,\*2 Nominal conditions

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

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*4 Reference data under condition of Indoor 27°C DB/19.5°C WB(81°F DB/67°F WB) Outdoor 35°C DB(95°F DB)

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

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



# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSKA(-BS)

#### ► Specifications



Model		PUHY-P1500YSKA (-BS)		
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz		
Cooling capacity (Nominal)	*1 kW kcal/h *1 BTU / h	165.0 147,000 563,000		
Power input Current input EER	kW A kW / kW	59.56 100.5-95.5-92.0 2.77		
Cooling capacity	*4 kW	168.5		
Temp. range of cooling	Indoor Outdoor	W.B. D.B.	15.0-24.0°C (59-75°F) -5.0-54.0°C (23-129°F)	
Heating capacity (Nominal)	*2 kW kcal/h *2 BTU / h	165.0 147,000 563,000		
Power input Current input COP	kW A kW / kW	56.12 94.7-90.0-86.7 2.94		
Temp. range of heating	Indoor Outdoor	D.B. W.B.	15.0-27.0°C (59-81°F) -20.0-15.5°C (-4-60°F)	
Indoor unit connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15~P250/3~50		
Sound pressure level (measured in anechoic room)	dB <A>	70		
Refrigerant piping diameter	Liquid pipe Gas pipe	mm (in.) mm (in.)	19.05 (3/4) Brazed 41.28 (1-5/8) Brazed	
<b>Set Model</b>				
Model		PUHY-P500YKA (-BS)	PUHY-P500YKA (-BS)	PUHY-P500YKA (-BS)
FAN	Type x Quantity	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min L/s cfm	360 6,000 12,712	360 6,000 12,712
	Control, Driving mechanism	Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 2	0.92 x 2
Compressor	External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
	Type x Quantity	Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter
	Motor output	kW	13.3	13.3
Case heater				
External finish				
Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension HxWxD		mm in.	1,650 x 1,750 x 740 65 x 68-15/16 x 29-3/16	1,650 x 1,750 x 740 65 x 68-15/16 x 29-3/16
Protection devices				
High pressure protection Inverter circuit (COMP/FAN)				
High pressure sensor, High pressure switch at 4.15 MPa (601 psi) Over-heat protection, Over-current protection				
Refrigerant Type x original charge				
R410A x 11.8 kg (27 lbs)				
Net weight kg (lbs)				
288 (635)				
Heat exchanger				
Salt-resistant cross fin & copper tube				
Pipe between unit and distributor		Liquid pipe Gas pipe	mm (in.) mm (in.)	15.88 (5/8) Brazed 28.58 (1-1/8) Brazed
Optional parts				
Outdoor Twinning kit: CMY-Y300V рр Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				

#### Notes:

\*1,\*2 Nominal conditions

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

\*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*4 Reference data under condition of Indoor 27°C DB/19.5°C WB(81°F DB/67°F WB) Outdoor 35°C DB(95°F DB)

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

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

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YHA(-BS)

#### ► Specifications

		PUHY-P200YHA(-BS)	PUHY-P250YHA(-BS)	PUHY-P300YHA(-BS)
Power source				
Cooling capacity *1 (Nominal)	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. range of cooling	Indoor W.B.	15~24°C(59~75°F)		
	Outdoor D.B.	- 5~46°C(23~115°F)		
Heating capacity *2 (Nominal)	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. 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 Model/Quantity	50~130% of outdoor unit capacity		
	P15~P250 / 1~17	P15~P250 / 1~21	P15~P250 / 1~26	
Sound pressure level (measured in anechoic room)	dB<A>	56	57	59
Power pressure level (measured in anechoic room)	dB<A>	76	77	79
Diameter of refrigerant pipe	Liquid mm(in.)	ø9.52 (ø3/8) Brazed	ø9.52 (ø3/8) Brazed	ø9.52 (ø3/8) Brazed
	Gas mm(in.)	ø12.7 (ø1/2) Brazed , total length >=90m	(ø12.7 (ø1/2) Brazed , total length >=40m)	
External finish	Pre-coated galvanized steel sheets (+ powder coating for-BS type) < MUNSELL 3.0Y 7.8/11 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
	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
Net weight	kg(lbs)	185 (408)	200 (441)	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 m³/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 x 1	0.92 x 1	0.92 x 1
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	Over-current protection		
	Fan motor	Thermal switch	Thermal switch	Thermal switch
Refrigerant	Type x Original charge	R410A x 6.5kg (15 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)
Optional parts		joint : CMY-Y102SS-G2	joint : CMY-Y102SS / LS-G2	Header : CMY-Y104 / 108 / 1010-G
		Header : CMY-Y104 / 108 / 1010-G		

#### Notes:

\*1,\*2 Nominal conditions

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

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

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



# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YHA(-BS)

#### ► Specifications



		PUHY-P350YHA(-BS)	PUHY-P400YHA(-BS)	PUHY-P450YHA(-BS)
Cooling capacity *1 (Nominal)	kW	40.0	45.0	50.0
	BTU/h	136,500	153,500	170,600
Power input	kW	11.20	13.23	16.66
Current input	A	18.9-17.9-17.3	22.3-21.2-20.4	28.1-26.7-25.7
COP (kW/kW)		3.57	3.40	3.00
Temp. range of cooling	Indoor W.B.	15~24°C (59~75°F)		
	Outdoor D.B.	- 5~46°C (23~115°F)		
Heating capacity *2 (Nominal)	kW	45.0	50.0	52.0
	BTU/h	153,500	170,600	177,400
Power input	kW	12.09	13.47	15.85
Current input	A	20.4-19.3-18.6	22.7-21.6-20.8	26.7-25.4-24.5
COP (kW/kW)		3.72	3.71	3.28
Temp. 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 Model/Quantity	50~130% of outdoor unit capacity		
	P15~P250 / 1~30	P15~P250 / 1~34	P15~P250 / 1~39	
Sound pressure level (measured in anechoic room)	dB<A>	60	61	62
Power pressure level (measured in anechoic room)	dB<A>	80	81	82
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 3.0Y 7.8/11 or similar >			
External dimension H x W x D	mm	1,650 x 1,220 x 760	1,650 x 1,220 x 760	1,650 x 1,220 x 760
	in.	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16
Net weight	kg(lbs)	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
	m³/min	225	225	225
FAN	Air flow rate L/s	3,750	3,750	3,750
	cfm	7,945	7,945	7,945
	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit	Over-current protection		
	Fan motor	Thermal switch	Thermal switch	Thermal switch
Refrigerant	Type x Original charge	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)
Optional parts		joint : CMY-Y102SS / LS-G2 Header : CMY-Y104 / 108 / 1010-G		

#### Notes:

\*1,\*2 Nominal conditions

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

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

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

# Outdoor Unit Y Series Heat Pump

## PUHY-P YSHA(-BS)

### ► Specifications



Set name	PUHY-P500YSHA(-BS)	PUHY-P550YSHA(-BS)	PUHY-P600YSHA(-BS)	PUHY-P650YSHA(-BS)				
Power source								
Cooling capacity *1 (Nominal)	56.0 kW	63.0 kW	69.0 kW	73.0 kW				
Power input *1 BTU/h	191,100	215,000	235,400	249,100				
Current input A	16.47	18.36	18.75	20.79				
COP (kW / 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				
Temp. range of cooling	Indoor W.B. Outdoor D.B.	15~24°C (59~75°F) - 5~46°C (23~115°F)						
Heating capacity *2 (Nominal)	63.0 kW	69.0 kW	76.5 kW	81.5 kW				
Power input *2 BTU/h	215,000	235,400	261,000	278,100				
Current input A	16.40	18.06	19.92	21.90				
COP (kW/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				
Temp. range of heating	Indoor temp. D.B. Outdoor temp. W.B.	15~27°C (59~81°F) -20~15.5°C (-4~60°F)						
Indoor unit connectable	Total capacity Model/Quantity	50~130% of outdoor unit capacity						
Sound pressure level (measured in anechoic room)	P15-P250 / 1~43	P15-P250 / 1~47	P15-P250 / 1~50	P15-P250 / 1~50				
Power pressure level (measured in anechoic room)	dB <A>	60	61	62				
Diameter of refrigerant pipe	Liquid mm(in.) Gas mm(in.)	ø15.88 (ø5/8) Brazed ø28.58 (ø1-1/8) Brazed	ø15.88 (ø5/8) Brazed ø28.58 (ø1-1/8) Brazed	ø15.88 (ø5/8) Brazed ø28.58 (ø1-1/8) Brazed				
Outdoor unit 1 and Outdoor unit 2	PUHY-P250YHA (-BS) PUHY-P250YHA (-BS)	PUHY-P250YHA (-BS) PUHY-P300YHA (-BS)	PUHY-P250YHA (-BS) PUHY-P350YHA (-BS)	PUHY-P300YHA (-BS) PUHY-P350YHA (-BS)				
External finish	Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 3.0Y 7.8/11 or similar>							
External dimension H x W x D	mm in.	1,650 x 920 x 760 65 x 36-1/4 x 29-15/16	1,650 x 920 x 760 65 x 36-1/4 x 29-15/16	1,650 x 920 x 760 65 x 36-1/4 x 29-15/16				
Net weight	kg(lbs)	200 (441)	200 (441)	215 (474)				
Heat exchanger	Salt-resistant cross fin & copper tube							
Compressor	Type	Inverter scroll hermetic compressor						
Starting method	Inverter							
Motor output	kW	6.7	6.7	8.2	6.7	10.3	8.2	10.3
FAN	m³/min	185	185	185	185	225	185	225
Air flow rate	L/s	3,083	3,083	3,083	3,083	3,750	3,083	3,750
	cfm	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	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)						
Inverter circuit	Over-current protection							
Fan motor	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch
Refrigerant	Type x Original charge	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 9.0kg (20 lbs)	R410A x 11.5kg (26 lbs)	R410A x 9.0kg (26 lbs)	R410A x 11.5kg (26 lbs)
Pipe between unit distributor	Liquid mm(in.) Gas mm(in.)	ø9.52 (ø3/8) Brazed ø22.2 (ø7/8) Brazed	ø12.7 (ø1/2) Brazed ø22.2 (ø7/8) Brazed	ø9.52 (ø3/8) Brazed ø22.2 (ø7/8) Brazed	ø12.7 (ø1/2) Brazed ø22.2 (ø7/8) Brazed	ø12.7 (ø1/2) Brazed ø22.2 (ø7/8) Brazed	ø12.7 (ø1/2) Brazed ø22.2 (ø7/8) Brazed	ø15.88 (ø5/8) Brazed ø28.58 (ø1-1/8) Brazed
Optional parts	Outdoor Twinning Kit : CMY-Y100VBK2 joint : CMY-Y102SS / LS-G2, CMY-Y202S / 302S-G2 Header : CMY-Y104 / 108 / 1010-G							

### Notes:

\*1,\*2 Nominal conditions

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

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

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

# Outdoor Unit Y Series Heat Pump

## PUHY-P YSHA(-BS)

### ► Specifications



Set name	PUHY-P700YSHA(-BS)	PUHY-P750YSHA(-BS)	PUHY-P800YSHA(-BS)			
Power source						
Cooling capacity *1 (Nominal)	80.0 kW	85.0 kW	90.0 kW			
Power input *1 BTU/h	273,000	290,000	307,100			
Current input A	22.47	25.07	27.69			
COP (kW/kW)	3.56	3.39	3.25			
Temp. range of cooling	Indoor W.B. Outdoor D.B.	15~24°C (59~75°F) - 5~46°C (23~115°F)				
Heating capacity *2 (Nominal)	88.0 kW	95.0 kW	100.0 kW			
Power input *2 BTU/h	300,300	324,100	341,200			
Current input A	23.71	25.46	25.70			
COP (kW/kW)	3.71	3.73	3.89			
Temp. range of heating	Indoor temp. D.B. Outdoor temp. W.B.	15~27°C (59~81°F) -20~15.5°C (-4~60°F)				
Indoor unit connectable	Total capacity Model/Quantity	50~130% of outdoor unit capacity				
Sound pressure level (measured in anechoic room)	dB <A>	63	63.5			
Power pressure level (measured in anechoic room)	dB <A>	83	83.5			
Diameter of refrigerant pipe	Liquid mm(in.) Gas mm(in.)	ø19.05 (ø3/4) Brazed ø34.93 (ø1-3/8) Brazed	ø19.05 (ø3/4) Brazed ø34.93 (ø1-3/8) Brazed			
Outdoor unit 1 and Outdoor unit 2	PUHY-P350YHA(-BS)	PUHY-P350YHA(-BS)	PUHY-P400YHA(-BS)			
External finish	Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 3.0Y 7.8/11 or similar>					
External dimension H x W x D	mm in.	1,650 x 1,220 x 760 65 x 48-1/16 x 29-15/16	1,650 x 1,220 x 760 65 x 48-1/16 x 29-15/16			
Net weight	kg(lbs)	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	12.0
FAN	m³/min	225	225	225	225	225
Air flow rate	L/s	3,750	3,750	3,750	3,750	3,750
	cfm	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	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)				
Inverter circuit	Over-current protection					
Fan motor	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch
Refrigerant	Type x Original charge	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)
Pipe between unit distributor	Liquid mm(in.) Gas mm(in.)	ø12.7 (ø1/2) Brazed ø28.58 (ø1-1/8) Brazed	ø12.7 (ø1/2) Brazed ø28.58 (ø1-1/8) Brazed	ø15.88 (ø5/8) Brazed ø28.58 (ø1-1/8) Brazed	ø12.7 (ø1/2) Brazed ø28.58 (ø1-1/8) Brazed	ø15.88 (ø5/8) Brazed ø28.58 (ø1-1/8) Brazed
Optional parts	Outdoor Twinning Kit : CMY-Y100VBK2 joint : CMY-Y102SS / LS-G2, CMY-Y202S / 302S-G2 Header : CMY-Y104 / 108 / 1010-G					

### Notes:

\*1,\*2 Nominal conditions

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

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

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

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSHA(-BS)

#### ► Specifications

Set name		PUHY-P850YSHA(-BS)	PUHY-P900YSHA(-BS)		
Power source		3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity *1 (Nominal)	kW *1 BTU/h	96.0 327,600	101.0 344,600		
Power input Current input	kW A	30.90 52.1-49.7-52.7	34.12 57.5-54.7-52.7		
COP (kW/kW)		3.10	2.96		
Temp. range of cooling	Indoor W.B. Outdoor D.B.	15~24°C (59~75°F) - 5~46°C (23~115°F)			
Heating capacity *2 (Nominal)	kW *2 BTU/h	102.0 348,000	104.0 354,800		
Power input Current input	kW A	29.82 50.3-47.8-46.0	31.7 53.5-50.8-49.0		
COP (kW/kW)		3.42	3.28		
Temp. range of heating	Indoor temp. D.B. Outdoor temp. W.B.	15~27°C (59~81°F) -20~15.5°C (-4~60°F)			
Indoor unit connectable	Total capacity Model/Quantity	50~130% of outdoor unit capacity P15~P250 / 1~50			
Sound pressure level (measured in anechoic room)	dB<A>	64.5	65		
Power pressure level (measured in anechoic room)	dB<A>	84.5	85		
Diameter of refrigerant pipe	Liquid mm(in.) Gas mm(in.)	ø19.05 (ø3/4) Brazed ø41.28 (ø1-5/8) Brazed	ø19.05 (ø3/4) Brazed ø41.28 (ø1-5/8) Brazed		
Outdoor unit 1 and Outdoor unit 2	PUHY-P400YHA(-BS)	PUHY-P450YHA(-BS)	PUHY-P450YHA(-BS)		
External finish	Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 3.0Y 7.8/11 or similar>				
External dimension H x W x D	mm in.	1,650 x 1,220 x 760 65 x 48-1/16 x 29-15/16	1,650 x 1,220 x 760 65 x 48-1/16 x 29-15/16	1,650 x 1,220 x 760 65 x 48-1/16 x 29-15/16	1,650 x 1,220 x 760 65 x 48-1/16 x 29-15/16
Net weight	kg(lbs)	245 (541)	245 (541)	245 (541)	245 (541)
Heat exchanger	Salt-resistant cross fin & copper tube				
Compressor	Type Starting method	Inverter scroll hermetic compressor Inverter			
	Motor output kW m³/min	10.5 225	12.0 225	12.0 225	12.0 225
FAN	Air flow rate L/s cfm	3,750 7,945	3,750 7,945	3,750 7,945	3,750 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 x 1	0.92 x 1	0.92 x 1	0.92 x 1
Protection devices	High pressure protection Inverter circuit	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Over-current protection				
Fan motor	Thermal switch	Thermal switch	Thermal switch	Thermal switch	
Refrigerant	Type x Original charge	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)
Pipe between unit distributor	Liquid mm(in.) Gas mm(in.)	ø15.88 (ø5/8) Brazed ø28.58 (ø1-1/8) Brazed			
Optional parts	Outdoor Twinning kit : CMY-Y200VBK2 joint : CMY-Y102SS / LS-G2, CMY-Y202S / 302S-G2 Header : CMY-Y104 / 108 / 1010-G				



#### Notes:

\*1,\*2 Nominal conditions

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

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

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

# Outdoor Unit

## Y Series Heat Pump

### PUHY-P YSHA(-BS)

#### ► Specifications



Set name		PUHY-P950YSHA(-BS)	PUHY-P1000YSHA(-BS)	PUHY-P1050YSHA(-BS)			
Power source		3-phase 4-wire 380-400-415V 50/60Hz					
Cooling capacity *1 (Nominal)	kW *1 BTU/h	108.0 368,500	113.0 385,600	118.0 402,600			
Power input Current input	kW A	30.68 51.7-49.2-47.4	32.47 54.8-52.0-50.1	33.90 57.2-54.3-52.4			
COP (kW/kW)		3.52	3.48	3.48			
Temp. range of cooling	Indoor W.B. Outdoor D.B.	15~24°C (59~75°F) - 5~46°C (23~115°F)					
Heating capacity *2 (Nominal)	kW *2 BTU/h	119.5 407,700	127.0 433,300	132.0 450,400			
Power input Current input	kW A	30.02 50.6-48.1-46.4	33.15 55.9-53.1-51.2	35.01 59.1-56.1-54.1			
COP (kW/kW)		3.98	3.83	3.77			
Temp. range of heating	Indoor temp. D.B. Outdoor temp. W.B.	15~27°C (59~81°F) -20~15.5°C (-4~60°F)					
Indoor unit connectable	Total capacity Model/Quantity	50~130% of outdoor unit capacity P15~P250 / 1~50					
Sound pressure level (measured in anechoic room)	dB<A>	64	64.5	65			
Power pressure level (measured in anechoic room)	dB<A>	84	84.5	85			
Diameter of refrigerant pipe	Liquid mm(in.) Gas mm(in.)	ø19.05 (ø3/4) Brazed ø41.28 (ø1-5/8) Brazed	ø19.05 (ø3/4) Brazed ø41.28 (ø1-5/8) Brazed	ø19.05 (ø3/4) Brazed ø41.28 (ø1-5/8) Brazed			
Outdoor unit 1, Outdoor unit 2, and Outdoor unit 3	PUHY-P400YHA(-BS)	PUHY-P450YHA(-BS)	PUHY-P450YHA(-BS)	PUHY-P400YHA(-BS)			
External finish	Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 3.0Y 7.8/11 or similar>						
External dimension H x W x D	mm in.	1,650 x 920 x 760 65 x 36-1/4 x 29-15/16	1,650 x 920 x 760 65 x 36-1/4 x 29-15/16	1,650 x 920 x 760 65 x 36-1/4 x 29-15/16	1,650 x 920 x 760 65 x 48-1/16 x 29-15/16	1,650 x 920 x 760 65 x 48-1/16 x 29-15/16	1,650 x 920 x 760 65 x 48-1/16 x 29-15/16
Net weight	kg(lbs)	200 (441)	215 (474)	245 (541)	215 (474)	245 (541)	245 (541)
Heat exchanger	Salt-resistant cross fin & copper tube						
Compressor	Type Starting method	Inverter scroll hermetic compressor Inverter					
	Motor output kW m³/min	6.7 185	8.2 225	10.5 185	8.2 225	10.5 185	10.5 225
FAN	Air flow rate L/s cfm	3,083 6,532	3,083 6,532	3,750 7,945	3,083 6,532	3,750 7,945	3,750 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	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
Protection devices	High pressure protection Inverter circuit	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)					
	Over-current protection						
Fan motor	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch
Refrigerant	Type x Original charge	R410A x 9.0kg (20 lbs)	R410A x 11.5kg (26 lbs)	R410A x 9.0kg (20 lbs)	R410A x 11.5kg (26 lbs)	R410A x 9.0kg (20 lbs)	R410A x 11.5kg (26 lbs)
Pipe between unit distributor	Liquid mm(in.) Gas mm(in.)	ø9.52 (ø3/8) Brazed ø22.2 (ø7/8) Brazed	ø12.7 (ø1/2) Brazed ø22.2 (ø7/8) Brazed	ø15.88 (ø5/8) Brazed ø28.58 (ø1-1/8) Brazed	ø12.7 (ø1/2) Brazed ø22.2 (ø7/8) Brazed	ø15.88 (ø5/8) Brazed ø28.58 (ø1-1/8) Brazed	ø12.7 (ø1/2) Brazed ø22.2 (ø7/8) Brazed
Optional parts	Outdoor Twinning kit : CMY-Y300VBK2 joint : CMY-Y102SS / LS-G2, CMY-Y202S / 302S-G2 Header : CMY-Y104 / 108 / 1010-G						

#### Notes:

\*1,\*2 Nominal conditions

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

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

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

# Outdoor Unit Y Series Heat Pump

## PUHY-P YSHA(-BS)

### ► Specifications

Set name		PUHY-P1100YSHA(-BS)			PUHY-P1150YSHA(-BS)			
Power source		3-phase 4-wire 380-400-415V 50/60Hz						
Cooling capacity *1 (Nominal)	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. range of cooling	Indoor	W.B.	15~24°C (59~75°F)					
	Outdoor	D.B.	- 5~46°C (23~115°F)					
Heating capacity *2 (Nominal)	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. 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			
Power pressure level (measured in anechoic room)	dB<A>	85			85.5			
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-P350YHA(-BS)	PUHY-P350YHA(-BS)	PUHY-P400YHA(-BS)	PUHY-P350YHA(-BS)	PUHY-P450YHA(-BS)	PUHY-P450YHA(-BS)		
External finish	Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 3.0Y 7.8/11 or similar>							
External dimension H x W x D	mm	1,650 x 1,220 x 760	1,650 x 1,220 x 760	1,650 x 1,220 x 760	1,650 x 1,220 x 760	1,650 x 1,220 x 760	1,650 x 1,220 x 760	
	in.	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	
Net weight	kg (lbs)	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	
Air flow rate	m³/min	225	225	225	225	225		
	L/s	3,750	3,750	3,750	3,750	3,750		
	cfm	7,945	7,945	7,945	7,945	7,945		
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1		
	Motor output	kW	0.92 x 1					
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)						
	Inverter circuit	Over-current protection						
Fan motor	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch	Thermal switch		
Refrigerant	Type x Original charge	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)	R410A x 11.5kg (26 lbs)		
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	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	ø28.58 (ø1-1/8) Brazed	
Optional parts	Outdoor Twinning Kit : CMY-Y300VBK2 joint : CMY-Y102SS / LS-G2, CMY-Y202S / 302S-G2 Header : CMY-Y104 / 108 / 1010-G							

### Notes:

\*1,\*2 Nominal conditions

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

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

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



# Outdoor Unit Y Series Heat Pump

## PUHY-P YSHA(-BS)

### ► Specifications



Set name		PUHY-P1200YSHA(-BS)			PUHY-P1250YSHA(-BS)			
Power source		3-phase 4-wire 380-400-415V 50/60Hz						
Cooling capacity *1 (Nominal)	kW	136.0			140.0			
	BTU/h	464,000			477,700			
Power input	kW	41.71			46.20			
Current input	A	70.4-66.8-64.4			77.9-74.0-71.4			
COP (kW/kW)		3.26			3.03			
Temp. range of cooling	Indoor	W.B.	15~24°C (59~75°F)					
	Outdoor	D.B.	- 5~46°C (23~115°F)					
Heating capacity *2 (Nominal)	kW	150.0			150.0			
	BTU/h	511,800			511,800			
Power input	kW	40.10			44.77			
Current input	A	67.6-64.3-61.9			75.5-71.7-69.2			
COP (kW/kW)		3.74			3.35			
Temp. 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			
Power pressure level (measured in anechoic room)	dB<A>	86			86			
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-P350YHA(-BS)	PUHY-P350YHA(-BS)	PUHY-P400YHA(-BS)	PUHY-P350YHA(-BS)	PUHY-P450YHA(-BS)	PUHY-P450YHA(-BS)		
External finish	Pre-coated galvanized steel sheets (+ powder coating for-BS type) <MUNSELL 3.0Y 7.8/11 or similar>							
External dimension H x W x D	mm	1,650 x 1,220 x 760	1,650 x 1,220 x 760	1,650 x 1,220 x 760	1,650 x 1,220 x 760	1,650 x 1,220 x 760	1,650 x 1,220 x 760	
	in.	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	65 x 48-1/16 x 29-15/16	
Net weight	kg (lbs)	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	
Air flow rate	m³/min	225	225	225	225	225		
	L/s	3,750	3,750	3,750	3,750	3,750		
	cfm	7,945	7,945	7,945	7,945	7,945		
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1				

# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YKA(-BS)

#### ► Specifications

Model	PUCY-P200YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P300YKA (-BS)	PUCY-P350YKA (-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	22.4	28.0	33.5
	kcal/h	20,000	25,000	30,000
	*1 BTU / h	76,400	95,500	114,300
	Power input kW	5.59	7.08	8.95
Current input A	9.4-8.9-8.6	11.9-11.3-10.9	15.1-14.3-13.8	18.1-17.2-16.6
EER kW / kW	4.00	3.95	3.74	3.71
Cooling capacity *3 kW	22.7	28.4	34.0	40.6
Temp. range of cooling	Indoor W.B.	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)
	Outdoor D.B.	10.0-54.0°C (50-129°F)	10.0-54.0°C (50-129°F)	10.0-54.0°C (50-129°F)
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity	P15~P250/1~17	P15~P250/1~21	P15~P250/1~26
Sound pressure level (measured in anechoic room)	dB <A>	57	58	61
Refrigerant piping diameter	Liquid pipe mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed (12.7 (1/2))	9.52 (3/8) Brazed (12.7 (1/2))
	Gas pipe mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
Air flow rate	m³/min	175	175	175
	L/s	2,917	2,917	2,917
	cfm	6,179	6,179	6,179
Control, Driving mechanism	Inverter-control, Direct-driven by motor			
Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1
*2 External static press.	0 Pa (0 mmH <sub>2</sub> O)			
	Type x Quantity	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
Compressor	Starting method	Inverter	Inverter	Inverter
	Motor output	kW	5.5	6.9
	Case heater	kW	—	—
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD	mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740
	in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16
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)	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	Over-heat protection, Over-current protection
	Compressor	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor	Over-current protection	Over-current protection	Over-current protection
Refrigerant	Type x original charge	R410A x 5.5 kg (13 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)
Net weight	kg (lbs)	174 (384)	183 (404)	201 (444)
Heat exchanger	Salt-resistant cross fin & copper tube			
Optional parts	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G



Notes:

\*1 Nominal cooling conditions (subject to JIS B8615-2)

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

\*2 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*3 Reference data under condition of Indoor: 27°CDB./19.5°CWB. (81°FDB./67°FWB.), Outdoor: 35°CDB. (95°FDB.).

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

# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YKA(-BS)

#### ► Specifications



Model	PUCY-P400YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P500YKA (-BS)
Power source	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1 kW	44.0	48.0
	kcal/h	39,000	43,000
	*1 BTU / h	150,100	163,800
	Power input kW	12.71	15.73
Current input A	21.4-20.3-19.6	26.5-25.2-24.3	28.9-27.5-26.5
EER kW / kW	3.46	3.05	3.26
Cooling capacity *3 kW	44.7	48.8	56.9
Temp. range of cooling	Indoor W.B.	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)
	Outdoor D.B.	10.0-54.0°C (50-129°F)	10.0-54.0°C (50-129°F)
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model / Quantity	P15~P250/1~34	P15~P250/1~39
Sound pressure level (measured in anechoic room)	dB <A>	63	63
Refrigerant piping diameter	Liquid pipe mm (in.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas pipe mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1
Air flow rate	m³/min	175	175
	L/s	2,917	2,917
	cfm	6,179	6,179
Control, Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
Motor output	kW	0.92 x 1	0.92 x 1
*2 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
	Type x Quantity	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
Compressor	Starting method	Inverter	Inverter
	Motor output	kW	10.8
	Case heater	kW	—
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>
External dimension HxWxD	mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740
	in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16
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
	Fan motor	Over-current protection	Over-current protection
Refrigerant	Type x original charge	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight	kg (lbs)	237 (523)	237 (523)
Heat exchanger	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Optional parts	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

Notes:

\*1 Nominal cooling conditions (subject to JIS B8615-2)

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

\*2 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*3 Reference data under condition of Indoor: 27°CDB./19.5°CWB. (81°FDB./67°FWB.), Outdoor: 35°CDB. (95°FDB.).

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

# Outdoor Unit Y Series Cooling-only

**PUCY-P YSKA(-BS)**

## ► Specifications



Model		PUCY-P550YSKA (-BS)		PUCY-P600YSKA (-BS)		PUCY-P650YSKA (-BS)	
Power source		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW	61.5		68.0		72.0	
	kcal/h	52,900		58,500		61,900	
	*1 BTU / h	209,800		232,000		245,700	
	Power input kW	15.97		17.79		19.67	
	Current input A	26.9-25.6-24.6		30.0-28.5-27.4		33.2-31.5-30.4	
	EER kW / kW	3.85		3.82		3.66	
Cooling capacity		*3 kW	62.5	69.1		73.2	
Temp. range of cooling	Indoor	W.B.	15.0-24.0°C (59-75°F)	15.0-24.0°C (59-75°F)		15.0-24.0°C (59-75°F)	
	Outdoor	D.B.	10.0-54.0°C (50-129°F)	10.0-54.0°C (50-129°F)		10.0-54.0°C (50-129°F)	
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
	Model / Quantity	P15-P250/2-47		P15-P250/2-50		P15-P250/2-50	
Sound pressure level (measured in anechoic room)		dB <A>	63	63		64.5	
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Braze	15.88 (5/8) Braze		15.88 (5/8) Braze	
	Gas pipe	mm (in.)	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze		28.58 (1-1/8) Braze	

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# Outdoor Unit

## Y Series Cooling-only

## **PUCY-P YSKA(-BS)**

## ► Specifications



Model		PUCY-P550YSKA (-BS)		PUCY-P600YSKA (-BS)		PUCY-P650YSKA (-BS)		
Power source		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	61.5		68.0		72.0		
	kcal/h	52,900		58,500		61,900		
	*1 BTU / h	209,800		232,000		245,700		
	Power input kW	15.97		17.79		19.67		
	Current input A	26.9-25.6-24.6		30.0-28.5-27.4		33.2-31.5-30.4		
	EER kW / kW	3.85		3.82		3.66		
Cooling capacity		*3 kW	62.5		69.1		73.2	
Temp. range of cooling	Indoor	W.B.		15.0-24.0°C (59-75°F)		15.0-24.0°C (59-75°F)		
	Outdoor	D.B.		10.0-54.0°C (50-129°F)		10.0-54.0°C (50-129°F)		
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity	P15-P250/2-47		P15-P250/2-50		P15-P250/2-50		
Sound pressure level (measured in anechoic room)		dB <A>	63		63		64.5	
Refrigerant piping diameter	Liquid pipe mm (in.)	15.88 (5/8) Brazed		15.88 (5/8) Brazed		15.88 (5/8) Brazed		
	Gas pipe mm (in.)	28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		28.58 (1-1/8) Brazed		
Set Model								
Model	PUCY-P250YKA (-BS)		PUCY-P300YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P350YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P400YKA (-BS)	
FAN	Type x Quantity	Propeller fan x 1		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	
	Air flow rate m³/min	175		175	175	175	175	
	L/s	2,917		2,917	2,917	2,917	2,917	
	cfm	6,179		6,179	6,179	6,179	6,179	
	Control, Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		
	Motor output kW	0.92 x 1		0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	
*2 External static press.	External static press.	0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	
	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		
Compressor	Starting method	Inverter		Inverter		Inverter		
	Motor output kW	6.9		8.1		6.9		
	Case heater kW	-		-		-		
External finish		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD mm		1,650 x 920 x 740		1,650 x 920 x 740		1,650 x 920 x 740		
		65 x 36-1/4 x 29-3/16		65 x 36-1/4 x 29-3/16		65 x 48-1/16 x 29-3/16		
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)		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		Over-heat protection, Over-current protection	
	Compressor		Over-heat protection		Over-heat protection		Over-heat protection	
	Fan motor		Over-current protection		Over-current protection		Over-current protection	
	Refrigerant Type x original charge		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)		R410A x 6.5 kg (15 lbs)	
Net weight kg (lbs)		183 (404)		201 (444)		183 (404)		
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe mm (in.)	9.52 (3/8) Brazed		12.7 (1/2) Brazed		9.52 (3/8) Brazed		
	Gas pipe mm (in.)	22.2 (7/8) Brazed		22.2 (7/8) Brazed		28.58 (1-1/8) Brazed		
Optional parts		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

## **Notes:**

\*1 Nominal cooling conditions (subject to JIS B8615-2)

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

\*2 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*3 Reference data under condition of Indoor: 27°C.D.B./19.5°C.C.W.B. (81°F.D.B./67°F.C.W.B.), Outdoor: 35°C.D.B. (95°F.D.B.)

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

Model		PUCY-P700YSKA (-BS)		PUCY-P750YSKA (-BS)		PUCY-P800YSKA (-BS)			
Power source		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz			
Cooling capacity (Nominal)	*1 kW	76.0		81.5		88.0			
	kcal/h	65,400		70,100		75,700			
	*1 BTU / h	259,300		278,100		300,300			
	Power input	kW		22.47		24.47			
Current input		A		37.9-36.0-34.7		41.3-39.2-37.8			
EER		kW / kW		3.38		3.33			
Cooling capacity		*3 kW	77.2		82.8		89.4		
Temp. range of cooling	Indoor	W.B.		15.0-24.0°C (59-75°F)		15.0-24.0°C (59-75°F)		15.0-24.0°C (59-75°F)	
	Outdoor	D.B.		10.0-54.0°C (50-129°F)		10.0-54.0°C (50-129°F)		10.0-54.0°C (50-129°F)	
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
	Model / Quantity	P15-P250/2-50		P15-P250/2-50		P15-P250/2-50		P15-P250/2-50	
Sound pressure level (measured in anechoic room)		dB <A>		64.5		65.5		66	
Refrigerant piping diameter	Liquid pipe	mm (in.)		19.05 (3/4) Brazed		19.05 (3/4) Brazed		19.05 (3/4) Brazed	
	Gas pipe	mm (in.)		34.93 (1-3/8) Brazed		34.93 (1-3/8) Brazed		34.93 (1-3/8) Brazed	

**Set Model**

Model		PUCY-P250YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P300YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P400YKA (-BS)
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m <sup>3</sup> /min	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	6,179	6,179	6,179	6,179
	Control, Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
*2 External static press.		Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)
		Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)	Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity	Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	12.4	8.1	12.4	10.8
	Case heater	kW	-	-	-	-	-
	External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
	in.	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16
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)		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		Over-heat protection, Over-current protection	
	Compressor	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor	Over-current protection		Over-current protection		Over-current protection	
Refrigerant	Type x original charge	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight	kg (lbs)	183 (404)	237 (523)	201 (444)	237 (523)	237 (523)	237 (523)
Heat exchanger	Salt-resistant cross fin & copper tube				Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2		Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2	
		Header: CMY-Y104/108/1010-G		Header: CMY-Y104/108/1010-G		Header: CMY-Y104/108/1010-G	

**Notes:**

1 Nominal cooling conditions (subject to JIS B8615-2)

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

<sup>2</sup> External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

Reference data under condition of Indoor: 27°C.D.B./19.5°C.W.B. (81°F.D.B./67°F.W.B.), Outdoor: 35°C.D.B. (95°F.D.B.)

<sup>3</sup> Reference data under condition of Index: 27 C.B./10.5 C.W.B. (31 P.D.B./31 P.W.B.), Outage

# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YSKA(-BS)

#### ► Specifications

Model	PUCY-P850YSKA (-BS)		PUCY-P900YSKA (-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW kcal/h *1 BTU / h	92.0 79,100 313,900	96.0 82,600 327,600	
Power input	kW	28.37	31.47	
Current input	A	47.8-45.4-43.8	53.1-50.4-48.6	
EER	kW / kW	3.24	3.05	
Cooling capacity	*3 kW	93.5	97.6	
Temp. range of cooling	Indoor Outdoor	W.B. D.B.	15.0-24.0°C (59-75°F) 10.0-54.0°C (50-129°F)	15.0-24.0°C (59-75°F) 10.0-54.0°C (50-129°F)
Indoor unit connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15-P250/2-50	50~130% of outdoor unit capacity P15-P250/2-50	
Sound pressure level (measured in anechoic room)	dB <A>	66	66	
Refrigerant piping diameter	Liquid pipe Gas pipe	mm (in.) 41.28 (1-5/8) Braze	mm (in.) 41.28 (1-5/8) Braze	mm (in.) 41.28 (1-5/8) Braze
Set Model				
Model	PUCY-P400YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P450YKA (-BS)
FAN	Type x Quantity Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate m³/min L/s cfm	175 2,917 6,179	175 2,917 6,179	175 2,917 6,179
	Control, Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	
	Motor output kW	0.92 x 1	0.92 x 1	0.92 x 1
	*2 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity Inverter scroll hermetic compressor	Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter
	Motor output kW	10.8	12.4	12.4
	Case heater kW	-	-	-
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm in.	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16
Protection devices	High pressure protection Inverter circuit (COMP/FAN) Compressor Fan motor Refrigerant	High pressure sensor, High pressure switch at 4.15 MPa (601 psi) Over-heat protection, Over-current protection Over-heat protection, Over-current protection Over-heat protection, Over-current protection Type x original charge Net weight kg (lbs)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi) Over-heat protection, Over-current protection Over-heat protection, Over-current protection Over-heat protection, Over-current protection R410A x 11.5 kg (26 lbs) 237 (523)	Over-heat protection, Over-current protection Over-heat protection, Over-current protection Over-heat protection, Over-current protection Thermal switch R410A x 11.5 kg (26 lbs) 237 (523)
Heat exchanger	Salt-resistant cross fin & copper tube			
Pipe between unit and distributor	Liquid pipe Gas pipe mm (in.)	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze
Optional parts	Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			



#### Notes:

\*1 Nominal cooling conditions (subject to JIS B8615-2)

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

\*2 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*3 Reference data under condition of Indoor: 27°CDB./19.5°CWB. (81°FDB./67°FWB.), Outdoor: 35°CDB. (95°FDB.).

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

# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YSKA(-BS)

#### ► Specifications



Model	PUCY-P950YSKA (-BS)		PUCY-P1000YSKA (-BS)	
Power source	3-phase 4-wire 380-400-415V 50/60Hz		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity (Nominal)	*1 kW kcal/h *1 BTU / h	104.0 89,400 354,800	112.0 96,300 382,100	
Power input	kW	35.13	38.88	
Current input	A	59.3-56.3-54.3	65.6-62.3-60.1	
EER	kW / kW	2.96	2.88	
Cooling capacity	*3 kW	105.7	113.9	
Temp. range of cooling	Indoor Outdoor	W.B. D.B.	15.0-24.0°C (59-75°F) 10.0-54.0°C (50-129°F)	15.0-24.0°C (59-75°F) 10.0-54.0°C (50-129°F)
Indoor unit connectable	Total capacity Model / Quantity	50~130% of outdoor unit capacity P15-P250/2-50	50~130% of outdoor unit capacity P15-P250/2-50	50~130% of outdoor unit capacity P15-P250/2-50
Sound pressure level (measured in anechoic room)	dB <A>	67.5	68	
Refrigerant piping diameter	Liquid pipe Gas pipe	mm (in.) 41.28 (1-5/8) Braze	mm (in.) 41.28 (1-5/8) Braze	mm (in.) 41.28 (1-5/8) Braze
Set Model				
Model	PUCY-P400YKA (-BS)	PUCY-P500YKA (-BS)	PUCY-P500YKA (-BS)	PUCY-P500YKA (-BS)
FAN	Type x Quantity Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate m³/min L/s cfm	175 2,917 6,179	320 5,333 11,299	320 5,333 11,299
	Control, Driving mechanism	Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor	
	Motor output kW	0.92 x 1	0.92 x 2	0.92 x 2
	*2 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	
	Starting method	Inverter	Inverter	Inverter
	Motor output kW	12.4	14.3	14.3
	Case heater kW	-	-	-
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm in.	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,750 x 740 65 x 68-15/16 x 29-3/16	1,650 x 1,750 x 740 65 x 68-15/16 x 29-3/16
Protection devices	High pressure protection Inverter circuit (COMP/FAN) Compressor Fan motor Refrigerant	High pressure sensor, High pressure switch at 4.15 MPa (601 psi) Over-heat protection, Over-current protection Over-heat protection, Over-current protection Over-heat protection, Over-current protection Type x original charge Net weight kg (lbs)	Over-heat protection, Over-current protection Over-heat protection, Over-current protection Over-heat protection, Over-current protection Thermal switch R410A x 11.8 kg (27 lbs)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi) Over-heat protection, Over-current protection Over-heat protection, Over-current protection Over-heat protection, Over-current protection R410A x 11.8 kg (27 lbs)
Heat exchanger	Salt-resistant cross fin & copper tube			
Pipe between unit and distributor	Liquid pipe Gas pipe mm (in.)	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze	15.88 (5/8) Braze 28.58 (1-1/8) Braze
Optional parts	Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			

#### Notes:

\*1 Nominal cooling conditions (subject to JIS B8615-2)

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

\*2 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*3 Reference data under condition of Indoor: 27°CDB./19.5°CWB. (81°FDB./67°FWB.), Outdoor: 35°CDB. (95°FDB.).

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



# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YSKA(-BS)

#### ► Specifications



Model	PUCY-P1050YSKA (-BS)			PUCY-P1100YSKA (-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz			3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	115.0		121.5		
	kcal/h	98,900		104,500		
	*1 BTU / h	392,400		414,600		
Power input	kW	33.39		35.21		
Current input	A	56.3-53.5-51.6		59.4-56.4-54.4		
EER	kW / kW	3.44		3.45		
Cooling capacity	*3 kW	116.9		123.5		
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)		
	Outdoor	D.B.	10.0~54.0°C (50~129°F)	10.0~54.0°C (50~129°F)		
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity			50~130% of outdoor unit capacity	
Model / Quantity	P15~P250/3~50			P15~P250/3~50		
Sound pressure level (measured in anechoic room)	dB <A>	66.5		66.5		
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed	
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed	

#### Set Model

Model	PUCY-P300YKA (-BS)	PUCY-P300YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P300YKA (-BS)	PUCY-P350YKA (-BS)	PUCY-P450YKA (-BS)
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m³/min	175	175	175	175
		L/s	2,917	2,917	2,917	2,917
		cfm	6,179	6,179	6,179	6,179
	Control, Driving mechanism	Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	*2 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity	Inverter scroll hermetic compressor			Inverter scroll hermetic compressor	
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	8.1	12.4	12.4
	Case heater	kW	-	-	-	-
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 920 x 740	1,650 x 1,220 x 740
	in.	65 x 36-1/4 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 36-1/4 x 29-3/16	65 x 48-1/16 x 29-3/16
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	
	Fan motor	Over-current protection			Over-current protection	
Refrigerant	Type x original charge	R410A x 6.5 kg (15 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)
	Net weight	kg (lbs)	201 (444)	201 (444)	237 (523)	201 (444)
Heat exchanger	Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts	Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

#### Notes:

\*1 Nominal cooling conditions (subject to JIS B8615-2)

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

\*2 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*3 Reference data under condition of Indoor: 27°CDB/19.5°CWB. (81°FDB./67°FWB.), Outdoor: 35°CDB. (95°FDB.).

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

# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YSKA(-BS)

#### ► Specifications



Model	PUCY-P1100YSKA (-BS)			PUCY-P1200YSKA (-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz			3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	128.0		132.0		
	kcal/h	110,100		113,500		
	*1 BTU / h	436,700		450,400		
Power input	kW	36.15		38.15		
Current input	A	61.0-57.9-55.8		64.4-61.1-58.9		
EER	kW / kW	3.54		3.46		
Cooling capacity	*3 kW	130.1		134.2		
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	
	Outdoor	D.B.	10.0~54.0°C (50~129°F)	10.0~54.0°C (50~129°F)	10.0~54.0°C (50~129°F)	
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity			50~130% of outdoor unit capacity	
Model / Quantity	P15~P250/3~50			P15~P250/3~50		
Sound pressure level (measured in anechoic room)	dB <A>	67.5		68		
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed			19.05 (3/4) Brazed	
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed			41.28 (1-5/8) Brazed	

#### Set Model

Model	PUCY-P350YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P400YKA (-BS)
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m³/min	175	175	175	175
		L/s	2,917	2,917	2,917	2,917
		cfm	6,179	6,179	6,179	6,179
	Control, Driving mechanism	Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	*2 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity	Inverter scroll hermetic compressor			Inverter scroll hermetic compressor	
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.8	10.8	10.8</td

# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YSKA(-BS)

#### ► Specifications



Model	PUCY-P1250YSKA (-BS)			PUCY-P1300YSKA (-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz			3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	136.0	140.0			
	kcal/h	117,000	120,400			
	*1 BTU / h	464,000	477,700			
Power input	kW	41.27	44.82			
Current input	A	69.6-66.1-63.7	75.6-71.8-69.2			
EER	kW / kW	3.29	3.12			
Cooling capacity	*3 kW	138.3	142.3			
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)		
	Outdoor	D.B.	10.0~54.0°C (50~129°F)	10.0~54.0°C (50~129°F)		
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity			50~130% of outdoor unit capacity	
Model / Quantity	P15-P250/3-50			P15-P250/3-50		
Sound pressure level (measured in anechoic room)	dB <A>	68			68	
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Braze			19.05 (3/4) Braze	
	Gas pipe mm (in.)	41.28 (1-5/8) Braze			41.28 (1-5/8) Braze	

Model	PUCY-P400YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P450YKA (-BS)
<b>FAN</b>						
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
Air flow rate	m³/min	175	175	175	175	175
	L/s	2,917	2,917	2,917	2,917	2,917
	cfm	6,179	6,179	6,179	6,179	6,179
Control, Driving mechanism	Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
Motor output	kW	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 1
	Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
*2 External static press.						
<b>Compressor</b>						
Type x Quantity	Inverter-control, Direct-driven by motor			Inverter scroll hermetic compressor		
Starting method	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Motor output	kW	10.8	10.8	12.4	10.8	12.4
Case heater	kW	-	-	-	-	-
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,220 x 740
	in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16
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	Over-heat protection	Over-heat protection	Over-heat protection
	Fan motor	Over-current protection			Over-current protection	
Refrigerant	Type x original charge	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight	kg (lbs)	237 (523)	237 (523)	237 (523)	237 (523)	237 (523)
Heat exchanger	Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe mm (in.)	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze	15.88 (5/8) Braze
	Gas pipe mm (in.)	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze	28.58 (1-1/8) Braze
Optional parts	Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		

#### Notes:

\*1 Nominal cooling conditions (subject to JIS B8615-2)

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

\*2 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*3 Reference data under condition of Indoor: 27°CDB./19.5°CWB. (81°FDB./67°FWB.), Outdoor: 35°CDB. (95°FDB.).

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

# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YSKA(-BS)

#### ► Specifications



Model	PUCY-P1300YSKA (-BS)		
Power source	3-phase 4-wire 380-400-415V 50/60Hz		
Cooling capacity (Nominal)	*1 kW	144.0	
	kcal/h	123,800	
	*1 BTU / h	491,300	
Power input	kW	48.39	
Current input	A	81.6-77.6-74.8	
EER	kW / kW	2.97	
Cooling capacity	*3 kW	146.4	
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	10.0~54.0°C (50~129°F)
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity	
Model / Quantity	P15-P250/3-50		
Sound pressure level (measured in anechoic room)	dB <A>	68	
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Braze	
	Gas pipe mm (in.)	41.28 (1-5/8) Braze	

Model	PUCY-P450YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P450YKA (-BS)
<b>FAN</b>			
Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
Air flow rate	m³/min	175	175
	L/s	2,917	2,917
	cfm	6,179	6,179
Control, Driving mechanism	Inverter-control, Direct-driven by motor		
Motor output	kW	0.92 x 1	0.92 x 1
	Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
*2 External static press.			
<b>Compressor</b>			
Type x Quantity	Inverter scroll hermetic compressor		
Starting method	Inverter	Inverter	Inverter
Motor output	kW	12.4	12.4
Case heater	kW	-	-
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>		
External dimension HxWxD	mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740
	in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16
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
	Fan motor	Over-current protection	Over-current protection
Refrigerant	Type x original charge		

# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YSKA(-BS)

#### ► Specifications



Model		PUCY-P1400YSKA (-BS)	
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1 kW	152.0	
	kcal/h	130,700	
	*1 BTU / h	518,600	
Power input	kW	52.59	
Current input	A	88.7-84.3-81.2	
EER	kW / kW	2.89	
Cooling capacity	*3 kW	154.5	
Temp. range of cooling	Indoor W.B.	15.0-24.0°C (59-75°F)	
	Outdoor D.B.	10.0-54.0°C (50-129°F)	
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity	
	Model / Quantity	P15-P250/3-50	
Sound pressure level (measured in anechoic room)	dB <A>	68.5	
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed	
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed	

Model		PUCY-P450YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P500YKA(-BS)
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Air flow rate	m³/min	175	175
		L/s	2,917	5,333
		cfm	6,179	11,299
	Control, Driving mechanism	Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 1	0.92 x 1
			0.92 x 1	0.92 x 2
	*2 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity	Inverter scroll hermetic compressor		
	Starting method	Inverter	Inverter	Inverter
	Motor output	kW	12.4	12.4
	Case heater	kW	-	-
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension HxWxD	mm	1,650 x 1,220 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740
	in.	65 x 48-1/16 x 29-3/16	65 x 48-1/16 x 29-3/16	65 x 68-15/16 x 29-3/16
Protection devices	High pressure protection	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)		
	Inverter circuit (COMP/FAN)	Over-heat protection, Over-current protection		
Refrigerant	Type x original charge	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)
Net weight	kg (lbs)	237 (523)	237 (523)	305 (673)
Heat exchanger	Salt-resistant cross fin & copper tube			
Pipe between unit and distributor	Liquid pipe mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts	Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G			

#### Notes:

\*1 Nominal cooling conditions (subject to JIS B8615-2)

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

\*2 External static pressure option is available (30Pa, 60Pa / 3.1mmH<sub>2</sub>O, 6.1mmH<sub>2</sub>O).

\*3 Reference data under condition of Indoor: 27°CDB/19.5°CWB. (81°FDB/67°FWB.), Outdoor: 35°CDB. (95°FDB.)

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

# Outdoor Unit

## Y Series Cooling-only

### PUCY-P YSKA(-BS)

#### ► Specifications



Model		PUCY-P1450YSKA (-BS)		PUCY-P1500YSKA (-BS)	
Power source		3-phase 4-wire 380-400-415 V 50/60 Hz		3-phase 4-wire 380-400-415 V 50/60 Hz	
Cooling capacity (Nominal)	*1 kW	160.0		168.0	
	kcal/h	137,600		144,500	
	*1 BTU / h	545,900		573,200	
Power input	kW	56.53		60.54	
Current input	A	95.4-90.6-87.3		102.3-97.2-93.7	
EER	kW / kW	2.83		2.77	
Cooling capacity	*3 kW	162.7		170.8	
Temp. range of cooling	Indoor W.B.	15.0-24.0°C (59-75°F)		15.0-24.0°C (59-75°F)	
	Outdoor D.B.	10.0-54.0°C (50-129°F)		10.0-54.0°C (50-129°F)	
Indoor unit connectable	Total capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
	Model / Quantity	P15-P250/3-50		P15-P250/3-50	
Sound pressure level (measured in anechoic room)	dB <A>	69.5		70	
Refrigerant piping diameter	Liquid pipe mm (in.)	19.05 (3/4) Brazed		19.05 (3/4) Brazed	
	Gas pipe mm (in.)	41.28 (1-5/8) Brazed		41.28 (1-5/8) Brazed	

Model		PUCY-P450YKA (-BS)	PUCY-P500YKA (-BS)	PUCY-P500YKA (-BS)	PUCY-P500YKA (-BS)	PUCY-P500YKA (-BS)
FAN	Type x Quantity	Propeller fan x 1	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m³/min	175	320	320	320
		L/s	2,917	5,333	5,333	5,333
		cfm	6,179	11,299	11,299	11,299
	Control, Driving mechanism	Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor	
	Motor output	kW	0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2
			0.92 x 1	0.92 x 2	0.92 x 2	0.92 x 2
	*2 External static press.	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)	0 Pa (0 mmH <sub>2</sub> O)
Compressor	Type x Quantity	Inverter scroll hermetic compressor			Inverter scroll hermetic compressor	
	Starting method	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.4	14.3	14.3	14.3
	Case heater	kW	-	-	-	-
External finish	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension HxWxD	mm	1,650 x 1,220 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740
	in.	65 x 48-1/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16	65 x 68-15/16 x 29-3/16
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	
Refrigerant	Type x original charge	R410A x 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight	kg (lbs)	237 (523)	237 (523)	305 (673)	305 (673)	305 (673)
Heat exchanger	Salt-resistant cross fin & copper tube				Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Optional parts	Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G				Outdoor Twinning kit: CMY-Y300VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G	

#### Notes:

\*1 Nominal cooling conditions (subject to JIS B8615-2)

	Indoor	Outdoor	Pipe length	Level difference

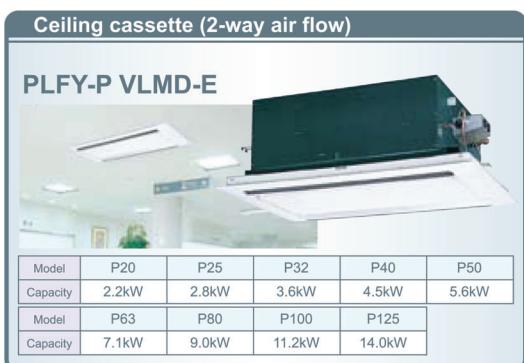
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## Wide selection of indoor units



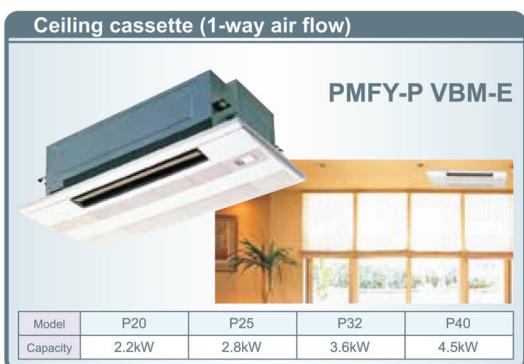
**Features**

- \* Automatic Air Speed Adjustment (VBM only)
- \* 72 different airflow patterns
- \* Individual Setting for each outlet direction with wired thermostat
- \* wide airflow (VBM only)
- \* i-see sensor with 360 monitor (VBM only)
- \* High ceiling level installation (4.2m)
- \* Fresh air intake



**Features**

- \* Slim body of 290mm height
- \* Equipped with drain pump mechanism
- \* Low noise level
- \* Long life filter
- \* Easy installation and maintenance
- \* Fresh air intake



**Features**

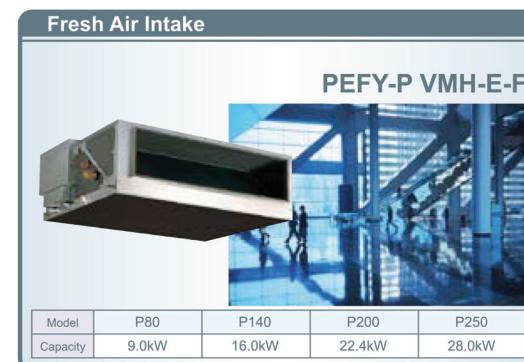
- \* Compact and light weight
- \* Equipped with drain pump mechanism
- \* Low noise level
- \* Long life filter
- \* Easy installation and maintenance
- \* Fresh air intake



**Features**

- \* Slim body of 200 & 250mm height (VMS1& VMA(L))
- \* Bottom & Rear inlet (VMA(L) only)
- \* Analogue input for auto adjust fan speed (VMA(L) only)
- \* Changable static pressure
- \* Drain pump option
- \* Low noise level
- \* Easy installation and maintenance

## Wide selection of indoor units



**Features**

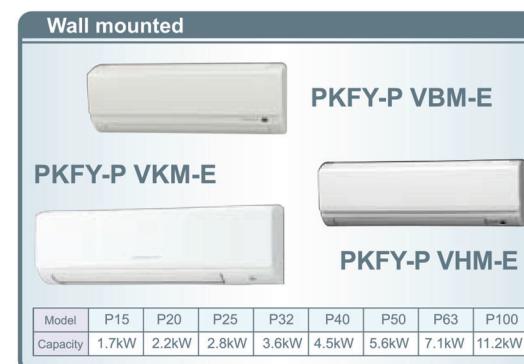
The Fresh Air intake indoor unit can be installed in any place: Fresh Air can be taken in with temperature control. Outside air will be cooled down or heated up to supply it to the room, and this reduces the air conditioning load in a room. High-capacity humidifier will keep room air moist and comfortable during heating.

\*Supply air temperature control cannot be used.



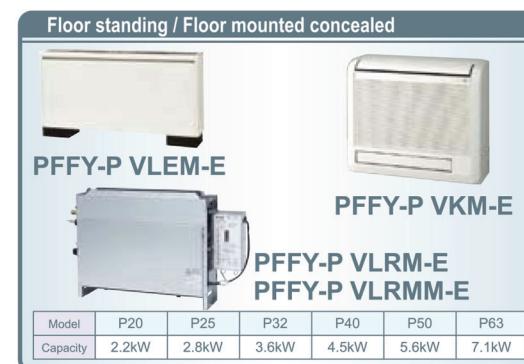
**Features**

- \* Extra slim & stylish design
- \* Auto vane distributes air evenly
- \* Ultra-quiet operation
- \* Automatic Air Speed Adjustment
- \* Long life filter
- \* Easy installation and maintenance
- \* Fresh air intake



**Features**

- \* Compact and light weight
- \* 4-Way piping
- \* Quiet operation
- \* Long life filter
- \* Easy installation and maintenance
- \* Built-in signal receiver
- \* Drain pump option (VHM only)



**Features**

- \* Sophisticated Design
- \* Quiet operation
- \* Easy installation and maintenance

# Indoor Unit

## Ceiling cassette type

### 4-way airflow



#### PLFY-P VBM-E • PLFY-P VCM-E2

##### ▶ Specifications

Model	PLFY-P32VBM-E	PLFY-P40VBM-E	PLFY-P50VBM-E	PLFY-P63VBM-E	PLFY-P80VBM-E	PLFY-P100VBM-E	PLFY-P125VBM-E	
Power source								
Cooling capacity *1 kW	3.6	4.5	5.6	7.1	9.0	11.2	14.0	
BTU/h	12,300	15,400	19,100	24,200	30,700	38,200	47,800	
Cooling capacity *4 kW	3.7	4.6	5.7	7.2	9.2	11.4	14.2	
Heating capacity *1 kW	4.0	5.0	6.3	8.0	10.0	12.5	16.0	
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 0.27		0.29	0.36	0.51	1.00	1.07	
Heating A 0.20		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 x W x D	Unit mm(in.) 258 x 840 x 840 (10-3/16 x 33-8/1 x 33-8/1)		Panel 35 x 950 x 950 (1-3/8 x 37-7/16 x 37-7/16)					
Net weight	Unit kg(lbs.) 22 (49)		Panel 23 (51)		27 (60)		6 (13)	
External finish (Munsell No.)	Unit Galvanized steel sheet Panel White (6.4Y 8.9/0.4)							
Dimension H x W x D	Unit mm(in.) 258 x 840 x 840 (10-3/16 x 33-8/1 x 33-8/1)		Panel 35 x 950 x 950 (1-3/8 x 37-7/16 x 37-7/16)					
Net weight	Unit kg(lbs.) 22 (49)		Panel 23 (51)		27 (60)		6 (13)	
Heat exchanger	Cross fin (Aluminum plate fin and copper tube)							
Fan	Type x Quantity	Turbo fan x 1						
Airflow rate *2 (Lo-Mid1-Mid2-Hi) m³/min	11-12-13-14	12-13-14-16	14-15-16-18	16-18-20-22	21-24-27-29	22-25-28-30		
L/s	183-200-217-233	200-217-233-267	233-250-267-300	267-300-333-367	350-400-450-483	367-417-467-500		
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							
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		
Model	PLFY-P15VCM-E2	PLFY-P20VCM-E2	PLFY-P25VCM-E2	PLFY-P32VCM-E2	PLFY-P40VCM-E2			
Power source								
Cooling capacity *1 kW	1.7	2.2	2.8	3.6	4.5			
BTU/h	5,800	7,500	9,600	12,300	15,400			
Cooling capacity *4 kW	1.7	2.2	2.8	3.7	4.6			
Heating capacity *1 kW	1.9	2.5	3.2	4.0	5.0			
BTU/h	6,500	8,500	10,900	13,600	17,100			
Power consumption	Cooling kW 0.04		0.05	0.05	0.06	0.06		
Heating kW 0.04		0.05		0.06		0.06		
Current	Cooling A 0.19		0.23	0.23	0.28	0.28		
Heating A 0.19		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 x W x D	Unit mm(in.) 208 x 570 x 570 (8-1/4 x 22-1/2 x 22-1/2)		Panel 20 x 650 x 650 (13/16 x 25-5/8 x 25-5/8)					
Net weight	Unit kg(lbs.) 15.5 (35)		Panel 3 (7)		17 (38)		3 (7)	
Heat exchanger	Cross fin (Aluminum fin and copper tube)							
Fan	Type x Quantity	Turbo fan x 1						
Airflow rate *2 (Lo-Mid-Hi) m³/min	8-8.5-9	8-9-10	8-9-10	8-9-11	8-9-11			
L/s	133-142-150	133-150-167	133-150-167	133-150-183	133-150-183			
cfm	283-300-353	283-318-353	283-318-353	283-318-388	283-318-388			
External static pressure Pa	0							
Motor	Type 1-phase induction motor							
Output kW	0.008	0.011	0.015	0.02	0.02			
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) (PVC pipe VP-25 connectable)							
Sound pressure level (Lo-Mid-Hi) *2 *3 dB(A)	28-30-31	28-31-35	29-31-37	29-33-38	30-34-39			

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

Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB

Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB (when indoor units are connected to heat pump series)

\*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.

\*4 Reference data under condition of Indoor 27°C(81°F)DB/19.5°C(67°F)WB, Outdoor 35°C(95°F)DB

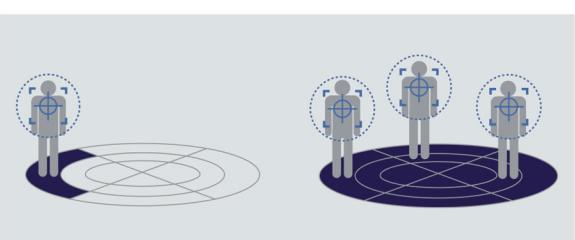
#### 3D i-see Sensor

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

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



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



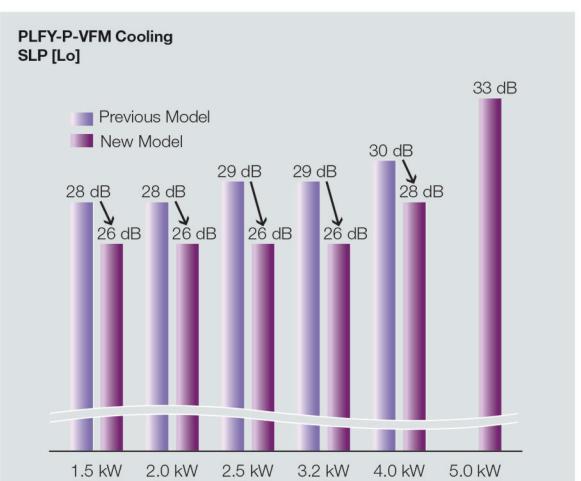
#### New size 5kW (P50)

New model has been introduced to expand line-up.

MODEL	1.5 kW	2.0 kW	2.5 kW	3.2 kW	4.0 kW	5.0 kW
PLFY-P VCM	✓	✓	✓	✓	✓	✓
PLFY-P VFM	✓	✓	✓	✓	✓	✓

#### Quietness

By the means of a new 3D Turbo Fan and DC inverter motor, sound level has been reduced by 2-4dB(A) for quieter and more comfortable air conditioning.



HEAT PUMP

For high outdoor temperature up to 54°C

# Indoor Unit

## Ceiling cassette type 2-way airflow



### PLFY-P VLMD-E

#### ► Specifications

Model	PLFY-P20VLMD-E	PLFY-P25VLMD-E	PLFY-P32VLMD-E	PLFY-P40VLMD-E	
Power source					
Cooling capacity *1 kW	2.2	2.8	3.6	4.5	
*1 BTU/h	7,500	9,600	12,300	15,400	
Cooling capacity *4 kW	2.2	2.8	3.7	4.6	
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	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.)	Galvanized steel plate				
Panel	Pure white (6.4Y 8.9/0.4)				
Dimension H x W x D	mm (in.)	290 x 776 x 634 (11-7/16 x 30-9/16 x 25)	20 x 1080 x 710 (13/16 x 42-9/16 x 28)		
Panel	mm (in.)				
Net weight	kg(lbs.)	23 (51)	24 (53)		
Panel	kg(lbs.)	6.5 (15)			
Heat exchanger	Cross fin				
	Type x Quantity	Turbo fan x 1			
Fan		m³/min	6.5-8.0-9.5	7.0-8.5-10.5	
		L/s	108-133-158	117-142-175	
		cfm	230-283-335	247-300-371	
	External static pressure	Pa	0		
Motor	Type	1-phase induction motor			
	Output	kW	0.015 (at 240V)		
Air filter	PP honeycomb fabric (long life type)				
Refrigerant	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)		
pipe diameter	Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)		
Field drain pipe diameter	mm(in.)	O.D.32 (1-1/4)			
Sound pressure level (Lo-Mid-Hi) *2 *3	220V/240V dB(A)	27-30-33	29-33-36		
(Lo-Mid-Hi) *2 *3	230V dB(A)	28-31-34	30-34-37		
Model	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
Cooling capacity *4 kW	5.7	7.2	9.2	11.4	14.2
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
	Heating kW	0.075 / 0.080	0.094 / 0.099	0.140 / 0.150	0.150 / 0.180
Current	Cooling A	0.41 / 0.43	0.49 / 0.51	0.72 / 0.74	0.75 / 0.88
	Heating A	0.35 / 0.38	0.43 / 0.46	0.66 / 0.69	0.69 / 0.83
External finish (Munsell No.)	Unit	Galvanized steel plate			
Panel		Pure white (6.4Y 8.9 / 0.4)			
Dimension H x W x D	Unit mm (in.)	290 x 946 x 634 (11-7/16 x 37-1/4 x 25)	290 x 1446 x 634 (11-7/16 x 56-15/16 x 25)	290 x 1708 x 606 (11-7/16 x 67-1/4 x 23-7/8)	
Panel mm (in.)		20 x 1250 x 710 (13/16 x 49-1/4 x 28)	20 x 1750 x 710 (13/16 x 68-15/16 x 28)	20 x 2010 x 710 (13/16 x 79-3/16 x 28)	
Net weight	kg(lbs.)	27 (60)	28 (62)	44 (98)	47 (104)
Panel	kg(lbs.)	7.5 (17)		12.5 (28)	13.0 (29)
Heat exchanger	Cross fin				
	Type x Quantity	Turbo fan x 1		Turbo fan x 2	Sirocco fan x 4
Fan		m³/min	9.0-11.0-12.5 (P50-P100:Lo-Mid-Hi)	11.0-13.0-15.5	15.5-18.5-22.0
		L/s	150-183-208	167-217-258	258-308-367
		cfm	318-388-441	353-459-547	547-653-777
	External static pressure	Pa	0	292-350-417	400-450-500-550
Motor	Type	1-phase induction motor			
	Output	kW	0.020 (at 240V)	0.020 (at 240V)	0.030 (at 240V)
Air filter	PP honeycomb fabric (long life type)				Synthetic fiber unwoven cloth filter (long life)
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)	
	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)	
Field drain pipe diameter	mm(in.)	O.D.32 (1-1/4)			
Sound pressure level (Lo-Mid-Hi) *2 *3	220V/240V dB(A)	31-34-37	32-37-39	33-36-39	36-39-42
(Lo-Mid-Hi) *2 *3	230V dB(A)	32-35-38	33-38-40	34-37-40	37-41-43

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

Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB  
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB (when indoor units are connected to heat pump series)

\*2 Airflow rate/Sound pressure level are in (low-middle-high) or (low-middle2-middle1-high).

\*3 It is measured in anechoic room.

\*4 Reference data under condition of Indoor 27°C(81°F)DB/19.5°C(67°F)WB, Outdoor 35°C(95°F)DB

# Indoor Unit

## Ceiling cassette type 1-way airflow



### PMFY-P VBM-E

#### ► Specifications

Model	PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E	
Power source					
Cooling capacity *1 kW	2.2	2.8	3.6	4.5	
*1 BTU/h	7,500	9,600	12,300	15,400	
Cooling capacity *4 kW	2.2	2.8	3.7	4.6	
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 x W x D	Unit mm (in.)	230 x 812 x 395 (9-1/16 x 32 x 15-9/16)			
Panel mm (in.)		30 x 1000 x 470 (1-3/16 x 39-3/8 x 18-9/16)			
Net weight	Unit kg(lbs.)	14 (31)			
Panel kg(lbs.)		3 (7)			
Heat exchanger	Cross fin (Aluminum plate fin and copper tube)				
	Type	Line flow fan x 1			
Fan		m³/min	6.5-7.2-8.0-8.7	7.3-8.0-8.6-9.3	
		L/s	108-120-133-145	122-133-143-155	
		cfm	230-254-283-307	258-283-304-328	
	External static pressure	Pa	0	7.7-8.7-9.7-10.7	
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

#### Notes:

\*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.  
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB  
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB (when indoor units are connected to heat pump series)

\*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).

\*3 It is measured in anechoic room.

\*4 Reference data under condition of Indoor 27°C(81°F)DB/19.5°C(67°F)WB, Outdoor 35°C(95°F)DB

# Indoor Unit

## Ceiling concealed type

### PEFY-P VMR-E-L/R

Static Pressure 5Pa	Width 640mm 25-6/32in.	Ultra Low Noise	Piping connection L model R model
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#### ▶ Specifications

Model		PEFY-P20VMR-E-L	PEFY-P25VMR-E-L	PEFY-P32VMR-E-L	
1-phase 220-230-240V 50Hz / 1-phase 220-230V 60Hz					
Power source	kW	2.2	2.8	3.6	
Cooling capacity *1	BTU/h	7,500	9,600	12,300	
Cooling capacity *4	kW	2.2	2.8	3.7	
Heating capacity *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	
Galvanized					
Dimension	Rear inlet mm (in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)			
H x W x D	Bottom inlet mm (in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)			
Net weight	kg(lbs.)	18 (40)			
Heat exchanger					
Fan	Type x Quantity	Sirocco fan x 1			
	4.8-5.8-7.9	4.8-5.8-9.3			
	Airflow rate L/s	80-97-132	80-97-155		
	cfm	170-205-279	170-205-328		
Motor	External static pressure Pa	5			
	Type	1-phase induction motor			
	Output kW	0.018	0.023		
Air filter					
Refrigerant	Gas	mm(in.)	PP Honeycomb fabric (washable)		
pipe diameter	Liquid	mm(in.)	ø12.7 (ø1/2) Brazed		
Field drain pipe diameter	mm(in.)	ø6.35 (ø1/4) Brazed			
Sound pressure level (Lo-Mid-Hi)	220V 230V 240V	dB(A)	O.D. 26 (1) 20-25-30 21-26-32 22-27-30		
220V 230V 240V			20-25-33 21-26-35 22-27-33		
Model		PEFY-P20VMR-E-R	PEFY-P25VMR-E-R	PEFY-P32VMR-E-R	
1-phase 220-230-240V 50Hz / 1-phase 220-230V 60Hz					
Power source	kW	2.2	2.8	3.6	
Cooling capacity *1	BTU/h	7,500	9,600	12,300	
Cooling capacity *4	kW	2.2	2.8	3.7	
Heating capacity *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	
Galvanized					
Dimension	Rear inlet mm (in.)	292 x 640 x 580 (11-1/2 x 25-1/4 x 22-7/8)			
H x W x D	Bottom inlet mm (in.)	300 x 640 x 570 (11-7/8 x 25-1/4 x 22-1/2)			
Net weight	kg(lbs.)	18 (40)			
Heat exchanger					
Fan	Type x Quantity	Sirocco fan x 1			
	4.8-5.8-7.9	4.8-5.8-9.3			
	Airflow rate L/s	80-97-132	80-97-155		
	cfm	170-205-279	170-205-328		
Motor	External static pressure Pa	5			
	Type	1-phase induction motor			
	Output kW	0.018	0.023		
Air filter					
Refrigerant	Gas	mm(in.)	PP Honeycomb fabric (washable)		
pipe diameter	Liquid	mm(in.)	ø12.7 (ø1/2) Brazed		
Field drain pipe diameter	mm(in.)	ø6.35 (ø1/4) Brazed			
Sound pressure level (Lo-Mid-Hi)	220V 230V 240V	dB(A)	O.D. 26(1) 20-25-30 21-26-32 22-27-30		
220V 230V 240V			20-25-33 21-26-35 22-27-33		



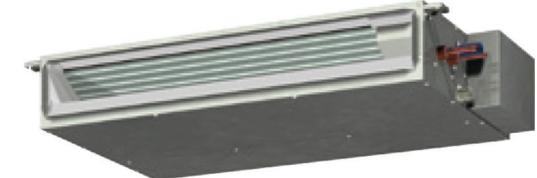
# Indoor Unit

## Ceiling concealed type

### PEFY-P VMS1(L)-E

Static Pressure 5~50Pa	Height 200mm 7-28/32in.	Low Noise
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#### ▶ Specifications



Model		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
1-phase 220-240V 50Hz / 1-phase 220-240V 60Hz								
Power source	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
Cooling capacity *1	BTU/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200
Cooling capacity *4	kW	1.7	2.2	2.8	3.7	4.6	5.7	7.2
Heating capacity *1	BTU/h	1.9	2.5	3.2	4.0	5.0	6.3	8.0
Heating capacity *1	BTU/h	6,500	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling kW	0.05 [0.03]	0.05 [0.03]	0.06 [0.04]	0.07 [0.05]	0.07 [0.05]	0.09 [0.07]	0.09 [0.07]
	Heating kW	0.03 [0.03]	0.03 [0.03]	0.04 [0.04]	0.05 [0.05]	0.05 [0.05]	0.07 [0.07]	0.07 [0.07]
Current	Cooling A	0.42 [0.31]	0.47 [0.36]	0.50 [0.39]	0.56 [0.45]	0.67 [0.56]	0.72 [0.61]	
	Heating A	0.31 [0.31]	0.36 [0.36]	0.39 [0.39]	0.45 [0.45]	0.56 [0.56]	0.61 [0.61]	
Galvanized								
Dimension	mm	200 x 790 x 700			200 x 990 x 700			200 x 1,190 x 700
H x W x D	In.	7-7/8 x 31-1/8 x 27-9/16			7-7/8 x 39 x 27-9/16			7-7/8 x 46-7/8 x 27-9/16
Net weight	*3 kg(lbs.)	19(42) [18(40)]			20(45) [19(42)]			24(53) [23(51)]
Heat exchanger								
Fan	Type x Quantity	Sirocco fan x 2			Sirocco fan x 3			Sirocco fan x 4
	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	
	Airflow rate 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
Motor	External static press Pa	5-15-35-50			DC motor			
	type	0.096						
	output	kW						
Air filter</td								

# Indoor Unit

## Ceiling concealed type

### PEFY-P VMA(L)-E PEFY-P VMA3-E

Middle Static Pressure  
35~150Pa

Slim Body  
Height 250mm



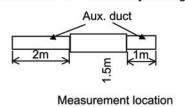
#### ▶ Specifications

		PEFY-P20VMA(L)-E	PEFY-P25VMA(L)-E	PEFY-P32VMA(L)-E	PEFY-P40VMA(L)-E	PEFY-P50VMA(L)-E	PEFY-P63VMA(L)-E
1-phase 220-230-240V 50 / 60Hz							
Cooling capacity *1	kW	2.2	2.8	3.6	4.5	5.6	7.1
(Nominal) *2	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Cooling capacity *7	kW	2.2	2.8	3.7	4.6	5.7	7.2
Heating capacity *2	kW	2.5	3.2	4.0	5.0	6.3	8.0
(Nominal) *3	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	KW	0.06 [0.04]	0.06 [0.04]	0.07 [0.05]	0.09 [0.07]	0.11 [0.09]	0.12 [0.10]
Heating *3	KW	0.04	0.04	0.05	0.07	0.09	0.10
Current	A	0.53 [0.42]	0.53 [0.42]	0.55 [0.44]	0.64 [0.53]	0.74 [0.63]	1.01 [0.90]
Heating	A	0.42	0.42	0.44	0.53	0.63	0.90
External finish							
Galvanized steel plate							
Dimension H x W x D	mm	250 x 700 x 732	250 x 700 x 732	250 x 700 x 732	250 x 900 x 732	250 x 900 x 732	250 x 1,100 x 732
	in.	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 27-9/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8
Net weight	kg(lbs)	23 (51) [22 (49)]	23 (51) [22 (49)]	23 (51) [22 (49)]	26 (58) [25 (56)]	26 (58) [25 (56)]	32 (71) [31(69)]
Heat exchanger							
Cross fin (Aluminum fin and copper tube)							
Type x Quantity		Sirocco fan x 1		Sirocco fan x 2			
Airflow rate (Low-Mid-High)	m³/min	6.0 - 7.5 - 8.5	6.0 - 7.5 - 8.5	7.5 - 9.0 - 10.5	10.0 - 12.0 - 14.0	12.0 - 14.5 - 17.0	13.5 - 16.0 - 19.0
Fan	L/s	100 - 125 - 142	100 - 125 - 142	125 - 150 - 175	167 - 200 - 233	200 - 242 - 283	225 - 267 - 317
	cfm	212 - 265 - 300	212 - 265 - 300	265 - 318 - 371	353 - 424 - 494	424 - 512 - 600	477 - 565 - 671
External static pressure *4	Pa	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150
Motor	Type	DC motor					
	Output	kW	0.085	0.085	0.085	0.085	0.121
Air filter		PP honeycomb fabric.					
Refrigerant pipe diameter	Liquid (R410A) mm(in.)	ø6.35 (1/4) Brazed	ø9.52 (3/8) Brazed				
Field drain pipe diameter	Gas (R410A) mm(in.)	ø12.7 (1/2) Brazed	ø15.88 (5/8) Brazed				
Sound pressure level (measured in anechoic room)	(Low-Mid-High) *3 *5 dB(A)	26-28-29	26-28-29	28-30-34	28-30-34	28-32-35	29-32-36
	*3 *6 dB(A)	23-25-26	23-25-26	23-26-29	23-27-30	25-29-32	25-29-33

		PEFY-P71VMA(L)-E	PEFY-P80VMA(L)-E	PEFY-P100VMA(L)-E	PEFY-P125VMA(L)-E	PEFY-P140VMA(L)-E	PEFY-P20VMA3-E
1-phase 220-230-240V 50 / 60Hz							
Cooling capacity *1	kW	8.0	9.0	11.2	14.0	16.0	2.2
(Nominal) *2	BTU/h	27,300	30,700	38,200	47,800	54,600	7,500
Cooling capacity *7	kW	8.1	9.2	11.4	14.2	16.3	—
Heating capacity *2	kW	9.0	10.0	12.5	16.0	18.0	2.5
(Nominal) *3	BTU/h	30,700	34,100	42,700	54,600	61,400	8,500
Power consumption	KW	0.14 [0.12]	0.14 [0.12]	0.24 [0.22]	0.34 [0.32]	0.36 [0.34]	0.110
Heating *3	KW	0.12	0.12	0.22	0.32	0.34	0.090
Current	A	1.15 [1.04]	1.15 [1.04]	1.47 [1.36]	2.05 [1.94]	2.21 [2.10]	0.90
Heating	A	1.04	1.04	1.36	1.94	2.10	0.79
External finish							
Galvanized steel plate							
Dimension H x W x D	mm	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,400 x 732	250 x 1,400 x 732	250 x 1,600 x 732	250 x 900 x 732
	in.	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 35-7/16 x 28-7/8
Net weight	kg(lbs)	32 (71) [31 (69)]	32 (71) [31 (69)]	42 (93) [41 (91)]	42 (93) [41 (91)]	46 (102) [45 (100)]	27 (60)
Heat exchanger							
Cross fin (Aluminum fin and copper tube)							
Type x Quantity		Sirocco fan x 2		Sirocco fan x 1			
Airflow rate (Low-Mid-High)	m³/min	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0	23.0 - 28.0 - 33.0	28.0 - 34.0 - 40.0	29.5 - 35.5 - 42.0	12.0 - 14.5 - 17.0
Fan	L/s	242 - 300 - 350	242 - 300 - 350	383 - 467 - 550	467 - 567 - 667	492 - 592 - 700	200 - 242 - 283
	cfm	512 - 636 - 742	512 - 636 - 742	812 - 989 - 1,165	989 - 1,201 - 1,412	1,042 - 1,254 - 1,483	424 - 512 - 600
External static pressure *4	Pa	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150	<20 - <35 - 50 - <70 - <100 - <150
Motor	Type	DC motor					
	Output	kW	0.121	0.121	0.244	0.244	0.085
Air filter		PP honeycomb fabric.					
Refrigerant pipe diameter	Liquid (R410A) mm(in.)	ø9.52 (3/8) Brazed	ø9.52 (3/8) Brazed	ø9.52 (3/8) Brazed	ø9.52 (3/8) Brazed	ø9.52 (3/8) Flare	ø6.35 (1/4) Flare
Field drain pipe diameter	Gas (R410A) mm(in.)	ø15.88 (5/8) Brazed	ø15.88 (5/8) Brazed	ø15.88 (5/8) Brazed	ø15.88 (5/8) Brazed	ø15.88 (5/8) Flare	ø12.7 (1/2) Flare
Sound pressure level (measured in anechoic room)	(Low-Mid-High) *3 *5 dB(A)	30-34-38	30-34-38	32-37-41	35-40-44	36-41-45	30-35-39
	*3 *6 dB(A)	26-29-34	26-29-34	28-33-37	32-36-40	33-37-42	—

**Notes:**

- \*1 Nominal cooling conditions  
Indoor: 27°C(81°F)DB/19°C(66°F)WB, Outdoor: 35°C(95°F)DB  
Pipe length: 7.5m(24-9/16ft), Level difference: 0m(0ft)
- \*2 Nominal heating conditions (when indoor units are connected to heat pump series)  
Indoor: 20°C(68°F)DB, Outdoor: 7°C(45°F)DB/6°C(43°F)WB  
Pipe length: 7.5m(24-9/16ft), Level difference: 0m(0ft)
- \*3 The values are measured at the rated external static pressure.
- \*4 The rated external static pressure is shown without <>. The factory setting is the rated value.
- \*5 Measured in anechoic room with a 1m air inlet duct and 2m air outlet duct attached to the unit and 1.5m below the unit.
- \*6 Measured in anechoic room with a 2m air inlet duct and 2m air outlet duct attached to the unit and 1.5m below the unit.
- \*7 Reference data under condition of Indoor 27°C(81°F)DB/19.5°C(67°F)WB, Outdoor 35°C(95°F)DB
- \*8 In case of PEFY-P VMAL-E
- \*9 When PEFY-P20VMA-E is connected, the available range of outdoor temperature is between 10°C and 49°C.



**Measurement location**

Aux. duct

2m

1.5m

1.5m

### PEFY-P VMH(S)-E

High Static Pressure



# Indoor Unit

## Fresh Air Intake Type

### PEFY-P VMH-E-F

Fresh Air Intake



#### ▶ Specifications

Model	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			
BTU/h		30,700	54,600			
Heating capacity *1	kW	8.5	15.1			
BTU/h		29,000	51,500			
Power consumption	Cooling kW	0.16 / 0.21	0.29 / 0.33			
Heating kW		0.16 / 0.21	0.29 / 0.33			
Current	Cooling A	0.67 / 0.91	1.24 / 1.48			
Heating A		0.67 / 0.91	1.24 / 1.48			
External finish	Galvanized					
Dimension H x W x D mm(in.)	380 x 1000 x 900 (15 x 39-3/8 x 35-7/16)		380 x 1200 x 900 (15 x 47-1/4 x 35-7/16)			
Net weight kg(lbs.)	50 (111)		67 (148)			
Heat exchanger	Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quantity	Sirocco fan x 1	Sirocco fan x 2			
	Airflow rate m³/min	9.0	18.0			
	L/s	150	300			
	cfm	318	636			
	External static pressure Pa	35 - 85 - 170	35 - 85 - 170			
	220V Pa	40 - 115 - 190	50 - 115 - 190			
	230V Pa	50 - 130 - 210	60 - 130 - 220			
	(Lo-Mid-Hi) 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 208, 220V dB(A)	27 - 38 - 43		28 - 38 - 43			
(Lo-Mid-Hi) *2 230, 240V dB(A)	33 - 43 - 45		34 - 43 - 45			
Model	PEFY-P200VMH-E-F		PEFY-P250 VMH-E-F			
Power source	3-phase 380-415V 50Hz / 3N~ 380-415V 60Hz					
Cooling capacity	kW	22.4	28.0			
BTU/h		76,400	95,500			
Heating capacity	kW	21.2	26.5			
BTU/h		72,300	90,400			
Power consumption	Cooling kW	0.34 / 0.42	0.39 / 0.50			
Heating kW		0.34 / 0.42	0.39 / 0.50			
Current	Cooling A	0.58 / 0.74	0.68 / 0.86			
Heating A		0.58 / 0.74	0.68 / 0.86			
External finish	Galvanized					
Dimension H x W x D mm(in.)	470 x 1250 x 1120 (18-9/16 x 49-1/4 x 44-1/8)					
Net weight kg(lbs.)	100 (221)					
Heat exchanger	Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quantity	Sirocco fan x 2				
	Airflow rate m³/min	28	35			
	L/s	467	583			
	cfm	989	1236			
	External static pressure Pa	140 / 200	110 / 190			
	400V Pa	150 / 210	120 / 200			
	415V Pa	160 / 220	130 / 210			
Motor	Type	3-phase induction motor				
	Output kW	0.20	0.23			
Air filter (option)	Synthetic fiber unwoven cloth filter (long life type)					
Refrigerant pipe diameter Gas (Flare) mm(in.)	ø19.05 (ø3/4)		ø22.2 (ø7/8)			
Liquid (Flare) mm(in.)	ø9.52 (ø3/8)					
Field drain pipe diameter mm(in.)	O.D.32 (1-1/4)					
Sound pressure level 380V dB(A)	39 / 42		40 / 44			
400V dB(A)	40 / 43		40 / 45			
*2 415V dB(A)	40 / 44		41 / 46			

1. The cooling and heating capacities are the maximum capacities that were obtained by operating in the above air conditions and with a refrigerant pipe of about 7.5m.

2. The actual capacity characteristics vary with the combination of indoor and outdoor units. See the technical information.

3. The operating noise is the data that was obtained by measuring it 1.8m from the bottom of the unit in an anechoic room. (Noise meter A-scale value)

4. The figure of Electrical characteristic indicates at 240V 50Hz/230V 60Hz (PEFY-P80, 140VMH-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 46°C(115°F)DB/35°C(95°F)WB

Heating : from -10°C(14°F)DB to 20°C(68°F)DB (when indoor units are connected to heat pump series) )

\* Thermo off(Fan) operation automatically starts 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 is 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 grille 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 is possible in case of usage of filer 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

#### ▶ Specifications

Model	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		
BTU/h		15,400	24,200	38,200		
Cooling capacity *4	kW	4.6	7.2	11.4		
Heating capacity *1	kW	5.0	8.0	12.5		
BTU/h		17,100	27,300	42,700		
Power consumption	Cooling kW	0.04	0.05	0.09		
Heating kW		0.04	0.05	0.11		
Current	Cooling A	0.28	0.33	0.65		
Heating A		0.28	0.33	0.76		
External finish(Munsell No.)	6.4Y 8.9/ 0.4					
Dimension H x W x D mm	230 x 960 x 680	230 x 1,280 x 680	230 x 1,600 x 680			
in.	9-1/16 x 37-13/16 x 26-3/4	9-1/16 x 50-3/8 x 26-3/4	9-1/16 x 63 x 26-3/4			
Net weight kg(lbs.)	24(53)	32 (71)	36 (79)	38 (84)		
Heat exchanger	Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity	Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 4		
	Airflow rate *2 m³/min	10-11-12-13	14-15-16-18	21-24-26-28		
	L/s	167-183-200-217	233-250-267-300	350-400-433-467		
	cfm	353-388-424-459	494-530-565-636	742-847-918-989		
	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) / ø19.05 (ø3/4) (Compatible)			
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)	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44		

#### Notes:

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

Cooling Indoor : 27°C(80.6°F)DB/19°C(66.2°F)WB, Outdoor 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(44.6°F)DB/6°C(42.8°F)WB (when indoor units are connected to heat pump series)

\*2 Airflow rate/Sound pressure level are shown in (low-middle

# Indoor Unit

## Wall mounted type



### PKFY-P VBM-E • PKFY-P VHM-E • PKFY-P VKM-E

#### ▶ Specifications

Model	PKFY-P15VBM-E	PKFY-P20VBM-E	PKFY-P25VBM-E	PKFY-P32VHM-E	PKFY-P40VHM-E	PKFY-P50VHM-E			
Power source									
Cooling capacity *1 kW	1.7	2.2	2.8	3.6	4.5	5.6			
Cooling capacity *1 BTU/h	5,800	7,500	9,600	12,300	15,400	19,100			
Cooling capacity *5 kW	1.7	2.2	2.8	3.7	4.6	5.7			
Heating capacity *1 kW	1.9	2.5	3.2	4.0	5.0	6.3			
Heating capacity *1 BTU/h	6,500	8,500	10,900	13,600	17,100	21,500			
Power consumption	Cooling *4 kW	0.04			0.04				
Heating	kW	0.04			0.03				
Current	Cooling *4 A	0.20			0.40				
Heating	A	0.20			0.30				
External finish(Munsell No.)	Plastic (1.0Y 9.2/0.2)			Plastic (1.0Y 9.2/0.2)					
Dimension H x W x D mm(in.)	295 x 815 x 225 (11-5/8 x 32-1/8 x 8-7/8)			295 x 898 x 249(11-5/8 x 35-3/8 x 9-13/16)					
Net weight kg(lbs.)	10 (23)			13(29)					
Heat exchanger	Cross fin (Aluminum fin and copper tube)								
Fan	Type x Quantity	Line flow fan x 1							
Airflow rate *2 m³/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				
(Lo-Mid2-Mid1-Hi)	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							
Output	kW	0.017							
Air filter	PP Honeycomb								
Refrigerant	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)		ø12.7 (ø1/2) / ø15.88 (ø5/8)	(Compatible)			
Pipe diameter	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			

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

Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB

(when indoor units are connected to heat pump series)

\*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.

\*5 Reference data under condition of Indoor 27°C(81°F)DB/19.5°C(67°F)WB,

Outdoor 35°C(95°F)DB

# Indoor Unit

## Floor standing exposed



### PFFY-P VKM-E2 PFFY-P VLEM-E

#### ▶ Specifications

Model	PFFY-P20VKM-E2	PFFY-P25VKM-E2	PFFY-P32VKM-E2	PFFY-P40VKM-E2
Power source				
Cooling capacity *1 kW	2.2	2.8	3.6	4.5
Cooling capacity *1 BTU/h	7,500	9,600	12,300	15,400
Cooling capacity *5 kW	2.2	2.8	3.7	4.6
Heating capacity *1 kW	2.5	3.2	4.0	5.0
Heating capacity *1 BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling kW	0.025	0.025	0.025
Heating	kW	0.025	0.025	0.028
Current	Cooling A	0.20	0.20	0.20
Heating	A	0.20	0.20	0.24
External finish	Plastic (Pure white)			
Dimension	mm	600 x 700 x 200		
H x W x D	in.	23-5/8 x 27-9/16 x 7-7/8		
Net weight	kg(lbs.)	15 (34)		
Heat exchanger	Cross fin (Aluminium plate fin and copper tube)			
Fan	Type x Quantity	Line flow fan x 2		
Airflow rate *2 m³/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
(Lo-Mid-Hi-Shi)	L/s	173-184-198-208	318-353-388	318-371-424
External static pressure	Pa	0		
Motor	Type	DC motor		
Output	kW	0.03 x 2		
Air filter	PP honeycomb fabric (Catechin Filter)			
Refrigerant	Gas(Flare)	mm(in.)	ø12.7 (ø1/2)	
pipe diameter	Liquid(Flare)	mm(in.)	ø6.35 (ø1/4)	
Field drain pipe diameter	mm(in.)	I.D.16 (5/8)		
Sound pressure level (Lo-Mid-Hi-Shi) *2 *3	dB(A)	27-31-34-37	28-32-35-38	28-32-35-38
		35-38-42-44		

Notes: \*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.

Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB

Heating Indoor : 20°C(68°F)DB, Outdoor : 35°C(95°F)DB

(when indoor units are connected to heat pump series)

\*2 Reference data under condition of Indoor 27°C(81°F)DB/19.5°C(67°F)WB, Outdoor 35°C(95°F)DB

\*3 Airflow rate/Sound pressure level are in (low-middle-high-shigh).

\*4 It is measured in anechoic room.

Model	PKFY-P63VKM-E	PKFY-P100VKM-E	
Power source			
Cooling capacity *1 kW	7.1	11.2	
Cooling capacity *1 BTU/h	24,200	38,200	
Cooling capacity *5 kW	7.2	11.4	
Heating capacity *1 kW	8.0	12.5	
Heating capacity *1 BTU/h	27,300	42,600	
Power consumption	Cooling *4 kW	0.05	
Heating	kW	0.08	
Current	Cooling *4 A	0.37	
Heating	A	0.51	
External finish(Munsell No.)	Plastic (1.0Y 9.2/0.2)		
Dimension H x W x D mm(in.)	365 x 1,170 x 295 (14-3/8 x 46-1/16 x 11-5/8)		
Net weight kg(lbs.)	21 (46)		
Heat exchanger	Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity	Line flow fan x 1	
Airflow rate *2 m³/min	16-20	20-26	
(Lo-Hi)	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	Gas (Flare)	mm(in.)	ø15.88 (ø5/8) / ø19.05 (ø3/4)
pipe diameter	Liquid (Flare)	mm(in.)	(Compatible)
Field drain pipe diameter	mm(in.)	ø9.52 (ø3/8)	
Sound pressure level (Lo-Hi) *2 *3	dB(A)	39-45	41-49

Notes: \*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.

Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB

(when indoor units are connected to heat pump series)

\*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.

\*5 Reference data under condition of Indoor 27°C(81°F)DB/19.5°C(67°F)WB,

Outdoor 35°C(95°F)DB

Notes: \*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.

Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB

(when

# Indoor Unit

Floor mounted concealed type

## PFFY-P VLRLM-E • PFFY-P VLRLMM-E

### ► Specifications

Static Pressure  
0 Pa

Static Pressure  
20~40~60 Pa



Model	PFFY-P20VLRLM-E	PFFY-P25VLRLM-E	PFFY-P32VLRLM-E	PFFY-P40VLRLM-E	PFFY-P50VLRLM-E	PFFY-P63VLRLM-E
Power source						
Cooling capacity *1	kW	2.2	2.8	3.6	4.5	5.6
Cooling capacity *1	BTU/h	7,500	9,600	12,300	15,400	19,100
Cooling capacity *5	kW	2.2	2.8	3.7	4.6	5.7
Cooling capacity *5	BTU/h	8,500	10,900	13,600	17,100	21,500
Heating capacity *1	kW	2.5	3.2	4.0	5.0	6.3
Heating capacity *1	BTU/h	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling kW	0.04 / 0.06	0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11
Power consumption	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
Current	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.)						
Dimension H x W x D	mm	639 x 886 x 220	639 x 1,006 x 220	639 x 1,246 x 220		
Dimension H x W x D	in.	25-3/16 x 34-15/16 x 8-11/16	25-3/16 x 39-5/8 x 8-11/16	25-3/16 x 49-1/16 x 8-11/16		
Net weight	kg(lbs.)	22 (49)	24 (53)	25 (56)	29 (64)	30 (67)
Heat exchanger						
Fan	Type x Quantity	Sirocco fan x 1	Sirocco fan x 2			
Airflow rate *2	m³/min	5.5-6.5	7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
Airflow rate *2	L/s	92-108	117-150	150-183	200-233	200-258
Airflow rate *2	cfm	194-230	247-318	318-388	424-494	424-547
External static pressure	Pa		0			
Motor	Type	1-phase induction motor				
Motor	Output	kW	0.015	0.018	0.030	0.035
Air filter		PP Honeycomb fabric (washable)				
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)		
Refrigerant pipe diameter	Liquid (Flare)	mm(in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)		
Field drain pipe diameter	mm(in.)		I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>			
Sound pressure level (Lo-Hi) *2 *3 *4	dB(A)	34-40	35-40	38-43	40-46	

Notes: \*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition. \*2 Air flow rate/Sound pressure level are in (Low-High)

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

(when indoor units are connected to heat pump series)

\*5 Reference data under condition of Indoor 27°C(81°F)DB/19.5°C(67°F)WB, Outdoor 35°C(95°F)DB

\*4 It is measured in anechoic room.

Model	PFFY-P20VLRLMM-E	PFFY-P25VLRLMM-E	PFFY-P32VLRLMM-E	PFFY-P40VLRLMM-E	PFFY-P50VLRLMM-E	PFFY-P63VLRLMM-E
Power source						
Cooling capacity *1	kW	2.2	2.8	3.6	4.5	5.6
Cooling capacity *1	BTU/h	7,500	9,600	12,300	15,400	19,100
Cooling capacity *4	kW	2.2	2.8	3.7	4.6	5.7
Cooling capacity *4	BTU/h	8,500	10,900	13,600	17,100	21,500
Heating capacity *1	kW	2.5	3.2	4.0	5.0	6.3
Heating capacity *1	BTU/h	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling kW	0.04	0.04	0.05	0.05	0.05
Power consumption	Heating kW	0.04	0.04	0.05	0.05	0.07
Current	Cooling A	0.34	0.38	0.43	0.48	0.07
Current	Heating A	0.34	0.38	0.43	0.48	0.59
External finish(Munsell No.)						
Dimension H x W x D	mm	639 x 886 x 220	639 x 1,006 x 220	639 x 1,246 x 220		
Dimension H x W x D	in.	25-3/16 x 34-15/16 x 8-11/16	25-3/16 x 39-5/8 x 8-11/16	25-3/16 x 49-1/16 x 8-11/16		
Net weight	kg(lbs.)	21 (47)	24 (53)	25 (56)	29 (64)	
Heat exchanger						
Fan	Type x Quantity	Sirocco fan x 1	Sirocco fan x 2			
Airflow rate *2	m³/min	4.5-5.5-6.5	6.5-7.5-9.0	8.0-9.5-11.0	10.0-12.0-14.0	11.0-13.0-15.5
Airflow rate *2	L/s	75-92-108	108-125-150	133-158-183	167-200-233	183-217-258
Airflow rate *2	cfm	159-194-230	230-265-318	282-335-388	353-424-494	388-459-547
External static pressure	Pa		20/40/60			
Motor	Type	DC brushless motor				
Motor	Output	kW	0.096			
Air filter		PP Honeycomb fabric (washable)				
Refrigerant pipe diameter	Gas (Flare)	mm(in.)	ø12.7 (ø1/2) Brazed	ø15.88 (ø5/8) Brazed		
Refrigerant pipe diameter	Liquid (Flare)	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) *2 *3 *4	dB(A)	31-36-40	27-32-37	30-36-40	32-37-41	35-40-44
Sound pressure level (Lo-Mid-Hi) *2 *3 *4	dB(A)	34-39-42	30-35-41	32-38-42	35-40-44	36-42-47
Sound pressure level (Lo-Mid-Hi) *2 *3 *4	dB(A)	35-40-43	32-37-42	3.5-39-44	36-41-45	38-43-48

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

Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB

Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB (when indoor units are connected to heat pump series)

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.

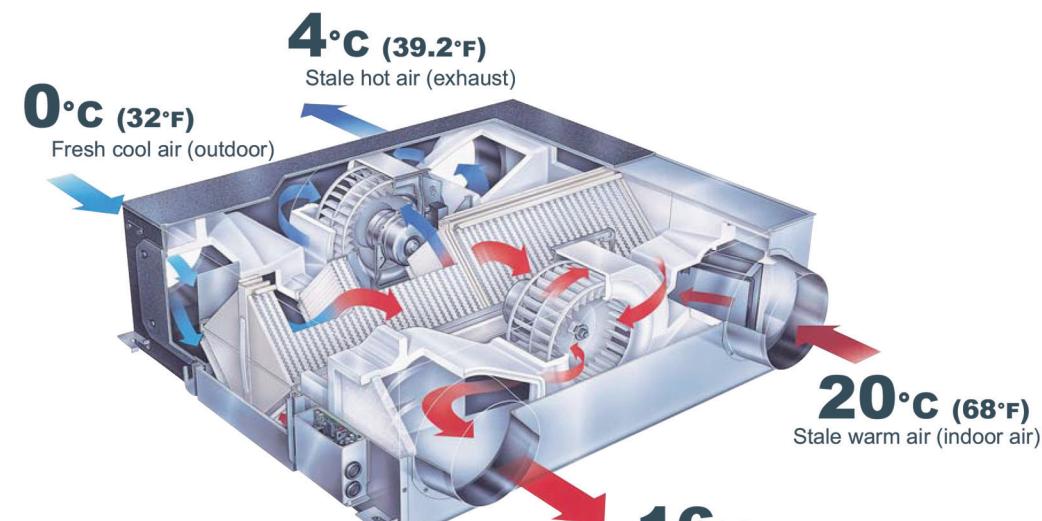
\*4 Reference data under condition of Indoor 27°C(81°F)DB/19.5°C(67°F)WB, Outdoor 35°C(95°F)DB



## The Ventilation System for Enhanced Air Quality - Lossnay

Combine with Lossnay Ventilation System Enhanced Air Quality.

Unified Control System Allows Greater Design Freedom.



## Heat-Exchange Efficiency Obtainable Only with Lossnay.

The secret to the unmatched comfort provided by Lossnay core is the cross-flow, flat-fin structure of heat-exchange unit. A diaphragm made of a specially processed paper fully separates intake and exhaust 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.

LGH-80RX5 [800m³/h Single phase 220-240V 50Hz]

LGH-25RX5 [250m³/h Single phase 220-240V 50Hz]

LGH-100RX5 [1000m³/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]



# Model line up

## ▶ Specifications

LGH-15RXs-E

Model		LGH-15RXs-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 (m³/h)		150	150	110	70	150	150	110	70
(L/s)		42	42	31	19	42	42	31	19
External static pressure (mmH <sub>2</sub> O)		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	—	—	—	—
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 anechoic 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-15~100RXs-E



LGH-15~100RXs-E

LGH-50RXs-E

Model		LGH-50RXs-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 (m³/h)		250	250	155	105	250	250	155	105
(L/s)		69	69	43	29	69	69	43	29
External static pressure (mmH <sub>2</sub> O)		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	—	—	—	—
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 anechoic 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 16 dB greater than the indicated value. (at High Fan speed)

Model		LGH-25RXs-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 (m³/h)		250	250	155	105	250	250	155	105
(L/s)		69	69	43	29	69	69	43	29
External static pressure (mmH <sub>2</sub> O)		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	—	—	—	—
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 anechoic 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-65RXs-E

Model		LGH-65RXs-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 (m³/h)		650	650	520	265	650	650	520	265
(L/s)		181	181	144	74	181	181	144	74
External static pressure (mmH <sub>2</sub> O)		11.2-12.2	6.1-8.2	4.1-5.1	0.8	11.2-12.2	6.1-8.2	4.1-5.1	0.8
(Pa)		110-120	60-80	40-50	8	110-120	60-80	40-50	8
Temperature exchange efficiency (%)		77.0	77.0	80.0	86.0	—	—	—	—
Heating		68.5	68.5	70.5	78.0	—	—	—	—
Cooling		66.0	66.0	68.5	77.0	—	—	—	—
Noise									



LGH-15~100RX5-E

LGH-150/200RX5-E

**LGH-100RX5-E**

LGH-100RX5-E							
50Hz / Single phase 220-240V							
LOSSNAY ventilation				By-pass ventilation			
Fan speed	Extra High	High	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
Power consumption (W)	500-535	445-475	350-380	175-200	510-550	460-485	365-395
Air volume (m³/h) (L/s)	1000 278	1000 278	755 210	415 115	1000 278	1000 278	755 210
External static pressure (mmH <sub>2</sub> O) (Pa)	16.3-17.3 160-170	10.2-11.2 100-110	5.6-6.1 55-60	1.8 18	16.3-17.3 160-170	10.2-11.2 100-110	5.6-6.1 55-60
Temperature exchange efficiency (%)	80.0	80.0	83.0	87.0	—	—	—
Enthalpy exchange efficiency (%)	Heating 72.5	72.5	74.0	80.0	—	—	—
Cooling 71.0	71.0	73.0	79.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoic chamber)	36-37	34-35	31-32.5	21-22	37-38	35-36	32-33
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**

LGH-150RX5-E							
50Hz / Single phase 220-240V							
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 (m³/h) (L/s)	1500 417	1500 417	1300 361	1500 417	1500 417	1300 361	
External static pressure (mmH <sub>2</sub> O) (Pa)	16.3-17.8 160-175	13.3-13.8 130-135	9.7-10.2 95-100	16.3-17.8 160-175	13.3-13.8 130-135	9.7-10.2 95-100	
Temperature exchange efficiency (%)	80.0	80.0	81.0	—	—	—	
Enthalpy exchange efficiency (%)	Heating 72.0	72.0	72.5	—	—	—	
Cooling 70.5	70.5	71.5	—	—	—	—	
Noise (dB) (Measured at 1.5m under the center of panel in an anechoic chamber)	38-39	36-37.5	33.5-35	39-40.5	37.5-39	35.5-37	
Weight (kg)	105						
Starting current	Under 7.3 A Less						

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

**LGH-200RX5-E**

LGH-200RX5-E							
50Hz / Single phase 220-240V							
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 (m³/h) (L/s)	2000 556	2000 556	1580 439	2000 556	2000 556	1580 439	
External static pressure (mmH <sub>2</sub> O) (Pa)	16.3-16.8 160-165	10.2-10.7 100-105	6.1-6.6 60-65	16.3-16.8 160-165	10.2-10.7 100-105	6.1-6.6 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	71.0	72.0	—	—	—	
Noise (dB) (Measured at 1.5m under the center of panel in an anechoic chamber)	39.5-40	37-38	32.5-34	40.5-41	38-39	33.5-35	
Weight (kg)	118						
Starting current	Under 11.9 A 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)

# System Controller

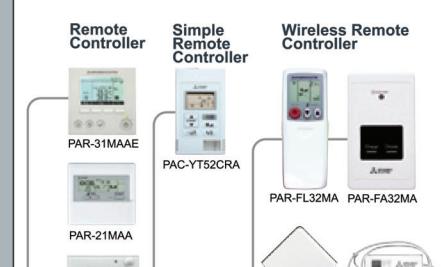
MITSUBISHI ELECTRIC's Air-conditioner Network System (MELANS) leads air conditioner management a PC browser and Network era.

## ► MELANS

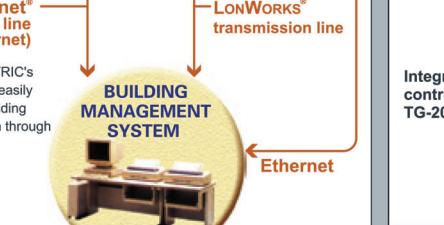
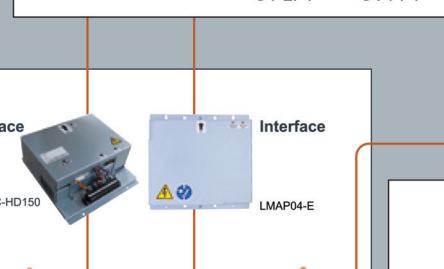
Use of our MELANS products enhances EFFICIENCY and QUALITY of air-conditioning, contributing to ENERGY SAVING and reduction in running cost. We offer a wide variety of MELANS products to meet all requirements - from the smallest and simplest to the largest and most complex. We have individual remote controllers, various centralized controllers, and centralized integrated software, as well as BMS interface hardware and software etc. Above all, with AE-200E/AE-50E/AG-150A/EB-50GU-J, PC browser and long distance remote control (monitoring and operating) via communication Network is possible and easy.

### I Individual Remote Controller

All of the local remote controllers feature liquid crystal and LED displays and easy to operate.



### C Centralized Remote Controller



### Air-Conditioning Control System

This is a specialized air conditioning management system, in which up to 2000 indoor units can be centrally controlled.



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

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

Model	Local remote controller *9					System controller *9									
	PAR-31MAAE	PAR-21MAA	PAR-U02MEDIA	PAC-YT52CRA	PAR-FL32MA	PAC-YT40ANRA	AT-50B	AE-200E / AE-50E	AE-200E + / AE-50E + / EW-50E	EW-50E	AG-150A	AG-150A + PAC-YG50ECA	EB-50GU-J	TG-2000A	*4~5
Controllable Groups / Indoors (Group / Indoor) *8	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	16 / 50	50 / 50	50 / 50	200 / 200	50 / 50	50 / 50	150 / 150	50 / 50	2000 / 2000	
■Operating															
ON / OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Mode (cool / heat / dry / fan)	○	○	○	○	○	N	○	○	○	○	○	○	○	○	○
Temperature-set	○	○	○	○	○	N	○	○	○	○	○	○	○	○	○
Dual set point *10	○	N	○	○	N	O <sup>11</sup>	○	○	○	○	N	N	N	N	○
Local Permit / Prohibit	N	N	N	N	N	N	○	○	○	○	N	N	N	N	○
Fan speed	○	○	○	○	○	N	○	○	○	○	N	○	○	N	○
Air-flow direction	○	○	○	○	○	N	○	○	○	○	N	○	○	N	○
■Status monitoring															
ON / OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Mode (cool / heat / dry / fan)	○	○	○	○	○	N	○	○	○	○	N	○	○	○	○
Temperature-set	○	○	○	○	○	N	○	○	○	○	N	○	○	○	○
Local Permit / Prohibit	○	○	○	○	○	O	○	○	○	○	N	○	○	N	○
Fan speed	○	○	○	○	○	N	○	○	○	○	N	○	○	N	○
Air-flow direction	○	○	○	○	○	N	○	○	○	○	N	○	○	N	○
Indoor temperature	○	○	○	○	○	N	N	○	○	○	N	○	○	N	○
Filter sign	○	○	○	○	○	N	N	○	○	○	N	○	○	N	○
Error flashing	○	○	○	○	○	O	○	○	○	○	▲	○	○	○	○
Error code	○	○	○	○	N	O	○	○	○	N	O	○	○	N	O
Operation hour	N	N	N	N	N	N	N	N	N	N	N	N	N	N	●
■Scheduling															
One-day	○	○	○	N	N	○	○	○	○	○	●	●	●	N	●
Times of ON / OFF per day	1	8	1	N	1	N	16	24	24	24	N	24	24	24	24
Weekly	○	○	○	N	N	○	○	○	○	○	○	○	○	○	○
Times of ON / OFF per week	8 x 7	8 x 7	8 x 7	N	N	16 x 7	24 x 7	24 x 7	24 x 7	N	24 x 7	24 x 7	24 x 7	24 x 7	24 x 7
Annual	N	N	N	N	N	N	N	○	○	○	●	●	●	N	●
Optimized start-up	N	N	N	N	N	N	N	N	N	N	N	N	N	N	O
Auto-off timer	○	○	○	N	N	N	N	N	N	N	N	N	N	N	N
Min. timer setting unit (minute)	5	1	5	N	10	N	5	1	1	1	N	1	1	1	1
■Recording															
Error record	○	N	N	N	N	N	○	○	○	○	N	O	O	N	O
Daily / monthly report	N	N	N	N	N	N	N	N	N	N	N	N	N	N	O
Electricity charge	N	N	N	N	N	N	N	N	N	N	N	N	N	N	●
Energy management data	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
Temp-set limitation by System controller *4	○ *6	○ *6	○	O *6	N	N	O *6	N	O *6	N	O *6	N	O *6	N	O *6
Operation-lock	○	○	○	O	N	N	○	N	N	N	N	N	N	N	N
Night setback	○	N	O	N	N	N	○	O	O	O	N	O	O	N	O
Sliding temperature control	N	N	N	N	N	N	N	N	O	O	O	N	O	N	O
■Management (Group / Interlocked)															
Ventilation interlock	N/O	N/O	N/O	N/O	N/O	N	O	O	O	O	○	○	○	N	○/O
Group setting	O *1	O *1	O	O *1	N	O	O	O	O	O	N	O	O	N	O
Block setting	N	N	N	N	N	N	N	N	O	O	N	O	O	N	O
Revision of electricity charge	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	N / O	N / O	N / O <sup>7</sup>	○ / ○ <sup>3</sup>	○ / ○	○ / ○	○ / ○	○	○	○	N	○ / ○
Fan speed	N / O	N / O	N / O	N	N	N	○	○	○	○	○	○	○	N	○ / O
Ventilation mode	N / N	N / N	N	N	N	N	○ / N	○ / N	○ / N	○ / N	○ / N	○ / N	○ / N	N / N	O / N
■Status monitoring on LOSSNAY interlocked (Group / Interlocked)															
ON / OFF	N / O	N / O	N / O	N / O	N	N	O / O	O / O	O / O	O / O	▲	▲	▲	O / O	O / O
Fan speed	N / O	N / O	N / O	N	N	N	O / O	O / O	O / O	O / O	N	O / O	O / O	N / O	O / O
Ventilation mode	N	N	N	N	N	N	O / N	O / N	O / N	O / N	O / N	O / N	O / N	N / N	O / N

\*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. AE-200E/AE-50E/AE-50E/AG-150A/EB-50GU-J license registration to AE-200E/AE-50E/AE-50E/AG-150A/EB-50GU-J is required to monitor and operate the units by browser and TG-2000A.

\*5. AG-150A connected with PAC-YG50ECA is compatible with TG-2000A Ver. 6.10\* or later. EB-50GU-J is compatible with TG-2000A Ver. 6.40A or later. AE-200E/AE-50E is compatible with TG-2000A Ver. 6.50\* or later. Contact your local distributor for which version of TG-2000A supports EW-50E.

\*6. This function can be set only on the ME remote controller. This function cannot be used with the MA/Simple MA remote controller.

(But, the validity of this function with the MA/Simple MA remote controller depends on the indoor unit model, and there are possibilities that this function can be used with them.)

\*7. Inter-lock is set from system controller (Except PAC-YT40ANRA) or local remote controllers.

\*8. The maximum number of controllable units decreases depending on the indoor unit model.

\*9. For indoor use only.

\*10. This function is supported only when all the indoor units, remote controllers, and system controllers that are connected to a given group features the function.

\*11. For the availability of the function, please contact your local distributor.

\*12. Supports the dual set point function.

\*13. BAC-HD150 ver. 2.10 and later supports the dual set point function.

\*14. Each group / Batched : ○: Each group ; □: Block (for CITY MULTI Indoor unit, not for all Mr.SLIM); ●: AE-200E/AE-50E/AE-50E/AG-150A/EB-50GU-J license registration possible.

\*15. (●): License registration for the optional functions required N: Not Available (Not Used.) △: Batched only; ▲: Batched handling (for maintenance) ■: Block

## Wired MA remote controller PAR-21MAA



Dimensions: 130(W) x 120(H) x 19(D) mm

: 5-1/8(W) x 4-23/32(H) x 3/4(D) in.

- Set temperature in 1°C/F increment

- Weekly timer

Up to 8 ON/OFF/temperature setting per day in 1 minute increment. Setting kept in nonvolatile memory. No need to worry about re-setting at power failure.

- Room temperature control with thermostat sensor inside the unit
- Self-diagnosis function immediately informs error

## Wireless remote controller PAR-FL32MA / PAR\_Fa32MA / PAR-SA9FA



Dimensions: 58(W) x 159(H) x 19(D) mm  
: 2-5/16(W) x 6-5/16(H) x 3/4(D) in.



Dimensions: 70(W) x 120(H) x 22.5(D) mm  
: 2-3/4(W) x 4-3/4(H) x 7/8(D) in.



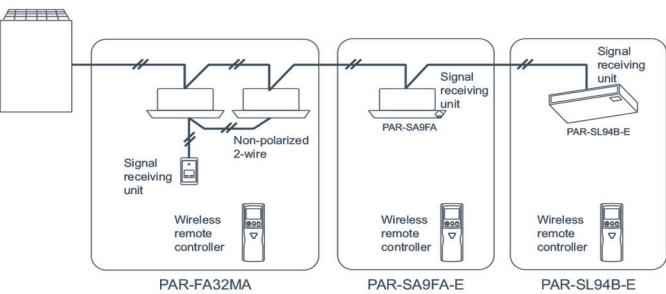
Dimensions: 256(H) x 19(D) mm  
PAR-SA9FA-E (4-way Cassette signal receiver)



Dimensions: 182(W) x 57(H) x 31(D) mm  
(Wireless remote controller kit for ceiling suspended)

- 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.

### Example of system configuration



### Functions

Item	Description	Operations	Display
ON/OFF	ON and OFF operation for a single group Sets the temperature for a single group Range of temperature setting Cool/Dry : 19°C - 30°C (14°F - 30°F) / 67°F - 87°F (57°F - 87°F) Heat : 17°C - 28°C (17°F - 28°F) / 63°F - 83°F (63°F - 83°F) Auto : 19°C - 28°C (17°C - 28°C) / 67°F - 83°F (63°F - 83°F) () For PEFY/PFFY by setting DipSW 7-1 to ON and limits to Ni6H fan speed only. Set to PAR-FL32MA according to its Installation Manual 4 "Model setting".	○	○
Temperature setting	Air flow direction angles (4-angle, Swing) Auto Louver ON/OFF. Air flow direction settings vary depending on the model.	○	○
Air flow direction setting	One ON/OFF setting can be set for one day.	*	*
Timer operation	Individually prohibit operation of each local remote control function (ON/OFF, Change operation mode, Set temperature, Reset filter).	○	○
Permit / Prohibit local operation	If operation is performed when the local remote controller inactivation command is received from the main system controller, a buzzer will ring and an LED will flash.	X	○ <sup>1</sup>
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one LOSSNAY.	X	X

\*Some models will have different display for the air flow direction and fan speed.  
Set the air flow direction and fan speed when performing initial setting.

## Centralized remote controller

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

### Advanced Touch controller AT-50B



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

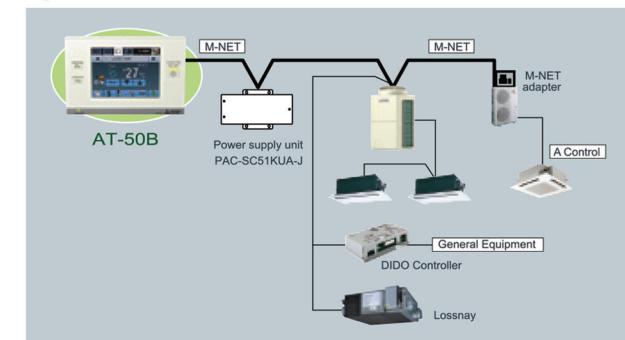
- Temperature will be displayed either in Centigrade in 0.5- or 1-degree increments, or in Fahrenheit, depending on the indoor unit model and the display mode setting on the remote controller.

#### Dual set point

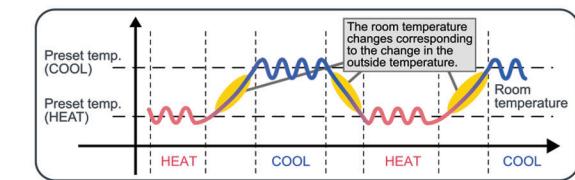
When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.

\*Please contact your Mitsubishi Electric sales office for details.

### System structure



### Operation pattern during Auto (dual set point) mode



### Design

#### Backlit LCD (Liquid Crystal Display) Touch Panel

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



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



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



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



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

## Functions

### Three in One

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

### Weekly and daily schedule

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

### System changeover

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

### Functions

#### [Basic Functions]

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

### Advanced Functions

Item	Description	Operations	Display
Permit / Prohibit	The ON/OFF, operation mode, setting temperature, fan speed, air direction, filter sign reset operations, and timer using the local remote controllers can be prohibited. Only ON/OFF and filter reset can be prohibited for the LOSSNAY group. *The settable items vary depending on the models.	○	○
Operation lock	The operation lock can be set to the input operation of AT-50B. Each button can be set. (Function Button 1, Function Button 2, Collective ON/OFF, Touch Panel) Each function can be set. (Operation mode, Setting temperature, Fan speed, Menu button) The password for the lock release can be set.	○	○
Error display	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed. * When an error occurs, the "ON/OFF" LED flashes. The operation monitor screen shows abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code and source of detection.	X	□○
Ventilation (independent)	Switches the mode "Bypass/Heat recovery/Auto" for LOSSNAY groups.	○	○
Ventilation (interlocked)	The LOSSNAY will run in interlock with the operation of indoor unit. The mode cannot be changed. The LED will turn ON during operation after interlocking.	○	○
Temperature-set limitation	Batch-setting to temperature range limit at cooling, heating, and auto mode. This function cannot be used with the MA remote controller. (Depends on the indoor unit model.)	○	○
Specific mode operation prohibit (Cooling prohibit, heating prohibit, cooling/heating prohibit)	When set as the main controller, operation of the following modes with the local remote controllers can be prohibited. When cooling is prohibited: Cooling, dry, automatic can not be chosen. When heating is prohibited: Heating, automatic can not be chosen. When cooling/heating is prohibited: Cooling, dry, heating, automatic can not be chosen.	○	○
External input (Emergency stop input, etc.)	The following input with level signals or pulse signals are available. Level signal: "Emergency stop input" or "Collective ON/OFF" Pulse signal: "Collective ON/OFF" or "Local remote controller prohibit/permit" One input can be selected from those above. * An external input/output adapter (PAC-YT51HAA-J (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	○	○
External output (Error output, operation output)	"ON/OFF" and "error/normal" are output with the level signal. * An external input/output adapter (PAC-YT51HAA-J (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	○	○
Checking the Gas Amount	Use this function to check for refrigerant leak from the outdoor unit. * When this function is used, the gas amount checking function of the outdoor unit cannot be used. This function is for CITY MULTI R2 and Y (PUMY is excluded) series only.	□	□
Schedule operation	Weekly schedule setting up to 12 pattern is available. In one pattern, up to 16 setting of "ON/OFF", "Operation mode", "Set Temperature", "Fan speed", "Air flow direction" and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedule (Summer/Winter) can be set. Today's schedule setting up to 5 pattern is available.	○	○

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

### Night setback function

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

### Main system controller/Sub system controller

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

### Simple button arrangement

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

## Centralized remote controller

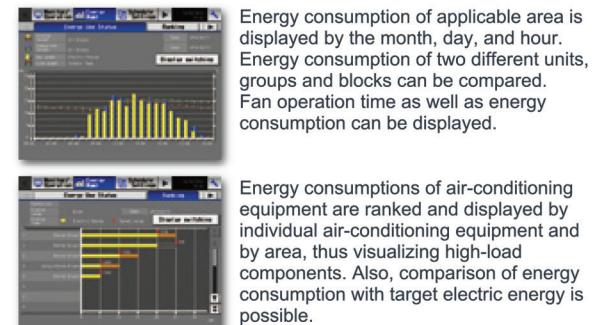
### Centralized controller AE-200E/AE-50E



Dimensions: 284(W) x 200(H) x 65(D) mm  
11-5/32(W) x 7-27/32(H) x 2-9/16(D) in.

Java™ is a registered trademark of Oracle® and/or its affiliates.

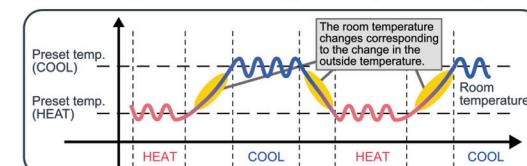
#### Control Screen for Power Consumption



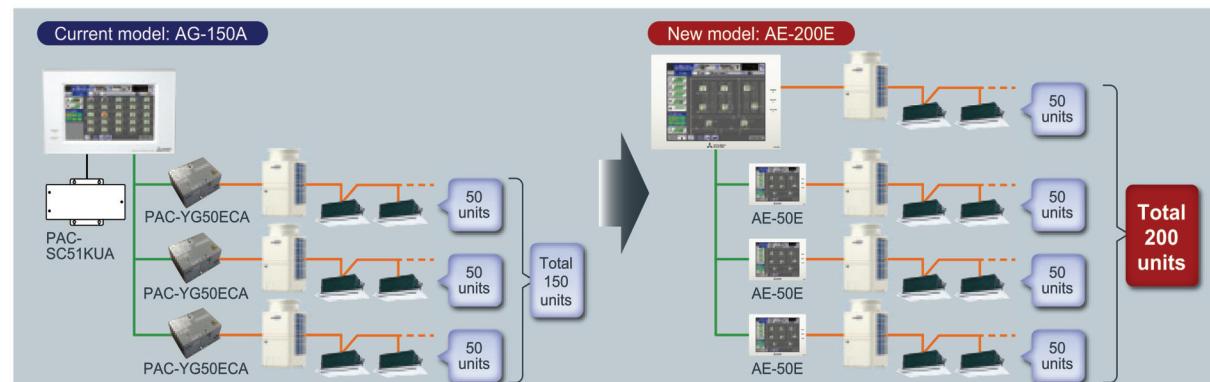
Energy consumption of applicable area is displayed by the month, day, and hour. Energy consumption of two different units, groups and blocks can be compared. Fan operation time as well as energy consumption can be displayed.

Energy consumptions of air-conditioning equipment are ranked and displayed by individual air-conditioning equipment and by area, thus visualizing high-load components. Also, comparison of energy consumption with target electric energy is possible.

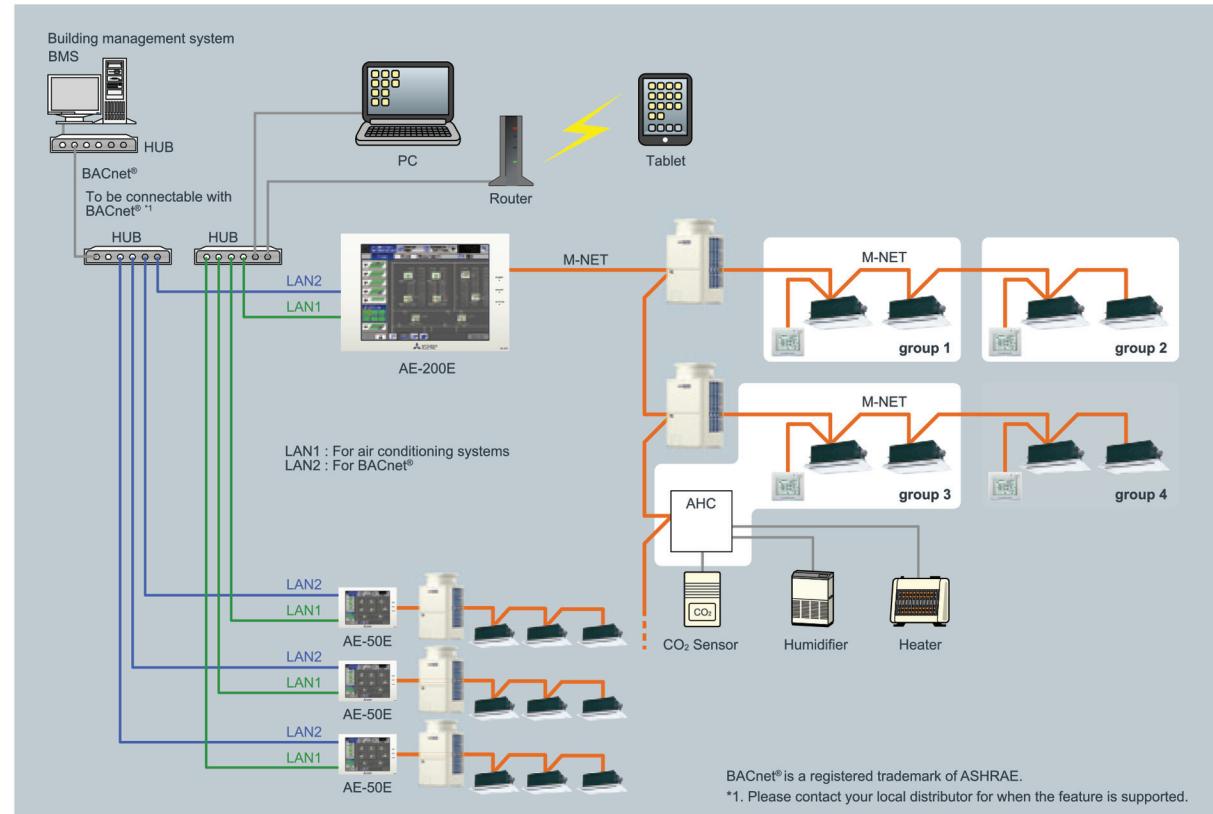
#### Operation pattern during Auto (dual set point) mode



#### Comparison in the number of connectable units



## System Structure



## Functions

Item	Description	Operations	Display
Controllable number of unit	Up to 50 units/50 groups		
ON/OFF	ON and OFF operation for the air conditioning units and general equipment. (To operate general equipment, PAC-YG66DCA is required.)	○ ○ △ ●	○ ○
Operation mode	Switches between several operation modes depending on the air conditioning unit. Air conditioning unit : Cool/Dry/Auto*/Fan/Heat LOSSNAY unit : Heat Recovery/Bypass/Auto CAHV, CRHV, Air To Water (PWFY) units : Heating, Heating ECO, Hot Water, Anti-freeze, Cooling(**) * Auto mode is for CITY MULTI R2 and WR2 series only. ** Only PWFY	○ ○ △ ●	○
Temperature setting	Cool/Dry : 19°C (67°F) -35°C (95°F) [14°C (57°F) -30°C (87°F)] Heat : 4.5°C (40°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)]. The range of temperature depends on the air conditioning unit. [ ] in case of using middle-temperature on PDFY, PEFY-VML/MR/VMS/VH-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-angles or 5-angles 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 prohibits operation of each local remote controller function. (ON/OFF, Operation mode, Set temperature, Filter sign reset, Air Direction*, Fan Speed*, Timer*) * This function depends on the model.	○ ○ △ ●	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	x	○
Error	When an error is currently occurring on an air conditioning unit, the affiliated unit and the error code are displayed.	x	□ ○
Test run	This operates air conditioning 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 adapter (PAC-YG10HA-E) you can set and monitor the following. Input : By level signal : "Batch ON/OFF", "Batch emergency stop" By pulse signal : "Batch ON/OFF", "Enable/disable local remote controller" Output : "ON/OFF", "Error/Normal"	○	○
Energy Management	Bar Graph : Indoor unit Electrical Energy, FAN operation time, Thermo-ON time (TOTAL, Cooling, Heating) can be displayed hourly, daily and monthly. Line Graph : Outdoor temp., Room temp., Set temp. (Heating, Cooling) input from PAC-YG63MCA and temp. from AHC.	x	□ ○ ●
Advanced HVAC Controller (AHC)	The status of AHC can only be monitored.	x	○
New Smart ME controller	The status of sensor on this controller can be monitored.	x	○
Smartphone/Tablet	The specified Web browser on iOS and Android OS can monitor and operate AE-200E. *1	○	○
New Web design	The web screen design is renewed for user friendly interface. *1	○ ○ △ ●	○
Initial setting software	The initial setting can be configured without the connection of AE-200E. *1	x	x
Apportionment of power consumption	Apportionment of power consumption can be calculated on AE-200 without TG-2000A. *1	●	□ ●
BACnet® communication	ANSI/ASHRAE 135-2010 (ISO16484-5) is supported and approved by the BTL. *1	○	x

\*1. Please contact your local distributor for when the feature is supported.

## Centralized remote controller

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

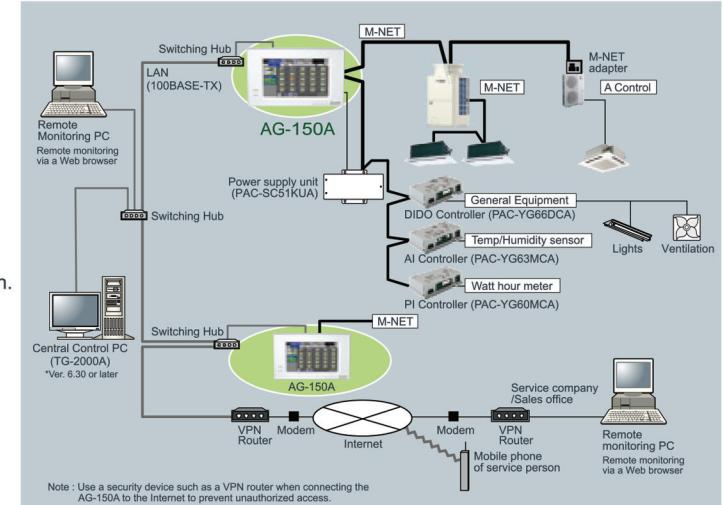
## Centralized controller AG-150A



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



## System structure



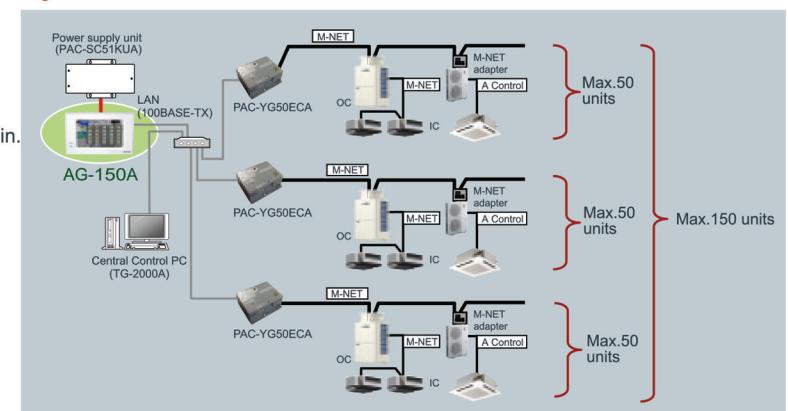
## Expansion Controller PAC-YG50ECA



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

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

## System structure



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

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



**Design****Backlight color liquid crystal**

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

**Touch panel****9 inch wide, high-resolution**

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

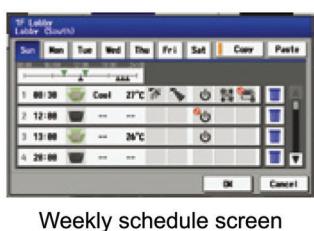
**Flat back****Easy installation**

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

\*Optional parts are required.

**USB memory compatible**

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



Weekly schedule screen

**Functions**

Item	Description	Operations	Display
Controllable unit	50 units/groups or 150 units/groups via expansion controller; PAC-YG50ECA. ON and OFF operation for the air conditioner units and general equipment. (To operate general equipment, PAC-YG66DCA is required.)	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/>
Mode selection	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.	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/>
Temperature setting	Cool/Dry : 19°C-30°C (14°C-33°C) / 67°F-87°F(57°F-87°F) Heat : 17°C-28°C (17°C-28°C) / 63°F-83°F(63°F-83°F) Auto : 19°C-28°C (17°C-28°C) / 63°F-83°F(63°F-83°F) ( ) in case of using middle-temperature on PEFY-VML/VMR/VM/VMH by setting DipSW7-1 to ON. Yet, PEFY-P-VMH-E-F is excluded.	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/>
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.	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/>
Air flow direction setting	Air flow direction angles, 4-angle or 5-angle Swing, Auto (Louver cannot be set)	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/>
Schedule operation	Annual/Weekly (5 types)/today schedule can be set for each group of air conditioning units. Optimized startup setting is also available.	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/>
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Change operation mode, Set temperature, Reset filter).	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/>
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	<input checked="" type="radio"/>	<input type="radio"/>
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.	<input checked="" type="radio"/>	<input type="radio"/> <input type="checkbox"/>
Test run	This operates air conditioner units in test run mode.	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/>
Ventilation interlock	The ventilation unit (LOSSNAY) is able to automatically start its operation when operation of the interlocked indoor unit starts.	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/>
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"	<input type="radio"/>	<input type="radio"/>

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

**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 to Ver. 2.10 or later.)

**Monitoring functions**

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

**Energy saving functions**

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

**Centralized remote controller**

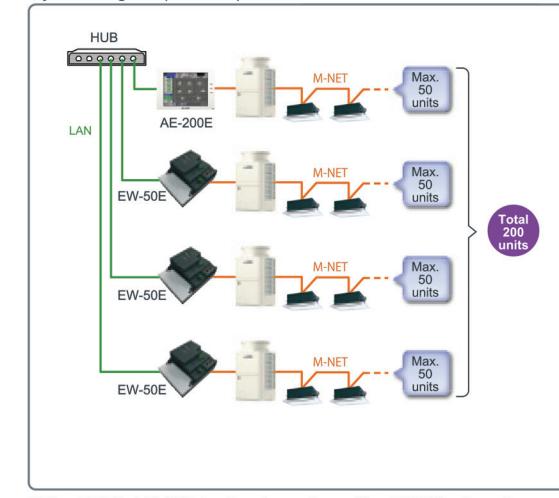
NEW



Dimensions: 209(W) x 172(H) x 92(D) mm  
8-1/4(W) x 6-25/32(H) x 3-5/8(D) in.

**System Structure**

System diagram (standard)



\* When M-NET of AE-200E is not used, a maximum of four EW-50E units can be connected.

**Enabled to operate and monitor air conditioners independently by using a PC**

Even without an AE-200E, EW-50E is possible to monitor and operate air conditioners using a browser software\*. Via the Internet, air conditioners can be monitored and operated from a remote location. In addition, air conditioners in multiple buildings can be operated collectively.\*2

\* 1. The operation of this product has been confirmed on Internet Explorer 8, IE9, IE10, and IE11, and on Oracle® Java Ver8.

Microsoft® Internet Explorer is a trademark or registered trademark of Microsoft Corporation in the United States and other countries. Oracle® and Java® are trademarks or registered trademarks of Oracle Corporation, its subsidiaries, and related companies in the United States or other countries.

Company names and product names in this brochure may be trademarks or registered trademarks of the respective rights holder.

\* 2. When connecting an EW-50E via the Internet, do not directly connect the EW-50E to the Internet.

Instead, always connect via a router via a VPN function that can ensure security.

To monitor the indoor units connected to EW-50E, use TG-2000A of Ver. 6.60 or later.

**Main Features****Available as the expansion controller for AE-200E**

Connecting three EW-50E units to an AE-200E makes it possible to operate and monitor a maximum of 200 indoor units.

**Apportioned electricity charge function**

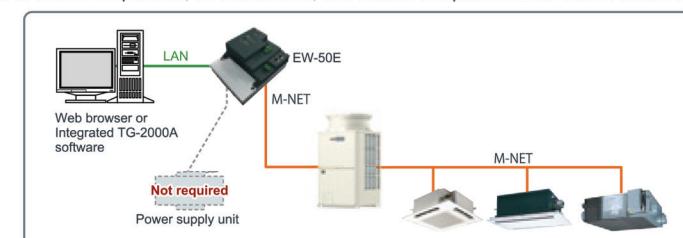
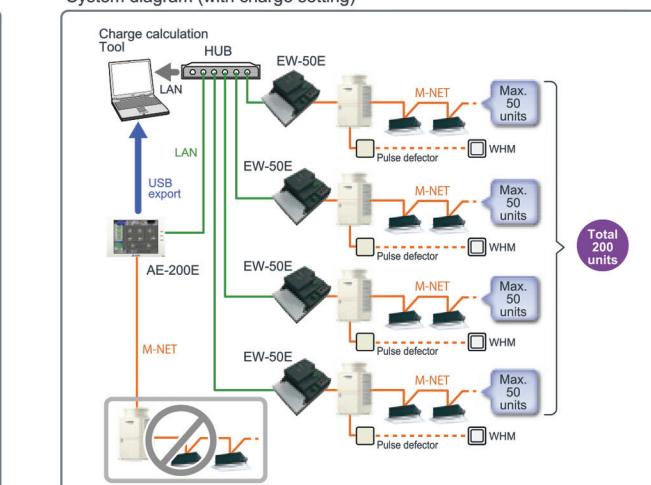
The amount of power consumed by the air conditioners is calculated with the use of AE-200E. The calculated data can be output to the PC via USB memory or LAN, and the charge report can be created with the use of the designated charge calculation tool.

\*The apportioned electricity charge function on AE-200E and TG-2000A cannot be used together.

\*To use the apportioned electricity charge function on AE-200E, check that the version of TG-2000A is 6.60 or later, even if the apportioned electricity charge function on TG-2000A is not used.

\*For other restrictions, refer to the Installation Manual and Instruction Book.

System diagram (with charge setting)



- Manage air conditioner usage conditions**  
It is possible to use a web browser to display the energy consumption of air conditioners in an easy-to-understand manner.



#### Operable without the transmission line power supply unit

Because the EW-50E unit is equipped with a power supply function, power supply from a transmission line power supply unit is not necessary.

Since power supply from an outdoor unit is also not necessary, self-sustained operation is possible even when the outdoor unit system goes down. (If the power consumption factor exceeds 1.5, a power supply unit is required.)

#### Energy-saving control

By adding an energy-saving control license (optional product), the set temperature can be changed automatically<sup>1</sup> based on the room temperature surrounding each air conditioner. Therefore, energy-saving control is possible without affecting comfort greatly.

\* 1. This function changes the set temperature in units of +2°C for cooling and -2°C for heating by the specified time interval.

If the difference between the suction temperature and the set temperature is significant, it is possible to exclude it from the energy-saving subject.

#### Functions

\* The functions and specifications are subject to change.

(◎: By group or multiple groups ○: By group □: Batch only)

Item	Remarks	Setting	Display
ON/OFF	Switches to ON or OFF air conditioners and general equipment.	○	○
Operation mode switching	Switches to cool, dry, auto, fan, or heat operation. * Depending on the unit, some modes are not available.	○	○
Room temperature setting	The temperature can be set in the following range. The values inside the parenthesis are for indoor units for medium temperature. * Depending on the model, the setting temperature range differs. · Cooling/dry : 19°C to 35°C (4.5°C to 30°C) · Heating : 17°C to 28°C (17°C to 28°C) · Auto : 19°C to 28°C (17°C to 28°C)	○	○
Set temperature 0.5°C increments	The temperature can be set and displayed in 0.5°C increments. * With some unit combinations, the temperature is set in 1°C increments.	○	○
Fan speed setting	The fan speed can be set to 4 levels, 3 levels, 2 levels or automatic. * Available fan speeds differ depending on the unit.	○	○
Air direction setting	Fixed swing in five levels or auto air direction can be set. * Available air directions differ depending on the unit.	○	○
Prohibition of local remote controller operation	It is possible to disable the ability to use local remote controller to run or stop, the operation mode, set temperature, filter sign reset, wind speed, wind direction and timer operation. * In the Lossnay group, only ON/OFF and filter reset can be disabled. * Disabling of the fan speed, air direction, and timer operation can be set for the PAC-SF50AT, PAR-36MA, PAR-F30ME, and PAC-YT52CR models.	○	○
Room temperature display	Displays the suction temperature of the indoor unit.	—	○
Error display	Displays the current error content together with the address.	—	○
Schedule operation	Today/weekly/weekly by season/yearly	○	○
Energy management	Setting content: ON/OFF, operation mode, set temperature, disable local remote controller, air direction/fan	—	○
Ventilator operation (solo)	Group operation can be possible for free plan Lossnay units only. * The above group operation mode includes auto ventilation, heat exchange, and normal ventilation.	○	○
Ventilator operation (interlocked)	Free plan Lossnay units and indoor units can be interlocked and operated together. * At this point, air volume can be operated but the ventilation mode cannot be selected.	○	○
External input (timer connection, emergency stop input, etc.)	Using a level signal or pulse signal, it is possible to input the following. Level signal: Emergency Stop Input, Batch ON/OFF, and Demand Input. Pulse signal: Batch ON/OFF or Operation Disable/Enable * Requires an external power supply and separately sold external I/O adapter (PAC-YG10HA). Of the above inputs, only one input can be selected.	□	—
External output (error output, operation output)	Using the level signal, ON/OFF and Error/Normal are output. * Requires an external power supply and separately sold external I/O adapter (PAC-YG10HA).	—	□
Web browser	Monitor/operation, failure, filter sign monitoring, schedule setting, interlocked control setting (option), energy saving control setting (option), energy saving peak cut setting (option), set temperature range restrictions, other	○ <sup>1</sup>	○ <sup>1</sup>
Filter reset	Filter sign reset	○	○
Connectable location	Centralized system transmission line: Connectable Recommended Indoor and outdoor transmission line: Connectable	—	—

\* The functions and specifications differ depending on the connected equipment and model.

\* Electric energy can be proportionally divided using the EW-50E alone.

But the apportioned electricity charge function requires an AE-200E or TG-2000A.

■Notes

\* 1. Some items do not support the multi group setting and display.

\* 2. Use only items for which the unit has the function.

Independent humidification unit<sup>2</sup>

Environmental measuring controller, metering measurement controller, general interface

## Centralized remote controller

### Centralized controller EB-50GU-J



EB-50GU-J (without display)  
• Dimensions: 9-7/8 (W) x 8-9/16 (H) x 3-7/8 (D) in.  
· 250 (W) x 217 (H) x 97.2 (D) mm



Java™ is a registered trademark of Oracle® and/or its affiliates.

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.8 or Ver.9)

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

#### Using "Dial-up Connection"

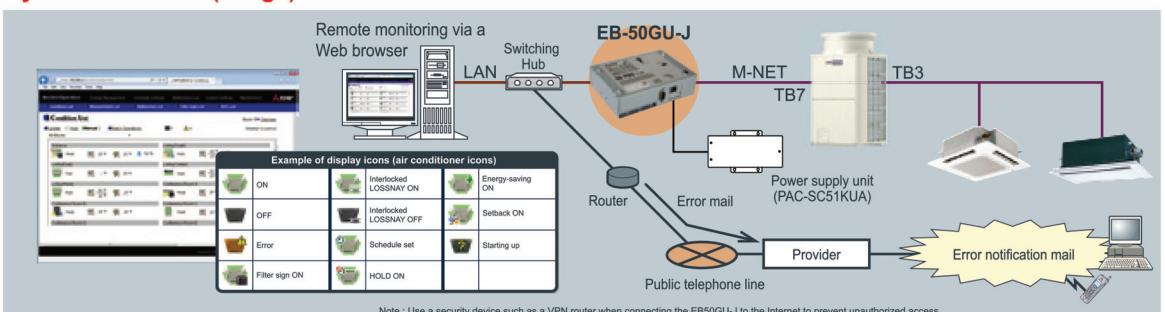
- Enables monitoring and operation from a remote place
- Enables error notification by e-mails to a PC or to a mobile phone

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

Function	Description	Operations	Display
ON / OFF	ON and OFF operation for the air conditioner units	○ ● ○	○ ○
Mode selection	Switches between COOL/DRY/FAN/AUTO/HEAT	○ ● ○	○
Temperature setting	The temperature can be set within the following range. Cool/Drying: 67°F - 95°F/19°C - 35°C Heat: 40°F - 83°F/4.5°C - 28°C Auto (single set point): 67°F - 83°F/19°C - 28°C Auto (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode. *The settable temperature ranges and items vary depending on the indoor and outdoor unit models.	○ ● ○	○
Air flow direction setting	Air flow direction angles, 4-angle or 5-angle Swing, Auto (Louver cannot be set)	○ ● ○	○
Timer operation / Schedule	Annual/Weekly(5 types)/Today schedule can be set for each group of air conditioning units. Optimized startup setting is also available.	○ ● ○	○
Permit / Prohibit function	Individually prohibit operation of each local remote control function	○ ● ○	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	X	○
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.	X	□
Test run	This operates air conditioner units in test run mode.	○ ○ △ ●	○
Ventilation interlock	Operation of indoor groups or general equipment can be interlocked by the change of state (ON/OFF, mode, error of indoor groups and general equipment).	○	○
AHC status	Displays the status of input and output ports of each Advanced HVAC CONTROLLER (AHC).	X	□
Energy Use Status	On the Energy Use Status screen, the energy-control-related status, such as electric energy consumption, operation time, and outdoor temperature, can be displayed in a graph. Operators can check the detailed status of given indoor units by specifying the date to display the data per group, block, or unit address.	X	□ ○ ●

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

#### System Structure (image)

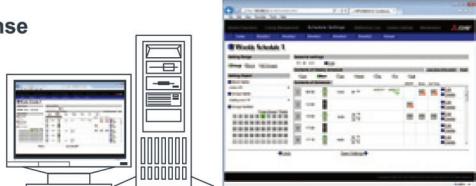


#### Annual / Weekly Schedule

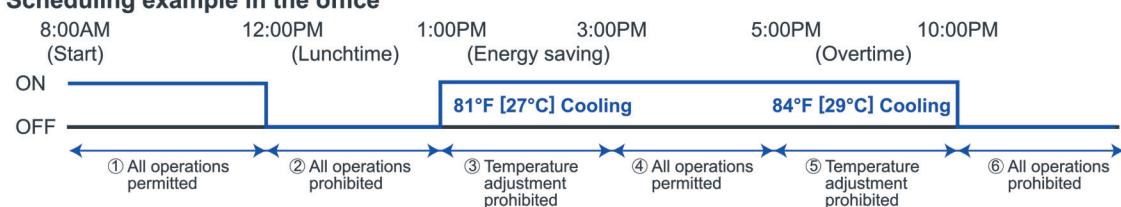
##### Enables Weekly and Annual scheduling with a registering license

The operations that can be scheduled for air conditioning unit group: ON/OFF/Optimized Start, Mode, Set Temp, Air Direction, Fan Speed, and Prohibit Remote Controller operation

For annual schedule, it is possible to set 50 day-long settings up to 24 months into the future.



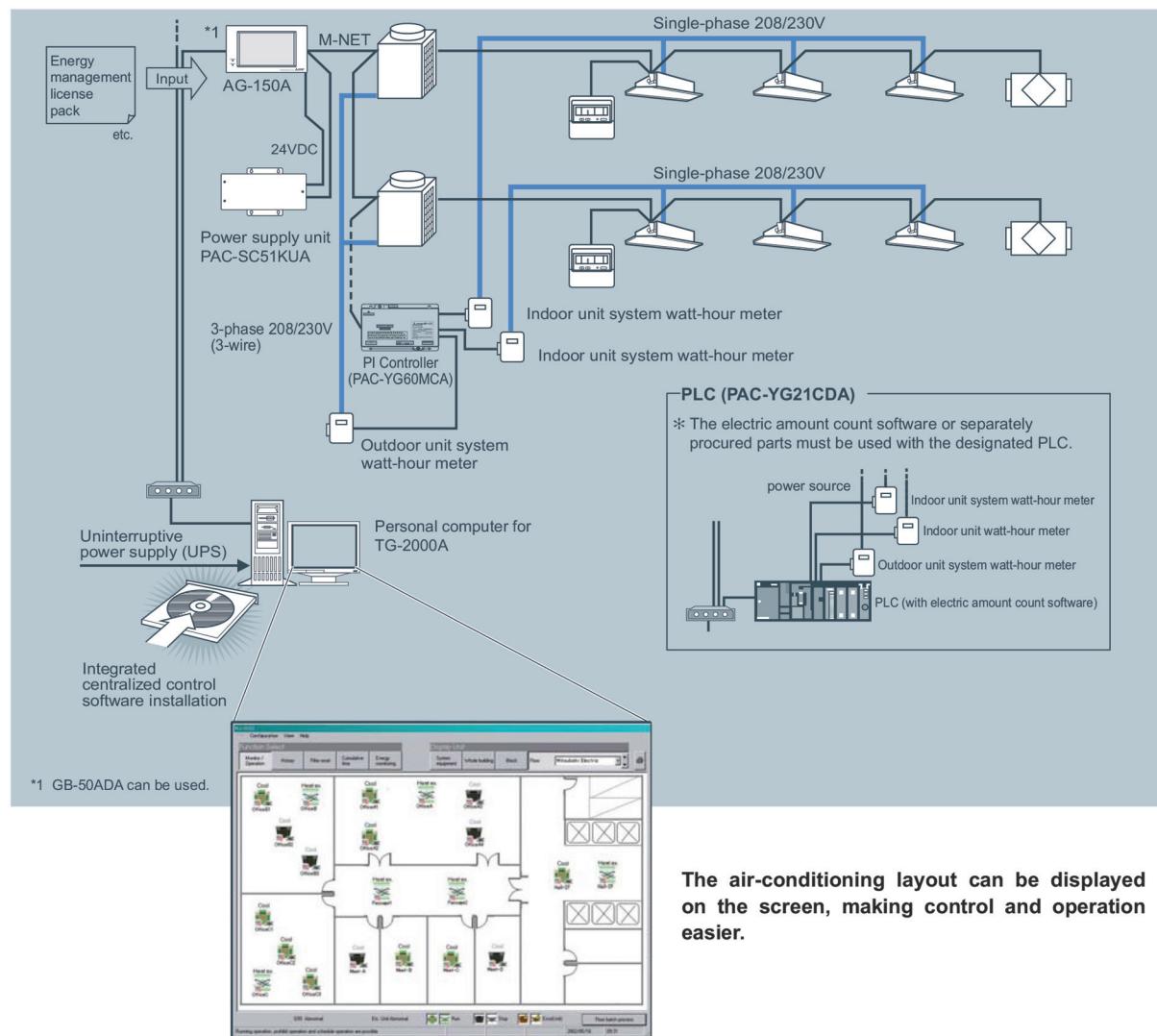
#### Scheduling example in the office



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

## Integrated centralized control software TG-2000A

### Example of Basic System Configuration



### 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/GB-50ADA units that are used in branch offices.

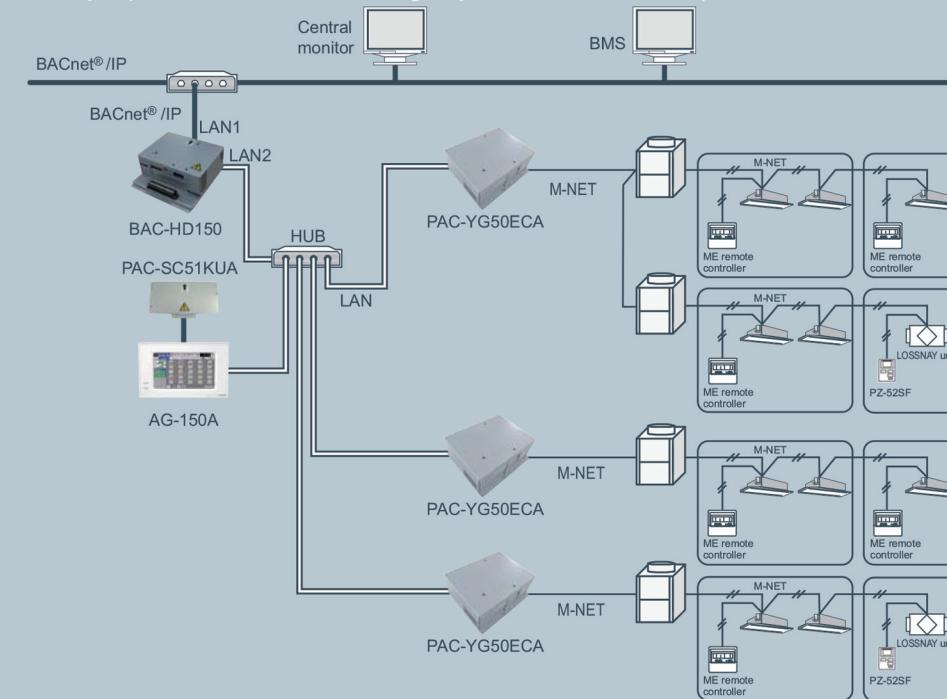
## BACnet® (BAC-HD150)

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

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

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

### System example (Connection of 150 units / groups with PAC-YG50ECA)



### BACnet® and M-NET adapter

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



# Optional Parts For Indoor Units

## >>4-way cassette type (PLFY-VBM/VCM)

Description	Model	Applicable capacity	Remarks
		VBM	VCM
Decoration panel	SLP-2AAW / SLP-2ALW	-	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-SH65OF-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
	CMP-40VLW-C	P20, P25, P32, P40
Decoration panel	CMP-63VLW-C	P50, P63
	CMP-100VLW-C	P80, P100
	CMP-125VLW-C	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-40BMW	P20, P25, P32, P40

## >>Ceiling concealed type (PEFY-VMH(S))

Description	Model	Applicable capacity	Remarks
Drain pump	PAC-KE04DM-F	P40~P250VMH	
	PAC-KE05DM-F	P200, P250VMHS	
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 (PEFY-VMA(L))

Description	Model	Applicable capacity
	PAC-KE91TB-E	P20, P25, P32
Filter box	PAC-KE92TB-E	P40, P50
	PAC-KE93TB-E	P63, P71, P80
	PAC-KE94TB-E	P100, P125
	PAC-KE95TB-E	P140

## >>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-SH90KF-E	P63
Wireless remote controller kit	PAC-SL94B-E	P100, 125
	PAC-SL94B-E	P40, 63, 100, 125

## >>Ceiling concealed type (PEFY-VMS1(L))

Description	Model	Applicable capacity	*For PEFY-VMS1L only
Drain pump	PAC-KE07DM-E	P15, 20, 25, 32, 40, 50, 63	
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, 32, 40, 50, 63
Drain pump kit	PAC-SH75DM-E	P32, 40, 50
	PAC-SH94DM-E	P63, 100



# Optional Parts For Outdoor Units

## >>For PUCY series

Description	Model	Remarks
Twinning kit	CMY-Y100VBK3	For PUCY-P550~P650 / EP400~EP650YSKA
	CMY-Y200VBK2	For PUCY-P700~P1000 / EP700YSKA
	CMY-Y300VBK3	For PUCY-P1050~P1350 / EP750~EP1100YSKA
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit)
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
Branch pipe (Header)	CMY-Y104-G	The 1st branch of P450~P650
	CMY-Y108-G	The 1st branch of P700~P1250
	CMY-Y1010-G	For 4 branches
		For 8 branches
		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 PUMY series

Description	Model
Branch Pipe (2 Branch)	CMY-Y62-G-E
Header	CMY-Y64-G-E
Header	CMY-Y68-G-E
Drain Socket	PAC-SG61DS-E
Centralized Drain Pan	PAC-SH97DP-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-SH95AG-E
Air Outlet Guide	PAC-SH96SG-E
Base Heater	PAC-SJ20BH-E

## Snow Hood

Prevention the Outdoor unit from wind and snow damages in cold or snowy areas, snow hood is recommended and helpful.

\*Do not use a snow hood made of stainless steel, which may cause the unit to rust. If the use of a stainless snow hood is the only option, contact the sales office before installing it.

Refer to the data book for details.

# Optional Parts For Control

Model	Description
PAC-SE41TS-E	Remote Sensor for AJ/K/M-Net Control
PAC-SE55RA-E	Remote ON/OFF adapter for Indoor Unit
PAC-SA88HA-E	Multiple Remote Controller Adapter
PAC-SA89TA-E	Timer Adapter for remote controller
PAC-SC37SA-E	Output signal connector
PAC-SC36NA-E	Input signal connector
PAC-SF46EPA	Transmission booster
LMAP04-E	Air conditioner interface
PAC-YG11CDA	Electric amount count software
BAC-HD150	BAC net® and M-NET adapter

Model	Description
PAC-YT51HAA-J	External input/output adapter for AT-50B
PAC-YG10HA	External input/output adapter for AG-150A
PAC-YG50ECA	Expansion controller for AG-150A
PAC-SC51KUA	Power supply unit for AG-150A / GB-50ADA-J
PAC-YG81TB	Mounting attachment B type for AG-150A wall-mount installations
PAC-YG83UTB	Electric box for AG-150A wall-embed installations
PAC-YG85KTB	Mounting attachment A type for AG-150A/PAC-SC51KUA wall-mount installations
PAC-YG71CBL	Black surface cover for AG-150A



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