MITSUBISHI ELECTRIC

Changes for the Better

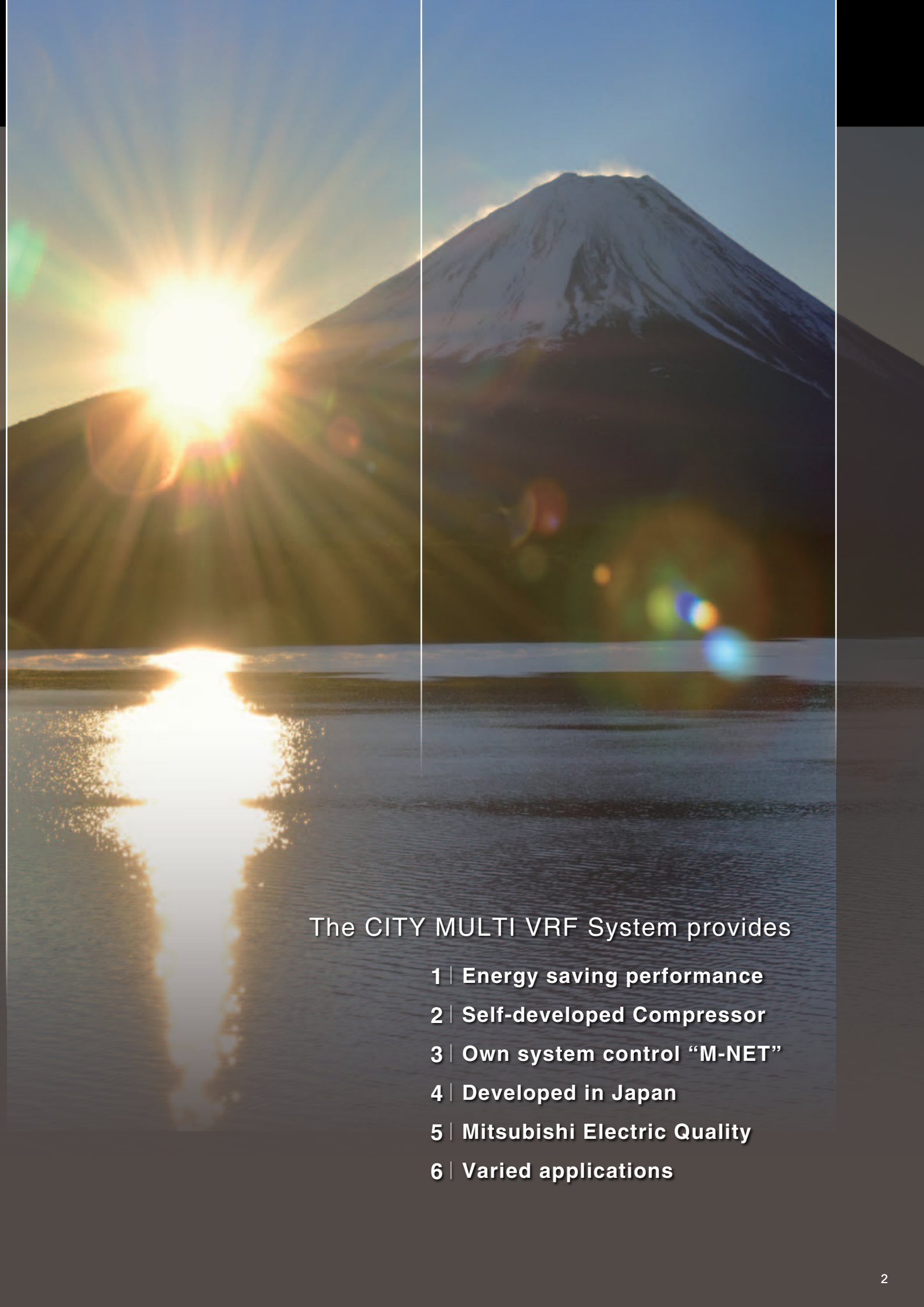
for a greener tomorrow eco Changes

AIR CONDITIONING SYSTEMS

CITY MULTI

CM18ME-A

Aiming at the highest level of the air-conditioning technology, we realize comfortable space with global environmental-friendly energy-saving models.



The CITY MULTI VRF System provides

1 | **Energy saving performance**

2 | **Self-developed Compressor**

3 | **Own system control “M-NET”**

4 | **Developed in Japan**

5 | **Mitsubishi Electric Quality**

6 | **Varied applications**

Contents

- Advantages of CITY MULTI 5 ~ 12P
- Outdoor unit 13 ~ 72P
- Indoor unit 73 ~ 112P
- Remote Controller 113 ~ 140P
- Optional parts 141 ~ 142P
- Lossnay 143 ~ 158P
- Precautions for use 159 ~ 164P

What is Variable Refrigerant Flow (VRF)?

VRF is characterized by the ability to connect multiple indoor units to one outdoor unit and control the indoor units individually. The outdoor unit uses an inverter-driven compressor and can change the refrigerant flow rate according to the indoor unit load.

Since the capacity range of the indoor unit is wide, air-conditioning of even small spaces is possible. Also, indoor units can be individually started, stopped, and controlled to regulate temperature, thereby leading to energy savings.

The CITY MULTI VRF System provides more satisfactory air-conditioning systems with 6 advantages.

1. Energy-saving performance

Wasteful energy use can be prevented by operating the inverter according to the load and by using an intelligent power module, such as DIPIPM, and techniques for improving the energy-saving performance of the inverter.

2. Self-developed Compressor

Mitsubishi Electric has focused on in-house development of the compressor, the core component of the air conditioner. We have developed a compressor that meets the specifications required by the air conditioner. This achieved qualities that include a low-pressure shell, and the capability to operate the outdoor unit up to 20 HP with a single compressor.

3. Own system control: M-NET

Mitsubishi Electric uses “M-NET”, an original air-conditioner network system.
M-NET is a network that connects CITY MULTI air conditioners in a building through the use of transition wiring with 2 non-polar wires.
Control of air-conditioning units and fine control of each indoor unit is accomplished by connecting Mitsubishi Electric’s Building Air-Conditioning Control System (MELANS*) to M-NET.

* MELANS: Mitsubishi Electric’s Air-conditioner Network System

4. Developed in Japan

The product concept and key parts of CITY MULTI, such as compressors and fans, have been designed at Mitsubishi Electric’s plants in Japan. This comprises all of the highly technological developments over Japan’s long history.

5. Mitsubishi Electric Quality

CITY MULTI is produced under strict production controls. Production lines are controlled to prevent any minor errors by unique systems, such as “part server”, “Cart Navi”.

6. Varied applications

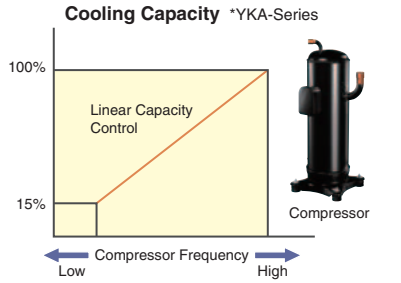
CITY MULTI can be installed in various types of buildings, such as residences, offices and hotels. A suitable model can be selected according to the situation of use, for example, air-conditioning control throughout an entire building using AE-200E, and control with a local remote controller for an individual indoor unit. The system enables schedule control, operation mode selection, and control using the latest tablet terminals via a Wi-Fi connection.

Energy saving performance

The advantage of CITY MULTI from Mitsubishi Electric is its high energy efficiency, which leads to increased energy savings.
The energy-saving performance of CITY MULTI has been improved to a high level within the industry through technical innovation.

Smart control for saving energy

The compressor varies its speed to match the indoor cooling or heating demand, thus it only consumes the amount of energy 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.

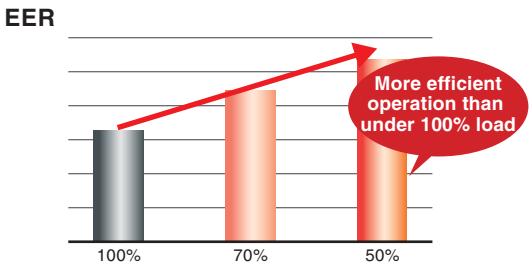


* image

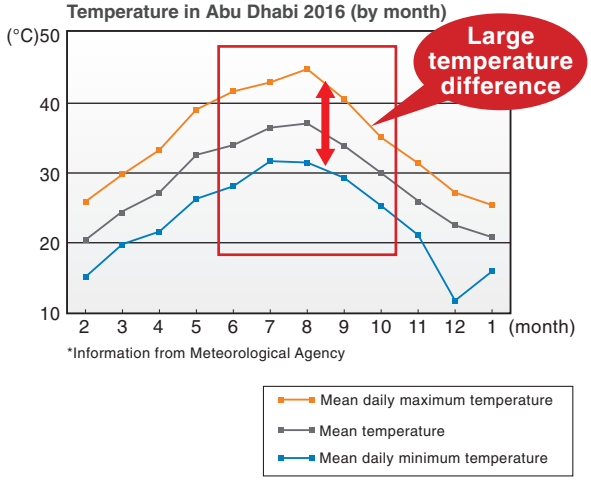
* Values vary depending on actual conditions, such as ambient temperature.

The Importance of Partial-Load Efficiency

The energy efficiency ratio (EER) is an index calculated at an ambient temperature of 35°C [95°F]. Actually, the temperature difference between day and night is large, even on hot days.Therefore, it is important to save energy across various temperatures where the EER cannot be measured perfectly. **CITY MULTI can achieve true energy savings by improving efficiency not only under rated conditions, but also under partial-load conditions.**

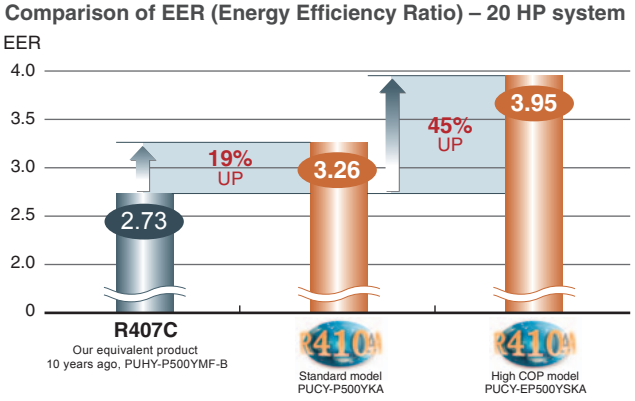


Partial-Load Efficiency (PUCY-P500YSKA)



Energy-saving performance can be further improved by high energy efficiency models.

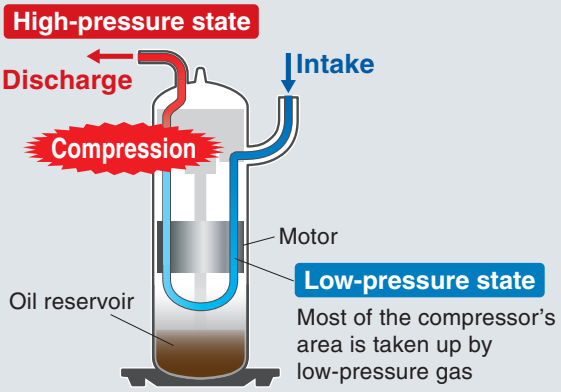
We offer a range of high-efficiency models in addition to standard models. The energy efficiency Ratio (EER) has improved drastically compared to models produced ten years ago.



Self-developed Compressor

The compressor is the heart of an air conditioner contains inverter control.
Mitsubishi Electric manages all compressor production processes, from development, design, and manufacture to quality control.
We develop high-performance compressors to improve performance to a higher level.

Low-pressure shells for top flow models



Cross section of compressor

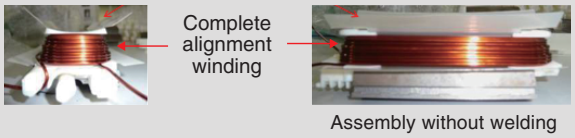
Low-pressure shell compressor

Most of the area in the compressor is taken up by the low-pressure gas. The refrigerant is drawn in from the side of the compressor and moves to the bottom of the shell where it flows to the scroll section and is compressed. The compressed high-pressure gas is discharged from the top of the compressor.
This prevents the motor and bearings from being heated up by the compressed high-pressure gas.
The refrigerant is collected at the bottom of the shell to reduce the rate of compressor damage caused by liquid refrigerant compression.

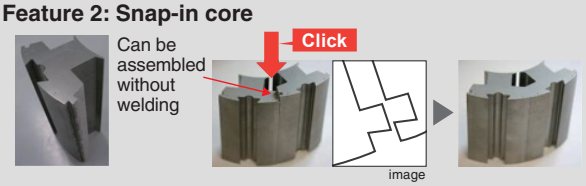
Snap-in core

Mitsubishi Electric has incorporated a new and original production process that wraps a conductor directly around the split core to create a compact and highly efficient motor.

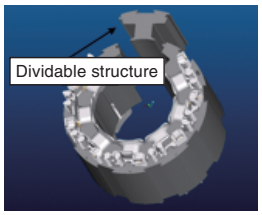
Feature 1: Coils wound around each core



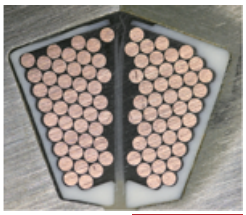
Feature 2: Snap-in core



Compressor motor



Snap-in core



Cross section **Density: high**

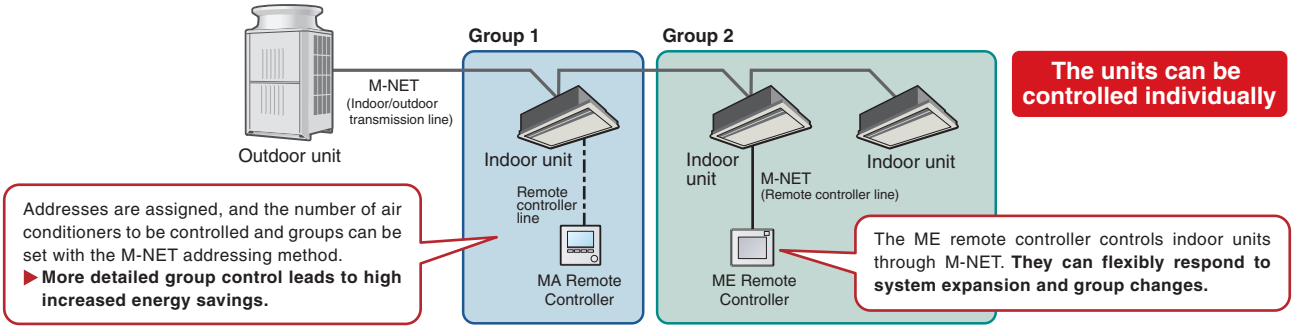
Motor efficiency is high at low speeds when coil occupancy is high, thus improving compression efficiency for low-load operation.

Own system control: M-NET

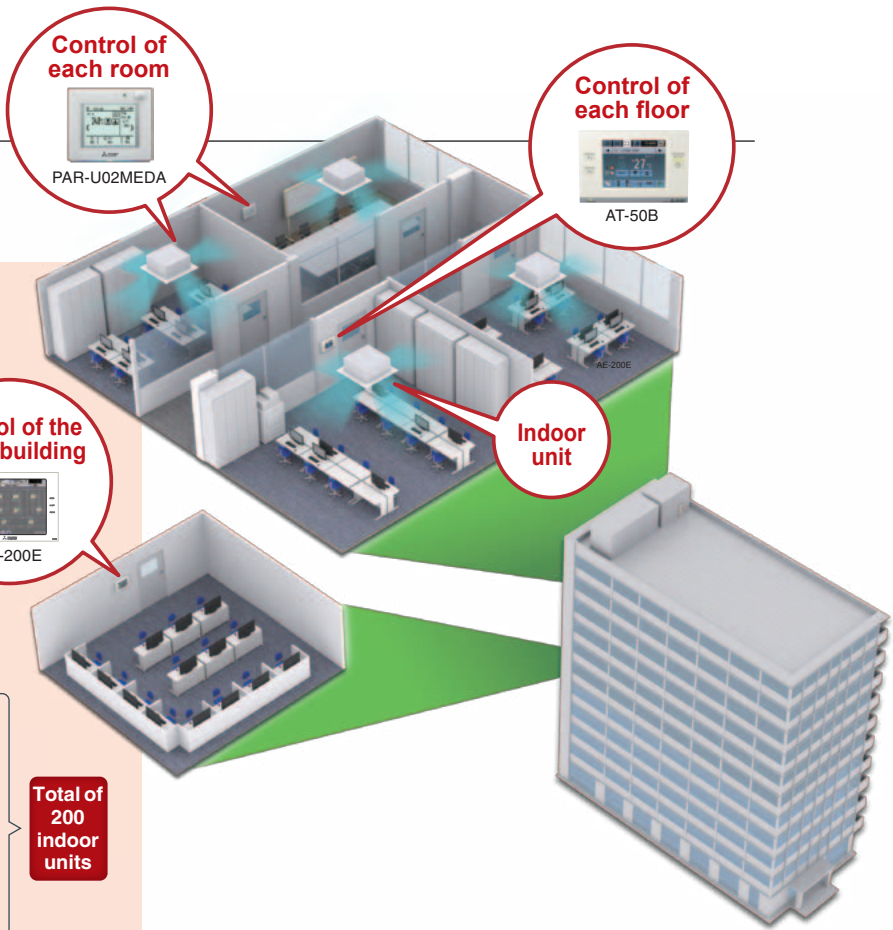
A networked system called M-NET is used to control air conditioner operation. Air conditioners can be grouped and controlled appropriately for use by MELANS (Mitsubishi Electric's Air-conditioner Network System), which centrally controls air-conditioning units on the network.

Basic M-NET system

The basic M-NET system for multiple building air conditioners consists of outdoor units, indoor units and remote controllers. Outdoor units and indoor units are connected to M-NET through the "outdoor/indoor unit transmission line," and the indoor units and remote controllers are connected through the "remote controller line". Two types of local remote controllers are available: MA and ME. Numbers called M-NET addresses are assigned to outdoor units, indoor units, and local remote controllers, **thus allowing interaction via commands to operate the air conditioners and change settings.**



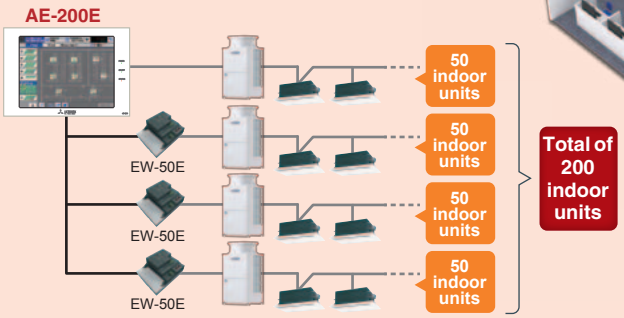
System example



Centralized control using AE-200E

When one AE-200E unit is combined with the EW-50E expansion controller, up to 200 indoor units can be controlled. It is also possible to control operating time of the air conditioners to reduce the power consumption.

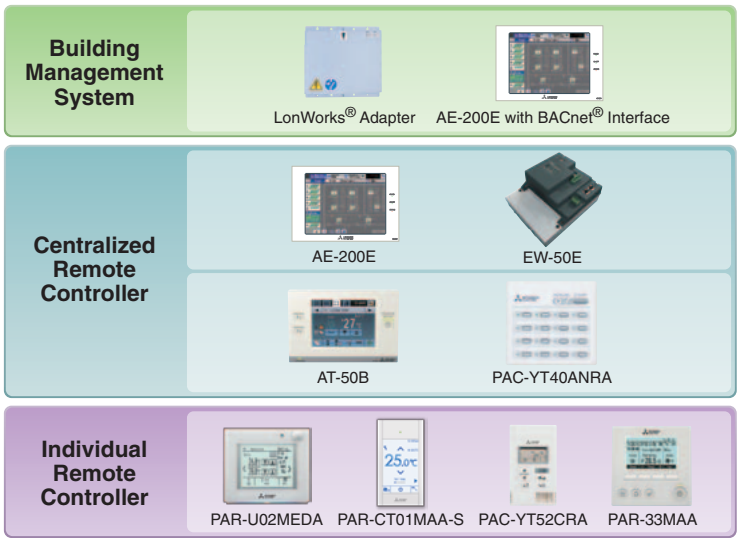
System Structure



Controller example

There are many controller options:
They can be connected to a Building Management System using BACnet® or a LonWorks® interface for a high level of control.

* Optional parts or licenses may be required depending on the type of control.
For more detailed information, please contact your nearest sales office or distributor.

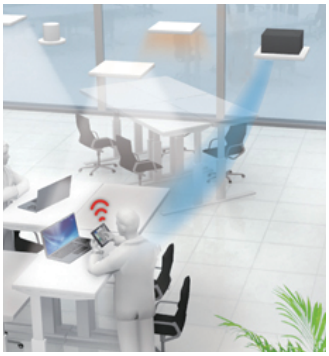


Examples of controller functions

Control using smartphone or tablet terminal* (AE-200E)

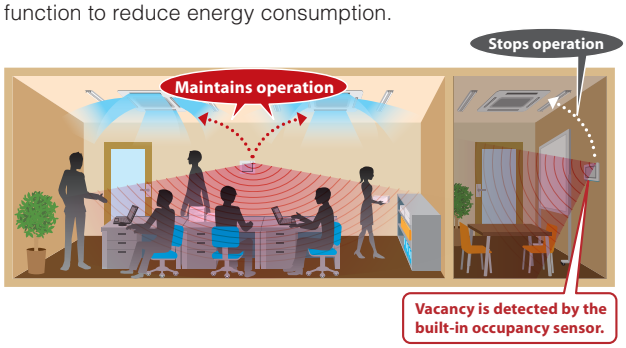
Air conditioners can be monitored and operated by using tablets and smartphones when a Wi-Fi router is connected to the LAN.

* A Wi-Fi router is required to use this function.



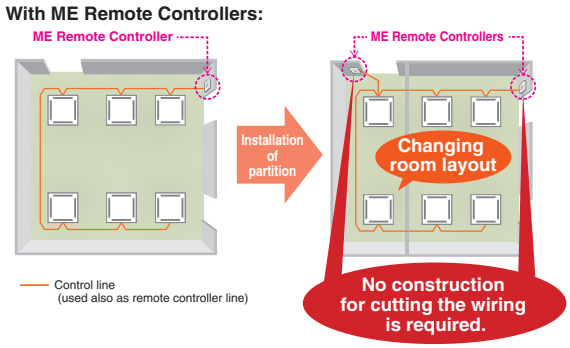
Auto-off function via the occupancy sensor (PAR-U02MEDA)

When **the built-in occupancy and brightness sensors detect vacancy in a specific zone**, the controller uses its internal function to reduce energy consumption.



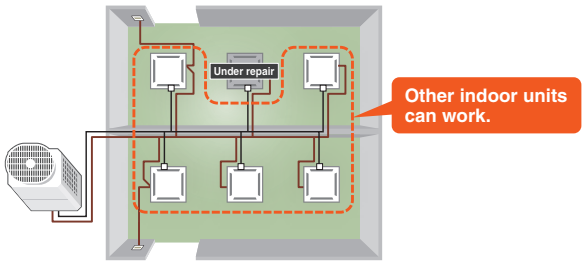
ME Controller (PAR-U02MEDA)

The ME remote controller can be operated when it is connected with any of the indoor units.
When changing the room layout, you can set the groups easily with the remote controller.



Operation can be continued even in case of malfunction of an indoor unit.

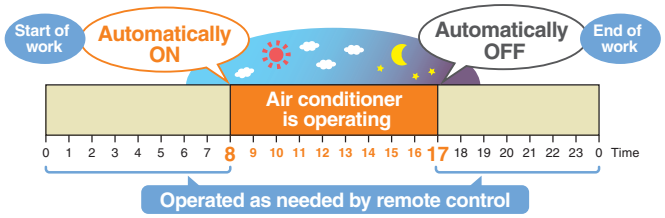
Mitsubishi Electric's indoor units can continue to operate, even if one is under repair, because the unit's LEV is closed.



Schedule-based control of temperature and operation mode

The air conditioner's start time can be scheduled according to the opening time or a fixed time. The function can be locked during working hours so that staff cannot control the air conditioners.

* Centraized Remote controller is required to use this function.



Developed in Japan

Mitsubishi Electric is renowned globally and is a household name with a solid reputation for excellent products and services. The company was founded in 1920 and is known by its present name: Mitsubishi Electric. Since our founding, we have risen to the top level of the air conditioning industry and we continue to maintain that position. The company is proud of its achievements in providing some of awarded systems on the market.

History of CITY MULTI

1984 Japan
Sales launch of "**CITY MULTI**" Series of variable refrigerant flow (VRF) air-conditioning systems.

1992
Export of CITY MULTI starts.

2011 Overseas
The model for Middle east/ Asia, YHA, was released for the first time.

2014 Overseas
YKA Module is the current standard module.
Each of the key parts has been improved to create high-performance modules.

Reliable modules appreciated in Japan

1991	CITY MULTI R2-Series (awarded "Technical Prize" by Japan Society of Refrigerating and Air Conditioning Engineers)*
2000	City Multi R2 New Refrigerant Series (awarded "Chairman Prize" of ECCJ)*
2007	"Replace Multi Air Conditioner" (awarded "Chairman Prize" by Japan Institute of Invention and Innovation)*
2010	"Replace Multi Air Conditioner" (honored by Minister of Education, Culture, Sports, Science and Technology in the science and technology category)
2011	Ceiling concealed reheat indoor unit "PEFY-AF1200CFM(R)" for North America (awarded "Product of the Year" prize at AHR Expo 2011)
2015	"Grand Multi Air Conditioner 2015" (awarded "Technical Prize" by Japan Society of Refrigerating and Air Conditioning Engineers)*
2017	City Multi Hybrid VRF (awarded "Air Conditioning Product of the Year" prize at The ACR News Awards 2017)

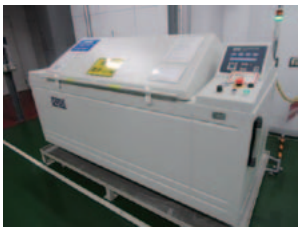
* The models for Japan were awarded.

Creating high-quality products with cutting-edge technologies and professional people who have deep experience in the development factory in Japan

All models of CITY MULTI to be exported around the world are examined at the development factory in Japan to ensure that they can withstand the environmental conditions in each region, and products that have passed the quality check are supplied. The marketing, unit design and quality control departments in Japan put together a team to work on developing high-quality products.
Also the parts used in the units are checked for quality. We have determined the evaluation criteria for more than 300 parts and use only those that have passed the durability and safety tests.

Salt spray test

A sodium chloride solution is sprayed on the part to be tested and evaluated, and the rust generated on the surface is observed to evaluate the corrosion resistance.
In accordance with JRA90021, the standard models and BS models are subjected to this salt spray test for 480 hours and 960 hours respectively.



Heat shock test

The part is exposed to repeated temperature changes to verify its resistance to changes in ambient temperature.

All parts for CITY MULTI have been checked for quality and reliability.

Mitsubishi Electric Quality

Under its quality first principle, Mitsubishi Electric is creating products with an unwavering commitment to quality, producing air conditioning systems that provide comfortable spaces for people around the world.

Mitsubishi Electric Quality

COMFORT

Beyond creating a comfortable environment, we aim to achieve harmony between users and their surroundings.

EFFICIENCY

We strive to achieve optimum cost performance by continuously reducing energy requirements and improving eco-friendliness.

DURABILITY

Our products are subjected to rigorous testing under harsh conditions that are more extreme than that of the real world to ensure years of reliable service.

Commitment to quality on the production line

The main production plant for CITY MULTI, Air Conditioning & Refrigeration System Works, produces many kinds of products and has introduced several unique systems.
These systems include, for example, a “parts server” for preparing parts for assembled, a display for providing indications according to the work point, and “Cart Navi,” which prevents work from proceeding to the next process if the correct procedure and specified tools have not been used to achieve the expected process quality. The plant intends to improve both the production efficiency and quality. As the result of this, human errors can be prevented in operations requiring high skills and when handling small parts, such as screws, thus producing high-quality products. These same systems are used in overseas plants.

Cart Navi

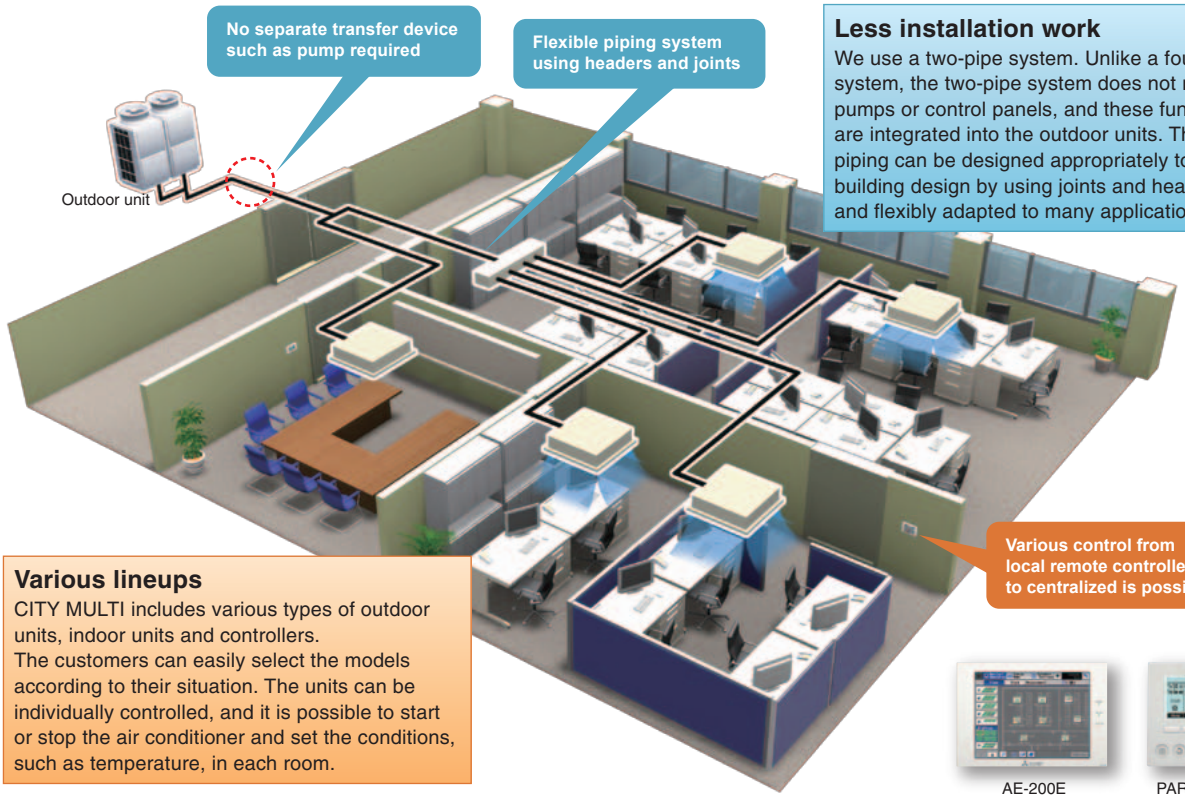
On the production line for the primary product, i.e. outdoor units, an airtightness check is performed using helium to eliminate any refrigerant leakage from the piping. After the airtightness check is performed twice and the units are assembled, the units are tested to confirm normal operation. Only the units that pass this test are shipped.

Refrigerant leak inspection process using helium gas

Varied applications

The most advantageous benefit to using CITY MULTI worldwide is its increased number of applications.
It can be used in various facilities, such as offices, hotels, residences and schools.

Various lineups and Less Installation work



Less installation work
We use a two-pipe system. Unlike a four-pipe system, the two-pipe system does not require pumps or control panels, and these functions are integrated into the outdoor units. The piping can be designed appropriately to any building design by using joints and headers and flexibly adapted to many applications.

Various lineups
CITY MULTI includes various types of outdoor units, indoor units and controllers.
The customers can easily select the models according to their situation. The units can be individually controlled, and it is possible to start or stop the air conditioner and set the conditions, such as temperature, in each room.

AE-200E

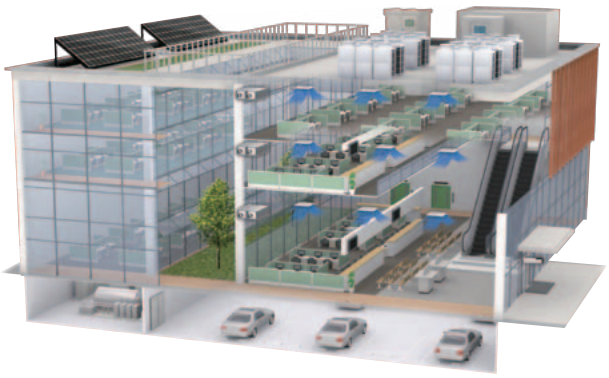

PAR-33MAA

For Office

Air conditioners for office application are required to keep work spaces comfortable, and need to have high energy-saving performance and the ability to finely control the operation of the entire system.

- The total piping length is 1,000 m [3280 ft.], enabling flexible piping design*
- Indoor units appropriate for ceiling applications can be selected from various unit types, such as:
  ceiling cassette type 4-way airflow and ceiling concealed units
- Individual control ensures air-conditioning only in the desired spaces
- Further energy savings can be achieved by introducing controllers,such as ME remote controller and the AE-200E, to use the auto-off feature and centralized control

* PUCY / PUHY model only.



Centralized control using Web browser
Each air conditioner can be controlled by using a tablet.*

* A Wi-Fi router is required to use this function.

The operation schedule can be set and controlled for each group, floor, or the entire building by using the AE-200E. The schedule for each unit can also be set.

For Residence

A single outdoor unit can be used to control the multiple indoor units in each rooms. Ceiling concealed indoor units matching the interior design are available. They provide comfortable air-conditioning without spoiling the sophisticated look of a space.

- The most suitable indoor units can be selected from various types, such as: ceiling concealed, 4-way airflow, and wall mounted varieties
- Models with a minimum sound level of 20 dB (PEFY-P20VMR-E-L/R) are suitable for bedrooms
- A single outdoor unit can control multiple indoor units
- Air conditioners can be controlled wirelessly via a Wi-Fi router and the AE-200E

The unit can also be installed in a clipped ceiling. It matches the interior.

Side-flow type small outdoor units (PUMY-Series) are available. They can be installed in tight spaces.

For Hotel

CITY MULTI can provide hotel guests with comfortable spaces and meet the owner's demands for energy savings.

- Indoor units for hotels exceling in quiet operation are available (lowest sound level 20 dB (PEFY-P20VMR-E-L/R))
- If a controller is installed in each room, the temperature and operation mode for the room can be selected
- An auto-off system can be established by linking with card keys*
- Energy consumption can be visualized by using AE-200E (allowing control of up to 200 indoor units)

PAR-CT01MAA-S
New model where conditions can be set on the color LCD screen.
Guests can operate it easily.
The background and font colors can be changed.

* PAC-SE55RA-E is required for each indoor unit linked with a card key.

For Tenant

In shopping complexes with many tenants, the air conditioners in each tenant location must be controlled appropriately.

- With AE-200E and PI Controller, the power consumption for each tenant can be calculated, and the corresponding charges can be calculated easily*
- Grouping can be changed with ME Remote Controller, only by changing the M-NET address setting. It is possible to quickly adapt to layout changes resulting from changes in tenants
- The system can be easily piped, and used in both small-scale and large-scale buildings

* For the billing function, PI Controller and what -hour meter with pulse transmitter (locally available one) are required.
For more detailed information, Please contact your nearest sales office distrlbuter.

Outdoor unit

Side flow type

- Compact body, 330 mm [13 in.] in depth. Reduced installation space
- Cooling only models are more compact, 981 mm [38-5/8 in.] in height

S-Series

Heat pump
(4.5-9HP)
- PUMY-P VKM4
- PUMY-P YKM(4)

Cooling only
(4-5.5HP)
- PUMY-CP VKM
- PUMY-CP YKM

Top flow type

- A wide lineup of up to 60 HP
- Total piping length of 1000 m [3281 ft.], height difference of 50 m [164 ft.], and high flexibility in piping work
- Features various operation modes, and the unit can be set according to the intended use
- Both standard and high-efficiency models are available

Cooling only
(8-60HP)
- PUCY-(E)P Y(S)KA

Heat pump
(8-60HP)
- PUHY-(E)P Y(S)KA

* For the restrictions on piping, please refer to the DATA BOOK.

Wide selection of outdoor units

Series	Type	Model name	Model	HP	4	4.5	5	5.5	6	7	8	9	10	12	14	16	18
				Model	P100	P112	P125	P140	P150	P175	P200	P225	P250	P300	P350	P400	P450
S	Cooling only	**S-Series** PUMY-CP VKM PUMY-CP YKM  Page 23			(4)		(5)	(5.5)									
S	Heat Pump	**S-Series** PUMY-P VKM4(-BS) PUMY-P YKM4(-BS) PUMY-P YKM(-BS)  Page 19-Page 22				VKM4/YKM4 (4.5)	(5)	(5.5)		YKM (7)	(8)	(9)					
Y	Cooling only	**Y-Series** PUCY-P YKA(-BS) PUCY-P YSKA(-BS)  Page 37-Page 47	S	*1							(8)		(10)	(12)			
			L												(14)	(16)	(18)
			XL														
		Y-Series - High Efficiency PUCY-EP YSKA(-BS)  Page 48-Page 53	S												(8)(8)	(8)(10)
			L														
			XL														
	Heat Pump	**Y-Series** PUHY-P YKA(-BS) PUHY-P YSKA(-BS)  Page 54-Page 64	S							(8)		(10)	(12)			
			L												(14)	(16)	(18)
			XL														
		Y-Series - High Efficiency PUHY-EP YSKA(-BS)  Page 65-Page 70	S												(8)(8)	(8)(10)
			L														
			XL														

*1. Indicates S, L, XL modules *2. The circled numbers in the table indicate horse power, and the combination of S, L, and XL modules.

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

S-Series

PUMY

Side-flow type outdoor units have a depth of 330 mm [13 in.], and can be installed in tight spaces. The lineup includes models from 4 HP to 9 HP. They are suitable for small-scale offices and residences. Single-phase type (VKM) and 3-phase type (YKM) are available.

Heat pump	Cooling only
• PUMY-P VKM4 • PUMY-P YKM(4)	• PUMY-CP VKM • PUMY-CP YKM

Cooling model features CP V(Y)KM

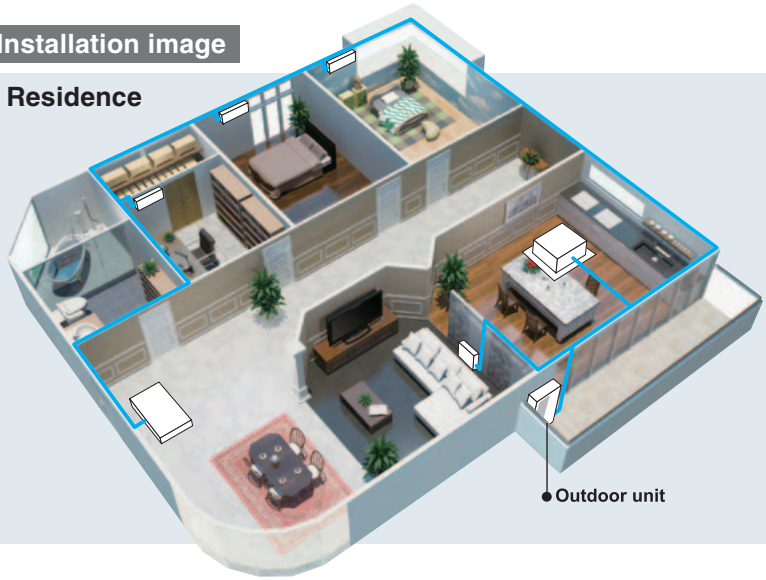
- Guaranteed operation at an outside air temperature of up to 52°C [125°F]. They can operate even at an increased temperature in the summer
- The 981 mm [38-5/8 in.] height model does not interfere with the appearance of balconies
- The units feature a super silent mode. The operation mode can be selected according to the installation situation

PUMY-P V(Y)KM4

PUMY-CP V(Y)KM

Installation image

Residence



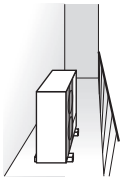
Advantage of PUMY (for residences)

One outdoor unit can be connected to up to 12 indoor units (P140). Even when indoor units are installed in many rooms, one outdoor unit can connect multiple indoor units.

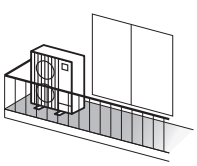
Space savings

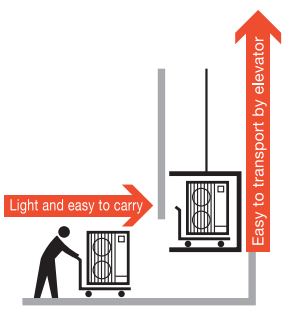
High transportability enables installation in narrow spaces.

Small space



On the balcony





Heat pump
Weight 122 kg [269 lb.]
(PUMY-P140YKM4)

Cooling only
Weight 87 kg [192 lb.]
(PUMY-CP140YKM)

The unit height of cooling only model has been greatly reduced. The compact design is suitable for installation in narrow spaces in residences and offices.

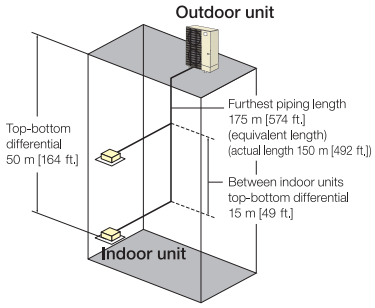
Flexible Piping

Mitsubishi Electric uses a two-pipe system, which is characterized by reduced numbers of pipes and piping joints.

[P112~140(V/YKM)4]

Refrigerant Piping Lengths	Maximum meters [feet]
Total length	300 [984]
Maximum allowable length	150 (175 equivalent) [492 (574)]
Farthest indoor from first branch	30 [98]

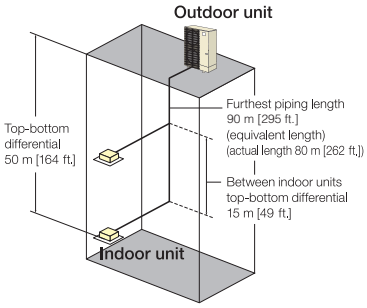
Vertical differentials between units	Maximum meters [feet]
Indoor/outdoor (outdoor higher)	**50 [164]**
Indoor/outdoor (outdoor lower)	**40 [131]** *1
Indoor/indoor	**15 [49]**



[P175~225YKM]

Refrigerant Piping Lengths	Maximum meters [feet]
Total length	150 [492]
Maximum allowable length	80 (90 equivalent) [262 (295)]
Farthest indoor from first branch	30 [98]

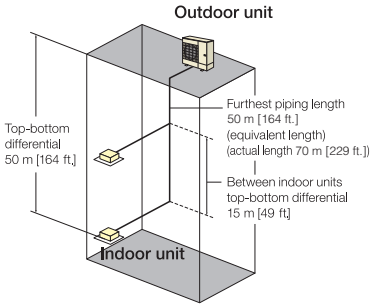
Vertical differentials between units	Maximum meters [feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	40 [131]
Indoor/indoor	15 [49]



[CP100~140(V/YKM)]

Refrigerant Piping Lengths	Maximum meters [feet]
Total length	120 [393]
Maximum allowable length	70 (90 equivalent) [229 (295)]
Farthest indoor from first branch	50 [164]

Vertical differentials between units	Maximum meters [feet]
Indoor/outdoor (outdoor higher)	50 [164]
Indoor/outdoor (outdoor lower)	30 [98]
Indoor/indoor	15 [49]



*1 30 m when PKFY or PFFY is connected.

Wide range of available according to use pattern

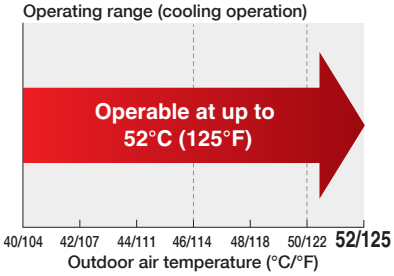
①Operation guaranteed at an outside air temperature of up to 52°C [125°F].*

- New inverter technology has made it possible for units to operate at an outdoor air temperature as high as 52°C [125°F].
- Performs well even in narrow spaces and in multiple installations where heated air stagnates.

* Except P175 to P225YKM model

■ **Operation at high temperatures (52°C/125°F)**

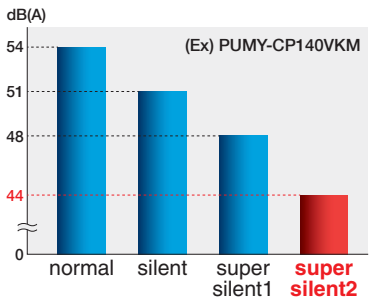
Operating range (cooling operation)



②Super silent mode

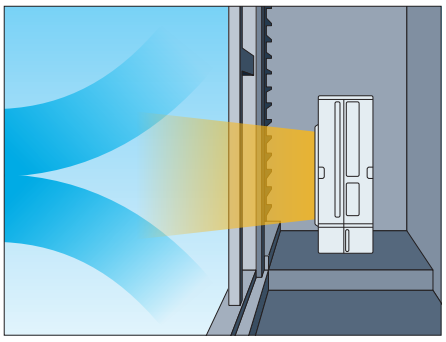
- Cooling only models have two super silent modes in addition to the two general low noise modes, and a suitable noise mode can be selected from among the four available modes. The noise level can be set according to the application, for example, in a residential zone where noise may be an issue.

* Only CP V(Y)KM model



③External static pressure

- An external static pressure of 30 Pa allows outdoor unit to be installed on balconies in high-rise buildings or spaces near louvers.



* Except P175 to P225YKM model
* To set the external static pressure on V(Y)VKM4, an optional component (PAC-SJ71FM-E) is required.

OUTDOOR UNIT

S-Series
PUMY-P VKM4 (-BS)/ PUMY-P YKM4 (-BS)

Specifications

Model			PUMY-P112VKM4 (-BS)	PUMY-P125VKM4 (-BS)	PUMY-P140VKM4 (-BS)	PUMY-P112YKM4 (-BS)	PUMY-P125YKM4 (-BS)	PUMY-P140YKM4 (-BS)
Power source			1-phase 220-230-240 V, 50 Hz; 1-phase 220-230 V, 60 Hz			3-phase 380-400-415 V, 50 Hz; 3-phase 380 V, 60 Hz		
Cooling capacity (Nominal)	*1	kW	12.5	14.0	15.5	12.5	14.0	15.5
	*1	BTU/h	42,650	47,768	52,886	42,650	47,768	52,886
	Power input	kW	2.79	3.46	4.52	2.79	3.46	4.52
	Current input	A	12.87/12.32/11.80, 12.87/12.32	15.97/15.27/14.64, 15.97/15.27	20.86/19.95/19.12, 20.86/19.95	4.99/4.74/4.57, 4.99	5.84/5.55/5.35, 5.84	7.23/6.87/6.62, 7.23
	EER	kW/kW	4.48	4.05	3.43	4.48	4.05	3.43
Temp. range of cooling	Indoor temp.	W.B.	15 to 24°C					
	Outdoor temp. *3 *4	D.B.	−5 to 52°C					
Heating capacity (Nominal)	*2	kW	14.0	16.0	18.0	14.0	16.0	18.0
	*2	BTU/h	47,768	54,592	61,416	47,768	54,592	61,416
	Power input	kW	3.04	3.74	4.47	3.04	3.74	4.47
	Current input	A	14.03/13.42/12.86, 14.03/13.42	17.26/16.51/15.82, 17.26/16.51	20.63/19.73/18.91, 20.63/19.73	5.43/5.16/4.98, 5.43	6.31/6.00/5.78, 6.31	7.15/6.79/6.55, 7.15
	COP	kW/kW	4.61	4.28	4.03	4.61	4.28	4.03
Temp. range of heating	Indoor temp.	D.B.	15 to 27°C					
	Outdoor temp.	W.B.	−20 to 15°C					
Indoor unit connectable	Total capacity		50 to 130% of outdoor unit capacity					
	Model/ Quantity	CITY MULTI	15 - 140/9	15 - 140/10	15 - 140/12	15 - 140/9	15 - 140/10	15 - 140/12
Sound pressure level (measured in anechoic room)	*5	dB <A>	49/51	50/52	51/53	49/51	50/52	51/53
Sound power level (measured in anechoic room)	*5	dB <A>	69/71	70/72	71/73	69/71	70/72	71/73
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8)					
	Gas pipe	mm (in.)	15.88 (5/8)					
Fan *2	Type x Quantity		Propeller Fan x 2					
	Air flow rate	m^3/min	110					
		L/s	1,833					
		cfm	3,884					
	Motor output	kW	0.074+0.074					
	External static press.		0 *6					
Compressor	Type x Quantity		Scroll hermetic compressor x 1					
	Starting method		Inverter					
	Motor output	kW	2.9	3.5	3.9	2.9	3.5	3.9
External finish			Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1					
External dimension H x W x D		mm	1,338×1,050×330(+40)					
		in.	52-11/16 × 41-11/32 × 13(+1-9/16)					
Protection devices	High pressure protection		High pressure Switch					
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection(Heat sink thermistor)					
	Compressor		Compressor thermistor, Overcurrent detection					
	Fan motor		Overheating, Voltage protection					
Refrigerant	Type x original charge		R410A 4.8 kg					
Net weight		kg (lbs)	122 (269)			125 (276)		
Heat exchanger			Cross Fin and Copper tube					
Defrosting method			Reversed refrigerant circuit					
Optional parts			Joint: CMY-Y62-G-E, Header: CMY-Y64/68-G-E Fan motor: PAC-SJ71FM-E, Airprotect guide: PAC-SH95AGE					

Notes:

*1 Nominal cooling conditions
*2 Nominal heating conditions

	Indoor	Outdoor	Pipe length	Level difference
Cooling	27ºC D.B./19ºC W.B. (81ºF D.B/66ºF W.B.)	35ºC D.B. (95ºF D.B.)	7.5m (24-9/16ft.)	0m (0ft.)
Heating	20ºC DB (68ºF DB)	7ºC DB/6ºC W.B. (45ºF D.B./43ºF W.B.)	7.5m (24-9/16ft.)	0m (0ft.)

*3 10 to 52°C D.B. (50 to 126°F D.B.), when connecting following models: PKFY-P15/20/25VBM, PFFY-P20/25/32VLE(R)M, PFFY-P20/25/32VKM, PEFY-P25/32/40VMA3; and M series, S series, and P series type indoor unit.
*4 −15 to 52°C D.B. (50 to 126°F D.B.), when using an optional air protect guide (PAC-SH95AG-E). However, this condition does not apply to the indoor unit listed in *3.
*5 Cooling mode/Heating mode
*6 External static pressure option is available (30Pa / 3.1mmH_2O). To use this option, PAC-SJ71FM-E is needed.
*Nominal conditions *1, *2 are subject to ISO 15042.
*Due to continuing improvement, above specifications may be subject to change without notice.
*This unit cannot be connected with the PFFY-YM-E or PFFY-YMH-E.

OUTDOOR UNIT

S-Series PUMY-P YKM

Specifications

Model			PUMY-P175YKM	PUMY-P200YKM	PUMY-P225YKM
Power source			3-phase 380-415V 50Hz	3-phase 380-415V 50Hz	3-phase 380-415V 50Hz
Cooling capacity (Nominal)	*1	kW	20.0	22.4	25.0
	*1	BTU/h	68,200	76,400	85,300
	Power input	kW	5.48	6.91	9.62
	Current input	A	8.95-8.51-8.20	11.29-10.72-10.34	15.72-14.93-14.39
	EER	kW/kW	3.65	3.24	2.60
Temp. range of cooling	Indoor temp.	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 temp.	D.B.	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)	-5.0~46.0°C (23~115°F)
Heating capacity (Nominal)	*2	kW	22.4	25.0	27.3
	*2	BTU/h	76,400	85,300	93,200
	Power input	kW	5.73	6.96	7.65
	Current input	A	9.36-8.89-8.57	11.37-10.80-10.41	12.50-11.87-11.44
	COP	kW/kW	3.91	3.59	3.57
Temp. range of heating	Indoor temp.	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 temp.	W.B.	-20.0~15.0°C (-4~59°F)	-20.0~15.0°C (-4~59°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	50~130% of outdoor unit capacity
	Model/Quantity		P15-P224/12	P15-P250/12	P15-P250/12
Sound pressure level (measured in anechoic room)	*3	dB <A>	56/61	56/61	58/63
Refrigerant piping diameter	Liquid pipe	mm (in.)	9.52 (3/8) Flare *4	9.52 (3/8) Flare *4	9.52 (3/8) Flare *4
	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 2	Propeller Fan x 2	Propeller Fan x 2
	Air flow rate	m^3/min	134	134	143.8
		L/s	2,233	2,233	2,397
		cfm	4,732	4,732	5,078
	Motor output	kW	0.2 + 0.2	0.2 + 0.2	0.2 + 0.2
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	4.7	5.4	6.0
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 H x W x D		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		High pressure Switch	High pressure Switch	High pressure Switch
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heatsink thermistor)	Overcurrent detection, Overheat detection (Heatsink thermistor)	Overcurrent detection, Overheat detection (Heatsink thermistor)
	Compressor		Compressor thermistor, Over current detection	Compressor thermistor, Over current detection	Compressor thermistor, Over current detection
	Fan motor		Overheating, Voltage protection	Overheating, Voltage protection	Overheating, Voltage protection
Refrigerant	Type x original charge		R410A 7.3kg	R410A 7.3kg	R410A 7.3kg
Net weight		kg (lbs)	138 (304)	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.)

*3 Cooling mode/Heating mode
*4 Liquid pipe diameter: 12.7mm in case of farther piping length is longer than 60m.
*Nominal conditions *1,*2 are subject to ISO 15042.
*This unit cannot be connected with the PFFY-YM-E or PFFY-YMH-E.
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

S-Series
PUMY-CP VKM/PUMY-CP YKM

Specifications

Model				PUMY-CP100VKM	PUMY-CP125VKM	PUMY-CP140VKM	PUMY-CP100YKM	PUMY-CP125YKM	PUMY-CP140YKM
Power source				1-phase 220/230/240 V, 50 Hz; 1-phase 220 V, 60 Hz			3-phase 380/400/415 V, 50 Hz; 3-phase 380 V, 60 Hz		
Cooling capacity (Nominal)		*1	kW	11.2	14.0	15.5	11.2	14.0	15.5
		*1	BTU/h	38,200	47,800	52,900	38,200	47,800	52,900
	Power input		kW	2.80	3.84	4.70	2.80	3.84	4.70
	Current input		A	12.99/12.42/11.90, 12.99	17.81/17.04/16.33, 17.81	21.80/20.85/19.98, 21.80	4.48/4.25/4.10, 4.48	6.14/5.83/5.62, 6.14	7.52/7.14/6.88, 7.52
	EER		kW/kW	4.00	3.65	3.30	4.00	3.65	3.30
Temp. range of cooling	Indoor temp.		W.B.	15 to 24°C					
	Outdoor temp.		D.B.	10 to 52°C					
Indoor unit connectable	Total capacity			50 to 130% of outdoor unit capacity					
	Model/ Quantity	CITY MULTI		15–125/7	15–140/10	15–140/12	15–125/7	15–140/10	15–140/12
Sound pressure level (measured in anechoic room)		*2	dB <A>	52/-	53/-	54/-	52/-	53/-	54/-
Refrigerant piping diameter	Liquid pipe		mm (in.)	9.52 (3/8)					
	Gas pipe		mm (in.)	15.88 (5/8)					
Fan	Type x Quantity			Propeller Fan × 1					
	Air flow rate		m^3/min	78.8					
			L/s	1,313					
			cfm	2,782					
	Motor output		kW	0.20 x 1					
Compressor	Type x Quantity			Twin rotary hermetic compressor × 1					
	Starting method			Inverter					
	Motor output		kW	2.2	2.7	3.0	2.2	2.7	3.0
External finish				Galvanized Steel Sheet Munsell No. 3Y 7.8/1.1					
External dimension H x W x D			mm	981 × 1050 × 330 (+25)					
			in.	38-5/8 × 41-3/8 × 13 (+1)					
Protection devices	High pressure protection			High pressure switch					
	Inverter circuit (COMP./FAN)			Overcurrent detection, Overheat detection (Heat Sink thermistor)					
	Compressor			Compressor thermistor, Overcurrent detection					
	Fan motor			Overheating, Voltage protection					
Refrigerant	Type x original charge			R410A 2.9kg					
Net weight			kg (lbs)	86 (190) *3			87 (191) *3		
Heat exchanger				Micro Slit Fin and Copper tube					
Defrosting method				—					
Optional parts				Joint: CMY-Y62-G-E, Header: CMY-Y64/68-G-E					

Notes:

*1 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.)

*2 Cooling mode/Heating mode
*3 87 (192), for PUMY-CP100/125/140VKM.TH-BS. 88 (195), for PUMY-CP100/125/140YKM.TH-BS.
*Nominal conditions *1 are subject to ISO 15042.
*Due to continuing improvement, above specification may be subject to change without notice.
*This unit cannot be connected with the PFFY-YM-E or PFFY-YMH-E.

Y-Series

Y-Series

- PUCY-P YKA(-BS)
- PUCY-P YSKA(-BS)
- PUCY-EP YSKA(-BS)
- PUHY-P YKA(-BS)
- PUHY-P YSKA(-BS)
- PUHY-EP YSKA(-BS)

The CITY MULTI Y-Series (for large applications) makes use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively. The CITY MULTI Series can be configured for all applications. Up to 50 (Y-Series) indoor units can be connected with up to 130% connected capacity to maximize engineering design options. This feature allows easy air conditioning in each area with convenient individual controllers.

PUCY/PUHY

These models are provided with high-performance inverter compressors to achieve high energy-saving performance. A wide lineup of models with up to 60 HP can be applied to various usage.

System structure example

Outdoor unit

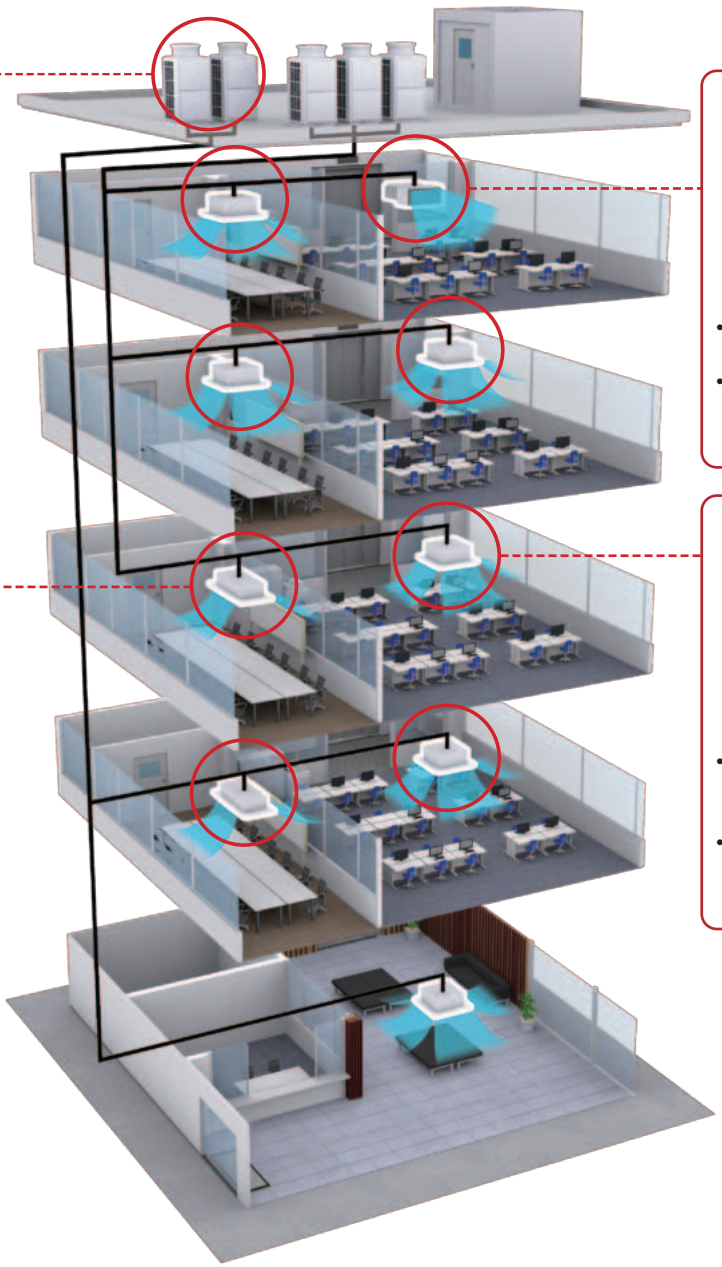
PUCY-Series

- High EER and energy-saving performance
- Wide lineup
- Operable at suction temperature of up to 52°C

2-way air flow

PLFY-P VLMD-E

- Stylish design with well blended air inlet
- The unit is 290 mm [11-7/16 in.] in height and usable in corridor or a narrow room



Ceiling concealed

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

- Thin design with a body height of 250 mm [9-7/8 in.]
- The rear or bottom air inlet can be selected depending on the installation situation

4-way air flow

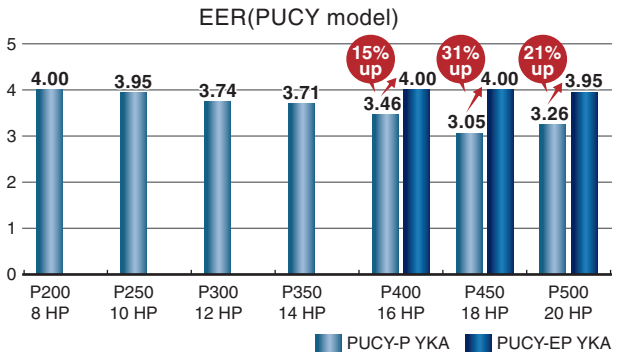
PLFY-P VBM-E

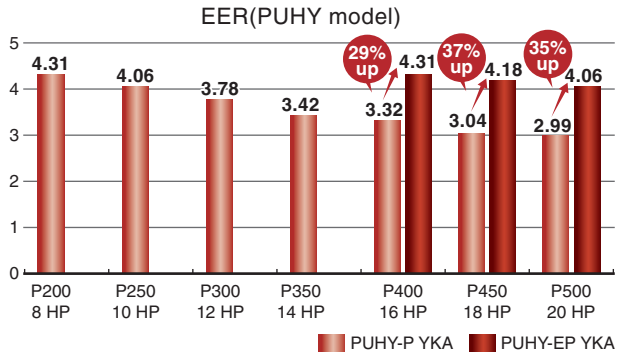
- The airflow pattern can be selected from 4, 3 or 2 directions
- With i-see Sensor, more comfortable air conditioning can be accomplished

High EER and energy-saving performance

Two standard and high-efficiency series are available. When used in combination, the high-efficiency series units show a higher EER by up to 38% compared to standard models (according to the comparison between PUHY18HP models).

HP	8	10	12	14	16	18	20
Model	P200	P250	P300	P350	P400	P450	P500
PUCY-P YKA	4.00	3.95	3.74	3.71	3.46	3.05	3.26
PUCY-EP YKA	–	–	–	–	4.00	4.00	3.95
PUHY-P YKA	4.31	4.06	3.78	3.42	3.32	3.04	2.99
PUHY-EP YKA	–	–	–	–	4.31	4.18	4.06





Wide lineup

A suitable model can be selected from a wide range of horsepower ratings, from 8 HP to 60 HP, according to the application.

A single module can cover up to 20 HP. Reduction of piping work

HP	8	10	12	14	16	18	20
Model	P200	P250	P300	P350	P400	P450	P500
PUC(H)Y-P YKA	S	S	S	L	L	L	XL
PUC(H)Y-EP YKA	–	–	–	–	S+S	S+S	S+S

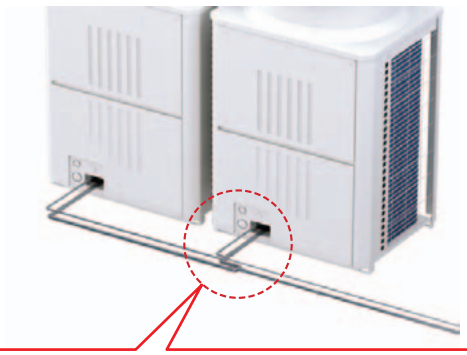
HP	22	24	26	28	30	32	34
Model	P550	P600	P650	P700	P750	P800	P850
PUC(H)Y-P YKA	S+S	S+L	S+L	S+L	S+L	L+L	L+L
PUC(H)Y-EP YKA	–	–	S+L	L+L	S+S+L	S+S+L	S+S+L

HP	36	38	40	42	44	46	48
Model	P900	P950	P1000	P1050	P1100	P1150	P1200
PUC(H)Y-P YKA	L+L	L+XL	XL+XL	S+S+L	S+L+L	L+L+L	L+L+L
PUC(H)Y-EP YKA	S+S+L	S+S+L	S+L+L	L+L+L	L+L+L	–	–

HP	50	52	54	56	58	60
Model	P1250	P1300	P1350	P1400	P1450	P1500
PUC(H)Y-P YKA	L+L+L	L+L+L	L+L+L	L+L+XL	L+XL+XL	XL+XL+XL
PUC(H)Y-EP YKA	–	–	–	–	–	–

Large capacities up to 60 HP.

Advantage of a single module (20HP)



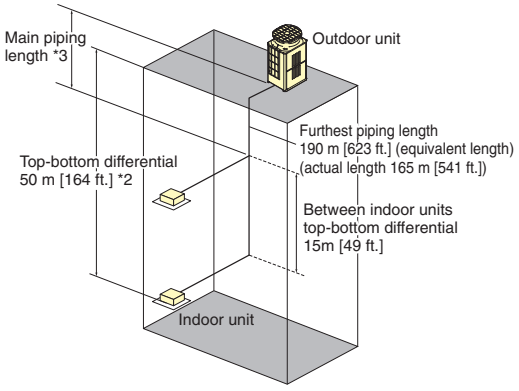
In the case of a single module

The twinning kit used to combine modules is not required

System Pipe Lengths

[8–60 HP (Cooling-only Y-Series)]
[16–44 HP (Cooling-only High COP Y-Series)]
[8–60 HP (Y-Series)]
[16–44 HP (High COP Y-Series)]

Refrigerant Piping Lengths	Maximum meters [feet]
Total length	1,000 [3,280]*1
Maximum allowable length	165 (190 equivalent) [541 (623)]
Farthest indoor from first branch	40 [131]*2
Main piping length	*3
Vertical differentials between units	**Maximum meters [feet]**
Indoor/outdoor (outdoor higher)	50 [164]*4
Indoor/outdoor (outdoor lower)	40 [131]*5
Indoor/indoor	15 [49]*6



*1 The maximum total piping length in systems with model units P1400 through P1500 800 m [2625 ft.].
*2 90m is available. When the piping length exceeds 40m, use one size larger liquid pipe starting with the section of piping where 40m is exceeded and all piping after that point. [for PUCY-P-Y(S)KA(-BS)/PUCY-EP-YSKA(-BS)]
*3 In systems with model units P1400 through P1500, pipe length restrictions apply to the main pipes as follows:
P1400: 110 m [360 ft.] max.
P1450: 90 m [295 ft.] max.
P1500: 60 m [197 ft.] max.
*4 Depending on the model and installation conditions, top-bottom differential 90m [295ft]. For more detailed information, please contact your nearest sales office or distributor.
*5 4 m [13 ft.] or less in cooling at outdoor temperature 10°C [50°F] or lower for heat pump series.
*6 30m is available. If the height difference between indoor units exceeds 15 m [49 ft.] (but does not exceed 30 m [98 ft.]), use pipes that are one size larger for indoor unit liquid pipes. [for PUCY-P-Y(S)KA(-BS)/PUCY-EP-YSKA(-BS)/PUHY-(E)P-Y(S)KA(-BS)]

Y-Series Technology

Inverter technology

Featuring our IPM, the latest controls.

Compressor

Featuring Mitsubishi Electric's compressor ensuring high efficiency during low-load operation.

Fan

Bell-mouth shape and DC motor ensure smooth air flow around the fan and effective operation.

Heat exchanger

The use of a grooved heat exchanger ensures high energy-saving performance and ensures high-performance operation.

Photo : Y-Series

Inverter technology

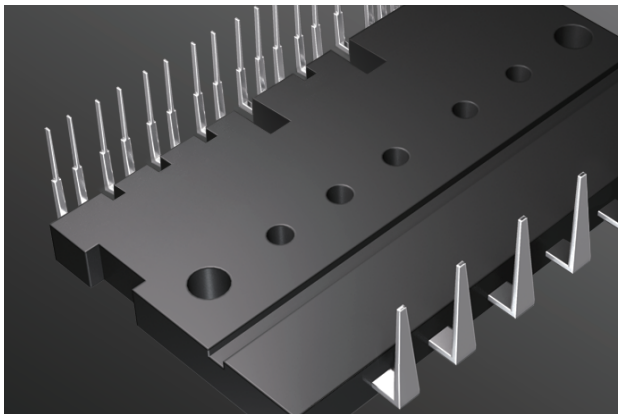
Intelligent Power Module (IPM) manufactured by Mitsubishi Electric

PUCY P PUCY EP PUHY P PUHY EP

*Except PUHY-P200/250YKA and PUHY-EP400/450YSKA models.

Power modules manufactured by Mitsubishi Electric are installed in the compressor, which is the core component, as well as in the inverter circuit board that drives the fan. Furthermore, a specialized drive circuit that ensures excellent performance make a high-quality, high-performance inverter possible .

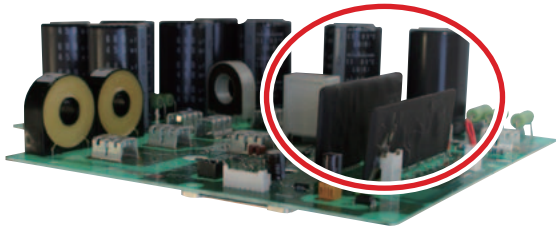
IPM technology ensures effective operation even at lower partial load and realizes automatic control to operate the air conditioners appropriately according to the situation, resulting in energy savings.



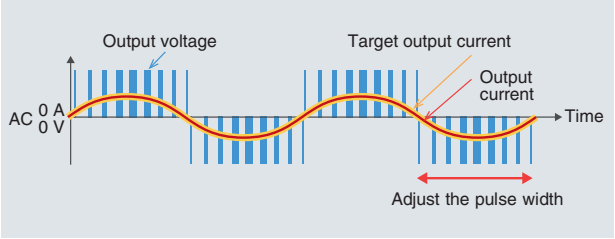
PWM control

PUCY P PUCY EP PUHY P PUHY EP

PWM control is used to control the number of motor revolutions according to the operational load, and it varies the inverter pulse width (electric signal wave occurring over a short period) to control the output, resulting optimal control of electrical current according to the operation.

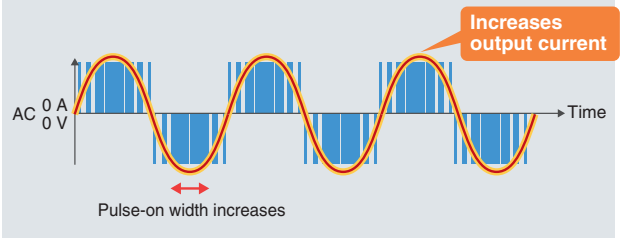


For low load Does not require high output current.



To accomplish the target output current, the intervals at which the "pulse" signal is turned on are controlled to adjust the output current. At the low-load time, the pulse-on width is minimized to save energy.

For high load Requires high output current



The increased pulse-on width increases both the duration that voltage is applied and the amount of electrical current compared to the low-load time, accelerating the compressor's rotation speed from 60 rps to 120 rps.*

*Number of compressor revolutions differs depending on the usage condition.

As a result, this expands the operating ability range of the unit.

Compressor

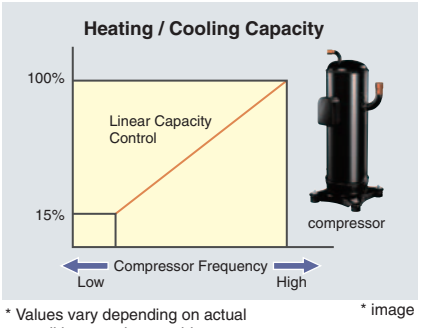
Inverter-Driven Compressor Technology

PUCY P | PUCY EP | PUHY P | PUHY EP

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

The compressor varies its speed to match the indoor cooling or heating demand, thus it only consumes the energy amount of energy required.

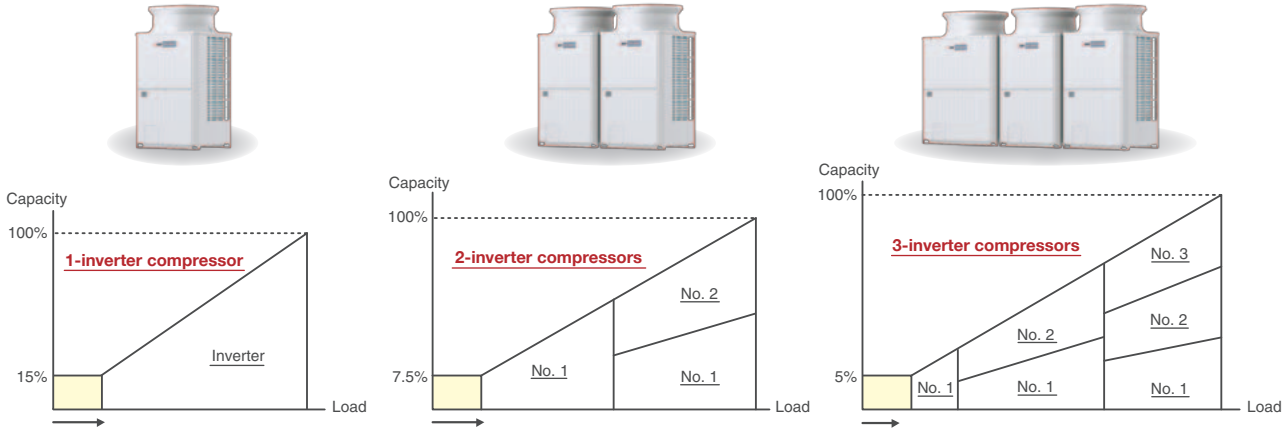
When an inverter driven system is operating at partial load, the energy efficiency of the system is significantly higher than that of a standard fixed speed, non inverter system.
The fixed speed system can only operate at 100%, although full load condition is not prevailed all time. Therefore, fixed speed systems cannot match the annual efficiency of inverter driven systems.



* Values vary depending on actual conditions, such as ambient temperature.

* image

Stable and Smooth Operation

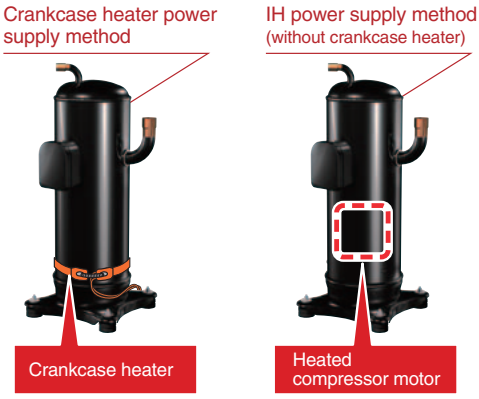


IH heater

PUCY P | PUCY EP | PUHY P | PUHY EP

IH heater is used to heat the refrigerant flowing back into the compressor*. This method differs from the conventional crankcase heater method (in which a belt heater is wrapped around the outside of the compressor) in that heat is not applied from the outside; **The refrigerant is heated from the inside, eliminating wasted heat.**

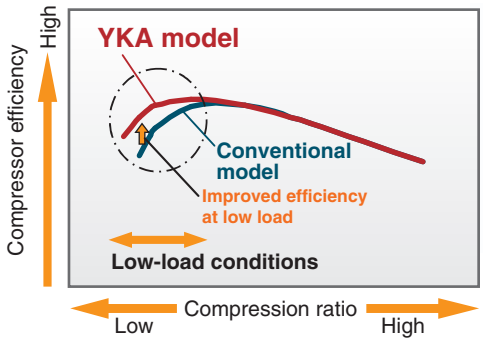
* Normally, the compressor is heated while the outdoor unit is stopped to prevent liquid refrigerant from remaining in the compressor and to evaporate the liquid refrigerant in the compressor.

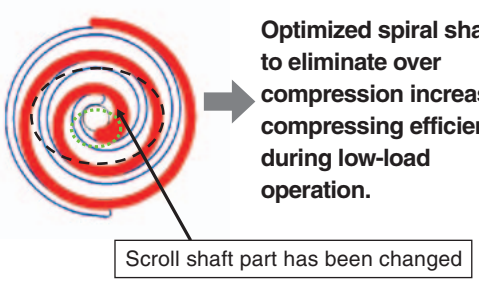


Equipped with a scroll compressor

PUCY P | PUCY EP | PUHY P | PUHY EP

Optimized scroll shape to increase efficiency





Optimized spiral shape to eliminate over compression increases compressing efficiency during low-load operation.

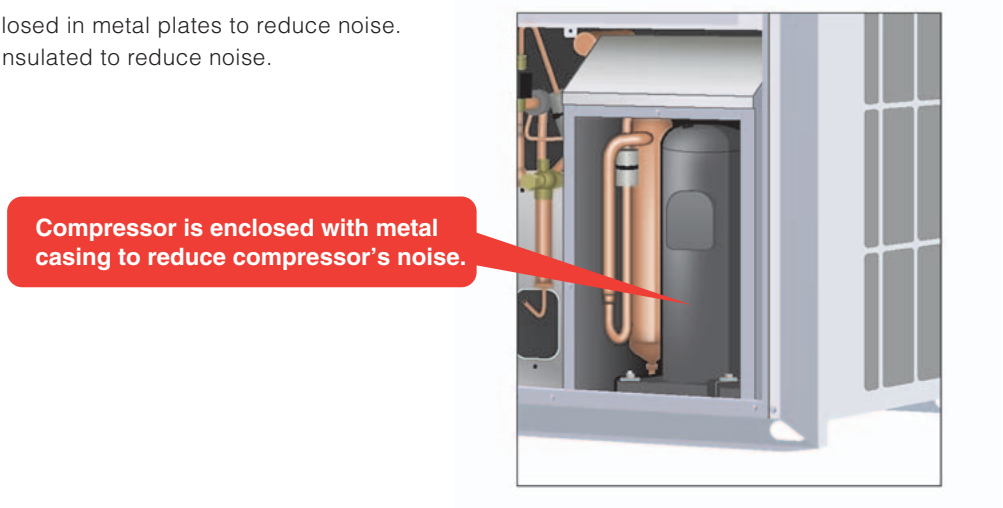
Operation with one compressor up to 20HP.

Outdoor units can be operated by one compressor, which offers various advantages.

- Improved service with **easier refrigerant piping work**.
- No switchover from one compressor to two compressor operations leading to **linear capacity control and to stable room temperature.**
- Operation with one compressor can reduce the backflow of liquid and the need for refrigerant control compared to operation with two compressors, thereby **leading to stable performance.**

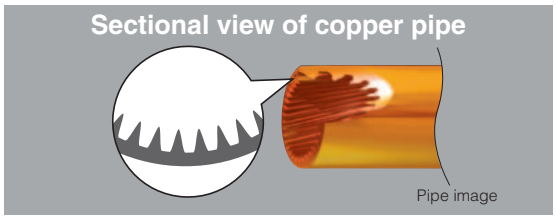
Metal plate compressor enclosure

The compressor is enclosed in metal plates to reduce noise.
Some unit models are insulated to reduce noise.



Heat exchanger

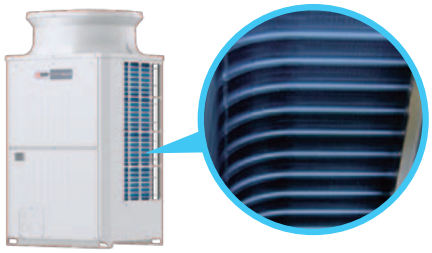
Grooves are formed in the copper pipe to improve the heat exchange performance.



The grooved structure in the copper pipe of the heat exchanger increases the heat exchange area where the refrigerant is in contact with air.

Fin Treatment

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



Treatment to prevent salt damage

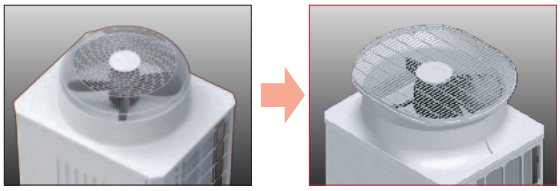
In addition to the fin treatment on the heat exchanger, the panels and the sheet-metal parts and fan in the outdoor unit are treated to protect them from salt damage.
The material and surface treatment of each of these parts are changed to ensure appropriate measures against salt damage.

Fan

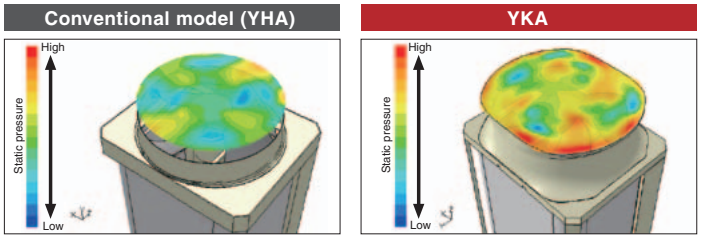
Improved bell-mouth shape design

PUCY P PUCY EP PUHY P PUHY EP

The adapted bell-mouth design smoothens the flow of wind around the fan, and improves the efficiency of the fan's rotation. This reduces the fan motor's input value, and contributes to energy savings.



Conventional model (YHA) YKA



Changes to the bell-mouth shape improve the static pressure during heat discharge, resulting in high efficiency.

Adapted DC motor

The YKA model's outdoor units use brushless DC motors, which contribute to reducing fan input.

Other technology

Heat Inter Change (HIC) circuit

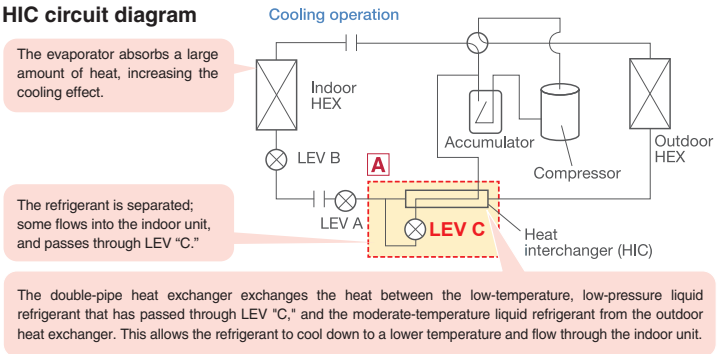
PUCY P PUCY EP PUHY P PUHY EP

The HIC circuit increases cooling efficiency. This technology raises the degree of supercooling, increasing both cooling capacity and cooling efficiency.
The HIC circuit is installed before the point at which the high-pressure liquid refrigerant, which has passed through the heat exchanger of the outdoor unit, flows into the indoor unit. The temperature of the liquid refrigerant, to which heat has been discharged from the outdoor unit's heat exchanger, is further lowered before the refrigerant enters the expansion valve, **allowing the evaporator to absorb a large amount of heat to increase cooling efficiency.**

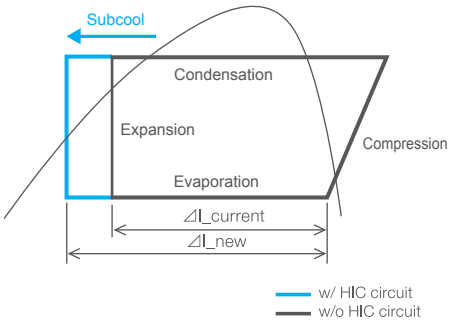
HIC mechanism

Some of the high-pressure liquid refrigerant that has passed through the outdoor unit's heat exchanger flows into the indoor unit directly, and the rest passes through linear expansion valve (LEV) "C" to decrease both the temperature and pressure. The heat is exchanged between the low-temperature, low-pressure liquid refrigerant that has passed through LEV "C" and the moderate-temperature liquid refrigerant from the outdoor unit's heat exchanger. This further lowers the temperature of the liquid refrigerant before it enters LEV "B". This heat exchange system uses "double-pipe" heat exchanger.

HIC circuit diagram

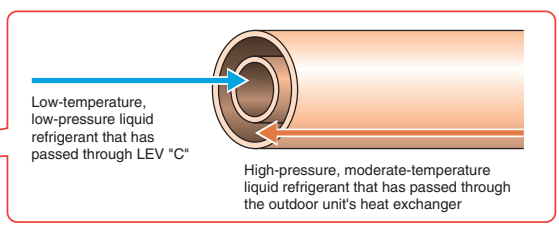


HIC circuit diagram
(Image using a Mollier diagram)



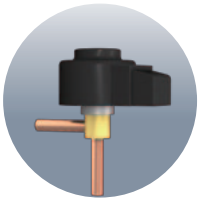
HIC circuit
(double-pipe heat exchanger)

Double-pipe heat exchange cross section



Use of high-accuracy control technique for LEV

The accuracy of control determines the capacity to adjust the refrigerant flow rate in the entire system and affects the comfort in the indoor air environment. The opening/closing operation of the expansion valve is controlled by pulse signals. **Mitsubishi Electric uses an electronic expansion valve that can be adjusted with up to 3000 pulses for optimum operation and to provide more comfortable air environment.**



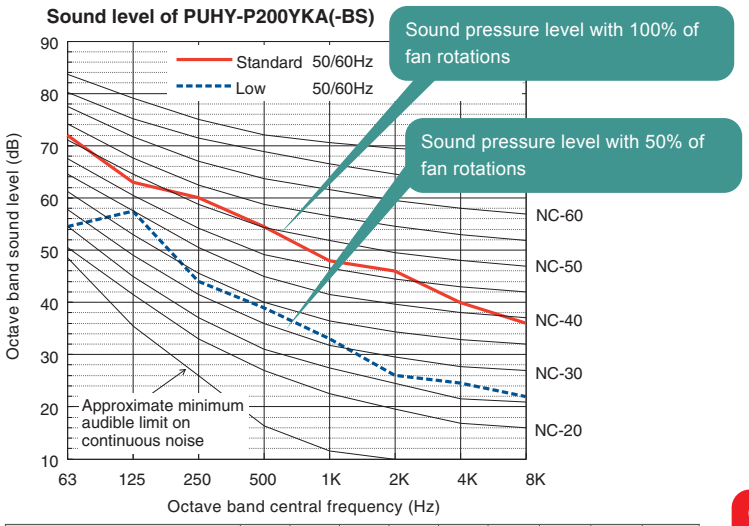
Y-Series operation mode

Low noise mode

This mode reduces noise by limiting the compressor frequency and the number of rotations made by the outdoor fan. The user can select their preferred level.

* Cooling/heating capacity drops during low-noise mode operation.
* This function can be set by the contact.

Examples of sound pressure level in low noise mode (PUHY-P200YKA <cooling>)*



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	50/60Hz	72.0	63.0	60.0	54.5	48.0	46.0	40.0	36.0	57.0
Low noise mode	50/60Hz	54.5	57.5	44.0	39.0	33.0	26.0	24.5	22.0	44.0

Can be reduced below 10 dB.

When Low noise mode is set,the A/C system's capacity is limited. The system may automatically return to normal operation from Low noise mode in cases of heavy operation conditions.
* For the detailed information on each function, please refer to the DATA BOOK.
* To use this function, the PAC-SC36NA-E is required.

System changeover (for heat pump)

Normal switching between cooling and heating

With CITY MULTI's switchable cooling/heating models, in order to switch from cooling to heating, the operation mode of all indoor units performing cooling operation needs to be manually switched.

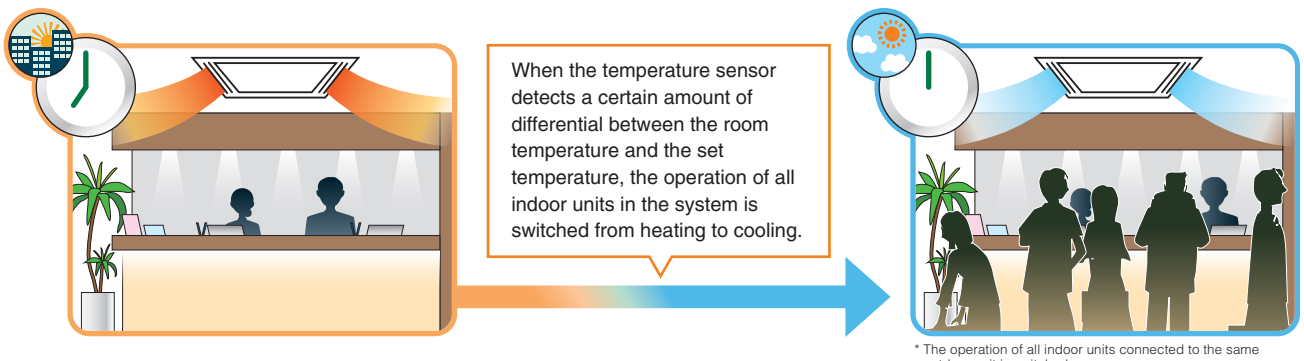
Using system-changeover to switch between cooling and heating

Depending on the dip switch settings, all indoor units can automatically switch their operation mode according to the operation mode of a specific indoor unit (the unit with the smallest M-NET address). Operation can be automatically switched between cooling and heating according to the temperature difference between the preset temperature on a specific indoor unit and the room temperature.

* Do not include the indoor unit with the smallest address in any group.
* Please avoid the indoor unit with the smallest number address to group with other indoor units.

Suitable situations

When both cooling and heating operations are required in a single day due to an extreme differences between the hottest and coldest parts of the day.



* The operation of all indoor units connected to the same outdoor unit is switched.

When using the AE-200E/AE-50E

It is possible to automatically switch between cooling and heating without setting the dip switches on outdoor units. The user can select from the two types of switching patterns shown below.

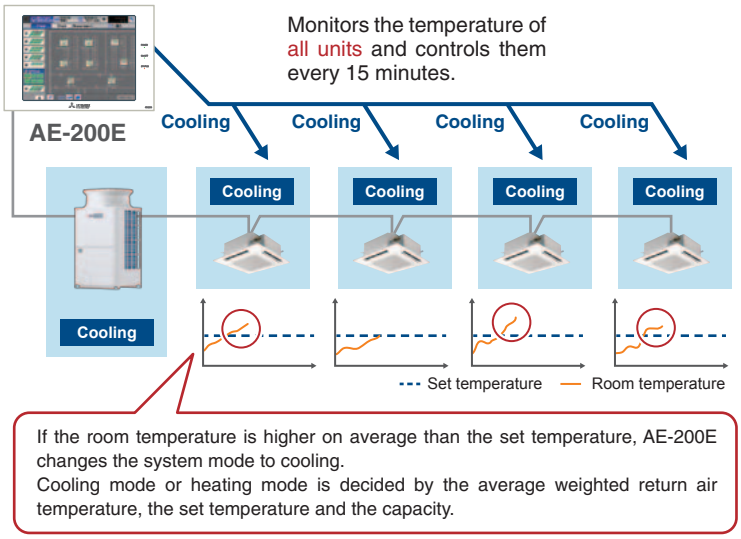
(1) Averaging

The operation mode (cooling or heating) will be determined and switched every 15 minutes based on the demands of the majority of all groups connected to the outdoor unit, taking into consideration the capacity of each indoor unit and the temperature differences between the set temperatures and room temperatures.

(2) Representative group

The operation mode (cooling or heating) will be switched based on the temperature difference between the set temperature and the room temperature of the representative group.

Averaging method image



Settings for the AE-200E

Evaporating temperature control (cooling mode only)

PUCY P | PUCY EP | PUHY P | PUHY EP

During cooling operation, the temperature of the refrigerant is controlled according to the air conditioning load. This helps to ensure energy efficient operation.

■ Normal mode

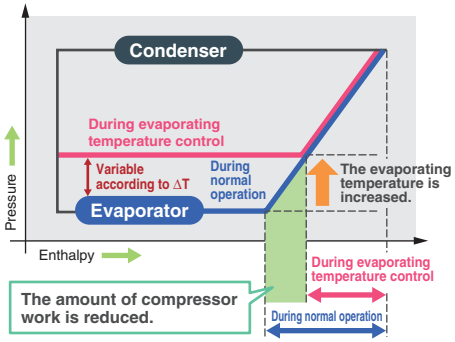
The evaporating temperature is kept constant regardless of the load. Even at low loads, the normal evaporating temperature does not change, which leads to energy losses during partial load operation.

■ Smart evaporating temperature control mode

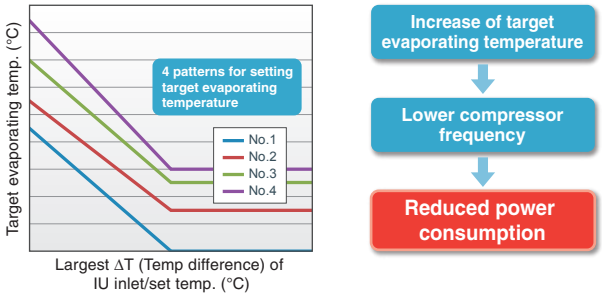
The evaporating temperature is increased and the compressor input is decreased according to the load, resulting in increased operating efficiency.

- The evaporating temperature is controlled by shifting it according to the ΔT. The user can select from 4 control patterns.

• Evaporating temperature control



*Changing the evaporating temperature reduces latent heat capacity. Select an appropriate pattern according to the installation conditions.



*1 To change the evaporating temperature setting, it is necessary to change the setting of the DIP switch on the outdoor unit.
*2 When the difference between the indoor unit air-intake temperature and the actual temperature setting exceeds 1°C [1.8°F]; the evaporating temperature will be uniform after this.

Suitable situations

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

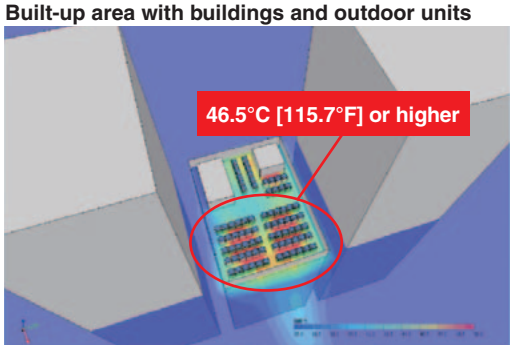
Easy Maintenance

Expanded outdoor air operation range

In certain cases, the passage of air is blocked in built-up areas, discharged warm air that is kept around the outdoor units may cause a temperature increase around the units. YKA has an expanded guaranteed operation range of up to 52°C [125°F] and can be used reliably even if the outdoor air temperature abnormally rises in hot summer daytime.

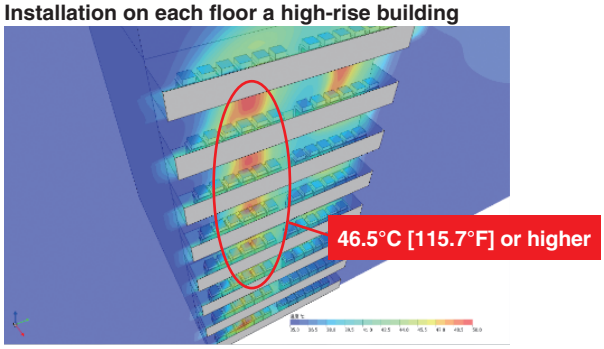
Example of flow analysis ■Conditions: Outdoor air temperature = 35°C (DB), Room temperature = 27°C (DB)

Built-up area with buildings and outdoor units



If the passage of air is blocked in a built-up area, the high-temperature air discharged from the outdoor units may be kept around the units.

Installation on each floor a high-rise building



When the outdoor units are installed on balconies, the high-temperature air discharged from the units may be kept in by upper balconies.

Temperature range for cooling

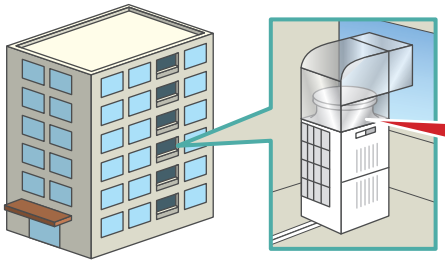
PUHY-P YKA

−5°C [23°F] to 52°C [125°F]

* Cooling performance will drop at temperatures exceeding 46°C [115°F], and if operation is continued, it may be necessary to increase the maintenance frequency.

Selectable external static pressure of the outdoor unit

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

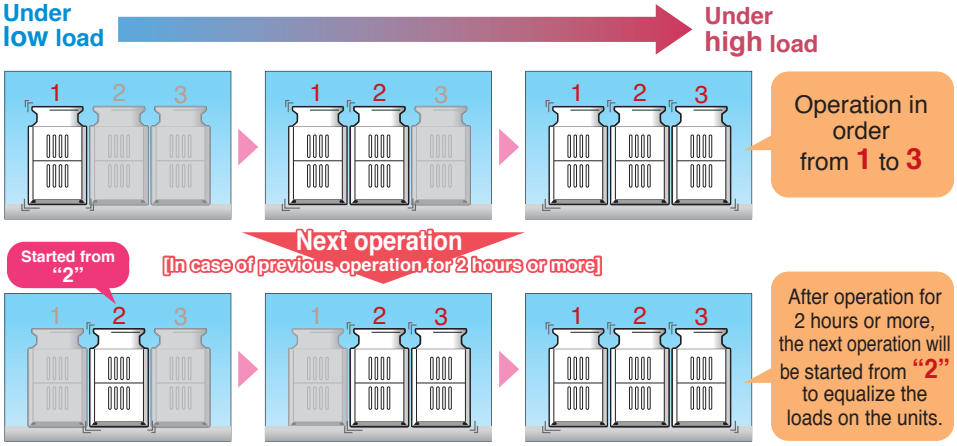


Long exhaust hoods can be connected.
This facilitates installation of the unit on each floor of a high-rise building or on balconies.

Maximum external static pressure 60 Pa (local setting)

Rotation control

With the combination model, the outdoor units operate alternately. This reduces the operating load and leads to a longer service life.
After operation for 2 hours or more, the next operation will be started from the outdoor unit “2.” The unit to be started first is changed to equalize the operating time of the units.

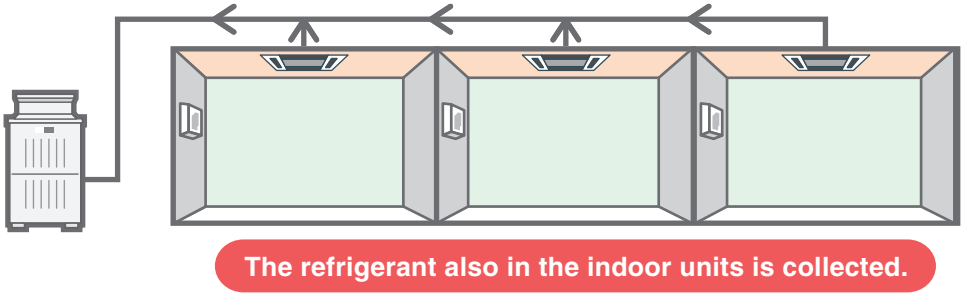


Emergency operation mode

Emergency operation is possible with the indoor unit's remote control. With the combination model, if one outdoor unit is malfunctioning, the other outdoor unit performs emergency operation.

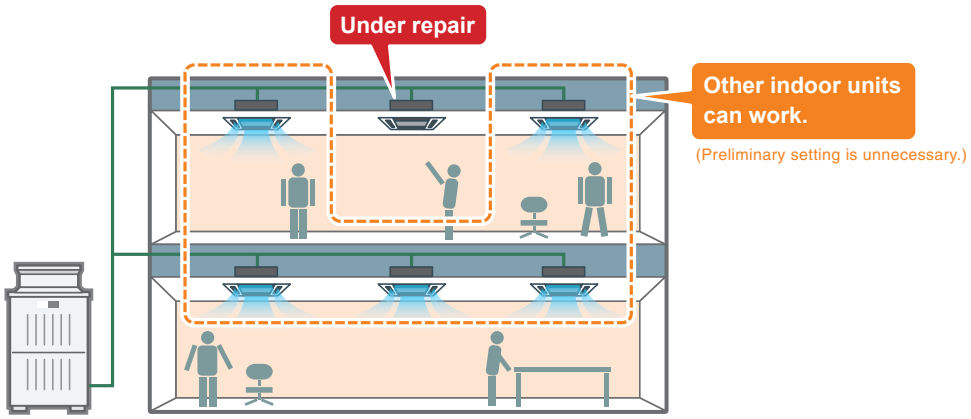
Pump down function

This function collects the refrigerant that remains in the indoor unit and in the outdoor unit's piping when the refrigerant piping needs to be removed, such as when the air conditioner is relocated.



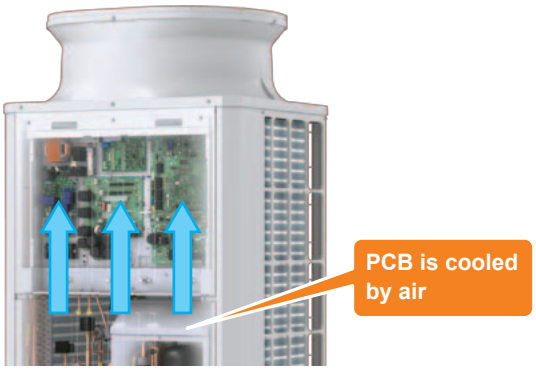
Individual LEV control

Even if one of indoor units stops for repair, the LEV of the indoor unit can be closed, and the other indoor units can still work.(Preliminary setting is unnecessary.)



Naturally cooled PCB (Print circuit board)

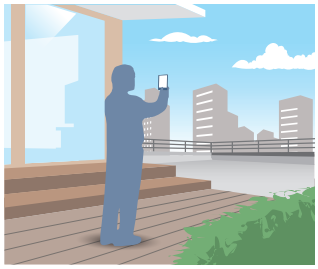
PCB is installed on the front, and, when any internal part on the panel is replaced, it can be accessed easily only by removing the front cover.
PCB is cooled by air during operation. This reduces the number of parts for cooling the panel and makes the maintenance easy.



CITY MULTI Digital Viewer

Download the application using the QR code below, and you can view the entire unit in 360 degrees. You can also simulate installation of the outdoor unit using photos.

The details of the outdoor unit can be checked from every angle in a full 360 degrees.
Any part can be zoomed in on and viewed with ease.



Take a photo of the installation place, and you can install the unit in the photo.
Simulate the image of an actual installation.

Applicable models

Cooling model

PUCY-P200-300YKA

PUCY-P350-450YKA

PUCY-P500YKA

CITY MULTI Digital Viewer

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1

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Read the QR code below to download the special application.

2

Launch the application, and read the QR code in this catalog.

3

The product is displayed in three dimensions.

4

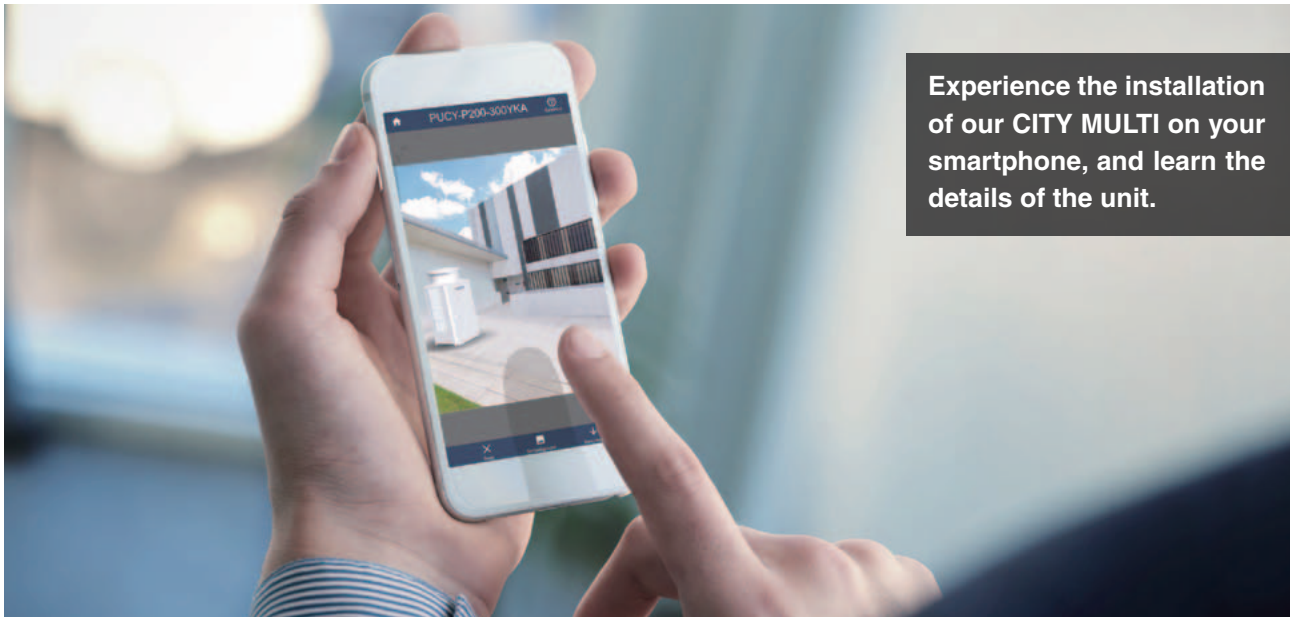
Choose a photo to serve as the background for the product.

5

The photo is placed in the background.

6

By adjusting the position and size, you can see the actual layout image of the product.



Experience the installation of our CITY MULTI on your smartphone, and learn the details of the unit.

* When downloading the application, you may be charged a communication fee.

OUTDOOR UNIT

Y-Series - Cooling-only
PUCY-P YKA (-BS)

Specifications

Model			PUCY-P200YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P300YKA (-BS)
Power source			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	22.4	28.0	33.5
		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
	EER	kW/kW	4.00	3.95	3.74
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°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) Brazed, farthest length >= 90 m)	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 40 m)
	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	m^3/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	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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	5.5	6.9	8.1
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>
External dimension H x W x D		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
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	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 Header: CMY-Y104/108/1010-G	Joint: CMY-Y102SS/LS-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_2O, 6.1mmH_2O).
*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-P350YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P450YKA (-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	40.0	44.0	48.0
		kcal/h	35,000	39,000	43,000
	*1	BTU/h	136,500	150,100	163,800
	Power input	kW	10.78	12.71	15.73
	Current input	A	18.1-17.2-16.6	21.4-20.3-19.6	26.5-25.2-24.3
	EER	kW/kW	3.71	3.46	3.05
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°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~P400/1~30	P15~P500/1~34	P15~P500/1~39
Sound pressure level (measured in anechoic room)		dB <A>	61	63	63
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	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	28.58 (1-1/8) Brazed
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/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	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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.8	12.4
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>
External dimension H x W x D		mm	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
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 11.5 kg (26 lbs)
Net weight		kg (lbs)	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
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_2O, 6.1mmH_2O).
*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-P500YKA (-BS)
Power source			3-phase 4-wire 380-400-415V 50/60Hz
Cooling capacity (Nominal)	*1	kW	56.0
		kcal/h	50,000
	*1	BTU/h	191,100
	Power input	kW	17.17
	Current input	A	28.9-27.5-26.5
	EER	kW/kW	3.26
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~43
Sound pressure level (measured in anechoic room)		dB <A>	65
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed
Fan	Type x Quantity		Propeller fan x 2
	Air flow rate	m^3/min	320
		L/s	5,333
		cfm	11,299
	Control, Driving mechanism		Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 2
*2	External static press.		0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor
	Starting method		Inverter
	Motor output	kW	14.3
	Case heater	kW	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>
External dimension H x W x D		mm	1,650 x 1,750 x 740
		in.	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 11.8 kg (27 lbs)
Net weight		kg (lbs)	305 (673)
Heat exchanger			Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

Notes:

*1 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_2O, 6.1mmH_2O).
*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)
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	61.5	68.0
		kcal/h	52,900	58,500
	*1	BTU/h	209,800	232,000
	Power input	kW	15.97	17.79
	Current input	A	26.9-25.6-24.6	30.0-28.5-27.4
	EER	kW/kW	3.85	3.82
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~47	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	63	63
Refrigerant piping diameter	Liquid pipe	mm (in.)	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

Set Model

Model			PUCY-P250YKA (-BS)	PUCY-P300YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P350YKA (-BS)
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	8.1	6.9	10.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		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)	
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection		Over-heat 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)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	183 (404)	201 (444)	183 (404)	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.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	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	

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_2O, 6.1mmH_2O).
*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-P650YSKA (-BS)	PUCY-P700YSKA (-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	72.0	76.0
		kcal/h	61,900	65,400
	*1	BTU/h	245,700	259,300
	Power input	kW	19.67	22.47
	Current input	A	33.2-31.5-30.4	37.9-36.0-34.7
	EER	kW/kW	3.66	3.38
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	64.5	64.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUCY-P250YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P250YKA (-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	m^3/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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	10.8	6.9	12.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		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
		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
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 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)	183 (404)	237 (523)	183 (404)	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.)	9.52 (3/8) Brazed	15.88 (5/8) Brazed	9.52 (3/8) 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
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-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_2O, 6.1mmH_2O).
*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-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
Cooling capacity (Nominal)	*1	kW	81.5	88.0
		kcal/h	70,100	75,700
	*1	BTU/h	278,100	300,300
	Power input	kW	24.47	25.43
	Current input	A	41.3-39.2-37.8	42.9-40.7-39.3
	EER	kW/kW	3.33	3.46
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	65.5	66
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			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
	Air flow rate	m^3/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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	12.4	10.8	10.8
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	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 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	
Refrigerant	Type x original charge		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)	201 (444)	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.)	12.7 (1/2) Brazed	15.88 (5/8) 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	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 Header: CMY-Y104/108/1010-G		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_2O, 6.1mmH_2O).
*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-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	92.0	96.0
		kcal/h	79,100	82,600
	*1	BTU/h	313,900	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
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	66	66
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-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	m^3/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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.8	12.4	12.4	12.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		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
		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
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	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 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	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) 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
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		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_2O, 6.1mmH_2O).
*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	104.0	112.0
		kcal/h	89,400	96,300
	*1	BTU/h	354,800	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
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
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-P450YKA (-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	m^3/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
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		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 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		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
		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
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 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	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
	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
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		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_2O, 6.1mmH_2O).
*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
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
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	Propeller fan x 1
	Air flow rate	m^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	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	0.92 x 1
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	12.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	201 (444)	201 (444)	237 (523)	201 (444)	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.)	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	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	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
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_2O, 6.1mmH_2O).
*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-P1150YSKA (-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
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
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	Propeller fan x 1
	Air flow rate	m^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	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	0.92 x 1
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.8	10.8	10.8	10.8	10.8
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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)	237 (523)	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.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	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	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_2O, 6.1mmH_2O).
*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-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
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room)		dB <A>	68	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-P400YKA (-BS)	PUCY-P400YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P400YKA (-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	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	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	0.92 x 1
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	12.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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)	237 (523)	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) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	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	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_2O, 6.1mmH_2O).
*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-P1350YSKA (-BS)	PUCY-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	144.0	152.0
		kcal/h	123,800	130,700
	*1	BTU/h	491,300	518,600
	Power input	kW	48.39	52.59
	Current input	A	81.6-77.6-74.8	88.7-84.3-81.2
	EER	kW/kW	2.97	2.89
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room)		dB <A>	68	68.5
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-P450YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-P450YKA (-BS)	PUCY-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	m^3/min	175	175	175	175	175	320
		L/s	2,917	2,917	2,917	2,917	2,917	5,333
		cfm	6,179	6,179	6,179	6,179	6,179	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 1	0.92 x 1	0.92 x 1	0.92 x 1	0.92 x 2
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	12.4	14.3
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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 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 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 11.5 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)	237 (523)	237 (523)	237 (523)	237 (523)	237 (523)	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	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	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_2O, 6.1mmH_2O).
*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	60.64
	Current input	A	95.4-90.6-87.3	102.3-97.2-93.7
	EER	kW/kW	2.83	2.77
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
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

Set Model

Model			PUCY-P450YKA (-BS)	PUCY-P500YKA (-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	Propeller fan x 2
	Air flow rate	m^3/min	175	320	320	320	320	320
		L/s	2,917	5,333	5,333	5,333	5,333	5,333
		cfm	6,179	11,299	11,299	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 2	0.92 x 2
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.4	14.3	14.3	14.3	14.3	14.3
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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 11.8 kg (27 lbs)	R410A x 11.8 kg (27 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)	305 (673)	305 (673)	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	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	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_2O, 6.1mmH_2O).
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

Y-Series - Cooling-only High Efficiency
PUCY-EP YSKA (-BS)

Specifications

Model			PUCY-EP400YSKA (-BS)	PUCY-EP450YSKA (-BS)	PUCY-EP500YSKA (-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	44.8	50.4	56.0
		kcal/h	38,500	43,300	48,200
	*1	BTU/h	152,900	172,000	191,100
	Power input	kW	11.18	12.59	14.16
	Current input	A	18.8-17.9-17.2	21.2-20.1-19.4	23.9-22.7-21.8
	EER	kW/kW	4.00	4.00	3.95
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°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~P500/1~34	P15~P500/1~39	P15~P500/1~43
Sound pressure level (measured in anechoic room)		dB <A>	60	60.5	61
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) 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-P200YKA (-BS)	PUCY-P200YKA (-BS)	PUCY-P200YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P250YKA (-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^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	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	0.92 x 1
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	5.5	6.9	6.9	6.9
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	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	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	
Refrigerant	Type x original charge		R410A x 5.5 kg (13 lbs)	R410A x 5.5 kg (13 lbs)	R410A x 5.5 kg (13 lbs)	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)	174 (384)	174 (384)	174 (384)	183 (404)	183 (404)	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	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 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_2O, 6.1mmH_2O).
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

Y-Series - Cooling-only High Efficiency
PUCY-EP YSKA (-BS)

Specifications

Model			PUCY-EP650YSKA (-BS)	PUCY-EP700YSKA (-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	73.5	80.0
		kcal/h	63,200	68,800
	*1	BTU/h	250,800	273,000
	Power input	kW	19.74	21.56
	Current input	A	33.3-31.6-30.5	36.3-34.5-33.3
	EER	kW/kW	3.72	3.71
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	64	64
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUCY-P300YKA (-BS)	PUCY-P350YKA (-BS)	PUCY-P350YKA (-BS)	PUCY-P350YKA (-BS)
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	10.4	10.4	10.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	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 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	
Refrigerant	Type x original charge		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)	201 (444)	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.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) 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-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202/302S-G2 Header: CMY-Y104/108/1010-G		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_2O, 6.1mmH_2O).
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

Y-Series - Cooling-only High Efficiency
PUCY-EP YSKA (-BS)

Specifications

Model			PUCY-EP750YSKA (-BS)	PUCY-EP800YSKA (-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	84.8	90.4
		kcal/h	72,900	77,700
	*1	BTU/h	289,300	308,400
	Power input	kW	21.85	23.33
	Current input	A	36.8-35.0-33.7	39.3-37.4-36.0
	EER	kW/kW	3.88	3.87
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	64	64
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUCY-P200YKA (-BS)	PUCY-P200YKA (-BS)	PUCY-P350YKA (-BS)	PUCY-P200YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P350YKA (-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^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	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	0.92 x 1
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter-control, Direct-driven by motor			Inverter-control, Direct-driven by motor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	10.4	5.5	6.9	10.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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 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 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		
Refrigerant	Type x original charge		R410A x 5.5 kg (13 lbs)	R410A x 5.5 kg (13 lbs)	R410A x 11.5 kg (26 lbs)	R410A x 5.5 kg (13 lbs)	R410A x 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	174 (384)	174 (384)	237 (523)	174 (384)	183 (404)	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.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) 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_2O, 6.1mmH_2O).
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

Y-Series - Cooling-only High Efficiency
PUCY-EP YSKA (-BS)

Specifications

Model			PUCY-EP850YSKA (-BS)	PUCY-EP900YSKA (-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	96.0	101.5
		kcal/h	82,600	87,300
	*1	BTU/h	327,600	346,300
	Power input	kW	24.80	26.71
	Current input	A	41.8-39.7-38.3	45.0-42.8-41.2
	EER	kW/kW	3.87	3.80
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	64	65
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-P250YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P350YKA (-BS)	PUCY-P250YKA (-BS)	PUCY-P300YKA (-BS)	PUCY-P350YKA (-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^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	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	0.92 x 1
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	6.9	10.4	6.9	8.1	10.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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 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 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		
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 6.5 kg (15 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	183 (404)	183 (404)	237 (523)	183 (404)	201 (444)	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.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) 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_2O, 6.1mmH_2O).
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

Y-Series - Cooling-only High Efficiency
PUCY-EP YSKA (-BS)

Specifications

Model			PUCY-EP950YSKA (-BS)	PUCY-EP1000YSKA (-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	107.0	113.5
		kcal/h	92,000	97,600
	*1	BTU/h	365,100	387,300
	Power input	kW	28.68	30.51
	Current input	A	48.4-45.9-44.3	51.5-48.9-47.1
	EER	kW/kW	3.73	3.72
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	66	66
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-P350YKA (-BS)	PUCY-P300YKA (-BS)	PUCY-P350YKA (-BS)	PUCY-P350YKA (-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^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	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	0.92 x 1
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	8.1	10.4	8.1	10.4	10.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	201 (444)	201 (444)	237 (523)	201 (444)	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.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	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	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_2O, 6.1mmH_2O).
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

Y-Series - Cooling-only High Efficiency
PUCY-EP YSKA (-BS)

Specifications

Model			PUCY-EP1050YSKA (-BS)	PUCY-EP1100YSKA (-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	120.0	124.0
		kcal/h	103,200	106,600
	*1	BTU/h	409,400	423,100
	Power input	kW	32.34	34.25
	Current input	A	54.5-51.8-49.9	57.8-54.9-52.9
	EER	kW/kW	3.71	3.62
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.	10.0~52.0°C (50~126°F)	10.0~52.0°C (50~126°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room)		dB <A>	66	67
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-P350YKA (-BS)	PUCY-P350YKA (-BS)	PUCY-P350YKA (-BS)	PUCY-P350YKA (-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^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	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	0.92 x 1
*2	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.4	10.4	10.4	10.4	10.8
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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)	237 (523)	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.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	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	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_2O, 6.1mmH_2O).
*Due to continuing improvement, above specification may be subject to change without notice.

OUTDOOR UNIT

Y-Series
PUHY-P YKA (-BS)

Specifications

Model			PUHY-P200YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P300YKA (-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	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	5.19	6.89	8.86
	Current input	A	8.7-8.3-8.0	11.6-11.0-10.6	14.9-14.2-13.6
	EER	kW/kW	4.31	4.06	3.78
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	22.4	28.0	33.5
		kcal/h	20,000	25,000	30,000
	*2	BTU/h	76,400	95,500	114,300
	Power input	kW	5.05	6.33	8.11
	Current input	A	8.5-8.0-7.8	10.6-10.1-9.7	13.6-13.0-12.5
	COP	kW/kW	4.43	4.42	4.13
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~P250/1~17	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) Brazed, farthest length >= 90 m)	9.52 (3/8) Brazed (12.7 (1/2) Brazed, farthest length >= 40 m)
	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	m^3/min	175	175	185
		L/s	2,917	2,917	3,083
		cfm	6,179	6,179	6,532
	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
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	5.5	6.9	8.1
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>
External dimension H x W x D		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
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)
Net weight		kg (lbs)	195 (430)	195 (430)	211 (466)
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 Header: CMY-Y104/108/1010-G	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.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*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
PUHY-P YKA (-BS)

Specifications

Model			PUHY-P350YKA (-BS)	PUHY-P400YKA (-BS)	PUHY-P450YKA (-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	40.0	45.0	48.0
		kcal/h	35,000	40,000	43,000
	*1	BTU/h	136,500	153,500	163,800
	Power input	kW	11.69	13.55	15.78
	Current input	A	19.7-18.7-18.0	22.8-21.7-20.9	26.6-25.3-24.3
	EER	kW/kW	3.42	3.32	3.04
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	40.0	45.0	48.0
		kcal/h	35,000	40,000	43,000
	*2	BTU/h	136,500	153,500	163,800
	Power input	kW	9.61	10.92	13.33
	Current input	A	16.2-15.4-14.8	18.4-17.5-16.8	22.5-21.3-20.6
	COP	kW/kW	4.16	4.12	3.60
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)
	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~P400/1~30	P15~P500/1~34	P15~P500/1~39
Sound pressure level (measured in anechoic room)		dB <A>	61	63	63
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) Brazed	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	28.58 (1-1/8) Brazed
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	210	210	210
		L/s	3,500	3,500	3,500
		cfm	7,415	7,415	7,415
	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
*3	External static press.		0 Pa (0 mmH$_2$O)	0 Pa (0 mmH$_2$O)	0 Pa (0 mmH$_2$O)
Compressor	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.8	12.4
	Case heater	kW	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>
External dimension H x W x D		mm	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
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 11.5 kg (26 lbs)
Net weight		kg (lbs)	256 (565)	253 (558)	253 (558)
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,*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$_2$O, 6.1mmH$_2$O).
*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

PUHY-P YKA (-BS)

Specifications

Model			PUHY-P500YKA (-BS)
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz
Cooling capacity (Nominal)	*1	kW	55.0
		kcal/h	49,000
	*1	BTU/h	187,700
	Power input	kW	18.39
	Current input	A	31.0-29.4-28.4
	EER	kW/kW	2.99
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	55.0
		kcal/h	49,000
	*2	BTU/h	187,700
	Power input	kW	15.71
	Current input	A	26.5-25.1-24.2
	COP	kW/kW	3.50
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~43
Sound pressure level (measured in anechoic room)		dB <A>	65
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed
Fan	Type x Quantity		Propeller fan x 2
	Air flow rate	m^3/min	360
		L/s	6,000
		cfm	12,712
	Control, Driving mechanism		Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 2
*3	External static press.		0 Pa (0 mmH$_2$O)
Compressor	Type		Inverter scroll hermetic compressor
	Starting method		Inverter
	Motor output	kW	13.3
	Case heater	kW	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>
External dimension H x W x D		mm	1,650 x 1,750 x 740
		in.	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 11.8 kg (27 lbs)
Net weight		kg (lbs)	288 (635)
Heat exchanger			Salt-resistant cross fin & copper tube
Optional parts			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2 Header: CMY-Y104/108/1010-G

Notes:

*1,*2 Nominal conditions

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

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH$_2$O, 6.1mmH$_2$O).
*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
PUHY-P YSKA (-BS)

Specifications

Model			PUHY-P550YSKA (-BS)	PUHY-P600YSKA (-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	63.0	68.0
		kcal/h	55,000	60,000
	*1	BTU/h	215,000	232,000
	Power input	kW	16.07	18.18
	Current input	A	27.1-25.7-24.8	30.6-29.1-28.1
	EER	kW/kW	3.92	3.74
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	63.0	68.0
		kcal/h	55,000	60,000
	*2	BTU/h	215,000	232,000
	Power input	kW	15.51	16.70
	Current input	A	26.1-24.8-23.9	28.1-26.7-25.8
	COP	kW/kW	4.06	4.07
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~47	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	63	63
Refrigerant piping diameter	Liquid pipe	mm (in.)	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

Set Model

Model			PUHY-P250YKA (-BS)	PUHY-P300YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P350YKA (-BS)
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	175	185	175	210
		L/s	2,917	3,083	2,917	3,500
		cfm	6,179	6,532	6,179	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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	8.1	6.9	10.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		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)	
	Inverter circuit (COMP./FAN)		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)	211 (466)	195 (430)	256 (565)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		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_2O, 6.1mmH_2O).
*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

PUHY-P YSKA (-BS)

Specifications

Model			PUHY-P650YSKA (-BS)	PUHY-P700YSKA (-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	73.0	76.0
		kcal/h	65,000	68,000
	*1	BTU/h	249,100	259,300
	Power input	kW	19.78	21.40
	Current input	A	33.3-31.7-30.5	36.1-34.3-33.0
	EER	kW/kW	3.69	3.55
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	73.0	76.0
		kcal/h	65,000	68,000
	*2	BTU/h	249,100	259,300
	Power input	kW	18.02	20.00
	Current input	A	30.4-28.8-27.8	33.7-32.0-30.9
	COP	kW/kW	4.05	3.80
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	64.5	64.5
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUHY-P250YKA (-BS)	PUHY-P400YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-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	m^3/min	175	210	175	210
		L/s	2,917	3,500	2,917	3,500
		cfm	6,179	7,415	6,179	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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	10.8	6.9	12.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		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
		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
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 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)
Net weight		kg (lbs)	195 (430)	253 (558)	195 (430)	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.)	9.52 (3/8) Brazed	15.88 (5/8) Brazed	9.52 (3/8) 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
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		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.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*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
PUHY-P YSKA (-BS)

Specifications

Model			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
Cooling capacity (Nominal)	*1	kW	81.5	90.0
		kcal/h	73,000	80,000
	*1	BTU/h	278,100	307,100
	Power input	kW	23.90	27.10
	Current input	A	40.3-38.3-36.9	45.7-43.4-41.8
	EER	kW/kW	3.41	3.32
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	81.5	90.0
		kcal/h	73,000	80,000
	*2	BTU/h	278,100	307,100
	Power input	kW	22.20	23.01
	Current input	A	37.4-35.6-34.3	38.8-36.9-35.5
	COP	kW/kW	3.67	3.91
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	65.5	66
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUHY-P300YKA (-BS)	PUHY-P450YKA (-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
	Air flow rate	m^3/min	185	210	210	210
		L/s	3,083	3,500	3,500	3,500
		cfm	6,532	7,415	7,415	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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	12.4	10.8	10.8
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	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 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	
Refrigerant	Type x original charge		R410A x 8.0 kg (18 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)	211 (466)	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.)	12.7 (1/2) Brazed	15.88 (5/8) 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	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-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		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.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

Y-Series
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	96.0
		kcal/h	83,000	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
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	93.0	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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	66	66
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P400YKA (-BS)	PUHY-P450YKA (-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
	Air flow rate	m^3/min	210	210	210	210
		L/s	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.8	12.4	12.4	12.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		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
		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
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 11.5 kg (26 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	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.)	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
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		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.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*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
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	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
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	103.0	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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
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			PUHY-P450YKA (-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^3/min	210	360	360	360
		L/s	3,500	6,000	6,000	6,000
		cfm	7,415	12,712	12,712	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 2	0.92 x 2	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.4	13.3	13.3	13.3
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		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
		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
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 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)	R410A x 11.8 kg (27 lbs)
Net weight		kg (lbs)	253 (558)	288 (635)	288 (635)	288 (635)
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
	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
Optional parts			Outdoor Twinning kit: CMY-Y200VBK2 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		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.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*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
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	115.0	121.5
		kcal/h	103,000	108,000
	*1	BTU/h	392,400	414,600
	Power input	kW	32.57	35.63
	Current input	A	54.9-52.2-50.3	60.1-57.1-55.0
	EER	kW/kW	3.53	3.41
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	115.0	121.5
		kcal/h	103,000	108,000
	*2	BTU/h	392,400	414,600
	Power input	kW	31.50	33.80
	Current input	A	53.1-50.5-48.6	57.0-54.2-52.2
	COP	kW/kW	3.65	3.59
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
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			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	m^3/min	185	185	210	185	210	210
		L/s	3,083	3,083	3,500	3,083	3,500	3,500
		cfm	6,532	6,532	7,415	6,532	7,415	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	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	12.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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 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	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) Brazed	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,*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_2O, 6.1mmH_2O).
*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
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	130.0	135.0
		kcal/h	115,000	120,000
	*1	BTU/h	443,600	460,600
	Power input	kW	38.80	40.66
	Current input	A	65.5-62.2-59.9	68.6-65.2-62.8
	EER	kW/kW	3.35	3.32
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	130.0	135.0
		kcal/h	115,000	120,000
	*2	BTU/h	443,600	460,600
	Power input	kW	35.51	37.70
	Current input	A	59.9-56.9-54.8	63.6-60.4-58.2
	COP	kW/kW	3.66	3.58
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
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			PUHY-P350YKA (-BS)	PUHY-P400YKA (-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	Propeller fan x 1
	Air flow rate	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	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	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.8	10.8	10.8	10.8	10.8
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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)	256 (565)	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.)	12.7 (1/2) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	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	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,*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_2O, 6.1mmH_2O).
*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
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	138.0	141.0
		kcal/h	123,000	126,000
	*1	BTU/h	470,900	481,100
	Power input	kW	43.12	45.77
	Current input	A	72.7-69.1-66.6	77.2-73.4-70.7
	EER	kW/kW	3.20	3.08
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	138.0	141.0
		kcal/h	123,000	126,000
	*2	BTU/h	470,900	481,100
	Power input	kW	40.35	42.98
	Current input	A	68.1-64.7-62.3	72.5-68.9-66.4
	COP	kW/kW	3.42	3.28
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room)		dB <A>	68	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			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	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	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	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	12.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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)	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.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	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	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,*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_2O, 6.1mmH_2O).
*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
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	144.0	151.0
		kcal/h	129,000	135,000
	*1	BTU/h	491,300	515,200
	Power input	kW	48.64	52.24
	Current input	A	82.1-78.0-75.1	88.1-83.7-80.7
	EER	kW/kW	2.96	2.89
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	144.0	151.0
		kcal/h	129,000	135,000
	*2	BTU/h	491,300	515,200
	Power input	kW	46.15	49.50
	Current input	A	77.9-74.0-71.3	83.5-79.3-76.5
	COP	kW/kW	3.12	3.05
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room)		dB <A>	68	68.5
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			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	m^3/min	210	210	210	210	210	360
		L/s	3,500	3,500	3,500	3,500	3,500	6,000
		cfm	7,415	7,415	7,415	7,415	7,415	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 1	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	12.4	13.3
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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 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 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 11.5 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)	253 (558)	253 (558)	288 (635)
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	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	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,*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_2O, 6.1mmH_2O).
*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
PUHY-P YSKA (-BS)

Specifications

Model			PUHY-P1450YSKA (-BS)	PUHY-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	158.0	165.0
		kcal/h	141,000	147,000
	*1	BTU/h	539,100	563,000
	Power input	kW	55.83	59.56
	Current input	A	94.2-89.5-86.3	100.5-95.5-92.0
	EER	kW/kW	2.83	2.77
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	158.0	165.0
		kcal/h	141,000	147,000
	*2	BTU/h	539,100	563,000
	Power input	kW	52.49	56.12
	Current input	A	88.6-84.1-81.1	94.7-90.0-86.7
	COP	kW/kW	3.01	2.94
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
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

Set Model

Model			PUHY-P450YKA (-BS)	PUHY-P500YKA (-BS)	PUHY-P500YKA (-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	Propeller fan x 2	Propeller fan x 2
	Air flow rate	m^3/min	210	360	360	360	360	360
		L/s	3,500	6,000	6,000	6,000	6,000	6,000
		cfm	7,415	12,712	12,712	12,712	12,712	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 2	0.92 x 2	0.92 x 2	0.92 x 2	0.92 x 2
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	12.4	13.3	13.3	13.3	13.3	13.3
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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 11.8 kg (27 lbs)	R410A x 11.8 kg (27 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)	253 (558)	288 (635)	288 (635)	288 (635)	288 (635)	288 (635)
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	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	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,*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_2O, 6.1mmH_2O).
*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 - High Efficiency
PUHY-EP YSKA (-BS)

Specifications

Model			PUHY-EP400YSKA (-BS)	PUHY-EP450YSKA (-BS)	PUHY-EP500YSKA (-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	44.8	50.4	56.0
		kcal/h	40,000	45,000	50,000
	*1	BTU/h	152,900	172,000	191,100
	Power input	kW	10.39	12.05	13.79
	Current input	A	17.5-16.6-16.0	20.3-19.3-18.6	23.2-22.1-21.3
	EER	kW/kW	4.31	4.18	4.06
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	44.8	50.4	56.0
		kcal/h	40,000	45,000	50,000
	*2	BTU/h	152,900	172,000	191,100
	Power input	kW	10.66	12.00	13.36
	Current input	A	17.9-17.0-16.4	20.2-19.2-18.5	22.5-21.4-20.6
	COP	kW/kW	4.20	4.20	4.19
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~P500/1~34	P15~P500/1~39	P15~P500/1~43
Sound pressure level (measured in anechoic room)		dB <A>	60	60.5	61
Refrigerant piping diameter	Liquid pipe	mm (in.)	12.7 (1/2) 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			PUHY-P200YKA (-BS)	PUHY-P200YKA (-BS)	PUHY-P200YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P250YKA (-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^3/min	175	175	175	175	175	175
		L/s	2,917	2,917	2,917	2,917	2,917	2,917
		cfm	6,179	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	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor		Inverter scroll hermetic compressor	
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	5.5	6.9	6.9	6.9
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 920 x 740	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	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	
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 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)	R410A x 8.0 kg (18 lbs)
Net weight		kg (lbs)	195 (430)	195 (430)	195 (430)	195 (430)	195 (430)	195 (430)
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube	
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed	22.2 (7/8) Brazed
Optional parts			Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010-G		Outdoor Twinning kit: CMY-Y100VBK3 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_2O, 6.1mmH_2O).
*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 - High Efficiency
PUHY-EP YSKA (-BS)

Specifications

Model			PUHY-EP650YSKA (-BS)	PUHY-EP700YSKA (-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	73.5	80.0
		kcal/h	65,000	70,000
	*1	BTU/h	250,800	273,000
	Power input	kW	20.41	23.39
	Current input	A	34.4-32.7-31.5	39.4-37.5-36.1
	EER	kW/kW	3.60	3.42
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	73.5	80.0
		kcal/h	65,000	70,000
	*2	BTU/h	250,800	273,000
	Power input	kW	18.70	20.25
	Current input	A	31.5-29.9-28.9	34.1-32.4-31.3
	COP	kW/kW	3.93	3.95
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	64	64
Refrigerant piping diameter	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUHY-P300YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P350YKA (-BS)
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 1	Propeller fan x 1
	Air flow rate	m^3/min	185	210	210	210
		L/s	3,083	3,500	3,500	3,500
		cfm	6,532	7,415	7,415	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_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		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	8.1	10.4	10.4	10.4
	Case heater	kW	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>	
External dimension H x W x D		mm	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 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	
Refrigerant	Type x original charge		R410A x 8.0 kg (18 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)	211 (466)	256 (565)	256 (565)	256 (565)
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	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) 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-Y100VBK3 Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010-G		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.)

*3 External static pressure option is available (30Pa, 60Pa / 3.1mmH_2O, 6.1mmH_2O).
*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 - High Efficiency
PUHY-EP YSKA (-BS)

Specifications

Model			PUHY-EP750YSKA (-BS)	PUHY-EP800YSKA (-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	84.8	90.4
		kcal/h	75,000	80,000
	*1	BTU/h	289,300	308,400
	Power input	kW	21.14	23.00
	Current input	A	35.6-33.9-32.6	38.8-36.8-35.5
	EER	kW/kW	4.01	3.93
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	84.8	90.4
		kcal/h	75,000	80,000
	*2	BTU/h	289,300	308,400
	Power input	kW	20.58	21.99
	Current input	A	34.7-33.0-31.8	37.1-35.2-33.9
	COP	kW/kW	4.12	4.11
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	64	64
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	34.93 (1-3/8) Brazed	34.93 (1-3/8) Brazed

Set Model

Model			PUHY-P200YKA (-BS)	PUHY-P200YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P200YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P350YKA (-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^3/min	175	175	210	175	175	210
		L/s	2,917	2,917	3,500	2,917	2,917	3,500
		cfm	6,179	6,179	7,415	6,179	6,179	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	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	5.5	5.5	10.4	5.5	6.9	10.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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 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 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		
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 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	195 (430)	195 (430)	256 (565)	195 (430)	195 (430)	256 (565)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	9.52 (3/8) 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	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,*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_2O, 6.1mmH_2O).
*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 - High Efficiency
PUHY-EP YSKA (-BS)

Specifications

Model			PUHY-EP850YSKA (-BS)	PUHY-EP900YSKA (-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	96.0	101.5
		kcal/h	85,000	90,000
	*1	BTU/h	327,600	346,300
	Power input	kW	25.00	27.06
	Current input	A	42.2-40.0-38.6	45.6-43.3-41.8
	EER	kW/kW	3.84	3.75
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	96.0	101.5
		kcal/h	85,000	90,000
	*2	BTU/h	327,600	346,300
	Power input	kW	23.35	25.24
	Current input	A	39.4-37.4-36.0	42.6-40.4-39.0
	COP	kW/kW	4.11	4.02
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	64	65
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P250YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P250YKA (-BS)	PUHY-P300YKA (-BS)	PUHY-P350YKA (-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^3/min	175	175	210	175	185	210
		L/s	2,917	2,917	3,500	2,917	3,083	3,500
		cfm	6,179	6,179	7,415	6,179	6,532	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	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	6.9	6.9	10.4	6.9	8.1	10.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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 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 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		
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 8.0 kg (18 lbs)	R410A x 11.5 kg (26 lbs)
Net weight		kg (lbs)	195 (430)	195 (430)	256 (565)	195 (430)	211 (466)	256 (565)
Heat exchanger			Salt-resistant cross fin & copper tube			Salt-resistant cross fin & copper tube		
Pipe between unit and distributor	Liquid pipe	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	22.2 (7/8) 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,*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_2O, 6.1mmH_2O).
*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 - High Efficiency
PUHY-EP YSKA (-BS)

Specifications

Model			PUHY-EP950YSKA (-BS)	PUHY-EP1000YSKA (-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	107.0	113.5
		kcal/h	95,000	100,000
	*1	BTU/h	365,100	387,300
	Power input	kW	29.23	32.06
	Current input	A	49.3-46.8-45.1	54.1-51.4-49.5
	EER	kW/kW	3.66	3.54
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	107.0	113.5
		kcal/h	95,000	100,000
	*2	BTU/h	365,100	387,300
	Power input	kW	27.22	28.80
	Current input	A	45.9-43.6-42.0	48.6-46.1-44.5
	COP	kW/kW	3.93	3.94
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/1~50	P15~P500/1~50
Sound pressure level (measured in anechoic room)		dB <A>	66	66
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P300YKA (-BS)	PUHY-P300YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P300YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P350YKA (-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^3/min	185	185	210	185	210	210
		L/s	3,083	3,083	3,500	3,083	3,500	3,500
		cfm	6,532	6,532	7,415	6,532	7,415	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	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	8.1	8.1	10.4	8.1	10.4	10.4
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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)	256 (565)	211 (466)	256 (565)	256 (565)
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	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
	Gas pipe	mm (in.)	22.2 (7/8) Brazed	22.2 (7/8) Brazed	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-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_2O, 6.1mmH_2O).
*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 - High Efficiency
PUHY-EP YSKA (-BS)

Specifications

Model			PUHY-EP1050YSKA (-BS)	PUHY-EP1100YSKA (-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	120.0	125.0
		kcal/h	105,000	110,000
	*1	BTU/h	409,400	426,500
	Power input	kW	35.08	36.76
	Current input	A	59.2-56.2-54.2	62.0-58.9-56.8
	EER	kW/kW	3.42	3.40
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.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating capacity (Nominal)	*2	kW	120.0	125.0
		kcal/h	105,000	110,000
	*2	BTU/h	409,400	426,500
	Power input	kW	31.25	33.24
	Current input	A	52.7-50.1-48.3	56.1-53.3-51.3
	COP	kW/kW	3.84	3.76
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		50~130% of outdoor unit capacity	50~130% of outdoor unit capacity
	Model/Quantity		P15~P500/2~50	P15~P500/2~50
Sound pressure level (measured in anechoic room)		dB <A>	66	67
Refrigerant piping diameter	Liquid pipe	mm (in.)	19.05 (3/4) Brazed	19.05 (3/4) Brazed
	Gas pipe	mm (in.)	41.28 (1-5/8) Brazed	41.28 (1-5/8) Brazed

Set Model

Model			PUHY-P350YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P350YKA (-BS)	PUHY-P350YKA (-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	Propeller fan x 1
	Air flow rate	m^3/min	210	210	210	210	210	210
		L/s	3,500	3,500	3,500	3,500	3,500	3,500
		cfm	7,415	7,415	7,415	7,415	7,415	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	0.92 x 1
*3	External static press.		0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)	0 Pa (0 mmH_2O)
Compressor	Type		Inverter scroll hermetic compressor			Inverter scroll hermetic compressor		
	Starting method		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Motor output	kW	10.4	10.4	10.4	10.4	10.4	10.8
	Case heater	kW	–	–	–	–	–	–
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 3.0Y 7.8/1.1 or similar>		
External dimension H x W x D		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	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	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		
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)	256 (565)	256 (565)	256 (565)	256 (565)	256 (565)	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.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	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	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,*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_2O, 6.1mmH_2O).
*Nominal condition *1,*2 are subject to JIS B8615-2.
*Due to continuing improvement, above specification may be subject to change without notice.

Indoor unit

A suitable unit can be selected from among a wide lineup of 16 types of units according to a building's needs. The lineup includes the cassette type, ensuring improved comfort and a pleasant appearance, the ceiling concealed type, excelling in quietness and ensuring flexible placement of air outlets, and the ceiling suspended and wall-mounted types.

Various installation patterns for indoor situations

Ceiling Cassette Type

Ceiling Concealed Type

Other Type

Wide Selection of Indoor Units

Ceiling Cassette Type

4-way airflow type
PLFY-P VBM-E

* All product images are with i-see Sensor.

Capacity zone

kW	3.6	4.5	5.6	7.1	9.0	11.2	14.0

››› P79-P80

4-way airflow type
PLFY-P VFM-E1

* All product images are with 3D i-see Sensor.

Capacity zone

kW	1.7	2.2	2.8	3.6	4.5	5.6

››› P81-P82

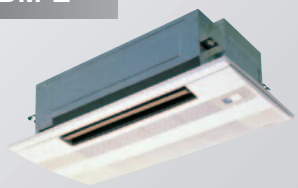
2-way airflow type
PLFY-P VLMD-E

Capacity zone

kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0

››› P83-P84

1-way airflow type
PMFY-P VBM-E



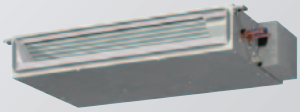
Capacity zone

kW	2.2	2.8	3.6	4.5

››› P85-P86

Ceiling Concealed Type

Low static pressure type
PEFY-P VMS1(L)-E



Capacity zone

kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1

››› P89-P90

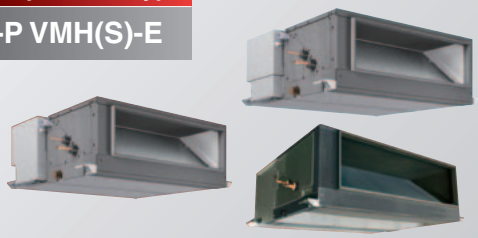
Medium static pressure type
PEFY-P VMA(L)-E
PEFY-P VMA3-E

Capacity zone

VMA(L) (kW)	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
VMA3 (kW)	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	

››› P91-P94

High static pressure type
PEFY-P VMH(S)-E



Capacity zone

kW	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0	22.4	28.0

››› P95-P96

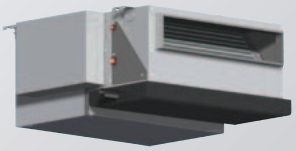
Fresh air intake type
PEFY-P VMH-E-F

Capacity zone

kW	9.0	16.0	22.4	28.0

››› P97-P98

Low noise type
PEFY-P VMR-E-L/R



Capacity zone

kW	2.2	2.8	3.6

››› P99-P100

Other Type

Ceiling suspended type
PCFY-P VKM-E

Capacity zone

kW	4.5	7.1	11.2	14.0

››› P101-P102

Wall-mounted type
PKFY-P VBM-E
PKFY-P VHM-E
PKFY-P VKM-E

Capacity zone

VBM (kW)	1.7	2.2	2.8
VHM (kW)	3.6	4.5	5.6
VKM (kW)	7.1	11.2	

››› P103-P104

Floor standing type
PFFY-P VKM-E2

Capacity zone

kW	2.2	2.8	3.6	4.5

››› P105-P106

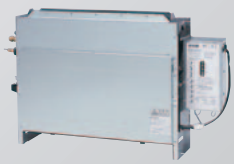
Floor standing type (for perimeter zone)
PFFY-P VLEM-E

Capacity zone

kW	2.2	2.8	3.6	4.5	5.6	7.1

››› P107-P108

Floor standing type (for perimeter zone)
PFFY-P VLRM-E
PFFY-P VLRMM-E

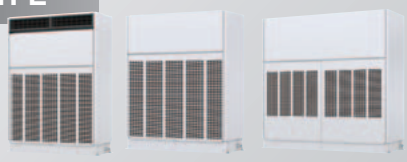


Capacity zone

kW	2.2	2.8	3.6	4.5	5.6	7.1

››› P109-P110

Floor standing type
PFFY-P YM-E
PFFY-P YMH-E



Capacity zone

YM (kW)	22.4	28.0	45.0	56.0
YMH (kW)	22.4	28.0		

››› P111-P112

Ceiling Cassette

Ceiling Cassette Type

4-way airflow type
PLFY-P VBM-E

- The airflow pattern can be selected from 4, 3, or 2 directions
- With the i-see Sensor, “sensible temperature control” is available, contributing to improve comfort/energy efficiency

i-see Sensor | Decoration Panel | Drain Pump | Air Flow Rate 4 types | Fresh air intake usable

4-way airflow type
PLFY-P VFM-E1

- 625 mm [24 in.] compact design. Fits perfectly with 2-inch by 2-inch ceiling systems
- With 3D i-see Sensor, smart control based on the number of people in the room is available, contributing to improve comfort/energy efficiency

3D i-see Sensor | Decoration Panel | Drain Pump

2-way airflow type
PLFY-P VLMD-E

- Stylish design with well blended air inlet
- The unit has a height of 290 mm [11-7/16 in.] and can be used in a corridor or narrow room

1-way airflow type
PMFY-P VBM-E

- The 1-way air flow type that is recommended to install on the edges of a room
- Thin design with a height of 230 mm [9-1/16 in.]

PLFY-P VBM-E

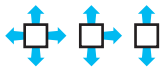
Optimum Airflow

Individual Vane Settings

Optimum airflow settings provide maximum comfort throughout the room.

In addition to the selection of variable airflow patterns (i.e., 2-, 3- or 4-way), this function allows the independent selection of vertical airflow levels for each vane, thereby maintaining a comfortable room environment with even temperature distribution.

2-, 3-, 4-way airflow pattern selection
* Optional shuffle placement is required for 2- and 3-way patterns.



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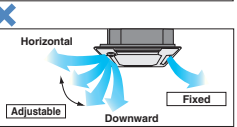
Airflow direction at each vane can be set using the wired remote controller.



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72 airflow patterns

+

Wide Airflow

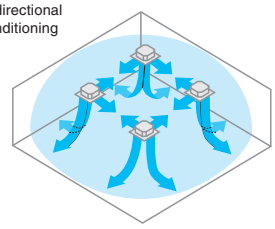
Wide-angle outlets distribute airflow to all corners of the room.

The outlets are larger than those of conventional models and the shape has been improved for better wide-angle ventilation.

Conventional model

VBM 4-Way Ceiling Cassette

Multi-directional air conditioning



Individual Vane Setting

+

Wide Airflow

The combination of individual vane setting, which enables the optimal outlet setting for each room layout, and the wide airflow function works to ensure even temperature distribution throughout each room. The result is uniformly comfortable air conditioning.

Automatic Air-speed Adjustment

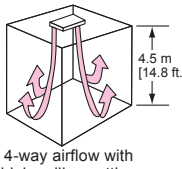
An automatic air-speed mode that adjusts airflow speed automatically is adopted to maintain comfortable room conditions at all times. This setting automatically adjusts the air-speed to conditions that match the room environment.

At the start of heating / cooling operation, the airflow is set to high-speed to quickly heat / cool the room.

When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable and comfortable heating/cooling operation.

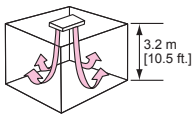
Equipped with High- and Low-ceiling Modes

Units are equipped with high- and low-ceiling operation modes that make it possible to switch the airflow volume to match a room's height. The ability to choose the optimum airflow volume makes it possible to optimize the breezy sensation felt throughout the room.

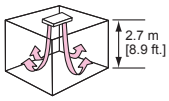


4-way airflow with high-ceiling setting

*P100



4-way airflow with standard setting



4-way airflow with low-ceiling setting

Airflow Range

Airflow pattern \ Model	P32–P80 [m/ft.]			P100 / P125 [m/ft.]		
	High-ceiling setting	Standard setting	Low-ceiling setting	High-ceiling setting	Standard setting	Low-ceiling setting
4-Way	3.5/11.5	2.7/8.9	2.5/8.2	4.5/14.8	3.2/10.5	2.7/8.9
3-Way	3.5/11.5	3.0/9.8	2.7/8.9	4.5/14.8	3.6/11.8	3.0/9.8
2-Way	3.5/11.5	3.3/10.8	3.0/9.8	4.5/14.8	4.0/13.1	3.3/10.8

"i-see Sensor" can be used with ceiling cassette type 4-way airflow unit.

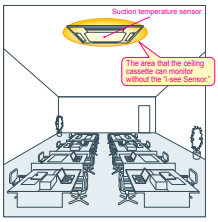
This unit controls the temperature difference at the top and bottom of a room by checking the floor temperature with"i-see Sensor". Comfortable air conditioning can be accomplished smoothly with "sensible temperature control."

Prevents overcooling/overheating, and improves comfort/energy efficiency

Without i-see Sensor: preset temperature at 23°C [73°F]

Perceived temperature at 20°C [68°F] (Bottom 17°C [62°F])

The preset temperature tends to be higher than we need, because heated air rises to the ceiling.

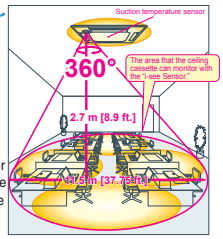


With i-see Sensor+Auto fan speed: preset temperature at 20°C [68°F]

i-see Sensor

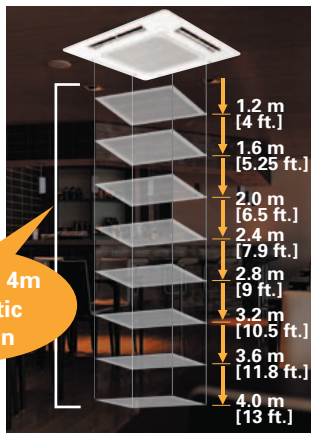
Perceived temperature at 20°C [68°F] (Bottom 20°C [68°F])

The auto-fan-speed mode of 4-way Cassette with "i-see Sensor" heats the floor well and decreases the temperature difference at the top and bottom of the room.



Easy Cleaning

Equipped with automatic panel elevation, cleaning the filter is easy, even with high ceilings.
Maintenance time is reduced by shortening cleaning time.



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				1-phase 220-240V 50Hz/1-phase 220V 60Hz						
Cooling capacity		*1	kW	3.6	4.5	5.6	7.1	9.0	11.2	14.0
		*1	BTU/h	12,300	15,400	19,100	24,200	30,700	38,200	47,800
Heating capacity		*1	kW	4.0	5.0	6.3	8.0	10.0	12.5	16.0
		*1	BTU/h	13,600	17,100	21,500	27,300	34,100	42,700	54,600
Power consumption	Cooling		kW	0.03	0.04		0.05	0.07	0.15	0.16
	Heating		kW	0.02	0.03		0.04	0.06	0.14	0.15
Current	Cooling		A	0.27	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)					298 x 840 x 840 (11-3/4 x 33-1/8 x 33-1/8)	
	Panel		mm (in.)	35 x 950 x 950 (1-3/8 x 37-7/16 x 37-7/16)						
Net weight	Unit		kg (lbs.)	22 (49)			23 (51)		27 (60)	
	Panel		kg (lbs.)	6 (13)						
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)						
Fan	Type x Quantity			Turbo fan x 1						
	Airflow rate (Lo-Mid2-Mid1-Hi)	*2	m^3/min	11-12-13-14	12-13-14-16		14-15-16-18	16-18-20-22	21-24-27-29	22-25-28-30
			L/s	183-200-217-233	200-217-233-267		233-250-267-300	267-300-333-367	350-400-450-483	367-417-467-500
			cfm	388-424-459-494	424-459-494-565		494-530-565-636	565-636-706-777	742-848-953-1024	777-883-989-1059
	External static pressure		Pa	0						
Motor	Type			DC motor						
	Output		kW	0.050					0.120	
Air filter				PP Honeycomb						
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)		ø12.7 (ø1/2)/ø15.88 (ø5/8) (Compatible)	ø15.88 (ø5/8)		ø15.88 (ø5/8)/ø19.05 (ø3/4) (Compatible)	
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)		ø6.35 (ø1/4)/ø9.52 (ø3/8) (Compatible)	ø9.52 (ø3/8)			
Field drain pipe diameter			mm (in.)	O.D. 32 (1-1/4)						
Sound pressure level (Lo-Mid2-Mid1-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

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

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

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

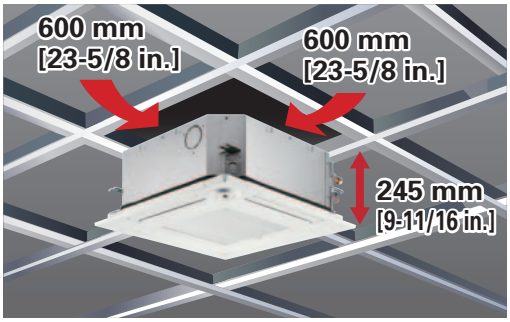
PLFY-P VFM-E1

Flexible Design

The straight square design matches 2 × 2 (600mm〉600mm [[23-5/8 in.〉23-5/8 in.]) ceiling construction specifications. The unit height is 245 mm and it can be installed in a narrow ceiling space.

Compact and light design

The panel weighs 3 kg, and the unit body weighs 14 kg (P15, P20 and P25 models) or 15 kg (P32, P40 and P50 models).
Their weight is 5 kg lighter than PLFY-VCM-E2 model, allowing them to be easily suspended.



Detects number of people

Room occupancy energy-saving mode

The 3D i-see Sensor detects the number of people in the room. It then calculates the occupancy rate based on the maximum number of people in the room up to that point in time in order to save air-conditioning power. Air-conditioning power equivalent to 1°C is saved during both cooling and heating operation at an occupancy rate of approximately 30%. The temperature is controlled according to the number of people.

No occupancy energy-saving mode

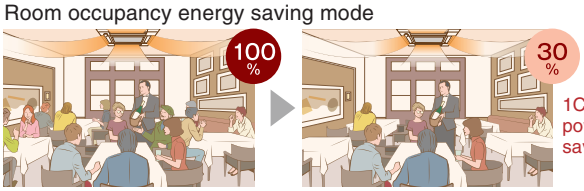
When 3D i-see Sensor detects that no one is in the room, the system is switched to a preset power-saving mode. If the room remains unoccupied for more than 60min, air-conditioning power equivalent to 2°C is saved during both cooling and heating operation. This contributes to preventing waste in terms of heating and cooling.

No occupancy Auto-OFF mode

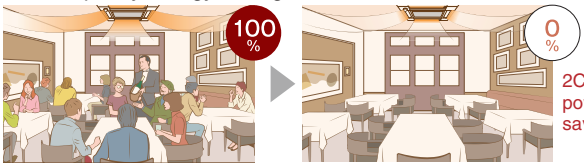
When the room remains unoccupied for a preset period of time, the air conditioner turns off automatically, thereby providing even greater power savings. The time until operation is stopped can be set in intervals of 10min, ranging from 60 to 180 min.

*No occupancy Auto-OFF mode is not available when multiple indoor units are operated by one MA remote controller.

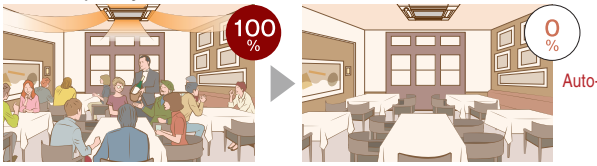
Room occupancy energy saving mode



No occupancy energy saving mode



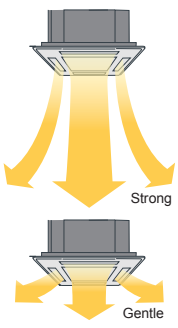
No occupancy Auto-OFF mode



*PAR-33MAA is required for each setting

Automatic Air-speed Adjustment

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

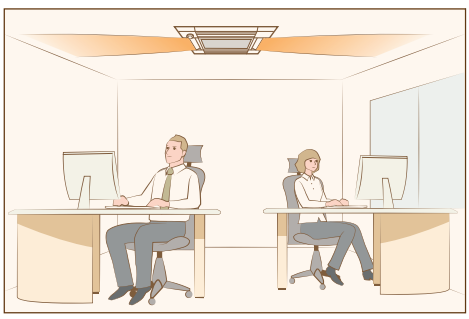


At the start of the heating / cooling operation, the airflow is set to high-speed to quickly heat / cool the room.

When the room temperature reaches the desired setting, the airflow speed is decreased automatically for stable and comfortable heating/cooling operation.

Direct/Indirect settings*

Some people do not like the feeling of wind, while others want to be warm from head to toe. People's likes and dislikes vary. With the 3D i-see Sensor, it is possible to choose to block or not block to the wind for each vane.



*PAR-33MAA or PAR-SL100A-E is required for each setting.

Specifications

Model				PLFY-P15VFM-E1	PLFY-P20VFM-E1	PLFY-P25VFM-E1	PLFY-P32VFM-E1	PLFY-P40VFM-E1	PLFY-P50VFM-E1
Power source				1-phase 220-240V 50Hz/220V 60Hz					
Cooling capacity		*1	kW	1.7	2.2	2.8	3.6	4.5	5.6
		*1	BTU/h	5,800	7,500	9,600	12,300	15,400	19,100
Heating capacity		*1	kW	1.9	2.5	3.2	4.0	5.0	6.3
		*1	BTU/h	6,500	8,500	10,900	13,600	17,100	21,500
Power consumption	Cooling		kW	0.02	0.02	0.02	0.02	0.03	0.04
	Heating		kW	0.02	0.02	0.02	0.02	0.03	0.04
Current	Cooling		A	0.19	0.21	0.22	0.23	0.28	0.40
	Heating		A	0.14	0.16	0.17	0.18	0.23	0.35
External finish (Munsell No.)	Unit			Galvanized steel sheet					
	Panel			MUNSELL (1.0Y 9.2/0.2)					
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		mm (in.)	10 x 625 x 625 (3/8 x 24-5/8 x 24-5/8)					
Net weight	Unit		kg (lbs.)	14 (31)			15 (33)		
	Panel		kg (lbs.)	3 (7)					
Heat exchanger				Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity			Turbo fan x 1					
	Airflow rate (Lo-Mid-Hi)		m^3/min	6.5-7.5-8.0	6.5-7.5-8.5	6.5-8.0-9.0	7.0-8.0-9.5	7.5-9.0-11.0	9.0-11.0-13.0
			L/s	108-125-133	108-125-142	108-133-150	117-133-158	125-150-183	150-183-217
			cfm	230-265-282	230-265-300	230-282-318	247-282-335	265-318-388	318-388-459
	External static pressure		Pa	0					
Motor	Type			DC motor					
	Output		kW	0.05					
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	dB (A)	26-28-30	26-29-31	26-30-33	26-30-34	28-33-39	33-39-43

Notes:

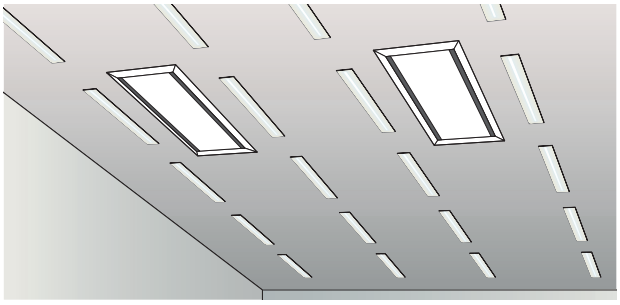
*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 It is measured in anechoic room at power source 230V.

PLFY-P VLMD-E

Simple panel design

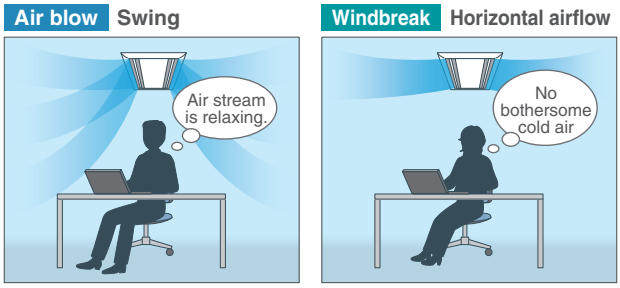
In-take port is not a grille but made in stylish design. It can be installed visually beautifully in harmony with ceiling and illuminations.



Vane Control

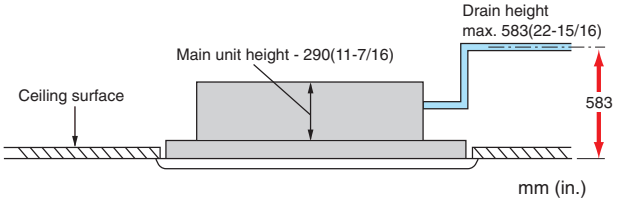
Vane angle can be selected from 7 types including "Horizontal fix" and "Swing" to set a airblow type according to your taste.

*Airflow direction cannot be changed individually.



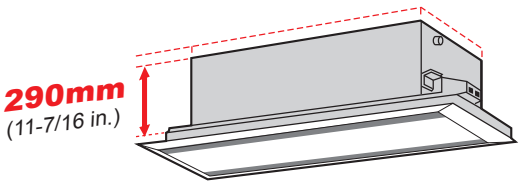
Drain pump is equipped as standard feature

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



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

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



Specifications

Model				PLFY-P20VLMD-E	PLFY-P25VLMD-E	PLFY-P32VLMD-E	PLFY-P40VLMD-E
Power source				1-phase 220-240V 50Hz/1-phase 220-230V 60Hz			
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5
		*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity		*1	kW	2.5	3.2	4.0	5.0
		*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling		kW	0.072/0.075	0.072/0.075	0.072/0.075	0.081/0.085
	Heating		kW	0.065/0.069	0.065/0.069	0.065/0.069	0.074/0.079
Current	Cooling		A	0.36/0.37	0.36/0.37	0.36/0.37	0.40/0.42
	Heating		A	0.30/0.32	0.30/0.32	0.30/0.32	0.34/0.37
External finish (Munsell No.)	Unit			Galvanized steel plate			
	Panel			Pure white (6.4Y 8.9/0.4)			
Dimension H x W x D	Unit		mm (in.)	290 x 776 x 634 (11-7/16 x 30-9/16 x 25)			
	Panel		mm (in.)	20 x 1080 x 710 (13/16 x 42-9/16 x 28)			
Net weight	Unit		kg (lbs.)	23 (51)		24 (53)	
	Panel		kg (lbs.)	6.5 (15)			
Heat exchanger				Cross fin			
Fan	Type x Quantity			Turbo fan x 1			
	Airflow rate (Lo-Mid-Hi)	*2	m^3/min	6.5-8.0-9.5			7.0-8.5-10.5
			L/s	108-133-158			117-142-175
			cfm	230-283-335			247-300-371
	External static pressure		Pa	0			
Motor	Type			1-phase induction motor			
	Output		kW	0.015 (at 240V)			
Air filter				PP honeycomb fabric (long life type)			
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)			
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)			
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)			
Sound pressure level (Lo-Mid-Hi)	220V, 240V	*2 *3	dB (A)	27-30-33			29-33-36
	230V	*2 *3	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
Heating capacity		*1	kW	6.3	8.0	10.0	12.5	16.0
		*1	BTU/h	21,500	27,300	34,100	42,700	54,600
Power consumption	Cooling		kW	0.082/0.086	0.101/0.105	0.147/0.156	0.157/0.186	0.28/0.28
	Heating		kW	0.075/0.080	0.094/0.099	0.140/0.150	0.150/0.180	0.27/0.27
Current	Cooling		A	0.41/0.43	0.49/0.51	0.72/0.74	0.75/0.88	1.35/1.35
	Heating		A	0.35/0.38	0.43/0.46	0.66/0.69	0.69/0.83	1.33/1.33
External finish (Munsell No.)	Unit			Galvanized steel plate				
	Panel			Pure white (6.4Y 8.9/0.4)				
Dimension H x W x D	Unit		mm (in.)	290 x 946 x 634 (11-7/16 x 37-1/4 x 25)		290 x 1446 x 634 (11-7/16 x 56-15/16 x 25)		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	Unit		kg (lbs.)	27 (60)	28 (62)	44 (98)	47 (104)	56 (124)
	Panel		kg (lbs.)	7.5 (17)		12.5 (28)		13.0 (29)
Heat exchanger				Cross fin				
Fan	Type x Quantity			Turbo fan x 1		Turbo fan x 2		Sirocco fan x 4
	Airflow rate (P50~P100:Lo-Mid-Hi) (P125:Lo-Mid2-Mid1-Hi)	*2	m^3/min	9.0-11.0-12.5	11.0-13.0-15.5	15.5-18.5-22.0	17.5-21.0-25.0	24.0-27.0-30.0-33.0
			L/s	150-183-208	167-217-258	258-308-367	292-350-417	400-450-500-550
			cfm	318-388-441	353-459-547	547-653-777	618-742-883	848-953-1,059-1,165
	External static pressure		Pa	0				
Motor	Type			1-phase induction motor				
	Output		kW	0.020 (at 240V)		0.020 (at 240V)	0.030 (at 240V)	0.078 x 2 (at 240V)
Air filter				PP honeycomb fabric (long life type)				Synthetic fiber unwoven cloth filter (long life)
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)			
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)			
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)				
Sound pressure level (Lo-Mid-Hi)	220V, 240V	*2 *3	dB (A)	31-34-37	32-37-39	33-36-39	36-39-42	40-42-44-46 (Lo-Mid2-Mid1-Hi)
	230V	*2 *3	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

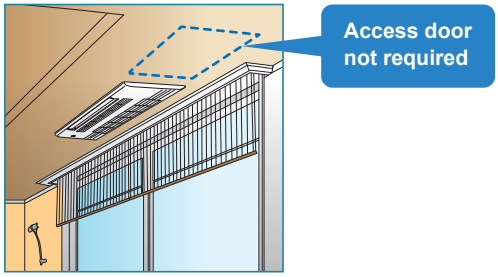
*2 Airflow rate/Sound pressure level are in (low-middle-high) or (low-middle2-middle1-high).

*3 It is measured in anechoic room.

PMFY-P VBM-E

Ceiling Mounted

Installing a the 1-way airflow type unit in a room creates a more spacious feel that enhances room comfort. This overhead format is also an excellent solution when lighting equipment is installed at the center of the room and fixtures such as book shelves are mounted on wall surfaces.



Compact size for smooth installation and maintenance

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

Drain pump

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

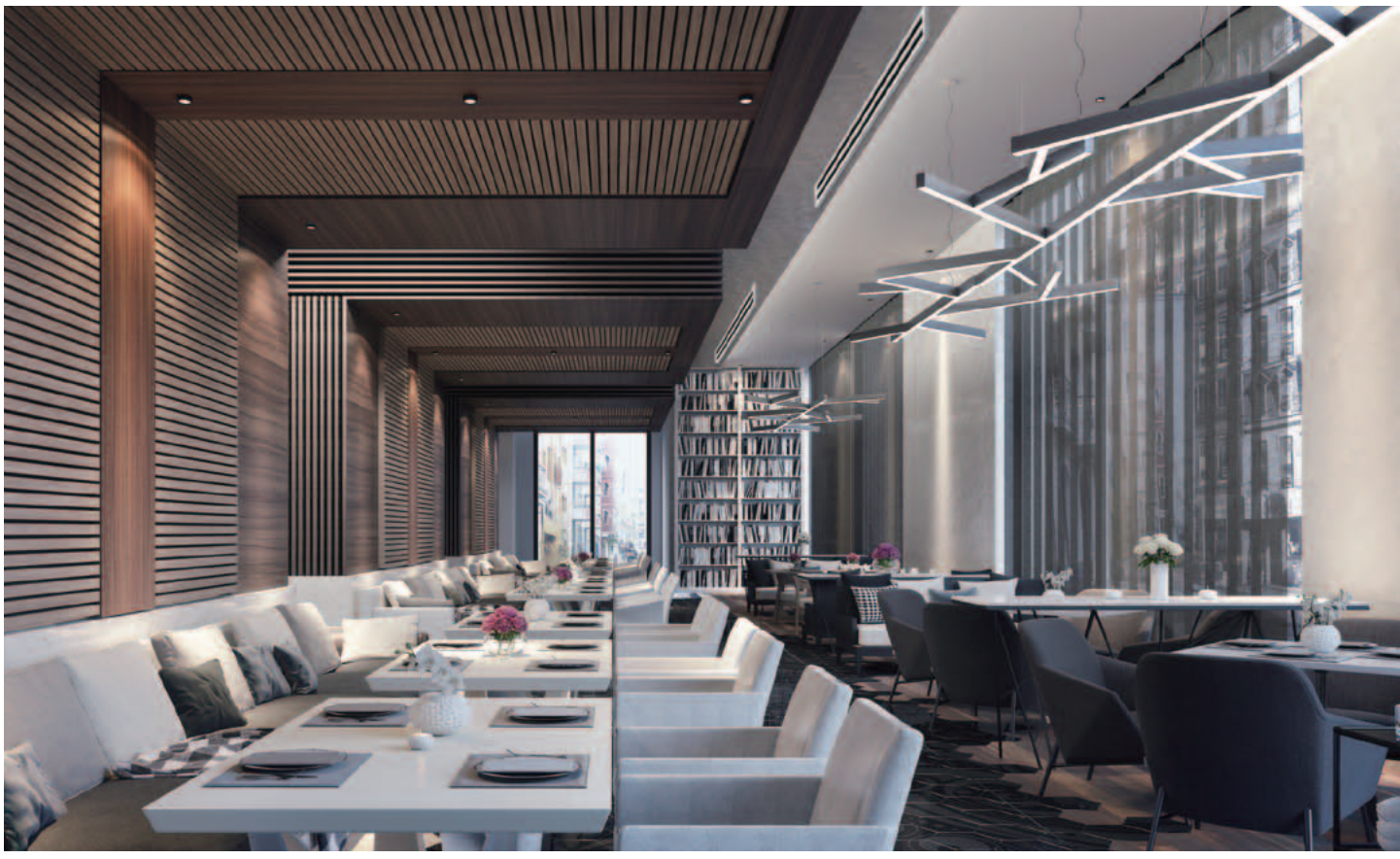
Specifications

Model				PMFY-P20VBM-E	PMFY-P25VBM-E	PMFY-P32VBM-E	PMFY-P40VBM-E
Power source				1-phase 220-240V 50Hz/1-phase 220V 60Hz			
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5
		*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity		*1	kW	2.5	3.2	4.0	5.0
		*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling		kW	0.042	0.044		0.054
	Heating		kW	0.042	0.044		0.054
Current	Cooling		A	0.20	0.21		0.26
	Heating		A	0.20	0.21		0.26
External finish (Munsell No.)				White (0.98Y 8.99/0.63)			
Dimension H 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)			
Fan	Type x Quantity			Line flow fan x 1			
	Airflow rate (Lo-Mid2-Mid1-Hi)	*2	m^3/min	6.5-7.2-8.0-8.7	7.3-8.0-8.6-9.3		7.7-8.7-9.7-10.7
			L/s	108-120-133-145	122-133-143-155		128-145-162-178
			cfm	230-254-283-307	258-283-304-328		272-307-343-378
	External static pressure		Pa	0			
Motor	Type			1-phase induction motor			
	Output		kW	0.028			
Air filter				PP Honeycomb fabric			
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)			
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)			
Field drain pipe diameter			mm (in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi)		*2 *3	dB (A)	27-30-33-35	32-34-36-37		33-35-37-39

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).
*3 It is measured in anechoic room.

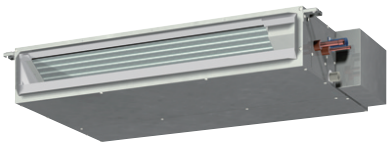
Ceiling Concealed



Ceiling Concealed Type

Low static pressure type

PEFY-P VMS1(L)-E



- The thin design with a body height of only 200 mm [7-7/8 in.] (all horsepower models) enables installation in a narrow space in the ceiling
- Low-noise operation
- Compact body with an external static pressure of up to 50 Pa

Static pressure up to 50 Pa	Low noise	Height 200 mm	Drain pump (standard) up to 550 mm [21-11/16 in.]	Air flow rate 3 stages
			VMS1 model only	

Medium static pressure type

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

- Thin design of a body height of 250 mm [9-7/8 in.] (all horsepower models)
- The rear or bottom air inlet can be selected
- The drain pump is optionally selectable

Static pressure up to 150 Pa	Height 250 mm	Rear or bottom inlet	Drain pump (standard) up to 700 mm [27-9/16 in.]	Air flow rate 3 stages
* The maximum value varies depending on the model.			VMA model only	

High static pressure type

PEFY-P VMH(S)-E

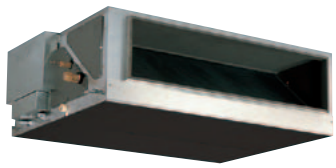
- External static pressure of up to 250 Pa*1, ample external static pressure expands of duct design possibilities
- Applicable to drain pumps (option) from 550 mm [21-11/16 in.] to up to 700 mm [27-9/16 in.]

Static pressure up to 250 Pa	Drain pump option up to 700 mm [27-9/16 in.]	Air flow rate 3 stages*2

*1 The maximum value varies depending on the model.
*2 Except VMH Models.

Fresh air intake type

PEFY-P VMH-E-F



- Fresh air intake type indoor unit
- External static pressure of up to 240 Pa* expands duct design possibilities

* P140 model 240 V

Static pressure up to 240 Pa	Drain pump option up to 550 mm [21-11/16 in.]	Fresh air intake type	Air flow rate 1 stage

* The maximum value varies depending on the model.

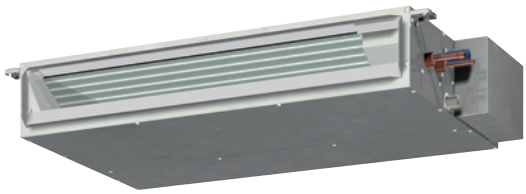
Low noise type

PEFY-P VMR-E-L/R

- Low noise operation. Suitable for spaces where low noise is required such as hotels
- The rear or bottom air inlet can be selected
- The piping connection position can be selected according to the room layout

Static pressure 5 Pa	Low noise	Rear or bottom inlet	Right/Left Piping connection	Air flow rate 3 stages

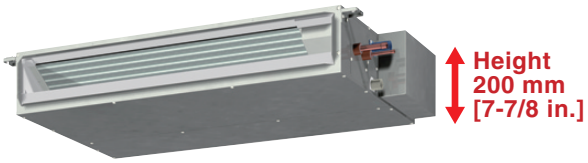
PEFY-P VMS1(L)-E



Compact design with a height of only 200 mm [7-7/8 in.] (all models) and a width of 790 mm [31-1/8 in.] (P15 to P32), 990 mm [39 in.] (P40 and P50), or 1190 mm [46-7/8 in.] (P63)

Thin body design with a height of only 200 mm [7-7/8 in.] (all models) enables installation in a narrow space in the ceiling.

PEFY-P VMX(L)-E(1)		P15	P20	P25	P32	P40	P50	P63
Height	mm [in.]	200 [7-7/8]						
Width	mm [in.]	790 [31-1/8]				990 [39]		1190 [46-7/8]



Low-noise design

The centrifugal fan and coil are designed to reduce noise, making these models suitable for spaces where quietness is required.

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

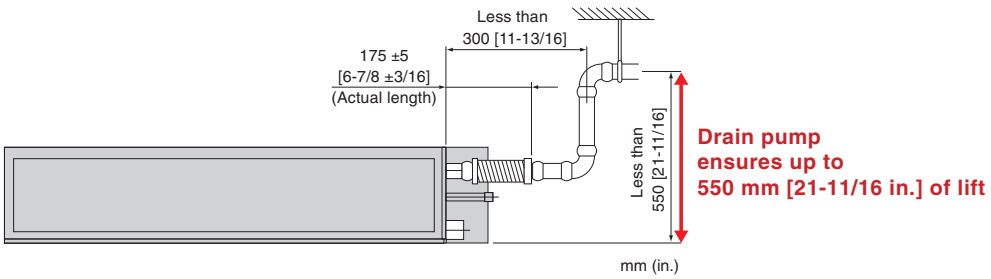
Sound Pressure Level	Capacity		P15	P20	P25	P32	P40	P50	P63
	Fan Speed	High	28	29	30	32	33	35	36
		Mid	24	25	26	27	30	32	33
		Low	22	23	24	24	28	30	30

Selectable external static pressure

The unit may have a compact body, but its external static pressure can be up to 50 Pa.
The external static pressure can be selected from 5, 15, 35 and 50 Pa.
(The factory default is 15 Pa.)

Models with and without drain pump are available

PEFY-P VMS1 is provided with a drain pump as standard and does not require a drain trap. PEFY-P VMS1L which is model without drain pump is recommended for places where low-noise operation is required (i.e. hotels)



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
Power source				1-phase 220-240V 50Hz/1-phase 220-240V 60Hz						
Cooling capacity		*1	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
		*1	BTU/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity		*1	kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
		*1	BTU/h	6,500	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	*3	Cooling	kW	0.05 [0.03]	0.05 [0.03]	0.06 [0.04]	0.07 [0.05]	0.07 [0.05]	0.09 [0.07]	0.09 [0.07]
		Heating	kW	0.03 [0.03]	0.03 [0.03]	0.04 [0.04]	0.05 [0.05]	0.05 [0.05]	0.07 [0.07]	0.07 [0.07]
Current	*3	Cooling	A	0.42 [0.31]	0.47 [0.36]	0.50 [0.39]	0.50 [0.39]	0.56 [0.45]	0.67 [0.56]	0.72 [0.61]
		Heating	A	0.31 [0.31]	0.36 [0.36]	0.39 [0.39]	0.39 [0.39]	0.45 [0.45]	0.56 [0.56]	0.61 [0.61]
External finish				Galvanized						
Dimension H x W x D			mm	200 x 790 x 700				200 x 990 x 700		200 x 1,190 x 700
			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)]		28 (62) [27 (60)]
Heat exchanger				Cross fin (Aluminium fin and copper tube)						
Fan	Type x Quantity			Sirocco fan x 2				Sirocco fan x 3		Sirocco fan x 4
	Airflow rate (Lo-Mid-Hi)		m^3/min	5-6-7	5.5-6.5-8	5.5-7-9	6-8-10	8-9.5-11	9.5-11-13	12-14-16.5
			L/s	83-100-117	91-108-133	91-117-150	100-133-167	133-158-183	158-183-217	200-233-275
			cfm	176-212-247	194-229-282	194-247-317	212-282-353	282-335-388	335-388-459	424-494-583
	External static pressure		Pa	5-15-35-50						
Motor	Type			DC motor						
	Output		kW	0.096						
Air filter				PP Honeycomb fabric (washable)						
Refrigerant pipe diameter	Gas		mm (in.)	ø12.7 (ø1/2) Brazed						ø15.88 (ø5/8) Brazed
	Liquid		mm (in.)	ø6.35 (ø1/4) Brazed						ø9.52 (ø3/8) Brazed
Field drain pipe diameter			mm (in.)	O.D. 32 (1-1/4)						
Sound pressure level (Lo-Mid-Hi) (measured in anechoic room)			dB (A)	22-24-28	23-25-29	24-26-30	24-27-32	28-30-33	30-32-35	30-33-36

Notes:

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

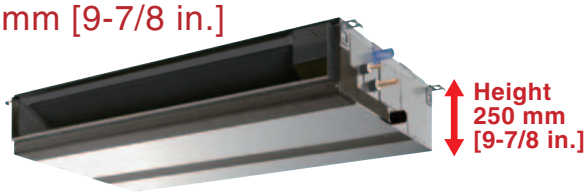
*2 The external static pressure is set to 15 Pa at factory shipment.

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

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

Compact design with a height of only 250 mm [9-7/8 in.]

A thin body design with a height of only 250 mm [9-7/8 in.] (all models) enables installation in a 280 mm [11-in.] high ceiling space.



Drain pump is optionally selectable

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

PEFY-P VMA(3)-E built-in drain pump

PEFY-P VMAL-E No drain pump

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

Selectable external static pressure

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

External static pressure setting

Series	20	25	32	40	50	63	71	80	100	125	140*
PEFY-P VMA(3)(L)-E	35/50/70/100/150 Pa										

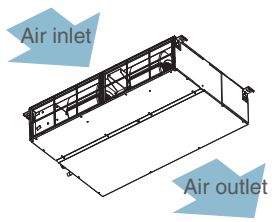
* VMA3 Series do not contain P140.

Selectable air inlet pattern

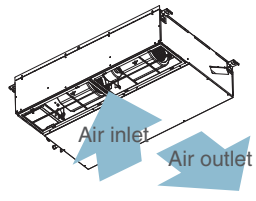
The air inlet position can only be changed between rear and bottom by switching the positions of the closing plate and air filter. (The factory default is bottom inlet.)

Two air inlet options can be chosen, rear or bottom:

1. Rear inlet



2. Bottom inlet



* Unit with a bottom inlet make more noise than those with a rear inlet. It is recommended that the rear inlet be selected when installing the units in rooms that should be quiet, such as bedrooms.

Specifications

Model				PEFY-P20VMA(L)-E	PEFY-P25VMA(L)-E	PEFY-P32VMA(L)-E
Power source			*1	1-phase 220-230-240V 50/60Hz		
Cooling capacity (Nominal)			*1 kW	2.2	2.8	3.6
			*2 BTU/h	7,500	9,600	12,300
Heating capacity (Nominal)			*2 kW	2.5	3.2	4.0
			*3 BTU/h	8,500	10,900	13,600
Power consumption		Cooling*3	kW	0.06 [0.04]	0.06 [0.04]	0.07 [0.05]
		Heating*3	kW	0.04	0.04	0.05
Current		Cooling*3	A	0.53 [0.42]	0.53 [0.42]	0.55 [0.44]
		Heating	A	0.42	0.42	0.44
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
			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
Net weight			kg (lbs.)	23 (51) [22 (49)]	23 (51) [22 (49)]	23 (51) [22 (49)]
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity			Sirocco fan x 1		
	Airflow rate (Lo-Mid-Hi)		m^3/min	6.0-7.5-8.5	6.0-7.5-8.5	7.5-9.0-10.5
			L/s	100-125-142	100-125-142	125-150-175
			cfm	212-265-300	212-265-300	265-318-371
	External static pressure	*4	Pa	<35>-50-<70>-<100>-<150>	<35>-50-<70>-<100>-<150>	<35>-50-<70>-<100>-<150>
Motor	Type			DC motor		
	Output		kW	0.085	0.085	0.085
Air filter				PP honeycomb fabric.		
Refrigerant pipe diameter		Liquid (R410A)	mm (in.)	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed
		Gas (R410A)	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)						
(Lo-Mid-Hi)		*3 *5	dB (A)	26-28-29	26-28-29	28-30-34
		*3 *6	dB (A)	23-25-26	23-25-26	23-26-29

Model				PEFY-P40VMA(L)-E	PEFY-P50VMA(L)-E	PEFY-P63VMA(L)-E
Power source			*1	1-phase 220-230-240V 50/60Hz		
Cooling capacity (Nominal)			*1 kW	4.5	5.6	7.1
			*2 BTU/h	15,400	19,100	24,200
Heating capacity (Nominal)			*2 kW	5.0	6.3	8.0
			*3 BTU/h	17,100	21,500	27,300
Power consumption		Cooling*3	kW	0.09 [0.07]	0.11 [0.09]	0.12 [0.10]
		Heating*3	kW	0.07	0.09	0.10
Current		Cooling*3	A	0.64 [0.53]	0.74 [0.63]	1.01 [0.90]
		Heating	A	0.53	0.63	0.90
External finish				Galvanized steel plate		
Dimension H x W x D			mm	250 x 900 x 732	250 x 900 x 732	250 x 1,100 x 732
			in.	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.)	26 (58) [25 (56)]	26 (58) [25 (56)]	32 (71) [31 (69)]
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity			Sirocco fan x 1		Sirocco fan x 2
	Airflow rate (Lo-Mid-Hi)		m^3/min	10.0-12.0-14.0	12.0-14.5-17.0	13.5-16.0-19.0
			L/s	167-200-233	200-242-283	225-267-317
			cfm	353-424-494	424-512-600	477-565-671
	External static pressure	*4	Pa	<35>-50-<70>-<100>-<150>	<35>-50-<70>-<100>-<150>	<35>-50-<70>-<100>-<150>
Motor	Type			DC motor		
	Output		kW	0.085	0.085	0.121
Air filter				PP honeycomb fabric.		
Refrigerant pipe diameter		Liquid (R410A)	mm (in.)	6.35 (1/4) Brazed	6.35 (1/4) Brazed	9.52 (3/8) Brazed
		Gas (R410A)	mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)						
(Lo-Mid-Hi)		*3 *5	dB (A)	28-30-34	28-32-35	29-32-36
		*3 *6	dB (A)	23-27-30	25-29-32	25-29-33

Notes:

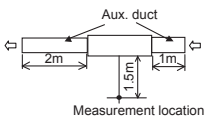
*1 Nominal cooling conditions
Indoor: 27°C(81°F)DB/19°C(66°F)WB, Outdoor: 35°C(95°F)DB
Pipe length: 7.5m(24-9/16ft.), Level difference: 0m(0ft.)

*2 Nominal heating conditions
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.)

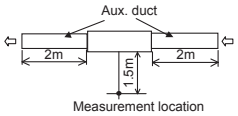
*3 The values are measured at the rated external static pressure.

*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.



* [ ] is in case of PEFY-P VMAL-E

* When PEFY-P20VMA2-E is connected, the available range of outdoor temperature is between 10°C and 49°C.

Specifications

Model				PEFY-P71VMA(L)-E	PEFY-P80VMA(L)-E	PEFY-P100VMA(L)-E
Power source			*1	1-phase 220-230-240V 50/60Hz		
Cooling capacity (Nominal)			*1 kW	8.0	9.0	11.2
			*2 BTU/h	27,300	30,700	38,200
Heating capacity (Nominal)			*2 kW	9.0	10.0	12.5
			*3 BTU/h	30,700	34,100	42,700
Power consumption		Cooling*3	kW	0.14 [0.12]	0.14 [0.12]	0.24 [0.22]
		Heating*3	kW	0.12	0.12	0.22
Current		Cooling*3	A	1.15 [1.04]	1.15 [1.04]	1.47 [1.36]
		Heating	A	1.04	1.04	1.36
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
			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
Net weight			kg (lbs.)	32 (71) [31 (69)]	32 (71) [31 (69)]	42 (93) [41 (91)]
Heat exchanger				Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity			Sirocco fan x 2		
	Airflow rate (Lo-Mid-Hi)		m^3/min	14.5-18.0-21.0	14.5-18.0-21.0	23.0-28.0-33.0
			L/s	242-300-350	242-300-350	383-467-550
			cfm	512-636-742	512-636-742	812-989-1,165
	External static pressure		*4 Pa	<35>-50-<70>-<100>-<150>	<35>-50-<70>-<100>-<150>	<35>-50-<70>-<100>-<150>
Motor	Type			DC motor		
	Output		kW	0.121	0.121	0.244
Air filter				PP honeycomb fabric.		
Refrigerant pipe diameter		Liquid (R410A)	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
		Gas (R410A)	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed	15.88 (5/8) Brazed
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)						
(Lo-Mid-Hi)			*3 *5 dB (A)	30-34-38	30-34-38	32-37-41
			*3 *6 dB (A)	26-29-34	26-29-34	28-33-37

Model				PEFY-P125VMA(L)-E	PEFY-P140VMA(L)-E
Power source			*1	1-phase 220-230-240V 50/60Hz	
Cooling capacity (Nominal)			*1 kW	14.0	16.0
			*2 BTU/h	47,800	54,600
Heating capacity (Nominal)			*2 kW	16.0	18.0
			*3 BTU/h	54,600	61,400
Power consumption		Cooling*3	kW	0.34 [0.32]	0.36 [0.34]
		Heating*3	kW	0.32	0.34
Current		Cooling*3	A	2.05 [1.94]	2.21 [2.10]
		Heating	A	1.94	2.10
External finish				Galvanized steel plate	
Dimension H x W x D			mm	250 x 1,400 x 732	250 x 1,600 x 732
			in.	9-7/8 x 55-1/8 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight			kg (lbs.)	42 (93) [41 (91)]	46 (102) [45 (100)]
Heat exchanger				Cross fin (Aluminum fin and copper tube)	
Fan	Type x Quantity			Sirocco fan x 2	
	Airflow rate (Lo-Mid-Hi)		m^3/min	28.0-34.0-40.0	29.5-35.5-42.0
			L/s	467-567-667	492-592-700
			cfm	989-1,201-1,412	1,042-1,254-1,483
	External static pressure		*4 Pa	<35>-50-<70>-<100>-<150>	<35>-50-<70>-<100>-<150>
Motor	Type			DC motor	
	Output		kW	0.244	0.244
Air filter				PP honeycomb fabric.	
Refrigerant pipe diameter		Liquid (R410A)	mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed
		Gas (R410A)	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)					
(Lo-Mid-Hi)			*3 *5 dB (A)	35-40-44	36-41-45
			*3 *6 dB (A)	32-36-40	33-37-42

Notes:

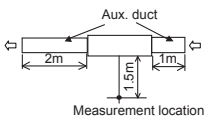
*1 Nominal cooling conditions
Indoor: 27°C(81°F)DB/19°C(66°F)WB, Outdoor: 35°C(95°F)DB
Pipe length: 7.5m(24-9/16ft.), Level difference: 0m(0ft.)

*2 Nominal heating conditions
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.)

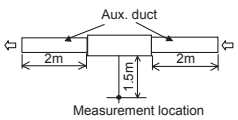
*3 The values are measured at the rated external static pressure.

*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.



* [ ] is in case of PEFY-P VMAL-E

* When PEFY-P20VMA2-E is connected, the available range of outdoor temperature is between 10°C and 49°C.

Specifications

Model				PEFY-P20VMA3-E	PEFY-P25VMA3-E	PEFY-P32VMA3-E	PEFY-P40VMA3-E	PEFY-P50VMA3-E
Power source				1-phase 220-230-240 V 50/60 Hz				
Cooling capacity (Nominal)		*1	kW	2.2	2.8	3.6	4.5	5.6
		*1	BTU/h	7,500	9,600	12,300	15,400	19,100
	*2 Power input		kW	0.11	0.12	0.12	0.14	0.36
	*2 Current input		A	0.9	1.01	1.01	1.15	2.21
Heating capacity (Nominal)		*3	kW	2.5	3.2	4	5	6.3
		*3	BTU/h	8,500	10,900	13,600	17,100	21,500
	*2 Power input		kW	0.09	0.1	0.1	0.12	0.34
	*2 Current input		A	0.79	0.9	0.9	1.04	2.1
External finish				Galvanized steel plate				
External dimension H x W x D			mm	250 x 900 x 732	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,600 x 732
			in.	9-7/8 x 35-7/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight			kg (lbs.)	27(60)	32 (71)	32 (71)	32 (71)	46 (102)
Heat exchanger				Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity			Sirocco fan x 1	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	*4 External static press.		Pa	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>
			mmH_2O	<3.6>-5.1-<7.1>-<10.2>-<12.7>	<3.6>-5.1-<7.1>-<10.2>-<12.7>	<3.6>-5.1-<7.1>-<10.2>-<12.7>	<3.6>-5.1-<7.1>-<10.2>-<12.7>	<3.6>-5.1-<7.1>-<10.2>-<12.7>
	Motor Type			DC motor				
	Motor output		kW	0.085	0.121	0.121	0.121	0.244
	Driving mechanism			Direct-driven by motor				
	Air flow rate (Low-Mid-High)		m^3/min	12.0-14.5-17.0	13.5-16.0-19.0	13.5-16.0-19.0	14.5-18.0-21.0	29.5-35.5-42.0
			L/s	200-242-283	225-267-317	225-267-317	242-300-350	492-592-700
			cfm	424-512-600	477-565-671	477-565-671	512-636-742	1,042-1,254-1,483
Air filter				PP honeycomb fabric.				
Refrigerant piping diameter	Liquid		mm (in.)	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed	6.35 (1/4) Brazed
	Gas		mm (in.)	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed	12.7 (1/2) Brazed
Field drain pipe size			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)								
(Lo-Mid-Hi)		*2 *5	dB (A)	26-34-35	25-29-33	25-29-33	26-29-34	33-37-42

Model				PEFY-P63VMA3-E	PEFY-P71VMA3-E	PEFY-P80VMA3-E	PEFY-P100VMA3-E	PEFY-P125VMA3-E
Power source				1-phase 220-230-240 V 50/60 Hz				
Cooling capacity (Nominal)		*1	kW	7.1	8	9	11.2	14
		*1	BTU/h	24,200	27,300	30,700	38,200	47,800
	*2 Power input		kW	0.36	0.36	0.36	0.36	0.36
	*2 Current input		A	2.21	2.21	2.21	2.21	2.21
Heating capacity (Nominal)		*3	kW	8	9	10	12.5	16
		*3	BTU/h	27,300	30,700	34,100	42,700	54,600
	*2 Power input		kW	0.34	0.34	0.34	0.34	0.34
	*2 Current input		A	2.1	2.1	2.1	2.1	2.1
External finish				Galvanized steel plate				
External dimension H x W x D			mm	250 x 1,600 x 732	250 x 1,600 x 732	250 x 1,600 x 732	250 x 1,600 x 732	250 x 1,600 x 732
			in.	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8	9-7/8 x 63 x 28-7/8
Net weight			kg (lbs.)	46 (102)	46 (102)	46 (102)	46 (102)	46 (102)
Heat exchanger				Cross fin (Aluminum fin and copper tube)				
Fan	Type x Quantity			Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	*4 External static press.		Pa	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>	<35>-50-<70>-<100>-<125>
			mmH_2O	<3.6>-5.1-<7.1>-<10.2>-<12.7>	<3.6>-5.1-<7.1>-<10.2>-<12.7>	<3.6>-5.1-<7.1>-<10.2>-<12.7>	<3.6>-5.1-<7.1>-<10.2>-<12.7>	<3.6>-5.1-<7.1>-<10.2>-<12.7>
	Motor Type			DC motor				
	Motor output		kW	0.244	0.244	0.244	0.244	0.244
	Driving mechanism			Direct-driven by motor				
	Air flow rate (Low-Mid-High)		m^3/min	29.5-35.5-42.0	29.5-35.5-42.0	29.5-35.5-42.0	29.5-35.5-42.0	29.5-35.5-42.0
			L/s	492-592-700	492-592-700	492-592-700	492-592-700	492-592-700
			cfm	1,042-1,254-1,483	1,042-1,254-1,483	1,042-1,254-1,483	1,042-1,254-1,483	1,042-1,254-1,483
Air filter				PP honeycomb fabric.				
Refrigerant piping diameter	Liquid		mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed
	Gas		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
Field drain pipe size			mm (in.)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)	O.D.32 (1-1/4)
Sound pressure level (measured in anechoic room)								
(Lo-Mid-Hi)		*2 *5	dB (A)	33-37-42	33-37-42	33-37-42	33-37-42	33-37-42

Notes:

*1,*3 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor : 27°CD.B./19°CW.B. (81°FD.B. / 66°FW.B.) Outdoor : 35°CD.B. (95°FD.B.)
Heating : Indoor : 20°CD.B. (68°FD.B.) Outdoor : 7°CD.B. / 6°CW.B. (45°FD.B. / 43°FW.B.)
Pipe length : 7.5m (24-9/16ft) Level difference : 0m (0ft)

*2 The values are measured at the factory setting of external static pressure.

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

*5 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.

PEFY-P VMH(S)-E

PEFY-P VMH-E

PEFY-P VMHS-E (P40-P140)

PEFY-P VMHS-E (P200/P250)

Sufficient external static pressure ensuring flexible duct design

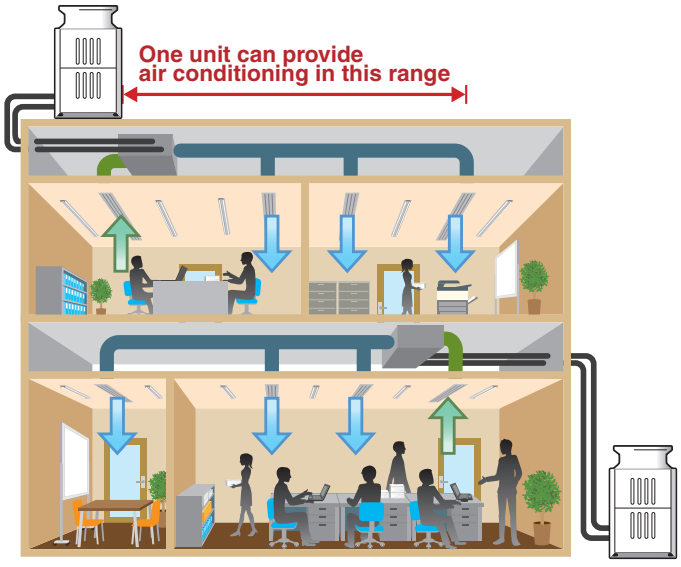
Sufficient external static pressure enables designs with long ducts and greatly expands design possibilities. Ducted air-conditioning that maches an interior design can be realized.

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

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

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

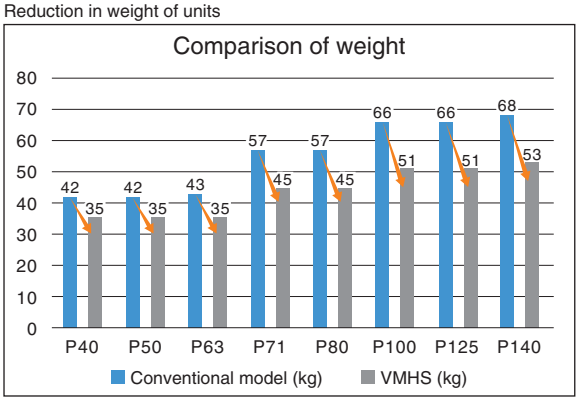
PEFY-P VMH-E		P200	P250
External static pressure (Pa)	380 V	<110> – 220	
	400/415 V	<130> – 260	



Use of DC motors (VMHS Models)

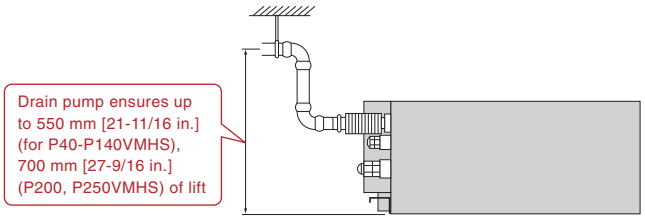
These new P40 to P140VMHS Models use DC motors. This reduces the power consumption and weight of the units.

Reduction in weight of units



Drain pump (option) ensures up to 550 mm [21-11/16 in.] for P40-P140VMHS, P200/P250VMH model / 700 mm [27-9/16 in.] for P200/P250VMHS models

The introduction of an upper drain pump allows the drain connection to be raised as high as 550 mm [21-11/16 in.] for P40-P140VMHS, P200/P250VMH models/700 mm [27-9/16 in.] for P200, 500VMHS models, allowing more freedom in piping layout design and reducing horizontal piping requirements.



Specifications

Model				PEFY-P40VMHS-E	PEFY-P50VMHS-E	PEFY-P63VMHS-E	PEFY-P71VMHS-E	PEFY-P80VMHS-E	PEFY-P100VMHS-E	PEFY-P125VMHS-E	PEFY-P140VMHS-E
Power source				1-phase 220-230-240 V 50/60 Hz							
Cooling capacity		*1	kW	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
		*1	BTU/h	15,400	19,100	24,200	27,300	30,700	38,200	47,800	54,600
	*2	Power input	kW	0.055		0.090	0.075	0.090	0.160		0.190
	*2	Current input (220-230-240 V)	A	0.41-0.39-0.38		0.64-0.62-0.59	0.54-0.52-0.50	0.63-0.61-0.58	1.05-1.01-0.96		1.24-1.19-1.14
Heating capacity		*3	kW	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
		*3	BTU/h	17,100	21,500	27,300	30,700	34,100	42,700	54,600	61,400
	*2	Power input	kW	0.055		0.090	0.075	0.090	0.160		0.190
	*2	Current input (220-230-240 V)	A	0.41-0.39-0.38		0.64-0.62-0.59	0.54-0.52-0.50	0.63-0.61-0.58	1.05-1.01-0.96		1.24-1.19-1.14
External finish				Galvanized steel plate							
External dimension H x W x D			mm	380 x 745 x 900			380 x 1,030 x 900		380 x 1,195 x 900		
			in.	15 x 29-3/8 x 35-7/16			15 x 40-9/16 x 35-7/16		15 x 47-1/16 x 35-7/16		
Net weight			kg (lbs.)	35 (78)			45 (100)		51 (113)		53 (117)
Heat exchanger				Cross fin (Aluminum fin and copper tube)							
Fan	Type x Quantity			Sirocco fan x 1			Sirocco fan x 2				
	*4 External static press.		Pa	50-<100>-<150>-<200>							
			mmH_2O	5.1-<10.2>-<15.3>-<20.4>							
	Motor Type			DC motor							
	Motor output		kW	0.121			0.244		0.375		
	Air flow rate			(Low-Mid-High)							
			m^3/min	10.0-12.0-14.0		13.5-16.0-19.0	15.5-18.0-22.0	18.0-21.5-25.0	26.5-32.0-38.0		28.0-34.0-40.0
			L/s	167-200-233		225-267-317	258-300-367	300-358-417	442-533-633		467-567-667
			cfm	353-424-494		477-565-671	547-636-777	636-759-883	936-1,130-1,342		989-1,201-1,412
Sound pressure level (measured in anechoic room)				(Low-Mid-High)							
		*2	dB <A>	20-23-27		24-27-32	24-26-30	25-27-30	27-31-34		27-32-36
Air filter				Option:Synthetic fiber unwoven cloth filter (long life filter) and filter box are recommended.							
Refrigerant piping diameter	Gas (R410A)		mm (in.)	12.7 (1/2) Brazed		15.88 (5/8) Brazed					
	Liquid (R410A)		mm (in.)	6.35 (1/4) Brazed		9.52 (3/8) Brazed					
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)							

Model				PEFY-P200VMH-E	PEFY-P250VMH-E	PEFY-P200VMHS-E	PEFY-P250VMHS-E
Power source				3-phase 380-415V 50Hz/3N ~ 380-415V 60Hz		1-phase 220-240V 50Hz/1-phase 220-240V 60Hz	
Cooling capacity		*5	kW	22.4	28.0	22.4	28.0
		*5	BTU/h	76,400	95,500	76,400	95,500
Heating capacity		*5	kW	25.0	31.5	25.0	31.5
		*5	BTU/h	85,300	107,500	85,300	107,500
Power consumption	Cooling		kW	0.99/1.14	1.23/1.41	0.63 *2	0.82 *2
	Heating		kW	0.99/1.14	1.23/1.41	0.63 *2	0.82 *2
Current	Cooling	380-415V	A	1.62/1.86	2.00/2.30	–	
		220-230-240V	A	–		3.47-3.32-3.18 *2	4.72-4.43-4.14 *2
	Heating	380-415V	A	1.62/1.86	2.00/2.30	–	
		220-230-240V	A	–		3.47-3.32-3.18 *2	4.72-4.43-4.14 *2
External finish				Galvanized		Galvanized steel plate	
Dimension H x W x D			mm	470 x 1,250 x 1,120			
			in.	18-9/16 x 49-1/4 x 44-1/8			
Net weight			kg (lbs.)	100 (221)		97 (214)	100 (221)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)			
Fan	Type x Quantity			Sirocco fan x 2			
	Airflow rate		m^3/min	58.0	72.0	–	
			L/s	967	1200	–	
			cfm	2048	2543	–	
		Lo-Mid-Hi	m^3/min	–		50.0-61.0-72.0	58.0-71.0-84.0
			L/s	–		833-1017-1200	967-1183-1400
			cfm	–		1766-2154-2542	2048-2507-2966
	External static pressure	380V	Pa	110 · 220 *6		–	
		400, 415V	Pa	130 · 260 *6		–	
			Pa	–		<50>-<100>-150-<200>-<250> *9	
			mmH_2O	–		<5.1>-<10.2>-15.3-<20.4>-<25.5> *9	
Motor	Type			3-phase induction motor		DC motor	
	Output		kW	0.76 *7	1.08 *7	0.87	
Air filter (option)				Synthethic fiber unwoven cloth filter (long life)		Synthethic fiber unwoven cloth filter (long life filter) and filter box are recommended.	
Refrigerant pipe diameter	Gas (Brazing)		mm (in.)	ø19.05 (ø3/4)	ø22.2 (ø7/8)	ø19.05 (ø3/4)	ø22.2 (ø7/8)
	Liquid (Brazing)		mm (in.)	ø9.52 (ø3/8)			
Field drain pipe diameter			mm (in.)	O.D. 32 (1-1/4)			
Sound pressure level	380V		dB (A)	42 (110Pa)/45 (220Pa) *8	50 (110Pa)/52 (220Pa) *8	–	
	400, 415V		dB (A)	44 (130Pa)/47 (260Pa) *8	52 (130Pa)/54 (260Pa) *8	–	
	Lo-Mid-Hi		dB (A)	–		36-39-43 *10	39-42-46 *10

Notes:

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

*2 The values are measured at the factory setting of external static pressure.

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

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

*5 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

*6 The external static pressure is set to 220Pa (at 380V) /260Pa (at 400, 415V) at factory shipment.

*7 The value are that at 415V.

*8 It is measured in anechoic room.

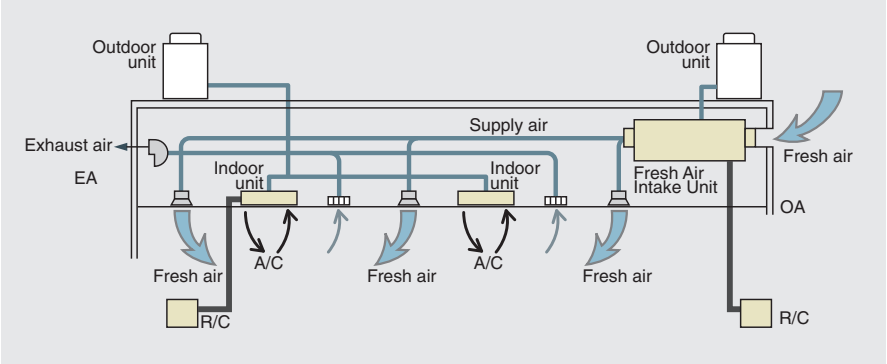
*9 The rated external static pressure is shown without < >.
The factory setting is the rated value.

*10 It is measured at the rated external static pressure in anechoic room.

PEFY-P VMH-E-F

Example design for an outside air treatment unit system

The Fresh Air intake indoor unit can take fresh outdoor air into any building.



[Recommended application]
Office, Lobby, Workshop, Restroom, Nursing home, Smoking corner, Kitchen in a restaurant

Applications across a wide range of design

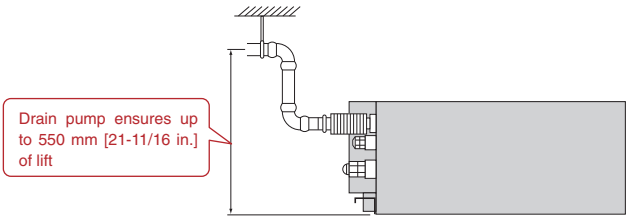
Sufficient external static pressure (up to 240 Pa) enables designs with long ducts and expands design possibilities.

PEFY-P VMH-E-F		P80	P140	P200	P250
External static pressure (Pa)	208 V	<35> – 85 – <170>	<35> – 85 – <170>	<140> – 200	<110> – 190
	220 V	<40> – 115 – <190>	<50> – 115 – <190>	<150> – 210	<120> – 200
	230 V	<50> – 130 – <210>	<60> – 130 – <220>	<160> – 220	<130> – 210
	240 V	<80> – 170 – <220>	<100> – 170 – <240>	–	–

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

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

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



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
		*1	BTU/h	30,700	54,600
Heating capacity		*1	kW	8.5	15.1
		*1	BTU/h	29,000	51,500
Power consumption	Cooling		kW	0.16/0.21	0.29/0.33
	Heating		kW	0.16/0.21	0.29/0.33
Current	Cooling		A	0.67/0.91	1.24/1.48
	Heating		A	0.67/0.91	1.24/1.48
External finish				Galvanized	
Dimension H x W x D			mm (in.)	380 x 1000 x 900 (15 x 39-3/8 x 35-7/16)	380 x 1200 x 900 (15 x 47-1/4 x 35-7/16)
Net weight			kg (lbs.)	50 (111)	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		m^3/min	9.0	18.0
			L/s	150	300
			cfm	318	636
	External static pressure (Lo-Mid-Hi)	208V	Pa	35-85-170	35-85-170
		220V	Pa	40-115-190	50-115-190
		230V	Pa	50-130-210	60-130-220
		240V	Pa	80-170-220	100-170-240
Motor	Type			1-phase induction motor	
	Output		kW	0.09 (at 220V)	0.14 (at 220V)
Air filter (option)				Synthetic fiber unwoven cloth filter (long life)	
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø15.88 (ø5/8)	
	Liquid (Flare)		mm (in.)	ø9.52 (ø3/8)	
Field drain pipe diameter			mm (in.)	O.D.32 (1-1/4)	
Sound pressure level (Lo-Mid-Hi)	208, 220V	*2	dB (A)	27-38-43	28-38-43
	230, 240V	*2	dB (A)	33-43-45	34-43-45

Model				PEFY-P200VMH-E-F	PEFY-P250VMH-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		m^3/min	28	35
			L/s	467	583
			cfm	989	1236
	External static pressure	380V	Pa	140/200	110/190
		400V	Pa	150/210	120/200
		415V	Pa	160/220	130/210
Motor	Type			3-phase induction motor	
	Output		kW	0.20	0.23
Air filter (option)				Synthetic fiber 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	*2	dB (A)	39/42	40/44
	400V	*2	dB (A)	40/43	40/45
	415V	*2	dB (A)	40/44	41/46

Notes:

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

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

*6 Operational temp range is (Cooling : from 21°C(70°F)DB/15.5°C(60°F)WB to 43°C(109°F)DB/35°C(95°F)WB
Heating : from -10°C(14°F)DB to 20°C(68°F)DB)
* Thermo off(Fan) operation automatically starts either when temperature is lower than 21°C(70°F)DB in cooling mode or when the temperature exceeds 20°C(68°F)DB in heating mode.
*7 As the room temp in sensed by the thermo in the remote controller or the one in the room, be sure to use either remote controller or room thermo.
*8 Autochangeover function or Dry mode is NOT available. Fan mode operation during the thermo off in Cooling/Heating mode.
*9 In any case, the air flow rate should be kept lower than 110% of the above chart. Please see "Fan curves" for the details.
*10 When this unit is used as sole A/C system, be careful about the dew in air outlet grilles in cooling mode.
*11 Un-conditioned outdoor air such as humid air or cold air blows to the indoor during thermo off operation.
Please be careful when positioning indoor unit air outlet grilles, ie take the necessary precautions for cold air, and also insulate rooms for dew condensation prevention as required.
*12 Air filter must be installed in the air intake side. The filter should be attached where easy maintenance in possible in case of usage of fild supply filters.
*13 Long life cannot be used with Hi-efficiency filter together (PEFY-P80 · 140VMH-E-F type).

PEFY-P VMR-E-L/R

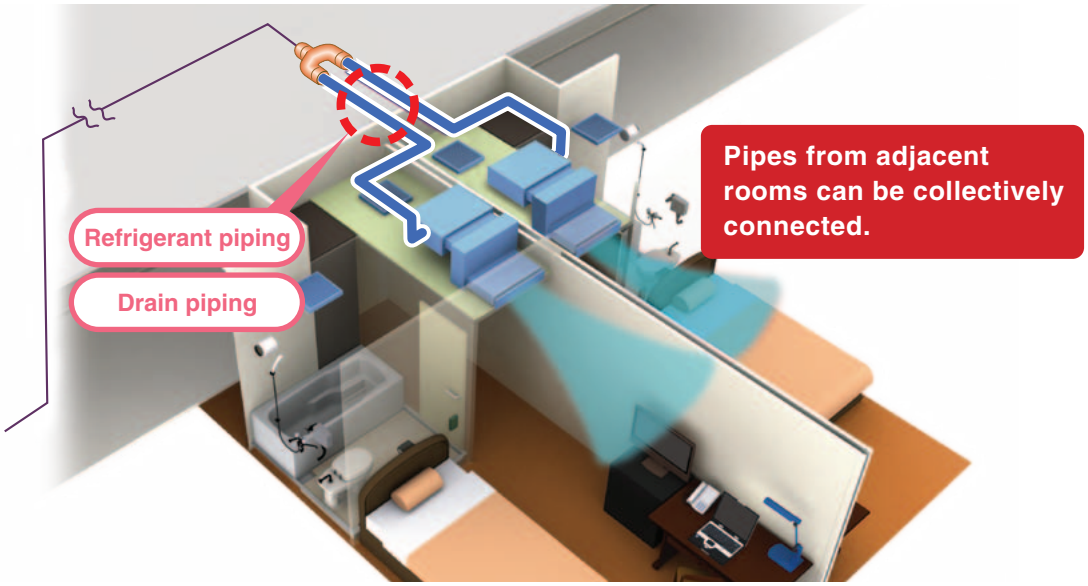
Low-noise operation for a quiet indoor environment

Low noise design from 20 dB* at low air volume to up to 35 dB

* Noise values measured on a rear-inlet model in anechoic chamber. (The noise value is higher in cases where the bottom inlet is used)
* Value at low air volume, external static pressure of 5 Pa and power source of 220 V.

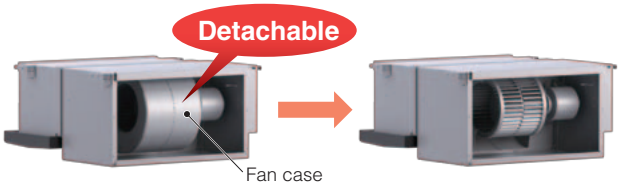
Flexibly application in symmetrically arranged rooms

Models are available with refrigerant/drain piping and control box on either the right or left sides. They can be flexibly applied to symmetrically arranged hotel rooms.



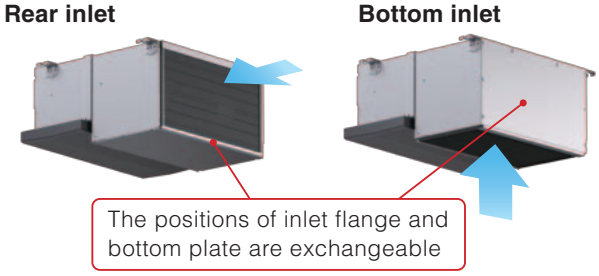
Easy Maintenance

The fan case has no screws and can be easily removed, meaning the fan is easy to maintain. The air filter can be removed from the side or rear of the body.



Air inlet direction can easily be changed

The rear or bottom air inlet can be selected according to the room's layout.



* In the case of bottom inlet, the noise value is higher.

Specifications

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

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

Notes:

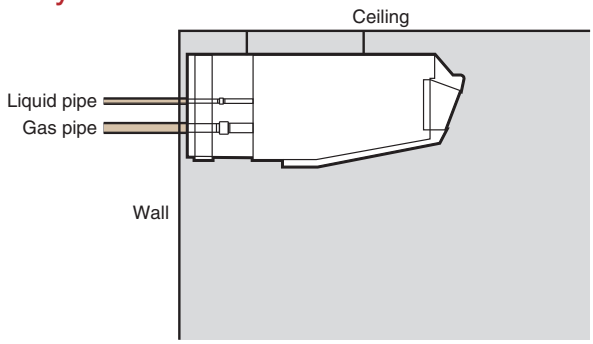
*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling : Indoor 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating : Indoor 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB

*2 The external static pressure is set to 5Pa (at 220V, 230V, 240V).

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

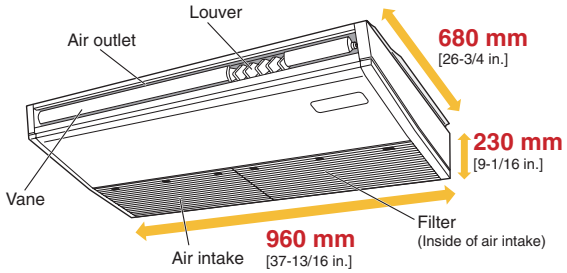
PCFY-P VKM-E

Easy installation



The ceiling suspended cassette can easily be installed without requiring duct work, even if the ceiling does not have sufficient space.

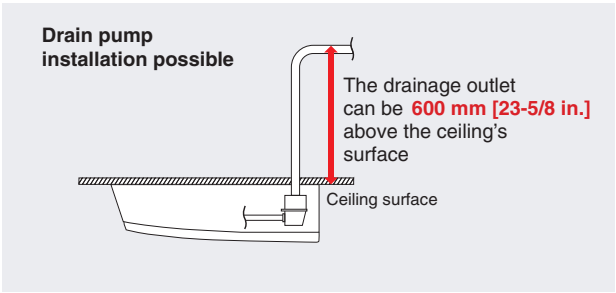
230 mm [9-1/16 in.] high unit is designed in consideration of interior design coordination



Sleek and slim with stylishly curved lines, the PCFY-Series is designed to blend into interior.

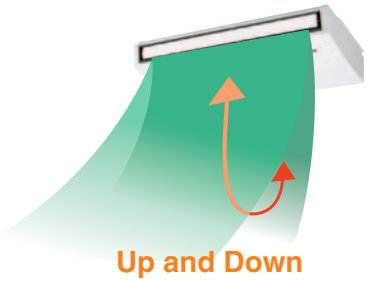
Drain pump is available for all models

The optional drain pump allows the drain connection to be raised as high as 600mm [23-5/8 in.], expanding flexibility in choosing the unit's location.



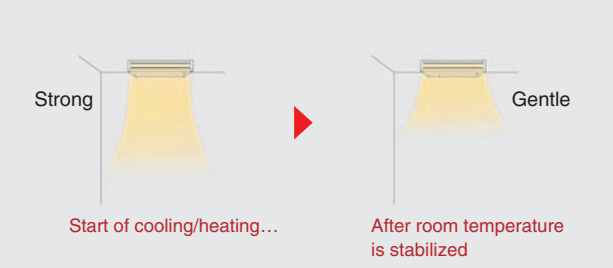
Auto Vane Control

Outlet vanes can be moved up and down using the remote controller. This improved airflow control feature solves the problem of drafts.



Equipped with automatic air-speed adjustment

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



Specifications

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	14.0
		*1	BTU/h	15,400	24,200	38,200	47,800
Heating capacity		*1	kW	5.0	8.0	12.5	16.0
		*1	BTU/h	17,100	27,300	42,700	54,600
Power consumption	Cooling		kW	0.04	0.05	0.09	0.11
	Heating		kW	0.04	0.05	0.09	0.11
Current	Cooling		A	0.28	0.33	0.65	0.76
	Heating		A	0.28	0.33	0.65	0.76
External finish (Munsell No.)				6.4Y 8.9/ 0.4			
Dimension H x W x D			mm	230 x 960 x 680	230 x 1,280 x 680	230 x 1,600 x 680	
			in.	9-1/16 x 37-13/16 x 26-3/4	9-1/16 x 50-3/8 x 26-3/4	9-1/16 x 63 x 26-3/4	
Net weight			kg (lbs.)	24 (53)	32 (71)	36 (79)	38 (84)
Heat exchanger				Cross fin (Aluminum fin and copper tube)			
Fan	Type x Quantity			Sirocco fan x 2	Sirocco fan x 3	Sirocco fan x 4	
	Airflow rate (Lo-Mid2-Mid1-Hi)	*2	m^3/min	10-11-12-13	14-15-16-18	21-24-26-28	21-24-27-31
			L/s	167-183-200-217	233-250-267-300	350-400-433-467	350-400-450-517
			cfm	353-388-424-459	494-530-565-636	742-847-918-989	742-847-953-1,095
	External static pressure		Pa	0			
Motor	Type			DC motor			
	Output		kW	0.090	0.095	0.160	
Air filter				PP Honeycomb (long life)			
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)	ø15.88 (ø5/8)	ø15.88 (ø5/8)/ø19.05 (ø3/4) (Compatible)	
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)	ø9.52 (ø3/8)		
Field drain pipe diameter			mm (in.)	O.D. 26 (1)			
Sound pressure level (Lo-Mid2-Mid1-Hi)		*2 *3	dB (A)	29-32-34-36	31-33-35-37	36-38-41-43	36-39-42-44

Notes:

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

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

PKFY-P VBM

PKFY-P VHM

PKFY-P VKM

Standard design that matches the room's interior

The compact design fits residences, offices, small meeting rooms, and restaurants.

Lineup of 3 standard types

The line-up consists of 3 standard types of wall mounted type which can be installed easily.

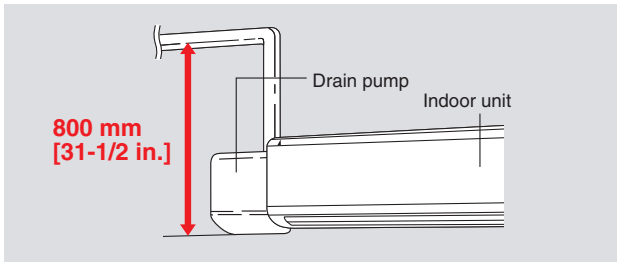
Capacity range	P15	P20	P25	P32	P40	P50	P63	P100
VBM*	●	●	●					
VHM				●	●	●		
VKM							●	●

* External LEV box (optional) is recommended for hotels, hospitals, or dormitories where background noise is low.

Drain pump is applicable (option, VHM and VKM only)

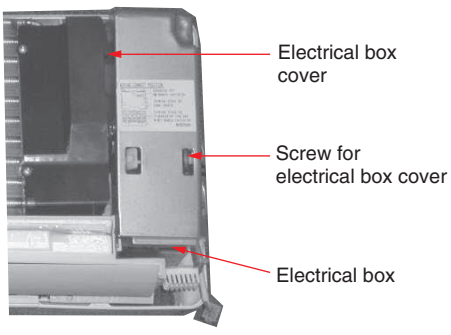
The optional drain pump allows the drain connection to be raised as high as 800 mm [31-1/2 in.]*, allowing more freedom in piping layout design.

* PLFY-P VHM



Maintenance from front panel

After removing the panel, the electronic box can be seen and easily accessed. It has a cover to prevent ignition due to a short circuit.



Specifications

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

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB,Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle2-middle1-high).
*3 It is measured in anechoic room.
*4 Electrical characteristic of cooling are included optional drain-pump.

Model				PKFY-P63VKM-E	PKFY-P100VKM-E
Power source				1-phase 220-230-240V 50Hz/1-phase 220V 60Hz	
Cooling capacity		*1	kW	7.1	11.2
		*1	BTU/h	24,200	38,200
Heating capacity		*1	kW	8.0	12.5
		*1	BTU/h	27,300	42,600
Power consumption	Cooling*4		kW	0.05	0.08
	Heating		kW	0.04	0.07
Current	Cooling*4		A	0.37	0.58
	Heating		A	0.30	0.51
External finish (Munsell No.)				Plastic (1.0Y 9.2/0.2)	
Dimension H x W x D			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 (Lo-Hi)	*2	m^3/min	16-20	20-26
			L/s	267-333	333-433
			cfm	565-706	706-918
	External static pressure		Pa	0	
Motor	Type			DC motor	
	Output		kW	0.056	
Air filter				PP Honeycomb	
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø15.88 (ø5/8)	ø15.88 (ø5/8)/ø19.05 (ø3/4) (Compatible)
	Liquid (Flare)		mm (in.)	ø9.52 (ø3/8)	
Field drain pipe diameter			mm (in.)	I.D. 16 (5/8)	
Sound pressure level (Lo-Hi)		*2 *3	dB (A)	39-45	41-49

Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-high).
*3 It is measured in anechoic room.
*4 Electrical characteristic of cooling are included optional drain-pump.

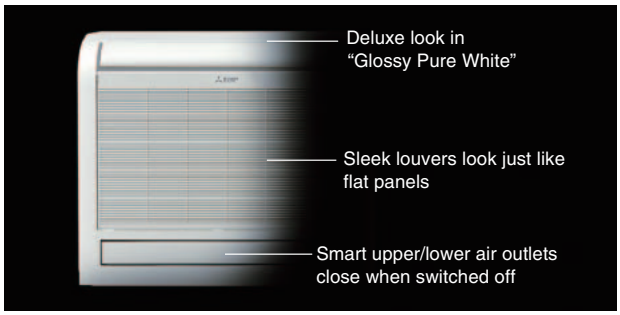
PFFY-P VKM-E2

Sophisticated Design

An innovative floor-standing air-conditioner from Mitsubishi Electric. A pleasing mix of streamlined form and diversified function. Engineered to keep room walls free, provide comfortable cooling in summer, and toasty heating in the winter.

The “Glossy Pure White” color ensures a deluxe look, a perfect match for any room. Both upper and lower air outlets remain closed when switched off, a smart and striking image.

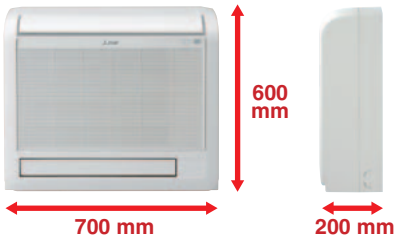
A superb new air-conditioner from Mitsubishi Electric, providing a handsome fit for your own distinctive interior.



Slim yet Mighty

The unit’s body is slim and trim, highlighting its compact essence. An ideal size for living rooms, bedrooms, and more.

The removable and washable front panel makes cleaning a snap. Easy, regular cleaning helps your air-conditioner stay beautiful while maintaining its energy-efficient operation.

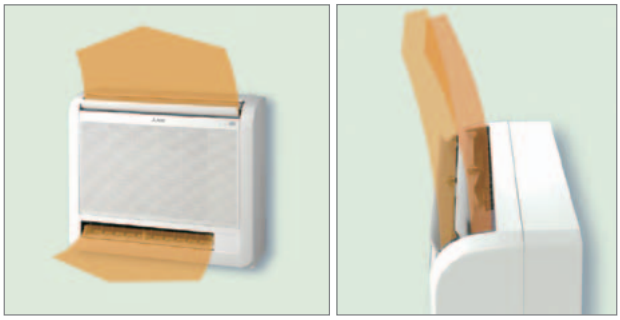


Optimum Air Distribution

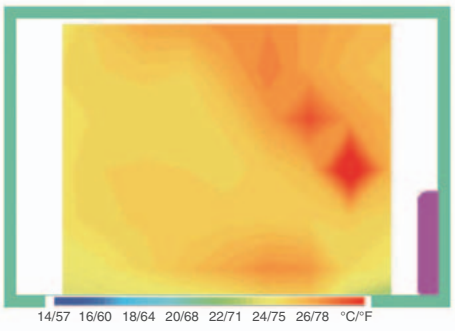
Comfy room temperatures are accomplished through optimum, powerful and efficient air distribution through the upper and lower air outlets.

The upper vane angle is remote controllable, with 5 air flow direction levels (+Swing and Auto modes) and 4 wind power levels (+Auto mode).

By setting the vane angle almost vertical, bothersome direct wind can be avoided for increased comfort.



The air from both the upper and lower air outlets is optimally controlled and distributed evenly to every corner of the room. In heating mode, the warm air is smartly controlled to stay at the floor level: Say goodbye to chilly feet!



Specifications

Model				PFFY-P20VKM-E2	PFFY-P25VKM-E2	PFFY-P32VKM-E2	PFFY-P40VKM-E2
Power source				1-phase 220-240V 50Hz			
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5
		*1	BTU/h	7,500	9,600	12,300	15,400
Heating capacity		*1	kW	2.5	3.2	4.0	5.0
		*1	BTU/h	8,500	10,900	13,600	17,100
Power consumption	Cooling		kW	0.025	0.025	0.025	0.028
	Heating		kW	0.025	0.025	0.025	0.028
Current	Cooling		A	0.20	0.20	0.20	0.24
	Heating		A	0.20	0.20	0.20	0.24
External finish				Plastic (Pure white)			
Dimension H x W x D			mm	600 x 700 x 200			
			in.	23-5/8 x 27-9/16 x 7-7/8			
Net weight			kg (lbs.)	15 (34)			
Heat exchanger				Cross fin (Alminium plate fin and copper tube)			
Fan	Type x Quantity			Line flow fan x 2			
	Airflow rate (Lo-Mid-Hi-SHi)	*2	m^3/min	5.9-6.8-7.6-8.7	6.1-7.0-8.0-9.1	6.1-7.0-8.0-9.1	8.0-9.0-9.5-10.7
	External static pressure		Pa	0			
Motor	Type			DC motor			
	Output		kW	0.03 x 2			
Air filter				PP honeycomb fabric (Catechin Filter)			
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)			
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)			
Field drain pipe diameter			mm (in.)	I.D.16 (5/8)			
Sound pressure level (Lo-Mid-Hi-SHi)		*2	dB (A)	27-31-34-37	28-32-35-38	28-32-35-38	35-38-42-44

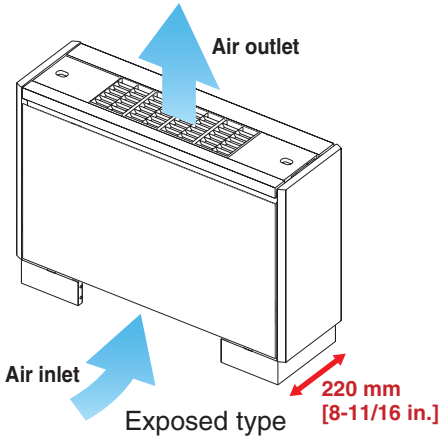
Notes:

*1 Cooling/heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor : 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor : 7°C(45°F)DB/6°C(43°F)WB
*2 Airflow rate/Sound pressure level are in (low-middle-high-shigh).
*3 It is measured in anechoic room.

PFFY-P VLEM-E

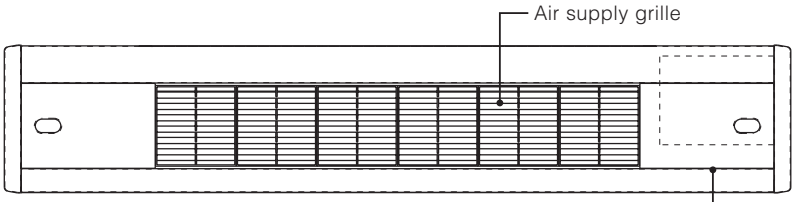
Compact unit for easy perimeter air-conditioning

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



Remote controller can be installed on the main unit

The remote controller can be embedded in the main unit, allowing temperature and air volume to be easily set.



PAR-33MAA

Specifications

Model				PFFY-P20VLEM-E	PFFY-P25VLEM-E	PFFY-P32VLEM-E	PFFY-P40VLEM-E	PFFY-P50VLEM-E	PFFY-P63VLEM-E
Power source				1-phase 220-240V 50Hz/1-phase 208-230V 60Hz					
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
		*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity		*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
		*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling		kW	0.04/0.06		0.06/0.07	0.065/0.075	0.085/0.09	0.1/0.11
	Heating		kW	0.04/0.06		0.06/0.07	0.065/0.075	0.085/0.09	0.1/0.11
Current	Cooling		A	0.19/0.25		0.29/0.30	0.32/0.33	0.40/0.41	0.46/0.47
	Heating		A	0.19/0.25		0.29/0.30	0.32/0.33	0.40/0.41	0.46/0.47
External finish (Munsell No.)				Acrylic paint (5Y 8/1)					
Dimension H x W x D			mm	630 x 1,050 x 220		630 x 1,170 x 220		630 x 1,410 x 220	
			in.	24-13/16 x 41-3/8 x 8-11/16		24-13/16 x 46-1/8 x 8-11/16		24-13/16 x 55-9/16 x 8-11/16	
Net weight			kg (lbs.)	28 (62)		30 (67)	32 (71)	36 (80)	37 (82)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quantity			Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate (Lo-Hi)	*2	m^3/min	5.5-6.5		7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
			L/s	92-108		117-150	150-183	200-233	200-258
			cfm	194-230		247-318	318-388	424-494	424-547
	External static pressure		Pa	0					
Motor	Type			1-phase induction motor					
	Output		kW	0.015		0.018	0.030	0.035	0.050
Air filter				PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter			mm (in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Hi)		*2 *3 *4	dB (A)	34-40		35-40	38-43		40-46

Notes:

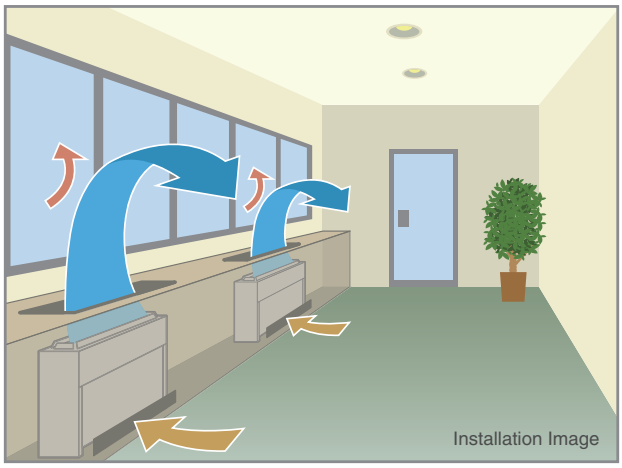
*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Air flow rate/Sound pressure level are in (Low-High)
*3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz
· 2dB(A) lower at AC220V/50Hz
· 3dB(A) lower at 1.5m x 1.5m point
*4 It is measured in anechoic room.

PFFY-P VLRM-E
PFFY-P VLRMM-E

Compact unit for easy perimeter air-conditioning

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

Air flow rate
2 stages (VLRM)
3 stages (VLRMM)



Maximum external static pressure 60 Pa (VLRMM model)

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

Specifications

Model				PFFY-P20VLRM-E	PFFY-P25VLRM-E	PFFY-P32VLRM-E	PFFY-P40VLRM-E	PFFY-P50VLRM-E	PFFY-P63VLRM-E
Power source				1-phase 220-240V 50Hz/1-phase 208-230V 60Hz					
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
		*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity		*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
		*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling		kW	0.04/0.06		0.06/0.07	0.065/0.075	0.085/0.09	0.1/0.11
	Heating		kW	0.04/0.06		0.06/0.07	0.065/0.075	0.085/0.09	0.1/0.11
Current	Cooling		A	0.19/0.25		0.29/0.30	0.32/0.33	0.40/0.41	0.46/0.47
	Heating		A	0.19/0.25		0.29/0.30	0.32/0.33	0.40/0.41	0.46/0.47
External finish (Munsell No.)				Galvanized steel plate					
Dimension H x W x D			mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
			in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/16	
Net weight			kg (lbs.)	22 (49)		24 (53)	25 (56)	29 (64)	30 (67)
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quantity			Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate (Lo-Hi)	*2	m^3/min	5.5-6.5		7.0-9.0	9.0-11.0	12.0-14.0	12.0-15.5
			L/s	92-108		117-150	150-183	200-233	200-258
			cfm	194-230		247-318	318-388	424-494	424-547
	External static pressure		Pa	0					
Motor	Type			1-phase induction motor					
	Output		kW	0.015		0.018	0.030	0.035	0.050
Air filter				PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas (Flare)		mm (in.)	ø12.7 (ø1/2)					ø15.88 (ø5/8)
	Liquid (Flare)		mm (in.)	ø6.35 (ø1/4)					ø9.52 (ø3/8)
Field drain pipe diameter			mm (in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Hi)		*2 *3 *4	dB (A)	34-40		35-40	38-43		40-46

Notes:

*1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
Cooling Indoor : 27°C(81°F)DB/19°C(66°F)WB, Outdoor 35°C(95°F)DB
Heating Indoor : 20°C(68°F)DB, Outdoor 7°C(45°F)DB/6°C(43°F)WB
*2 Air flow rate/Sound pressure level are in (Low-High)
*3 Measured point : 1m x 1m, Power supply : AC240V/50Hz
· 1dB(A) lower at AC230V/50Hz · 2dB(A) lower at AC220V/50Hz · 3dB(A) lower at 1.5m x 1.5m point
*4 It is measured in anechoic room.

Model				PFFY-P20VLRMM-E	PFFY-P25VLRMM-E	PFFY-P32VLRMM-E	PFFY-P40VLRMM-E	PFFY-P50VLRMM-E	PFFY-P63VLRMM-E
Power source				1-phase 220-240V 50Hz/1-phase 220-240V 60Hz					
Cooling capacity		*1	kW	2.2	2.8	3.6	4.5	5.6	7.1
		*1	BTU/h	7,500	9,600	12,300	15,400	19,100	24,200
Heating capacity		*1	kW	2.5	3.2	4.0	5.0	6.3	8.0
		*1	BTU/h	8,500	10,900	13,600	17,100	21,500	27,300
Power consumption	Cooling		kW	0.04		0.04	0.05	0.05	0.07
	Heating		kW	0.04		0.04	0.05	0.05	0.07
Current	Cooling		A	0.34		0.38	0.43	0.48	0.59
	Heating		A	0.34		0.38	0.43	0.48	0.59
External finish (Munsell No.)				Galvanized steel plate					
Dimension H x W x D			mm	639 x 886 x 220		639 x 1,006 x 220		639 x 1,246 x 220	
			in.	25-3/16 x 34-15/16 x 8-11/16		25-3/16 x 39-5/8 x 8-11/16		25-3/16 x 49-1/16 x 8-11/1625 (56)	
Net weight			kg (lbs.)	21 (47)		24 (53)	25 (56)	29 (64)	
Heat exchanger				Cross fin (Aluminum plate fin and copper tube)					
Fan	Type x Quantity			Sirocco fan x 1		Sirocco fan x 2			
	Airflow rate (Lo-Mid-Hi)		m^3/min	4.5-5.5-6.5		6.5-7.5-9.0	8.0-9.5-11.0	10.0-12.0-14.0	11.0-13.0-15.5
			L/s	75-92-108		108-125-150	133-158-183	167-200-233	183-217-258
			cfm	159-194-230		230-265-318	282-335-388	353-424-494	388-459-547
	External static pressure	*2	Pa	20/40/60					
Motor	Type			DC brushless motor					
	Output		kW	0.096					
Air filter				PP Honeycomb fabric (washable)					
Refrigerant pipe diameter	Gas		mm (in.)	ø12.7 (ø1/2) Brazed					ø15.88 (ø5/8) Brazed
	Liquid		mm (in.)	ø6.35 (ø1/4) Brazed					ø9.52 (ø3/8) Brazed
Field drain pipe diameter			mm (in.)	I.D.26 (1) <Accessory hose O.D.27 (1-3/32) (top end :20 (13/16))>					
Sound pressure level (Lo-Mid-Hi)	20Pa	*3	dB (A)	31-36-40		27-32-37	30-36-40	32-37-41	35-40-44
	40Pa		dB (A)	34-39-42		30-35-41	32-38-42	35-40-44	36-42-47
	60Pa		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
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.

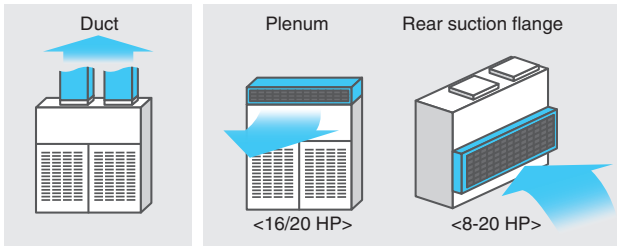
PFFY-P YM-E
PFFY-P YMH-E

Reduces installation and maintenance time

This series is a floor-standing, large capacity, indoor unit, which reduces the piping and installation burdens, and makes maintenance easy.

Increased adaptation to local needs

In addition to the standard duct blowing, both plenum blowing and rear suction are optionally selectable.



(Standard) (Option)

Wide ranges of airflow rate and static pressure options are available to suit a greater variety of needs

		Air flow rate (m³/min [ft.³/min])	Static pressure (Pa)
		High, 50/60 Hz	380 V, 50/60 Hz
PFFY-P200YM-E	8 HP	65.0/69.0 [2300/2430]	0
PFFY-P250YM-E	10 HP	77.0/72.0 [2720/2540]	0
PFFY-P200YMH-E*	8 HP	65.0 [2300]	180/200
PFFY-P250YMH-E*	10 HP	72.0 [2540]	180/210
PFFY-P400YM-E	16 HP	150.0 [5300]	210/390
PFFY-P500YM-E	20 HP	200.0 [7060]	290/510

*High static pressure model

Pulley belt option

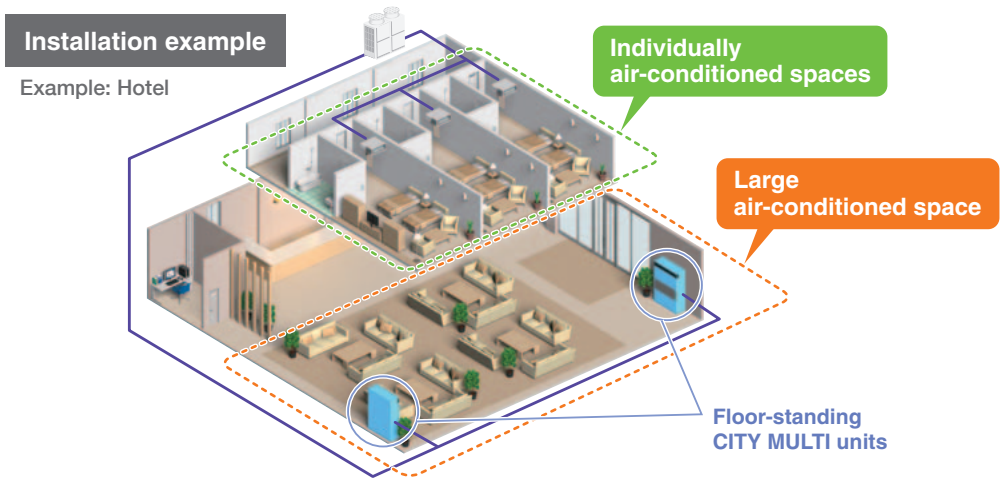
This option supports the use of wider ranges of airflow rates and static pressures to suit a greater variety of needs.

Both large-scale and individual air conditioning can be performed

When this model is used in a large space and CITY MULTI indoor units are used in individual rooms, one outdoor unit can control the air conditioners in these rooms of various sizes.

Multiple units can be connected to one outdoor unit

Multiple units of this model can be connected to one outdoor unit. Air can be spread throughout a large room.



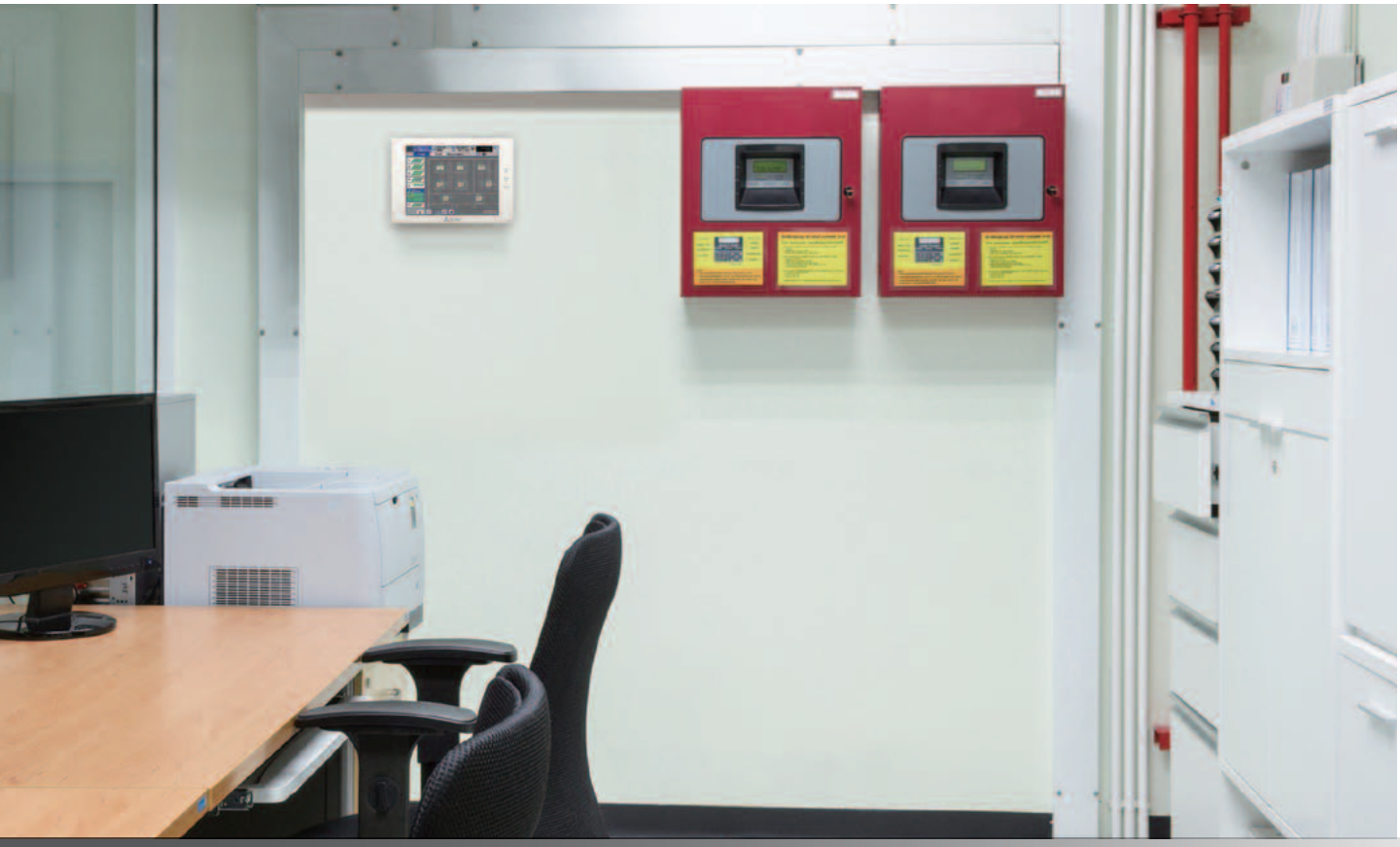
Specifications

Model				PFFY-P200YM-E	PFFY-P250YM-E	PFFY-P200YMH-E	PFFY-P250YMH-E	PFFY-P400YM-E	PFFY-P500YM-E
Power source				3-phase 4-wire 380-400-415 V 50/60 Hz					
Cooling capacity (Nominal)		*1	kW	22.4	28.0	22.4	28.0	45.0	56.0
		*1	BTU/h	76,400	95,500	76,400	95,500	153,500	191,100
	*2 Power input		kW	0.490/0.680	1.05/1.26	1.00/1.41	1.31/1.41	2.86/3.79	3.94/5.30
	*2 Current input (380-400-415 V)		A	0.97-0.98-0.99/ 1.24-1.23-1.22	1.74-1.83-1.88/ 2.06-2.05-2.04	1.82-1.85-1.87/ 2.37-2.37-2.37	2.14-2.18-2.20/ 2.18-2.18-2.18	5.23-5.25-5.33/ 6.16-6.18-6.26	7.66-7.68-7.76/ 8.49-8.51-8.58
Heating capacity (Nominal)		*3	kW	25.0	31.5	25.0	31.5	50.0	63.0
		*3	BTU/h	85,300	107,500	85,300	107,500	170,600	215,000
	*2 Power input		kW	0.490/0.680	1.05/1.26	1.00/1.41	1.31/1.41	2.86/3.79	3.94/5.30
	*2 Current input (380-400-415 V)		A	0.97-0.98-0.99/ 1.24-1.23-1.22	1.74-1.83-1.88/ 2.06-2.05-2.04	1.82-1.85-1.87/ 2.37-2.37-2.37	2.14-2.18-2.20/ 2.18-2.18-2.18	5.23-5.25-5.33/ 6.16-6.18-6.26	7.66-7.68-7.76/ 8.49-8.51-8.58
External finish				Galvanized steel plate (with polyester coating) <MUNSELL 3.0Y 7.8/1.1 or similar>					
External dimension H x W x D			mm	1,665 x 1,200 x 500	1,665 x 1,200 x 500	1,465 x 1,200 x 500	1,465 x 1,200 x 500	1,800 x 1,860 x 650	1,800 x 1,860 x 650
			in.	65-9/16 x 47-1/4 x 19-11/16	65-9/16 x 47-1/4 x 19-11/16	57-11/16 x 47-1/4 x 19-11/16	57-11/16 x 47-1/4 x 19-11/16	70-7/8 x 73-1/4 x 25-5/8	70-7/8 x 73-1/4 x 25-5/8
Net weight			kg (lbs)	157 (347)	158 (349)	138 (305)	139 (307)	310 (684)	362 (799)
Heat exchanger				Cross fin (Aluminum fin and copper tube)					
Fan	Type x Quantity			Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2
	External static press. (380 V)		Pa	<0>	<0>	<180>/<200>	<180>/<210>	<210>/<390>	<290>/<510>
			mmH_2O	<0.0>	<0.0>	<18.4>/<20.4>	<18.4>/<21.4>	<21.4>/<39.8>	<29.6>/<52.0>
	Motor Type			3-phase induction motor					
	Motor output		kW	0.400	0.500	0.770	0.770	3.700	5.500
	Driving mechanism			Direct-driven by motor				Belt driving	
	Air flow rate			(High-Low)		(High)			
			m^3/min	65.0-59.0/69.0-60.0	77.0-56.0/72.0-50.0	65.0	72.0	150.0	200.0
			L/s	1,083-983/1,150-1,000	1,283-933/1,200-833	1,083	1,200	2,500	3,333
			cfm	2,295-2,083/2,436-2,119	2,719-1,977/2,542-1,766	2,295	2,542	5,297	7,062
Sound pressure level (measured in anechoic room) (380 V)		*2	dB (A)	(High-Low) 58-56/60-56	63-60/62-60	(High) 58/60	60/61	68/69	69/69
Air filter				PP honeycomb fabric.					
Refrigerant piping diameter	Liquid (R410A)		mm (in.)	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	9.52 (3/8) Brazed	12.7 (1/2) Brazed	15.88 (5/8) Brazed
	Gas (R410A)		mm (in.)	22.22 (7/8) Brazed	22.22 (7/8) Brazed	22.22 (7/8) Brazed	22.22 (7/8) Brazed	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
Field drain pipe size			in.	Rc 1	Rc 1	Rc 1	Rc 1	Rc 1-1/4	Rc 1-1/4

Notes:

*1 Nominal cooling conditions
Indoor: 27°CD.B./19°CW.B. (81°FD.B./66°FW.B.), Outdoor: 35°CD.B. (95°FD.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*2 The values are measured at the factory setting of external static pressure.
*3 Nominal heating conditions
Indoor: 20°CD.B. (68°FD.B.), Outdoor: 7°CD.B./6°CW.B. (45°FD.B./43°FW.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
*4 Long period operation in a high temperature and humidity atmosphere (dew point of 23°C or more) may cause condensation to form in the indoor unit.
*5 In case of this type of unit is connected, the maximum connected indoor unit capacity to one outdoor unit have to be less than or equal to 100%.
*6 This unit cannot be connected to R2 or WR2-Series. (PFFY-P400, P500YM-E only)
*7 This unit cannot be connected to PUMY-Series.

* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.
* Due to continuing improvement, above specifications may be subject to change without notice.



Remote Controller

Remote controller list

Building Management Zone

Centralized control

LonWorks® Adapter

LMAP04-E
For LonWorks®

AE-200E with BACnet Interface
For BACnet®

BMS and CITY MULTI can be connected. This enables control of the entire building and air-conditioning control on the BMS side.

Floor Management Zone

System controller

AE-200E
This model, featuring a color LCD screen, can control up to 50 indoors unit when used independently, and up to 200 indoor units when connected to AE-50E/EW-50E.

EW-50E
This model can control up to 50 indoor units when connected to the AE-200E as an expansion unit.

PAC-YT40ANRA
The power can be turned on and off easily for 50 indoor units in up to 16 groups with this single unit.

AT-50B
This model is suitable for control on each floor. You can control up to 50 indoor units on the color LCD screen.

The air conditioners in each group can be turned on and off, and their modes can be changed. The weekly timer allows them to be turned on automatically before work starts, and off after closing time.

Local remote controller

PAR-33MAA
(MA remote controller)
The temperature can be set in steps of 0.5°C [1°F] increments, and the air flow direction and error icons are displayed on the screen.

PAR-21MAA
(MA remote controller)
The temperature can be set in steps of 1°C/1°F increments. The button panel can be accessed and closed when the buttons are not used.

PAR-U02MEDA
(ME remote controller)
All elements appear on the LCD screen, which features an occupancy sensor. All conditions including grouping can be set on this one controller.

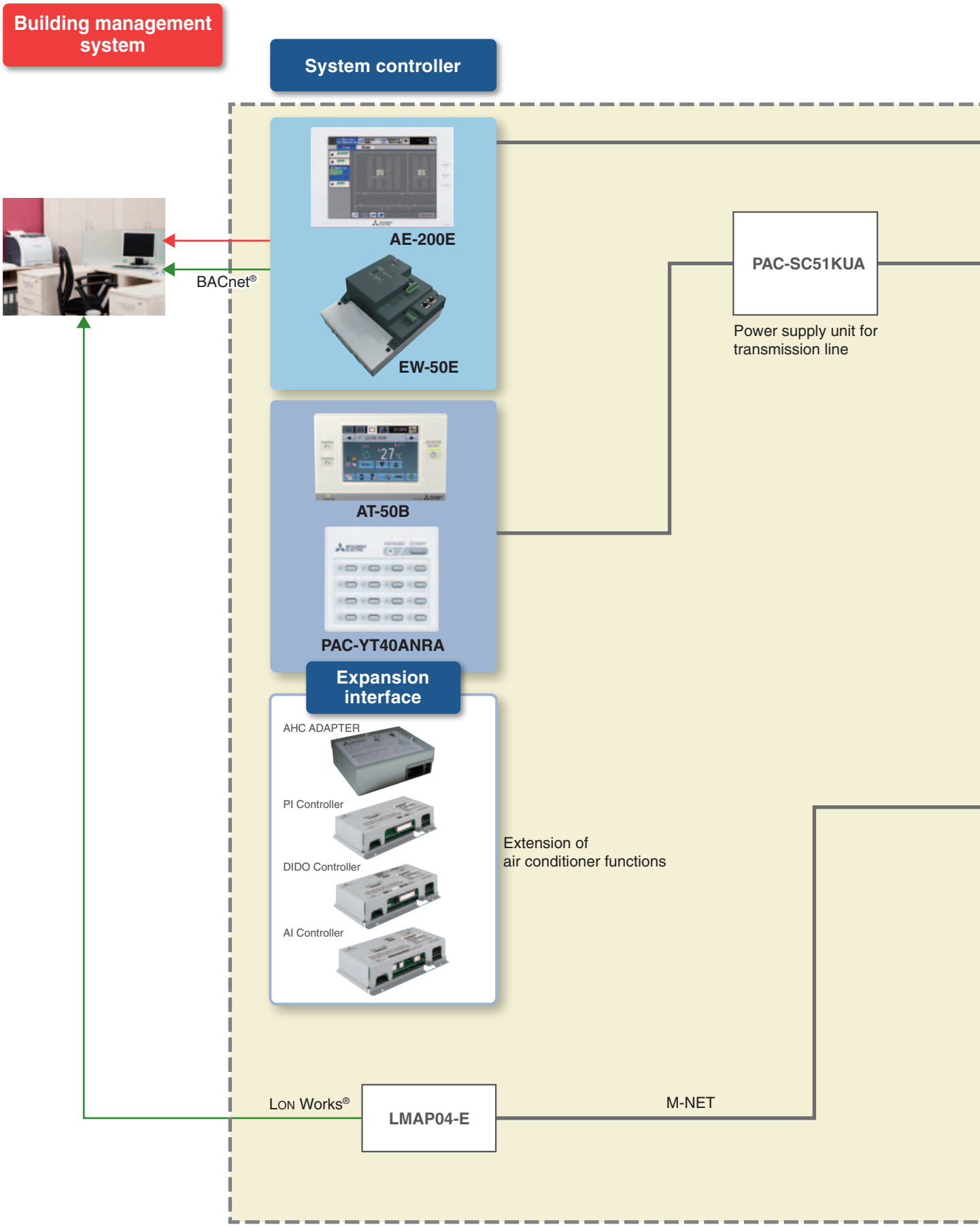
PAC-YT52CRA
(MA remote controller)
A compact remote controller dedicated to setting the temperature and fan speed

PAR-CT01MAA-S
(MA remote controller)
All elements appear on the LCD screen. The background and character colors can be selected.

PAR-SL100A-E
(MA Wireless remote controller)
* Connected only to PLFY-P VFM-E1

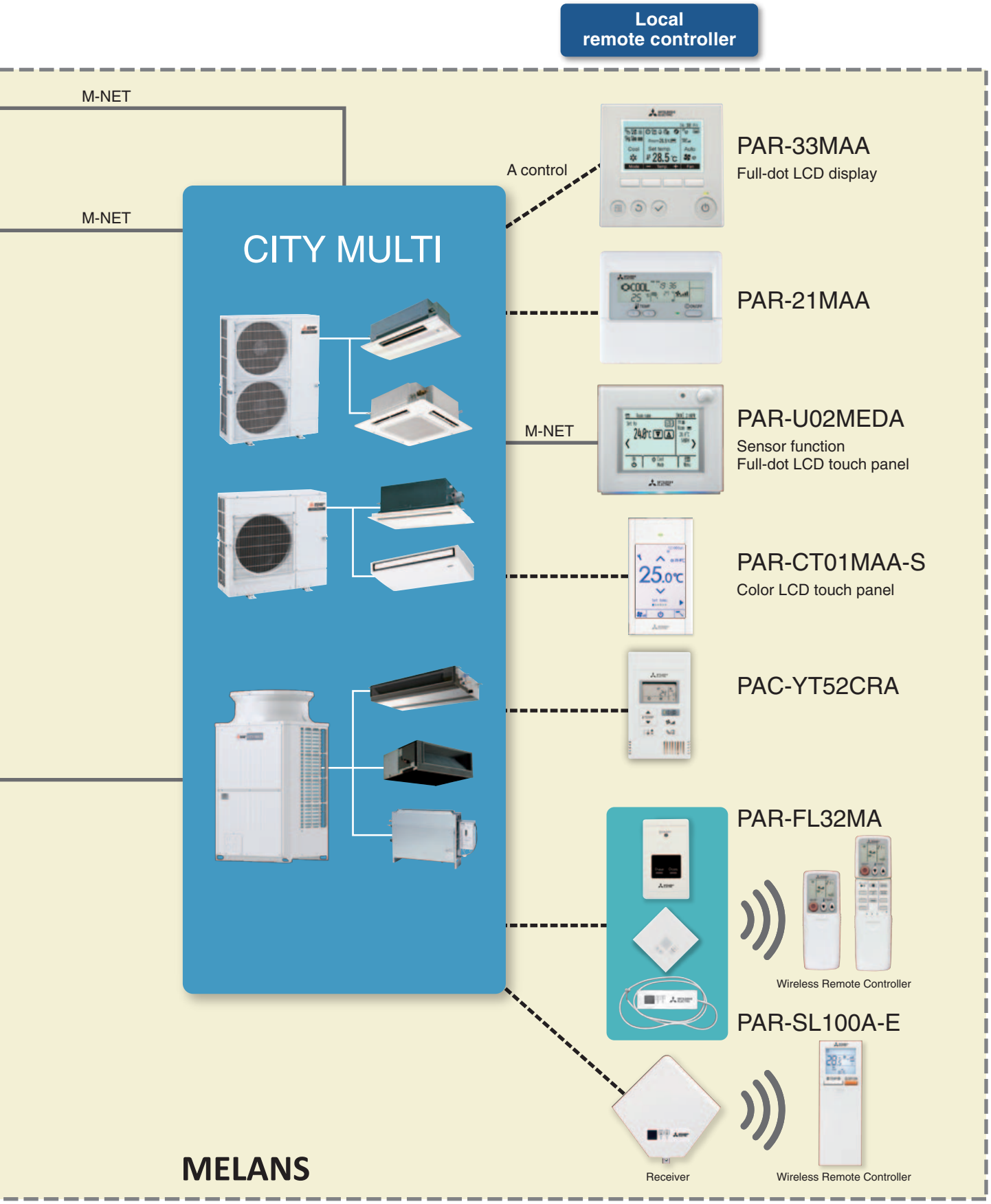
PAR-FL32MA
(MA Wireless remote controller)

A suitable remote controller can be selected to control the air conditioners in each room according to each use situation.



M-NET

Using our MELANS products enhances air-conditioning EFFICIENCY and QUALITY, contributing to ENERGY SAVINGS and reducing running cost. We offer a wide variety of MELANS products to meet requirements - from the smallest and simplest, to the largest and most complex. We have individual remote controllers, various centralized controllers, BMS interface, etc.


Local
remote controller
M-NET
M-NET
CITY MULTI
A control
M-NET
PAR-33MAA
Full-dot LCD display
PAR-21MAA
PAR-U02MEDA
Sensor function
Full-dot LCD touch panel
PAR-CT01MAA-S
Color LCD touch panel
PAC-YT52CRA
PAR-FL32MA
Wireless Remote Controller
PAR-SL100A-E
Receiver
Wireless Remote Controller
MELANS

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

Model	Local remote controller *7								System controller *7							
	PAR-CT01MA	PAR-33MAA	PAR-21MAA	PAR-U02MEDA	PAR-CT01MAA-S	PAC-YT52CRA	PAR-FL32MA	PAR-SL100A-E	PAC-YT40ANRA	AT-50B	AE-200E		AE-200E + AE-50E / EW-50E		EW-50E	
Controllable Groups / Indoors (Group / Indoor) *6	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 1	16 / 50	50 / 50	50 / 50		200 / 200		50 / 50	
											AE-200E	Browser	AE-200E	Browser	EW-50E	Browser
■Operation																
ON / OFF	○	○	○	○	○	○	○	○	◎	◎	◎ ■	◎ ■	◎ ■	◎ ■	▲	◎ ■
Mode (cool / heat / dry / fan)	○	○	○	○	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Temperature setting	○	○	○	○	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Dual set point *8	○	○	N	○	○	○	N	○ *9	○ *10	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Local Permit / Prohibit	N	N	N	N	N	N	N	N	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Fan speed	○	○	○	○	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Air flow direction	○	○	○	○	○	○	○	○	N	◎	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
■Status monitoring																
ON / OFF	○	○	○	○	○	○	○	○	◎	◎	◎	○	◎	○	▲	○
Mode (cool / heat / dry / fan)	○	○	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Temperature setting	○	○	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Local Permit / Prohibit	○	○	○	○	○	○	○	N	○	○	○	○	○	○	N	○
Fan speed	○	○	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Air flow direction	○	○	○	○	○	○	○	○	N	○	○	○	○	○	N	○
Indoor temperature	○	○	○	○	○	○	N	N	N	○	○	○	○	○	N	○
Filter sign	○	○	○	○	○	N	N	N	N	◎	○	○	○	○	N	○
Error flashing	○	○	○	○	○	○	○	N	○	◎	○	○	○	○	▲	○
Error code	○	○	○	○	○	○	N	N	○	○	○	○	○	○	N	○
Operation hour	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
■Scheduling																
One day	○	○	○	○	○	N	N	N	N	○	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
ON / OFF times per day	1	1	8	1	1	N	1	1	N	16	24	24	24	24	N	24
Weekly	○	○	○	○	○	N	N	N	N	○	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
ON / OFF times per week	8 x 7	8 x 7	8 x 7	8 x 7	8 x 7	N	N	N	N	16 x 7	24 x 7	24 x 7	24 x 7	24 x 7	N	24 x 7
Annual	N	N	N	N	N	N	N	N	N	N	◎ ■	◎ ■	◎ ■	◎ ■	N	◎ ■
Optimized start-up	N	N	N	N	N	N	N	N	N	N	○	○	○	○	N	○
Auto-off timer	○	○	○	○	○	N	N	N	N	N	N	N	N	N	N	N
Min. timer setting unit (minute)	5	5	1	5	5	N	10	10	N	5	1	1	1	1	N	1
■Recording																
Error log	○	○	N	N	○	N	N	N	N	○	○	○	○	○	N	○
Daily / monthly report	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Electricity charge	N	N	N	N	N	N	N	N	N	N	N	N	●	N	N	N
Energy management data	N	N	N	N	N	N	N	N	N	N	●	●	●	●	N	●

Model	Local remote controller *7								System controller *7							
	PAR-CT01MA	PAR-33MAA	PAR-21MAA	PAR-U02MEDA	PAR-CT01MAA-S	PAC-YT52CRA	PAR-FL32MA	PAR-SL100A-E	PAC-YT40ANRA	AT-50B	AE-200E		AE-200E + AE-50E / EW-50E		EW-50E	
Controllable Groups / Indoors (Group / Indoor) *6	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 16	1 / 1	16 / 50	50 / 50	50 / 50		200 / 200		50 / 50	
											AE-200E	Browser	AE-200E	Browser	EW-50E	Browser
■Other																
Temp-set limitation by Local R / C	○	○	○	○	○	○	N	N	N	N	N	N	N	N	N	N
Temp-set limitation by System controller	○*4	○*4	○*4	○	○*4	○*4	N	N	N	○*4	N	○*2 *4	N	○*2 *4	N	○*2 *4
Operation lock	○	○	○	○	○	○	N	N	N	◎	N	N	N	N	N	N
Night setback	○	○	N	○	○	N	N	N	N	◎	○	○*2	○	○*2	N	○*2
Sliding temperature control	N	N	N	N	N	N	N	N	N	N	○	○*2	○	○*2	N	○*2
BACnet® connection	N	N	N	N	N	N	N	N	N	N	●	●	●	●	●	●
■Management (Group / Interlocked)																
Ventilation interlock	N /○	N /○	N /○	N /○	N /○	N /○	N / N	N / N	○	○	○	○/○*2	○	○/○*2	N / N	○/○*2
Group setting	○*1	○*1	○*1	○	○*1	○*1	N / N	N / N	○	○	○	○*2	○	○*2	N / N	○*2
Block setting	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	○	○*2	○	○*2	N / N	○*2
■Operating on LOSSNAY interlocked (Group / Interlocked)																
ON / OFF	N /○	N /○	N /○	N /○	N /○	N /○	N /○*5	N /○*5	◎/◎*3	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	▲/▲	◎/◎
Fan speed	N /○	N /○	N /○	N /○	N /○	N / N	N / N	N / N	N / N	◎/◎	◎/◎	◎/◎	◎/◎	◎/◎	N / N	◎/◎
Ventilation mode	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	◎/ N	◎/ N	◎/ N	◎/ N	◎/ N	N / N	◎/ N
■Status monitoring on LOSSNAY interlocked (Group / Interlocked)																
ON / OFF	N /○	N /○	N /○	N /○	N /○	N /○	N / N	N / N	N / N	○/○	◎/◎	◎/◎	◎/◎	◎/◎	▲/▲	◎/◎
Fan speed	N /○	N /○	N /○	N /○	N /○	N / N	N / N	N / N	N / N	○/○	○/○	○/○	○/○	○/○	N / N	○/○
Ventilation mode	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	N / N	○/ N	○/ N	○/ N	○/ N	○/ N	N / N	○/ N

◎: Each group / Batched ; ○: Each group ; □: Block (for CITY MULTI Indoor unit, not for all Mr.SLIM) ; ●: AE-200E/AE-50E/EW-50E license registration possible.
(●): License registration for the optional functions required N: Not Available (Not Used.) △: Batched only ; ▲: Batched handling (for maintenance) ■: Block

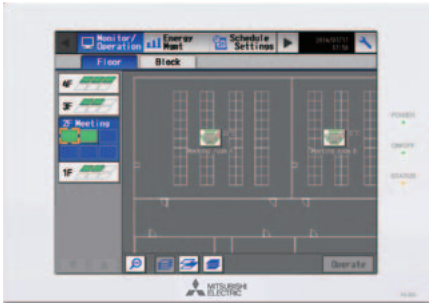
*1. Group setting via wiring between Indoor units with cross-over cable;
*2. Installation possible at Initial setting web browser;
*3. Interlock is set at Local remote controller.
*4. This function can only be set on the ME remote controller.
This function cannot be used with the MA/Simple MA remote controller.
(However, the validity of this function with the MA/Simple MA remote controller depends on the indoor unit model, and it is possible to use this function with them.)
*5. Interlock is set from system controllers (Except PAC-YT40ANRA) or local remote controllers.
*6. The maximum number of controllable units decreases depending on the indoor unit model.
*7. For indoor use only.
*8. This function is supported only when all of the indoor units, remote controllers, and system controllers that are connected to a given group features said function.
*9. Function setting of this remote controller is necessary.
*10. Please contact your local distributor regarding the availability of this function.
*11. BAC-HD150 ver. 2.10 and later supports the dual set point function.

Air conditioner control system interface

LMAP04-E : LonWorks® Interface
Controls up to 50 Groups/ 50 units, for details, refer to its description.
BAC-HD150: BACnet® Interface
Controls up to 50 Groups/ 50 units, for details, refer to its description.*11

Centralized controller

AE-200E/AE-50E



Dimensions 284(W) x 200(H) x 65(D) mm
11-3/16(W) x 7-7/8(H) x 2-9/16(D) in.

Promotes energy savings through the comprehensive display of the air-conditioning equipment's energy consumption

- Energy consumption of the air-conditioning equipment can be displayed by individual area in graph form for easier viewing
- Users can easily confirm the operating status by comparing power consumption of the previous year, as well as with the electrical power target.
- Floor layout is displayed on the 10.4-inch LCD touch panel for easier management of air-conditioning equipment.

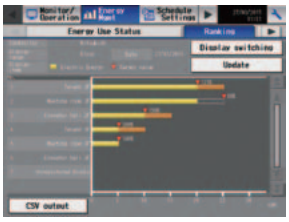
An optimal system can be easily and flexibly established according to a facility's scale.

- Up to 50 indoor units can be managed.
- Centralized control of up to 200 indoor units can be performed with three "AE-50E/EW-50E" expansion controllers.
- More than 200 indoor units can be managed by connecting the PC to the web browser.*1

*1. Please contact your local distributor regarding support for this feature.

Screen for Power Consumption

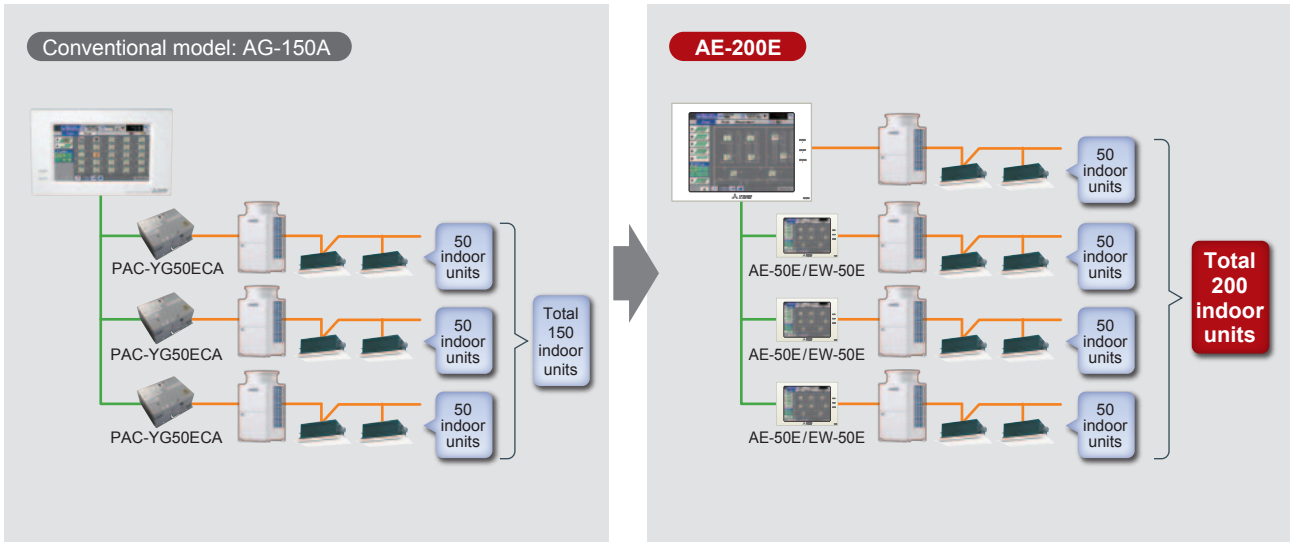
Energy consumption of a targeted area is displayed by month, day, and hour.
Energy consumption of two different units, groups, and blocks can be compared.
Fan operation time and energy consumption can be displayed.



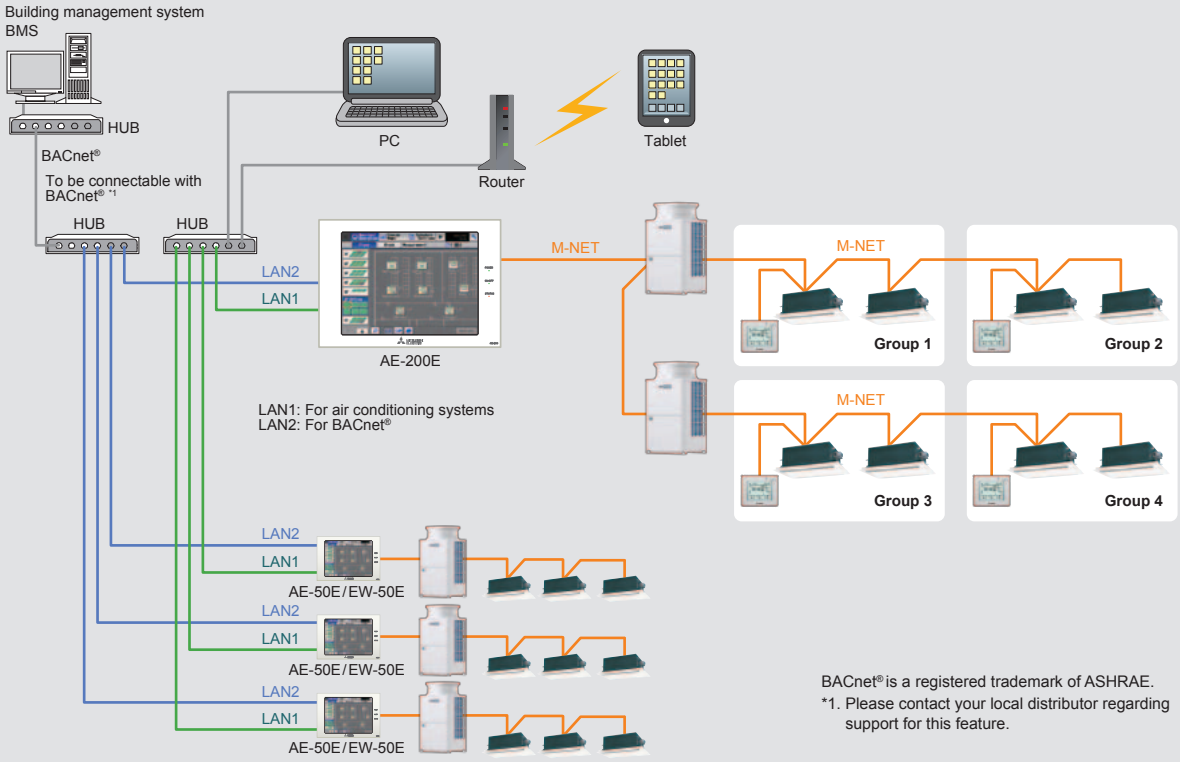
Energy consumption of air-conditioning equipment can be ranked and displayed by individual equipment or area. Visualization of high-load components is possible.
Energy consumption can also be compared with electrical energy targets.

* For the billing function, PI Controller and what -hour meter with pulse transmitter (locally available one) are required.

Comparing the number of connectable units



System Structure



Functions

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

Item	Description	Operations	Display
Controllable number of units	Up to 50 units/50 groups		
ON/OFF	ON and OFF operation for the air conditioning units and general equipment. (PAC-YG66DCA is required to operate general equipment.)	○ ◎ △ ●	○ ◎
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 * Auto mode is for CITY MULTI R2 and WR2 Series only.	○ ◎ △ ●	○
Temperature setting	Cool/Dry: 19-35°C [67-95°F] (14-30°C [57-87°F]) Heat: 4.5-28°C [40-83°F] (17-28°C [63-83°F]) Auto: 19-28°C [67-83°F] (17-28°C [63-83°F]) The range of temperature depends on the air conditioning unit. Values in parentheses "( )" are in cases where the middle-temperature is used on PDFY, PEFY-VML/VMR/VMS/VMH-by setting DipSW7-1 to ON. Note: 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.	×	○
Error	When an error is currently occurring on an air conditioning unit, the affected unit and the error code are displayed.	×	□ ◎
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 (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 external I/O adapter (PAC-YG10HA) sold separately. Only one input can be selected from the above inputs.	◎	◎
Energy Management	Bar Graph: Indoor unit Electric 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.	×	□ ○ ●
Advanced HVAC Controller (AHC)	The status of AHC can only be monitored.	×	○
ME remote controller	The status of sensor on this controller can be monitored.	×	○
Smartphone/Tablet	The specified web browser on iOS and Android OS can monitor and operate the AE-200E. *1	○	○
New web design	Revised web screen design for a more user friendly interface. *1	○ ◎ △ ●	○
Initial setting software	The initial setting can be configured without an AE-200E connection *1	×	×
Apportionment of power consumption	Apportionment of power consumption can be calculated on the AE-200 *2	●	□ ●
BACnet® communication	ANSI/ASHRAE 135-2010 (ISO16484-5) is supported and approved by the BTL. *1	○	×

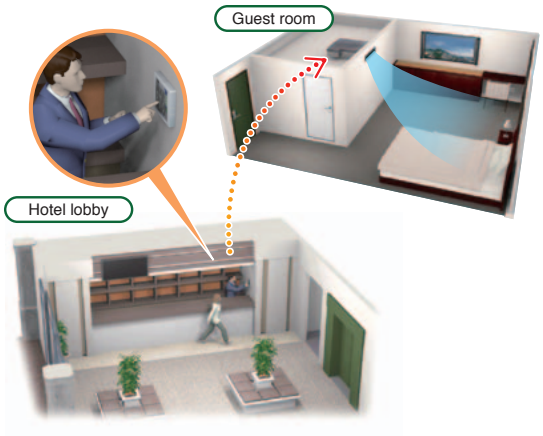
*1. Please contact your local distributor regarding support for this feature.
*2. Even when the number of indoor units is 50 or less, the system must consist of AE-200E and EW-50E/AE-50E.

Example of AE-200E Functions

Remote air conditioner operation in each room from the front desk

For Hotels

The air conditioner in each room can be remotely operated from the AE-200E installed at the front desk.
It is unnecessary to keep air conditioners running; the rooms are air-conditioned before guests enter.
All air conditioners in the hotel can be controlled using the scheduling function.



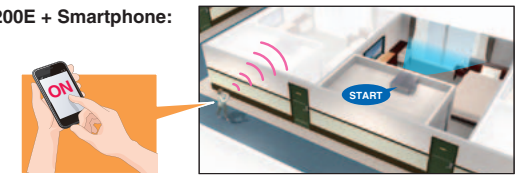
Operation and monitoring using a web browser*

For Hotels

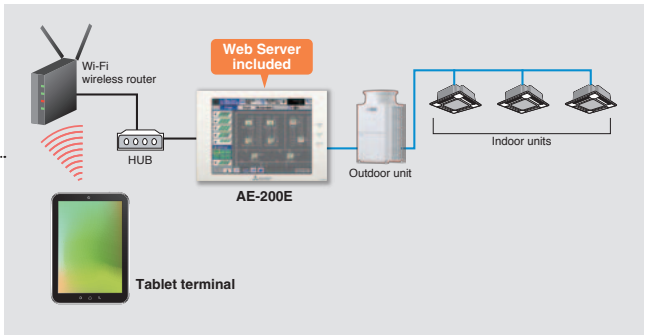
Air conditioning units can be operated and monitored from LAN-connected personal computers, tablets, and smartphones. You can easily see the operation conditions of units in the same manner as when browsing a website.

* A Wi-Fi router is required to use this function.

▶ **With AE-200E + Smartphone:**



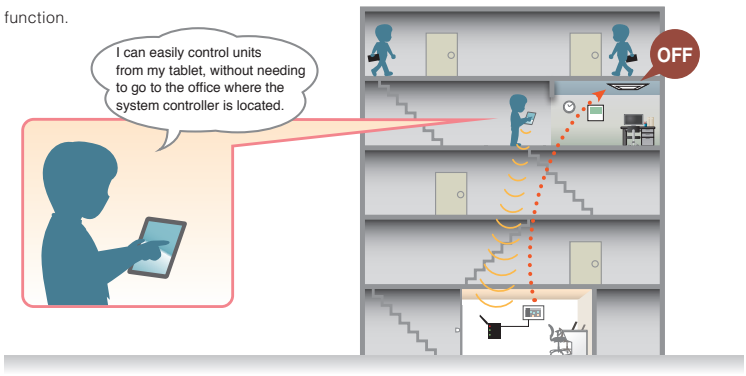
System configuration



You can control air conditioners that have not been turned off while on patrol right from your tablet without returning to the central management office.

For Offices

* A Wi-Fi router is required to use this function.



Centralized controller

EW-50E

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.

Main Features

- **Can be used as an expansion controller for the AE-200E**

  Up to 200 indoor units can be operated and monitored by connecting three EW-50E units to an AE-200E controller.

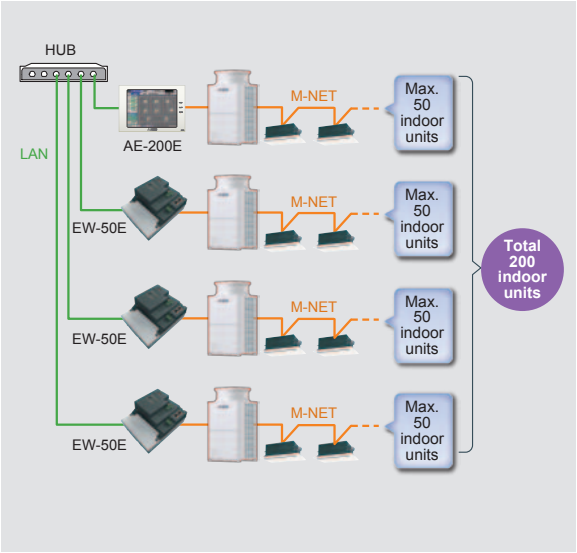
- **Function to apportion electricity charges**

  The power consumption of each air conditioner can be calculated with an AE-200E controller. The calculated data can be output to a PC via a USB memory device or LAN, and billing charges can be prepared using a specific charge calculation tool.

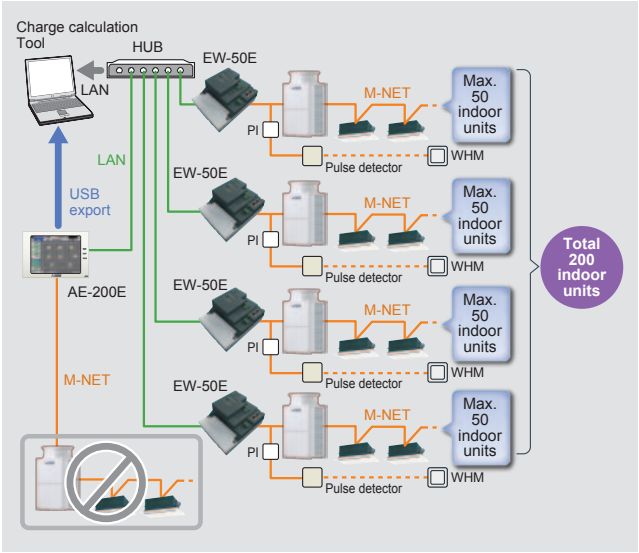
*To use the function to apportion electricity charge, the AE-200E and EW-50E are required.
*For other restrictions, refer to the Installation Manual and Instruction Book.

System Structure

System diagram (standard)



System diagram (with charge setting)

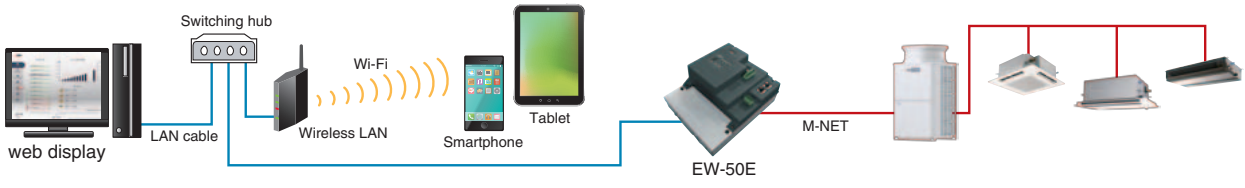


* When the AE-200E M-NET is not used, a maximum of four EW-50E units can be connected.

- **Air conditioner units can be operated and monitored independently using a PC**

  Even without an AE-200E controller, the EW-50E can operate and monitor air conditioner units using browser software*1.
  Air conditioners can be operated and monitored remotely via the Internet. In addition, air conditioners in multiple buildings can be operated collectively.*2

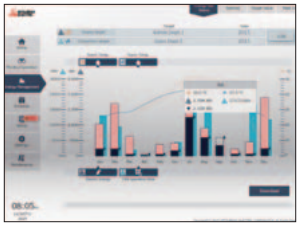
* 1. This operation has been confirmed on Internet Explorer 11, Edge or on Google Chrome ver.54, and Safari 10.
  Microsoft® Internet Explorer is a trademark or registered trademark of Microsoft Corporation in the United States and other countries.
  Google is a registered trademark of Google Inc.
  Google Chrome is a registered trademark of Google Inc. in the U.S. and other countries.
  Edge is a trademark or registered trademark of Microsoft Corporation in the U.S. and other countries.
  Internet Explorer is a trademark or registered trademark of Microsoft Corporation in the U.S. and other countries.
  Windows is a trademark or registered trademark of Microsoft Corporation in the U.S. and other countries.
  Safari is a trademark or registered trademark of Apple Inc. in the U.S.
  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 connect the EW-50E directly to the Internet. Instead, always connect via a router using the VPN function to ensure security.



• Manage air conditioner usage conditions

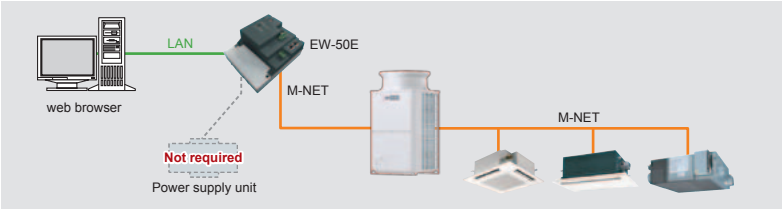
Energy consumption of air conditioners can be displayed in an easy-to-understand manner using a web browser.

* For the billing function, PI Controller and watt-hour meter with pulse transmitter (locally available one) are required.


• Operable without the transmission line power supply unit

The EW-50E unit is equipped with a power supply function. Power supplied by a transmission line power supply unit is not necessary. Since an outside power supply is not needed, self-sustained operation is possible even when the outdoor unit system is down. (In cases where the power consumption factor exceeds 1.5, a power supply unit is needed.)



• Energy-saving control

With the addition of an energy-saving control license (optional product), the set temperature can be automatically changed* according to the room temperature around the air conditioner unit to allow greater energy savings without sacrificing comfort.

* 1. With this function, the set temperature can be changed in +2°C/2°F increments for cooling and -2°C/2°F increments for heating during a set time interval. In cases where the intake temperature and the set temperature are significantly different, exclusion from the energy-saving target is possible.

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 air conditioners and general equipment ON or OFF.	◎	◎
Operation mode switching	Switches to cool, dry, auto, fan, or heat operation. * Some modes are not available depending on the unit.	◎	○
Room temperature setting	The temperature can be set within the following range. Cool/Dry: 19-35°C [67-95°F] Heat: 4.5-28°C [40-83°F] Auto (single set point): 19-28°C [67-83°F] Auto (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode.	◎	○
Set temperature 0.5°C/1°F increments	The temperature can be set and displayed in 0.5°C/1°F increments. * With some unit combinations, the temperature is set in 1°C/1°F 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 5 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 to 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 AT-50B, PAR-32MA (6), PAR-U02MEDA, 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 Setting content: ON/OFF, operation mode, set temperature, disable local remote controller, air direction/fan	◎	○
Energy management	Displays the power consumption* or operating hours. * Optional part required.	—	◎
Ventilator operation (solo)	Group operation is 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 external I/O adapter (PAC-YG10HA) sold separately. Only one input can be selected from the above inputs.	□	—
External output (error output, operation output)	Using the level signal, ON/OFF, and Error/Normal are output. * Requires an external power supply and external I/O adapter (PAC-YG10HA) sold separately.	—	□
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	◎ *1	◎ *1
Filter reset	Filter sign reset	○	○
Connectable location	Centralized system transmission line: Connectable Recommended Indoor and outdoor transmission line: Connectable	—	—

* Functions and specifications differ depending on the connected equipment and model.
* Electric energy can be proportionally divided using the EW-50E alone. However, the apportioned electricity charge function requires an AE-200E.

■Connectable equipment: CITY MULTI
A Mr. Slim Control (Can be connected using an M-NET adapter or special outdoor unit)
Room air conditioner (Requires a system control interface or M-NET control interface)
Lossnay
AI controller, PI controller, DIDO controller

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

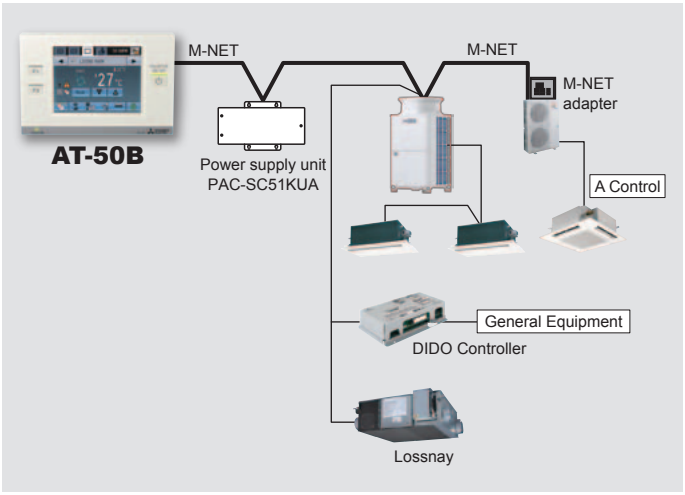
Advanced Touch controller

AT-50B

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

The color touch panel is easy to see and operate. The operation screen can be selected according to the intended use.

System structure



Design

Backlit LCD Touch Panel

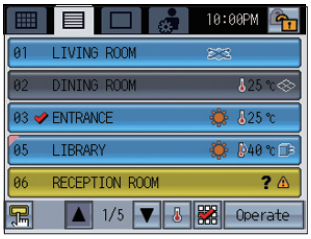
The 5-inch color LCD (Liquid Crystal Display) touch panel enables easy and simple operations.
When the backlight is off, touching the panel turns on the backlight. The backlight will remain on for a preset length of time.
The touch panel displays operation status of the units in GRID, LIST, or in GROUP form.

GRID (zoom out) screen

Displays operation status of all groups.

GRID (zoom in) screen

Displays the operation status details of each group by group name.



LIST screen

Displays the operation status details of each group.

GROUP screen

Displays the operation status details of each group. Sets group operations.

Functions

Controls 50 indoor units in all

One screen shows the operation conditions of 50 connected indoor units.

Weekly and daily schedule

You can set two patterns of weekly schedule and change the schedule according to the season. It is possible to set also a special schedule in consideration of public holidays, etc.

System changeover

The operation mode can be changed according to the indoor temperature settings, target temperature of each group, or a representative indoor unit.

Main system controller/Sub-system controller

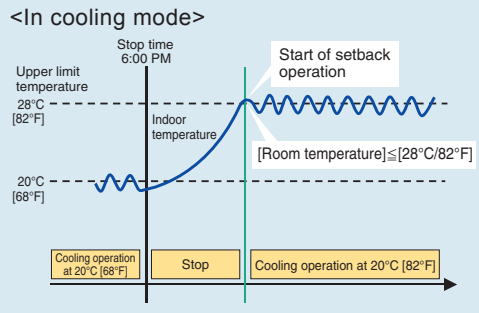
The AT-50B can be used as any of the main and sub system controllers. When it is connected to a system controller, such as the AE-200E, it is used as a sub controller. When some units of the AT-50B are connected, the main and sub controllers can be determined.

Functions [Basic Functions]

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

Night setback function

When the room temperature goes outside of a certain range during the predetermined period, this function automatically starts heating or cooling operation to prevent dew condensation or an excessive temperature increase in the room.



Simple button arrangement

The F1 and F2 buttons beside the main screen can be customized for frequently used functions.
(Schedule/Operation Mode/Temperature Correction/Remote Controller Restriction)

Advanced Functions

□: Each unit ○: Each group ◎: Group or collective ×: Not available

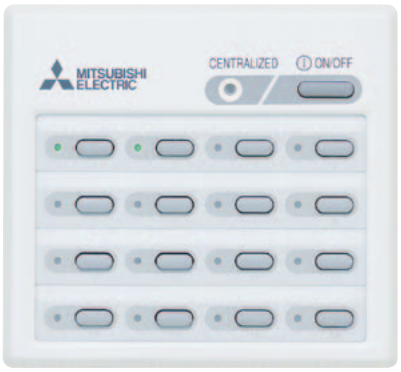
Item	Description	Operations	Display
Permit / Prohibit	The ON/OFF, operation mode, setting temperature, fan speed, air direction, filter sign reset operations, and timer using the local remote controllers can be prohibited. Only ON/OFF and filter reset can be prohibited for the LOSSNAY group. *The settable items vary depending on the models.	◎	◎
Operation lock	The operation lock can be set to the input operation of the 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 occurring on an air conditioner unit, the affected unit and the error code are displayed. * When an error occurs, the "ON/OFF" LED flashes. The operation monitor screen shows on abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code, and source of detection.	×	□◎
Ventilation (independent)	Switches the mode "Bypass/Heat recovery/Auto" for LOSSNAY groups.	◎	◎
Ventilation (interlocked)	The LOSSNAY will run in interlock with the operation of the 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 in cooling, heating, and auto modes. 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 (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 (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 a 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 of up to 12 patterns is available. In one pattern, up to 16 settings for "ON/OFF", "Operation mode", "Set Temperature", "Fan speed", "Air flow direction", and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedules (Summer/Winter) can be set. Today's schedule allows setting of up to 5 patterns.	○	○

* 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.

ON/OFF remote controller

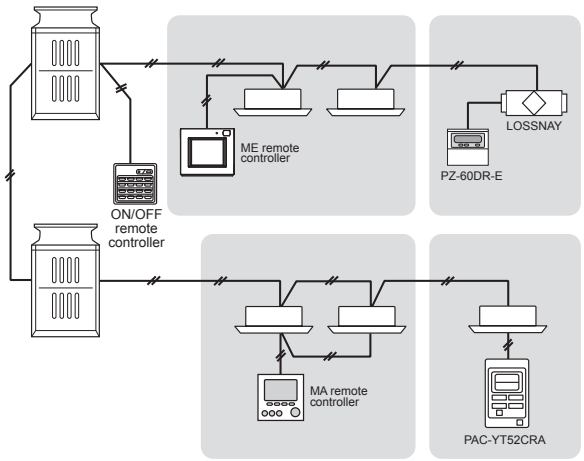
PAC-YT40ANRA

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



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

System example



- **Control of up to 16 groups/50 indoor units is possible**
  - Up to 16 groups/50 units can be operated with one ON/OFF remote controller.
  - A general-purpose interface is available for control, allowing general devices to also be turned ON and OFF.
- **Just press a switch to start**
  - All of the units can be started and stopped by pressing the main switch, and each unit in the group can be started and stopped with individual switches.
- **LED flashing during failure**
  - If any error should occur in the air conditioner, its details can be confirmed easily with the flashing LED. The LED also indicates whether each group is running or stopped.
- **Interlock operation with external system is possible**
  - It can be flexibly interlocked with a card reader, fire alarm system, or building management system, etc., using the incorporated external input/output function.
- **Flexible group setting**
  - Groups can be easily configured, allowing the group pattern to be freely set according to the layout.
  - The ON/OFF remote controller can be connected at the indoor/outdoor transmission line without the power supply unit.

NOTE
The dual set point function is available depending on the controller version.
Please contact your local distributor regarding the availability of this function.

○: Each group □: Batch only ×: Not available

Function	Description	PAC-YT40ANRA	
UNITS	Max No.Units	50 units/16 groups	
		Operations	Display
ON/OFF	ON and OFF operation	○	○
Error indication	LED flashes during failure. (The error code can be confirmed by removing the cover.)	×	○
Ventilation operation (Independent)	Group operation of only LOSSNAY units possible. *Only ON/OFF of group.	○	○
Ventilation operation (Interlocked)	The LOSSNAY will run in interlock with the operation of the indoor unit. *The fan rate and mode cannot be changed. The LED will turn ON only during operation after interlocking.	○	○
External input	On and Off operation / Fire Alarm*	□	×
External output	On and Off operation / Faults*	×	□

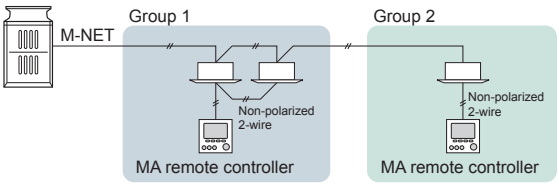
* Applicable to collective only
Not applicable to groups

Wired MA remote controller

PAR-33MAA

Dimensions	120(W) x 120(H) x 19(D) mm 4-3/4(W) x 4-3/4(H) x 3/4(D) in.

Example of system configuration



*When a PAR-32MAA is connected to a group, no other MA remote controllers can be connected to the same group.

- **Dot LCD**
  Uses a dot LCD screen on which characters are easy to see and pictorial symbols can be displayed.
- **Draft reduction**
  A “Close” option has been added to the manual vane angle selection. The ventilation duct can be closed to prevent draft air from the air conditioner.
  *Not available on all indoor unit models. For details, please contact your local distributor.
- **Auto descending panel***
  The air flow panels can be raised or lowered with the remote controller. The descending distance of the panels can also be selected.
  *Not available on all indoor unit models. For details, please contact your local distributor.
- **Night Setback**
  When the room temperature exceeds the preset upper and lower limits, air conditioning operations are suspended to prevent indoor condensation and extreme temperatures.
- **Language selection**
  The screen's display language can be selected from several languages.
  English, French, Spanish, Italian, Portuguese, Greek, Turkish, Swedish
- **3D i-see Sensor**
  Settings for 3D i-see Sensor can be performed.

Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Auto / Heat.	○	○
Room temp. setting	The temperature can be set within the following range. Cool / Drying: 19-35°C [67-95°F] Heat: 4.5-28°C [40-83°F] Auto (single set point): 19-28°C [67-83°F] Auto (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode. * Set temperature range varies depending on the model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Louver setting	Switches between louver ON/OFF.	○	○
Ventilation equipment control	Interlocked setting and interlocked operation setting with the CITY MULTI LOSSNAY units can be performed. The Stop/Low/High settings of the ventilation equipment can be controlled.	○	○
Error information	When an error occurs, an error code and the unit address appear. Air conditioning unit model, serial number, and contact number can be set to appear when an error occurs. (The information above needs to be entered in advance.) * An error code may not appear depending on the error.	–	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 minutes in 10-minute increments.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, fan speed, air direction, and filter sign reset. * While an operation is prohibited, the operation icon lights up (only on the Main display in "Full" mode).	×	○
Operation lock	The following operations can be prohibited: ON/OFF, operation mode setting, temperature setting, and airflow direction setting.	○	○
Temperature range restriction	The room temperature range for each operation mode can be restricted.	○	○
Auto return	The units operate at the preset temperature after a designated period. (Time can be set to a value from 30 to 120 minutes in 10-minute increments.) * Not valid when the temperature setting range is restricted.	○	×
Daylight saving time	The start/end time for daylight saving time can be set. The daylight saving time function will be activated based on the setting contents.	○	○

Wired MA remote controller

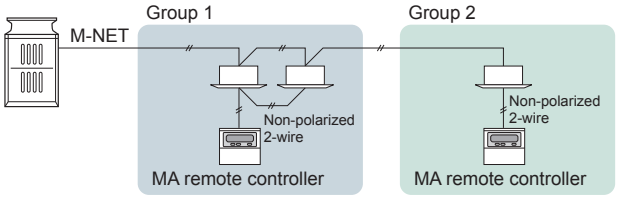
PAR-21MAA

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

- **Dot Liquid Crystal Display (LCD)**
- **Multi-language Display**

- **Set temperature in 1°C/°F increment**
- **Weekly timer**
  Up to 8 ON/OFF/temperature settings per day in one-minute increments. Setting kept in nonvolatile memory. No need to worry about resetting after a power failure.
- **Self-diagnosis function immediately reports an error code in case of malfunction**

Example of system configuration



Multi-language Display Example [Dot display table]

Language		English	German	Spanish	Russian	Italian	Chinese	French	Japanese
Waiting for start-up		PLEASE WAIT	←	←	←	←	←	←	←
Operation mode	Cool	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FROID	冷房
	Dry	DRY	Trocknen	DESHUMI-DIFICACION	Сушка	DRY	除湿	DESHU	ドライ
	Heat	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Auto	AUTO	AUTO	AUTO-MÁTICO	Авто	AUTO	自动	AUTO	自動
	Auto(Cool)	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FROID	冷房
	Auto(Heat)	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Fan	FAN	Lüfter	VENTI-LACIÓN	Вент	VENTILAZIONE	送风	VENTILATION	送風
	Ventilation	VENTILATION	Gebläse Lüftung	VENTI-LACIÓN	Вентиляция	ARIA ESTERNA	换气	VENTILATION	換気
	Stand by (Hot adjust)	STAND BY	STAND BY	CALENTANDO	ОБОГРЕВ: ПАУЗА	STAND BY	准备中	PRE CHAUFFAGE	準備中
	Defrost	DEFROST	Abtauen	DESCONGE-LACIÓN	ОТТАИВАНИЕ	SBRINAMENTO	除霜中	DEGIVRAGE	霜取中
Button not used		NOT AVAILABLE	nicht Verfügbar	NO DISPONIBLE	НЕ ДОСТУПНО	NON DISPONIBILE	无效按钮	NON DISPONIBLE	無効ボタン
Check (Error)		CHECK	Prüfen	COMPROBAR	Проверка	CHECK	检查	CONTROLE	点検
Test run		TEST RUN	Testbetrieb	TEST FUNCIONAMIENTO	Тестовый запуск	TEST RUN	试运转	TEST	試ウンテン
Self check		SELF CHECK	selbst-diagnose	AUTO REVISIÓN	Самодиагностика	SELF CHECK	自我诊断	AUTO CONTROLE	自己ジンダン
Unit function selection		FUNCTION SELECTION	Funktion Auswahl	SELECCIÓN DE FUNCIÓN	Выбор функции	SELEZIONE FUNZIONI	功能选择	SELECTION FONCTIONS	キノウ選択
Setting of ventilation		SETTING OF VENTILATION	Lüftenstufen Wahlen	CONFIG. VENTILACIÓN	Настройка вентустан.	IMPOSTAZIONE ARIA ESTERNA	换气设定	SELECTION VENTILATION	換気設定

Functions

□: Each unit ○: Each group ◎: Group or collective ×: Not available

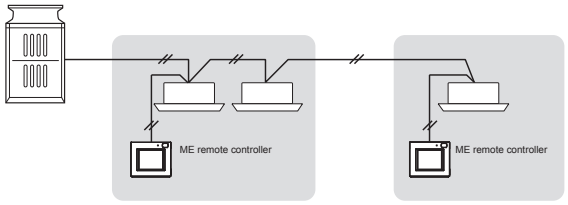
Item	Description	Operations	Display
ON/OFF	ON and OFF operation for a single group	○	○
Operation mode switching	Switches between Cool / Dry / Auto* / Fan / Heat. Operation modes vary depending on the air conditioner unit. * Auto only supported for the CITY MULTI R2 and WR2 Series.	○	○
Temperature setting	Sets the temperature for a single group Range of temperature setting: Cool/Dry: 19-30°C [67-87°F] (14-30°C [57-87°F]) Heat : 17-28°C [63-83°F] (17-28°C [63-83°F]) Auto : 19-28°C [67-83°F] (17-28°C [63-83°F]) Values in parentheses "( )" are for PEFY/PFFY by setting DipSW 7-1 to ON and limits to NI6H fan speed only.	○	○
Fan speed setting	Models with 4 air flow speed settings: High/Mid-1/Mid-2/Low Models with 3 air flow speed settings: High/Mid/Low Models with 2 air flow speed settings: High/Low Fan speed setting (including Auto) varies depending on the model.	○	○
Air flow direction setting	Air flow direction angles (4-angle, or 5-angle Swing) Auto Louver ON/OFF Air flow direction settings vary depending on the model.	○	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (ON/OFF, Change operation mode, Set temperature, Reset filter). *1: When the local remote controller inactivation command is received from the main system controller, " ▨ " is displayed.	×	○*1
Prohibition/permission of specified mode (Cooling prohibited/heating prohibited /cooling-heating prohibited)	Operation for the following modes is prohibited through System Controller settings: At cooling prohibited: Cool, Dry, Auto, At heating prohibited: Heat, Auto, At cooling-heating prohibited: Cool, Heat, Dry, Auto	×	○
Error	When an error is occurring on an air conditioner unit, the affected unit and the error code are displayed.	×	□
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one LOSSNAY. LOSSNAY items that can be set are "Hi" "Low" "Stop". Ventilation mode switching is not available.	○	○
Set temperature range limit	Set temperature range limit to cooling, heating, or auto mode.	○	○
Auto lock function	Setting/releasing of simplified locking for remote control switch can be performed. · Locking of all switches · Locking of all switches except ON/OFF switch	○	○

ME remote controller

PAR-U02MEDA

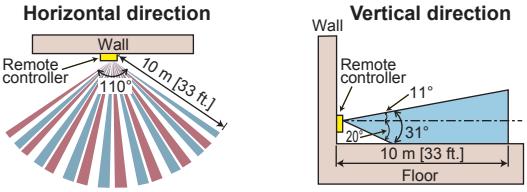
Dimensions	140(W) x 120(H) x 25(D) mm 5-9/16(W) x 4-3/4(H) x 1(D) in.

Example of system configuration



- **Occupancy Sensor**
  The occupancy sensor detects when the room is empty and provides energy-saving control.
- **Touch Panel & Backlit LCD**
  The operation settings screen is a touch panel.
  When the backlight is off, touching the panel turns on the backlight.
  The backlight will remain on for a preset length of time.
- **LED Indicator**
  The color of the LED indicator indicates operation status.
  The LED indicator is lit during normal operations, and is not lit when units are stopped. In case of error, the indicator blinks.
- **Brightness Sensor**
  The brightness sensor detects brightness in the room and provides energy-saving control.
- **Temperature & Humidity Sensor**
  The sensor detects room temperature and relative humidity.
- **Device control via AHC (Advanced HVAC Controller)**
  Products from other manufacturers can be connected via AHC.

Occupancy Sensor detection zone



Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Heat / Auto. Operation modes vary depending on the indoor unit model.	○	○
Temperature setting	The temperature can be set within the following range. Cool / Drying: 19-35°C [67-95°F] Heat: 4.5-28°C [40-83°F] Auto: (single set point): 19-28°C [67-83°F] 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 temperature ranges that can be set vary depending on the indoor unit model.	○	○
Fan speed setting	Changes fan speed. * Available fan speeds vary depending on the model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, fan speed, air direction, and filter sign reset. * While an operation is prohibited, the operation icon lights up.	×	○
Error information	When an error occurs, an error code and the unit address appear. A contact number can be set to appear when an error occurs. (The information above needs to be entered in the Service menu.)	—	○
Schedule (Weekly timer)	Weekly ON/OFF times, operation mode, and set temperatures can be set. • Time can be set in 5-minute increments. Up to 8 schedule patterns can be set per day of the week. * Not valid when the ON/OFF timer is set.	○	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 in 10-minute increments.	○	○
Energy-save control during vacancy	When vacancy is detected by the occupancy sensor, the energy-save control assist function is activated. Four control types are available for selection: ON/OFF/Set temperature/Fan speed/Thermo-off. The brightness sensor can be used in conjunction with the occupancy sensor to detect the occupancy/vacancy status more accurately.	○	○

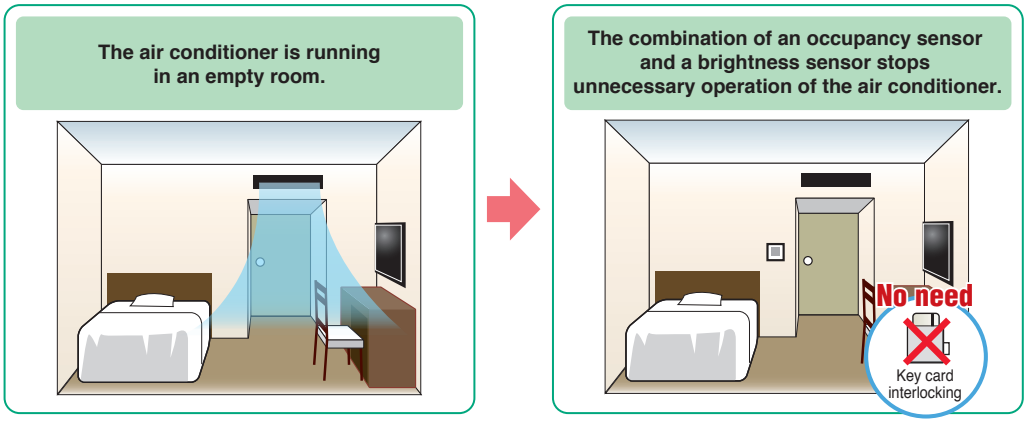
Example of use of PAR-U02MEDA

Automatic turning off air conditioners

For Hotels

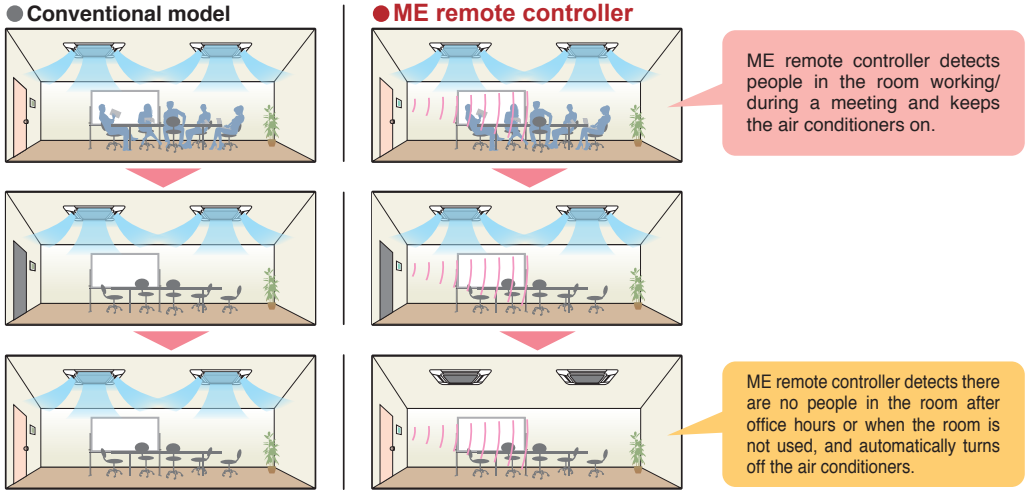
Mitsubishi Electric's remote controller has an occupancy sensor to automatically turn off the air conditioner when the room is empty.

With ME Remote Controller



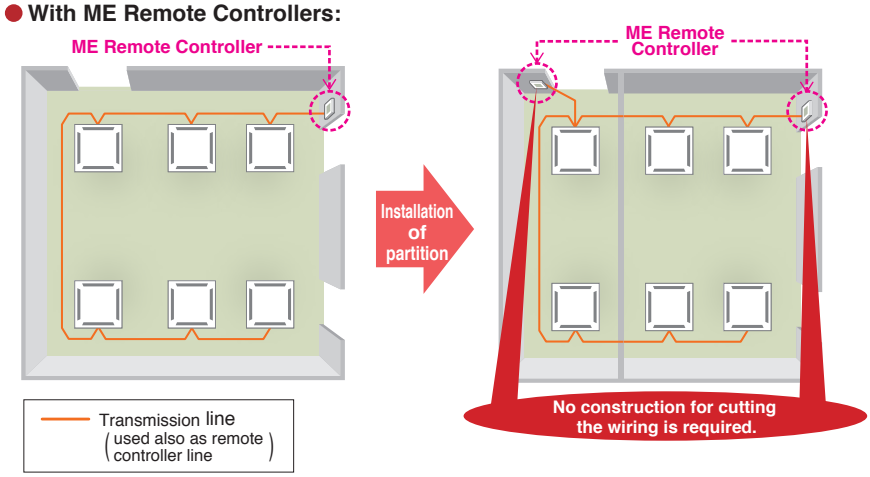
The occupancy sensor of the ME remote controller detects the conditions in the room, and the ME remote controller will automatically turn the air conditioners on or off.

For Offices



Partitioning can be installed later when a ME Remote Controller is used.

For Offices
For Commercial Facilities



The ME remote controller can be operated when it is connected with any of the indoor units.
When changing the room layout, you can set the groups easily with the remote controller.

MA remote controller

PAR-CT01MAA-S

- **User-friendly**
  Large icons are easily visible on the full color touch panel display.
- **Flexibility**
  Customized display, color of parameter and background, editable parameter on the initial display.

Dimensions	65(W) x 120(H) x 14.1(D) mm 2-9/16(W) x4-3/4(H) x 9/16(D) in.

User-friendly

Full color touch panel display

Touch Panel

3.5 inch/HVGA
Full Color LCD

Operation panels

Temperature setting

Operation mode

Fan speed

Vane control

Ventilation

Louver control

Flexibility

Multiple color patterns

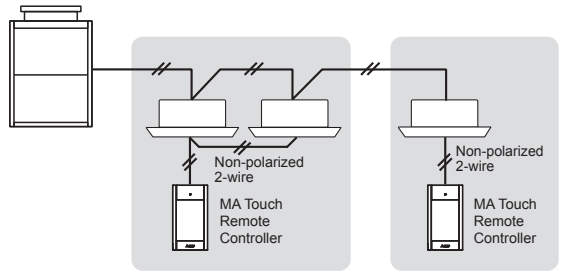
180 color patterns can be selected for the display's control parameters or background.

Control parameter customization

Users can customize the panel to display the selected parameters only.

Available in a wide variety of colors to suit the decor of any room.

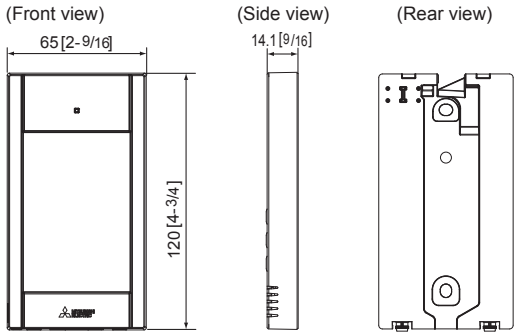
System example



*When a PAR-CT01MAA is connected to a group, no other MA remote controllers can be connected to the same group.

External dimension

Unit: mm[in.]



Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Auto / Heat.	○	○
Room temp.setting *1	The temperature can be set within the following range. Cool / Dry: 19-35°C [67-95°F] Heat: 4.5-28°C [40-83°F] Auto (single set point): 19-28°C [67-83°F] Auto (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode. * Set temperature range varies depending on the model.	○	○
Air flow direction setting	Changes airflow direction. * Available airflow directions vary depending on the model.	○	○
Louver setting	Switches between louver ON/OFF.	○	○
Ventilation equipment control	Interlocked setting and interlocked operation setting with CITY MULTI Lossnay units can be performed. The Stop/Low/High settings of the ventilation equipment can be controlled.	○	○
Daylight saving time	The start/end time for daylight saving time can be set. The daylight saving time function will be activated based on the settings.	○	○
Error information	When an error occurs, an error code and the unit address appear. Air conditioning unit model, serial number, and contact number can be set to appear when an error occurs. (The information above needs to be entered in advance.) * An error code may not appear depending on the error.	—	○
Touch panel	The touch panel can be cleaned and calibrated.	—	○
Timer	ON/OFF timer Turns ON and OFF daily at a set time. • Time can be set in 5-minute increments. • It is also possible to set the ON time only or the OFF time only. Auto-OFF timer Turns off the unit after a certain period of operation. • Operation time can be set to a value from 30 to 240 minutes in 10-minute increments.	○	○
Allows/disallows local operation	The following operation can be prohibited by applying certain settings on the centralized controller: ON/OFF, operation mode setting, temperature setting, and filter sign reset. * While an operation is prohibited, the operation icon lights up (only on the Main display in "Full" mode).	×	○
Operation lock	The following operations can be prohibited: "Location." "ON/OFF," "mode." "Set temp." "Menu." "Fan." "Louver." or "Vane."	○	○
Temperature range restriction	The room temperature range for each operation mode can be restricted.	○	○
Auto return	The units operate at the preset temperature after a designated period. (Time can be set to a value from 30 to 120 minutes in 10-minute increments.) * Not valid when the temperature setting range is restricted.	○	×
Design	The color of the screen can be changed.	○	○

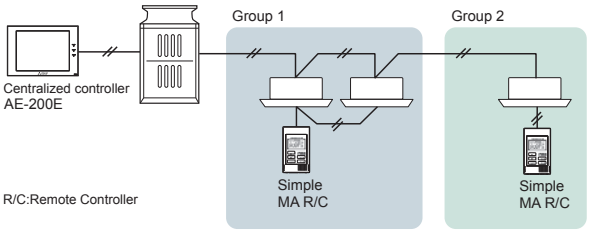
*1 Temperature will be displayed either in Celsius in 0.5- or 1-degree increments, or in Fahrenheit, depending on the indoor unit model and the display mode setting on the remote controller.

Simple remote controller

PAC-YT52CRA (MA)

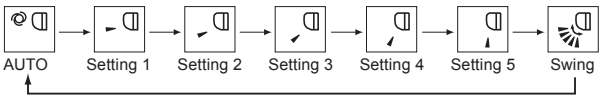
Dimensions	70(W) x 120(H) x 14.5(D) mm 2-3/4(W) x 4-3/4(H) x 19/32(D) in.

Example of system configuration



- **Backlit LCD**
  Backlight for operation in dark areas
- **Flat back**
  Slim and flat type. Hole-free installation on walls
  Less than 14.5 mm [19/32 in.] thick.
- **Vane button (standard)**
  A vane adjustment button has been added to allow the user to change the direction of the air flow (ceiling-cassette and wall-mounted types).

  Pressing the button will switch the vane directions.



  * Air flow direction settings will vary depending on the connected indoor unit model.
  * For models without a vane adjustment function, air flow direction cannot be set. In such cases, the vane icon blinks when the button is pressed.

- **Only cross-over wiring based on two-wire signal lines is required.**
- **Room temperature sensor is built-in.**
- **Can be used to operate all types of indoor units.**
  *As this controller has limited functions, please use it in conjunction with the standard controller or a central controller.
- **LCD temperature settings and display are in 1°C /1°F increments.**

Functions

□: Each unit ○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	Switches between ON and OFF.	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Heat / Auto. Operation modes vary depending on the indoor unit model.	○	○
Temperature setting	The temperature can be set within the following range. Cool/Drying: 19-35°C [67-95°F] Heat: 5-28°C [40-83°F] Auto (single set point): 19-28°C [67-83°F] Auto (dual set points) [Cool] Same as the set temp. range for Cool mode. [Heat] Same as the set temp. range for Heat mode. * Set temperature range varies depending on the model.	○	○
Fan speed setting	Changes fan speed. * Available fan speeds vary depending on the model.	○	○
Permit / Prohibit local operation	By setting a centralized controller, the following local operations can be prohibited: ON/OFF, operation mode, preset temperature. * The CENTRAL icon appears while local operations are prohibited.	×	○
Error	Displays the current error status with the address. * The address may hot be displayed depending on the error status.	×	□
Ventilation equipment	When the CITY MULTI indoor unit is connected, interlocked setting of the CITY MULTI LOSSNAY unit is possible. When the Mr. SLIM indoor unit (A-control) is connected, interlocked operation LOSSNAY unit (LGH-R(V) X Type) is possible.	○	○
Set temperature range limit	The preset temperature range can be restricted for each operation mode (COOL/HEAT/AUTO).	○	○

Wireless remote controller

PAR-FL32MA / PAR-SL100A-E / PAR-FA32MA / PAR-SA9FA-E / PAR-SF9FA-E / PAR-SL94B-E

PAR-FL32MA

Dimensions

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

PAR-SL100A-E

(PLFY-VFM-E1 only)

Dimensions

66(W) x 188(H) x 20(D) mm
[2-5/8(W) x 7-13/32(H) x 7/8(D) in.]

PAR-FA32MA

Dimensions

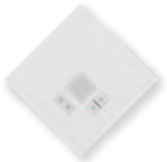
70(W) x 120(H) x 22.5(D) mm
[2-3/4(W) x 4-3/4(H) x 7/8(D) in.]

PAR-SA9FA-E

(4-way Cassette signal receiver)

Dimensions

256(H) x 19(D) mm
[10-1/16 x 3/4 in.]



PAR-SF9FA-E

(PLFY-VFM-E1 signal receiver)

Dimensions

214(H) x 25.5(D) mm

PAR-SL94B-E

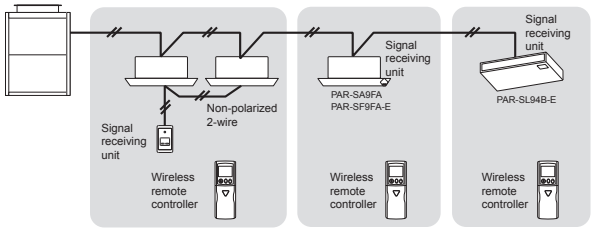
(Wireless remote controller kit for ceiling-suspended type)

Dimensions

182(W) x 57(H) x 31(D) mm
[7-3/16(W) x 2-1/4(H) x 1-1/4(D) in.]

- **No need to configure addresses for group operation**
- **Lit LED keeps you informed of operation - the LED also provides you with error codes 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.
- **Multiple indoor units cannot be controlled from the PAR-SL100A-E Only one indoor unit can be used in each group**
- **LCD temperature setting and display in 1°C /1°F increments**

Example of system configuration



Compatibility table

	Receiver	Transmitter
PMFY-P VBM PLFY-P VLMD PFFY-P VKM PEFY-P VMR-E/R/VMH(S)-E(2) PFFY-P VLEM/VKM/VLRM/VLRMM PEFY-P VMS1(L) PEFY-VMA(L)(3)	PAR-FA32MA	PAR-FL32MA
PCFY-P VKM	PAR-FA32MA PAR-SL94B-E	
PKFY-P VBM-E PKFY-P VHM/VKM	Built-in	
PLFY-P VBM-E	PAR-SA9FA-E	
PLFY-P VFM-E1	PAR-SF9FA-E	PAR-SL100A-E

Functions

○: Each group ×: Not available

Item	Description	Operations	Display
ON/OFF	ON and OFF operation for a single group	○	○
Temperature setting	Sets the temperature for a single group Range of temperature setting: Cool/Dry: 19°C - 30°C (14°C - 30°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) / 67°F - 83°F (63°F - 83°F) ( ) For PEFY/PFFY by setting DipSW 7-1 to ON and limits to HI6H fan speed only. * Set to PAR-FL32MA according to its Installation Manual 4 "Model setting".	○	○
Air flow direction setting	Air flow direction angles (4-angle, Swing) Auto Louver ON/OFF. Air flow direction settings vary depending on the model.	*1	*1
Timer operation	One ON/OFF setting can be set per day.	○	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (ON/OFF, Change operation mode, Set temperature, Reset filter). *3 If operation is performed when the local remote controller inactivation command is received from the main system controller, a buzzer will sound and an LED will flash.	×	○*3
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one LOSSNAY. The LOSSNAY will run in interlock with the operation of the indoor unit.	×*2	×

*1 Some models will have a different display for the air flowdirection and fan speed.
Set the air flow direction and fan speed when performing initial setting.
*2 The fan rate and mode cannot be changed.

AHC ADAPTER

PAC-IF01AHC-J

Dimensions 4-9/16(W) x 3-1/2(H) x 1-9/16(D) in.
116(W) x 90(H) x 40(D) mm

The Advanced HVAC CONTROLLER (AHC) comprises of MITSUBISHI ELECTRIC's AHC ADAPTER (PAC-IF01AHC-J) and α2 SIMPLE APPLICATION CONTROLLER* (ALPHA2).

*α2 SIMPLE APPLICATION CONTROLLER is one of the Programming Logic Controllers manufactured by MITSUBISHI ELECTRIC CORPORATION.

AHC allows for the connection of MITSUBISHI ELECTRIC's air conditioning network system (M-NET) to other systems, which was not possible with the use of ALPHA2 alone. AHC provides the following functions:

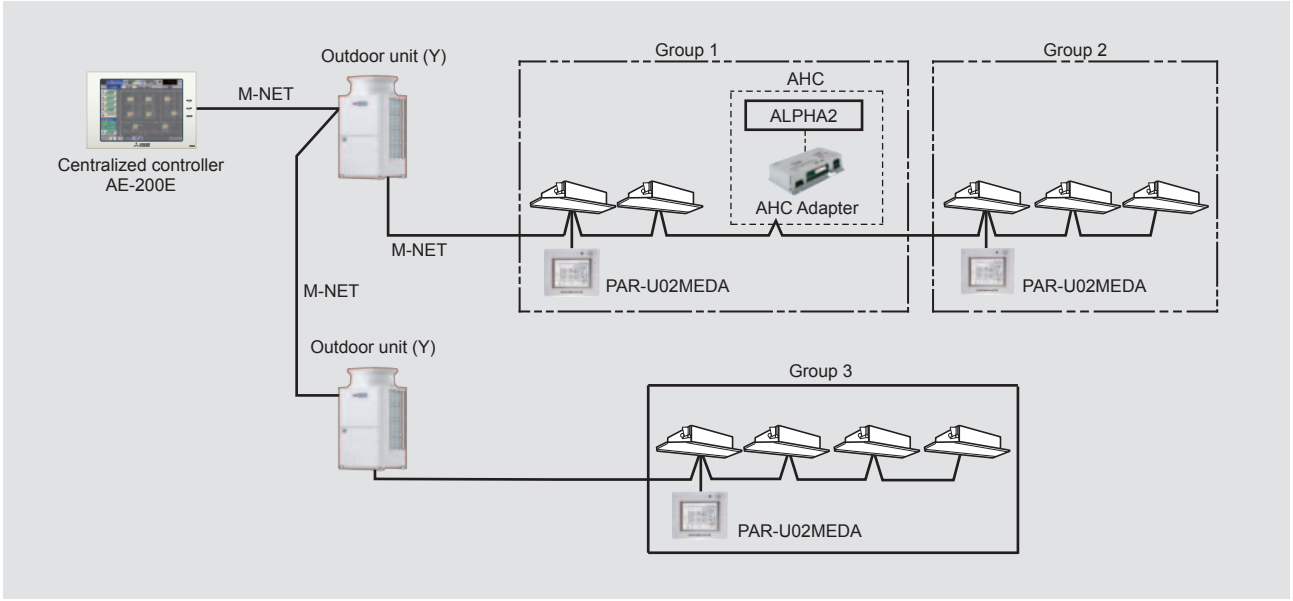
① Controls external devices using the sensor data of the air conditioning units connected to M-NET
② Interlocks the operation of air conditioning units and external devices that are connected to ALPHA2
③ Controls air conditioning units that are connected to M-NET
④ Allows for the combined use of items ①-③ above
⑤ Monitors the input/output status of ALPHA2 via a remote controller or a centralized controller

Compatible controllers

- Remote Controller: PAR-U02MEDA
- Centralized Controller: EB-50GU-J, AE-200E, AE-50E, EW-50E

* Refer to the manual that came with ALPHA2 for information about ALPHA2.
* Use of the AHC ADAPTER requires either a remote controller or a centralized controller.

System Structure



PI Controller

PAC-YG60MCA

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

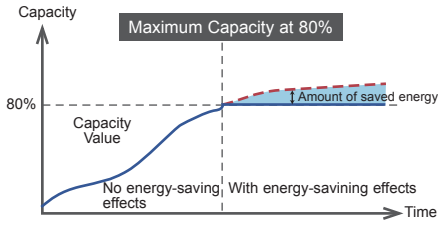
The PI controller counts pulses from a power meter, gas meter, water meter, and calorimeter. Combining the use of the AE-200E/AE-50E/EW-50E allows for calculating the charges for each unit and performing peak cut (e.g., demand control) operation. The meters can be monitored on the AE-200E/AE-50E LCD.

Energy Saving Control (Peak Cut)

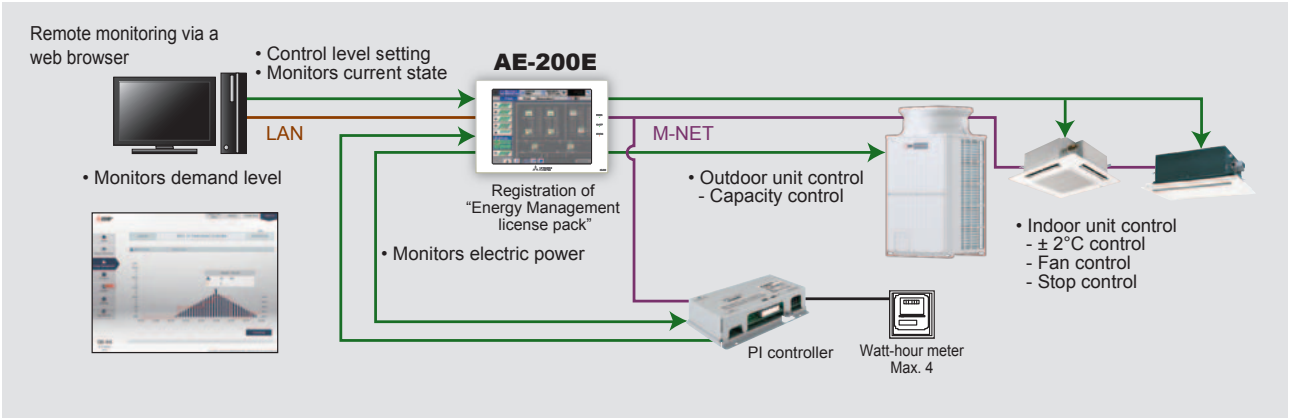
Enables Energy Saving Control with the use of our PI controller. (Registration of "Energy Management license pack" is required.)

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

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



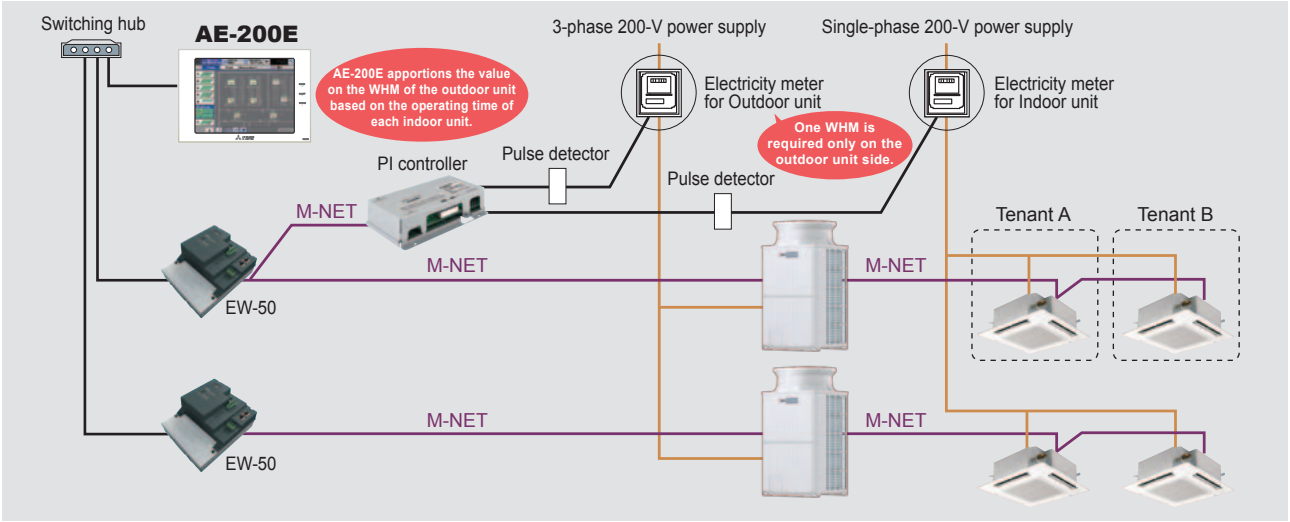
System Structure



Charge Calculation

Enables calculation of charges for each tenant and output it as a CSV file

System Structure



DIDO Controller

PAC-YG66DCA

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

The DIDO controller is used in combination with an AE-200E/AE-50E/EW-50E to operate general-purpose equipment, as well as to monitor operating and error status. It is equipped with two sets of standard terminals (Channels 1 and 2), and four sets of expansion connectors for the input/output terminals. Expansion cable is optional.
Operation can be monitored or performed from the AE-200E/AE-50E LCD.
In addition, this device includes a function that interlocks M-NET devices such as indoor units, general equipment, etc.

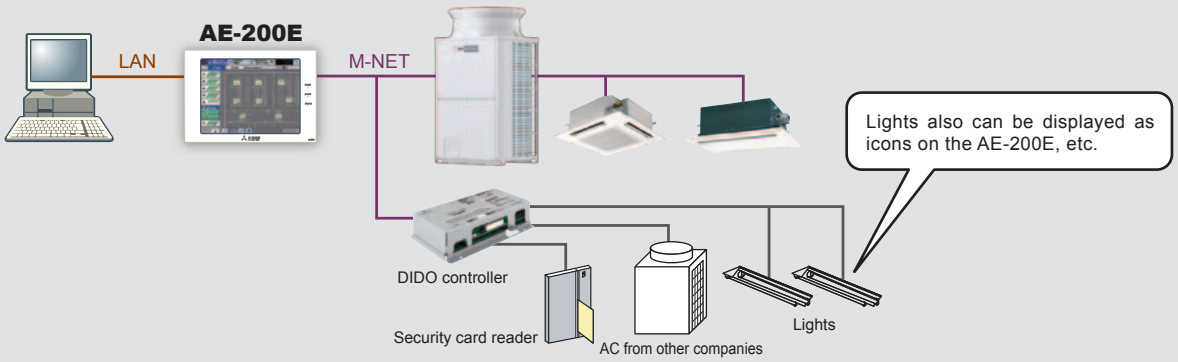
General-purpose equipment Control

Enables controlling and monitoring equipment other than air-conditioners (air-conditioners from other companies, lights, ventilators, etc.)

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

Icon display (Lights)

System Structure



AI Controller

PAC-YG63MCA

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

The AI controller measures temperature and humidity; it also has an alarm capability if the measurement data exceed defined setpoints.
Historical measurement data can be displayed only via the AE-200E/AE-50E/EW-50E web browser .
Temperature and humidity can be displayed on the AE-200E/AE-50E LCD.
Furthermore, an alarm can be output if measurement data exceeds a preset upper or lower limit.
The AI controller also features a function that interlocks M-NET devices for indoor units, etc.

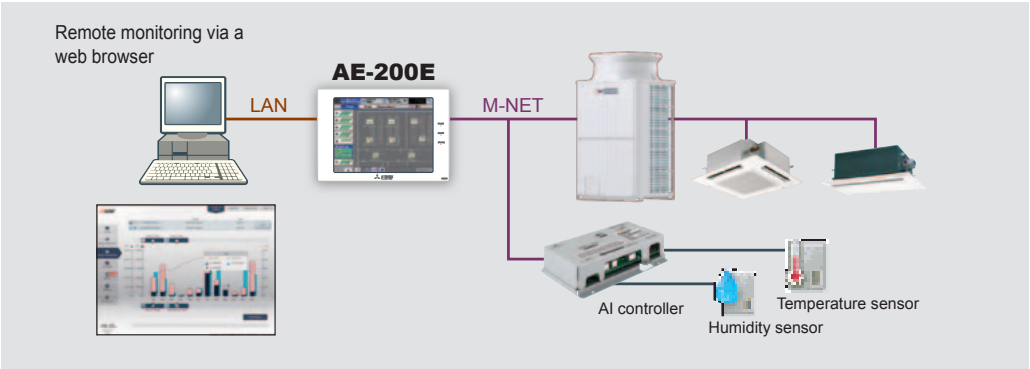
Temperature/Humidity Monitoring

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

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

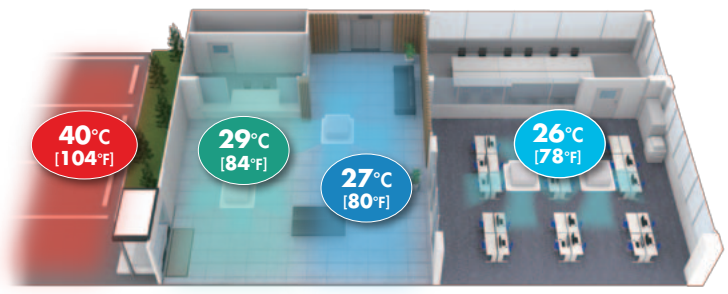
- Trend displays of measurement data can be shown on a web browser.
- An alarm can be output by e-mail when measurement data exceeds a preset upper or lower limit.

System Structure

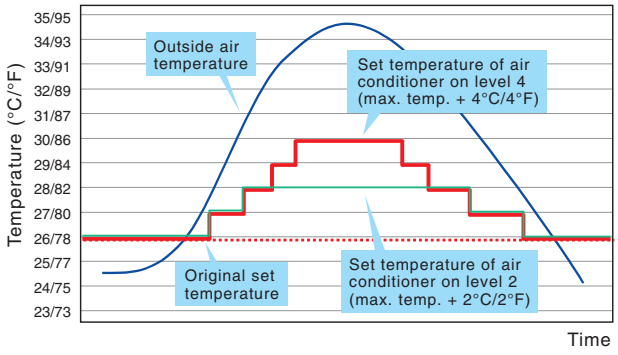


Operation according to outside air temperature

This function controls the air conditioner's operation during the cooling/heating period to reduce the difference between the outside air temperature and the temperature in the building (near the entrance), thereby preventing stress to human health caused by rapid temperature changes. The function is effective in saving energy and can be set for each group.



The degree of change in set temperature from level 1 (1°C/1°F) to 4 (4°C/4°F) can be set for each air conditioner.



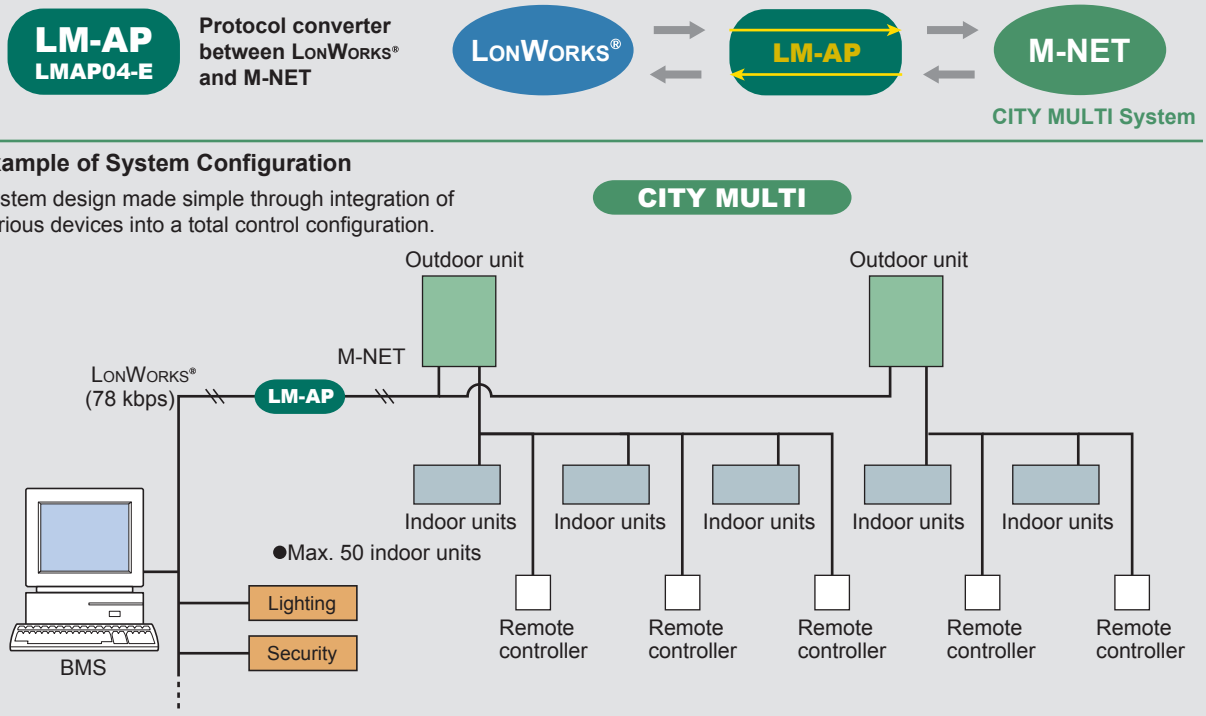
Open network supported

The following options are available to enable connection of CITY MULTI to an open network.

LonWorks® (LMAP04-E)

CITY MULTI can easily combine into a Building Management System (BMS) via the LonWorks® and M-NET adapter LMAP04-E. LonWorks® is an opened transmission protocol widely used at BMS, and related equipment control. CITY MULTI is therefore compatible with large-scaled BMS management via LonWorks®.

One LM ADAPTER unit can connect up to 50 Groups/50 indoor units
Using a single LonWorks® adapter (LM-AP), you can connect up to a maximum of 50 indoor units.



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

LonWorks® INTERFACE

FUNCTION	CONTENT
Control	
ON/OFF	ON / OFF
Mode Operation	Cool / Dry / Heat / Auto / Fan
Set point Adjustment	Cooling 19-30°C [67-87°F], Heating 17-28°C [63-83°F], Auto 19-28°C [67-83°F]
Fan Speed Control	High / Mid-1 / Mid-2 / Low
Permit / Prohibit	ON / OFF, Mode, Set point
Emergency Stop	–
Monitoring	
ON/OFF	ON / OFF
Mode	Cool / Dry / Heat / Auto / Fan
Set point	Cooling 19-35°C [67-95°F], Heating 4.5-28°C [40-83°F], Auto 19-28°C [67-83°F]
Fan Speed	High / Mid-1 / Mid-2 / Low
Permit / Prohibit	On / Off, Mode, Set point
Alarm State	Normal / Error
Room Temperature	-10-50°C (14-122°F)
Thermo ON/OFF	ON / OFF

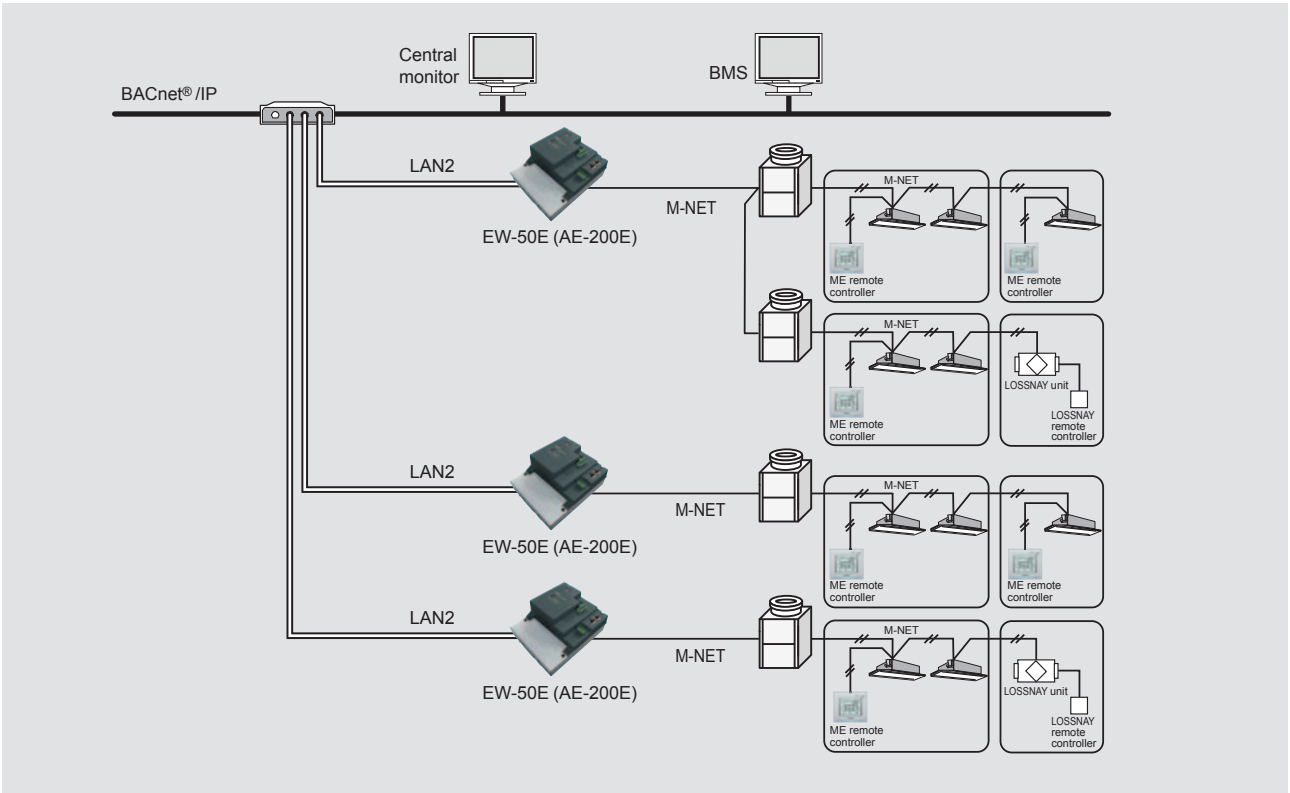
BACnet®

CITY MULTI can easily combine into a Building Management System (BMS) via EW-50E (AE-200E).
BACnet® is an open transmission protocol widely used at BMS, and related equipment control.
CITY MULTI is compatible with large-scal BMS management via BACnet®.

EW-50E (AE-200E) can control up to 50 units/groups (including LOSSNAY).

*To use the BACnet® function on EW-50E (AE-200E), BACnet® license registration is required.

System example



BACnet® and M-NET adapter

FUNCTION	CONTENT
Operation	
ON/OFF	ON/OFF
Mode	Cool/Dry/Heat/Auto/Fan
Fan Speed	Low-Mid2-Mid1-High-Auto
Air Direction	Horizontal-60°-80°-100°swing
Set Temperature	Cooling 19-35°C [67-95°F], Heating 4.5-28°C [40-83°F], Auto 19-28°C [67-83°F]
Filter Sign Reset	Normal/Reset
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp, Fan speed
Forced Off	Reset/Execute
Ventilation Mode	Heat Recovery/Bypass/Auto
Air to Water Mode	Heating/ECO/Hot Water/Antifreeze/Cooling

FUNCTION	CONTENT
Monitoring	
ON/OFF	ON/OFF
Mode	Cool/Dry/Heat/Auto/Fan
Fan Speed	Low-Mid2-Mid1-High-Auto
Air Direction	Horizontal-60°-80°-100°swing
Set Temperature	Cooling 19-35°C [67-95°F], Heating 4.5-28°C [40-83°F], Auto 19-28°C [67-83°F]
Filter Sign	ON/OFF
Permit/Prohibit	ON/OFF, Mode, Filter sign reset, Set temp, Fan speed
Indoor Temperature	Temperature
Alarm Signal	Normal/Error
Error Code	2 Character code- Indicates all unit alarms
Error Code Detail	4 Character code- Indicates all unit alarms
Communication State	Normal/Error
Ventilation Mode	Heat Recovery/Bypass/Auto
Air to Water Mode	Heating/ECO/Hot Water/Antifreeze/Cooling
Apportioned Electric Energy	Group, Interlocked Units 0.1 kWh
PI controller Electric Energy	0.1 kWh
Apportionment Parameter	Available*
Night Purge State	ON/OFF
Thermo On/Off State	ON/OFF
External Heat Source State	ON/OFF
Trend Log	Indoor Temp, Apportioned Electric Energy, PI controller Electric Energy, Apportionment Parameter

* To use this function, the license to charge, AE-200E (not connected to the M-NET), PI controller, watt-hour meter with pulse transmitter (locally available one) are required.

OPTIONAL PARTS FOR OUTDOOR UNITS

For PUMY-Series

Description	Model	Remarks
Branch (2 Branch)	CMY-Y62-G-E	For PUMY-CP VKM/YKM, PUMY-P VKM4/YKM(E)4/YKM1
Header	CMY-Y64-G-E	For PUMY-CP VKM/YKM, PUMY-P VKM4/YKM(E)4/YKM1
	CMY-Y68-G-E	For PUMY-CP VKM/YKM, PUMY-P VKM4/YKM(E)4/YKM1
Fan motor	PAC-SJ71FM-E	For PUMY-P VKM4/YKM(E)4
Air protect guide*	PAC-SH95AG-E	For PUMY-CP VKM/YKM, PUMY-P VKM4/YKM(E)4/YKM1
Drain socket	PAC-SG61DS-E	For PUMY-CP VKM/YKM, PUMY-P VKM4/YKM(E)4/YKM1
Air outlet guide*	PAC-SH96SG-E	For PUMY-CP VKM/YKM, PUMY-P VKM4/YKM(E)4/YKM1
Drain pan	PAC-SH97DP-E	For PUMY-CP VKM/YKM, PUMY-P VKM4/YKM(E)4/YKM1
Base heater	PAC-SJ20BH-E	For PUMY-P VKM4/YKM(E)4/YKM1
Connection kit	PAC-LV11M-J	For PUMY-CP VKM/YKM, PUMY-P VKM4/YKM(E)4/YKM1

* 2 fan type needs 2 pieces.

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)
		The 1st branch of P450-P650
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
		The 1st branch of P700-P1250
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches

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

For PUHY-Series

Description	Model	Remarks
Twinning kit	CMY-Y100VBK3	For PUHY-P550-P650YSKA / EP400-EP650YSKA
	CMY-Y200VBK2	For PUHY-P700-P900YSKA / EP700YSKA
	CMY-Y200VBK3	For PUHY-P950-P1000YSKA
	CMY-Y300VBK3	For PUHY-P1050-P1500YSKA / EP750-1100YSKA
Branch pipe (Joint)	CMY-Y102SS-G2	200 or below (Total capacity of indoor unit)
	CMY-Y102LS-G2	201-400 (Total capacity of indoor unit)
	CMY-Y202S-G2	401-650 (Total capacity of indoor unit)
		The 1st branch of P450-P650
	CMY-Y302S-G2	651 or above (Total capacity of indoor unit)
		The 1st branch of P700-P1250
Branch pipe (Header)	CMY-Y104-G	For 4 branches
	CMY-Y108-G	For 8 branches
	CMY-Y1010-G	For 10 branches

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

OPTIONAL PARTS FOR CONTROL

Model	Description
PAC-SE41TS-E	Remote Sensor for A/J/K/M-Net Control
PAC-SE55RA-E	Remote ON/OFF adaptor for Indoor Unit
PAC-SA88HA-EP	Remote Display Adaptor for Indoor Unit
PAC-SA89TA-EP	Timer Adaptor for remote controller
PAC-SC37SA-E	Output signal connector
PAC-SC36NA-E	Input signal connector
PAC-SF46EPA	Transmission booster
PAC-YG11CDA	Electric amount count software
PAC-YT51HAA-J	External input/output adapter for AT-50B
PAC-YG10HA	External input/output adapter for AE-200E
PAC-YG82TB	Mounting attachment for AE-200E wall-mount installations
PAC-YG84UTB	Electrical box for AE-200E wall-embed installations
PAC-YG86TK	Mounting kit for AE-200E wall-mount installations
PAC-YG72CWL	Surface cover with USB port for AE-200E
PAC-AH125M-J	Air handling unit controller
PAC-AH140M-J	
PAC-AH250M-J	
PAC-AH500M-J	

OPTIONAL PARTS FOR INDOOR UNITS

4-way cassette type (PLFY-VBM)

Description	Model	Applicable capacity
Decoration panel	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
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

4-way cassette type (PLFY-VFM-E1)

Description	Model	Applicable capacity
Wireless signal receiver	PAR-SA9FA-E	P15, P20, P25, 32, 40, 50
i-see Sensor corner panel	PAC-SF1ME-E	P15, P20, P25, 32, 40, 50

<VFM-E1>Panel & Corner panel

		With Signal Receiver	With 3D i-see Sensor	With New Wireless Remote Controller
Panel	SLP-2FA			
	SLP-2FAL	√		
	SLP-2FAE		√	
	SLP-2FALE	√	√	
	SLP-2FALM	√		√
	SLP-2FALME	√	√	√
Corner panel	PAR-SF9FA-E	√		
	PAC-SF1ME-E		√	

2-way cassette type (PLFY-VLMD)

Description	Model	Applicable capacity
Decoration panel	CMP-40VLW-C	P20, P25, P32, P40
	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-VMS1(L))

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

Ceiling concealed type (PEFY-VMA(L)/VMA3)

Description	Model	Applicable capacity	
		VMA(L)	VMA3
Filter box	PAC-KE91TB-E	P20, P25, P32	–
	PAC-KE92TB-E	P40, P50	P20
	PAC-KE93TB-E	P63, P71, P80	P25, P32, P40
	PAC-KE94TB-E	P100, P125	–
	PAC-KE95TB-E	P140	P50, P63, P71, P80, P100, P125

Ceiling concealed type (PEFY-VMH(S)-E)

Description	Model	Applicable capacity		Remarks
		VMH-E	VMHS-E	
Drain pump	PAC-KE04DM-F	P200, P250	-	
	PAC-KE05DM-F	-	P200, P250	
	PAC-DRP10DP-E2	-	P40-P140	
Long life filter	PAC-KE86LAF	-	P40, P50, P63	
	PAC-KE88LAF	-	P71, P80	
	PAC-KE89LAF	-	P100, P125, P140	
	PAC-KE85LAF	P200, P250	P200, P250	
Filter box	PAC-KE63TB-F	-	P40, P50, P63	Required when long life filter is used
	PAC-KE99TB-F	-	P71, P80	
	PAC-KE140TB-F	-	P100, P125, P140	
	PAC-KE250TB-F	P200, P250	P200, P250	

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

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

Ceiling suspended type (PCFY-VKM)

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

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

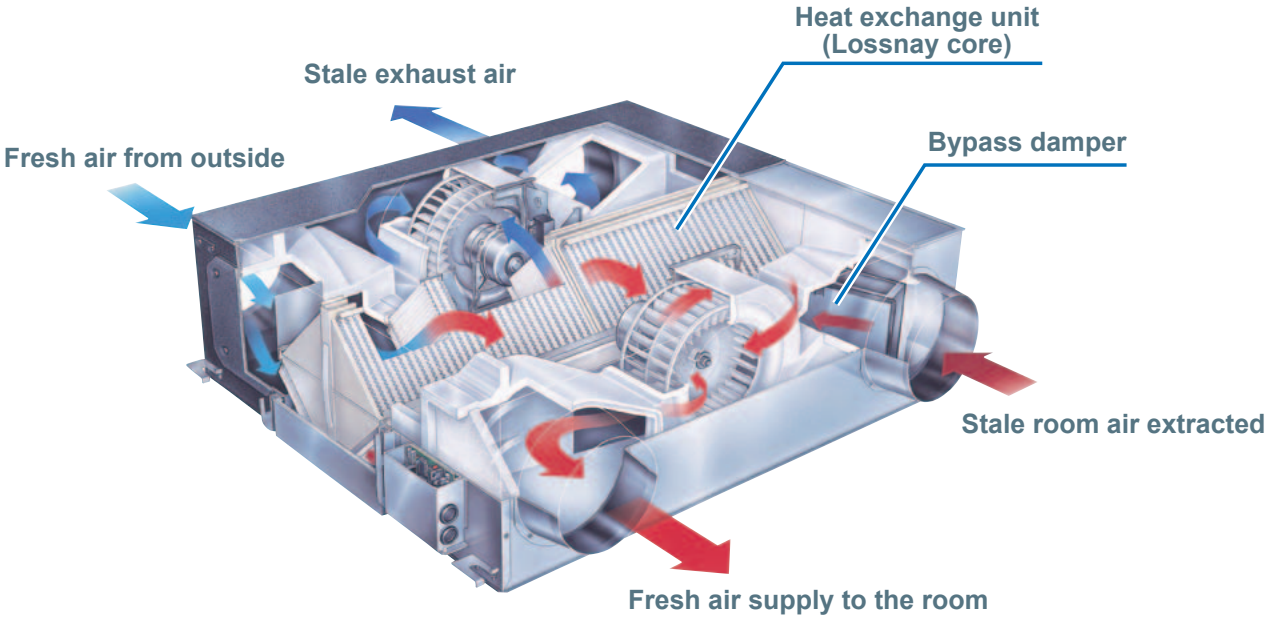
Description	Model	Applicable capacity
External LEV Box	PAC-SG95LE-E	P15, 20, 25, 32, 40, 50, 63
Drain pump kit	PAC-SH75DM-E	P32, 40, 50
	PAC-SH94DM-E	P63, 100

Floor standing type (PFFY-P-YM(H))

Description	Model	Applicable capacity
OA duct flange	PAC-ODF10DF-E	P200, 250
	PAC-ODF20DF-E	P400, 500
Plenum	PAC-PLE20PL-E1	P400, 500

The Ventilation System for Enhanced Air Quality - Lossnay

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



■50Hz model

LGH-15RX5-E [150m³/h Single phase 220-240V 50Hz]
LGH-25RX5-E [250m³/h Single phase 220-240V 50Hz]
LGH-35RX5-E [350m³/h Single phase 220-240V 50Hz]
LGH-50RX5-E [500m³/h Single phase 220-240V 50Hz]
LGH-65RX5-E [650m³/h Single phase 220-240V 50Hz]
LGH-80RX5-E [800m³/h Single phase 220-240V 50Hz]
LGH-100RX5-E [1000m³/h Single phase 220-240V 50Hz]
LGH-150RX5-E [1500m³/h Single phase 220-240V 50Hz]
LGH-200RX5-E [2000m³/h Single phase 220-240V 50Hz]

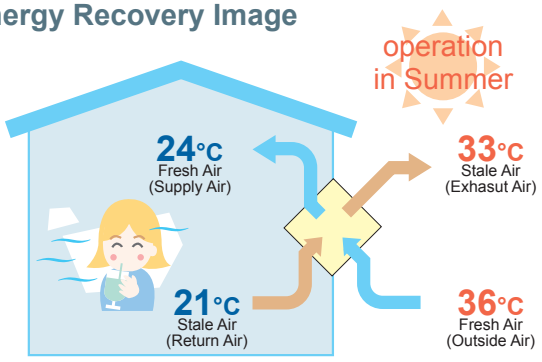
■60Hz model

LGH-15RX5-E60 [150m³/h Single phase 220-240V 60Hz]
LGH-25RX5-E60 [250m³/h Single phase 220-240V 60Hz]
LGH-35RX5-E60 [350m³/h Single phase 220-240V 60Hz]
LGH-50RX5-E60 [500m³/h Single phase 220-240V 60Hz]
LGH-65RX5-E60 [650m³/h Single phase 220-240V 60Hz]
LGH-80RX5-E60 [800m³/h Single phase 220-240V 60Hz]
LGH-100RX5-E60 [1000m³/h Single phase 220-240V 60Hz]
LGH-150RX5-E60 [1500m³/h Single phase 220-240V 60Hz]
LGH-200RX5-E60 [2000m³/h Single phase 220-240V 60Hz]

Heat-Exchange Efficiency Obtainable Only with Lossnay.

The secret to the unmatched comfort provided by Lossnay core is the cross-flow, plate-fin structure off the heat-exchange unit. A diaphragm made of a specially processed paper fully separates inducted and exhausted air supplies, ensuring that only fresh air is introduced to the indoor environment.
The superior heat-transfer and moisture permeability of the special paper assure highly effective total heat exchange (temperature and humidity) when inducted and exhausted air supplies cross in the Lossnay core.

Energy Recovery Image



•Heat-exchange calculating equation

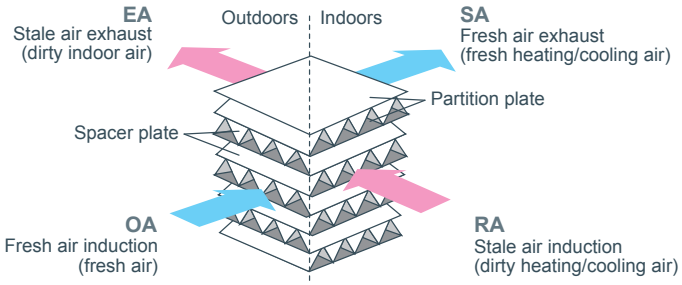
Indoor supply-air temperature (°C) = Outdoor temperature (°C) − {Outdoor temperature (°C) − Indoor temperature (°C)} × Temp exchange efficiency (%)

Calculation example : 24°C = 36°C − (36°C − 21°C) x 80%

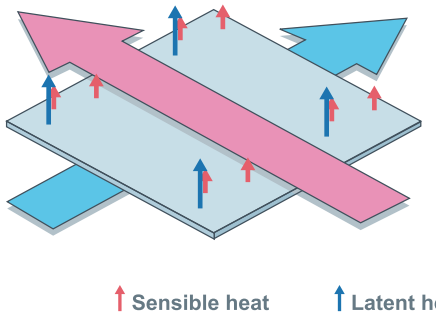
Lossnay Technology

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

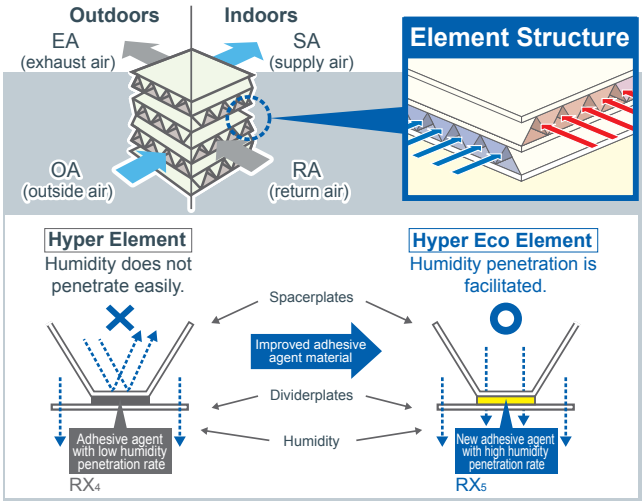
Two paths ventilation

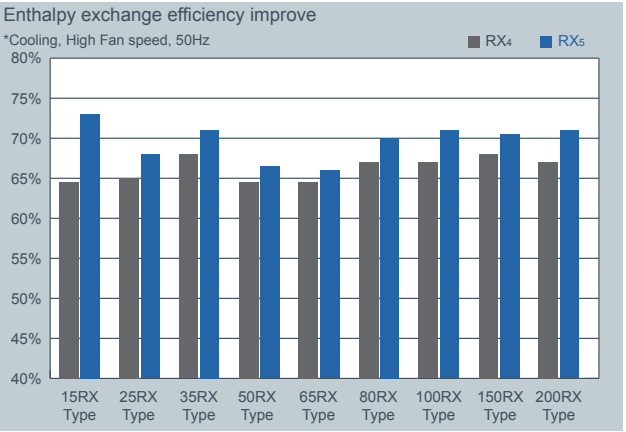


Total Energy transfer



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

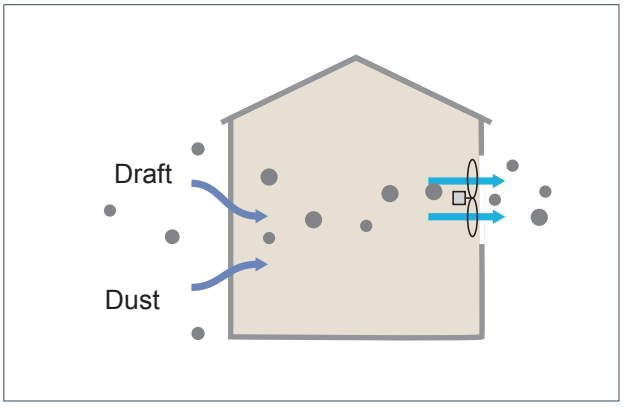




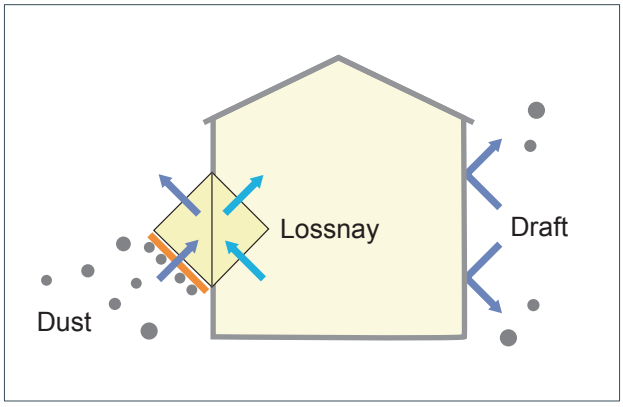
Lossnay realize more comfortable amenities

The filter equipped on Lossnay core eliminates dust and dirt from outside. It provides clean and fresh outdoor air to your rooms. And, supply fan and exhaust fan runs to ensure that the indoor air pressure is well-balanced. It prevents draft from outside, too.

■Conventional ventilation system

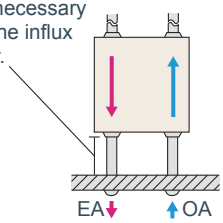
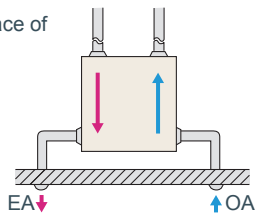
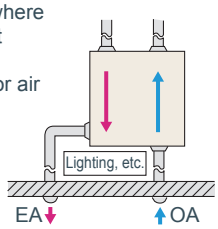
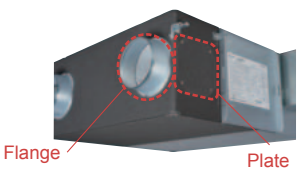
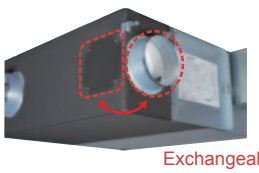


■Lossnay ventilation system



Connect ducts in two different directions (OA, EA side)

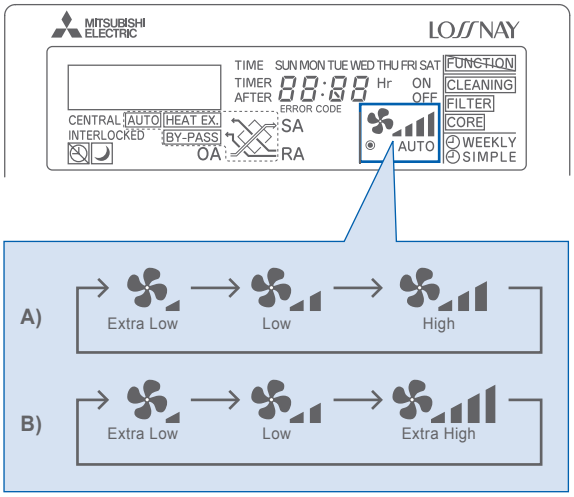
Ducts can be connected in two different directions to the outdoor vents thanks to collars and aperture plates that can be interchangeably placed in two different positions. This flexibility allows for installations close to the surface of a wall and helps avoid cases where the stale air exhaust vent would be blocked by an obstruction of some kind. This makes both planning and installation that much simpler.

Standard installation	Installation with duct direction changed
A space is necessary to prevent the influx of rainwater. 	Can be installed close to the surface of the wall.  Avoid installations where the stale air exhaust aperture would be blocked by lighting or air conditioning units. 
	 Remove the flange (factory-standard direction) and the side panel plate and switch their placements. They are both equipped with screw stoppers making the switch extremely simple. The direction of the ducts can only be changed on the outside (OA and EA). The inside cannot be changed (SA and RA).

Extra Low Mode

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

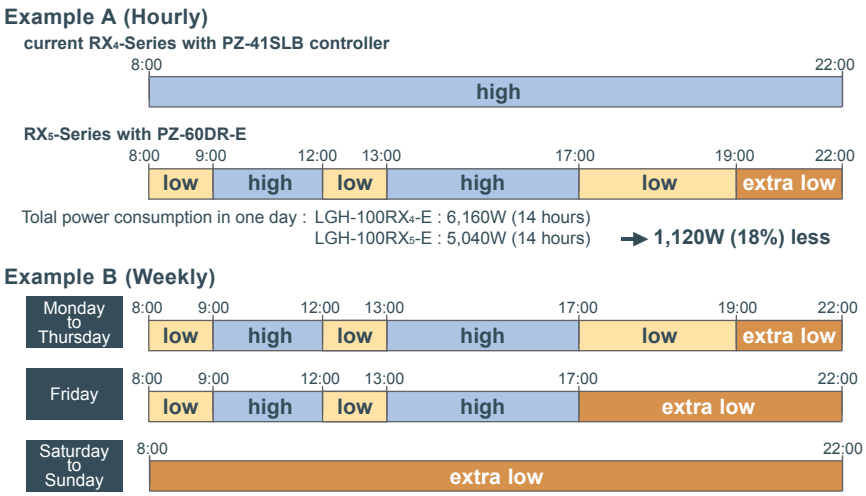
In addition to the conventional Extra High, High, and Low modes, an Extra Low mode is added to provide a more dynamic range of air volume settings and versatility in a variety of installation environments, yielding much better energy conservation. Using a simplified timer function, it switches to Extra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



* The Extra High and High ventilation modes are selectable by the initial setting.
* Extra-Low not equipped LGH-150RX5-E/E60 and 200RX5-E/E60.
* The ventilation mode is actually selected in three levels, and the remote controller also displays these three levels.

Energy Saving by WEEKLY timer

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



"By-pass" Ventilation External Control Setting

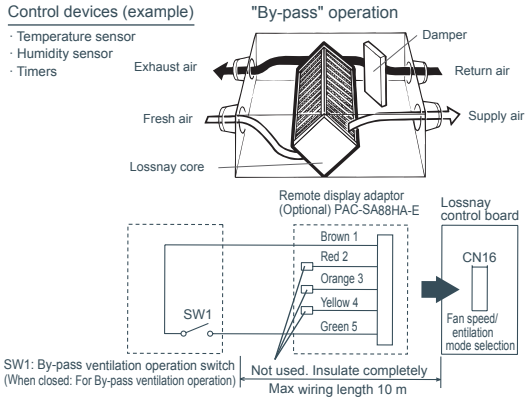
In addition to the automatic damper open/close function, open/close control via external devices is now possible, delivering a “By-pass” ventilation system that is suitable to the installed environment.

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

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

•Automatic ventilation setting

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



1. Reduces cooling load

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

2. Night purge

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

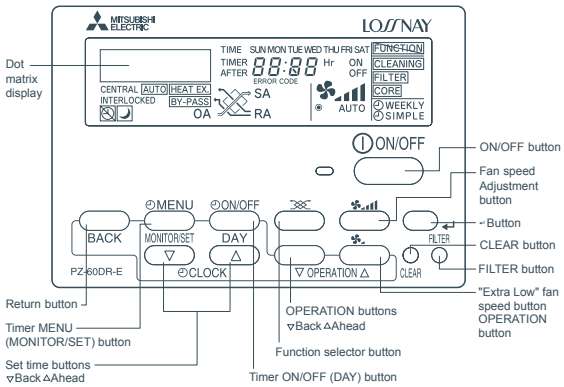
3. Office equipment room cooling

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

* When the outdoor air tempereture drops lower than 8°C it changes to the heat exchange ventilation. (Display of the remote controller does not change.)
* In the case of “By-pass” ventilation, the supply air temperature slightly rises more than the outside air temperature because of the heat effect around the ducts or the unit motors.

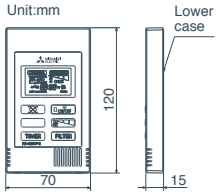
Remote Controller PZ-60DR-E

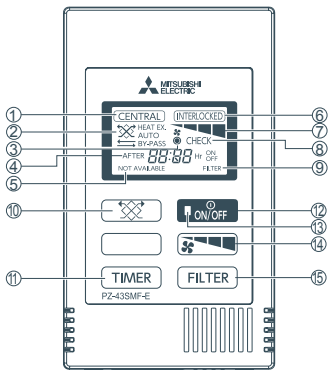
A new remote controller for the RX5-Series is now available. In addition to boosting the energy conservation performance of the main unit, the remote controller features a variety of new functions which also pursue additional energy conservation.
The appearance of the remote controller conforms to Mitsubishi air conditioner interface design standards.
Functions that were set using Dip-Switch on the Lossnay main unit can now be configured as needed using the new remote controller.
This eliminates the need to crawl under the eaves to change operation settings. Also, a newly adopted dot matrix display provides much more information, making it easy to check maintenance indications, operation status display, and explanations required when configuring settings.



Lossnay remote controller (PZ-43SMF-E)

Unit:mm





①Displayed during remote operation prohibited by centralsed control unit, etc.
②Displays the ventilation mode status.
Heat exchange HEAT EX.
By-pass BY-PASS
Automatic (HEAT EX./BY-PASS) HEAT EX. AUTO or AUTO BY-PASS
③Displayed while the Lossnay remote controller is powered on.
④Displays on-timer or off-timer duration.
⑤When a button is pressed for a function which the Lossnay unit cannot perform, this display flashes concurrently with the display of the function.
⑥Displayed when the Lossnay starts off by interlocked indoor unit or external signal.
⑦Displays the selected fan speed.
⑧Displayed together with the malfunctioning unit (3 digits) and an error code (4 digits).
⑨Displayed when the accumulated operating time reaches the time set for filter maintenance.
⑩Used to select the ventilation mode among heat exchange, by-pass or automatic.
⑪Increasing 0:30 by pressing it once. Keep pressing the button for fast-forwarding.
⑫Switch for start and stop.
⑬On during operation. Flashes when a malfunction occurs.
⑭Used to select the fan speed either “Low” or “High”.
Low → High
⑮Press twice to reset the filter sign display.

LGH-15~35RX5-E

Model line up

■ Specification

LGH-15RX5-E

Model		LGH-15RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		0.44-0.46	0.37-0.38	0.25-0.25	0.14-0.15	0.45-0.46	0.37-0.38	0.25-0.26	0.14-0.15
Power consumption (W)		96-110	80-90	53-59	30-35	97-110	81-91	54-61	30-35
Air volume	(m^3/h)	150	150	110	70	150	150	110	70
	(L/s)	42	42	31	19	42	42	31	19
External static pressure	(mmH_2O)	10.2-10.7	6.6-7.1	3.6-4.1	1.4	10.2-10.7	6.6-7.1	3.6-4.1	1.4
	(Pa)	100-105	65-70	35-40	14	100-105	65-70	35-40	14
Temperature exchange efficiency (%)		82.0	82.0	84.0	85.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	75.0	75.0	77.5	81.0	—	—	—	—
	Cooling	73.0	73.0	76.5	81.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		27.5-28	26.5-27	22-23.5	18	28.5-29	27-28	23-24	18-19
Weight (kg)		20							
Starting current		Under 0.8 A Less							

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

LGH-25RX5-E

Model		LGH-25RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		0.52-0.55	0.47-0.48	0.26-0.27	0.17-0.18	0.53-0.55	0.47-0.48	0.26-0.27	0.17-0.18
Power consumption (W)		113-129	102-114	56-62	36-42	115-131	103-115	56-63	36-42
Air volume	(m^3/h)	250	250	155	105	250	250	155	105
	(L/s)	69	69	43	29	69	69	43	29
External static pressure	(mmH_2O)	8.2-8.7	5.1-6.1	2-2.5	0.9	8.2-8.7	5.1-6.1	2-2.5	0.9
	(Pa)	80-85	50-60	20-25	9	80-85	50-60	20-25	9
Temperature exchange efficiency (%)		79.0	79.0	81.5	83.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	69.5	69.5	74.0	77.5	—	—	—	—
	Cooling	68.0	68.0	72.5	76.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		26-27	25-26	20-21.5	18-19	26.5-27.5	25.5-26.5	20.5-22	18-19
Weight (kg)		20							
Starting current		Under 0.9 A Less							

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

LGH-35RX5-E

Model		LGH-35RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		0.92-0.92	0.74-0.74	0.5-0.51	0.28-0.3	0.93-0.94	0.77-0.77	0.51-0.52	0.28-0.3
Power consumption (W)		195-212	160-169	105-116	58-69	197-217	164-173	105-116	58-69
Air volume	(m^3/h)	350	350	210	115	350	350	210	115
	(L/s)	97	97	58	32	97	97	58	32
External static pressure	(mmH_2O)	15.8-16.3	7.6-8.2	2.5-3.1	0.9	15.8-16.3	7.6-8.2	2.5-3.1	0.9
	(Pa)	155-160	75-80	25-30	9	155-160	75-80	25-30	9
Temperature exchange efficiency (%)		80.0	80.0	85.0	88.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	71.5	71.5	76.5	81.5	—	—	—	—
	Cooling	71.0	71.0	75.5	81.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		32-32	28.5-29.5	21.5-23	18	32.5-32.5	29.5-30.5	21.5-24	18
Weight (kg)		29							
Starting current		Under 2.4 A Less							

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

LGH-50~80RX5-E

LGH-50RX5-E

Model		LGH-50RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		1.2-1.25	1.0-1.0	0.85-0.85	0.4-0.4	1.25-1.25	1.0-1.0	0.85-0.85	0.4-0.4
Power consumption (W)		255-286	207-228	175-190	80-95	260-290	210-230	180-195	80-95
Air volume	(m^3/h)	500	500	390	180	500	500	390	180
	(L/s)	139	139	108	50	139	139	108	50
External static pressure	(mmH_2O)	15.3-15.8	6.6-9.2	4.1-6.1	1.0	15.3-15.8	6.6-9.2	4.1-6.1	1.0
	(Pa)	150-155	65-90	40-60	10	150-155	65-90	40-60	10
Temperature exchange efficiency (%)		78.0	78.0	81.0	86.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	69.0	69.0	71.0	78.0	—	—	—	—
	Cooling	66.5	66.5	68.0	77.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		33-34	30.5-32	26.5-28	19	34-35	31-32.5	27-29	19
Weight (kg)		32							
Starting current		Under 3.0 A Less							

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

LGH-65RX5-E

Model		LGH-65RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		1.7-1.8	1.5-1.5	1.2-1.2	0.6-0.6	1.7-1.8	1.5-1.5	1.2-1.2	0.6-0.6
Power consumption (W)		350-380	308-322	248-265	120-140	350-385	310-335	250-265	120-140
Air volume	(m^3/h)	650	650	520	265	650	650	520	265
	(L/s)	181	181	144	74	181	181	144	74
External static pressure	(mmH_2O)	11.2-12.2	6.1-8.2	4.1-5.1	0.8	11.2-12.2	6.1-8.2	4.1-5.1	0.8
	(Pa)	110-120	60-80	40-50	8	110-120	60-80	40-50	8
Temperature exchange efficiency (%)		77.0	77.0	80.0	86.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	68.5	68.5	70.5	78.0	—	—	—	—
	Cooling	66.0	66.0	68.5	77.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		34-34.5	32-33	28.5-31.5	22	34.5-35	32.5-33.5	28.5-30.5	22-22.5
Weight (kg)		40							
Starting current		Under 4.4 A Less							

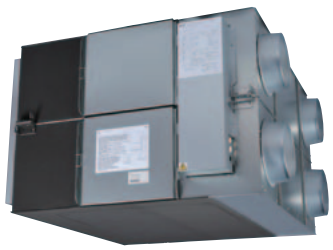
*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 10 dB greater than the indicated value. (at High Fan speed)

LGH-80RX5-E

Model		LGH-80RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		1.75-1.75	1.6-1.6	1.45-1.45	0.60-0.65	1.75-1.75	1.6-1.6	1.45-1.45	0.60-0.65
Power consumption (W)		380-415	345-370	315-340	125-145	380-415	345-370	315-340	120-145
Air volume	(m^3/h)	800	800	700	355	800	800	700	355
	(L/s)	222	222	194	99	222	222	194	99
External static pressure	(mmH_2O)	14.8-15.3	10.7-12.2	8.2-9.7	2	14.8-15.3	10.7-12.2	8.2-9.7	2
	(Pa)	145-150	105-120	80-95	20	145-150	105-120	80-95	20
Temperature exchange efficiency (%)		79.0	79.0	80.5	87.5	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	71.0	71.0	72.5	79.5	—	—	—	—
	Cooling	70.0	70.0	71.5	79.5	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		33.5-34.5	32-33	30-31	22	34.5-35.5	33-34	31-32	22
Weight (kg)		53							
Starting current		Under 3.8 A Less							

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

LGH-100RX5-E



LGH-150/200RX5-E

LGH-100RX5-E

Model		LGH-100RX5-E							
Frequency / Power source		50Hz / Single phase 220-240V							
Ventilation mode		LOSSNAY ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		2.3-2.4	2.1-2.1	1.7-1.7	0.9-0.9	2.3-2.4	2.1-2.1	1.7-1.7	0.9-0.9
Power consumption (W)		500-535	445-475	350-380	175-200	510-550	460-485	365-395	175-200
Air volume	(m^3/h)	1000	1000	755	415	1000	1000	755	415
	(L/s)	278	278	210	115	278	278	210	115
External static pressure	(mmH_2O)	16.3-17.3	10.2-11.2	5.6-6.1	1.8	16.3-17.3	10.2-11.2	5.6-6.1	1.8
	(Pa)	160-170	100-110	55-60	18	160-170	100-110	55-60	18
Temperature exchange efficiency (%)		80.0	80.0	83.0	87.0	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.5	72.5	74.0	80.0	—	—	—	—
	Cooling	71.0	71.0	73.0	79.0	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		36-37	34-35	31-32.5	21-22	37-38	35-36	32-33	21-22
Weight (kg)		59							
Starting current		Under 4.6 A Less							

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

LGH-150RX5-E

Model		LGH-150RX5-E					
Frequency / Power source		50Hz / Single phase 220-240V					
Ventilation mode		LOSSNAY ventilation			By-pass ventilation		
Fan speed		Extra High	High	Low	Extra High	High	Low
Current (A)		3.5-3.5	3.2-3.2	2.9-2.9	3.5-3.5	3.2-3.2	2.9-2.9
Power consumption (W)		760-830	690-740	630-680	765-835	695-745	635-685
Air volume	(m^3/h)	1500	1500	1300	1500	1500	1300
	(L/s)	417	417	361	417	417	361
External static pressure	(mmH_2O)	16.3-17.8	13.3-13.8	9.7-10.2	16.3-17.8	13.3-13.8	9.7-10.2
	(Pa)	160-175	130-135	95-100	160-175	130-135	95-100
Temperature exchange efficiency (%)		80.0	80.0	81.0	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.0	72.0	72.5	—	—	—
	Cooling	70.5	70.5	71.5	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		38-39	36-37.5	33.5-35	39-40.5	37.5-39	35.5-37
Weight (kg)		105					
Starting current		Under 7.3 A Less					

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 15 dB greater than the indicated value. (at High Fan speed)

LGH-200RX5-E

Model		LGH-200RX5-E					
Frequency / Power source		50Hz / Single phase 220-240V					
Ventilation mode		LOSSNAY ventilation			By-pass ventilation		
Fan speed		Extra High	High	Low	Extra High	High	Low
Current (A)		4.8-4.8	4.2-4.2	3.4-3.4	4.8-4.8	4.2-4.2	3.4-3.4
Power consumption (W)		1035-1100	910-980	715-785	1040-1110	915-980	720-785
Air volume	(m^3/h)	2000	2000	1580	2000	2000	1580
	(L/s)	556	556	439	556	556	439
External static pressure	(mmH_2O)	16.3-16.8	10.2-10.7	6.1-6.6	16.3-16.8	10.2-10.7	6.1-6.6
	(Pa)	160-165	100-105	60-65	160-165	100-105	60-65
Temperature exchange efficiency (%)		80.0	80.0	83.0	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.5	72.5	73.5	—	—	—
	Cooling	71.0	71.0	72.0	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		39.5-40	37-38	32.5-34	40.5-41	38-39	33.5-35
Weight (kg)		118					
Starting current		Under 11.9A Less					

*The Air outlets noise (45° angle, 1.5 meters in front of the unit) is about 18 dB greater than the indicated value. (at High Fan speed)

LGH-15~35RX5-E60

LGH-15RX5-E60

Model		LGH-15RX5-E60							
Frequency / Power source		60Hz / 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)		0.54-0.56	0.45-0.46	0.28-0.3	0.15-0.16	0.54-0.57	0.45-0.47	0.28-0.3	0.15-0.16
Power consumption (W)		118-134	98-109	61-69	32-37	117-135	97-112	61-69	32-37
Air volume	(m^3/h)	150	150	110	60	150	150	110	60
	(L/s)	42	42	31	17	42	42	31	17
External static pressure	(mmH_2O)	14.8	10.7	5.6	1.6	14.8	10.7	5.6	1.6
	(Pa)	145	105	55	16	145	105	55	16
Temperature exchange efficiency (%)		80	80	82	85	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	73.5	73.5	76.5	81.5	—	—	—	—
	Cooling	74.5	74.5	78.5	82	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		29.5-31	27-29	21.5-22.5	18-18	29.5-31	27-29	22-23.5	18-19
Weight (kg)		20							
Starting current		Under 0.9A Less							

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

LGH-25RX5-E60

Model		LGH-25RX5-E60							
Frequency / Power source		60Hz / 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)		0.61-0.64	0.54-0.56	0.28-0.3	0.17-0.18	0.62-0.65	0.55-0.57	0.28-0.3	0.17-0.18
Power consumption (W)		132-150	118-134	61-70	37-42	134-152	119-135	61-70	37-42
Air volume	(m^3/h)	250	250	145	95	250	250	145	95
	(L/s)	69	69	40	26	69	69	40	26
External static pressure	(mmH_2O)	11.7	7.6	2.5	1.0	11.7	7.6	2.5	1.0
	(Pa)	115	75	25	10	115	75	25	10
Temperature exchange efficiency (%)		73	73	79.5	82	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	63.5	63.5	73	78	—	—	—	—
	Cooling	66.5	66.5	75	78	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		27.5-29	25.5-27	20-21	18-18	28-29.5	26-27.5	20.5-21	18-18
Weight (kg)		20							
Starting current		Under 1.0A Less							

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

LGH-35RX5-E60

Model		LGH-35RX5-E60							
Frequency / Power source		60Hz / 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)		1.02-1.02	0.93-0.96	0.65-0.68	0.29-0.31	1.02-1.02	0.94-0.97	0.65-0.68	0.29-0.31
Power consumption (W)		222-241	202-229	141-162	62-73	222-241	204-231	141-162	62-73
Air volume	(m^3/h)	350	350	255	115	350	350	255	115
	(L/s)	97	97	71	32	97	97	71	32
External static pressure	(mmH_2O)	19.4	7.6	4.1	0.8	19.4	7.6	4.1	0.8
	(Pa)	190	75	40	8	190	75	40	8
Temperature exchange efficiency (%)		75	75	80.5	85	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	71.5	71.5	74.5	78	—	—	—	—
	Cooling	71	71	73.5	77	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		31.5-33	28.5-30.5	22.5-26	18-18	32-33.5	29-31	22.5-26	18-18
Weight (kg)		29							
Starting current		Under 2.0A Less							

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

LGH-50~80RX5-E60

LGH-50RX5-E60

Model		LGH-50RX5-E60							
Frequency / Power source		60Hz / 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)		1.34-1.38	1.20-1.25	0.86-0.90	0.36-0.39	1.34-1.39	1.20-1.25	0.86-0.90	0.36-0.39
Power consumption (W)		285-315	263-298	187-213	79-93	285-317	263-298	187-213	79-93
Air volume	(m^3/h)	500	500	380	180	500	500	380	180
	(L/s)	139	139	106	50	139	139	106	50
External static pressure	(mmH_2O)	20.4	6.6	4.1	0.8	20.4	6.6	4.1	0.8
	(Pa)	200	65	40	8	200	65	40	8
Temperature exchange efficiency (%)		72	72	78	83	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	69	69	72	79	—	—	—	—
	Cooling	67.5	67.5	71	79	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		34-35.5	30-32.5	25-27.5	18-18.5	34.5-36	31-33	25.5-27.5	18-18.5
Weight (kg)		32							
Starting current		Under 2.5A Less							

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

LGH-65RX5-E60

Model		LGH-65RX5-E60							
Frequency / Power source		60Hz / 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)		1.9-2.0	1.8-1.9	1.2-1.3	0.6-0.6	2.0-2.0	1.8-1.9	1.2-1.3	0.6-0.6
Power consumption (W)		415-470	390-435	253-290	120-140	433-470	390-435	253-290	120-140
Air volume	(m^3/h)	650	650	470	240	650	650	470	240
	(L/s)	181	181	131	67	181	181	131	67
External static pressure	(mmH_2O)	18.9	6.1	3.1	0.8	18.9	6.1	3.1	0.8
	(Pa)	185	60	30	8	185	60	30	8
Temperature exchange efficiency (%)		71	71	76	82	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	67.5	67.5	72.5	79	—	—	—	—
	Cooling	67	67	72.5	79	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		35.5-37.5	33-34.5	26.5-29	19-20	36-37.5	33-35	27-30	19-20
Weight (kg)		40							
Starting current		Under 4.0A Less							

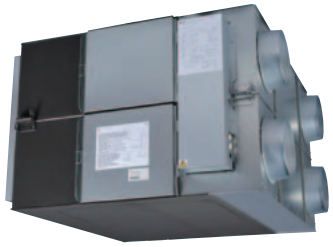
*The Air outlets noise (45° angle,1.5meters in front of the unit) is about 10dB greater than the indicated value.(at High Fan speed)

LGH-80RX5-E60

Model		LGH-80RX5-E60							
Frequency / Power source		60Hz / Single phase 220-240V							
Ventilation mode		Lossnay ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		2.4-2.4	2.1-2.2	1.6-1.7	0.6-0.7	2.4-2.4	2.1-2.2	1.6-1.7	0.6-0.7
Power consumption (W)		498-542	456-505	350-407	130-158	505-550	456-508	350-407	130-158
Air volume	(m^3/h)	800	800	660	300	800	800	660	300
	(L/s)	222	222	183	83	222	222	183	83
External static pressure	(mmH_2O)	23.5	12.7	8.7	1.8	23.5	12.7	8.7	1.8
	(Pa)	230	125	85	18	230	125	85	18
Temperature exchange efficiency (%)		74	74	76	84	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	71	71	73	82	—	—	—	—
	Cooling	70	70	72	82	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		35.5-37	32.5-34.5	29-31	21-21	36-38	33-35	31-32	21-21
Weight (kg)		53							
Starting current		Under 4.5A Less							

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

LGH-100RX5-E60



LGH-150/200RX5-E60

LGH-100RX5-E60

Model		LGH-100RX5-E60							
Frequency / Power source		60Hz / Single phase 220-240V							
Ventilation mode		Lossnay ventilation				By-pass ventilation			
Fan speed		Extra High	High	Low	Extra Low	Extra High	High	Low	Extra Low
Current (A)		2.9-2.9	2.7-2.8	1.6-1.7	0.8-0.9	2.9-2.9	2.8-2.8	1.6-1.7	0.8-0.9
Power consumption (W)		620-680	580-650	350-405	168-197	620-680	582-653	350-405	168-197
Air volume	(m^3/h)	1000	1000	700	415	1000	1000	700	415
	(L/s)	278	278	194	115	278	278	194	115
External static pressure	(mmH_2O)	20.4	11.7	5.6	1.9	20.4	11.7	5.6	1.9
	(Pa)	200	115	55	19	200	115	55	19
Temperature exchange efficiency (%)		77	77	81	87	—	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.5	72.5	77	82	—	—	—	—
	Cooling	73	73	77	82	—	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		36-38	34.5-36.5	28-30	21-21	37.5-39.5	36-38	29-31	21-21
Weight (kg)		59							
Starting current		Under 5.0A Less							

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

LGH-150RX5-E60

Model		LGH-150RX5-E60					
Frequency / Power source		60Hz / Single phase 220-240V					
Ventilation mode		Lossnay ventilation			By-pass ventilation		
Fan speed		Extra High	High	Low	Extra High	High	Low
Current (A)		4.6-4.8	4.1-4.2	3.2-3.4	4.7-4.8	4.1-4.3	3.2-3.4
Power consumption (W)		980-1080	895-1000	702-810	1000-1090	900-1010	702-810
Air volume	(m^3/h)	1500	1500	1230	1500	1500	1230
	(L/s)	417	417	342	417	417	342
External static pressure	(mmH_2O)	24.0	13.3	8.7	24.0	13.3	8.7
	(Pa)	235	130	85	235	130	85
Temperature exchange efficiency (%)		74.5	74.5	76.5	—	—	—
Enthalpy exchange efficiency (%)	Heating	72	72	74	—	—	—
	Cooling	71	71	72	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		37.5-40	35-37	31-33.5	39-41	36-38.5	31.5-34
Weight (kg)		105					
Starting current		Under 9.0A Less					

*The Air outlets noise (45° angle,1.5meters in front of the unit) is about 15dB greater than the indicated value.(at High Fan speed)

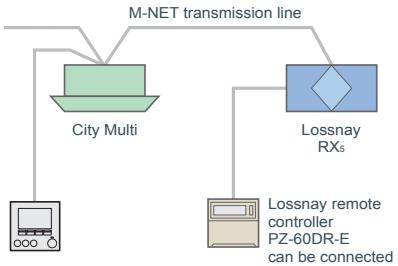
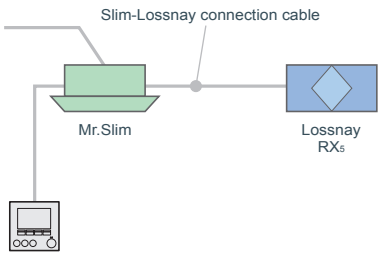
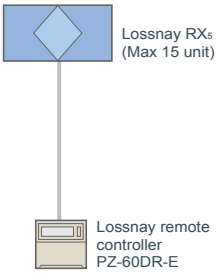
LGH-200RX5-E60

Model		LGH-200RX5-E60					
Frequency / Power source		60Hz / Single phase 220-240V					
Ventilation mode		Lossnay ventilation			By-pass ventilation		
Fan speed		Extra High	High	Low	Extra High	High	Low
Current (A)		5.7-5.8	5.3-5.5	3.3-3.5	5.7-5.8	5.3-5.5	3.3-3.5
Power consumption (W)		1220-1355	1160-1295	715-835	1220-1355	1160-1295	715-835
Air volume	(m^3/h)	2000	2000	1400	2000	2000	1400
	(L/s)	556	556	389	556	556	389
External static pressure	(mmH_2O)	19.4	10.2	5.1	19.4	10.2	5.1
	(Pa)	190	100	50	190	100	50
Temperature exchange efficiency (%)		77	77	81	—	—	—
Enthalpy exchange efficiency (%)	Heating	72.5	72.5	77	—	—	—
	Cooling	73	73	77	—	—	—
Noise (dB) (Measured at 1.5m under the center of panel in an anechoeic chamber)		38.5-40.5	36.5-38.5	30-32.5	40.5-42	39-40.5	32-33.5
Weight (kg)		118					
Starting current		Under 10.0A Less					

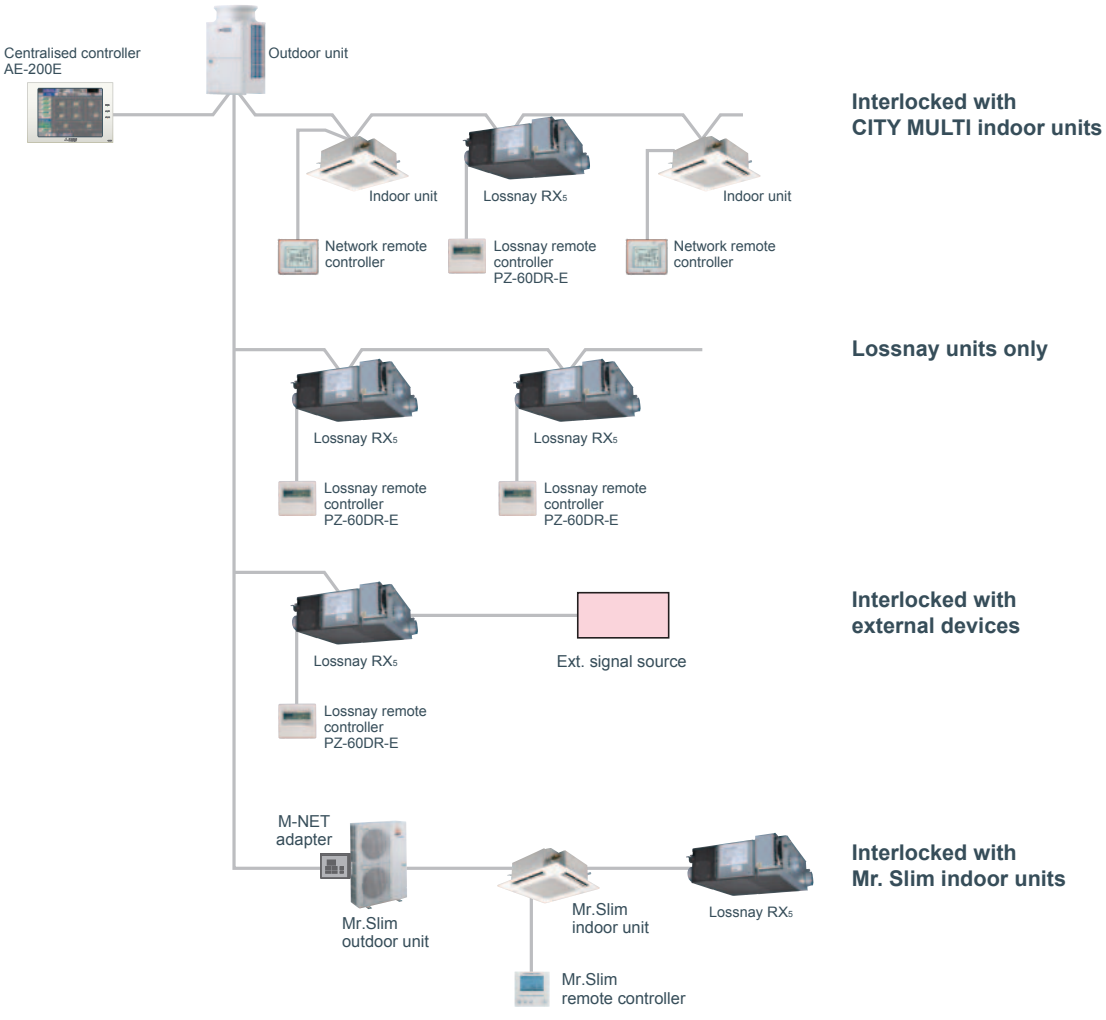
*The Air outlets noise (45° angle,1.5meters in front of the unit) is about 18dB greater than the indicated value.(at High Fan speed)

Control

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

Interlocked with Air conditioners		Lossnay independent
Interlocked with CITY MULTI	Interlocked with Mr.Slim	
	 The Lossnay remote controller (PZ-60DR-E, PZ-43SMF-E) can not be used with this system.	 PZ-43SMF-E can be connected however function is limited.

■Centralized Controller System



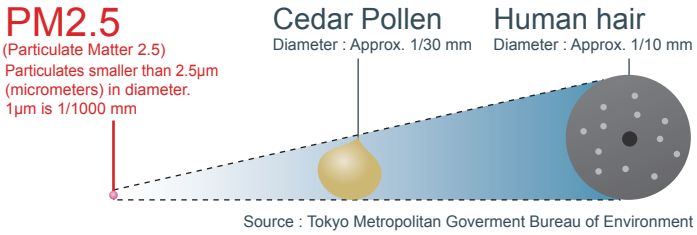
Solution to PM2.5

Why do you need a filter in your ventilation system?

Ventilation is important. However, outside air may not always be fresh and clean, especially if you are living in a smog-choked city. Filtering the outside air before bringing it into your home/office is a solution to reduce your exposure to air pollution.

What is PM2.5?

PM2.5 is airborne particulates that are 2.5μm or smaller in size.
They may carry toxins in the air and can penetrate deep into the lungs, potentially causing health problems.



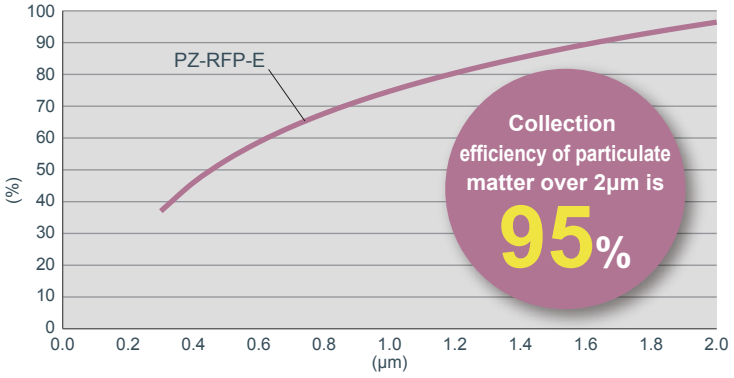
Source : Tokyo Metropolitan Goverment Bureau of Environment

PM 2.5 air pollutant control with Lossnay ventilation

Lossnay offers optional filters, PZ-RFP-E-Series for LGH-RX$_5$ and GUF-Series, which are designed to remove approx. 95% of airborne particulates that are 2.0μm or larger.

*The collection efficiency of airborne particulates is measured based on JIS B9908. This method measures filter efficiency by counting the quantity of particulates collected at both front and back sides of the filter.
Note 1: Collection efficiency may vary depending on the airflow speed of the ventilator. The results reported are those measured in-house, and the performance of actual equipment may be different.
Note 2: The removal of airborne particulates smaller than 0.3μm cannot be confirmed.
Note 3: Ventilation filters do not remove all harmful substances from the air. Temporary use is recommended when concerned about stagnant outside air entering your home/office.

Lossnay filter collection performance by particulate size



Line-up

Optional Filter	**PZ-RFP-E-Series** Advanced high-efficiency filter Replace filter every 1 year 
Applicable Model	LGH-RX$_5$-Series, GUF-Series

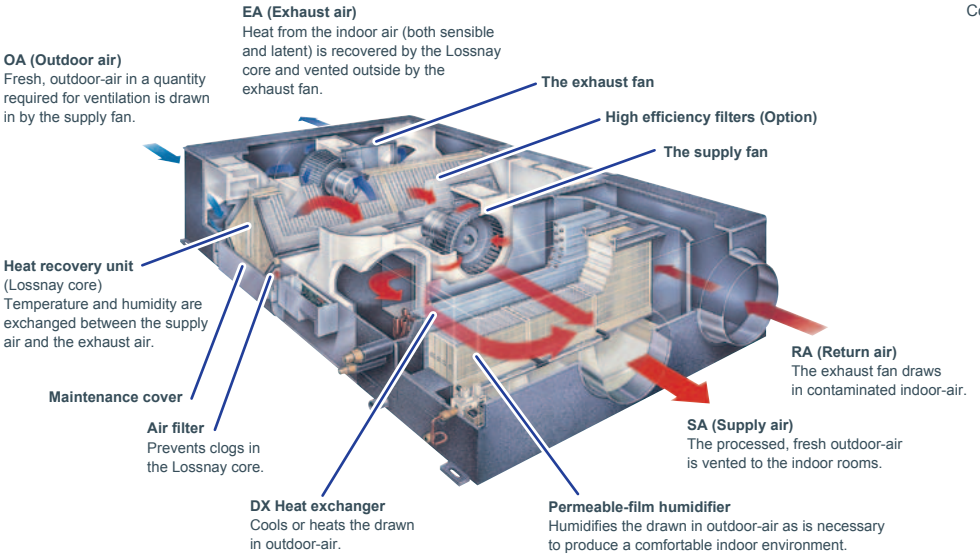
OA Processing Units

GUF-RDH4-Series

Ideal Indoor-Air Quality — For Your Comfort and Health

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

*Model:GUF-100RDH4
Condition:Heating



Permeable Film Humidifier (RDH4 model)

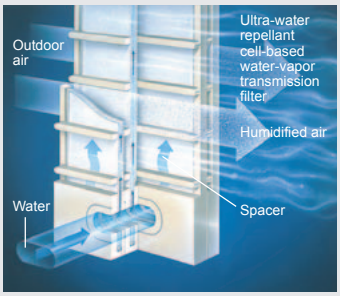
Comfortable Level of Humidity for Exceptionable Air Quality

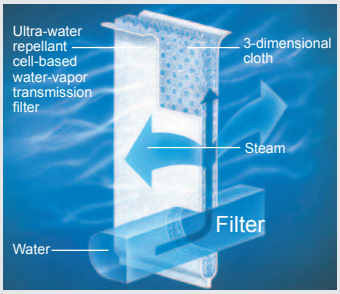
The OA Processing Unit is equipped with a permeable film humidifier developed by Mitsubishi Electric. Steam transmission efficiency has been improved remarkably by lowering the resistance of the material. By providing an optimum level of humidity, the OA Processing Unit creates a comfortable interior environment preventing irritations such as dried out eyes or a parched throat that can be caused by insufficiently low levels of humidity in the air.

Highly Efficient Humidification

Improvements in the system of airflow patterns and water injection techniques have resulted in a substantial increase in humidifying volume. The system also controls the humidity level of the air that is exhausted, ensuring an efficient, environmentally friendly manner of operation.

Note: In the case in which the level of residual impurities exceeds 100mg/ℓ please use a water purifier



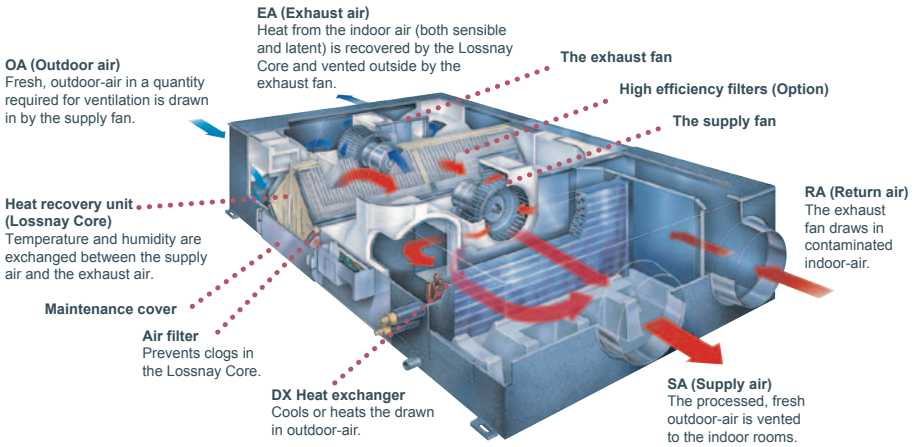


GUF-RD4-Series

A Total Air Conditioning Package Manifesting Remarkable Power

Lossnay Ventilation and Air Conditioning

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

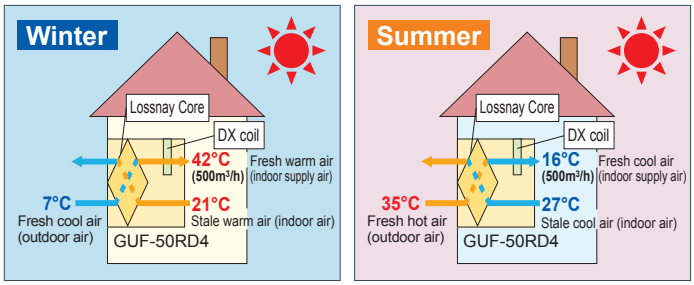


The Air Conditioning Function

Two Units in One

Along with Lossnay ventilation, the OA Processing Unit is really two units in one, functioning as the main air conditioner when the load is light and adding supplemental air conditioning when the load is heavy. Also, with ventilation and air conditioning integrated, space is saved and installation expense kept to a minimum. Wha'ts more, the air temperature in any room can be perfectly adjusted to the desired temperature of the occupants via the OA Processing Unit, which can be used as the indoor unit of the CITY MULTI air conditioning system. The heat recovery function maximizes efficiency and saves energy, benefiting the environment and helping companies cut costs. It also reduces the refrigerant load and lowers the amount of horsepower required by the outdoor unit.

Temperature simulation (Example : GUF-50RD4)



Specification

Model			GUF-50RDH4	GUF-100RDH4	GUF-50RD4	GUF-100RD4	GUF-100RDH4-60
Power source			1-phase 220-240V 50Hz				1-phase 220V 60Hz
Cooling capacity *1		kW	5.57 <1.94>	11.44 <4.12>	5.57 <1.94>	11.44 <4.12>	11.44 <4.12>
Figure in < > is the recovery capacity by LOSSNAY core. *1		kcal / h	4,800 <1,650>	9,800 <3,500>	4,800 <1,650>	9,800 <3,500>	9,800 <3,500>
		BTU / h	19,000 <6,600>	39,000 <14,000>	19,000 <6,600>	39,000 <14,000>	39,000 <14,000>
*3	Power input	W	235-265	480-505	235-265	480-505	685
*3	Current input	A	1.15	2.20	1.15	2.20	3.20
Heating capacity *2		kW	6.21 <2.04>	12.56 <4.26>	6.21 <2.04>	12.56 <4.26>	12.56 <4.26>
Figure in < > is the recovery capacity by LOSSNAY core. *2		kcal / h	5,340 <1,750>	10,800 <3,650>	5,340 <1,750>	10,800 <3,650>	10,800 <3,650>
		BTU / h	21,200 <7,000>	42,850 <14,450>	21,200 <7,000>	42,850 <14,450>	42,850 <14,450>
*3	Power input	W	235-265	480-505	235-265	480-505	685
*3	Current input	A	1.15	2.20	1.15	2.20	3.20
Capacity equivalent to indoor unit			P32	P63	P32	P63	P63
Humidifying capacity		kg / h	2.7	5.4	—	—	5.4
		lbs / h	6.0	12.0	—	—	12.0
	Humidifier		Permeable film humidifier		—		
External finish			Galvanized, with grey insulation sheet				
External dimension H x W x D		mm	317 x 1,016 x 1,288	398 x 1,231 x 1,580	317 x 1,016 x 1,288	398 x 1,231 x 1,580	398 x 1,231 x 1,580
		in.	12-1/2 x 40 x 50-3/4	15-11/16 x 48-1/2 x 62-1/4	12-1/2 x 40 x 50-3/4	15-11/16 x 48-1/2 x 62-1/4	15-11/16 x 48-1/2 x 62-1/4
Net weight		kg (lbs)	51 (112)	88 (194)	48 (106)	82 (181)	88 (194)
Heat exchanger	LOSSNAY core		Partition, Cross-flow structure, Special preserved paper-plate.				
	Refrigerant coil		Cross fin (Aluminum fin and copper tube)				
FAN	Type x Quantity		SA: Centrifugal fan (Sirocco fan) x 1				
			EA: Centrifugal fan (Sirocco fan) x 1				
	External static press. *4	Pa	125	135	140	140	115
		mmH_2O	12.7	13.8	14.3	14.3	11.7
	Motor type		Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 2units				
	Motor output	kW	—	—	—	—	—
	Driving mechanism		Direct-driven by motor				
	Airflow rate (High value)	m^3 / h	500	1,000	500	1,000	1,000
		L / s	139	278	139	278	278
		cfm	294	589	294	589	589
Sound pressure level (Low-High) (measured in anechoic room) *3		dB <A>	33.5-34.5	38-39	33.5-34.5	38-39	40.5
Insulation material			Polyester sheet				
Air filter	Supplying air		Non-woven fabrics filter (Gravitational method 82%) & Optional part: High efficiency filter (Colorimetric method 65%)				
	Exhausting air		Non-woven fabrics filter (Gravitational method 82%)				
Protection device			Fuse				
Refrigerant control device			LEV				
Connectable outdoor unit			R410A CITY MULTI				
Diameter of refrigerant pipe	Liquid	mm (in.)	ø6.35 (ø1/4) Flare	ø9.52 (ø3/8) Flare	ø6.35 (ø1/4) Flare	ø9.52 (ø3/8) Flare	ø9.52 (ø3/8) Flare
	Gas	mm (in.)	ø12.7 (ø1/2) Flare	ø15.88 (ø5/8) Flare	ø12.7 (ø1/2) Flare	ø15.88 (ø5/8) Flare	ø15.88 (ø5/8) Flare

Notes:

*1 Nominal cooling conditions
Indoor : 27°CDB (81°FDB)/19°CWB (66°FWB)
Outdoor : 35°CDB (95°FDB)/24°CWB (75°FWB)

*2 Nominal heating conditions
Indoor : 20°CDB (68°FDB)/13.8°CWB (57°FWB)
Outdoor : 7°CDB (45°FDB)/6°CWB (43°FWB)

*3 The values are measured at the rated external static pressure.

*4 The figure in < > indicates the value when external static pressure is changed.

Precautions for Use

＊Refer to the enclosed Installation Manual for details on installation. Arrange to have an expert install the system correctly.

1. General precautions

1-1. Usage

- The air-conditioning system described in this catalogue is designed for human comfort.
- This product is not designed for preservation of food, animals, plants, precision equipment, or art objects. To prevent quality loss, do not use the product for purposes other than what it is designed for.
- To reduce the risk of water leakage and electric shock, do not use the product for air-conditioning vehicles or vessels.

1-2. Installation environment

- Do not install any unit other than the dedicated unit in a place where the voltage changes a lot, large amounts of mineral oil (e.g., cutting oil) are present, cooking oil may splash, or a large quantity of steam can be generated such as a kitchen.
- Do not install the unit in acidic or alkaline environment.
- Installation should not be performed in the locations exposed to chlorine or other corrosive gases. Avoid near a sewer.
- To reduce the risk of fire, do not install the unit in a place where flammable gas may be leaked or inflammable material is present.
- This air conditioning unit has a built-in microcomputer. Take the noise effects into consideration when deciding the installation position. Especially in a place where antenna or electronic device are installed, it is recommended that the air conditioning unit be installed away from them.
- Install the unit on a solid foundation according to the local safety measures against typhoons, wind gusts, and earthquakes to prevent the unit from being damaged, toppling over, and falling.

1-3. Backup system

- In a place where air conditioner's malfunctions may exert crucial influence, it is recommended to have two or more systems of single outdoor units with multiple indoor units.

1-4. Unit characteristics

- Heat pump efficiency depends on outdoor temperature. In the heating mode, performance drops as the outside air temperature drops. In cold climates, performance can be poor. Warm air would continue to be trapped near the ceiling and the floor level would continue to stay cold. In this case, heat pumps require a supplemental heating system or air circulator. Before purchasing them, consult your local distributor for selecting the unit and system.
- When the outdoor temperature is low and the humidity is high, the heat exchanger on the outdoor unit side tends to collect frost, which reduces its heating performance. To remove the frost, Auto-defrost function will be activated and the heating mode will temporarily stop for 3-10 minutes. Heating mode will automatically resume upon completion of defrostprocess.
- Air conditioner with a heat pump requires time to warm up the whole room after the heating operation begins, because the system circulates warm air in order to warm up the whole room.
- The sound levels were obtained in an anechoic room. The sound levels during actual operation are usually higher than the simulated values due to ambient noise and echoes. Refer to the section on "SOUND LEVELS" for the measurement location.
- Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes even when operating normally. Please consider to avoid location where quietness is required.
- The total capacity of the connected indoor units can be greater than the capacity of the outdoor unit. However, when the connected indoor units operate simultaneously, each unit's capacity may become smaller than the rated capacity.
- When the unit is started up for the first time within 12 hours after power on or after power failure, it performs initial startup operation (capacity control operation) to prevent damage to the compressor. The initial startup operation requires 90 minutes maximum to complete, depending on the operation load.

1-5. Relevant equipment

- Use an earth leakage breaker (ELB) with medium sensitivity, and an activation speed of 0.1 second or less.
- Consult your local distributor or a qualified technician when installing an earth leakage breaker.
- If the unit is inverter type, select an earth leakage breaker for handling high harmonic waves and surges.
- Leakage current is generated not only through the air conditioning unit but also through the power wires. Therefore, the leakage current of the main power supply is greater than the total leakage current of each unit. Take into consideration the capacity of the earth leakage breaker or leakage alarm when installing one at the main power supply. To measure the leakage current simply on site, use a measurement tool equipped with a filter, and clamp all the four power wires together. The leakage current measured on the ground wire may not accurate because the leakage current from other systems may be included to the measurement value.
- Do not install a phase advancing capacitor on the unit connected to the same power system with an inverter type unit and its equipment.
- If a large current flows due to the product malfunctions or faulty wiring, both the earth leakage breaker on the product side and the upstream overcurrent breaker may trip almost at the same time. Separate the power system or coordinate all the breakers depending on the system's priority level.

1-6. Optional accessories

- Only use accessories recommended by Mitsubishi Electric. Consult your local distributor or a qualified technician when installing them. Improper installation by an unqualified person may result in water leakage, electric leakage, system breakdown, or fire.
- Some optional accessories may not be compatible with the air conditioning unit to be used or may not suitable for the installation conditions. Check the compatibility when considering any accessories.
- Note that some optional accessories may affect the air conditioner's external form, appearance, weight, operating sound, and other characteristics.

1-7. Operation/Maintenance

- Read the Instruction Book that is provided with each unit carefully prior to use.
- Maintenance or cleaning of each unit may be risky and require expertise. Read the Instruction Book to ensure safety. Consult your local distributor or a qualified technician when special expertise is required such as when the indoor unit needs to be cleaned.

2. Precautions for Indoor unit

2-1. Operating environment

- The refrigerant (R410A) used for air conditioner is non-toxic and nonflammable. However, if the refrigerant leaks, the oxygen level may drop to harmful levels. If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit even if the refrigerant should leak.
- If the units operate in the cooling mode at the humidity above 80%, condensation may collect and drip from the indoor units.

2-2. Unit characteristics

- The return air temperature display on the remote controller may differ from the ones on the other thermometers.
- The clock on the remote controller may be displayed with a time lag of approximately one minute every month.
- The temperature using a built-in temperature sensor on the remote controller may differ from the actual room temperature due to the effect of the wall temperature.
- Use a built-in thermostat on the remote controller or a separately-sold thermostat when indoor units installed on or in the ceiling operate the automatic cooling/heating switchover.
- The room temperature may rise drastically due to Thermo OFF in the places where the air conditioning load is large such as computer rooms.
- Be sure to use a regular filter. If an irregular filter is installed, the unit may not operate properly, and the operation noise may increase.
- The room temperature may rise over the preset temperature in the environment where the heating air conditioning load is small.

2-3. Unit installation

- Do not have any branching points on the downstream of the refrigerant pipe header.
- When a field-supplied external thermistor is installed or when a device for the demand control is used, abnormal stop of the unit or damage of the electromagnetic contactor may occur. Consult your local distributor for details.
- When indoor units operate a fresh air intake, install a filter in the duct (field-supplied) to remove the dust from the air.
- The 4-way or 2-way Airflow Ceiling Cassette Type units that have an outside air inlet can be connected to the duct, but need a booster fan to be installed at site. Refer to the chapter "Indoor Unit" for the available range for fresh air intake volume.
- Operating fresh air intake on the indoor unit may increase the sound pressure level.

3. Precautions for Fresh air intake type indoor unit

3-1. Usage

- This unit mainly handles the outside air load, and is not designed to maintain the room temperature. Install other air conditioners for handling the air conditioning load in the room.

3-2. Unit characteristics

- This unit cannot perform the drying operation. The unit will continue the fan operation and blow fresh air (air that is not air-conditioned) when the Heating Thermo-OFF or Cooling Thermo-OFF mode is selected.
- This unit switches the Thermo ON or OFF depending on the room temperature. The outside air is directly supplied into the room during Thermo OFF. Take caution of the cold supply air due to low outside air temperature and of condensation in the room due to high humidity of the outside air.
- Outside air temperature ranges for the operation must be as follows: Cooling: 21ºCD.B./15.5ºCW.B. ~ 43ºCD.B./35ºCW.B. Heating: -10ºCD.B.~ 20ºCD.B
  The unit is forced to operate Thermo OFF (fan operation) when the outside air temperature is as follows. Cooling: 21ºCD.B or below; Heating: 20ºCD.B or above
- Either a remote controller (sold separately) or a remote sensor (sold separately) must be installed to monitor the room temperature.
- If only this unit is used as an indoor unit, condensation may form at the supply air grill while the unit is operated in the cooling mode. This unit cannot operate dehumidifying.
- Use the unit in the way that the airflow rate will not exceed the 110% of the rated airflow.

4. Precautions for Outdoor unit/Heat source unit

4-1. Installation environment

- Outdoor unit with salt-resistant specification is recommended to use in a place where it is subject to salt air.
- Even when the unit with salt-resistant specification is used, it is not completely protected against corrosion. Be sure to follow the directions or precautions described in Instructions Book and Installation Manual for installation and maintenance. The salt-resistant specification is referred to the guidelines published by JRAIA (JRA9002).
- Install the unit in a place where the flow of discharge air is not obstructed. If not, the short-cycling of discharge air may occur.
- Provide proper drainage around the unit base, because the condensation may collect and drip from the outdoor units. Provide water-proof protection to the floor when installing the units on the rooftop.
- In a region where snowfall is expected, install the unit so that the outlet faces away from the direction of the wind, and install a snow guard to protect the unit from snow. Install the unit on a base approximately 50 cm higher than the expected snowfall. Close the openings for pipes and wiring, because the ingress of water and small animals may cause equipment damage. If SUS snow guard is used, refer to the Installation Manual that comes with the snow guard and take caution for the installation to avoid the risk of corrosion.
- When the unit is expected to operate continuously for a long period of time at outside air temperatures of below 0ºC, take appropriate measures, such as the use of a unit base heater, to prevent icing on the unit base. (Not applicable to the PUMY series)
- Install the snow guard so that the outlet/inlet faces away from the direction of the wind.
- The piping could vibrate depending on the installation conditions for the piping at the site. Adjust the piping support method and support span, etc., if the piping vibrates.

- When the snow accumulates approximately 50 cm or more on the snow guard, remove the snow from the guard. Install a roof that is strong enough to withstand snow loads in a place where snow accumulates.
- Provide proper protection around the outdoor units in places such as schools to avoid the risk of injury.
- A cooling tower and heat source water circuit should be a closed circuit that water is not exposed to the atmosphere. When a tank is installed to ensure that the circuit has enough water, minimize the contact with outside air so that the oxygen from being dissolved in the water should be 1 mg/L or less.
- Install a strainer (50 mesh or more recommended) on the water pipe inlet on the heat source unit.
- Interlock the heat source unit and water circuit pump.
- Note the followings to prevent the freeze bursting of pipe when the heat source unit is installed in a place where the ambient temperature can be 0ºC or below.
  - ♦ Keep the water circulating to prevent it from freezing when the ambient temperature is 0ºC or below.
  - ♦ Before a long period of non use, be sure to purge the water out of the unit.
- Salt-resistant unit is resistant to salt corrosion, but not salt-proof.
  Please note the following when installing and maintaining outdoor units in marine atmosphere.
  1. Install the salt-resistant unit out of direct exposure to sea breeze, and minimize the exposure to salt water mist.
  2. Avoid installing a sun shade over the outdoor unit, so that rain will wash away salt deposits off the unit.
  3. Install the unit horizontally to ensure proper water drainage from the base of the unit. Accumulation of water in the base of the outdoor unit will significantly accelerate corrosion.
  4. Periodically wash salt deposits off the unit, especially when the unit is installed in a coastal area.
  5. Repair all noticeable scratches after installation and during maintenance.
  6. Periodically check the unit, and apply anti-rust agent and replace corroded parts as necessary.

4-2. Circulating water

- Follow the guidelines published by JRAIA (JRA-GL02-1994) to check the water quality of the water in the heat source unit regularly.
- A cooling tower and heat source water circuit should be a closed circuit that water is not exposed to the atmosphere. When a tank is installed to ensure that the circuit has enough water, minimize the contact with outside air so that the oxygen from being dissolved in the water should be 1 mg/L or less.

4-3. Unit characteristics

- When the Thermo ON and OFF is frequently repeated on the indoor unit, the operation status of outdoor units may become unstable.
- An indoor unit capacity of up to 130% (150% for cooling-heating simultaneous models) in respect to the outdoor unit capacity. However, the anticipated performance may not be achieved if the system is run at a capacity exceeding 100%.

4-4. Relevant equipment

- Provide grounding in accordance with the local regulations.

5. Precautions for Control-related items

5-1. Product specification

- To introduce the MELANS system, a consultation with us is required in advance. Especially to introduce the electricity charge apportioning function or energy-save function, further detailed consultation is required.
  Consult your local distributor for details.
- Billing calculation for AE-200E, AE-50E, EW-50E or the billing calculation unit is unique and based on our original method. (Backup operation is included.) It is not based on the metering method, and do not use it for official business purposes. It is not the method that the amount of electric power consumption (input) by air conditioner is calculated. Note that the electric power consumption by air conditioner is apportioned by using the ratio corresponding to the operation status (output) for each air conditioner (indoor unit) in this method.
- In the apportioned billing function for AE-200E, AE-50E, EW-50E use separate watthour meters for A-control units, K-control units, and packaged air conditioner for City Multi air conditioners.
  It is recommended to use an individual watthour meter for the large-capacity indoor unit (with two or more addresses).
- When using the peak cut function on the AE-200E, AE-50E, EW-50E note that the control is performed once every minute and it takes time to obtain the effect of the control. Take appropriate measures such as lowering the criterion value. Power consumption may exceed the limits if AE-200E, AE-50E, EW-50E malfunctions or stops. Provide a back-up remedy as necessary.
- The controllers cannot operate while the indoor unit is OFF. (No error)
  Turn ON the power to the indoor unit when operating the controllers.
- When using the interlocked control function on the AE-200E, AE-50E, EW-50E, PAC-YG66DCA, or PAC-YG63MCA, do not use it for the control for the fire prevention or security. (This function should never be used in the way that would put people's lives at risk.) Provide any methods or circuit that allow ON/OFF operation using an external switch in case of failure.

5-2. Installation environment

- The surge protection for the transmission line may be required in areas where lightning strikes frequently occur.
- A receiver for a wireless remote controller may not work properly due to the effect of general lighting. Leave a space of at least 1 m between the general lighting and receiver.
- When the Auto-elevating panel is used and the operation is made by using a wired remote controller, install the wired remote controller to the place where all air conditioners controlled (at least the bottom part of them) can be seen from the wired remote controller. If not, the descending panel may cause damage or injury, and be sure to use a wireless remote controller designed for use with elevating panel (sold separately).
- Install the wired remote controller (switch box) to the place where the following conditions are met.
  - ♦ Where installation surface is flat
  - ♦ Where the remote controller can detect an accurate room temperature
    The temperature sensors that detect a room temperature are installed both on the remote controller and indoor unit. When a room temperature is detected using the sensor on the remote controller, the main remote controller is used to detect a room temperature. In this case, follow the instructions below.
    > Install the controller in a place where it is not subject to the heat source.
    (If the remote controller faces direct sunlight or supply air flow direction, the remote controller cannot detect an accurate room temperature.)
    > Install the controller in a place where an average room temperature can be detected.
    > Install the controller in a place where no other wires are present around the temperature sensor.
    (If other wires are present, the remote controller cannot detect an accurate room temperature.)
- To prevent unauthorized access, always use a security device such as a VPN router when connecting AE-200E, AE-50E, EW-50E to the Internet.

Maintenance Equipment

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

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

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

If the following conditions are met, the equipment may not be used, or the "maintenance cycle" and "replacement intervals" may be shortened.

- When equipment is used in an environment where the temperature and humidity are high or change dramatically
- When equipment is used in an environment where the power supply fluctuations (the distortion of voltage, frequency, and waveform) are large (Only within the allowable range)
- When equipment is used in an environment where the unit may receive vibration or mechanical shock
- When equipment is used in an environment where dust, salt, toxic gases such as sulfur dioxide and hydrogen sulfide, and oil mist are present
- When equipment starts/stops frequently and operates for a long time (24-hour air conditioning operation)

Table 1. Maintenance cycle

Major components	Checking cycle	Maintenance cycle
Compressor	1 year	20,000 hours
Motor (Fan, Louver, drain pump)		20,000 hours
Bearing		15,000 hours
Electric board		25,000 hours
Heat exchanger		5 years

Major components	Checking cycle	Maintenance cycle
Expansion valve	1 year	20,000 hours
Valve (solenoid valve, four-way valve)		20,000 hours
Sensor (thermistor, presser sensor)		5 years
Drain pan		8 years

Note1 This table shows major components. Refer to the maintenance contract for details.
Note2 This maintenance cycle shows a period in which products are expected to require no maintenance. Use this cycle for planning maintenance (budgeting the maintenance expense etc.) Checking/ Maintenance cycle may be shorter than the one on this table depending on the contents of maintenance check contract.

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

Replacement cycle of consumable components
[Note that replacement cycle does not mean guarantee period.]

Table 2. Replacement cycle

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

Note1 This table shows major components. Refer to the maintenance contract for details.
Note2 This replacement cycle shows a period in which products are expected to require no replacements. Use this cycle for planning maintenance (budgeting expenses for replacing equipments etc.)

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.

⚠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, 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.

■ Our air conditioning equipment and heat pumps contain a fluorinated greenhouse gas, R410A.

MITSUBISHI ELECTRIC CORPORATION

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