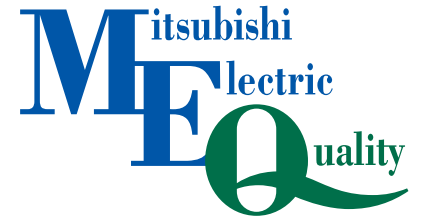




Changes for the Better

SPLIT-TYPE AIR CONDITIONERS



— Deluxe —
Inverter Series
Mr. SLIM
R32



Cooling
only

Mr. SLIM PRODUCT LINE-UP

	18,000 BTU/h	24,000 BTU/h	30,000 BTU/h	36,000 BTU/h
Ceiling-cassette (PLY-M SERIES) 	 <p>PLY-M18EA-PA</p>	 <p>PLY-M24EA-PA</p>	 <p>PLY-M30EA-PA</p>	 <p>PLY-M36EA-PA</p>
Ceiling-concealed (PEY-M SERIES) 	 <p>PEY-M18JAL-PA</p>	 <p>PEY-M24JAL-PA</p>	 <p>PEY-M30JAL-PA</p>	 <p>PEY-M36JAL-PA</p>
Ceiling-suspended (PCY-M SERIES) 	 <p>PCY-M18KAL-PA</p>	 <p>PCY-M24KAL-PA</p>	 <p>PCY-M30KAL-PA</p>	 <p>PCY-M36KAL-PA</p>
Outdoor Unit	 <p>SUY-M18VA-PA</p>	 <p>SUY-M24VA-PA</p>	 <p>SUY-M30VA-PA</p>	 <p>PUY-M36V/YKA-PA</p>

43,000 BTU/h	48,000 BTU/h	Remote Controller	Contents
 <p>PLY-M42EA-PA</p>	 <p>PLY-M48EA-PA</p>	 <p>PAR-21MAA PAR-SL101A-E PAR-41MAA [optional]</p> <p>For details of remote controllers and panels, please refer to P.20-22.</p>	<p>P. 07-10</p>
 <p>PEY-M42JAL-PA</p>	 <p>PEY-M48JAL-PA</p>	 <p>PAR-21MAA [optional] PAR-SL101A-E PAR-41MAA [optional]</p>	<p>P. 11-12</p>
 <p>PCY-M42KAL-PA</p>	 <p>PCY-M48KAL-PA</p>	 <p>PAR-21MAA [optional] PAR-SL101A-E PAR-41MAA [optional]</p>	<p>P. 13</p>
 <p>PUY-M42V/YKA-PA</p>	 <p>PUY-M48V/YKA-PA</p>		

Doing Our Part to Create a Better Future for All...

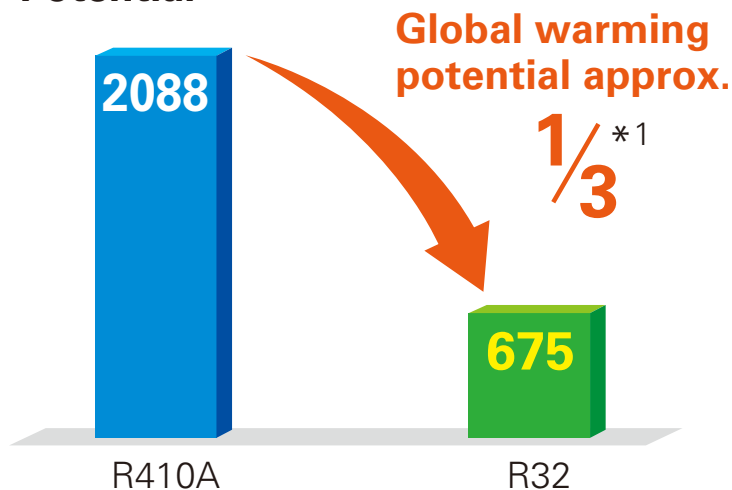
Environmental Sustainability Vision 2050



Refrigerant R32

The new R32 refrigerant has a global warming potential approximately 1/3*1 that of our current refrigerant, R410A; thereby dramatically reducing the negative impact more than ever. Actively introducing the new R32 refrigerant to suppress global warming, Mitsubishi Electric continues to promote manufacturing while considering the environment.

Comparison of Global Warming Potential

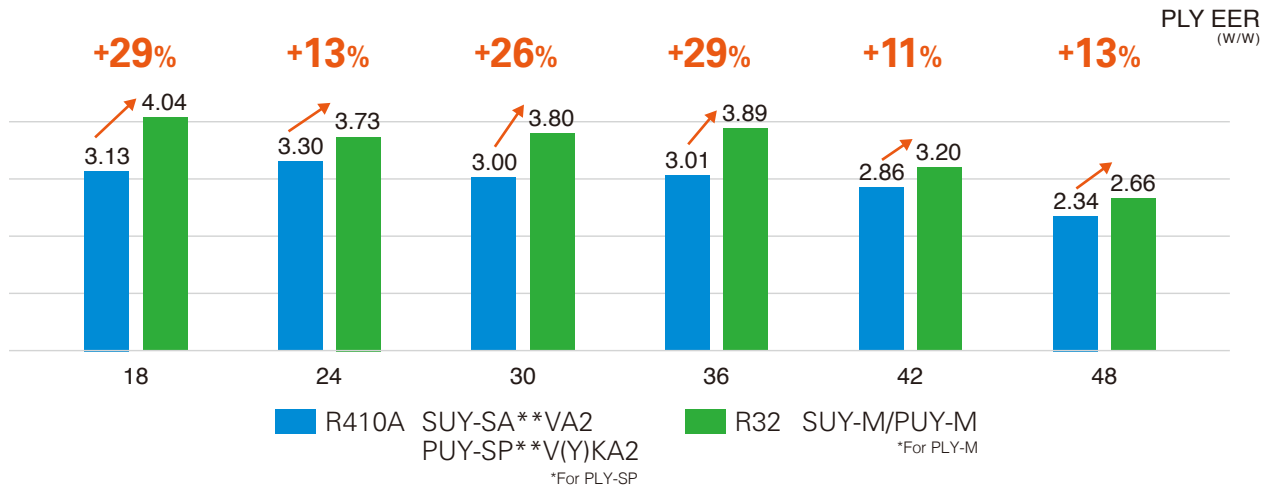


*1: Source: IPCC 4th Assessment Report, global warming potential (GWP) 100-year value. Comparison of 2088 (R410A) and 675 (R32).

MAJOR FEATURES

NEW High Energy Efficiency

The new R32 Deluxe Inverter series realize high energy savings with its high energy efficiency. All models in the series have achieved high levels of energy-saving performance, and contribute to reducing energy consumption in homes, offices, and a range of other settings. Offered in a variety of output capacities and installation patterns, the vast applicability promises and ideal match for any user.



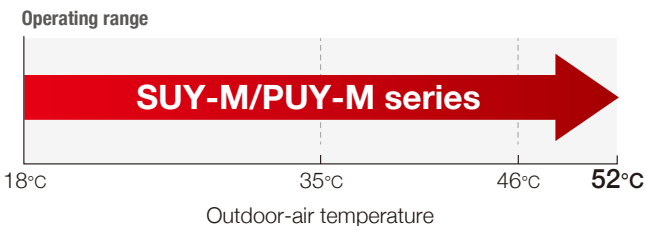
NEW High Power Fan Speed Mode

This start-up mode increases fan speed for 15 minutes as maximum to cool or heat the space rapidly (after the first Thermo-ON operation).

*Power consumption and sound pressure level will increase in this mode.
 *High power fan speed mode is not available when the external static pressure is set to 125 Pa.

Operating at High Temperatures (52°C)

Mitsubishi Electric inverter technology has made it possible for units to operate at outdoor-air temperatures as high as 52°C.



Longer Piping (18/24/30)

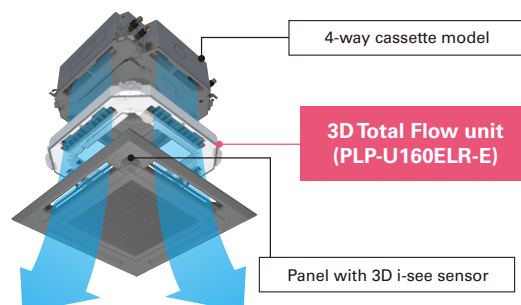
Piping lengths and height differences (18/24/30) are longer than R410A models. Installation flexibility increases widely.

Capacity Class	Max. Piping Length (m)		Max. Height Difference (m)	
	R410A SUY-SA	R32 SUY-M	R410A SUY-SA	R32 SUY-M
18	20	35	12	20
24	30	35	15	20
30	30	50	15	30

NEW 3D Total Flow* for PLY-M

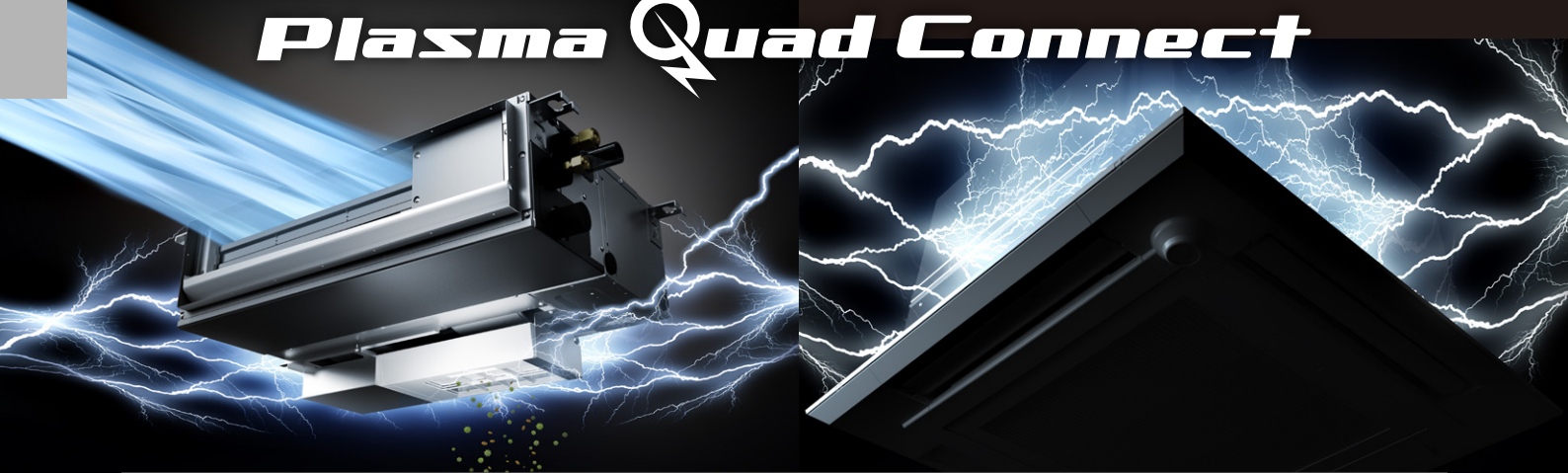
3D Total Flow is an innovative function. Our original 3D i-see sensor detects the temperature of the floor, and then the newly installed 3D Total Flow unit automatically controls the airflow in the left/right directions in a smart manner.

*3D Total Flow unit (PLP-U160ELR-E) cannot be used with Plasma Quad Connect (PAC-SK51FT-E), Insulation kit (PAC-SK36HK-E), Shutter Plate (PAC-SJ37SP-E), Multi functional casement (PAC-SJ41TM-E) and High-efficiency filter element (PAC-SH59KF-E)

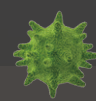


Hi-performance Plasma Filtration System

Plasma Quad Connect



Plasma Quad Connect is an high-performance air purifying device which can even be installed on the existing units, contributing to a better air quality in your room. Plasma Quad Connect applies a voltage of 6,000 volts to the electrode to generate plasma, effectively removing various kinds of particles such as viruses, bacteria, molds, allergens, dust, and PM2.5.



Virus
99%
inhibited *1 *2



Bacteria
99%
inhibited *2



Mold
99%
inhibited *2



Dust
99.7%
inhibited



Allergen
98%
inhibited



PM2.5
99%
inhibited *2

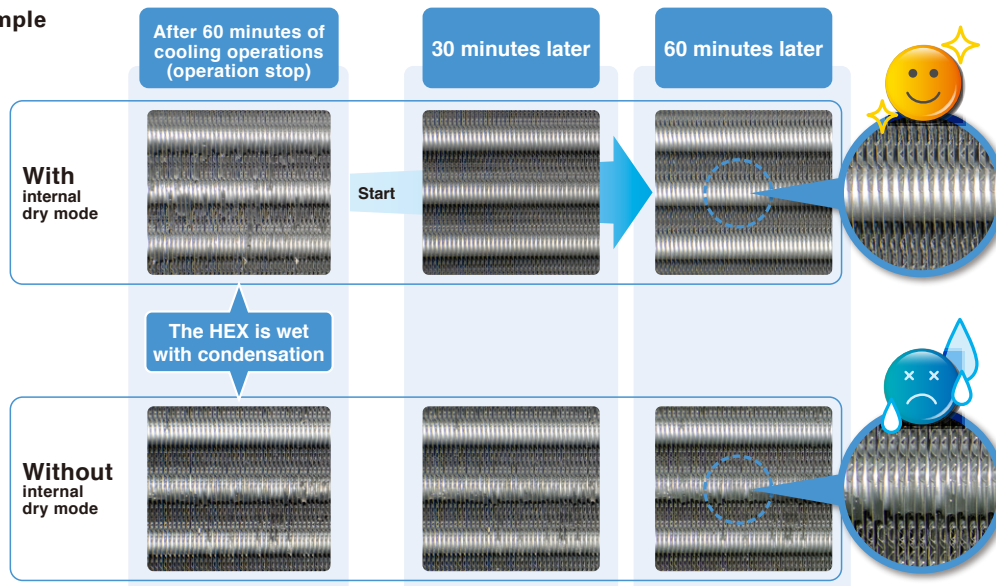
*1 The result of test with Influenza A virus.

*2 The result is based on the test with a device installed on the representative indoor unit. (MSZ-AP series)

NEW Internal Dry Mode for PEY-M

To dry the heat exchanger (HEX), the unit will operate in the fan mode at high speed after cooling or drying operation has stopped. The drying time is selectable from 30 or 60 minutes.

Operating Sample



*Under normal cooling conditions (Indoor) (27°C D.B./19°C W.B.)

*Results will vary depending on indoor temperature and humidity conditions.

Specification

Part Name	Plasma Quad Connect	Plasma Quad Attachment	Plasma Quad filter box	Plasma Quad Connect Casement
Model Name	MAC-100FT-E	PAC-HA31PAR, PAC-HA31PAU (Attachment for Ducted Indoor Units)*1,*3	PAC-KE92PTB-E, PAC-KE93PTB-E PAC-KE94PTB-E (Box for Ducted Indoor Units)*1,*3	PAC-SK51FT-E *4
Product Image				
Compatible with	PEY-M SERIES ^{*2}	PEY-M SERIES ^{*2}	PEY-M SERIES ^{*2}	PLY-M SERIES ^{*2} (4-way Cassette 3x3 models)
Input Voltage	Single Phase AC220~240V	—	—	Single Phase AC220~240V
Frequency	50/60Hz	—	—	50/60Hz
Power Consumption	4W	—	—	4W
Size H×W×D(mm)	56 × 499.5 × 168	—	KE92:247×917×179 KE93:247×1,117×179 KE94:247×1,417×179	134 × 840 × 840
Weight(φ)	1,600	PAC-HA31PAR:450 PAC-HA31PAU:970	KE92:4,570 KE93:5,320 KE94:6,520	8,700

*1 Both MAC-100FT-E and PQ Attachment or PQ box will be required when using with ducted models. *2 Please refer to page 27 about compatible model.
 *3 Specifications are subject to change without notice. *4 When multi-functional casement or automatic filter elevation panel is used/installed, PAC-SK51FT-E can not be used.
 *5 The image shows rear suction.

Test Report Results

Following test results were conducted under controlled laboratory conditions. Performance might differ in real life environment.

Tested Materials	Tested Standard	Capacity	Time	Result	Testing Organization	Test Report	
Virus	New Coronavirus (SARS-CoV-2)	Original	— ^{*8}	360min	99.8% inhibited ^{*9}	Japan Textile Products Quality and Technology Center	20KB070569
	Influenza A	JEM1467	25m ³	175min	99% inhibited ^{*10}	SMC Virus Research Center Japan (JAPAN)	R2-003
Bacteria	Staphylococcus Aureus	GB21551.6-2010	30m ³	335min	99% inhibited ^{*10}	CHEARI (Beijing) Certification & Testing Co., Ltd.	WK-21-50161
Mold	Penicillium Citrinum	JEM1467	25m ³	160min	99% inhibited ^{*10}	Life Science Research Laboratory (JAPAN)	LSRL-51021E-E091
Allergen	Cat Fur and Pollen	Original	— ^{*8}	—	98% inhibited ^{*11}	Institute of Tokyo Environmental Allergy (JAPAN)	No.T1606028
Dust	Dust and Mites	Original	— ^{*8}	—	99.7% inhibited ^{*11}	Institute of Tokyo Environmental Allergy (JAPAN)	No.T1606028
PM2.5	Cigarette smoke	JEM1467	25m ³	300min	99% inhibited ^{*10}	Life Science Research Laboratory (JAPAN)	SRL-21010E-E091

*8 The test was conducted on the Plasma Quad device alone, not designed to evaluate product performance. *9 The result without the effect of natural attenuation is 96.3%.
 *10 The result is based on the test with a device installed on the representative indoor unit. (MSZ-AP series) *11 It shows the result when allergen and dust pass through the device once.

4-way Ceiling-cassette

(PLY-M SERIES)



PLY-M18/24/30/36/42/48EA-PA

(3D i-see Sensor: optional)
(3D Total Flow : optional)



Horizontal Louver (3D Total Flow)

In addition to the ability of conventional models to control airflow in the vertical direction, the adoption of a horizontal louver unit allows each outlet to blow air over a horizontal angle of 90 degrees. The combination of four outlets delivers 360° airflow control around the entire circumference. This now makes it possible to blow air in diagonal directions which eliminates temperature irregularities.



Louvers can provide horizontal airflow control.

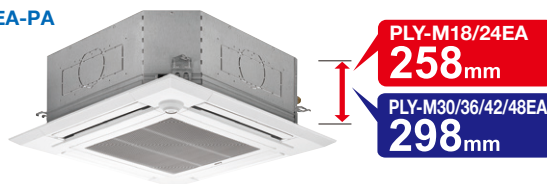
A sophisticated design that matches a variety of rooms and a high level of convenience enhancing your quality of life are combined in this compact, multi-functional indoor unit.

The incorporation of "3D total flow" and the "3D i-see Sensor" enhances airflow distribution control, achieving an enhanced level of comfort throughout the room.

Beautiful Square Design

The beautiful design harmonizes with any interior, making it ideal for facilities such as offices and retail stores.

PLY-M·EA-PA



"Pure White" Colour Matches Interior Décor

The colour "Pure White" has been introduced for the decoration panel and wired remote controller so as to blend in with any interior décor.

Quiet Operation

An improved airflow path and powerful high-capacity flow fan contribute to the realisation of quieter operation.

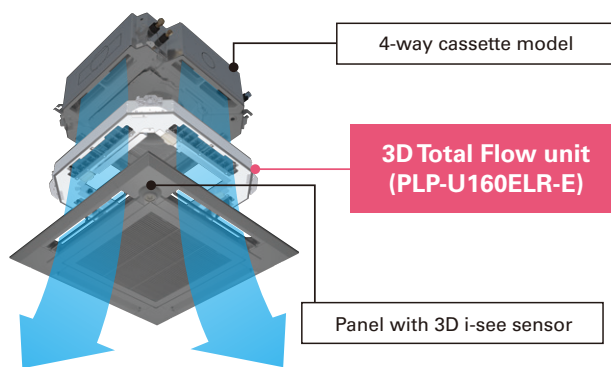


Power flow fan

NEW 3D Total Flow*

3D Total Flow is an innovative function. Our original 3D i-see sensor detects the temperature of the floor, and then the newly installed 3D Total Flow unit automatically controls the airflow in the left/right directions in a smart manner.

*3D Total Flow unit (PLP-U160ELR-E) cannot be used with Plasma Quad Connect (PAC-SK51FT-E), Insulation kit (PAC-SK36HK-E), Shutter Plate (PAC-SJ37SP-E), Multi functional casement (PAC-SJ41TM-E) and High-efficiency filter element (PAC-SH59KF-E)



Features at a glance

Installation & Maintenance	Comfort	Others
• Chargeless system	• 3D i-see Sensor	• System control
• Compact design	• Plasma Quad Connect	• Auto vane shutter
• Drain water lifting (850mm)	• 3D Total Flow	• Auto restart
• Handy corner pocket	• Auto fan speed	• Fresh-air intake
• Long-life filter (2500hr)*	• Wide vane	• Outdoor unit max. operating temp. of 52°C
• Self-diagnostic function	• Smudge/draft-free	
• Filter indicator (for wired remote controller)	• High-ceiling application	
• Flockless vanes	• Computerized dehumidifier	
• Elevation grille	• Quiet operation	
	• Bacteria- and mold-resistant filter	

*May vary according to operating conditions.

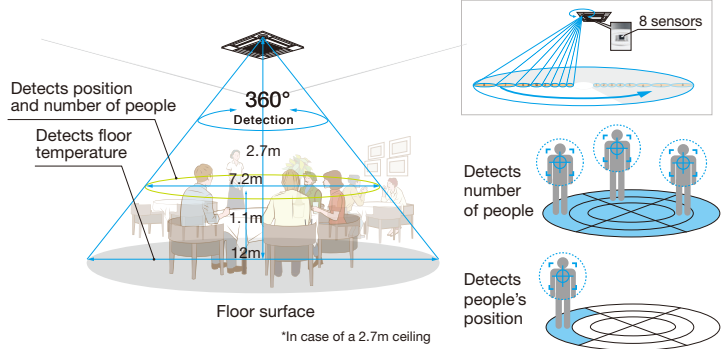
3D i-see Sensor



The "3D i-see Sensor" built into the optional corner panel eliminates uneven temperature distribution and reduces electricity consumption.

Highly accurate motion detection

A total of eight sensors rotate a full 360° in 3-minute intervals. In addition to detecting body temperature, our original algorithm also detects the number of occupants in the room and their positions.



"3D i-see Sensor" temperature-sensing technology improves energy efficiency and enhances room comfort

The "3D i-see Sensor" is an innovative Mitsubishi Electric technology that uses a radiation-based sensor to monitor temperature throughout an entire room. When connected to the air conditioner control panel, the "3D i-see Sensor" works to maximize room comfort.

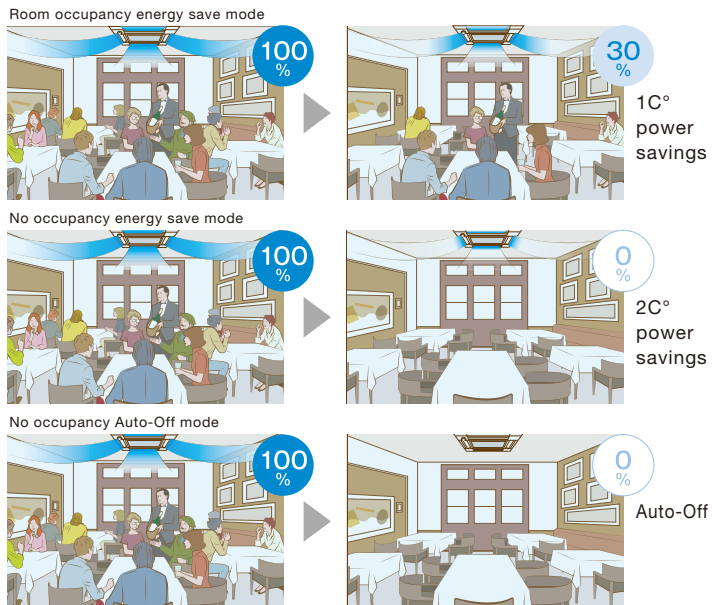
Sensible temperature control prevents excessive cooling through pioneering control technology

By measuring the inlet temperature and floor temperature, temperatures felt by the human body (sensible temperature) are computed. This allows the proper sensible temperature to always be maintained through the suppression of excessive cooling.

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. When the occupancy rate is approximately 30%, air-conditioning power equivalent to 1°C during cooling operation is saved. The temperature is controlled according to the number of people.



*PAR-41MAA is required for each setting
**% is room occupancy rate.

No occupancy energy-saving mode

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

No occupancy Auto-OFF mode

When the room remains unoccupied for a pre-set 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.

Detect People's Position

Direct/Indirect settings*

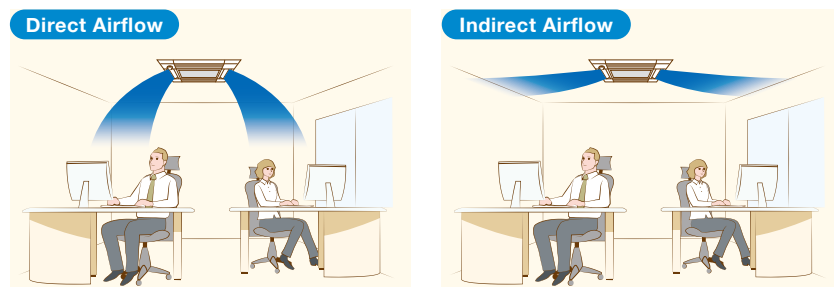
Some people do not like the feel of wind, some want to be warm from head to toe. People's likes and dislikes vary. With the 3D i-see Sensor, it is possible to choose to block or not block to the wind for each vane.

*PAR-41MAA or PAR-SL101A-E is required for each setting.

Direct (Downward) Indirect (Horizontal)



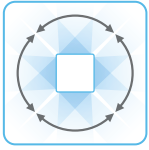
Saves energy while keeping a comfortable effective temperature by automatically switching between ventilation and cooling. When a pre-set temperature is reached, the air conditioning unit switches to swing fan operation to maintain the effective temperature. This clever function contributes to keeping a comfortable coolness.



*Only available for models equipped with 3D i-see Sensor.

	Vane setting	
	Direct	Indirect
Cooling	horizontal → swing	keep horizontal

Fine-tuned Sensing & Airflow Direction Control (3D Total Flow)



Swinging

Since airflow can be controlled in the horizontal and vertical directions, you can efficiently make the entire room comfortable.

Horizontal, vertical, and diagonal airflow delivered to every corner

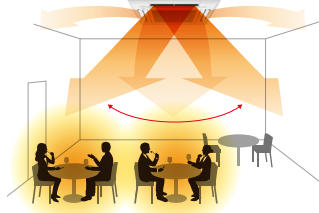
The combination of the vertical vanes with the horizontal louver unit makes it possible to direct airflow in any direction. This quickly makes the entire room comfortable, even when diagonal airflow is necessary.

Without 3D Total Flow

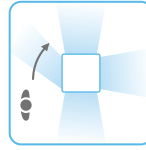


There are some areas that cannot receive air through vertical airflow control.

With 3D Total Flow



Swinging in both the vertical and horizontal directions provides a pleasant breeze throughout the room.



Indirect mode

When set to "Indirect" mode, the system detects the position of a person and maintains comfort while diverting airflow away from them.

Prevents direct airflow and keeps you comfortable

This function prevents people from being directly exposed to airflow while still ensuring comfort. The "Indirect" mode of 3D Total Flow keeps the downward airflow while avoiding direct blow to people, delivering a pleasant warmth.

Without 3D Total Flow

Models that are only equipped with vertical vanes need to swing the airflow upward to avoid people. This makes it difficult to warm up the surrounding space.

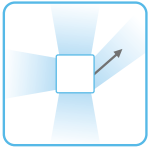


With 3D Total Flow

Now, it is easier to warm the surrounding space while still ensuring people do not receive direct blow.



*If people are present throughout the entire airflow range of an outlet, the airflow is shifted horizontally to avoid direct airflow.



Targeting

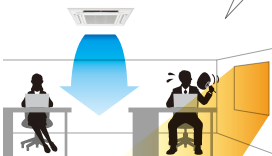
The system can detect spaces with uneven temperatures and target them by sending air even if they are in a diagonal direction.

Detects and targets areas with uneven temperatures

3D i-see sensor detects areas with uneven temperatures, even if they are caused by the installation orientation of the air conditioner or the influence of strong sunlight. Efficient air conditioning is possible thanks to the ability to send focused airflow to such areas, even those in a diagonal position.

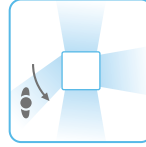
Without 3D Total Flow

Depending on application, conventional systems may take a long time to cool down hot spots.



With 3D Total Flow

The new system efficiently eliminates hot spots by using targeted airflow.



Direct mode

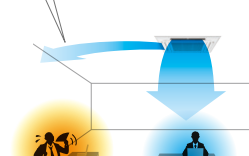
When set to "Direct" mode, the system detects the position and diverts airflow towards wherever they are located.

Delivers airflow even in diagonal directions

You can freely turn on "Direct" mode depending on personal preference. This allows for air conditioning in diagonal directions which was difficult for models that could only swing the airflow up and down. This feature is perfect for when you come back home on a hot day.

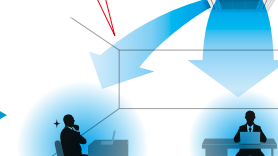
Without 3D Total Flow

It is difficult to direct airflow in diagonal directions when only using vertical vanes.



With 3D Total Flow

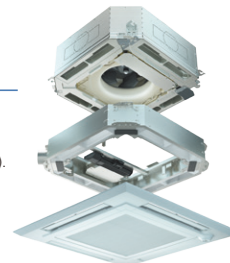
Ensures comfort even when you are located diagonally from an outlet.



Connectable to Plasma Quad Connect

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

*Plasma Quad Connect(PAC-SK51FT-E) cannot be used with PLP-U160ELR-E(3D Total Flow unit), Insulation kit (PAC-SK36HK-E), Auto elevation panel(PLP-6EAJ, PLP-6EAJE), Multi functional casement(PAC-SJ41TM-E) and High-efficiency filter element(PAC-SH59KF-E).



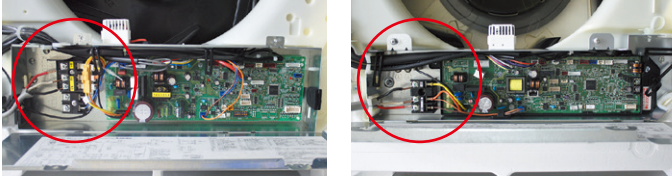
Easy Installation and Maintainance

Electrical box wiring

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

■ Previous model (B Series)

■ New model (E Series)



Increased space for plumbing work

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

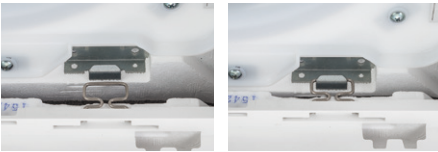
■ Previous model (B Series)

■ New model (E Series)



Temporary hanging hook

The structure of the panel has been revised and is now equipped with a temporary hanging hook. This has improved work efficiency during panel installation.



No need to remove screws

Installation is possible without removing the screws for the corner panel and the control box, simply loosen them. This lowers the risk of losing screws.

■ Corner panel

■ Control box cover



Lightweight decorative panel

After reviewing the structure and materials, weight has been reduced approximately 20% compared to the previous model, reducing the burden of installation.



Automatic Grille Lowering Function (PLP-6EAJ)

An automatic grille lowering function is available for easy filter maintenance. Special wired and wireless remote controllers can be used to lower the intake grille for maintenance.

*Auto elevation panel(PLP-6EAJ) cannot be used with Plasma Quad Connect(PAC-SK51FT-E).



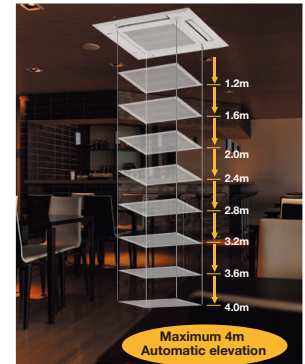
Grille Elevation Remote Controller
(comes with the automatic elevation panel)



Wired Remote Controller
PAR-41MAA



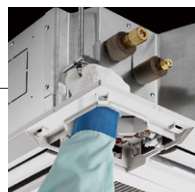
Wireless Remote Controller
PAR-SL101A-E



Fresh-air Intake

Indoor air quality is significantly enhanced by the direct intake of fresh air from outside. An optional multi-function casement (PAC-SJ41-TM-E) is also available for the intake of a larger volume of air.

Fresh-air Intake

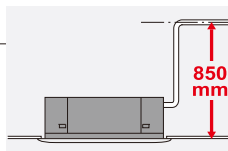


Handy Corner Pocket Design Simplifies Maintenance

By using the handy pockets equipped on the four corners of the grille, maintenance work such as drain pan cleaning and height adjustments can be accomplished without removing the grille.

Drain Water Lifting Mechanism

A high-performance drain pump on the drain water lifting mechanism allows the drain water pipe to be routed as high as 850mm from the ceiling surface.

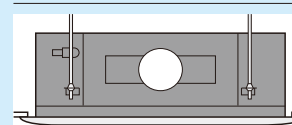


Compatible with Round and Rectangular Ducts

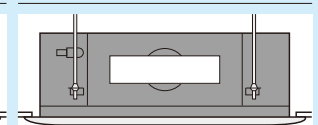
For easy connection to branch ducts, knock-out holes are designed to fit both round and rectangular ducts. Matching the shape of the duct fringe provides more flexibility during installation.

Connecting to round ducts

Connecting to rectangular ducts



150mm diameter cutout



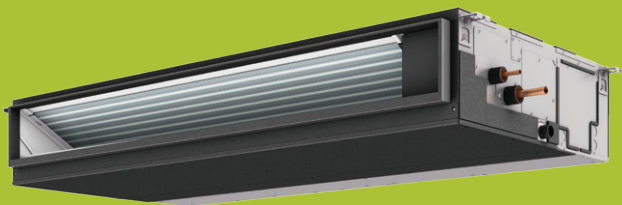
350mm x 100mm cutout

Bacteria-resistant Filters

Mitsubishi Electric filters are bacteria-resistant and designed for fresh and pleasant air conditioning at all times.

Ceiling-concealed

(PEY-M SERIES)



PEY-M18/24/30/36/42/48JAL-PA

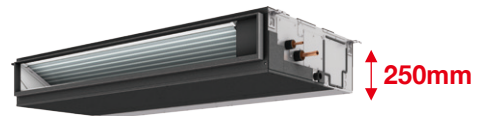


optional optional

The thin, ceiling-concealed indoor units of the PEY-M series are the perfect answer for the air-conditioning requirements of buildings with minimum ceiling installation space and wide-ranging external static pressure. Energy-saving efficiency has been improved, thereby reducing electricity consumption and contributing to a further reduction in operating cost.

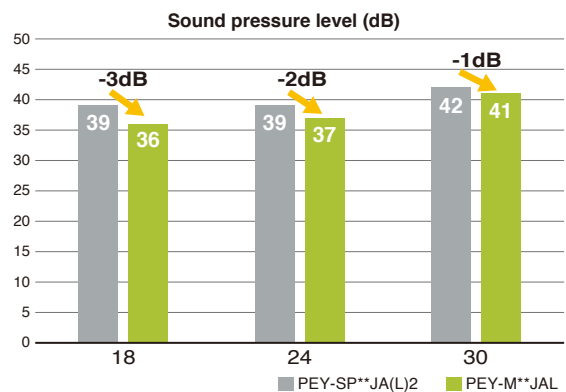
Compact Indoor Units

All models have slim bodies with a height of 250 mm. It allows installation in tight spaces such as ceiling cavities or drop-ceilings.



Reduced Noise Level

The noise levels of low capacity models (M18/24/30) are reduced compared to conventional models. The M18 model achieves 3dB reduction in noise level.



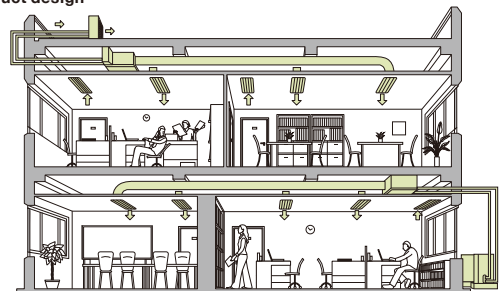
Wide Selection of Fan Speeds and External Static Pressure

Five-stage external static pressure conversions and three fan speed selections are available. Capable of being set to a maximum of 125Pa, units are applicable to a wide range of building types.

External static pressure setting

Series	18	24	30	36	42	48
PEY-M·JAL-PA	35/50/70/100/125Pa					

Flexible duct design



Features at a glance

Installation & Maintenance	Comfort	Others
<ul style="list-style-type: none"> • Chargeless system • Smooth installation • Self-diagnostic function 	<ul style="list-style-type: none"> • Computerized dehumidifier • Quiet operation 	<ul style="list-style-type: none"> • System control • Auto restart • Outdoor unit max. operating temp. of 52°C
<ul style="list-style-type: none"> • Drain pump (optional) 		



NEW High Power Fan Speed Mode

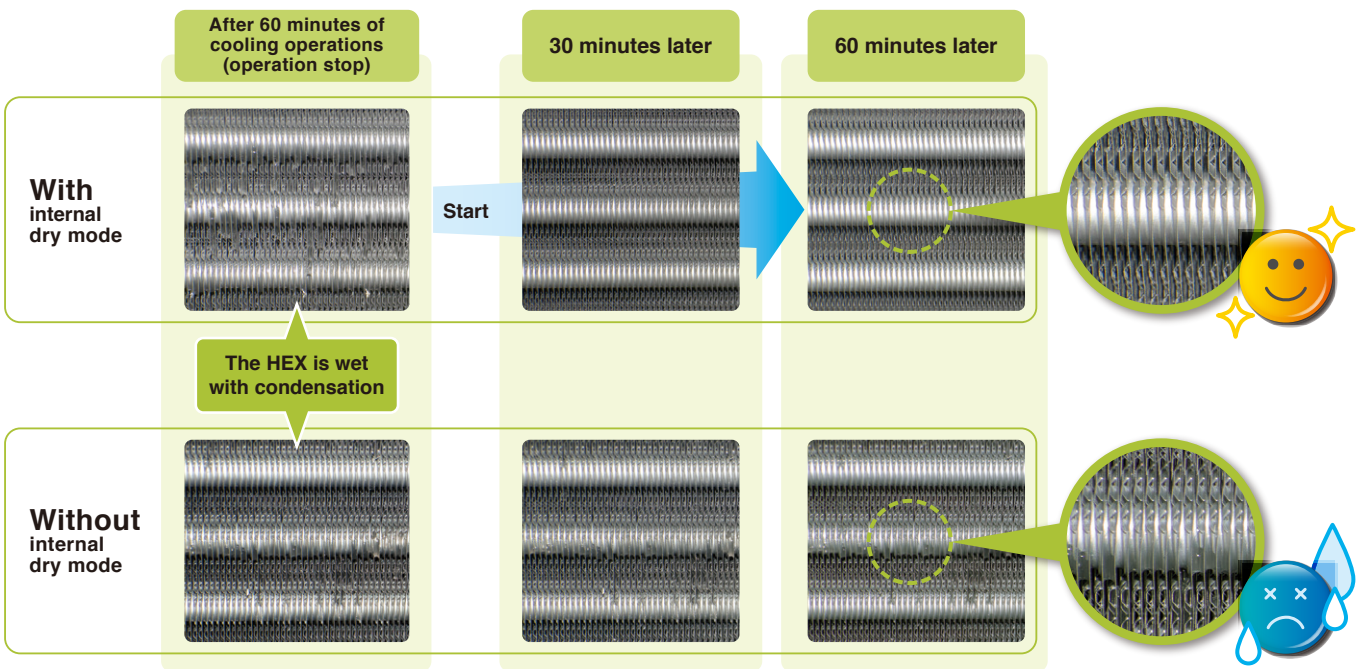
This start-up mode is run with the increased fan speed for a maximum of 15 minutes to rapidly cool or heat the space (after the first Thermo-ON operation).

- *Power consumption and sound pressure level will increase in this mode.
- *High power fan speed mode is not available when the external static pressure is set to 125 Pa.

NEW Internal Dry Mode

To dry the heat exchanger (HEX), the unit will operate in the fan mode at high speed after cooling or drying operation has stopped. The drying time is selectable from 30 or 60 minutes.

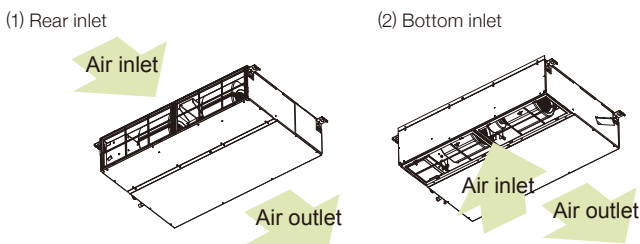
Operating Sample



*Under normal cooling conditions (Indoor) (27°C D.B./19°C W.B.)
 *Results will vary depending on indoor temperature and humidity conditions.

Air Inlet Selection

The air inlet position can be selected from two options: rear or bottom. It can switch the positions of the closing plate and air filter. (The factory default is the rear inlet.)



*Units with bottom inlets make more noise than those with rear inlets. It is recommended that the rear inlet be selected when installing a unit in a room that should be quiet, such as a bedroom.

Connectable to Plasma Quad Connect

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



Ceiling-suspended

(PCY-M SERIES)



PCY-M18/24/30/36/42/48KAL-PA



optional

optional

A stylish indoor unit design and airflow settings for both high- and low-ceiling interiors expand installation possibilities

Stylish Indoor Unit Design

A stylish square-like design is adopted for the indoor units of all models. As a result, the units blend in better with the ceiling.



Optional Drain Pump for Full-capacity Models

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

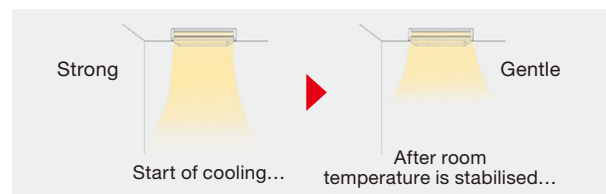
Drain pump installation possible

Drainage outlet can be 600mm above ceiling surface



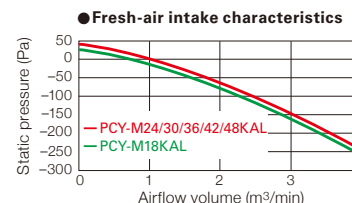
Automatic Air-speed Adjustment

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



Fresh-air Intake

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



Flockless Vanes

With the adoption of flockless vanes, dirt and other impurities can be cleaned off easily using a mild household detergent.

Features at a glance

Installation & Maintenance	Comfort	Others
<ul style="list-style-type: none"> Chargeless system New direct suspension system Drain water lifting (600mm)^{*1} Flexible piping Long-life filter (2500hr)^{*2} High-efficiency filter^{*1} Self-diagnostic function 	<ul style="list-style-type: none"> Auto swing Computerized dehumidifier Quiet operation 	<ul style="list-style-type: none"> System control Auto restart Auto vane shutter Outdoor unit max. operating temp. of 52°C

^{*1} Optional

^{*2} May vary according to operating conditions.



SPECIFICATIONS

4-way ceiling-cassette PLY-M SERIES

Specifications subject to change without notice.

Indoor unit		PLY-M18EA-PA	PLY-M24EA-PA	PLY-M30EA-PA	PLY-M36EA-PA	PLY-M36EA-PA	PLY-M42EA-PA	PLY-M42EA-PA	PLY-M48EA-PA	PLY-M48EA-PA					
Outdoor unit		SUY-M18VA-PA	SUY-M24VA-PA	SUY-M30VA-PA	PUY-M36VKA-PA	PUY-M36YKA-PA	PUY-M42VKA-PA	PUY-M42YKA-PA	PUY-M48VKA-PA	PUY-M48YKA-PA					
Cooling capacity (Min-Max)	kW	5.3 (2.8-5.3)	7.1 (2.9-7.1)	8.8 (3.8-8.8)	10.6 (4.0-10.6)		12.6 (6.1-12.6)		14.1 (7.0-14.7)						
Cooling capacity	BTU/h	18,000	24,000	30,000	36,000		43,000		48,000						
Total input	kW	1.31	1.90	2.31	2.72		3.94		5.30						
EER	W/W	4.04	3.73	3.80	3.89		3.20		2.66						
CSPF	W/W	6.83	6.96	6.32	6.39		5.83		5.34						
Indoor unit	Power supply	1ph 220-240V 50Hz				1ph 220-230V 60Hz									
	External finish	Munsell 1.0Y 9.2/0.2													
	Airflow (low-med2-med1-high)	CMM	16-17-19-21	16-18-20-23	21-23-25-28	21-25-28-31		21-25-28-32		24-26-29-32					
		CFM	565-600-670-740	565-635-705-810	740-810-885-990	740-885-990-1095		740-885-990-1130		850-920-1025-1130					
	Operation control and thermostat	Remote-control & Built-in													
	Noise level (low-med2-med1-high)	dB (A)	28-30-32-35	28-31-34-37	32-34-37-40	32-37-41-43		32-37-41-44		36-39-42-44					
	Unit drain pipe (outer diameter)	mm	32												
	Dimensions (panel)	W	mm				840 (950)								
		D	mm				840 (950)								
		H	mm				258 (40)								
Weight (panel)	kg	21 (5)				27 (5)									
Outdoor unit	Power supply	1ph 220-240V 50Hz				3ph 380-415V 50Hz		1ph 220-240V 50Hz		3ph 380-415V 50Hz		1ph 220-240V 50Hz		3ph 380-415V 50Hz	
		1ph 220-230V 60Hz				3ph 380V 60Hz		1ph 220-230V 60Hz		3ph 380V 60Hz		1ph 220-230V 60Hz		3ph 380V 60Hz	
	External finish	Munsell 3.0Y 7.8/1.1													
	Refrigerant (R32) control	Linear expansion valve													
	Airflow	CMM	51	67		90		93							
		CFM	1800	2365		3177		3283							
	Noise level	dB (A)	48	52	54	52		53		56					
	Dimensions	W	mm	800	840		1050								
		D	mm	285	330		330								
		H	mm	714	880		981								
	Weight	kg	35	46	43	62	64	62	64	63	64				
	Max. height difference	m	20				30								
	Max. piping length	m	35				50								
	Piping size (outer diameter)	mm	6.35/12.7		9.52/15.88										
Liquid/Gas															
Chargeless piping length	m	7				10									
Guaranteed Operating Range	°C	18-52													

*Rating conditions Cooling - Indoor: 27°C(80°F)DB, 19°C(66°F)WB, Outdoor: 35°C(95°F)DB

*Refrigerant piping length (one-way): 7.5m(25ft)

*Total input based on the indicated voltage (indoor/outdoor): 1ph 230V 50Hz, 3ph 400V 50Hz

*CSPF (Cooling Seasonal Performance Factor) is based on ISO 16358-1.

Ceiling-suspended PCY-M SERIES

Specifications subject to change without notice.

Indoor unit		PCY-M18KAL-PA	PCY-M24KAL-PA	PCY-M30KAL-PA	PCY-M36KAL-PA	PCY-M36KAL-PA	PCY-M42KAL-PA	PCY-M42KAL-PA	PCY-M48KAL-PA	PCY-M48KAL-PA					
Outdoor unit		SUY-M18VA-PA	SUY-M24VA-PA	SUY-M30VA-PA	PUY-M36VKA-PA	PUY-M36YKA-PA	PUY-M42VKA-PA	PUY-M42YKA-PA	PUY-M48VKA-PA	PUY-M48YKA-PA					
Cooling capacity (Min-Max)	kW	5.3 (2.8-5.3)	7.4 (2.9-7.4)	8.8 (3.8-8.8)	10.6 (4.0-10.6)		12.6 (6.1-12.6)		14.1 (7.0-14.7)						
Cooling capacity	BTU/h	18,000	25,000	30,000	36,000		43,000		48,000						
Total input	kW	1.25	1.98	2.23	2.83		3.96		5.44						
EER	W/W	4.24	3.73	3.94	3.74		3.18		2.59						
CSPF	W/W	7.20	6.78	6.40	6.33		5.83		5.14						
Indoor unit	Power supply	1ph 220-240V 50Hz				1ph 220-230V 60Hz									
	External finish	Munsell 6.4Y 8.9/0.4													
	Airflow (low-med2-med1-high)	CMM	16-17-18-20	21-23-26-29	23-25-27-29	27-29-32-34									
		CFM	565-600-635-705	740-810-920-1025	810-885-955-1025	955-1025-1130-1200									
	Operation control and thermostat	Remote-control & Built-in													
	Noise level (low-med2-med1-high)	dB (A)	34-36-38-40	33-36-39-42	37-39-41-43	42-44-46-48									
	Unit drain pipe (outer diameter)	mm	26												
	Dimensions	W	mm				1280								
		D	mm				680								
		H	mm				230								
Weight (panel)	kg	32	37	40											
Outdoor unit	Power supply	1ph 220-240V 50Hz				3ph 380-415V 50Hz		1ph 220-240V 50Hz		3ph 380-415V 50Hz		1ph 220-240V 50Hz		3ph 380-415V 50Hz	
		1ph 220-230V 60Hz				3ph 380V 60Hz		1ph 220-230V 60Hz		3ph 380V 60Hz		1ph 220-230V 60Hz		3ph 380V 60Hz	
	External finish	Munsell 3.0Y 7.8/1.1													
	Refrigerant (R410A) control	Linear expansion valve													
	Airflow	CMM	51	67		90		93							
		CFM	1800	2365		3177		3283							
	Noise level	dB (A)	48	52	54	52		53		56					
	Dimensions	W	mm	800	840		1050								
		D	mm	285	330		330								
		H	mm	714	880		981								
	Weight	kg	35	46	43	62	64	62	64	63	64				
	Max. height difference	m	20				30								
	Max. piping length	m	35				50								
	Piping size (outer diameter)	mm	6.35/12.7		9.52/15.88										
Liquid/Gas															
Chargeless piping length	m	7				10									
Guaranteed Operating Range	°C	18-52													

*Rating conditions Cooling - Indoor: 27°C(80°F)DB, 19°C(66°F)WB, Outdoor: 35°C(95°F)DB

*Refrigerant piping length (one-way): 7.5m(25ft)

*Total input based on the indicated voltage (indoor/outdoor): 1ph 230V 50Hz, 3ph 400V 50Hz

*CSPF (Cooling Seasonal Performance Factor) is based on ISO 16358-1.

Ceiling-concealed

PEY-M SERIES

Specifications subject to change without notice.

Indoor unit		PEY-M18JAL-PA	PEY-M24JAL-PA	PEY-M30JAL-PA	PEY-M36JAL-PA	PEY-M36JAL-PA	PEY-M42JAL-PA	PEY-M42JAL-PA	PEY-M48JAL-PA	PEY-M48JAL-PA	
Outdoor unit		SUY-M18VA-PA	SUY-M24VA-PA	SUY-M30VA-PA	PUY-M36VKA-PA	PUY-M36YKA-PA	PUY-M42VKA-PA	PUY-M42YKA-PA	PUY-M48VKA-PA	PUY-M48YKA-PA	
Cooling capacity (Min-Max)	kW	5.3 (2.8-5.3)	7.1 (2.9-7.1)	8.8 (3.8-8.8)	10.6 (4.0-10.6)		12.6 (6.1-12.6)		14.1 (7.0-14.7)		
Cooling capacity	BTU/h	18,000	24,000	30,000	36,000		43,000		48,000		
Total input	kW	1.49	1.87	2.31	2.76		3.67		5.20		
EER	W/W	3.55	3.79	3.80	3.84		3.43		2.71		
CSPF	W/W	6.22	6.37	5.74	6.18		5.32		4.79		
Indoor unit	Power supply	1ph 220-240V 50Hz 1ph 220-230V 60Hz									
	External finish	Galvanized sheet									
	Airflow (low-med-high)	CMM	12-14.5-17	17.5-21-25	24-29-34	29.5-35.5-42					
		CFM	424-512-600	618-742-883	847-1024-1201	1042-1254-1483					
	External static pressure	Pa	35-50-70-100-125								
	Operation control and thermostat	Remote control and Built-in									
	Noise level (low-med-high)	dB (A)	28-32-36	29-33-37	33-37-41	36-40-44					
	Unit drain pipe (outer diameter)	mm	32								
	Dimensions	W	mm	900	1100	1400					
		D	mm	732	732	732					
H		mm	250	250	250						
Weight (panel)	kg	26	29.5	35.5	38						
Outdoor unit	Power supply	1ph 220-240V 50Hz			3ph 380-415V 50Hz		1ph 220-240V 50Hz	3ph 380-415V 50Hz	1ph 220-240V 50Hz	3ph 380-415V 50Hz	
		1ph 220-230V 60Hz			3ph 380V 60Hz		1ph 220-230V 60Hz	3ph 380V 60Hz	1ph 220-230V 60Hz	3ph 380V 60Hz	
	External finish	Munsell 3.0Y 7.8/1.1									
	Refrigerant (R410A) control	Linear expansion valve									
	Airflow	CMM	51	67	90	93					
		CFM	1800	2365	3177	3283					
	Noise level	dB (A)	48	52	54	52	53	56			
	Dimensions	W	mm	800	840	1050					
		D	mm	285	330	330					
		H	mm	714	880	981					
	Weight	kg	35	46	43	62	64	62	64	63	64
	Max. height difference	m	20			30					
	Max. piping length	m	35			50					
Piping size (outer diameter)	mm	6.35/12.7			9.52/15.88						
Liquid/Gas											
Chargeless piping length	m	7			10						
Guaranteed Operating Range	°C	18--52									

*Rating conditions Cooling - Indoor: 27°C(80°F)DB, 19°C(66°F)WB, Outdoor: 35°C(95°F)DB

*Refrigerant piping length (one-way): 7.5m(25ft)

*Total input based on the indicated voltage (indoor/outdoor): 1ph 230V 50Hz, 3ph 400V 50Hz

*CSPF (Cooling Seasonal Performance Factor) is based on ISO 16358-1.

INVERTER TECHNOLOGIES

Mitsubishi Electric inverters ensure superior performance, including the optimum control of operation frequency. As a result, optimum power is applied in all heating/cooling ranges and maximum comfort is achieved while consuming minimal energy. Fast, comfortable operation and amazingly low running cost — That’s the Mitsubishi Electric promise.

INVERTERS – HOW THEY WORK

Inverters electronically control the electrical voltage, current and frequency of electrical devices such as the compressor motor in an air conditioner. They receive information from sensors monitoring operating conditions and adjust the rotation speed of the compressor, which directly regulates air conditioner output. Optimum control of operation frequency results in eliminating the consumption of excessive electricity and providing the most comfortable room environment.

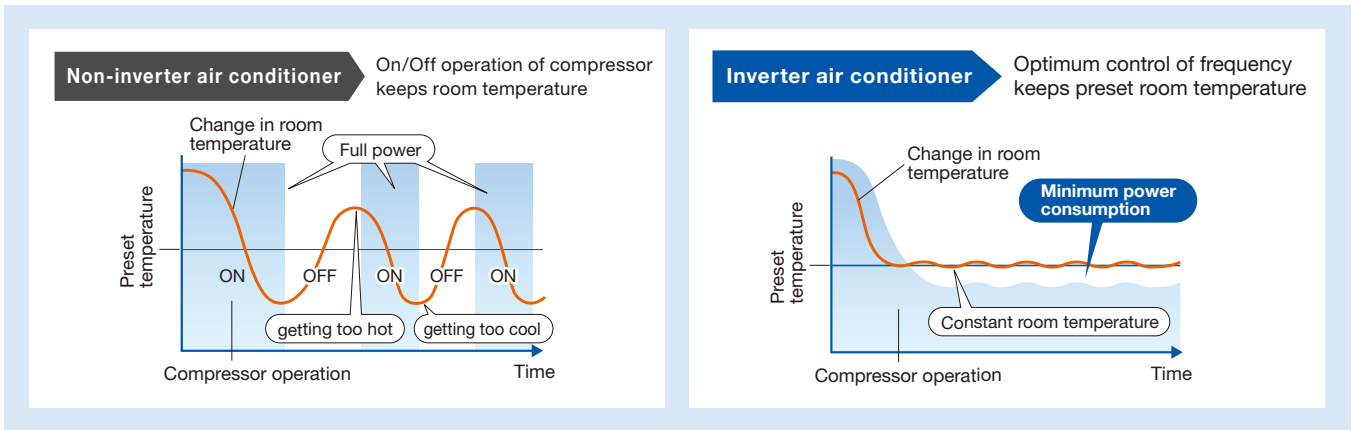
ECONOMIC OPERATION

Impressively low operating cost is a key advantage of inverter-equipped air conditioners. We have combined advanced inverter technologies with cutting-edge electronic and mechanical technologies to achieve a synergistic effect that enables improvements in heating/cooling performance efficiency. As a result, better performance and lower energy consumption are achieved.

TRUE COMFORT

Below is a simple comparison of air conditioner operation control with and without an inverter.

■ Inverter operation comparison



The compressors of air conditioners without an inverter start and stop repeatedly in order to maintain the preset room temperature. This repetitive on/off operation uses excessive electricity and compromises room comfort. The compressors of air conditioners equipped with an inverter run continuously; the inverter quickly optimizing the operating frequency according to changes in room temperature. This ensures energy-efficient operation and a more comfortable room.

Point 1 Quick & Powerful

Increasing the compressor motor speed by controlling the operation frequency ensures powerful output at start-up, and brings the room temperature to the comfort zone faster than units not equipped with an inverter. Hot rooms are cooled, and cold rooms are heated, faster and more efficiently.

Point 2 Room Temperature Maintained

The compressor motor operating frequency and the change in room temperature are monitored to calculate the most efficient waveform to maintain the room temperature in the comfort zone. This eliminates the large temperature swings common with non-inverter systems and guarantees a pleasant, comfortable environment.

MORE ADVANTAGES WITH MITSUBISHI ELECTRIC



Joint Lap DC Motor

Mitsubishi Electric has developed a unique motor, called the "Poki-Poki Motor" in Japan, which is manufactured using a joint lapping technique. This innovative motor operates based on a high-density, high-magnetic force, leading to extremely high efficiency and reliability.



Magnetic Flux Vector Sine Wave Drive

This drive device is actually a microprocessor that converts the compressor motor's electrical current waveform from a conventional waveform to a sine wave (180° conductance) to achieve higher efficiency by raising the motor winding utilisation ratio and reducing energy loss.



Heat Caulking Fixing Method

To fix internal parts in place, a "Heat Caulking Fixing Method" is used, replacing the former arc spot welding method. Distortion of internal parts is reduced, realising higher efficiency.



DC Fan Motor

A highly efficient DC motor drives the fan of the outdoor unit. Efficiency is much higher than an equivalent AC motor.

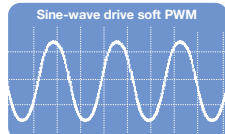


Vector-Wave Eco Inverter

This inverter monitors the varying compressor motor frequency and creates the most efficient waveform for the motor speed. As the result, operating efficiency in all speed ranges is improved, less power is used and annual electricity cost is reduced.

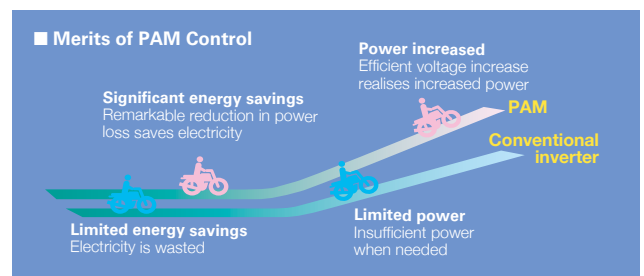
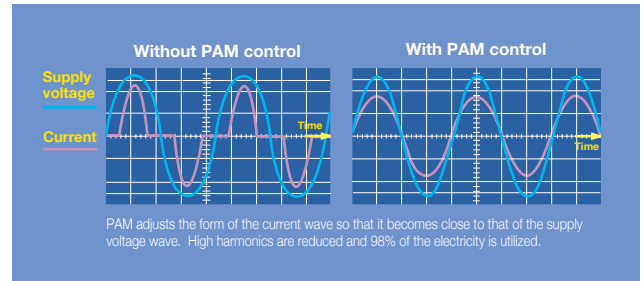
Smooth wave pattern

Inverter size has been reduced using insert-molding, where the circuit pattern is molded into the synthetic resin. To ensure quiet operation, soft PWM control is used to prevent the metallic whine associated with conventional inverters.



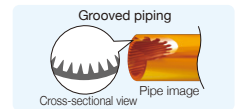
PAM (Pulse Amplitude Modulation)

PAM is a technology that controls the current waveform so that it resembles the supply voltage wave, thereby reducing loss and realising more efficient use of electricity. Using PAM control, 98% of the input power supply is used effectively.



Grooved Piping

High-performance grooved piping is used in heat exchangers to increase the heat exchange area.



Pure White

Pure white is adopted for the unit colour; white expressing the essence of cleanliness and easily matching virtually all interior décor.

Horizontal Vane

The air outlet vane swings up and down so that the airflow is spread evenly throughout the room.

Vertical Vane

The air outlet fin swings from side to side so that the airflow reaches every part of the room.

On/Off Operation Timer

Use the remote controller to set the times of turning the air-conditioner On/Off.

Auto Restart

Especially useful at the time of power outages, the unit turns back on automatically when power is restored.

Demand Function (Onsite Adjustment)

The demand function can be activated when the unit is equipped with a commercially available timer or an On/Off switch is added to the CNDM connector (option) on the control board of the outdoor unit. Energy consumption can be reduced up to 100% of the normal consumption according to the signal input from outside.

[Example: PUY Series]

Limit energy consumption by changing the settings of SW7-1, SW2 and SW3 on the control board of the outdoor unit. The following settings are possible.

SW7-1	SW2	SW3	Energy consumption
ON	OFF	OFF	100%
	ON	OFF	75%
	ON	ON	50%
	OFF	ON	0% (Stop)

*PUY outdoor only

High Power Fan Speed Mode

A start-up mode that runs with the increased fan speed for up to 15 minutes to rapidly cool or heat the space.

Internal Dry Mode

To dry the heat exchanger (HEX), the unit will operate in the fan mode at high speed after cooling or drying operation has stopped. The drying time is selectable from 30 or 60 minutes.

Long-life Filter

A special process for the entrapment surface improves the filtering effect, making the maintenance cycle longer than that of units equipped with conventional filters.

Filter Check Signal

Air conditioner operating time is monitored, and the user is notified when filter maintenance is necessary.

High Ceiling Mode

In the case of rooms with high ceilings, the outlet-air volume can be increased to ensure that air is circulated all the way to the floor.

Low Ceiling Mode

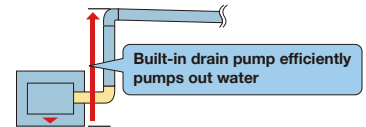
If the room has a low ceiling, the airflow volume can be reduced for less draft.

Auto Fan Speed Mode

The airflow speed mode adjusts the fan speed of the indoor unit automatically according to the present room conditions.

Drain Pump

A built-in drain pump enables drain piping to be raised.



Self-Diagnostic Function (Check Code Display)

Check codes are displayed on the remote controller or the operation indicator to inform the user of malfunctions detected.

Failure Recall Function

Operation failures are recorded, allowing confirmation when needed.

FUNCTIONS & TECHNOLOGIES

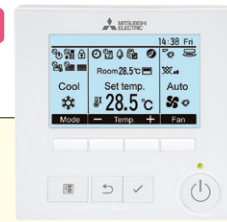
Category	Combination Icon	Indoor unit	PLY-M18/24/30/36/42/48EA-PA		PEY-M18/24/30/36/42/48JAL-PA		PCY-M18/24/30/36/42/48KAL-PA	
		Outdoor unit	SUY-M18/ 24/30VA-PA	PUY-M36/ 42/48V(Y)KA-PA	SUY-M18/ 24/30VA-PA	PUY-M36/ 42/48V(Y)KA-PA	SUY-M18/ 24/30VA-PA	PUY-M36/ 42/48V(Y)KA-PA
Technology	DC Inverter	●	●	●	●	●	●	●
	Joint Lap DC Motor	●		●		●		
	Magnetic Flux Vector Sine Wave Drive		●		●		●	
	Heating Caulking (Compressor)	●		●		●		
	DC Fan Motor	●	●	●	●	●	●	●
	Vector-Wave Eco Inverter		●		●		●	
	Pulse Amplitude Modulation (PAM)	●	●	●	●	●	●	●
	Grooved Piping	●	●	●	●	●	●	●
Functions	Energy Saving	3D i-see sensor	Opt	Opt				
		Demand Function		Opt		Opt		Opt
	Air Quality	Plasma Quad Connect	Opt	Opt	Opt	Opt		
		Fresh-air Intake	●	●			●	●
		Anti-allergy enzyme Filter	Opt	Opt			Opt	Opt
		High-efficiency Filter	Opt	Opt			Opt	Opt
		Long-life Filter	●	●			●	●
		Filter Check Signal	●	●	●	●	●	●
		Internal Dry Mode			●	●		
	Air Distribution	Auto Vane	●	●			●	●
		Horizontal Vane	●	●			●	●
		Vertical Vane						
		High Ceiling Mode	●	●			●	●
		Low Ceiling Mode	●	●			●	●
		Auto Fan Speed Mode	●	●			●	●
		Direct/Indirect Airflow (for Each Vane)	Opt	Opt				
		High Power Fan Speed Mode			●	●		
		3D Total Flow	Opt	Opt				
	Convenience	On/Off Operation Timer	●	●	●	●	●	●
		Auto Restart	●	●	●	●	●	●
		Low-noise Operation (outdoor unit)		●		●		●
		Rotation, Back-up and 2nd Stage Cut-in Functions		Opt		Opt		Opt
	System Control	PAR-41MAA Control	Opt	Opt	Opt	Opt	Opt	Opt
		Centralised On/Off Control	Opt	Opt	Opt	Opt	Opt	Opt
		System Group Control	Opt	Opt	Opt	Opt	Opt	Opt
		M-NET Connection	Opt	Opt	Opt	Opt	Opt	Opt
	Installation	Cleaning-free Pipe Reuse	●*	●	●*	●	●*	●
Reuse of Existing Wiring			Opt					
Drain Pump		●	●	Opt	Opt	Opt	Opt	
Pump Down Switch			●		●		●	
Flare Connection		●	●	●	●	●	●	
Maintenance	Self-Diagnostic Function (Check Code Display)	●	●	●	●	●	●	
	Failure Recall Function	●	●	●	●	●	●	
	Auto-descending panel	Opt	Opt					

* Opt: Separate parts must be purchased.

*Not available for different diameter joints.

CONTROL TECHNOLOGIES

NEW



PAR-41MAA (Optional)

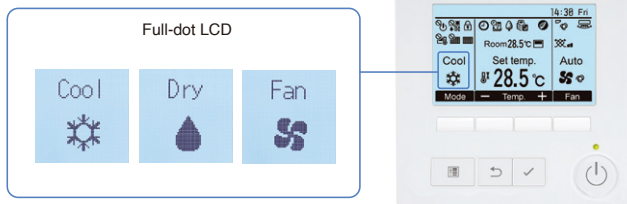
User-friendly Deluxe Remote Controller with Excellent Operability and Visibility

Full-dot Liquid-crystal Display Adopted

Easier to read thanks to use of a full-dot liquid-crystal display with backlight, and easier to use owing to the adoption of a menu format that enabled the number of operating buttons to be reduced.

PAR-41MAA

Display Example [Operation Mode]



Easy-to-Read & Easy-to-Use

Inverted display screen

The screen background color can be set to black to suit the atmosphere of the installation location.



Energy-efficient Control

Operation Control Functions

Auto-return

Prevents wasteful operation by automatically returning to the preset temperature after specified operating time

After adjusting the initial temperature on a hot day, it is easy to forget to return the temperature setting to its original value. The Auto-return function automatically resets the temperature back to the original setting after a specified period of time, thereby preventing overcooling. The Auto-return activation time can be set in 10-minute units, in a range between 30 and 120 minutes.

*Auto-return cannot be used when Temperature Range Restriction is in use.

Night Setback

Keep desired room temperatures automatically

This function monitors the room temperature and automatically activates the cooling mode when the temperature rises above the preset maximum temperature setting.

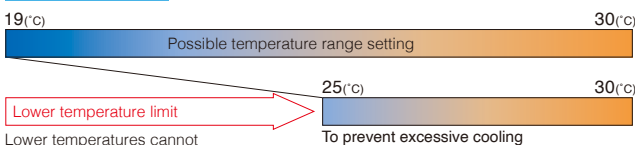
Temperature Range Restriction

Temperature Range Restriction prevents overcooling

Using a temperature that is 1°C higher for cooling results in a 10% reduction in power consumption.* Temperature Range Restriction limits the maximum and minimum temperature settings, contributing to the prevention of overcooling.

*In-house calculations

Cooling/Dry (Setting example of minimum temp. at 25°C)



Lower temperatures cannot be selected

Recommended for Office Restaurant

Auto-off Timer

Turns cooling off automatically after preset time elapses

When using Auto-off Timer, even if one forgets to turn off the unit, operation stops automatically after the preset time elapses, thereby preventing wasteful operation. Auto-off Timer can be set in 10-minute units, in a range between 30 minutes and 4 hours. Eliminates all anxiety about forgetting to turn off the unit.

Recommended for Meeting room Changing room

Operation Lock

Fixed temperature setting promotes energy savings

In addition to operation start/stop, the operation mode, temperature setting and air-flow direction can be locked. Unwanted adjustment of temperature settings is prevented and an appropriate temperature is constantly maintained, leading to energy savings. This feature is also useful in preventing erroneous operation or tampering.

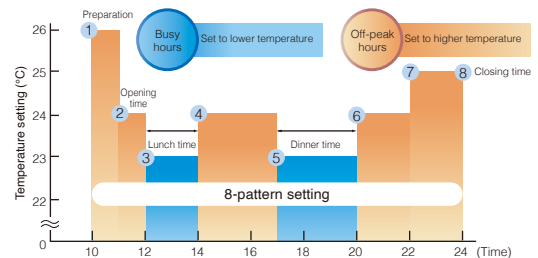
Recommended for Office School Public hall Hospital Computer server facility

Weekly Timer

Set up to 8 patterns per day including temperature control

The Weekly Timer enables the setting of operation start and stop times and adjusting the temperature as standard features. Up to 8 patterns per day can be set, providing operation that matches the varying conditions of each period, such as the number of customers in the store.*Weekly Timer cannot be used when On/Off Timer is in use.

Setting Example (restaurant in summer time)



*Joint research conducted with Japan Facility Solutions, Inc.

Manual Vane Angle Setting (4-way ceiling cassette)

Direction of vertical airflow for each vane can be set

Setting the vertical airflow direction for each individual vane can be performed simply via illustrated display. Seasonal settings such as switching between cooling and heating are easily changed as well.

Auto-descending Panel Operation

Easily raise/lower panels using the remote controller

Auto-descending panel operation is available as an option. Panels can be raise/lower using a button on the wired remote controller. Filter cleaning can be performed easily.

Advanced MA Remote Controller – A Progressive Step in the Evolution of Air Conditioning Control

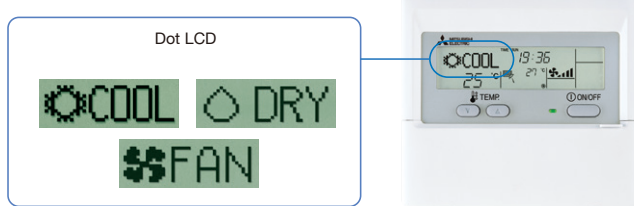


PAR-21MAA

Dot Liquid-crystal Display Adopted

The adoption of dot liquid-crystal display (LCD) technology and a large display screen for the control panel optimise visibility. Operation and control status are easily read at a glance.

Display Example [Operation Mode]



Easy-to-Read/Easy-to-Use

Multi-language

Multi-language Display

Control panel operation in eight different languages

Choose the desired language from among the following.



Energy-efficient Control

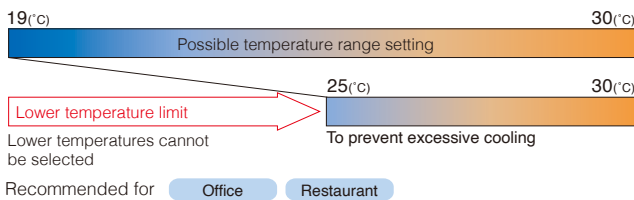
Operation Control Functions

Temperature Range Restriction

Air conditioner operation restricted to within a specified operating range

Set the upper and lower limits for the temperature range during operation. Excessive cooling is prevented, leading to increased energy savings.

Cooling/Dry (Setting example of minimum temp. at 25°C)



Auto-off Timer

Automatically turns off air conditioner

Set the time for the air conditioner to turn off automatically. The timer can be set in the range from 30 minutes up to 4 hours in 30-minute intervals. The “Simple Timer”— starts/stops in units of 1 hour in a 72-hour period—is set at the time of shipment from the factory. It can be changed to the “Auto-off Timer” function using the remote controller.

Recommended for Meeting room Changing room

Operation Lock

Prevent operation settings from being changed

Units can be set so that the operation mode cannot be changed. When “Operation Lock” is activated, new temperature setting commands are not accepted, thereby ensuring that the unit runs in the specified (locked in) temperature range. This promotes energy savings and prevents erroneous/ mischievous operation. Only the administrator can change settings when using the Operation Lock mode.

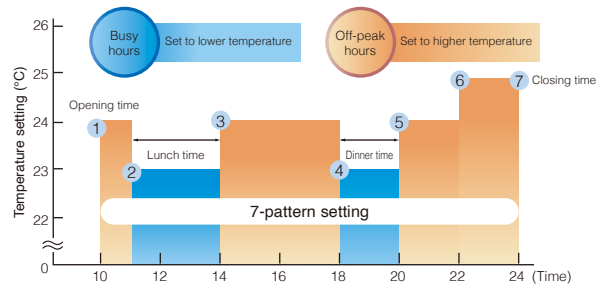
Recommended for Office School Public hall Hospital Computer server facility

Weekly Timer

Introduced in response to market demand

Control temperature on a weekly basis. Temperature settings and On/Off control can be managed over a period of one week using the Weekly Timer. Up to eight setting patterns per calendar day are possible.

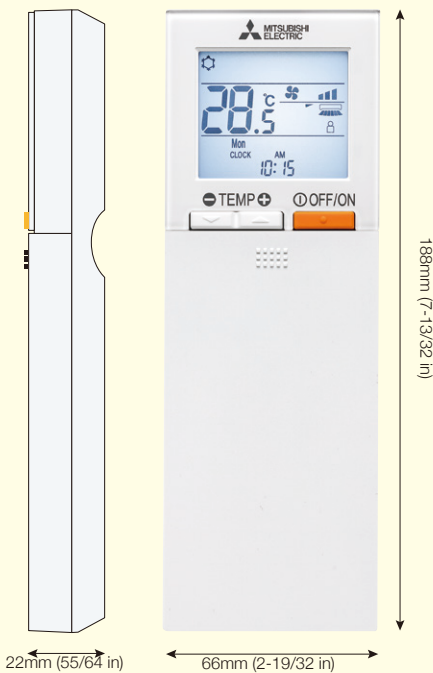
Setting Example (restaurant in summer time)



(Results of cooperative study with Japan Facility Solutions, Inc.)

Features (PAR-SL101A-E)

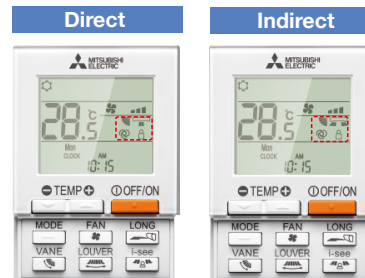
Wireless Remote Controller PAR-SL101A-E



3D i-see Sensor

(Direct/Indirect Airflow)

Pressing the i-see button enables direct or indirect setting of all vanes.



Weekly Timer

The Weekly Timer enables the setting of operation start and stop times and adjusting the temperature as standard features.



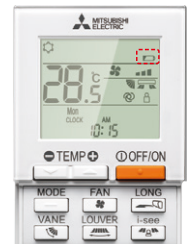
Backlight

Backlight function incorporated, making screen easy to read in the dark. Even in dimly lit rooms, the screen can be seen clearly for trouble-free remote controller operation.



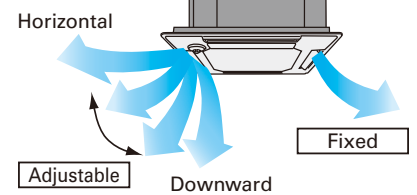
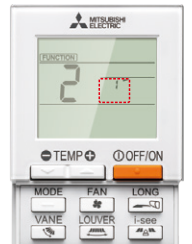
Battery Replacement Indicator

Previous wireless remote controllers were not able to check when the battery was low. Beginning with the PAR-SL101A-E, a battery charge indicator that shows the charge status is included in the LCD so it can be seen when the battery is low and needs to be changed.



Individual Vane Settings

The airflow directions of the four vanes can each be adjusted independently. Easily set the optimum airflow according to the room setting.


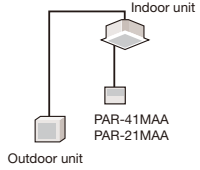

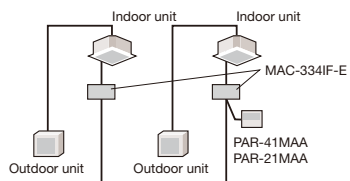
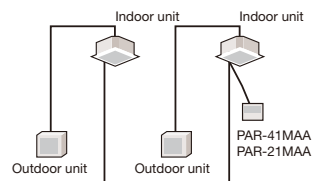

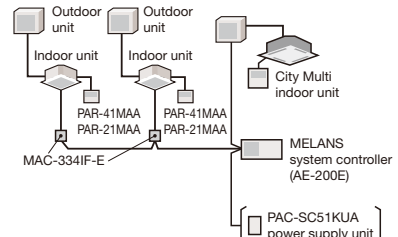
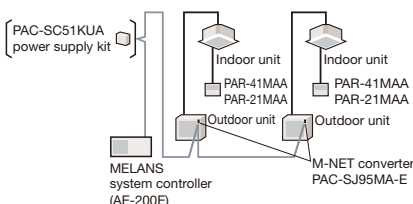


Panel and Remote Controller for PLY-M

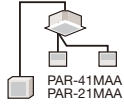

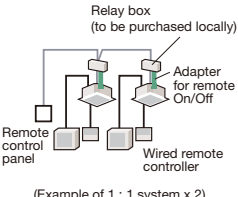
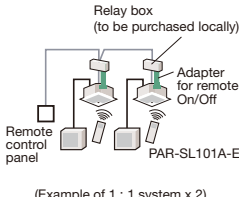
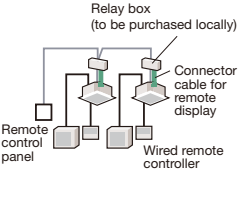
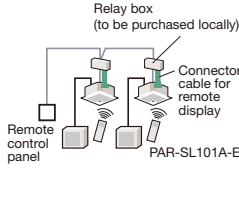
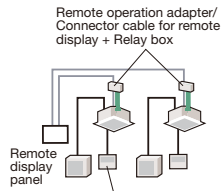
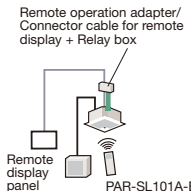
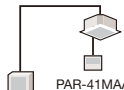
Part model name	Description	Included parts							
		Standard panel	Automatic filter elevation	Wireless signal receiver	3D i-see sensor	Wired controller (PAR-21MAA)	Wired controller (PAR-41MAA)	Wireless controller (PAR-SL101A-E)	Grill elevation wireless controller
PLP-6EA	Standard panel only	✓							
PLP-6EAMD	Panel with wired remote controller (PAR-21MAA)	✓				✓			
PLP-6EALM2	Panel with wireless remote controller (PAR-SL101A-E)	✓		✓				✓	
PLP-6EAJ	Automatic filter elevation	✓	✓	✓					✓
PAC-SE1ME-E	3D i-see sensor corner panel				✓				
PAR-SE9FA-E	Wireless signal receiver only			✓					
PAR-SL101A-E	Wireless remote controller only							✓	
PAR-21MAA	Wired remote controller only					✓			
PAR-41MAA	Wired remote controller only						✓		

SYSTEM CONTROL

Versatile system control can be realised using optional parts, relay circuits, control panels, etc.

MAJOR SYSTEM CONTROLS		
	System Examples	
Indoor Unit	PLY-M, PEY-M, PCY-M, Series indoor unit	
Outdoor Unit	SUY-M Series outdoor unit	PUY-M Series outdoor unit
 <p>PAR-41MAA Control PAR-21MAA Control</p>		
Details	Standard equipment (for indoor units compatible with wired remote controllers)	
Major Optional Parts Required	<ul style="list-style-type: none"> • PAR-41MAA (wired remote controller) • PAR-21MAA (wired remote controller) 	
 <p>System Group Control</p>		
Details	<ul style="list-style-type: none"> • One remote controller can simultaneously control multiple air conditioners with the same settings. • One remote controller can control up to 16 refrigerant systems. • Up to two remote controllers can be connected. • PAR-SL101A cannot be used when it is connected through the MAC-334IF-E or when group control is used. 	
Major Optional Parts Required	<ul style="list-style-type: none"> • MAC-334IF-E (interface) • PAR-41MAA (wired remote controller) • PAR-21MAA (wired remote controller) 	<ul style="list-style-type: none"> • PAR-41MAA (wired remote controller) • PAR-21MAA (wired remote controller)
 <p>M-NET Connections</p>		
Details	<ul style="list-style-type: none"> • Group of air conditioners can be controlled by MELANS system controller (M-NET). 	
Major Optional Parts Required	<ul style="list-style-type: none"> • MAC-334IF-E (interface) • MELANS system controller • PAC-SC51KUA (power supply unit) 	<ul style="list-style-type: none"> • PAC-SJ95MA-E (M-NET converter) • MELANS system controller • PAC-SC51KUA (power supply unit)

VARIATIONS FOR INDOOR UNITS (For SUY & PUY Series)

	System Examples		Details	Major Optional Parts Required
	Wired remote controller	Wireless remote controller		
<p>A 2-remote Controller Control</p> <p>With two remote controllers, control can be performed locally and remotely from two locations.</p>	 <p>PAR-41MAA PAR-21MAA</p> <p>* Set "Main" and "Sub" remote controllers.</p> <p>(Example of 1 : 1 system)</p>	 <p>PAR-SL101A-E PAR-41MAA PAR-21MAA</p> <p>* When using wired and wireless remote controllers</p> <p>(Example of 1 : 1 system)</p>	<ul style="list-style-type: none"> Up to two remote controllers can be connected to one group. Both wired and wireless remote controllers can be used in combination. 	<ul style="list-style-type: none"> Wired remote controller PAR-41MAA/PAR-21MAA Wireless remote controller PAR-SL101A-E for PEY Wireless remote controller kit for PCY PAR-SL94B-E
<p>B Operation Control by Level Signal</p> <p>Air conditioner can be started/stopped remotely. In addition, On/Off operation by local remote controller can be prohibited/permited.</p>	 <p>Relay box (to be purchased locally)</p> <p>Remote control panel</p> <p>Wired remote controller</p> <p>Adapter for remote On/Off</p> <p>(Example of 1 : 1 system x 2)</p>	 <p>Relay box (to be purchased locally)</p> <p>Remote control panel</p> <p>PAR-SL101A-E</p> <p>Adapter for remote On/Off</p> <p>(Example of 1 : 1 system x 2)</p>	<ul style="list-style-type: none"> Operation other than On/Off (e.g., adjustment of temperature, fan speed and airflow) can be performed even when remote controller operation is prohibited. Timer control is possible with an external timer. 	<ul style="list-style-type: none"> Adapter for remote On/Off PAC-SE55RA-E Relay box (to be purchased locally) Remote control panel (to be purchased locally)
<p>C Operation Control by Pulse Signal</p>	 <p>Relay box (to be purchased locally)</p> <p>Remote control panel</p> <p>Wired remote controller</p> <p>Connector cable for remote display</p> <p>(Example of 1 : 1 system x 2)</p>	 <p>Relay box (to be purchased locally)</p> <p>Remote control panel</p> <p>PAR-SL101A-E</p> <p>Connector cable for remote display</p> <p>(Example of 1 : 1 system x 2)</p>	<ul style="list-style-type: none"> The pulse signal can be turned on/off. Operation/emergency signal can be received at a remote location. 	<ul style="list-style-type: none"> Connector cable for remote display PAC-SA88HA-E/PAC-725AD (10 pcs. x PAC-SA88HA-E) Relay box (to be purchased locally) Remote control panel (to be purchased locally)
<p>D Remote Display of Operating Status</p> <p>Operating status can be displayed at a remote location.</p>	 <p>Remote operation adapter/ Connector cable for remote display + Relay box</p> <p>Remote display panel</p> <p>PAR-41MAA/PAC</p> <p>(Example of 1 : 1 system)</p>	 <p>Remote operation adapter/ Connector cable for remote display + Relay box</p> <p>Remote display panel</p> <p>PAR-SL101A-E</p> <p>(Example of 1 : 1 system)</p>	<ul style="list-style-type: none"> Operation/emergency signal can be received at a remote location (when channeled through the PAC-SF40RM-E → no-voltage signal, when channeled through the PAC-SA88HA-E → DC 12V signal). 	<ul style="list-style-type: none"> Remote display panel (to be purchased locally) Connector cable for remote display PAC-SA88HA-E/PAC-725AD (10 pcs. x PAC-SA88HA-E) Relay box (to be purchased locally) Remote operation adapter PAC-SF40RM-E <p>*Unable to use with wireless remote controller</p>
<p>E Timer Operation</p> <p>Allows on/off operation with timer</p> <p>*For control by an external timer, refer to [B] Operation Control by Level Signal.</p>	 <p>PAR-41MAA</p> <p>(Example of 1 : 1 system)</p>		<ul style="list-style-type: none"> Weekly Timer: On/Off and up to 8 pattern temperatures can be set for each calendar day (initial setting). On/Off Timer: On/Off can be set once each within 72 hr in intervals of 5min. Auto-off Timer: Operation will stop after a preset time elapses. Set time can be changed from 30min to 4hr in 10min intervals. <p>*Simple Timer and Auto-off Timer cannot be used at the same time.</p>	<p>Standard functions of PAR-41MAA</p>

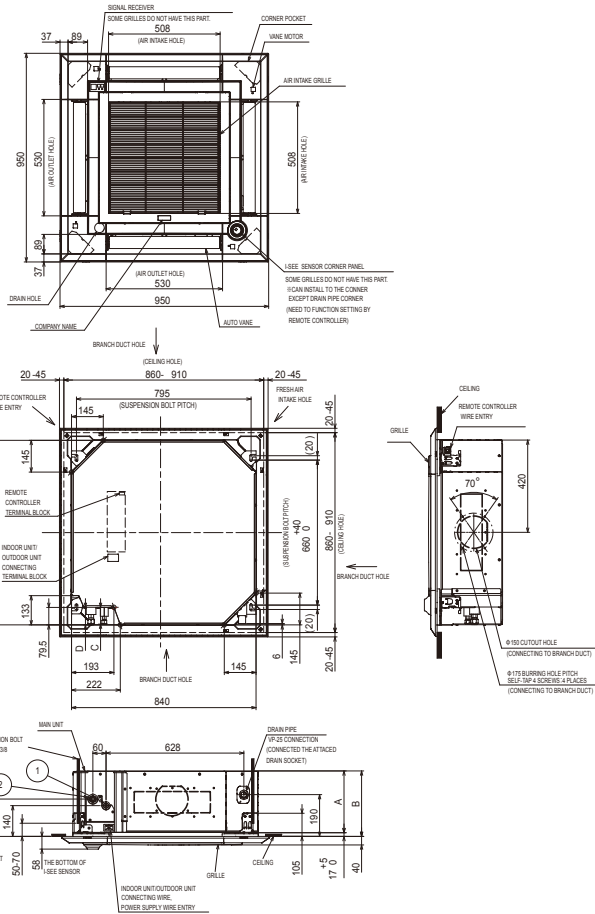
EXTERNAL DIMENSIONS

PLY-M18/24/30/36/42/48EA-PA

Unit : mm

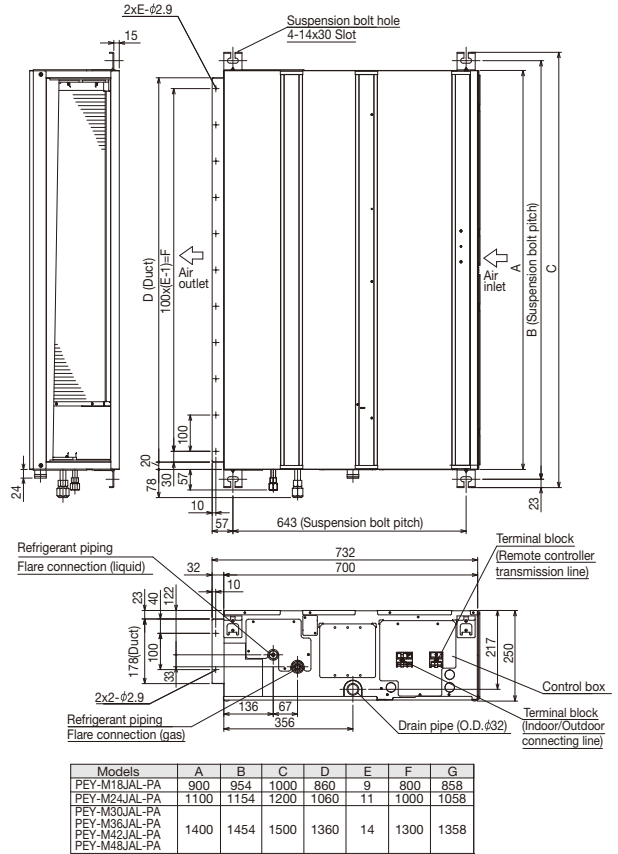
INDOOR UNIT

M	(1)	(2)	A	B	C	D	E	F
18	REFRIGERANT PIPE Φ 9.52 FLARED CONNECTION 1/4"	REFRIGERANT PIPE Φ 12.7 FLARED CONNECTION 1/2"	241	258				385 OR MORE OR LESS
24	REFRIGERANT PIPE Φ 9.52 FLARED CONNECTION 1/4"	REFRIGERANT PIPE Φ 12.7 FLARED CONNECTION 1/2"			79.5			
30			281	288				355 OR MORE OR LESS
36-48								400 OR MORE OR LESS



PEY-M18/24/30/36/42/48JAL-PA

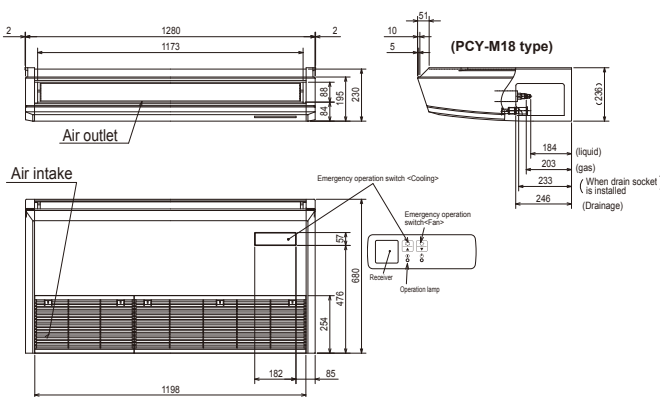
INDOOR UNIT



Models	A	B	C	D	E	F	G
PEY-M18JAL-PA	900	954	1000	860	9	800	858
PEY-M24JAL-PA	1100	1154	1200	1060	11	1000	1058
PEY-M30JAL-PA							
PEY-M36JAL-PA							
PEY-M42JAL-PA	1400	1454	1500	1360	14	1300	1358
PEY-M48JAL-PA							

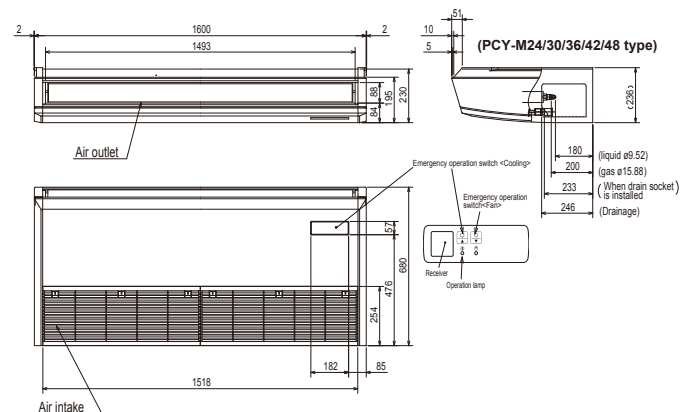
PCY-M18KAL-PA

INDOOR UNIT



PCY-M24/30/36/42/48KAL-PA

INDOOR UNIT

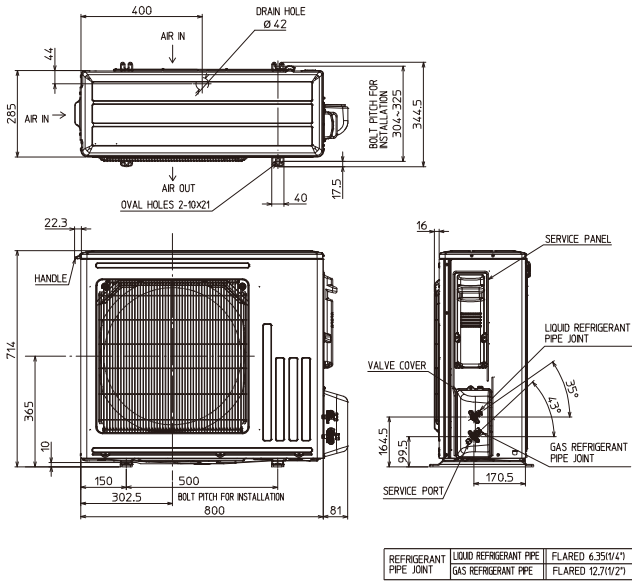


EXTERNAL DIMENSIONS

Unit: mm

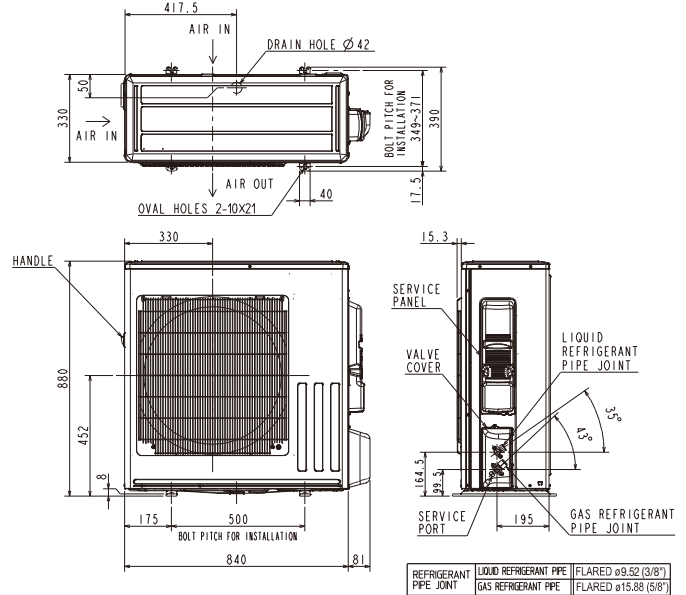
SUY-M18VA-PA

OUTDOOR UNIT



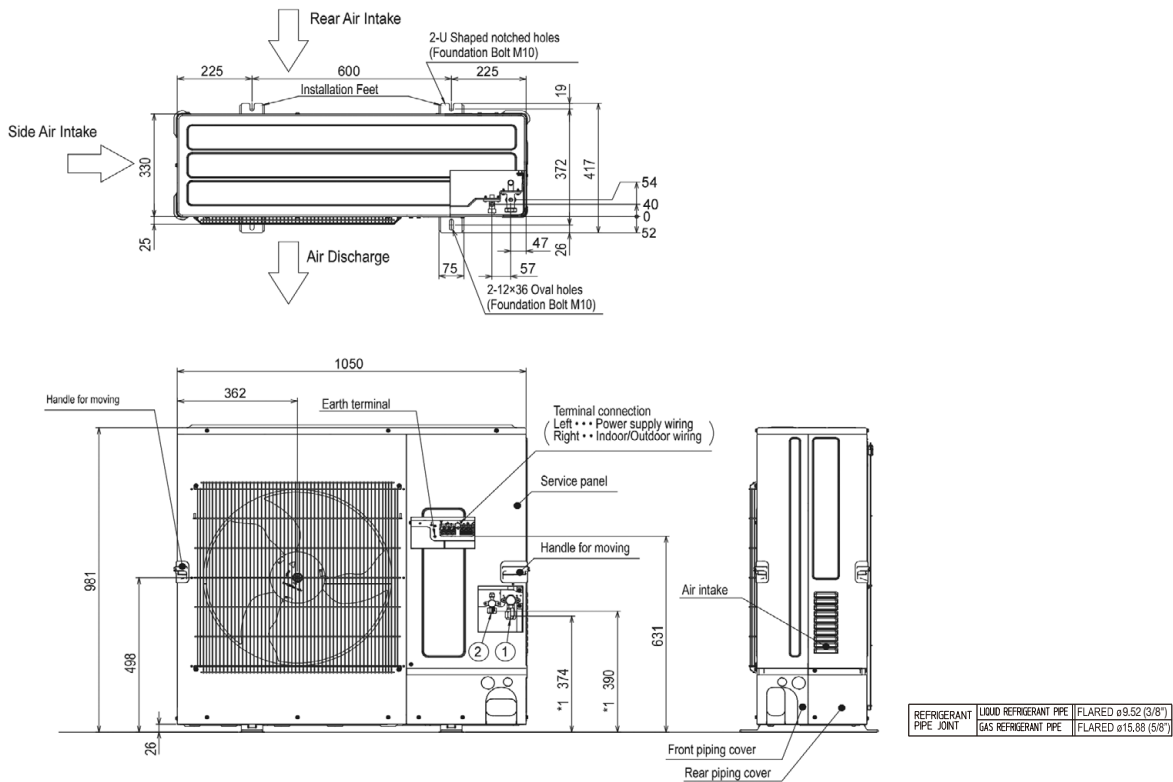
SUY-M24/30VA-PA

OUTDOOR UNIT



PUY-M36/42/48V/YKA-PA

OUTDOOR UNIT



NOTE & OUTDOOR UNIT

Notes for All Specifications

Rating conditions

Cooling - Indoor: 27°C (80°F) DB, 19°C (66°F) WB
Outdoor: 35°C (95°F) DB

Refrigerant piping length (one-way): 7.5m (25ft)

Total input based on the indicated voltage (indoor/outdoor)

	Indoor	Outdoor	
		18/24/30/36/42/48V	36/42/48Y
50Hz	Single-phase, 220-240V	Single-phase, 220-240V	Three-phase, 380-415V
60Hz	Single-phase, 220-230V	Single-phase, 220-230V	Three-phase, 380V

Guaranteed Operating Range

		SUY-M	PUY-M
Cooling	Upper limit (DB)	52°C	52°C
	Lower limit (DB)	18°C	18°C

Sound Pressure Level

- Sound pressure measurements were conducted in an anechoic chamber.
- The actual noise level depends on the distance from the unit and the acoustic environment.

Refrigerant Piping

Capacity	Between indoor and outdoor units		Pipe size (mm, outer dia.)	Thickness (mm)
	Max. height difference (m)	Max. piping length (m)		
SUY-M18VA-PA	20	35	Liquid: ø6.35	t 0.8
			Gas: ø12.7	t 0.8
SUY-M24VA-PA	20	35	Liquid: ø9.52	t 0.8
			Gas: ø15.88	t 1.0
SUY-M30VA-PA	30	50	Liquid: ø9.52	t 0.8
PUY-M36V/YKA-PA PUY-M42V/YKA-PA PUY-M48V/YKA-PA	30	50	Gas: ø15.88	t 1.0

Refrigerant Requirements (R32: kg)

Piping length	Factory charged	Additional charge										Calculation
	7m	10m	15m	20m	25m	30m	35m	40m	45m	50m		
SUY-M18VA-PA	0.85	0.03	0.08	0.13	0.18	0.23	0.28	—	—	—	Xg = 10g/m × (length-7)m	
SUY-M24VA-PA	0.95	0.06	0.16	0.26	0.36	0.46	0.56	—	—	—	Xg = 20g/m × (length-7)m	
SUY-M30VA-PA	1.06	0.06	0.16	0.26	0.36	0.46	0.56	0.66	0.76	0.86		
PUY-M36V/YKA-PA PUY-M42V/YKA-PA PUY-M48V/YKA-PA	1.2	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	Xg = 20g/m × (length-10)m	

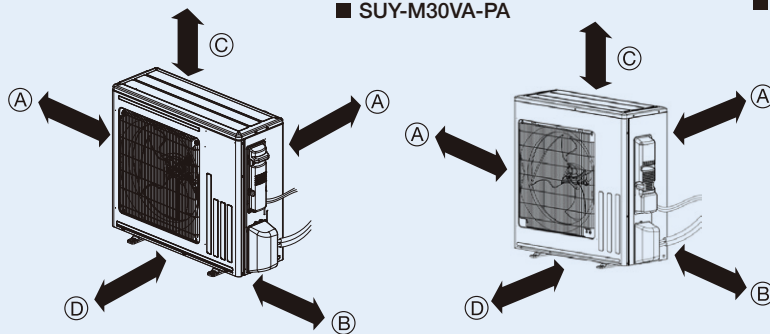
• When installing a single outdoor unit

<S Series>

■ SUY-M18VA-PA

■ SUY-M24VA-PA

■ SUY-M30VA-PA



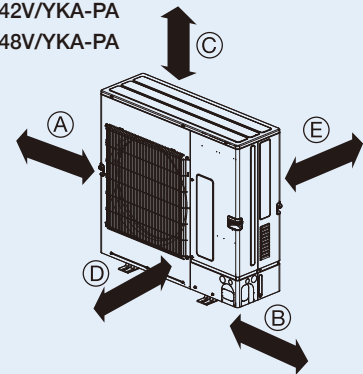
	SUY-M18VA	SUY-M24/30VA
(A)	100mm or more	
(B)	350mm or more	
(C)	100mm or more	500mm or more
(D)	200mm or more	—

<P Series>

■ PUY-M36V/YKA-PA

■ PUY-M42V/YKA-PA

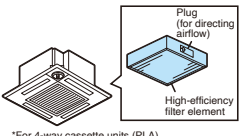
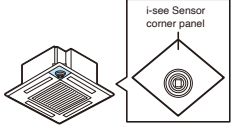
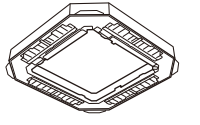
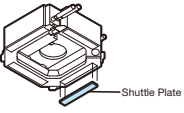
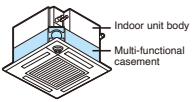

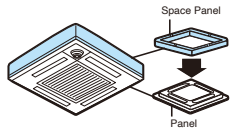
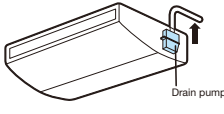

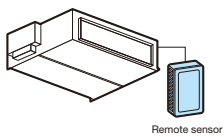
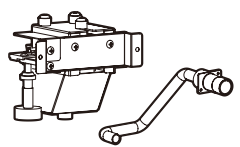
■ PUY-M48V/YKA-PA

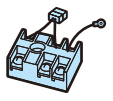
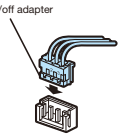
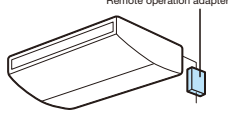
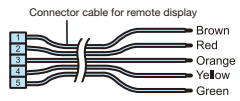
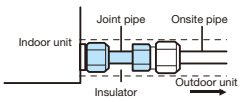
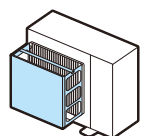
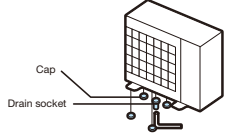
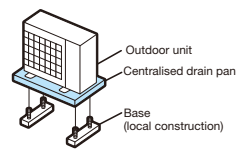
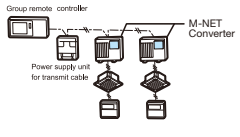
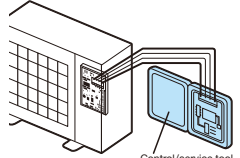


	PUY-M36/42/48V/YKA
(A)	250mm or more
(B)	250mm or more
(C)	1,500mm or more
(D)	Free
(E)	500mm or more

[Notice] If there is any obstruction around the unit, check the condition details in the Data Book.

Main Optional Parts

Part name	Description
High-efficiency Filter Element Element for high-efficiency filter. Removes fine dust particles from the air.	 <p>Plug (for directing airflow) High-efficiency filter element</p> <p>*For 4-way cassette units (PLA)</p>
3D i-see Sensor Corner Panel for PLY Corner panel holding the 3D i-see Sensor.	 <p>i-see Sensor corner panel</p>
3D Total Flow for PLA Casement equipped with horizontal louver.	
Shuttle Plate Plate for blocking an air outlet of the 4-way cassette indoor unit.	 <p>Shuttle Plate</p>
Multi-functional Casement Casement for fresh-air intake and attaching the high-efficiency filter element (optional).	 <p>Indoor unit body Multi-functional casement</p>
Fresh-air Intake Duct Flange Flange attachment for adding a duct to take in fresh air from outside.	 <p>*For 4-way cassette units</p>
Space Panel Decorative cover for installation when the ceiling height is low.	 <p>Space Panel Panel</p>
Drain Pump Pumps drain water to a point higher than that where the unit is installed.	 <p>Drain pump</p> <p>*For ceiling-suspended units</p>
Wired Remote Controller Advanced deluxe remote controller with full-dot liquid-crystal display and backlight. Equipped with convenient functions like night-setback.	
Remote Sensor Sensor to detect the room temperature at remote positions.	 <p>Remote sensor</p>
Drain Pump for PE Series Raises drain generated during units operation to secure the appropriate angle of the drain pipe.	

Part name	Description
Power Supply Terminal Kit Terminal bed to change the power supply from outdoor power supply to separate indoor/ outdoor power supplies.	
Remote On/Off Adapter Connector for receiving signals from the local system to control the on/off function.	 <p>Remote on/off adapter</p>
Remote Operation Adapter Adapter to display the operation status and control the on/off function from a distance.	 <p>Remote operation adapter</p>
Connector Cable for Remote Display Connector used to display the operation status and control the on/off function from a distance.	 <p>Connector cable for remote display</p> <p>1 Brown 2 Red 3 Orange 4 Yellow 5 Green</p>
Joint Pipe Part for connecting refrigerant pipes of different diameters.	 <p>Joint pipe Onsite pipe Indoor unit Insulator Outdoor unit</p>
Air Protection Guide Protects the outdoor unit from the wind.	
Drain Socket A set of caps to cover unnecessary holes at the bottom of the outdoor unit, and a socket to guide drain water to the local drain pipe.	 <p>Cap Drain socket</p>
Centralised Drain Pan Catches drain water generated by the outdoor unit.	 <p>Outdoor unit Centralised drain pan Base (local construction)</p>
M-NET Converter Used to connect P Series A-control models to M-NET controllers.	 <p>Group remote controller Power supply unit for transmit cable M-NET Converter</p>
Control/Service Tool Monitoring tool to display operation and self-diagnosis data.	 <p>Control/service tool</p>

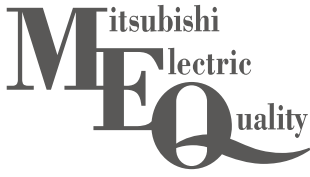
OPTIONAL PARTS

Optional Parts

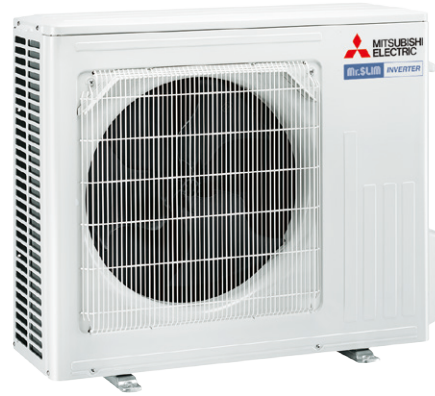
Part Name		Model name	Applicable models
Drain pump		PAC-SJ92DM-E	PCY-M18
		PAC-SJ93DM-E	PCY-M24/30/36/42/48
		PAC-DRP20DP-E	PEY-M
Flange for fresh-air intake		PAC-SH65OF-E	PLY-M
M-NET and Terminal interface		MAC-334IF-E	All indoor units
Wireless remote controller		PAR-SL101A-E	PLY-M
Wireless remote controller signal receiver		PAR-SE9FA-E	PLY-M
Wired remote controller		PAR-41MAA	All indoor units
		PAR-21MAA	All indoor units
Plasma Quad Connect		MAC-100FT-E	PEY-M* Plasma Quad attachment or box is required
Plasma Quad Connect (Casement)		PAC-SK51FT-E	PLY-M
High-efficiency filter		PAC-SH89KF-E	PCY-M18
		PAC-SH90KF-E	PCY-M24/30/36/42/48
High-efficiency filter element		PAC-SH59KF-E	PLY-M
Anti-Allergy Enzyme Filter		PAC-SK49KF-E	PCY-M18
		PAC-SK50KF-E	PCY-M24/30/36/42/48
Plasma Quad attachment	Rear Inlet	PAC-HA31PAR	PEY-M
	Bottom Inlet	PAC-HA31PAU	
Thermistor for Outlet-air		PAC-SE10TC-J	PEY-M
Filter box		PAC-KE92TB-E	PEY-M18/24
		PAC-KE93TB-E	PEY-M30
		PAC-KE94TB-E	PEY-M36/42/48
Plasma Quad Box		PAC-KE92PTB-E	PEY-SM18/24
		PAC-KE93PTB-E	PEY-SM30
		PAC-KE94PTB-E	PEY-SM30/36/42/48
3D i-see sensor corner panel		PAC-SE1ME-E	PLY-M
Shutter plate		PAC-SJ37SP-E	PLY-M
Multi-function casement		PAC-SJ41TM-E	PLY-M
Remote On/Off adaptor		PAC-SE55RA-E	All indoor units
Remote operation adaptor		PAC-SF40RM-E	All indoor units
Remote sensor		PAC-SE41TS-E	All indoor units
Space panel		PAC-SJ65AS-E	PLY-M
Connector cable for remote display		PAC-SA88HA-E	All indoor units
Multiple remote controller adaptor		PAC-725AD	All indoor units
Joint pipe	(Unit ø9.52 → Pipe ø12.7)	PAC-SG73RJ-E	PUY-M36/42/48
	(Unit ø15.88 → Pipe ø19.05)	PAC-SG75RJ-E	PUY-M36/42/48
Filter dryer for liquid pipe		PAC-SG82DR-E	PUY-M36/42/48
Air protection guide		PAC-SH95AG-E	PUY-M36/42/48
Drain socket		PAC-SG61DS-E	PUY-M36/42/48
Centralized drain pan		PAC-SH97DP-E	PUY-M36/42/48
M-Net converter		PAC-SJ95MA-E	PUY-M36/42/48
Control/Service tool		PAC-SK52ST	PUY-M36/42/48
External/Input adapter		PAC-SC36NA-E	PUY-M36/42/48
Power supply terminal kit		PAC-SJ39HR-E	PLY-M36/42/48

NOTICE

- Do not install indoor units in areas (e.g. mobile phone base stations) where the emission of VOCs such as phthalate compounds and formaldehyde is known to be high as this may result in a chemical reaction.
- Our air-conditioning equipments contain a fluorinated greenhouse gas, R32 (GWP: 675). *This GWP value is based on Regulation (EU) No.517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, R32 (GWP: 550)
- When installing or relocating or servicing our air-conditioning equipment, use only the specified refrigerant R32 to charge the refrigerant lines. Do not mix it with any other refrigerant and do not allow air to remain in the lines. If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant lines, and may result in an explosion and other hazards.
The use of any refrigerant other than that specified for the system will cause mechanical failure, system malfunction or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.



What is MITSUBISHI ELECTRIC Quality? MEQ represents our dedication to excellence in developing and manufacturing exceptional, eco-friendly home appliances, amazing industrial products, reliable public infrastructure systems and inspiring space technologies, which are truly out of this world. And there's so much more. When you see the MEQ logo, you know something good is being created.



Development

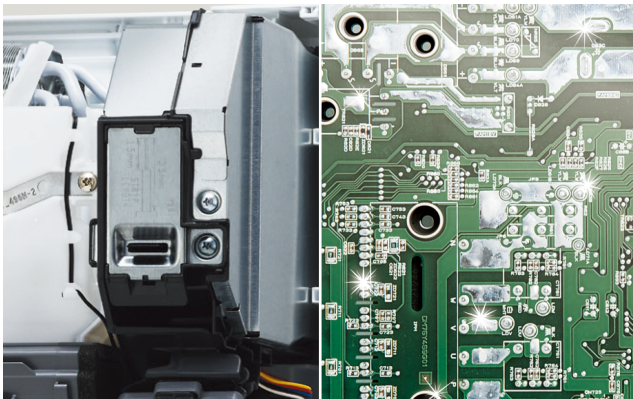
Taking into account the various harsh environments around the world, at MITSUBISHI ELECTRIC we have established uniquely strict quality control standards and various quality evaluation tests for our products.

Design

In order to ensure our customers can use our products with peace of mind and for a long time, we select high-quality durable parts, and invest great care when designing and assembling our products.

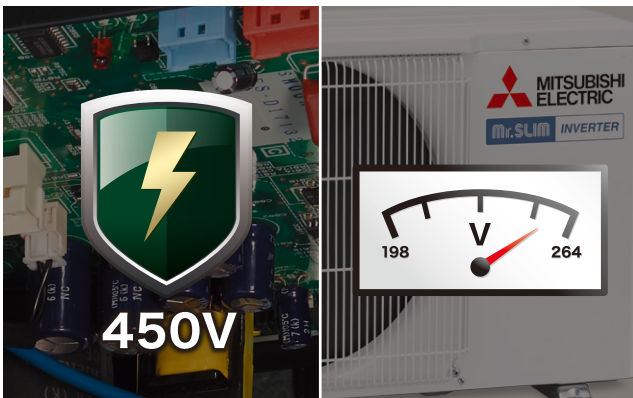
Production

MITSUBISHI ELECTRIC makes full use of advanced production technology to efficiently produce top quality products. All of our products are inspected by experienced professionals.



Ensure its reliable operation and preventing fire accident in case of short circuit.

Special coating prevents any damages from humidity and insects. (Outdoor Unit)



MITSUBISHI ELECTRIC PCB can resist high voltage up to 450V.* (Outdoor Unit)

MITSUBISHI ELECTRIC Inverter can be smoothly operated even in 198V~264V.*

*Single phase.
in case of Three phase 900V.

*Single phase.
in case of Three phase,342V-456V.



mitsubishi electric corporation

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<http://Global.MitsubishiElectric.com/>
