

PLA SERIES

PLA-ZM35/50/60/71/100/125/140EA

PLA-M35/50/60/71/100/125/140EA

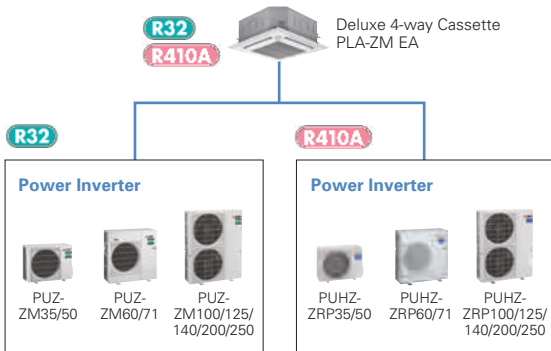
A complete line-up including deluxe units that offer added energy savings. The incorporation of wide air-outlet and the "3D i-see Sensor" enhances airflow distribution control, achieving an enhanced level of comfort throughout the room. The synergy of higher energy efficiency and more comfortable room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



Deluxe 4-way Cassette Line-up

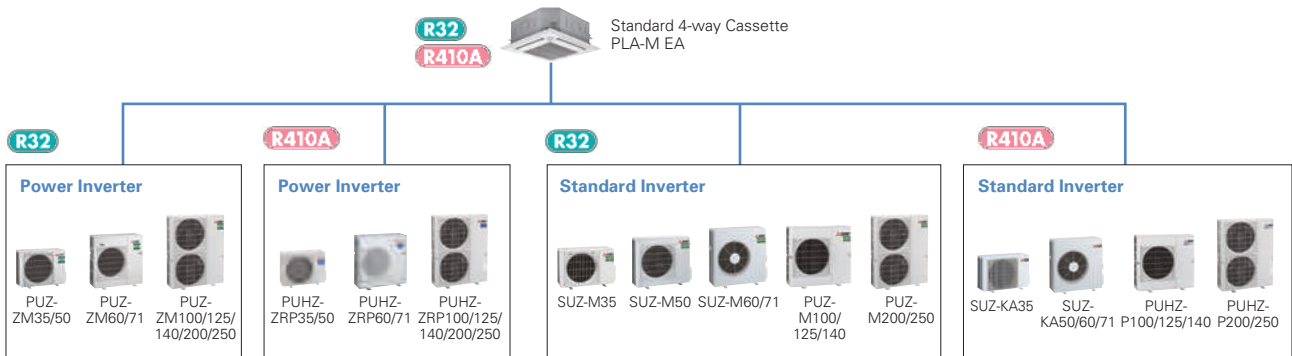
For users seeking even further energy savings, Mitsubishi Electric now offers deluxe units (PLA-ZM) to complete the line-up of models in this series, from 35-140. Compared to the standard models (PLA-RP), deluxe models provide additional energy savings, contributing to a significant reduction in electricity costs.

Indoor/Outdoor Unit Combinations



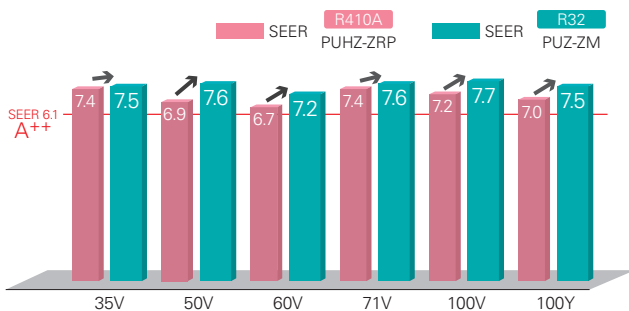
Line-up

Series	Model	35	50	60	71	100	125	140
R32 R410A	Deluxe 4-way Cassette (PLA-ZM)	●	●	●	●	●	●	●
R32 R410A	Standard 4-way Cassette (PLA-M)	●	●	●	●	●	●	●

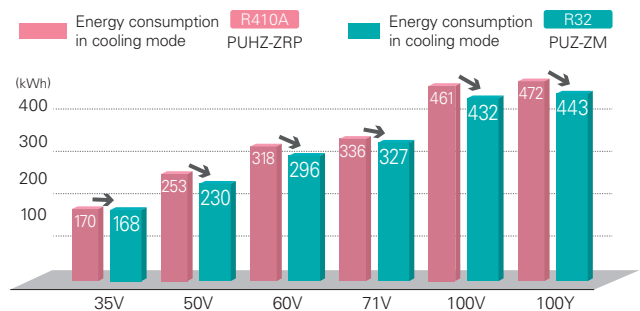


Industry-leading energy efficiency

Introduction of new R32 refrigerant realises improved cooling efficiency. Rating of more than 7.0 achieved for all capacity range.



Introduction of new R32 refrigerant reduces energy consumption and realises energy savings.

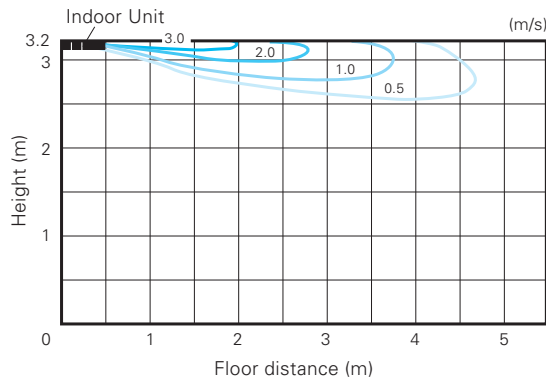


*Specifications reported are figures when PLA-ZM**EA is connected.

Horizontal Airflow

The new airflow control removes that uncomfortable drafty feeling with the introduction of a horizontal airflow that spreads across the ceiling. The ideal airflow for offices and restaurants.

[Horizontal airflow]
 Model name: PLA-ZM140EA
 Ceiling height: 3.2m
 Mode: Cooling



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.



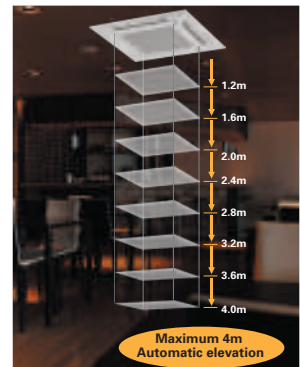
Grille Elevation Remote Controller
 (comes with the automatic elevation panel)



Wired Remote Controller



Wireless Remote Controller



Easy Installation

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

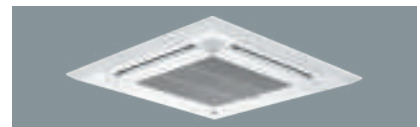


■ Control box cover



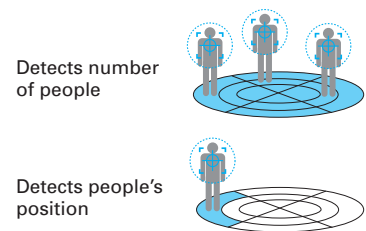
Lightweight decorative panel

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



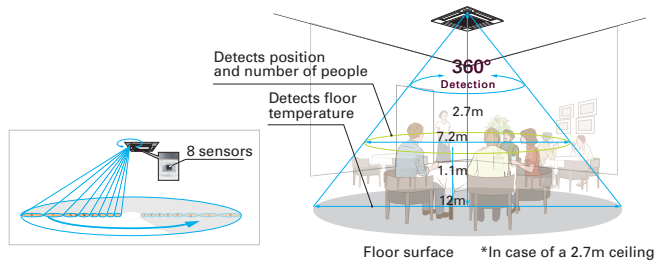
Detects number of people

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

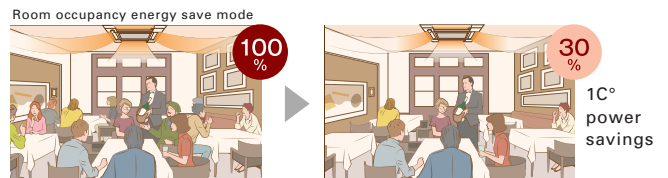
Once the position of a person is detected, the duct angle of the vane is automatically adjusted in that direction. Each vane can be independently set to "block wind" or "not block wind" according to taste.



Detects number of people

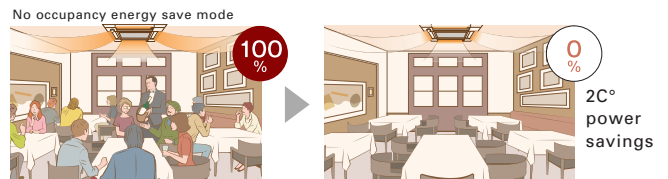
Room occupancy energy-saving mode

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 both cooling and heating operation is saved. The temperature is controlled according to the number of people.



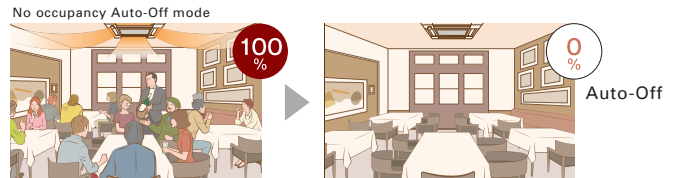
No occupancy energy-saving mode

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



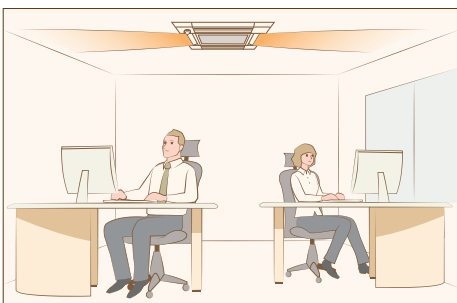
* When MA Remote Controller is used to control multiple refrigerant systems, "No occupancy Auto-OFF mode" cannot be used.

*PAR-40MAA is required for each setting

Detects 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-40MAA or PAR-SL100A-E is required for each setting.

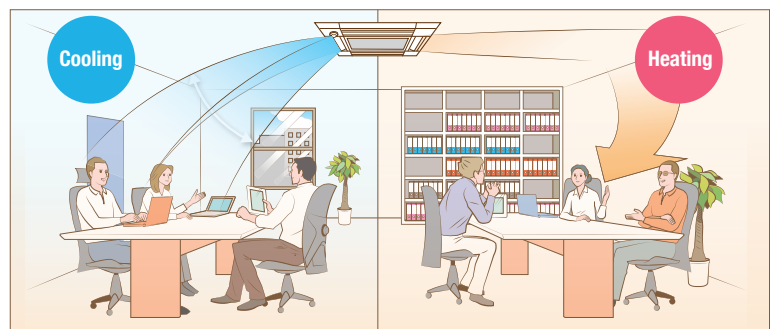
Seasonal airflow*

<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.



*PAR-40MAA is required for each setting.

SERIES SELECTION

Power Inverter Series



Indoor Unit

R32
R410A



Panel PLA-ZM35/50/60/71/100/125/140EA

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EALAE	✓	✓		
PLP-6EAJ	✓			✓
PLP-6EAJE	✓	✓		✓
PLP-6EALM	✓		✓	
PLP-6EALME	✓	✓	✓	

Outdoor Unit

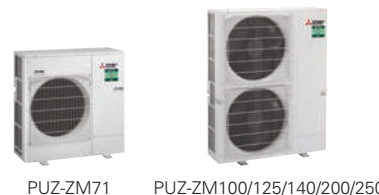
R32

For Single



R32

For Multi (Twin/Triple/Quadruple)



Remote Controller



PLA-ZM EA Indoor Unit Combinations Indoor unit combinations shown below are possible.

Indoor Unit Combination	Outdoor Unit Capacity																			
	For Single									For Twin						For Triple			For Quadruple	
	35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Power Inverter (PUHZ-ZRP)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	35x2	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4
Distribution Pipe	-	-	-	-	-	-	-	-	-	MSDD-50TR2-E			MSDD-50WR2-E			MSDT-111R3-E			MSDF-1111R2-E	

SERIES SELECTION

Standard Inverter Series



Indoor Unit

R32
R410A



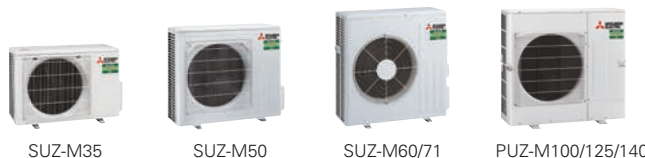
Panel PLA-M35/50/60/71/100/125/140EA

Panel	With Signal Receiver	With 3D i-see Sensor	With Wireless Remote Controller	With Auto Elevation
PLP-6EA				
PLP-6EAL	✓			
PLP-6EAE		✓		
PLP-6EALAE	✓	✓		
PLP-6EAJ	✓			✓
PLP-6EAJE	✓	✓		✓
PLP-6EALM	✓		✓	
PLP-6EALME	✓	✓	✓	

Outdoor Unit

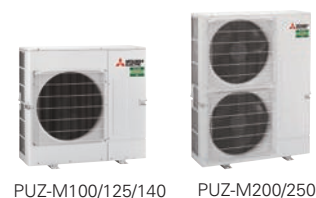
R32

For Single



R32

For Multi (Twin/Triple/Quadruple)



Remote Controller



PLA-M EA Indoor Unit Combinations Indoor unit combinations shown below are possible.

Indoor Unit Combination	Outdoor Unit Capacity																			
	For Single									For Twin						For Triple			For Quadruple	
	35	50	60	71	100	125	140	200	250	71	100	125	140	200	250	140	200	250	200	250
Standard Inverter (SUZ & PUHZ-P)	35x1	50x1	60x1	71x1	100x1	125x1	140x1	-	-	50x2	60x2	71x2	100x2	125x2	50x3	60x3	71x3	50x4	60x4	
Distribution Pipe	-	-	-	-	-	-	-	-	-	MSDD-50TR2-E			MSDD-50WR2-E			MSDT-111R3-E			MSDF-1111R2-E	

PLA-M SERIES POWER INVERTER



Type		Inverter Heat Pump												
Indoor Unit		PLA-M35EA	PLA-M50EA	PLA-M60EA	PLA-M71EA	PLA-M100EA		PLA-M125EA		PLA-M140EA				
Outdoor Unit		PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHA	PUZ-ZM100VKA	PUZ-ZM100YKA	PUZ-ZM125VKA	PUZ-ZM125YKA	PUZ-ZM140VKA	PUZ-ZM140YKA			
Refrigerant		R32*1												
Power Supply		Outdoor power supply												
Outdoor (V/Phase/Hz)		VKA · VHA:230 / Single / 50, YKA:400 / Three / 50												
Cooling	Capacity	Rated	kW	3.6	5.0	6.1	7.1	9.5	9.5	12.5	12.5	13.4	13.4	
		Min - Max	kW	1.6 - 4.5	2.3 - 5.6	2.7 - 6.5	3.3 - 8.1	4.9 - 11.4	4.9 - 11.4	5.5 - 14.0	5.5 - 14.0	6.2 - 15.0	6.2 - 15.0	
	Total Input	Rated	kW	0.751	1.175	1.523	1.716	2.084	2.084	3.399	3.399	3.746	3.746	
	EER			4.79	4.25	4.00	4.14	4.56	4.56	3.68	3.68	3.58	3.58	
		EEL Rank		-	-	-	-	-	-	-	-	-	-	
		Design Load	kW	3.6	5.0	6.1	7.1	9.5	9.5	-	-	-	-	
		Annual Electricity Consumption*2	kWh/a	172	234	299	332	435	446	-	-	-	-	
		SEER*4		7.3	7.4	7.1	7.4	7.6	7.4	-	-	-	-	
		Energy Efficiency Class		A++	A++	A++	A++	A++	A++	-	-	-	-	
	Heating (Average Season)	Capacity	Rated	kW	4.1	6.0	7.0	8.0	11.2	11.2	14.0	14.0	16.0	16.0
		Min - Max	kW	1.6 - 5.2	2.5 - 7.3	2.8 - 8.2	3.5 - 10.2	4.5 - 14.0	4.5 - 14.0	5.0 - 16.0	5.0 - 16.0	5.7 - 18.0	5.7 - 18.0	
Total Input		Rated	kW	0.890	1.581	1.863	2.014	2.685	2.685	3.773	3.773	4.365	4.365	
COP				4.61	3.79	3.76	3.97	4.17	4.17	3.71	3.71	3.67	3.67	
		EEL Rank		-	-	-	-	-	-	-	-	-	-	
		Design Load	kW	2.5	3.8	4.4	4.7	7.8	7.8	-	-	-	-	
		Declared Capacity	at reference design temperature	kW	2.5 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	-
			at bivalent temperature	kW	2.5 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.7 (-10°C)	7.8 (-10°C)	7.8 (-10°C)	-	-	-	-
			at operation limit temperature	kW	2.1 (-11°C)	3.7 (-11°C)	2.8 (-20°C)	3.5 (-20°C)	5.8 (-20°C)	5.8 (-20°C)	-	-	-	-
		Back Up Heating Capacity	kW	0	0	0	0	0	0	-	-	-	-	
	Annual Electricity Consumption*2	kWh/a	797	1184	1420	1432	2521	2521	-	-	-	-		
	SCOP*4		4.3	4.4	4.3	4.6	4.3	4.3	-	-	-	-		
	Energy Efficiency Class		A+	A+	A+	A++	A+	A+	-	-	-	-		
Operating Current (max)			A	13.2	13.2	19.2	19.3	27.0	8.5	27.2	10.2	28.7	13.7	
Indoor Unit	Input	Rated	kW	0.03	0.03	0.03	0.04	0.07	0.07	0.10	0.10	0.10	0.10	
	Operating Current (max)		A	0.20	0.22	0.24	0.27	0.46	0.46	0.66	0.66	0.66	0.66	
	Dimensions <Panel>	H x W x D	mm	258 - 840 - 840	<40 - 950 - 950>					298 - 840 - 840	<40 - 950 - 950>			
	Weight <Panel>	kg	19 <5>	19 <5>	21 <5>	21 <5>	24 <5>	24 <5>	26 <5>	26 <5>	26 <5>	26 <5>	26 <5>	
	Air Volume [Lo-Mi2-Mi1-Hi]	m³/min	11 - 13 - 15 - 16	12 - 14 - 16 - 18	12 - 14 - 16 - 18	14 - 17 - 19 - 21	19 - 23 - 26 - 29	19 - 23 - 26 - 29	21 - 25 - 28 - 31	21 - 25 - 28 - 31	24 - 26 - 29 - 32	24 - 26 - 29 - 32	24 - 26 - 29 - 32	
	Sound Level (SPL) [Lo-Mi2-Mi1-Hi]	dB(A)	26 - 28 - 29 - 31	27 - 29 - 31 - 32	27 - 29 - 31 - 32	28 - 30 - 32 - 34	31 - 34 - 37 - 40	31 - 34 - 37 - 40	33 - 37 - 41 - 44	33 - 37 - 41 - 44	36 - 39 - 42 - 44	36 - 39 - 42 - 44	36 - 39 - 42 - 44	
	Sound Level (PWL)	dB(A)	51	54	54	56	61	61	65	65	65	65	65	
	Dimensions	H x W x D	mm	630 - 809 - 300	943 - 950 - 330 (+25)				1,338 - 1,050 - 330 (+40)					
	Weight	kg	46	46	70	70	116	123	116	125	118	131		
	Outdoor Unit	Air Volume	m³/min	45	45	55	55	110	110	120	120	120	120	
Sound Level (SPL)		dB(A)	44	44	47	47	49	49	50	50	50	50		
Sound Level (PWL)		dB(A)	46	46	49	49	51	51	52	52	52	52		
Operating Current (max)		A	13.0	13.0	19.0	19.0	26.5	8.0	26.5	9.5	28.0	13.0		
Breaker Size		A	16	16	25	25	32	16	32	16	40	16		
Ext. Piping		Diameter	Liquid / Gas	mm	6.35 / 12.7	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	9.52 / 15.88	
		Max. Length	Out-In	m	50	50	55	55	100	100	100	100	100	
		Max. Height	Out-In	m	30	30	30	30	30	30	30	30	30	
Guaranteed Operating Range [Outdoor]		Cooling*3	°C	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	-15 ~ +46	
		Heating	°C	-11 ~ +21	-11 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	-20 ~ +21	

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of CO₂ over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional. The GWP of R32 is 675 in the IPCC 4th Assessment Report.

*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

*3 Optional air protection guide is required where ambient temperature is lower than -5°C.

*4 SEER and SCOP are based on 2009/125/EC:Energy-related Products Directive and Regulation(EU) No206/2012.