MITSUBISHI ELECTRIC

Changes for the Better

AIR CONDITIONERS

CASSETTE+ CONCEALED

Mr.SLIM

Series



Mr.SLIM PRODUCT LINE-UP

Inverter Series

1-Way Ceiling-Cassette **PMY-SM SERIES** 	 PMY-SM18FA-DA	 PMY-SM24FA-DA	 PMY-SM30FA-DA
4-Way Ceiling-Cassette **PLY-SM SERIES** 	 PLY-SM18HA-DA	 PLY-SM24HA-DA	 PLY-SM30HA-DA
4-Way Ceiling-Cassette **PLA-RP SERIES** **(Hot & Cold)** 	 PLA-RP50EA-DA	 PLA-R P71EA-DA	 PLA-RP100EA-DA-(N)
Ceiling-Concealed **PEY-SM SERIES** 	 PEY-SM18JA-DA	 PEY-SM24JA-DA	 PEY-SM30JA-DA
Ceiling-Concealed **SEZ/PEAD SERIES** **(Hot & Cold)** 	 SEZ-KD50VAL	 PEAD-RP71JALQ	 PEAD-RP100JALQ
Outdoor Unit	 SUY-SM18VA(B)-DA(D1)  SUZ-KA50VA-DA(D1)	 SUY-SM24VA(B)-DA(D1)  SUZ-KA71VA-DA(D1)	 SUY-SM30VA(B)-DA(D1)  PUHZ-P100YKA-DA(D1)

		 PAR-SL101A-E  PAR-41MAA	Contents P. 11-12
 PLY-SM36HA-DA	 PLY-SM48HA-DA	 PAR-21MAA  PAR-SL101A-E  PAR-41MAA	P. 13-15
 PLA-RP140EA-DA-(N)			P. 17-18
 PEY-SM36JA-DA	 PEY-SM48JA-DA		P. 19-20
 PEAD-RP140JA-N			P. 21-22
 PUY-SM36YKA-DA(D1) PUHZ-P140YKA-DA(D1)	 PUY-SM48YKA-DA(D1)		



Mr.SLIM

Non-Inverter Series



Mr.SLIM PRODUCT LINE-UP

Non-Inverter Series





Ceiling-Cassette (PL-M SERIES)	Ceiling-Concealed (PE-M SERIES)	Outdoor Unit
 PL-M18HAK	 PE-M18JAK	 PU-M18VAK
 PL-M24HAK	 PE-M24JAK	 PU-M24VAK/PU-M30VAK
 PL-M30HAK	 PE-M30JAK	
 PL-M36HAK	 PE-M36JAK	 PU-M36YAK/PU-M48YAK
 PL-M48HAK	 PE-M48JAK	
	 *	
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*Corded Remote (Standard) Available with Ceiling Concealed

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

Environmental Sustainability Vision 2050

Environmental Declaration

Protect the air, land, and water with our hearts and technologies to sustain a better future for all.

Environmental Sustainability Vision 2050

To solve various factors that lead to environment issues, the Mitsubishi Electric Group shall unite the wishes of each and every person, and strive to create new value for a sustainable future.

Three Environmental Action Guidelines

1. Apply diverse technologies in wide-ranging business areas to solve environmental issues
2. Challenge to develop business innovations for future generations
3. Publicize and share new values and lifestyles

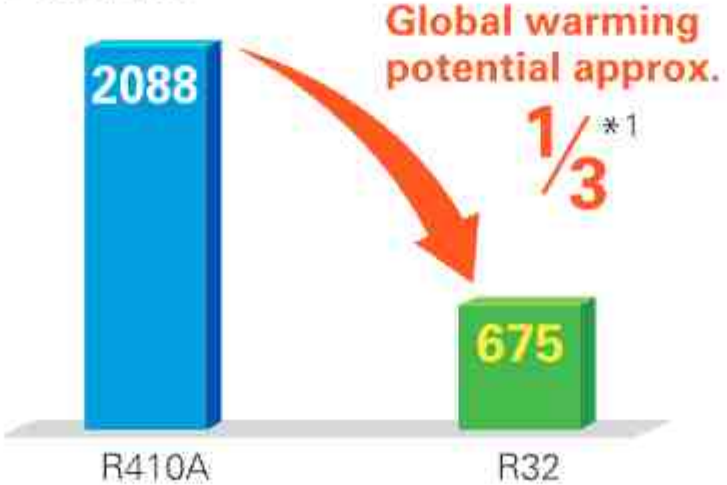
Key Initiatives

- Climate Change Measures
- Resource Circulation
- Live in Harmony with Nature
- Long-term Activities
- Innovation
- Nurturing Human Resources
- Understanding Needs
- Co-create and Disseminate New Values
- Live in Harmony with the Region

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 Standard Inverter series realize high energy savings with its high energy efficiency. This series have achieved high level of energy-saving performance, and are contributing to reduce 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.



Longer Piping (18/24/30)

Piping length and height difference (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-SM	R410A SUY-SA	R32 SUY-SM
18	20	35	12	20
24	30	35	15	20
30	30	50	15	30

NEW High Power Fan Speed Mode

This start-up mode runs 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 Blue Fin Condenser

A special coating is applied to the heat exchanger to increase corrosion toughness.



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.



Hi-performance Plasma Filtration System

Plasma Quad Connect







Plasma Quad Connect is a 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*1	
Mold	99% inhibited*1	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)

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 unit)*1,*3	PAC-KE92PTB-E, PAC-KE93PTB-E PAC-KE94PTB-E (Box for Ducted indoor unit)*1,*3	PAC-SL36FT-E*4
Product Image		 PQ attachment	 PQ box	
Compatible with	PEY-SM SERIES*3	PEY-SM SERIES*3	PEY-SM SERIES*3	PLY-SM SERIES*3 (4-way Cassette 3×3 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 × 498.5 × 168	—	KE92:247×917×179 KE93:247×1,117×179 KE94:247×1,417×179	134 × 840 × 840
Weight kg	1.600	PAC-HA31PAR:4.50 PAC-HA31PAU:9.70	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 Specifications are subject to change without notice.
*3 The model shown here such as.

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.

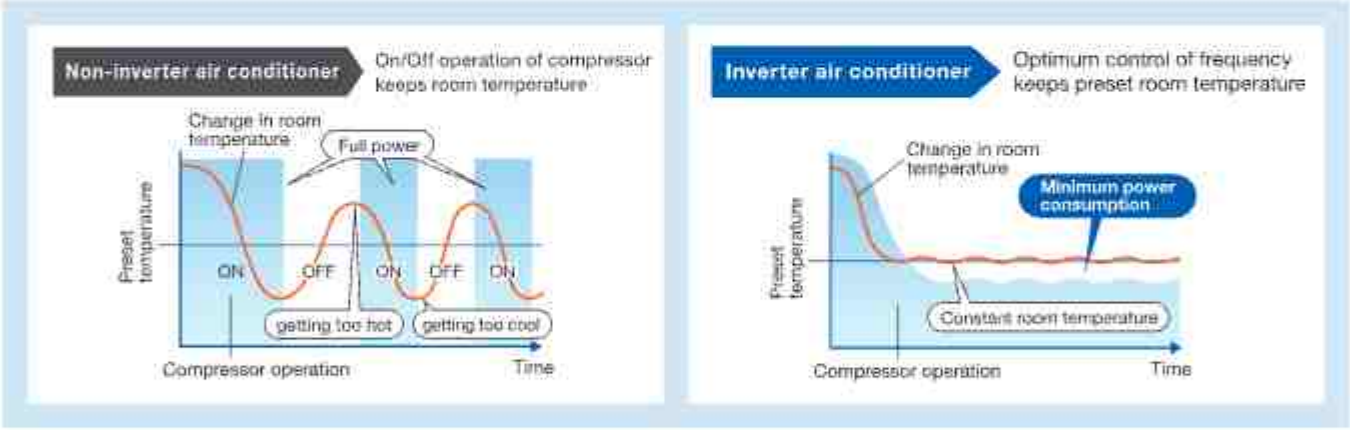
ECONOMIC OPERATION

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.

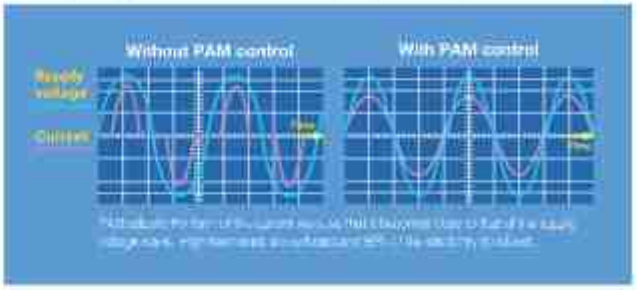
Smooth wave pattern

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.



FUNCTIONS

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 run 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.

1-Way Ceiling Cassette

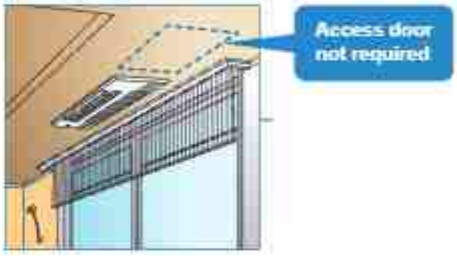
(PMY-SM SERIES)





Ceiling Mounted

Installing 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 bookshelves are mounted on wall surfaces.



Compact size for smooth installation and maintenance(PMY-SM)

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.

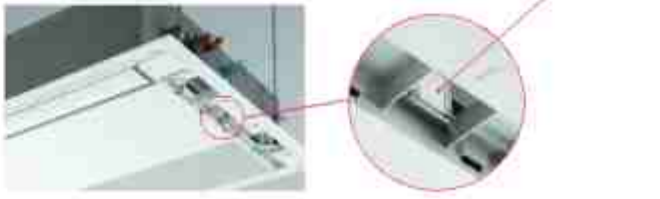
Easy access to suspension bolt

The structure of the panel makes access to the suspension bolt easier for height adjustment during installation and maintenance.



Temporary hanging hook

The panel is equipped with a temporary hanging hook. This structure makes work efficiency easier during panel installation.



SPECIFICATIONS

Models				PMY-SM18FA	PMY-SM24FA	PMY-SM30FA
Cooling capacity			kW	5.3 (2.80 - 5.30)	7.1 (2.90 - 7.10)	8.8 (3.80 - 8.80)
Cooling capacity			BTU/h	18,000	24,000	30,000
Total input			kW	1.64	2.29	2.66
ISEER			W/W	4.30	4.30	4.30
Indoor unit	Model name			PMY-SM18FA-DA	PMY-SM24FA-DA	PMY-SM30FA-DA
	Power supply			1phase 220-240V 50Hz		
	External finish			Munsell 6.4Y 8.9/0.4		
	Airflow (Low-Med1-Med2-High)		CMM	11-13-16-19	14-17-20-24	15-17-20-24
			CFM	388-459-565-671	494-600-706-848	530-600-706-848
	External static pressure		Pa	0 (direct blow)		
	Operation control and thermostat			Remote controller & built-in		
	Noise level (Low-Med1-Med2-High)		dB (A)	36-41-45-50	36-40-44-50	40-43-47-50
	Unit drain pipe		mm	32		
	Dimensions (panel)	W	mm	1112 (1340)		
		D	mm	724 (800)		
		H	mm	225 (20)		
	Weight (panel)		kg	27 (6.5)	28 (6.5)	29 (6.5)
Outdoor unit	Model name			SUY-SM18VAB-DA	SUY-SM24VAB-DA	SUY-SM30VAB-DA
	Power supply			1phase 220-240V 50Hz	1phase 220-240V 50Hz	1phase 220-240V 50Hz
	External finish			Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1
	Refrigerant (R32) control			Linear expansion valve		
	Airflow		CMM	36.1	36.4	63.4
			CFM	1275	1285	2239
	Noise level		dB (A)	47	52	54
	Dimensions	W	mm	800	800	840
		D	mm	285	285	330
		H	mm	550	714	880
	Weight		kg	32	38	47
	Max. height difference		m	20	20	30
	Max. piping length		m	35	35	50
	Pipe size	Liquid	' mm	6.35	9.52	9.52
		Gas	' mm	12.7	15.88	15.88
BEE Star Rating				3		
Operating	Upper limit (CDB)			52		
	Lower limit (CDB)			18		

- Rating conditions: Cooling - Indoor 27°C (DBT), 19°C , Outdoor 35°C (DBT)
- Rating conditions Cooling - Indoor: 27°C(80°F)DB, 19T(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): 1phase 230V 50Hz, 3N~ 400V 50Hz
- The sound pressure measurement is conducted in an anechoic chamber under the test conditions of Japanese industrial Standards.
- The actual sound level depends on the distance from the unit and acoustic environment.

4-way Ceiling-Cassette

(PLY-SM SERIES)



PLY-SM18/24/30/36/48HA-DA





Beautiful Square Design

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

PLY-SM*HA-DA



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.

"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

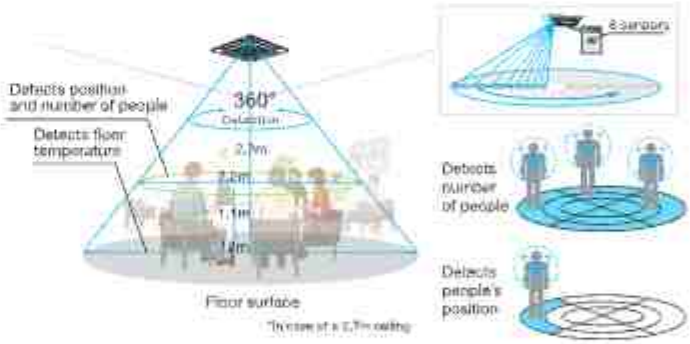
3D i-see Sensor



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 mist 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.

Features at a glance

Installation & Maintenance	Comfort	Others
• Chargeless system	• 3D i-see Sensor	• System control
• Compact design	• Auto fan speed	• Auto vane shutter
• Drain water lifting (660mm)	• Wide vane	• Auto restart
• Handy corner podual	• Smudge/draft-free	• Fresh-air intake
• Long-life filter (2500hr)*	• High-ceiling application	• Outdoor unit max. operating temp. of 52°C
• Self-diagnostic function	• Computerized dehumidifier	
• Flickless vanes	• Quiet operation	
• Side-suspend parts	• Bacteria and mold-resistant filter	
	• Plasma Quad Connect (optional)	

*Mu way according to operating conditions.

SPECIFICATIONS

Models				PLY-SM18HA	PLY-SM24HA	PLY-SM30HA	PLY-SM36HA	PLY-SM48HA
Cooling capacity (min-max)			kW	5.3 (2.80 - 5.30)	7.1 (2.90 - 7.10)	8.8 (3.80 - 8.80)	10.6 (4.00 - 10.60)	14.1 (7.00 - 14.10)
Cooling capacity			BTU/h	18,000	24,000	30,000	36,000	48,000
Total input			kW	1.52	2.15	2.48	3.45	5.80
ISEER			W/W	4.74	4.71	4.72	3.90	3.70
Indoor unit	Model name			PLY-SM18HA-DA	PLY-SM24HA-DA	PLY-SM30HA-DA	PLY-SM36HA-DA	PLY-SM48HA-DA
	Power supply			1phase 220-240V 50Hz	1phase 220-240V 50Hz	1phase 220-240V 50Hz	1phase 220-240V 50Hz	1phase 220-240V 50Hz
	External finish			Munsell 1.0Y 9.2/0.2				
	Airflow (Low-Med1-Med2-High)		CMM	15-16-18-20	17-18-20-22	20-23-26-30	21-25-28-31	22-27-32-37
			CFM	530-565-636-706	600-636-706-777	706-812-918-1059	742-883-989-1095	777-953-1130-1307
	External static pressure		Pa	0 (direct blow)				
	Operation control and thermostat			Remote controller & built-in				
	Noise level (Low-Med1-Med2-High)		dB (A)	25-27-30-32	28-30-32-35	31-34-37-41	32-37-41-43	34-39-43-47
	Unit drain pipe		mm	32				
	Dimensions (panel)	W	mm	840 (950)				
		D	mm	840 (950)				
		H	mm	298 (35)		298 (35)		
	Weight (panel)		kg	19 (5)	21 (5)	23 (5)	26 (5)	26 (5)
Outdoor unit	Model name			SUY-SM18VA-DA	SUY-SM24VA-DA	SUY-SM30VA-DA	PUY-SM36YKA-DA	PUY-SM48YKA-DA
	Power supply			1phase 220-240V 50Hz	1phase 220-240V 50Hz	1phase 220-240V 50Hz	3phase 380-415V 50Hz	
	External finish			Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1
	Refrigerant (R32) control			Linear expansion valve				
	Airflow		CMM	36.1	36.4	63.4	75	89
			CFM	1275	1285	2239	2648	3143
	Noise level		dB (A)	47	52	54	52	56
	Dimensions	W	mm	800	800	840	1050	1050
		D	mm	285	285	330	330	330
		H	mm	550	714	880	981	981
	Weight		kg	32	38	47	67	67
	Max. height difference		m	20	20	30	30	30
	Max. piping length		m	35	35	50	50	50
	Pipe size	Liquid	mm	6.35	9.52	9.52	9.52	9.52
		Gas	mm	12.7	15.88	15.88	15.88	15.88
BEE Star Rating				3	3	3	4	3

Operating Range		
	Upper limit (CDB)	52
	Lower limit (CDB)	18

- Rating conditions: Cooling - Indoor 27°C (DBT), 19°C , Outdoor 35°C (DBT)
- Rating conditions Cooling - Indoor: 27°C(80°F)DB, 19T(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): 1phase 230V 50Hz, 3N~ 400V 50Hz
- The sound pressure measurement is conducted in an anechoic chamber under the test conditions of Japanese industrial Standards.
- The actual sound level depends on the distance from the unit and acoustic environment.

Easy Installation and Maintainance

Checking window for drain pan NEW

For easier maintenance, small window will be equipped with unit. It make it easier to check if drain pan needs to be cleaned or not.

*Only for PLFY-P VHM models

• Location of checking window for drain pan



• How to check the status



Screwless wiring NEW

For easier installation, electrical wiring service panel can be removed without any screws, just simply slide the panel and rotates.
This lowers the risk of losing screws.

*Only for PLFY-P VHM models



Side Brackets (Optional Part) NEW

Side brackets allow installers to lower the position of channel steels. It is good option for installation site with narrow ceiling space.

*Only for PLFY-P VHM models



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.



Silver Antibacterial Agent NEW

This Silver Antibacterial Agent is available as a standard. If drain water seeps into the case, the agent dissolves into the water from the case and prevents growth of bacteria or mold.



Dual Barrier Coating NEW

Improve cleanliness of the intake grille and air outlet vane by adopting Dual Barrier Material.

*Not available for black panel

*Only for PLFY-P VHM models



Fresh-air Intake

Indoor air quality is significantly enhanced by the direct intake of fresh air from outside.





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.





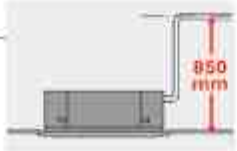
Bacteria-resistant Filters

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



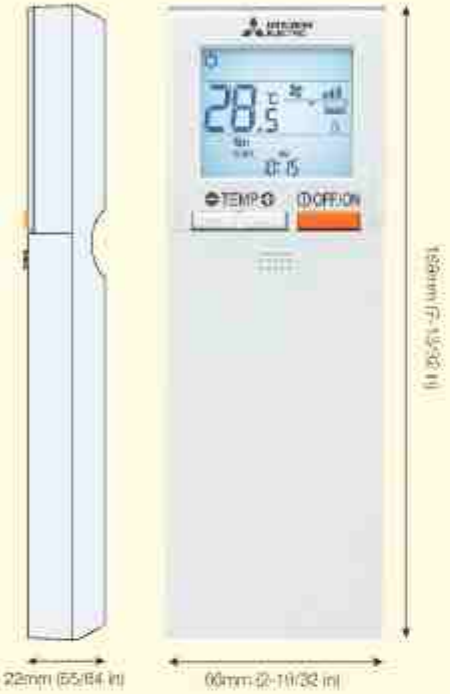
Drain Water Lifting Mechanism

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.



Remote Controller for PLY

Wireless Remote Controller
PAR-SL103A-E



Features (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

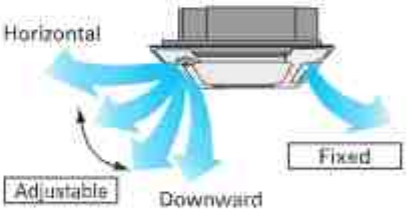
Previous wireless remote controllers were not able to check when the battery was low. Beginning with the PAR-SL101A-E, a battery charge indicator that shows the charge status is included in the LCD so it can be seen when the battery is low and needs to be changed.



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

Part model name	Description	Included parts			
		Standard panel	Wireless signal receiver	3D i-see sensor	Wireless controller (PAR-SL103A-E)
PLP-6MA	Standard panel only	✔			
PLP-6MALM	Panel with wireless remote controller	✔	✔		✔
PAC-SE36ME-E	3D i-see sensor corner panel			✔	
PAR-SRSLA-E	Wireless signal receiver only		✔		
PLP-6MAB	Standard black panel only	✔			
PLP-6MALMB	Black panel with wireless remote controller	✔	✔		✔

4-Way Ceiling-Cassette (Hot & Cold)

(PLA-RP SERIES)



PLA-RP50/71/100/140

A complete line-up including deluxe units that offer added energy savings. The incorporation of wide air-outlet and the "3D i-see Sensor enhances airflow distribution control, achieving an enhanced level of comfort throughout the room. The synergy of higher energy efficiency and more comfortable room environment results in optimum user satisfaction.

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.



Automatic Grille Lowering Function[1] (PLP-6EAJ)



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



Wireless Remote Controller

Seasonal airflow*



*PAR-32MAA is required for each setting.

When cooling

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.

When heating

The Air Conditioning unit automatically switches between circulator and heating.Wasted heat that accumulates near the ceiling is reused via circulation. When a pre-set temperature is reached the Air Conditioner switches from heating to circulator and blows air in the horizontal direction. It pushes down the warm air that has gathered near the ceiling to people's height, thereby providing smart heating.

3D i-see Sensor[1] for PLA series

Detects number of people

3D i-see Sensor detects the number of people in the room and sets the Air-Conditioning power accordingly.This makes automatic power-saving operation possible in places where the number of people entering and exiting is large.

Additionally, when the area is continuously unoccupied, the system switches to a more enhanced power-saving mode.

Depending on the setting, it will save additional capacity or stop operation altogether.

Detects people's position

Once the position of a person is detected, the duct angle of the vane is automatically adjusted in that direction. Each vane can be independently set to "block wind" or "not block wind" according to user preference.

SPECIFICATIONS

Models				PLA-RP50EA	PLA-R P71EA	PLA-RP100EA	PLA-RP140EA
Cooling	Capacity (Min - Max)		kW	5.5(2.3-5.6)	7.1(2.8-8.1)	9.4(3.7-10.6)	13.6 (5.8-14.1)
	Capacity		BTU/h	18,800	24,000	32,100	46,400
	Total Input		kW	1.61	2.10	3.18	5.30
	ISEER		WAN	4.50	4.51	4.40	3.70
Heating	Capacity (Min - Max)		kW	5.8(1.7-7.2)	8.0 (2.6-10.2)	11.2 (2.8-12.5)	15.0(4.9-15.8)
	Capacity		BTU/h	19,800	27,300	38,200	51,200
	Total Input		kW	1.69	2.24	3.26	4.67
	COP		WAN	3.43	3.56	3.43	3.21
Indoor Unit	Model name			PLA-RP50EA-DA	PLA-RP71EA-DA	PLA-RP100EA-DA	PLA-RP140EA-DA
	Power supply			1ph 220-240V 50Hz			
	External finish			Munsell 1.0Y 9.2/0.2			
	Airflow (Low-Med1-Med2-High)		CMM	14-16-17-18	16-17-19-21	19-23-26-29	24-26-29-32
			CFM	495-565-600-635	565-600-670-740	670-810-920-1025	850-920-1025-1130
	External static pressure		Pa	0 (direct blow)			
	Operation control and thermostat			Remote control & Built-In			
	Noise level (Low-Med1-Med2-High)		dB (A)	27-29-31-32	28-30-32.34	31-34-37-40	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)		298(40)	
	Weight (panel)		kg	19(5)	21(5)	24(5)	27(5)
Outdoor Unit	Model name			SUZ-KA50VA-DA	SUZ-KA71VA-DA	PUHZ-P100YKA-DA	PUHZ-P140YKA-DA
	Power supply			1 ph 220-240V 50Hz		3ph 380-415V 50Hz	
	External finish			Munsell 3.0Y 7.8/1.1			
	Refrigerant (R410A) control			Linear Expansion Valve			
	Airflow		CMM	44.6	50.1	79.0	86.0
			CFM	1575	1770	2792	3039
	Noise Level		dB (A)	52	55	51	56
	Dimensions	W	mm	840		1050	
		D	mm	330		330(+25)	
		H	mm	880		981	
	Weight		kg	54	53	78	85
	Max. height difference		m	30	30	30	30
	Max. piping length		m	30		50	
	Pipe size	Liquid	mm	6.35	9.52		
		Gas	mm	12.7	15.88		
	Chargeless piping length		m	7		30	
BEE Star Rating				3			
Cooling Guaranteed Operating Range		Upper limit (°CDB)		46			
		Lower limit (CDB)		-15			
Heating Guaranteed Operating Range		Upper limit (°CDB)		24		21	
		Lower limit (°CDB)		-10		-15	

- Rating conditions Cooling - Indoor: 27°C(80°F)DB, 19°C(66°F)WB, Outdoor: 35°C(95°F)DB,
- Heating - Indoor: 20°C(68°9DB, Outdoor: 7°C(45°F)DB, 6°C(43°F)WB
- Refrigerant piping length (one-way): 7.5m(25ft)
- Total input based on the indicated voltage (indoor/outdoor): 1 ph 220-240V 50Hz, 3ph 380-415V 50Hz
- Operation air protection guide is required where ambient temperature is lower than -5°C.

Ceiling-Concealed

(PEY-SM SERIES)



PEY-SM18/24/30/36/48JA-DA





The thin, ceiling-concealed indoor units of the PEY 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.



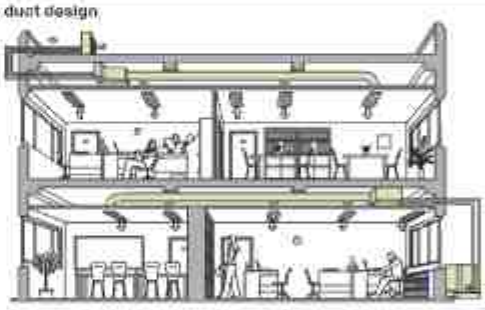
Wide Selection of Fan Speeds and External Static Pressure

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

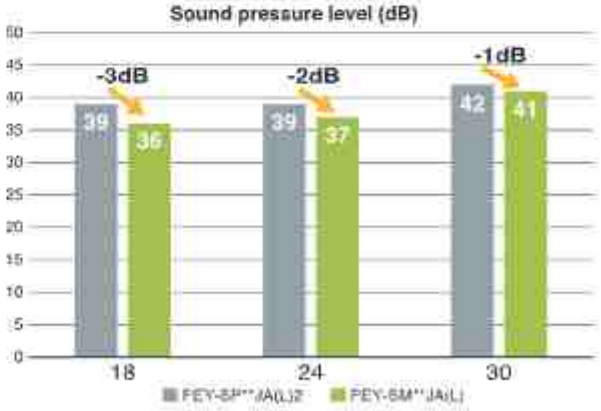
Series	18	24	30	36	42	48
PEY-SM*JA-DA	35/50/70/100/125Pa					

■ Flexible duct design



Reduced Noise Level

The noise levels of low capacity models (SM18/24/30) are reduced compared to conventional models. The SM18 model achieves 3dB reduction in noise level.



*Specifications reported are figures of high notch sound pressure level.

Features at a glance

Installation & Maintenance	Comfort	Others
• Changeless system	• Computerized dehumidifier	• System control
• Smooth installation	• Quiet operation	• Auto restart
• Self-diagnostic function		• Outdoor unit max. operating temp. of 52°C
• Drain pump (optional)		

SPECIFICATIONS

Models							
Cooling capacity (min-max)		kW	5.3 (2.80 - 5.30)	7.1 (2.90 - 7.10)	8.8 (3.80 - 8.80)	10.6 (4.00 - 10.60)	14.1 (7.00 - 14.10)
Cooling capacity		BTU/h	18,000	24,000	30,000	36,000	48,000
Total input		kW	1.56	2.00	2.45	3.35	5.65
ISEER		W/W	4.27	4.45	4.49	4.16	3.59
Indoor unit	Model name		PEY-SM18JA-DA	PEY-SM24JA-DA	PEY-SM30JA-DA	PEY-SM36JA-DA	PEY-SM48JA-DA
	Power supply		1phase 220-240V 50Hz	1phase 220-240V 50Hz	1phase 220-240V 50Hz	1phase 220-240V 50Hz	1phase 220-240V 50Hz
	External finish		Galvanized sheets				
	Airflow (Low-Med-High)	CMM	12.0 - 14.5 - 17.0	17.5 - 21.0 -25.0	24.0 - 29.0 - 34.0	29.5 - 35.5 - 42.0	29.5 - 35.5 - 42.0
		CFM	424 - 512 - 600	618 - 742 - 883	848 - 1024 - 1201	1042 - 1254 - 1483	1042 - 1254 - 1483
	External static pressure	Pa	35-50-70-100-125				
	Operation control and thermostat		Remote controller & built-in				
	Noise level (Low-Med-High)	dB (A)	28-32-36	29-33-37	33-37-41	36-40-44	36-40-44
	Unit drain pipe	mm	32				
	Dimensions (panel) W	mm	900	1100	1400		
	Dimensions (panel) D	mm	732				
	Dimensions (panel) H	mm	250				
	Weight	kg	26	29.5	36.5	38	38
Outdoor unit	Model name		SUY-SM18NVA-DA	SUY-SM24NVA-DA	SUY-SM30NVA-DA	PUY-SM36YKA-DA	PUY-SM48YKA-DA
	Power supply		1phase 220-240V 50Hz	1phase 220-240V 50Hz	1phase 220-240V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
	External finish		Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1	Munsell 3.0Y 7.8/1.1
	Refrigerant (R32) control		Linear expansion valve				
	Airflow	CMM	36.1	36.4	63.4	75	89
	Airflow	CFM	1275	1285	2239	2648	3143
	Noise level	dB (A)	47	52	54	52	56
	Dimensions W	mm	800	800	840	1050	1050
	Dimensions D	mm	285	285	330	330	330
	Dimensions H	mm	550	714	880	981	981
	Weight	kg	32	38	47	67	67
	Max. height difference	m	20	20	30	30	30
	Max. piping length	m	35	35	50	50	50
	Pipe size Liquid	mm	6.35	9.52	9.52	9.52	9.52
	Pipe size Gas	mm	12.7	15.88	15.88	15.88	15.88
BEE Star Rating			-				

Operating Range		
	Upper limit (CDB)	52
	Lower limit (CDB)	18

- Rating conditions: Cooling - Indoor 27°C (DBT), 19°C , Outdoor 35°C (DBT)
- Rating conditions Cooling - Indoor: 27°C(80°F)DB, 19°(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): 1phase 230V 50Hz, 3N~ 400V 50Hz
- The sound pressure measurement is conducted in an anechoic chamber under the test conditions of Japanese Industrial Standards.
- The actual sound level depends on the distance from the unit and acoustic environment.

NEW High Power Fan Speed Mode

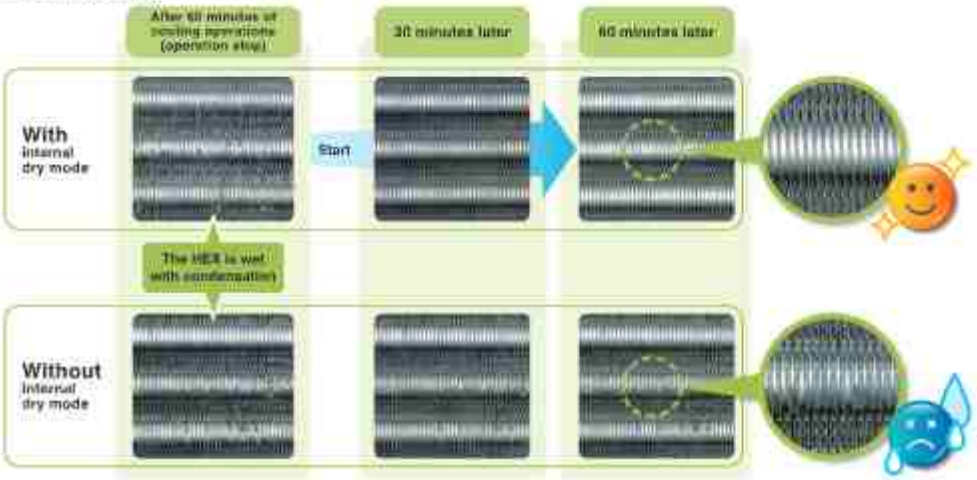
The start-up mode is run with the increased fan speed for a maximum of 15 minutes to rapidly cool or heat the space (after the first Thermo-ON operation).

*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 nominal cooling conditions (indoor: 27°C DB/19°C WB)
*Results will vary depending on indoor temperature and humidity conditions.

Ceiling-Concealed (Hot & Cold)

(SEZ/PEAD SERIES)



SEZ/PEAD50/71/100/140

Temperature Range : -10°C to 46°C



Ultra thin Ceiling Concealed indoor units of this series are the perfect answer for the air conditioning needs of modern buildings with minimum ceiling installation space requirements and wide-ranging external static pressure. Energy-saving efficiency has been improved, reducing electricity consumption and contributing to a further reduction in operating costs.



SEZ SERIES





Available with SEZ Series



PEAD SERIES





Optional - Not Available with PEAD Series

External Static Pressure

External static pressure conversion can be set up to five stages. Capable of being set to a maximum of 150 Pa, units are applicable to a wide range of building types.

External static pressure setting

Series	External Static Pressure Settings
SEZ-KD-VA	5/15/35/6 Pa
PEAD-RP JA	35/50/70/100/150 Pa

SPECIFICATIONS

Models				SEZ-KD50VAL	PEAD-RP71JALQ	PEAD-RP100JALQ	PEAD-RP140JALQ
Cooling	Capacity (Min - Max)		kW	5.1 (2.3-5.2)	7.1 (2.8-8.1)	9.4 (3.7-10.6)	13.6 (5.8-14.1)
	Capacity		BTU/h	17,400	24,000	32,000	46,400
	Total Input		kW	1.58	2.08	2.98	5.21
	ISEER		W/W	3.22	3.41	3.15	2.61
Heating	Capacity (Min - Max)		kW	6.4 (1.7-7.2)	8.0(2.6-10.2)	11.2(2.8-12.5)	15.0 (4.9 - 15.8)
	Capacity		BTU/h	21,800	27,300	38,200	51,200
	Total Input		kW	1.80	2.04	2.94	4.27
	COP		W/W	3.55	3.92	3.80	3.51
Indoor Unit	Model name			SEZ-KD50VAL	PEAD-RP71JALQ	PEAD-RP100JALQ	PEAD-RP140JALQ
	Power supply			1 ph 220-240V 50Hz	1 ph 220V-240V 50Hz		
	External finish			Galvanized sheets	Galvanized steel plate		
	Airflow (Low-Mid-High)		CMM	10.0-12.5-15.0	17.5-21-25	24-29-34	32-39-46
			CFM	353-441-530	618-742-883	848-1024-1200	1130-1377-1624
	External static pressure		Pa	5 / 15 / 35 / 50	35/50/70/100/150	35/50/70/100/150	35/50/70/100/150
	Operation control and			Remote Control Built	Remote Control Built in		
	Noise level (Low-Med-High)		dB (A)	30-34-37	26-30-34	29-34-38	34-38-43
	Unit drain pipe (outer diameter)		mm	32	32	32	32
	Dimensions	W	mm	990	1100	1400	1600
		D	mm	700	732		
		H	mm	200	250		
	Weight		kg	22	29	38	43
Outdoor Unit	Model name			SUZ-KA50VA-DA	SUZ-KA71VA-DA	PUHZ-P100YKA-DA	PUHZ-P140YKA-DA
	Power supply			1 ph 220-240V 50Hz	1 ph 220-240V 50Hz	3ph 380-415V 50Hz	
	External finish			Munsell 3.0Y 7.8/1.1			
	Refrigerant (R410A) control			Linear Expansion Valve			
	Airflow		CMM	44.6	50.1	79	86
			CFM	1574	1770	2792	3039
	Noise level		dB (A)	52	55	51	56
	Dimensions	W	mm	840	840	1050	
		D	mm	330	330	330 (+25)	
		H	mm	880	880	981	
	Weight		kg	54	53	78	85
	Max. height difference		m	30			
	Max piping length		m	30		50	
	Pipe size	Liquid	mm	6.35	9.52		
		Gas	mm	12.7	15.88		
	Chargeless piping length		m	7		30	
Cooling Guaranteed Operating Range		Upper limit		46	46		
		Lower limit		-15	-15		
Heating Guaranteed Operating Range		Upper limit		24	24	21	
		Lower limit		-10	-10	-15	

• Rating conditions Cooling - Indoor: 27°C (80?)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

• Operation air protection guide is required where ambient temperature is lower than -5°C.

4-way Ceiling-Cassette

(PL-M SERIES)



(i-see Sensor: optional)

PL-M18/24/30/36/48HAK



1 Star





Non-Inverter Series

This compact, multifunctional indoor unit has sophisticated design that goes well with any interior & provides high level of convenience while enhancing your quality of life.

Wide Airflow

Wide-angle outlets distribute airflow to all corners of the room, ensuring the room is sufficiently cooled/heated. Horizontal airflow and a fan speed reduced by 20% compared to conventional models also contribute to increased comfort for occupants.



Less Cold Draft

The horizontal airflow function prevents cold drafts from striking the body directly, thereby keeping the body from becoming chilled.

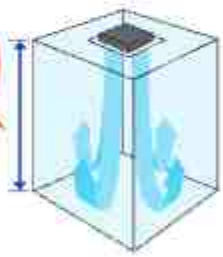


Human-like airflow prevents draft's feeling

Wide-flow Air Outlet

The high-power ceiling cassettes offer a wide-flow air outlet that enables effective air conditioning of rooms with atrium ceilings up to 4.5m in height. The demands of high-ceiling applications such as halls, showrooms or shopping malls can now be fully answered thanks to this powerful, yet highly efficient airflow.

Ideal for high-ceiling applications as high as **4.5m**



■Specification according to ceiling height (unit: m)

	PL-M18/24BAK			PL-M30/36/48BAK		
	Low ceiling*	Standard	High ceiling	Low ceiling*	Standard	High ceiling
4-way	2.6	2.7	3.6	2.7	3.2	4.5

* If installed in the Low Ceiling mode under high humidity conditions, please consult with your Mitsubishi Electric dealership since there is the risk of condensation.

Automatic Air-speed Adjustment

An automatic air-speed adjustment mode is provided in addition to the four air-speed stages, of High, Medium 1, Medium 2, and Low. Air speed can be changed freely according to the difference between set temperature and room temperature. The automatic air-speed adjustment mode offers quick cooling of a room in High mode, such as when starting cooling operation. After the room temperature is stabilized, the system switches to Low mode automatically to maintain comfort.

Low → Medium 2 → Medium 1 → High → Automatic air-speed adjustment

(When using the optional remote controller, air-flow setting is required.)

SPECIFICATIONS

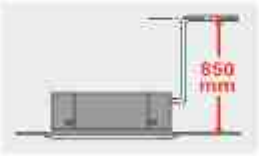
Models				PL-M18HAK	PL-M24HAK	PL-M30HAK	PL-M36HAK	PL-M48HAK
Cooling capacity			kW	5.3	6.9	8.8	10.6	13.4
Cooling capacity			BTU/h	18,000	23,500	30,000	36,100	45,700
Total input			kW	1.5	1.96	2.5	3.19	4.18
EER			W/W	3.53	3.52	3.52	3.32	3.21
ISEER			W/W	3.53	3.52	3.52	3.32	3.21
Indoor unit	Model name			PL-M18HAK-DA	PL-M24HAK-DA	PL-M30HAK-DA	PL-M36HAK-DA	PL-M48HAK-DA
	Power supply			1ph 220-240V 60Hz				
	External finish			Munsell 1.0Y 9.2/0.2				
	Airflow (low-high)		CMM	17-18-20-22	17-19-21-25	20-23-28-30	21-25-28-31	21-28-31-37
			CFM	600-636-706-777	600-671-742-883	706-812-918-1059	742-883-989-1095	742-918-1095-1307
	External static pressure		Pa	0 (direct blow)				
	Operation control and thermostat			Remote control incl Built-in				
	Noise level (low-high)		dB (A)	28-30-32-35	28-31-34-37	31-34-37-41	32-37-41-43	32-39-43-47
	Unit drain pipe		mm	32				
	Dimensions (panel)	W	mm	840 (950)				
		D	mm	840 (950)				
		H	mm	258 (35)		298 (35)		
	Weight (panel)		kg	21 (5)		23 (5)	26 (5)	
Outdoor unit	Model name			PU-M18VAK2-DA	PU-M24VAK2-DA	PU-M30VAK2-DA	PU-M36YAK2-DA	PU-M48YAK2-DA
	Power supply			1ph 220-240V 60Hz			3ph 380-415V 50Hz	
	External finish			Munsell 3.0Y 7.8/1.1				
	Refrigerant (R32) control			Capillary Tube				
	Airflow		CMM (CFM)	32 (1130)	53 (1871)	50 (1765)	92 (3249)	
	Noise level		dB (A)	53	56	55	54	56
	Dimensions	W	mm	718	840	840	1050	1050
		D	mm	255	330	330	330	330
		H	mm	525	880	880	981	981
	Weight		kg	34	51	63	82	86
	Max. height difference		m	20	20	30	30	30
	Max. piping length		m	35	35	50	50	50
	Pipe size (outer diameter)		mm	Liquid: 6.35 , Gas: 12.7	Liquid: 6.35 , Gas: 15.88	Liquid: 9.52 , Gas: 15.88		
BEE Star Rating								

Operating Range		
	Upper limit (CDB)	46
	Lower limit (CDB)	21

- 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
- The sound pressure measurement is conducted in an anechoic chamber under the test conditions of Japanese Industrial Standards.
- The actual sound level depends on the distance from the unit and acoustic environment.

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.



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.



Bacteria- and Mold-resistant Specifications

Mitsubishi Electric filters are bacteria-resistant, and the drain pans are designed to prevent the growth of mold for fresh and pleasant air conditioning at all times.

Features at a glance

Installation & Maintenance	Comfort	Others
• Chargeless system	• I-see Sensor	• System control
• Compact design	• Auto fan speed	• Auto vane shutter
• Drain water lifting (850mm)	• Wide vane	• Auto restart
• Handy corner pocket	• Smuggler (left / fins	
• Long-life filter (2500hr)*	• High-ceiling application	• Outdoor unit max. operating temp. of 46°C
• Self-diagnostic function	• Compressed dehumidifier	
• Flocklees vanes	• Quiet operation	
• Elevation grille	• Bacteria- and mold-resistant filter	

*After vane and indoor unit cleaning conditions

Ceiling-Concealed

(PE-M SERIES)



PE-M18/24/30/36/48JAK





The ultra thin, ceiling-concealed indoor units of PE-M series are the perfect answer for air-conditioning requirements of buildings with low ceiling heights having confined installation space and wide-ranging external static pressure.

Compact Indoor Units

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



PE-M18/24/30/36/48JAK

Height reduced

Air 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.

(1) Rear inlet



(2) Bottom inlet



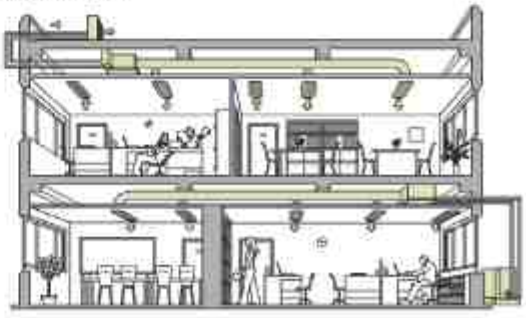
Wide Selection of External Static Pressure

Three-stage external static pressure conversions are available. Capable of being set to a maximum of 70Pa, units are applicable to a wide range of building types.

■External static pressure setting

Series	18	24	30	36	48
PE-M-JAK	30/50Pa		30/50/70Pa		

■Flexible duct design



Features at a glance

Installation & Maintenance	Comfort	Others
• Changeless system	• Computerized dehumidifier	• System control
• Smooth installation	• Quiet operation	• Auto restart
• Self-diagnostic function	• Drain pump(optional)	• Outdoor unit max. operating temp. of 46°C

SPECIFICATIONS

Models								
Cooling capacity			kW	5.45	6.80	8.80	10.40	14.10
Cooling capacity			BTU/h	18,600	22,500	30,000	35,500	48,100
Total input			kW	1.63	2.10	2.67	3.35	5.22
EER			W/W	3.35	3.14	3.30	3.10	2.70
Indoor unit	Model name							
	Power supply			1ph 220-240V 50Hz				
	External finish			Galvanized steel plate				
	Airflow (low-high)		CMM	17.5 - 27.0		24.0 - 34.0		28.0 - 42.0
			CFM	618 - 953		848 - 1200		989 - 1483
	External static pressure[1]		Pa	30-50		30-50-70		
	Operation control and thermostat			Remote control and Built-in				
	Noise level (low-high)		dB (A)	36-38		34 - 42		38-44
	Unit drain pipe		mm	32				
	Dimensions	W	mm	1,100		1,400		
		D	mm	732				
		H	mm	250				
	Weight		kg	29		39		
Outdoor unit	Model name							
	Power supply			1ph 220-240V 50Hz			3ph 380-415V 50Hz	
	External finish			Munsell 3.0Y 7.8/1.1				
	Refrigerant (R32) control			Capillary Tube				
	Airflow		CMM (CFM)	32 (1130)	59 (2084)	50 (1785)	92 (3249)	
	Noise level		dB (A)	53	56	55	54	56
	Dimensions	W	mm	710	840		1050	
		D	mm	255	330		330	
		H	mm	526	880		861	
	Weight		kg	35	51	63	82	85
	Max. height difference		m	20			30	
	Max. piping length		m	35			50	
	Pipe size (outer diameter)		mm	Liquid: 6.35 , Gas: 12.7	Liquid: 6.35 ,Gas: 15.88	Liquid: 9.52 , Gas: 15.88		

Operating Range	Upper limit (CDB)	46
	Lower limit (CDB)	21

- Rating condition: 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 unit+out): 1ph 230V 50Hz, 3ph 400V 50Hz
- The sound pressure measurement is conducted in an anechoic chamber under the test conditions of Japanese industrial Standards.
- The actual sound level depends on the design and appropriate sin up of duct work, distance from the unit and acoustic environment.
- Measured with a 2.0m Air outlet duct and 1.0m Air inlet duct attached Measurement point 1.5m Below the unit
- Rated External static pressure: 30 Pa (PS-M18JAK, 50Pa (PS-M18JAK/36JAK)

CONTROL TECHNOLOGIES

User-friendly Deluxe Remote Controller with Excellent Operability and Visibility

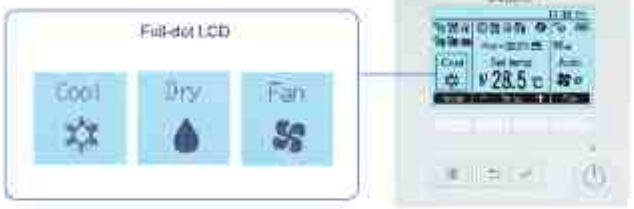


PAR-41MAA (Optional)

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.

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**

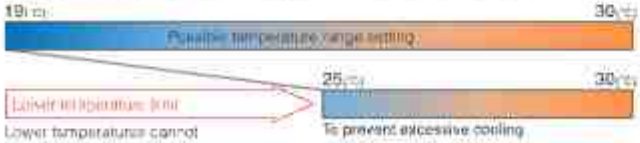
This function monitors the room temperature and automatically activates the cooling mode when the temperature rises above the preset maximum temperature setting.

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)



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**

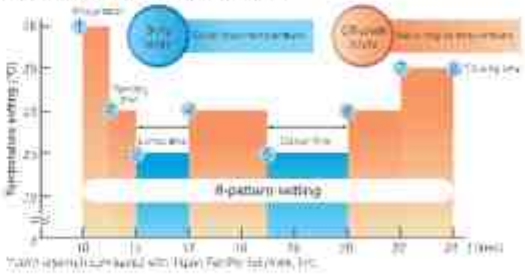
In addition to operation start/stop, the operation mode, temperature setting and airflow direction can be locked. Unwanted adjustment of temperature settings is prevented and an appropriate temperature is constantly maintained, leading to energy savings. This feature is also useful in preventing erroneous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



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]



PAR-21MAA



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

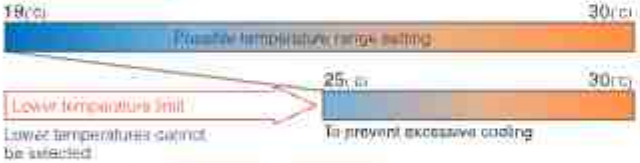
Operation Control Functions

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]



Recommended for: Office, Restaurant

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.

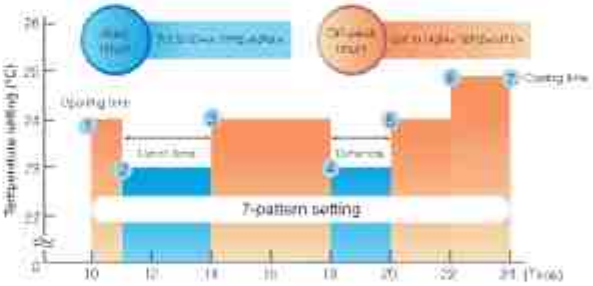
Recommended for: Office, School, Public hall, Hospital, Computer server facility

Weekly Timer

Introduced in response to market demand

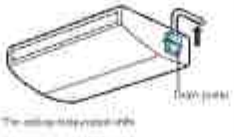
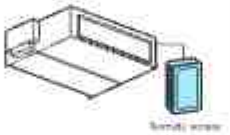
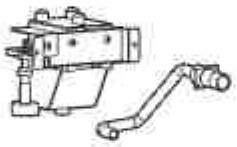
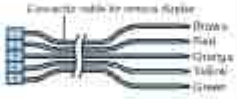
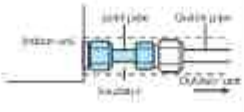
Control temperature on a weekly basis
Temperature settings and On/Off control can be managed over a period of one week using the Weekly Timer. Up to eight setting patterns per calendar day are possible.

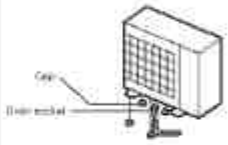
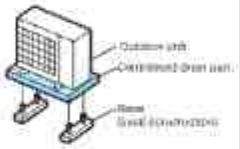
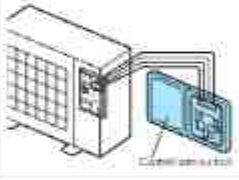
Setting Example (restaurant in summer time)



OPTIONAL PARTS

Main Optional Parts

Part name	Description
Drain Pump Pumps drain water to a point higher than that where the unit is installed.	
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.	
Drain Pump for PE Series Raises drain generated during units operation to secure the appropriate angle of the drain pipe.	
Remote On/Off Adapter Connector for receiving signals from the local system to control the on/off function.	
Remote Operation Adapter Adapter to display the operation status and control the on/off function from a distance.	
Connector Cable for Remote Display Connector used to display the operation status and control the on/off function from a distance.	
Joint Pipe Part for connecting refrigerant pipes of different diameters.	

Part name	Description
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.	
Centralised Drain Pan Catches drain water generated by the outdoor unit.	
M-NET Converter Used to connect P Series A-control models to M-NET controllers.	
Control/Service Tool Monitoring tool to display operation and self-diagnosis data.	

Mitsubishi Electric MEQ Quality

What is MITSUBISHI ELECTRIC Quality?

MEQ represents our dedication to excellence in developing & 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.

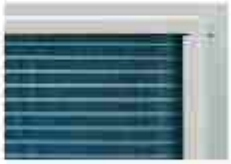
Development

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



Designs

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.



A special coating is applied to the heat exchanger to increase corrosion toughness.



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



Anti-rust painting & galvanized steel protect cabinet even under harsh environment.



MITSUBISHI ELECTRIC PCB can resist high voltage up to 450V.



Special coating prevents any damages from humidity and insects.



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

MITSUBISHI ELECTRIC

AIR CONDITIONERS

Changes for the Better



*Map for reference purpose only.

OUR PRESENCE

MITSUBISHI ELECTRIC INDIA PVT. LTD.

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MANUFACTURING FACILITY

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Origins Mahindra World City, Tiruvallur, Tamil Nadu – 601206

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Ahmedabad: 079-67777861, Bengaluru: 08065301600,
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South Zone
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Tirupur: 09319591931, Madurai: 9095348339
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Vizag (Visakhapatnam): 09505987306

The Energy Efficiency & Thermal graphic indicates the air conditioner model's energy efficiency (Energy Efficiency Ratio) and thermal performance (Cooling Capacity / Annual Electricity Consumption) as per the Energy Conservation (Energy Efficiency and Thermal Performance) Regulations, 2021. Please refer to the Energy Efficiency & Thermal graphic displayed on the air conditioner / Printed Label inside / enhance scheme for receiving of enquiry on Company website www.mitsubishielectric.in or Toll Free number 1800 102 2626.