

No. OC240  
REVISED EDITION-B

# TECHNICAL & SERVICE MANUAL

## Series PLA Ceiling Cassettes R407C

### Indoor unit

#### [Model names]

PLA-P1.6KA

PLA-P2KA

PLA-P2.5KA

#### [Service Ref.]

**PLA-P1.6KA.UK**

**PLA-P1.6KA1.UK**

**PLA-P2KA.UK**

**PLA-P2KA1.UK**

**PLA-P2.5KA.UK**

**PLA-P2.5KA1.UK**

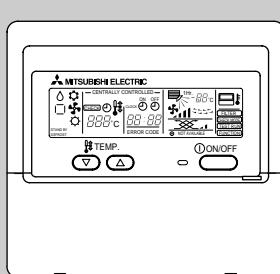
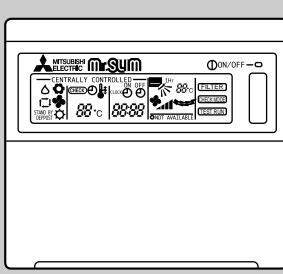
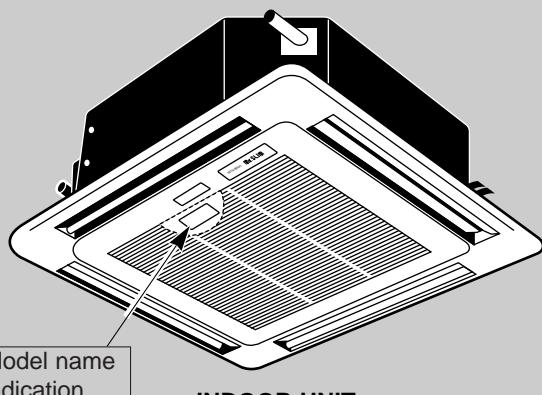
#### Revision:

- "12. PARTS LIST" has been modified.
- Program timer <PAC-YT32PTA> has been added in "13. OPTIONAL PARTS".

#### Note:

- Refer to the OCT03 REVISED EDITION-E as for control relation. This manual does not cover outdoor units. When servicing them, please refer to the service manual No.OC180 REVISED EDITION-A OC261 and this manual in a set.

- Please void OC240 REVISED EDITION-A.



REMOTE CONTROLLER

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**Mir.SLIM™**

**Revision:**

1. "12. PARTS LIST" has been modified on page 55.

Spare CONTROLLER BOARD for PLA-P1.6KA.UK, PLA-P1.6KA<sub>1</sub>.UK, PLA-P2KA.UK, PLA-P2KA<sub>1</sub>.UK, PLA-P3KA.UK and PLA-P3KA<sub>1</sub>.UK are unified.

Page	Revise point	Service Ref.	Old parts code	New part code
55	FUNCTIONAL PARTS No.13 CONTROLLER BOARD	PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK	S70 E16 310	S70 E20 310*
		PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK	S70 E17 310	
		PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK	S70 E18 310	

2. The description "The part name of symbol "I.B" is "SPCB" " is added on both pages of wiring diagram and part list.

## 1 TECHNICAL CHANGES

**PLA-P1.6KA.UK → PLA-P1.6KA<sub>1</sub>.UK    PLA-P2KA.UK → PLA-P2KA<sub>1</sub>.UK****PLA-P2.5KA.UK → PLA-P2.5KA<sub>1</sub>.UK**

- REMOTE CONTROLLER has changed.(PAR-S27A-E → PAR-20MAA-E)
- Outdoor units which are connected to PLA-P-KA.UK and PLA-P-KA<sub>1</sub>.UK have been added.

## 2 COMBINATION OF INDOOR AND OUTDOOR UNITS

Indoor unit	Outdoor unit	Outdoor unit									
		Heat pump type						Cooling only type			
		PUH-P				PU-P		1.6		2	2.5
		VGA	YGA	VGA	YGA	VGA <sub>1</sub>	YGA <sub>1</sub>	VGA	VGA	VGA	VGA <sub>1</sub>
		1.6	2	2.5	1.6	2	2.5	1.6V	1.6Y	2V	2Y
Heat pump without electric heater or Cooling only	PLA-P1.6KA.UK	○	○	—	—	—	—	○	—	—	—
	PLA-P2KA.UK	—	—	○	○	—	—	—	○	—	—
	PLA-P2.5KA.UK	—	—	—	—	○	○	—	—	—	○

Indoor unit	Outdoor unit	Outdoor unit											
		Heat pump type						Cooling only type					
		PUH-P•GAA.UK						PU-P•GAA.UK					
		1.6V	1.6Y	2V	2Y	2.5V	2.5Y	1.6V	1.6Y	2V	2Y	2.5V	2.5Y
Heat pump without electric heater or Cooling only	PLA-P1.6KA.UK	○	○	—	—	—	—	○	○	—	—	—	—
	PLA-P1.6KA <sub>1</sub> .UK	○	○	—	—	—	—	○	○	—	—	—	—
	PLA-P2KA.UK	—	—	○	○	—	—	—	—	○	○	—	—
	PLA-P2KA <sub>1</sub> .UK	—	—	○	○	—	—	—	—	○	○	—	—
	PLA-P2.5KA.UK	—	—	—	—	○	○	—	—	—	—	○	○
	PLA-P2.5KA <sub>1</sub> .UK	—	—	—	—	○	○	—	—	—	—	○	○

**Cautions for using with the outdoor unit which adopts R407C refrigerant.****- Do not use the existing refrigerant piping.**

-The old refrigerant and refrigerant oil in the existing piping contains a large amount of chlorine which may cause the refrigerant oil of the new unit to deteriorate.

**- Do not use copper pipes which are broken, deformed or discolour .**

In addition, be sure that the inner surfaces of the pipes are clean, free of hazardous sulphur and oxides, or have no dust / dirt, shaving particles, oils, moisture or any other contamination.

-If there is a large amount of residual oil (hydraulic oil, etc.) inside the piping and joints, deterioration of the refrigerant oil will result.

**- Store the piping to be used during installation indoors and keep both ends of the piping sealed until just before brazing. (Store elbows and other joints in a plastic bag.)**

-If dust, dirt, or water enters the refrigerant cycle, deterioration of the oil and compressor trouble may result.

**- Use ester oil, ether oil or alkyl benzene (small amount) as the refrigerant oil to coat flares and flange connections.**

-The refrigerant oil will degrade if it is mixed with a large amount of mineral oil.

**Use liquid refrigerant to fill the system.**

-If gas refrigerant is used to fill the system, the composition of the refrigerant in the cylinder will change and performance may drop.

**- Do not use a refrigerant other than R407C.**

-If another refrigerant (R22, etc.) is used, the chlorine in the refrigerant may cause the refrigerant oil to deteriorate.

**- Use a vacuum pump with a reverse flow check valve.**

-The vacuum pump oil may flow back into the refrigerant cycle and cause the refrigerant oil to deteriorate.

**- Do not use the following tools that are used with conventional refrigerant.**

**(Gauge manifold , charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, refrigerant recovery equipment)**

-If the conventional refrigerant and refrigerant oil are mixed in the R407C, the refrigerant may deteriorated.

-If water is mixed in the R407C, the refrigerant oil may deteriorate.

-Since R407C does not contain any chlorine, gas leak detectors for conventional refrigerant will not react to it.

**- Do not use a charging cylinder.**

-Using a charging cylinder may cause the refrigerant to deteriorate.

**- Be especially careful when managing the tools.**

-if dust, dirt, or water gets in the refrigerant cycle, the refrigerant may deteriorate.

**- Do not use the drier which is sold in the field.**

-The drier for R407C refrigerant is per-attached to outdoor unit refrigerant circuit.

-Some drier in the field are not in conformity with R407C refrigerant .

## [1] Service tools

Use the below service tools as exclusive tools for R407C refrigerant.

No.	Tool name	Specifications
①	Gauge manifold	·Only for R407C.
		·Use the existing fitting SPECIFICATIONS. (UNF7/16)
		·Use high-tension side pressure of 3.43MPa·G or over.
②	Charge hose	·Only for R407C.
		·Use pressure performance of 5.10MPa·G or over.
③	Electronic scale	
④	Gas leak detector	·Use the detector for R407C.
⑤	Adapter for reverse flow check.	·Attach on vacuum pump.
⑥	Refrigerant charge base.	
⑦	Refrigerant cylinder.	·For R407C      ·Top of cylinder (Brown)
		·Cylinder with syphon
⑧	Refrigerant recovery equipment.	

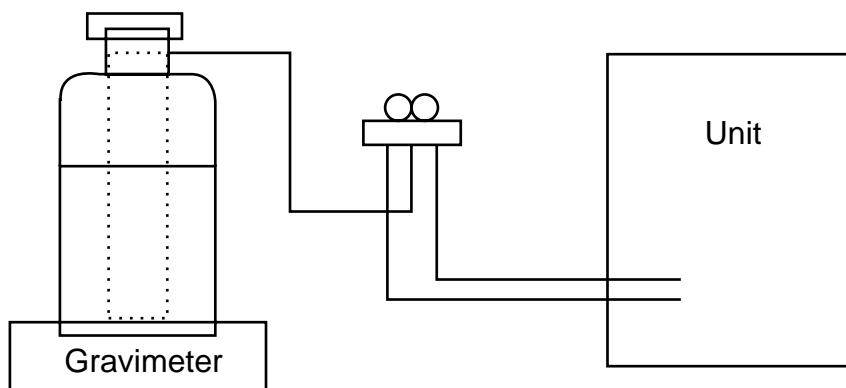
## [2] Notice on repair service

- After recovering the all refrigerant in the unit, proceed to working.
- Do not release refrigerant in the air.
- After completing the repair service, recharge the cycle with the specified amount of liquid refrigerant.

## [3] Refrigerant recharging

### (1) Refrigerant recharging process

- ① Direct charging from the cylinder.
  - R407C cylinder are available on the market has a syphon pipe.
  - Leave the syphon pipe cylinder standing and recharge it.  
(By liquid refrigerant)

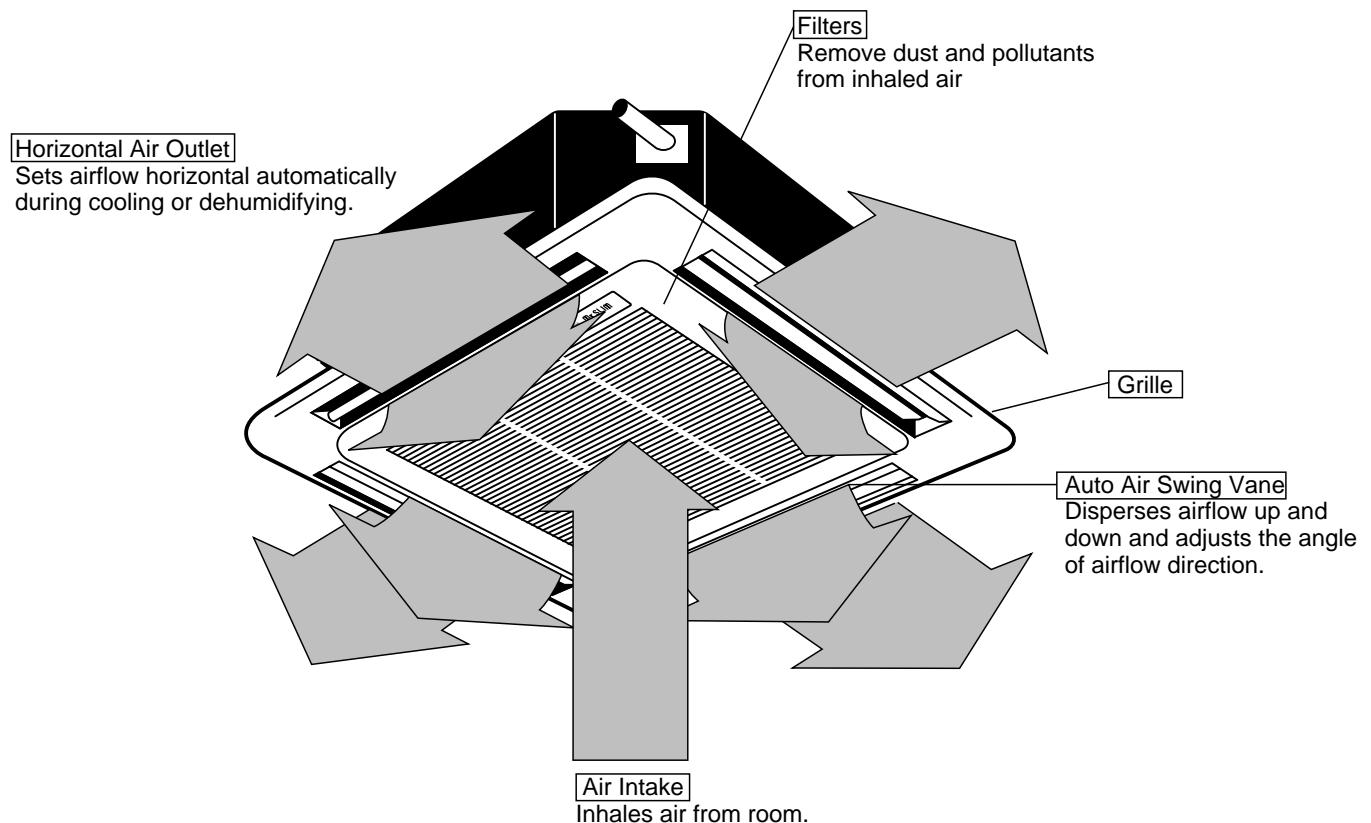


### (2) Recharge in refrigerant leakage case

- After recovering the all refrigerant in the unit, proceed to working.
- Do not release the refrigerant in the air.
- After completing the repair service, recharge the cycle with the specified amount of liquid refrigerant.

### ● Indoor Unit

PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK  
PLA-P1.6KA<sub>1</sub>.UK, PLA-P2KA<sub>1</sub>.UK, PLA-P2.5KA<sub>1</sub>.UK

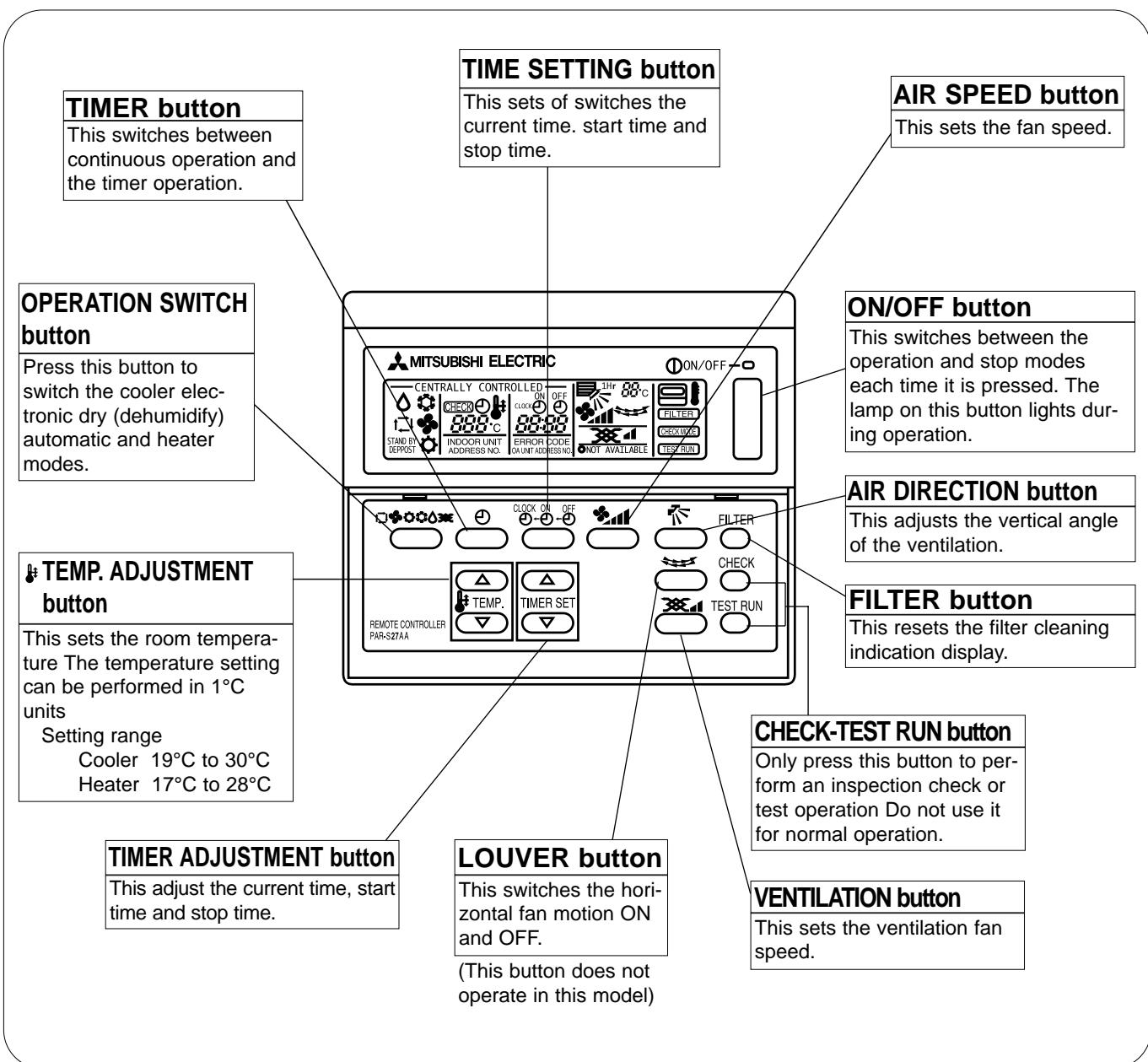


## ● Remote controller

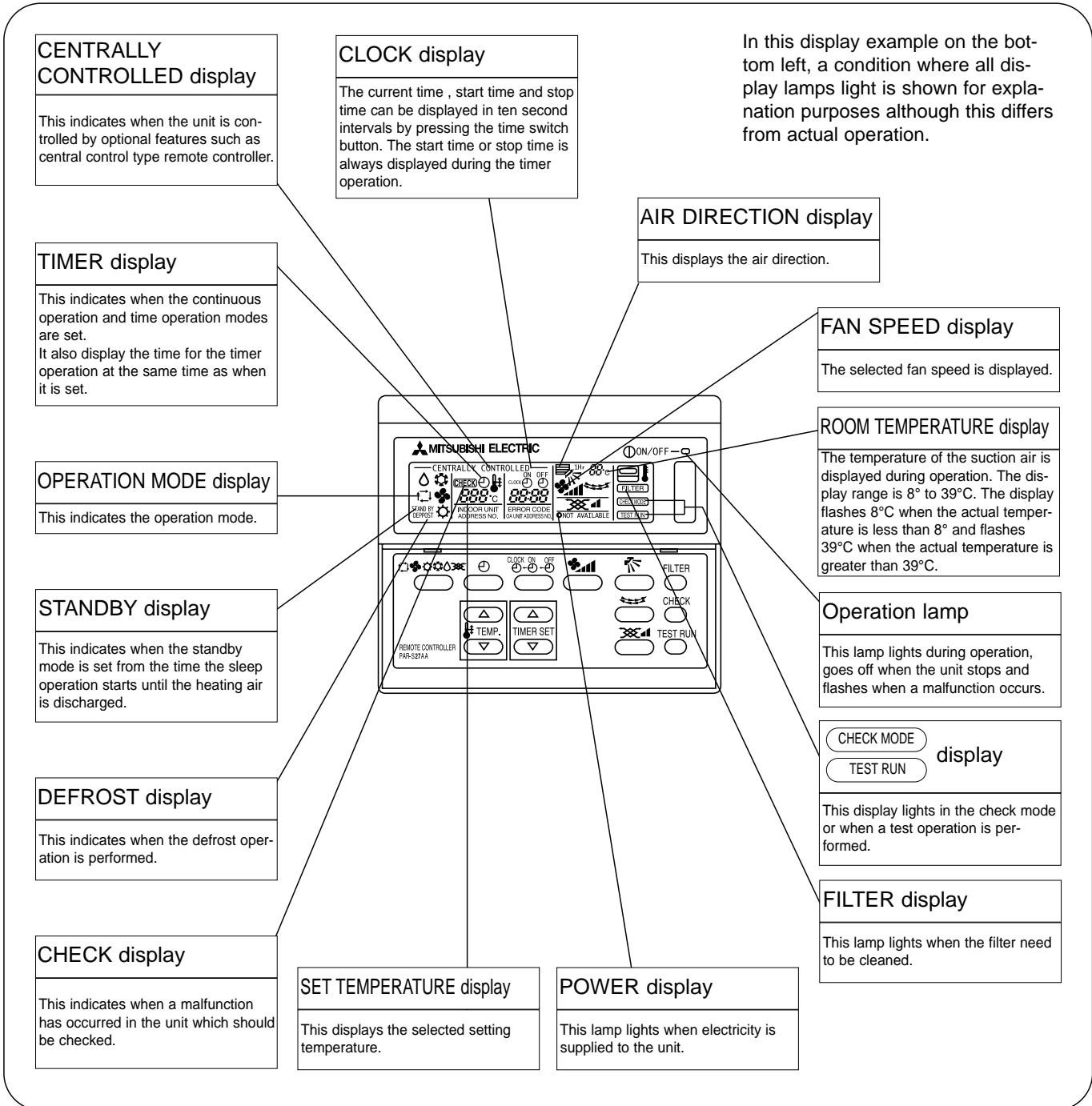
- Once the controls are set, the same operation mode can be repeated by simply pressing the ON/OFF button.

## PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK

### ● Operation buttons [ PAR-S27A-E ]



## ● Display

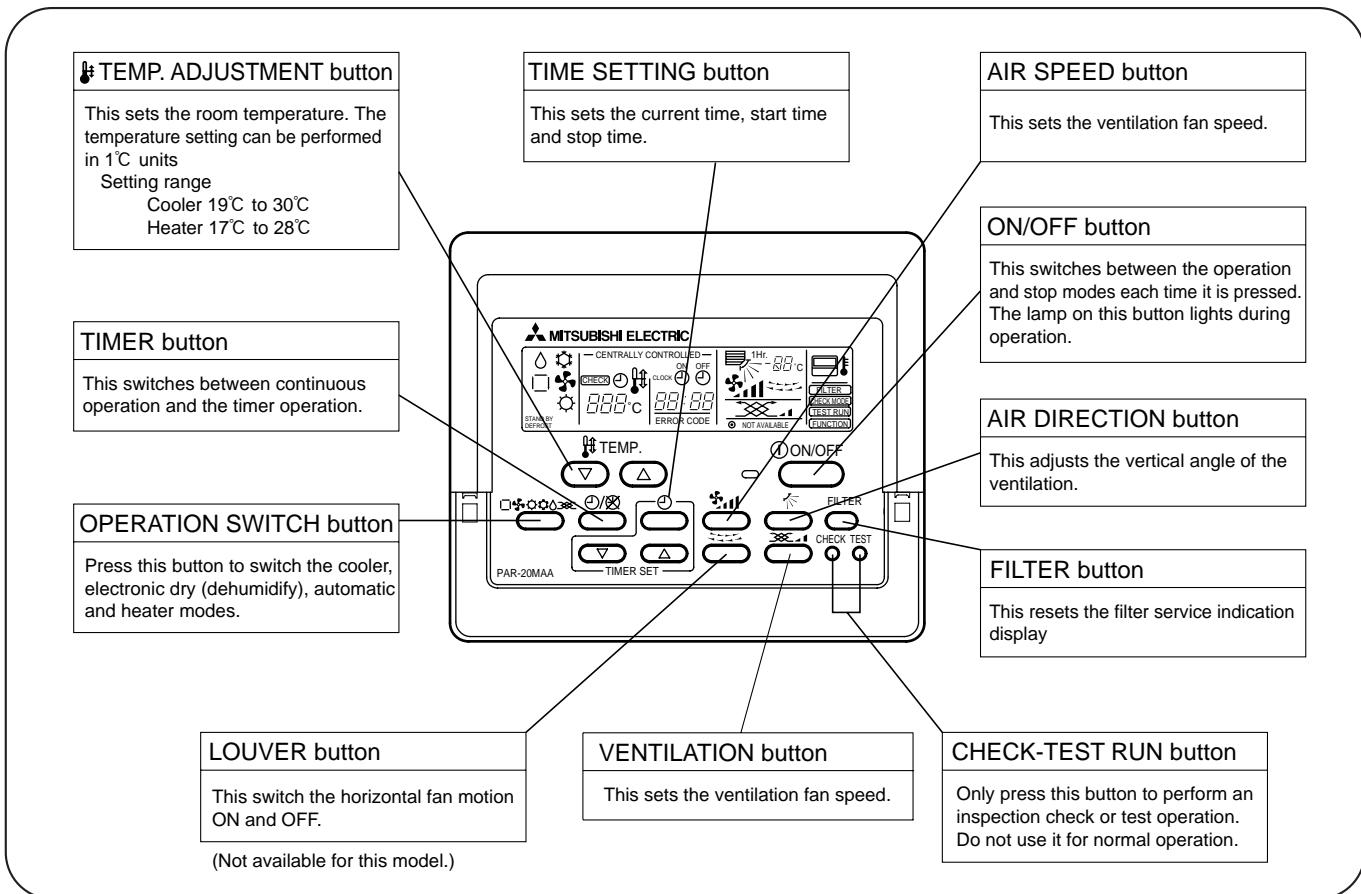


## **Caution**

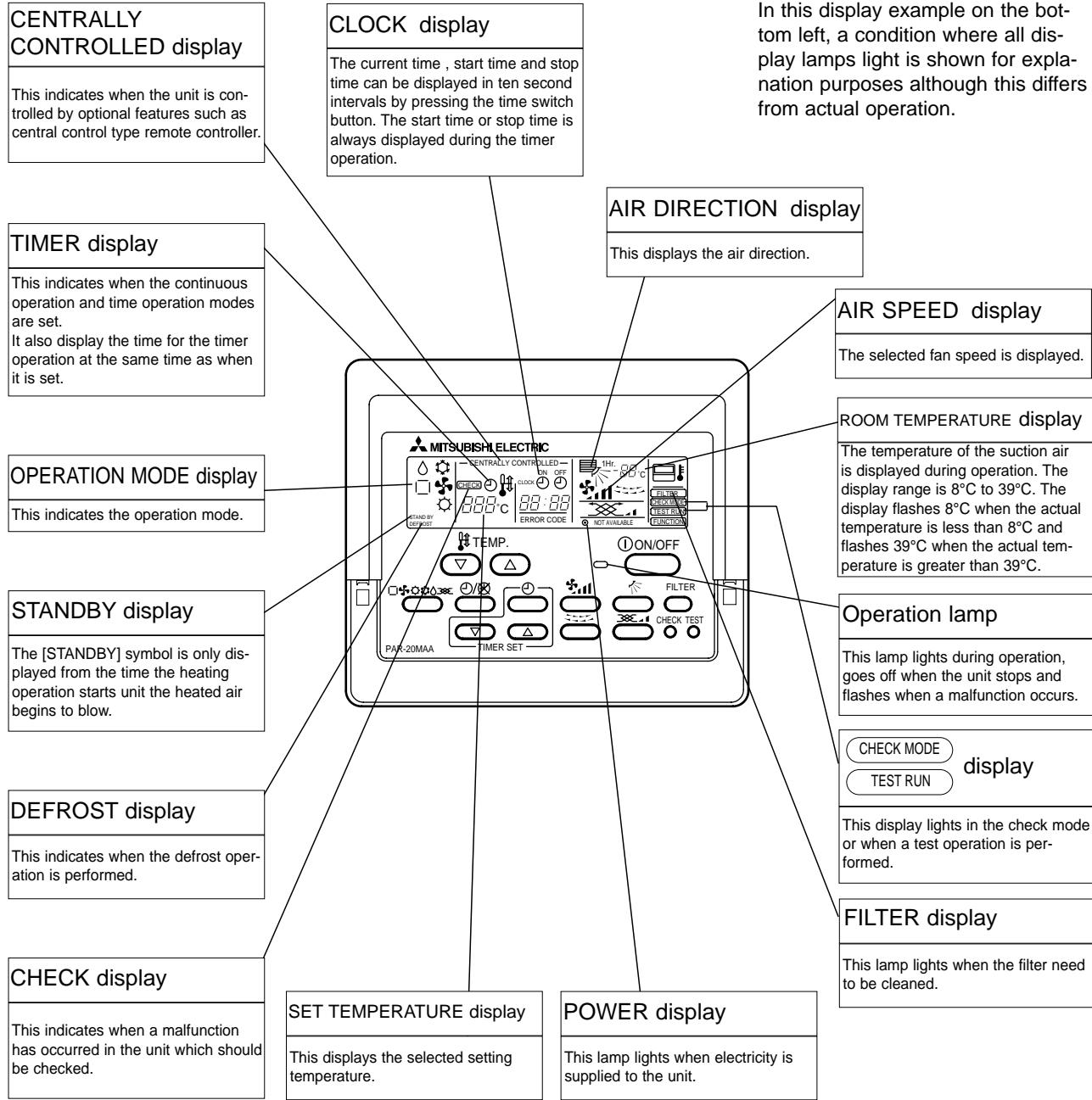
- Only the Power display lights when the unit is stopped and power supplied to the unit.
  - When power is turned ON for the first time the (CENTRAL CTRL) display appears to go off momentarily but this is not a malfunction.
  - “NOT AVAILABLE” is displayed when the Air speed button are pressed.This indicates that this room unit is not equipped with the fan direction adjustment function and the louver function.
  - When power is turned ON for the first time, it is normal that “H0” is displayed on the room temperature indication (For max. 2minutes). Please wait until this “H0” indication disappear then start the operation.

## PLA-P1.6KA<sub>1</sub>.UK, PLA-P2KA<sub>1</sub>.UK, PLA-P2.5KA<sub>1</sub>.UK

### ● Operation buttons [PAR-20MAA-E ]



## ● Display



### Caution

- Only the Power display lights when the unit is stopped and power supplied to the unit.
- “NOT AVAILABLE” is displayed when the Air speed button are pressed. This indicates that this room unit is not equipped with the fan direction adjustment function and the louver function.
- When power is turned ON for the first time, it is normal that “H0” is displayed on the room temperature indication (For max. 2minutes). Please wait until this “H0” indication disappears then start the operation.

# SPECIFICATIONS

## 1. Heat pump type

Item		Service Ref.		PLA-P1.6KA.UK			
Function		Cooling		Heating			
Capacity		Btu/h	15,000	17,100			
Total input		W	4,400	5,000			
		kW	1.86	1.93			
INDOOR UNIT	Service Ref.		PLA-P1.6KA.UK				
	Power supply(phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V				
	Input	kW	0.15	0.10			
	Running current	A	0.64	0.45			
	Starting current	A	0.70	0.50			
	External finish		Galvanized sheets with gray heat insulation				
	Heat exchanger		Plate fin coil				
	Fan	Fan(drive) x No.	Turbo fan (direct) x 1				
	Fan motor output	kW	0.030				
	Airflow(Low-Medium2-Medium1-High)	m³/min(CFM)	13-14-15-16(459-494-530-565)				
	External static pressure	Pa(mmAq)	0(direct blow)				
Operation control & Thermostat		Remote controller & built-in					
Noise level(Low-Medium2-Medium1-High)		dB	32-34-35.5-37				
Unit drain pipe I.D.		mm(in.)	32(1-1/4)				
OUTDOOR UNIT	Dimensions	W	mm(in.)	UNIT : 660(26) PANEL : 760(30)			
	D	mm(in.)	mm(in.)	UNIT : 660(26) PANEL : 760(30)			
	H	mm(in.)	mm(in.)	UNIT : 253(10) PANEL : 30(1-3/16)			
	Weight		kg(lbs)	UNIT : 19(42) PANEL : 3.7(8)			
	Service Ref.		PUH-P1.6VGA / PUH-P1.6YGA				
	Power supply (phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V / 3 phases, 50Hz, 380-400-415V(4wires)				
	Running current	A	7.66 / 2.67	8.19 / 2.86			
	Starting current	A	36 / 20				
	External finish		Munsell 5Y 8/1				
	Refrigerant control		Linear Expansion Valve				
REFRIGERANT PIPING	Compressor		Hermetic				
	Model		RE277VHSM / RE277YFKM				
	Motor output	kW	1.3				
	Starter type	Line start					
	Protection devices		Inner thermostat, HP switch, Discharge thermo./ Thermal relay, Discharge thermo., HP switch, Anti-phase protector.				
	Crankcase heater	W	30				
	Heat exchanger		Plate fin coil				
	Fan	Fan(drive) x No.	Propeller (direct) x 1				
	Fan motor output	kW	0.070				
	Airflow	m³/min(CFM)	45(1,590)				
Defrost method		Reverse cycle					
Noise level		Cooling	dB	46			
		Heating	dB	48			
Dimensions		W	mm(in.)	900(35-7/16)			
		D	mm(in.)	330+20(13+3/4)			
		H	mm(in.)	650 (25-5/8)			
Weight		kg(lbs)			55(121)		
Refrigerant		R407C					
Charge		2.6(5.7)					
Oil (Model)		0.57 (Ester)MEL56					
Pipe size O.D.		Liquid	mm(in.)	9.52 (3/8)			
		Gas	mm(in.)	15.88 (5/8)			
Connection method		Indoor side	Flared				
		Outdoor side	Flared				
Between the indoor & outdoor unit		Height difference	Max. 40m				
		Piping length	Max. 40m				

Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F)   Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
 Heating : Indoor : D.B. 20°C(68°F)                      Outdoor : D.B. 7°C(45°F) W.B. 6°C (43°F)

Refrigerant piping length (one way) : 5m (16ft)

2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C
Heating	Upper limit	D.B. 28°C	D.B. 24°C W.B. 18°C
	Lower limit	D.B. 17°C	D.B. -11°C W.B. -12°C

3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz  
 Outdoor Unit Single phase 240V 50Hz / 3 phases 415V 50Hz

Item		Service Ref.		PLA-P2KA.UK	
Function		Cooling		Heating	
Capacity	Btu/h	18,400		21,300	
	W	5,400		6,250	
Total input		kW	2.62	2.67	
INDOOR UNIT	Service Ref.		PLA-P2KA.UK		
	Power supply(phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V		
	Input	kW	0.14	0.10	
	Running current	A	0.65	0.45	
	Starting current	A	0.72	0.50	
	External finish		Galvanized sheets with gray heat insulation		
	Heat exchanger		Plate fin coil		
	Fan	Fan(drive) x No.	Turbo fan (direct) x 1		
	Fan motor output	kW	0.030		
	Airflow(Low-Medium2-Medium1-High)	m³/min(CFM)	13-14-15-16(459-494-530-565)		
OUTDOOR UNIT	External static pressure	Pa(mmAq)	0(direct blow)		
	Operation control & Thermostat		Remote controller & built-in		
	Noise level(Low-Medium2-Medium1-High)		32-34-35.5-37		
	Unit drain pipe I.D.		mm(in.)		
	Dimensions	W	mm(in.)		
		D	mm(in.)		
		H	mm(in.)		
	Weight		kg(lbs)	UNIT : 19(42)	PANEL : 3.7(8)
	Service Ref.		PUH-P2VGA / PUH-P2YGA		
	Power supply (phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V / 3 phases, 50Hz, 380-400-415V(4wires)		
REFRIGERANT PIPING	Running current	A	11.11 / 3.88	11.51 / 4.02	
	Starting current	A	74 / 30		
	External finish		Munsell 5Y 8/1		
	Refrigerant control		Linear Expansion Valve		
	Compressor		Hermetic		
	Model		NE38VMJM / NE38YEJM		
	Motor output	kW	1.7		
	Starter type		Line start		
	Protection devices		Inner thermostat, HP switch, Discharge thermo./ Thermal relay, Discharge thermo., HP switch, Anti-phase protector.		
	Crankcase heater	W	38		
Heat exchanger		Plate fin coil			
OUTDOOR UNIT	Fan	Fan(drive) x No.	Propeller (direct) x 1		
	Fan motor output	kW	0.070		
	Airflow	m³/min(CFM)	55(1,940)		
	Defrost method		Reverse cycle		
	Noise level	Cooling	dB	48	
		Heating	dB	49	
	Dimensions	W	mm(in.)	900(35-7/16)	
		D	mm(in.)	330+20(13+3/4)	
		H	mm(in.)	855 (33-5/8)	
	Weight		kg(lbs)	71(157)	
REFRIGERANT PIPING	Refrigerant		R407C		
	Charge		3.1(6.8)		
	Oil (Model)		L	1.2 (Ester)MEL56	
	Pipe size O.D.	Liquid	mm(in.)	9.52 (3/8)	
		Gas	mm(in.)	15.88 (5/8)	
	Connection method		Indoor side	Flared	
			Outdoor side	Flared	
	Between the indoor & outdoor unit		Height difference	Max. 40m	
			Piping length	Max. 40m	

Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F)    Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
 Heating : Indoor : D.B. 20°C(68°F)    Outdoor : D.B. 7°C(45°F) W.B. 6°C (43°F)

Refrigerant piping length (one way) : 5m (16ft)

2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C
Heating	Upper limit	D.B. 28°C	D.B. 24°C W.B. 18°C
	Lower limit	D.B. 17°C	D.B. -11°C W.B. -12°C

3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz  
 Outdoor Unit Single phase 240V 50Hz / 3 phases 415V 50Hz



Item		Service Ref.		PLA-P2.5KA.UK			
Function				Cooling			
Capacity	Btu/h			21,500	Heating		
	W			6,300	25,200		
Total input		kW		2.77	7,400		
					2.68		
INDOOR UNIT	Service Ref.		PLA-P2.5KA.UK				
	Power supply(phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V				
	Input	kW	0.14	0.10			
	Running current	A	0.61	0.45			
	Starting current	A	0.67	0.50			
	External finish		Galvanized sheets with gray heat insulation				
	Heat exchanger		Plate fin coil				
	Fan	Fan(drive) x No.	Turbo fan (direct) x 1				
	Fan motor output	kW	0.030				
	Airflow(Low-Medium2-Medium1-High)	m³/min(CFM)	14-15-16-17 (494-530-565-600)				
	External static pressure	Pa(mmAq)	0(direct blow)				
	Operation control & Thermostat		Remote controller & built-in				
	Noise level(Low-Medium2-Medium1-High)	dB	35-36.5-38-39.5				
	Unit drain pipe I.D.	mm(in.)	32(1-1/4)				
OUTDOOR UNIT	Dimensions	W	mm(in.)	UNIT : 660(26)	PANEL : 760(30)		
		D	mm(in.)	UNIT : 660(26)	PANEL : 760(30)		
		H	mm(in.)	UNIT : 253(10)	PANEL : 30(1-3/16)		
	Weight	kg(lbs)	UNIT : 20(44) PANEL : 3.7(8)				
	Service Ref.		PUH-P2.5VGA <sub>1</sub> / PUH-P2.5YGA <sub>1</sub>				
	Power supply (phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V / 3 phases, 50Hz, 380-400-415V(4wires)				
	Running current	A	11.78 / 4.11	11.55 / 4.03			
	Starting current	A	77 / 32				
	External finish		Munsell 5Y 8/1				
	Refrigerant control		Linear Expansion Valve				
	Compressor		Hermetic				
	Model		NE41VMJM / NE41YEJM				
	Motor output	kW	1.9				
	Starter type		Line start				
	Protection devices		Internal thermostat, HP switch, Discharge thermo./ Thermal relay, Discharge thermo, HP switch, Anti-phase protector.				
	Crankcase heater	W	38				
REFRIGERANT PIPING	Heat exchanger		Plate fin coil				
	Fan	Fan(drive) x No.	Propeller (direct) x 1				
	Fan motor output	kW	0.070				
	Airflow	m³/min(CFM)	50(1,770)				
	Defrost method		Reverse cycle				
	Noise level	Cooling	dB	48			
		Heating	dB	50			
	Dimensions	W	mm(in.)	900(35-7/16)			
		D	mm(in.)	330+20(13+3/4)			
		H	mm(in.)	855 (33-5/8)			
	Weight	kg(lbs)	82(181)				
	Refrigerant		R407C				
	Charge	kg(lbs)	3.3(7.3)				
	Oil (Model)	L	1.2 (Ester)MEL56				
	Pipe size O.D.	Liquid	mm(in.)	9.52 (3/8)			
		Gas	mm(in.)	15.88 (5/8)			
	Connection method	Indoor side		Flared			
		Outdoor side		Flared			
	Between the indoor & outdoor unit	Height difference		Max. 50m			
		Piping length		Max. 50m			

#### Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F)   Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
 Heating : Indoor : D.B. 20°C(68°F)   Outdoor : D.B. 7°C(45°F) W.B. 6°C (43°F)  
 Refrigerant piping length (one way) : 5m (16ft)

#### 2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C
Heating	Upper limit	D.B. 28°C	D.B. 24°C W.B. 18°C
	Lower limit	D.B. 17°C	D.B. -11°C W.B. -12°C

#### 3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz  
 Outdoor Unit Single phase 240V 50Hz / 3 phases 415V 50Hz

Service Ref.				PLA-P1.6KA.UK / PLA-P1.6KA1.UK			
Item							
Function			Cooling		Heating		
Capacity	Btu/h		15,000		17,100		
		W	4,400		5,000		
Total input	kW		1.82		1.89		
INDOOR UNIT	Service Ref.	PLA-P1.6KA.UK / PLA-P1.6KA1.UK					
	Power supply(phase, cycle, voltage)		Single phase, 50Hz, 220-230-240V				
	Input	kW	0.15	0.10			
	Running current	A	0.64	0.45			
	Starting current	A	0.70	0.50			
	External finish		Galvanized sheets with gray heat insulation				
	Heat exchanger		Plate fin coil				
	Fan	Fan(drive) x No.		Turbo fan (direct) x 1			
	Fan motor output	kW	0.030				
	Airflow(Low-Medium2-Medium1-High)	m³/min(CFM)	13-14-15-16 (459-494-530-565)				
	External static pressure	Pa(mmAq)	0(direct blow)				
OUTDOOR UNIT	Operation control & Thermostat		Remote controller & built-in				
	Noise level(Low-Medium2-Medium1-High)		32-34-35.5-37				
	Unit drain pipe I.D.		32(1-1/4)				
	Dimensions	W	mm(in.)	UNIT : 660(26) PANEL : 760(30)			
		D	mm(in.)	UNIT : 660(26) PANEL : 760(30)			
		H	mm(in.)	UNIT : 253(10) PANEL : 30(1-3/16)			
	Weight	kg(lbs)		UNIT : 19(42) PANEL : 3.7(8)			
	Service Ref.	PUH-P1.6VGAA.UK / PUH-P1.6YGAA.UK					
	Power supply (phase, cycle, voltage)		Single phase, 50Hz, 220-230-240V / 3phases,50Hz,380-400-415V(4wies)				
	Running current	A	7.36 / 2.49	7.59 / 2.56			
REFRIGERANT PIPING	Starting current	A	36 / 20				
	External finish		Munsell 5Y 7/1				
	Refrigerant control		Linear Expansion Valve				
	Compressor		Hermetic				
	Model	RE277VHSMT / RE277YFKM					
	Motor output	kW	1.3				
	Starter type	Line start					
	Protection devices		Internal thermostat, HP switch, Discharge thermo./ Thermal relay, HP switch, Discharge thermo.				
	Crankcase heater	W	30				
	Heat exchanger		Plate fin coil				
REFRIGERANT PIPING	Fan	Fan(drive) x No.		Propeller (direct) x 1			
	Fan motor output	kW	0.070				
	Airflow	m³/min(CFM)	45(1,590)				
	Defrost method		Reverse cycle				
	Noise level	Cooling	dB	47			
		Heating	dB	49			
	Dimensions	W	mm(in.)	900(35-7/16)			
		D	mm(in.)	330+20(13+3/4)			
		H	mm(in.)	650(25-5/8)			
	Weight	kg(lbs)		55(121)			
REFRIGERANT PIPING	Refrigerant		R407C				
	Charge	kg(lbs)		2.5(5.5)			
	Oil (Model)	L		0.57(Ester)MEL56			
	Pipe size O.D.	Liquid	mm(in.)	9.52 (3/8)			
		Gas	mm(in.)	15.88 (5/8)			
	Connection method		Indoor side	Flared			
			Outdoor side	Flared			
	Between the indoor & outdoor unit		Height difference	Max. 40m			
			Piping length	Max. 40m			

Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F)      Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
 Heating : Indoor : D.B. 20°C(68°F)      Outdoor : D.B. 7°C(45°F) W.B. 6°C (43°F)  
 Refrigerant piping length (one way) : 5m (16ft)

2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C
Heating	Upper limit	D.B. 28°C	D.B. 24°C W.B. 18°C
	Lower limit	D.B. 17°C	D.B. -11°C W.B. -12°C

3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz  
 Outdoor Unit Single phase 240V 50Hz / 3phases 415V 50Hz



Item		Service Ref.		PLA-P2KA.UK / PLA-P2KA1.UK			
Function				Cooling			
Capacity	Btu/h			18,000	Heating		
	W			5,300	20,300		
Total input	kW			2.44	5,950		
					2.40		
<b>Service Ref.</b>		<b>PLA-P2KA.UK / PLA-P2KA1.UK</b>					
Power supply(phase, cycle, voltage)		Single phase, 50Hz, 220-230-240V					
Input	kW			0.14	0.10		
Running current	A			0.65	0.45		
Starting current	A			0.72	0.50		
External finish	Galvanized sheets with gray heat insulation						
Heat exchanger	Plate fin coil						
Fan	Fan(drive) x No.			Turbo fan (direct) x 1			
	Fan motor output	kW		0.030			
	Airflow(Low-Medium2-Medium1-High)	m³/min(CFM)		13-14-15-16(459-494-530-565)			
	External static pressure	Pa(mmAq)		0(direct blow)			
Operation control & Thermostat			Remote controller & built-in				
Noise level(Low-Medium2-Medium1-High)	dB			32-34-35.5-37			
Unit drain pipe I.D.	mm(in.)			32(1-1/4)			
Dimensions	W	mm(in.)		UNIT : 660(26) PANEL : 760(30)			
	D	mm(in.)		UNIT : 660(26) PANEL : 760(30)			
	H	mm(in.)		UNIT : 253(10) PANEL : 30(1-3/16)			
Weight	kg(lbs)			UNIT : 19(42) PANEL : 3.7(8)			
<b>Service Ref.</b>		<b>PUH-P2VGAA.UK / PUH-P2YGAA.UK</b>					
Power supply (phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V / 3 phases, 50Hz, 380-400-415V(4wires)					
Running current	A			10.26 / 3.70	10.57 / 3.82		
Starting current	A			62 / 31			
External finish	Munsell 5Y 7/1						
Refrigerant control	Linear Expansion Valve						
Compressor	Hermetic						
Model	NE36VMJMT / NE36YEKMT						
Motor output	kW			1.6			
Starter type	Line start						
Protection devices	Inner thermostat, HP switch, Discharge thermo./ Thermal relay, HP switch, Discharge thermo						
Crankcase heater	W			38			
Heat exchanger	Plate fin coil						
Fan	Fan(drive) x No.	Propeller (direct) x 1					
	Fan motor output	kW		0.070			
	Airflow	m³/min(CFM)		55(1,940)			
Defrost method	Reverse cycle						
Noise level	Cooling	dB		48			
	Heating	dB		49			
Dimensions	W	mm(in.)		900(35-7/16)			
	D	mm(in.)		330+20(13+3/4)			
	H	mm(in.)		855 (33-5/8)			
Weight	kg(lbs)			71(157)			
<b>G</b> Refrigerant		R407C					
Charge	kg(lbs)			2.6(5.7)			
Oil (Model)	L			1.2 (Ester)MEL56			
Pipe size O.D.	Liquid	mm(in.)		9.52 (3/8)			
	Gas	mm(in.)		15.88 (5/8)			
Connection method	Indoor side			Flared			
	Outdoor side			Flared			
Between the indoor & outdoor unit	Height difference			Max. 40m			
	Piping length			Max. 40m			

Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F) Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
 Heating : Indoor : D.B. 20°C(68°F) Outdoor : D.B. 7°C(45°F) W.B. 6°C (43°F)  
 Refrigerant piping length (one way) : 5m (16ft)

2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C
Heating	Upper limit	D.B. 28°C	D.B. 24°C W.B. 18°C
	Lower limit	D.B. 17°C	D.B. -11°C W.B. -12°C

3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz  
 Outdoor Unit Single phase 240V 50Hz / 3 phases 415V 50Hz

Item		Service Ref.		PLA-P2.5KA.UK / PLA-P2.5KA1.UK	
Function				Cooling	Heating
Capacity	Btu/h			21,500	25,200
	W			6,300	7,400
Total input	kW			2.63	2.57
<b>Service Ref.</b>		<b>PLA-P2.5KA.UK / PLA-P2.5KA1.UK</b>			
Power supply(phase, cycle, voltage)		Single phase, 50Hz, 220-230-240V			
INDOOR UNIT	Input	kW		0.14	0.10
	Running current	A		0.61	0.45
	Starting current	A		0.67	0.50
External finish		Galvanized sheets with gray heat insulation			
Heat exchanger		Plate fin coil			
Fan	Fan(drive) x No.			Turbo fan (direct) x 1	
	Fan motor output	kW		0.030	
	Airflow(Low-Medium2-Medium1-High)	m³/min(CFM)		14-15-16-17 (494-530-565-600)	
	External static pressure	Pa(mmAq)		0(direct blow)	
Operation control & Thermostat		Remote controller & built-in			
Noise level(Low-Medium2-Medium1-High)		dB		35-36.5-38-39.5	
Unit drain pipe I.D.		mm(in.)		32(1-1/4)	
Dimensions	W	mm(in.)		UNIT : 660(26) PANEL : 760(30)	
	D	mm(in.)		UNIT : 660(26) PANEL : 760(30)	
	H	mm(in.)		UNIT : 253(10) PANEL : 30(1-3/16)	
Weight		kg(lbs)		UNIT : 20(44) PANEL : 3.7(8)	
<b>Service Ref.</b>		<b>PUH-P2.5VGAA.UK / PUH-P2.5YGAA.UK</b>			
Power supply (phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V / 3 phases, 50Hz, 380-400-415V(4wires)			
Running current		A	11.90 / 4.48	11.51 / 4.34	
Starting current		A		77 / 35	
External finish		Munsell 5Y 7/1			
Refrigerant control		Linear Expansion Valve			
Compressor		Hermetic			
Model		NE41VMJMT / NE41YEKMT			
Motor output		kW		1.9	
Starter type		Line start			
Protection devices		Internal thermostat, HP switch, Discharge thermo./ Thermal relay, HP switch, Discharge thermo			
Crankcase heater		W		38	
Heat exchanger		Plate fin coil			
OUTDOOR UNIT	Fan	Fan(drive) x No.		Propeller (direct) x 1	
	Fan motor output	kW		0.070	
	Airflow	m³/min(CFM)		50(1,770)	
Defrost method		Reverse cycle			
Noise level	Cooling	dB		48	
	Heating	dB		50	
Dimensions	W	mm(in.)		900(35-7/16)	
	D	mm(in.)		330+20(13+3/4)	
	H	mm(in.)		855 (33-5/8)	
Weight		kg(lbs)		82(181)	
REFRIGERANT PIPING		R407C			
Refrigerant					
Charge		kg(lbs)		3.1(6.8)	
Oil (Model)		L		1.2 (Ester)MEL56	
Pipe size O.D.	Liquid	mm(in.)		9.52 (3/8)	
	Gas	mm(in.)		15.88 (5/8)	
Connection method	Indoor side			Flared	
	Outdoor side			Flared	
Between the indoor & outdoor unit	Height difference			Max. 50m	
	Piping length			Max. 50m	

Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F) Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
 Heating : Indoor : D.B. 20°C(68°F) Outdoor : D.B. 7°C(45°F) W.B. 6°C (43°F)

Refrigerant piping length (one way) : 5m (16ft)

2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C
Heating	Upper limit	D.B. 28°C	D.B. 24°C W.B. 18°C
	Lower limit	D.B. 17°C	D.B. -11°C W.B. -12°C

3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz

Outdoor Unit Single phase 240V 50Hz / 3 phases 415V 50Hz

## 2. Cooling only type

Item	Service Ref.		PLA-P1.6KA.UK	PLA-P2KA.UK
Function			Cooling	Cooling
Capacity	Btu/h		15,000	18,400
	W		4,400	5,400
Total input	kW		1.86	2.62
<b>Service Ref.</b>	<b>PLA-P1.6KA.UK</b>		<b>PLA-P2KA.UK</b>	
Power supply(phase, cycle,voltage)			Single phase, 50Hz, 220-230-240V	
Input	kW	0.15	0.14	
Running current	A	0.64	0.65	
Starting current	A	0.70	0.72	
External finish	Galvanized sheets with gray heat insulation			
Heat exchanger	Plate fin coil			
Fan	Fan(drive) x No.	Turbo fan (direct) x 1		
	Fan motor output	kW	0.030	
	Airflow(Low-Medium2-Medium1-High)	m³/min(CFM)	13-14-15-16(459-494-530-565)	
	External static pressure	Pa(mmAq)	0(direct blow)	
Operation control & Thermostat	Remote controller & built-in			
Noise level(Low-Medium2-Medium1-High)	dB	32-34-35.5-37		
Unit drain pipe I.D.	mm(in.)	32(1-1/4)		
Dimensions	W	mm(in.)	UNIT : 660(26) PANEL : 760(30)	
	D	mm(in.)	UNIT : 660(26) PANEL : 760(30)	
	H	mm(in.)	UNIT : 253(10) PANEL : 30(1-3/16)	
Weight	kg(lbs)	UNIT : 19(42) PANEL : 3.7(8)		
<b>Service Ref.</b>	<b>PU-P1.6VGA</b>		<b>PU-P2VGA</b>	
Power supply (phase, cycle, voltage)	Single phase, 50Hz, 220-230-240V			
Running current	A	7.66	11.11	
Starting current	A	36	74	
External finish	Munsell 5Y 8/1			
Refrigerant control	Linear Expansion Valve			
Compressor	Hermetic			
Model	RE277VHSM		NE38VMJM	
Motor output	kW	1.3	1.7	
Starter type	Line start			
Protection devices	Inner thermostat, High pressure switch, Discharge thermo.			
Crankcase heater	W	30	38	
Heat exchanger	Plate fin coil			
Fan	Fan(drive) x No.	Propeller (direct) x 1		
	Fan motor output	kW	0.070	
	Airflow	m³/min(CFM)	45(1,590)	55(1,940)
Defrost method	—			
Noise level	Cooling	dB	46	48
Dimensions	W	mm(in.)	900(35-7/16)	
	D	mm(in.)	330+20(13+3/4)	
	H	mm(in.)	650 (25-5/8)	855(33-5/8)
Weight	kg(lbs)	55(121)	71(157)	
Refrigerant	R407C			
Charge	kg(lbs)	2.6(5.7)	3.1(6.8)	
Oil (Model)	L	0.57(Ester)MEL56	1.2(Ester)MEL56	
Pipe size O.D.	Liquid	mm(in.)	9.52 (3/8)	
	Gas	mm(in.)	15.88 (5/8)	
Connection method	Indoor side	Flared		
	Outdoor side	Flared		
Between the indoor & outdoor unit	Height difference	Max. 40m		
	Piping length	Max. 40m		

Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F)      Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
Refrigerant piping length (one way) : 5m (16ft)

### 2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C

### 3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz  
Outdoor Unit Single phase 240V 50Hz

Item		Service Ref.		PLA-P2.5KA.UK
Function				Cooling
Capacity	Btu/h			21,500
	W			6,300
Total input	kW			2.77
<b>Service Ref.</b>		<b>PLA-P2.5KA.UK</b>		
Power supply(phase, cycle,voltage)		Single phase, 50Hz, 220-230-240V		
Input	kW	0.14		
Running current	A	0.61		
Starting current	A	0.67		
External finish		Galvanized sheets with gray heat insulation		
Heat exchanger		Plate fin coil		
Fan	Fan(drive) x No.	Turbo fan (direct) x 1		
	Fan motor output	kW	0.030	
	Airflow(Low-Medium2-Medium1-High)	m³/min(CFM)	14-15-16-17 (494-530-565-600)	
	External static pressure	Pa(mmAq)	0(direct blow)	
Operation control & Thermostat		Remote controller & built-in		
Noise level(Low-Medium2-Medium1-High)		35-36.5-38-39.5		
Unit drain pipe I.D.		mm(in.)		32(1-1/4)
Dimensions	W	mm(in.)	UNIT : 660(26) PANEL : 760(30)	
	D	mm(in.)	UNIT : 660(26) PANEL : 760(30)	
	H	mm(in.)	UNIT : 253(10) PANEL : 30(1-3/16)	
Weight		kg(lbs)	UNIT : 20(44) PANEL : 3.7(8)	
<b>Service Ref.</b>		<b>PU-P2.5VGA<sub>1</sub></b>		
Power supply (phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V		
Running current	A	11.78		
Starting current	A	77		
External finish		Munsell 5Y 8/1		
Refrigerant control		Linear Expansion Valve		
Compressor		Hermetic		
Model		NE41VMJM		
Motor output	kW	1.9		
Starter type		Line start		
Protection devices		Internal thermostat, High pressure switch, Discharge thermo.		
Crankcase heater		W	38	
Heat exchanger		Plate fin coil		
Fan	Fan(drive) x No.	Propeller (direct) x 1		
	Fan motor output	kW	0.070	
	Airflow	m³/min(CFM)	50(1,770)	
Defrost method		—		
Noise level	Cooling	dB	48	
Dimensions	W	mm(in.)	900(35-7/16)	
	D	mm(in.)	330+20(13+3/4)	
	H	mm(in.)	855(33-5/8)	
Weight		kg(lbs)	82(181)	
Refrigerant		R407C		
Charge	kg(lbs)	3.3(7.3)		
Oil (Model)	L	1.2(Ester)MEL56		
Pipe size O.D.	Liquid	mm(in.)	9.52 (3/8)	
	Gas	mm(in.)	15.88 (5/8)	
Connection method		Indoor side	Flared	
		Outdoor side	Flared	
Between the indoor & outdoor unit		Height difference	Max. 50m	
		Piping length	Max. 50m	

Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F)      Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
Refrigerant piping length (one way) : 5m (16ft)

### 2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C

### 3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz  
Outdoor Unit Single phase 240V 50Hz / 3 phases 415V 50Hz

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Item	Service Ref.	PLA-P1.6KA.UK / PLA-P1.6KA1.UK	PLA-P2KA.UK / PLA-P2KA1.UK
Function		Cooling	Cooling
Capacity	Btu/h	15,000	18,000
	W	4,400	5,300
Total input	kW	1.82	2.44
INDOOR UNIT	Service Ref.	PLA-P1.6KA.UK / PLA-P1.6KA1.UK	PLA-P2KA.UK / PLA-P2KA1.UK
Power supply(phase, cycle,voltage)		Single phase, 50Hz, 220-230-240V	
Input	kW	0.15	0.14
Running current	A	0.64	0.65
Starting current	A	0.70	0.72
External finish		Galvanized sheets with gray heat insulation	
Heat exchanger		Plate fin coil	
Fan	Fan(drive) x No.	Turbo fan (direct) x 1	
	Fan motor output	0.030	
	Airflow(Low-Medium2-Medium1-High)	m³/min(CFM)	13-14-15-16(459-494-530-565)
	External static pressure	Pa(mmAq)	0(direct blow)
Operation control & Thermostat		Remote controller & built-in	
Noise level(Low-Medium2-Medium1-High)	dB	32-34-35.5-37	
Unit drain pipe I.D.	mm(in.)	32(1-1/4)	
Dimensions	W	mm(in.)	UNIT : 660(26) PANEL : 760(30)
	D	mm(in.)	UNIT : 660(26) PANEL : 760(30)
	H	mm(in.)	UNIT : 253(10) PANEL : 30(1-3/16)
Weight	kg(lbs)	UNIT : 19(42) PANEL : 3.7(8)	
OUTDOOR UNIT	Service Ref.	PU-P1.6VGAA.UK / PU-P1.6YGAA.UK	PU-P2VGAA.UK / PU-P2YGAA.UK
Power supply (phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V / 3 phases, 50Hz, 380-400-415V(4wires)	
Running current	A	7.36 / 2.49	10.26 / 3.70
Starting current	A	36 / 20	62 / 31
External finish		Munsell 5Y 7/1	
Refrigerant control		Linear Expansion Valve	
Compressor		Hermetic	
	Model	RE277VHSMT / RE277YFKM	NE36VMJMT / NE36YEKMT
	Motor output	1.3	1.6
	Starter type	Line start	
	Protection devices	Inner thermostat, HP switch, Discharge thermo./ Thermal relay, HP switch, Discharge thermo	
	Crankcase heater	W	30
			38
Heat exchanger		Plate fin coil	
Fan	Fan(drive) x No.	Propeller (direct) x 1	
	Fan motor output	0.070	
	Airflow	m³/min(CFM)	45(1,590)
			55(1,940)
Defrost method		—	
Noise level	Cooling	dB	47
	W	mm(in.)	900(35-7/16)
Dimensions	D	mm(in.)	330+20(13+3/4)
	H	mm(in.)	650 (25-5/8)
Weight	kg(lbs)	55(121)	855(33-5/8)
			71(157)
REFRIGERANT PIPING	Refrigerant		R407C
	Charge	kg(lbs)	2.5(5.5)
	Oil (Model)	L	0.57(Ester)MEL56
Pipe size O.D.	Liquid	mm(in.)	9.52 (3/8)
	Gas	mm(in.)	15.88 (5/8)
Connection method	Indoor side		Flared
	Outdoor side		Flared
Between the indoor & outdoor unit	Height difference		Max. 40m
	Piping length		Max. 40m

#### Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F)      Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
 Refrigerant piping length (one way) : 5m (16ft)

#### 2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C

#### 3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz  
 Outdoor Unit Single phase 240V 50Hz / 3 phases 415V 50Hz

Item		Service Ref.		PLA-P2.5KA.UK PLA-P2.5KA1.UK
Function				Cooling
Capacity	Btu/h			21,500
	W			6,300
Total input	kW			2.77
<b>Service Ref.</b>		<b>PLA-P2.5KA.UK PLA-P2.5KA1.UK</b>		
Power supply(phase, cycle, voltage)		Single phase, 50Hz, 220-230-240V		
Input	kW			0.14
Running current	A			0.61
Starting current	A			0.67
External finish		Galvanized sheets with gray heat insulation		
Heat exchanger		Plate fin coil		
Fan	Fan(drive) x No.			Turbo fan (direct) x 1
	Fan motor output	kW		0.030
Airflow(Low-Medium2-Medium1-High)		m³/min(CFM)	14-15-16-17 (494-530-565-600)	
External static pressure		Pa(mmAq)	0(direct blow)	
Operation control & Thermostat		Remote controller & built-in		
Noise level(Low-Medium2-Medium1-High)		dB	35-36.5-38-39.5	
Unit drain pipe I.D.		mm(in.)	32(1-1/4)	
Dimensions	W	mm(in.)	UNIT : 660(26) PANEL : 760(30)	
	D	mm(in.)	UNIT : 660(26) PANEL : 760(30)	
	H	mm(in.)	UNIT : 253(10) PANEL : 30(1-3/16)	
Weight	kg(lbs)	UNIT : 20(44) PANEL : 3.7(8)		
<b>Service Ref.</b>		<b>PU-P2.5VGAA.UK / PU-P2.5VGAA.UK</b>		
Power supply (phase, cycle, voltage)		Single Phase, 50Hz, 220-230-240V / 3 phases, 50Hz, 380-400-415V(4wires)		
Running current		A	11.90 / 4.48	
Starting current		A	77 / 35	
External finish		Munsell 5Y 8/1		
Refrigerant control		Linear Expansion Valve		
Compressor		Hermetic		
Model		NE41VMJMT / NE41YEKMT		
Motor output		kW	1.9	
Starter type		Line start		
Protection devices		Internal thermostat, High pressure switch, Discharge thermo.		
Crankcase heater		W	38	
Heat exchanger		Plate fin coil		
Fan	Fan(drive) x No.			Propeller (direct) x 1
	Fan motor output	kW	0.070	
	Airflow	m³/min(CFM)	50(1,770)	
Defrost method		—		
Noise level	Cooling	dB	48	
Dimensions	W	mm(in.)	900(35-7/16)	
	D	mm(in.)	330+20(13+3/4)	
	H	mm(in.)	855(33-5/8)	
Weight	kg(lbs)	82(181)		
Refrigerant		R407C		
Charge		3.1(6.8)		
Oil (Model)		1.2(Ester)MEL56		
Pipe size O.D.	Liquid	mm(in.)	9.52 (3/8)	
	Gas	mm(in.)	15.88 (5/8)	
Connection method		Indoor side	Flared	
		Outdoor side	Flared	
Between the indoor & outdoor unit		Height difference	Max. 50m	
		Piping length	Max. 50m	

Notes1. Rating Conditions (ISO T1)

Cooling : Indoor : D.B. 27°C(80°F) W.B. 19°C (66°F)      Outdoor : D.B. 35°C(95°F) W.B. 24°C (75°F)  
 Refrigerant piping length (one way) : 5m (16ft)

2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35°C W.B. 22.5°C	D.B. 46°C
	Lower limit	D.B. 19°C W.B. 15°C	D.B. -5°C

3. Above data based on indicated voltage

Indoor Unit Single phase 240V 50Hz  
 Outdoor Unit Single phase 240V 50Hz / 3 phases 415V 50Hz

## 1. PERFORMANCE DATA

### 1) COOLING CAPACITY(1)

PLA-P1.6KA.UK / PUH-P1.6VGA, PUH-P1.6YGA, PU-P1.6VGA

(240V)

Indoor Intake air D.B.(°C)	Indoor Intake air W.B.(°C)	Outdoor intake air D.B.(°C)											
		20				25				30			
		CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.
20	16	4356	3049	0.70	1.49	4224	2957	0.70	1.57	4092	2864	0.70	1.66
20	18	4664	2705	0.58	1.52	4532	2629	0.58	1.60	4378	2539	0.58	1.71
20	20	5016	2307	0.46	1.56	4906	2257	0.46	1.64	4774	2196	0.46	1.75
22	16	4356	3398	0.78	1.49	4224	3296	0.78	1.57	4092	3192	0.78	1.66
22	18	4664	3078	0.66	1.52	4532	2991	0.66	1.60	4378	2889	0.66	1.71
22	20	5016	2709	0.54	1.56	4906	2649	0.54	1.64	4774	2578	0.54	1.75
24	16	4356	3746	0.86	1.49	4224	3633	0.86	1.57	4092	3519	0.86	1.66
24	18	4664	3451	0.74	1.52	4532	3354	0.74	1.60	4378	3240	0.74	1.71
24	20	5016	3110	0.62	1.56	4906	3042	0.62	1.64	4774	2960	0.62	1.75
24	22	5346	2673	0.50	1.60	5236	2618	0.50	1.69	5104	2552	0.50	1.80
26	16	4356	4095	0.94	1.49	4224	3971	0.94	1.57	4092	3846	0.94	1.66
26	18	4664	3824	0.82	1.52	4532	3716	0.82	1.60	4378	3590	0.82	1.71
26	20	5016	3511	0.70	1.56	4906	3434	0.70	1.64	4774	3342	0.70	1.75
26	22	5346	3101	0.58	1.60	5236	3037	0.58	1.69	5104	2960	0.58	1.80
28	16	4356	4356	1.00	1.49	4224	4224	1.00	1.57	4092	4092	1.00	1.66
28	18	4664	4198	0.90	1.52	4532	4079	0.90	1.60	4378	3940	0.90	1.71
28	20	5016	3912	0.78	1.56	4906	3827	0.78	1.64	4774	3724	0.78	1.75
28	22	5346	3528	0.66	1.60	5236	3456	0.66	1.69	5104	3369	0.66	1.80
30	16	4356	4356	1.00	1.49	4224	4224	1.00	1.57	4092	4092	1.00	1.66
30	18	4664	4571	0.98	1.52	4532	4441	0.98	1.60	4378	4290	0.98	1.71
30	20	5016	4314	0.86	1.56	4906	4219	0.86	1.64	4774	4106	0.86	1.75
30	22	5346	3956	0.74	1.60	5236	3875	0.74	1.69	5104	3777	0.74	1.80
32	16	4356	4356	1.00	1.49	4224	4224	1.00	1.57	4092	4092	1.00	1.66
32	18	4664	4664	1.00	1.52	4532	4532	1.00	1.60	4378	4378	1.00	1.71
32	20	5016	4715	0.94	1.56	4906	4612	0.94	1.64	4774	4488	0.94	1.75
32	22	5346	4384	0.82	1.60	5236	4294	0.82	1.69	5104	4185	0.82	1.80
34	16	4356	4356	1.00	1.49	4224	4224	1.00	1.57	4092	4092	1.00	1.66
34	18	4664	4664	1.00	1.52	4532	4532	1.00	1.60	4378	4378	1.00	1.71
34	20	5016	5016	1.00	1.56	4906	4906	1.00	1.64	4774	4774	1.00	1.75
34	22	5346	4811	0.90	1.60	5236	4712	0.90	1.69	5104	4594	0.90	1.80

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

**COOLING CAPACITY(2)**
**PLA-P1.6KA.UK / PUH-P1.6VGA, PUH-P1.6YGA, PU-P1.6VGA**
**(240V)**

Indoor Intake air D.B.(°C)	Indoor Intake air W.B.(°C)	Outdoor intake air D.B.(°C)											
		35				40				45			
		CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.
20	16	3916	2741	0.70	1.79	3740	2618	0.70	1.92	3652	2556	0.70	2.01
20	18	4224	2450	0.58	1.83	4092	2373	0.58	1.97	3960	2297	0.58	2.06
20	20	4576	2105	0.46	1.88	4400	2024	0.46	2.01	4268	1963	0.46	2.10
22	16	3916	3054	0.78	1.79	3740	2917	0.78	1.92	3652	2849	0.78	2.01
22	18	4224	2788	0.66	1.83	4092	2701	0.66	1.97	3960	2614	0.66	2.06
22	20	4576	2471	0.54	1.88	4400	2376	0.54	2.01	4268	2305	0.54	2.10
24	16	3916	3368	0.86	1.79	3740	3216	0.86	1.92	3652	3141	0.86	2.01
24	18	4224	3126	0.74	1.83	4092	3028	0.74	1.97	3960	2930	0.74	2.06
24	20	4576	2837	0.62	1.88	4400	2728	0.62	2.01	4268	2646	0.62	2.10
24	22	4928	2464	0.50	1.92	4752	2376	0.50	2.06	4620	2310	0.50	2.16
26	16	3916	3681	0.94	1.79	3740	3516	0.94	1.92	3652	3433	0.94	2.01
26	18	4224	3464	0.82	1.83	4092	3355	0.82	1.97	3960	3247	0.82	2.06
26	20	4576	3203	0.70	1.88	4400	3080	0.70	2.01	4268	2988	0.70	2.10
26	22	4928	2858	0.58	1.92	4752	2756	0.58	2.06	4620	2680	0.58	2.16
28	16	3916	3916	1.00	1.79	3740	3740	1.00	1.92	3652	3652	1.00	2.01
28	18	4224	3802	0.90	1.83	4092	3683	0.90	1.97	3960	3564	0.90	2.06
28	20	4576	3569	0.78	1.88	4400	3432	0.78	2.01	4268	3329	0.78	2.10
28	22	4928	3252	0.66	1.92	4752	3136	0.66	2.06	4620	3049	0.66	2.16
30	16	3916	3916	1.00	1.79	3740	3740	1.00	1.92	3652	3652	1.00	2.01
30	18	4224	4140	0.98	1.83	4092	4010	0.98	1.97	3960	3881	0.98	2.06
30	20	4576	3935	0.86	1.88	4400	3784	0.86	2.01	4268	3670	0.86	2.10
30	22	4928	3647	0.74	1.92	4752	3516	0.74	2.06	4620	3419	0.74	2.16
32	16	3916	3916	1.00	1.79	3740	3740	1.00	1.92	3652	3652	1.00	2.01
32	18	4224	4224	1.00	1.83	4092	4092	1.00	1.97	3960	3960	1.00	2.06
32	20	4576	4301	0.94	1.88	4400	4136	0.94	2.01	4268	4012	0.94	2.10
32	22	4928	4041	0.82	1.92	4752	3897	0.82	2.06	4620	3788	0.82	2.16
34	16	3916	3916	1.00	1.79	3740	3740	1.00	1.92	3652	3652	1.00	2.01
34	18	4224	4224	1.00	1.83	4092	4092	1.00	1.97	3960	3960	1.00	2.06
34	20	4576	4576	1.00	1.88	4400	4400	1.00	2.01	4268	4268	1.00	2.10
34	22	4928	4435	0.90	1.92	4752	4277	0.90	2.06	4620	4158	0.90	2.16

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

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**COOLING CAPACITY(3)**
**PLA-P2KA.UK / PUH-P2VGA, PUH-P2YGA, PU-P2VGA**
**(240V)**

Indoor Intake air D.B.(°C)	Indoor Intake air W.B.(°C)	Outdoor intake air D.B.(°C)											
		20				25				30			
		CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.
20	16	5346	3421	0.64	2.10	5184	3318	0.64	2.21	5022	3214	0.64	2.34
20	18	5724	2976	0.52	2.14	5562	2892	0.52	2.25	5373	2794	0.52	2.41
20	20	6156	2462	0.40	2.20	6021	2408	0.40	2.31	5859	2344	0.40	2.46
22	16	5346	3849	0.72	2.10	5184	3732	0.72	2.21	5022	3616	0.72	2.34
22	18	5724	3434	0.60	2.14	5562	3337	0.60	2.25	5373	3224	0.60	2.41
22	20	6156	2955	0.48	2.20	6021	2890	0.48	2.31	5859	2812	0.48	2.46
24	16	5346	4277	0.80	2.10	5184	4147	0.80	2.21	5022	4018	0.80	2.34
24	18	5724	3892	0.68	2.14	5562	3782	0.68	2.25	5373	3654	0.68	2.41
24	20	6156	3447	0.56	2.20	6021	3372	0.56	2.31	5859	3281	0.56	2.46
24	22	6561	2887	0.44	2.25	6426	2827	0.44	2.38	6264	2756	0.44	2.54
26	16	5346	4704	0.88	2.10	5184	4562	0.88	2.21	5022	4419	0.88	2.34
26	18	5724	4350	0.76	2.14	5562	4227	0.76	2.25	5373	4083	0.76	2.41
26	20	6156	3940	0.64	2.20	6021	3853	0.64	2.31	5859	3750	0.64	2.46
26	22	6561	3412	0.52	2.25	6426	3342	0.52	2.38	6264	3257	0.52	2.54
28	16	5346	5132	0.96	2.10	5184	4977	0.96	2.21	5022	4821	0.96	2.34
28	18	5724	4808	0.84	2.14	5562	4672	0.84	2.25	5373	4513	0.84	2.41
28	20	6156	4432	0.72	2.20	6021	4335	0.72	2.31	5859	4218	0.72	2.46
28	22	6561	3937	0.60	2.25	6426	3856	0.60	2.38	6264	3758	0.60	2.54
30	16	5346	5346	1.00	2.10	5184	5184	1.00	2.21	5022	5022	1.00	2.34
30	18	5724	5266	0.92	2.14	5562	5117	0.92	2.25	5373	4943	0.92	2.41
30	20	6156	4925	0.80	2.20	6021	4817	0.80	2.31	5859	4687	0.80	2.46
30	22	6561	4461	0.68	2.25	6426	4370	0.68	2.38	6264	4260	0.68	2.54
32	16	5346	5346	1.00	2.10	5184	5184	1.00	2.21	5022	5022	1.00	2.34
32	18	5724	5724	1.00	2.14	5562	5562	1.00	2.25	5373	5373	1.00	2.41
32	20	6156	5417	0.88	2.20	6021	5298	0.88	2.31	5859	5156	0.88	2.46
32	22	6561	4986	0.76	2.25	6426	4884	0.76	2.38	6264	4761	0.76	2.54
34	16	5346	5346	1.00	2.10	5184	5184	1.00	2.21	5022	5022	1.00	2.34
34	18	5724	5724	1.00	2.14	5562	5562	1.00	2.25	5373	5373	1.00	2.41
34	20	6156	5910	0.96	2.20	6021	5780	0.96	2.31	5859	5625	0.96	2.46
34	22	6561	5511	0.84	2.25	6426	5398	0.84	2.38	6264	5262	0.84	2.54

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

**COOLING CAPACITY(4)**  
**PLA-P2KA.UK / PUH-P2VGA, PUH-P2YGA, PU-P2VGA**

(240V)

Indoor Intake air D.B.(°C)	Indoor Intake air W.B.(°C)	Outdoor intake air D.B.(°C)											
		35				40				45			
		CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.
20	16	4806	3076	0.64	2.52	4590	2938	0.64	2.70	4374	2799	0.64	2.92
20	18	5184	2696	0.52	2.58	5022	2611	0.52	2.78	4698	2443	0.52	2.99
20	20	5616	2246	0.40	2.65	5400	2160	0.40	2.83	5076	2030	0.40	3.04
22	16	4806	3460	0.72	2.52	4590	3305	0.72	2.70	4374	3149	0.72	2.92
22	18	5184	3110	0.60	2.58	5022	3013	0.60	2.78	4698	2819	0.60	2.99
22	20	5616	2696	0.48	2.65	5400	2592	0.48	2.83	5076	2436	0.48	3.04
24	16	4806	3845	0.80	2.52	4590	3672	0.80	2.70	4374	3499	0.80	2.92
24	18	5184	3525	0.68	2.58	5022	3415	0.68	2.78	4698	3195	0.68	2.99
24	20	5616	3145	0.56	2.65	5400	3024	0.56	2.83	5076	2843	0.56	3.04
24	22	6048	2661	0.44	2.70	5832	2566	0.44	2.91	5508	2424	0.44	3.09
26	16	4806	4229	0.88	2.52	4590	4039	0.88	2.70	4374	3849	0.88	2.92
26	18	5184	3940	0.76	2.58	5022	3817	0.76	2.78	4698	3570	0.76	2.99
26	20	5616	3594	0.64	2.65	5400	3456	0.64	2.83	5076	3249	0.64	3.04
26	22	6048	3145	0.52	2.70	5832	3033	0.52	2.91	5508	2864	0.52	3.09
28	16	4806	4614	0.96	2.52	4590	4406	0.96	2.70	4374	4199	0.96	2.92
28	18	5184	4355	0.84	2.58	5022	4218	0.84	2.78	4698	3946	0.84	2.99
28	20	5616	4044	0.72	2.65	5400	3888	0.72	2.83	5076	3655	0.72	3.04
28	22	6048	3629	0.60	2.70	5832	3499	0.60	2.91	5508	3305	0.60	3.09
30	16	4806	4806	1.00	2.52	4590	4590	1.00	2.70	4374	4374	1.00	2.92
30	18	5184	4769	0.92	2.58	5022	4620	0.92	2.78	4698	4322	0.92	2.99
30	20	5616	4493	0.80	2.65	5400	4320	0.80	2.83	5076	4061	0.80	3.04
30	22	6048	4113	0.68	2.70	5832	3966	0.68	2.91	5508	3745	0.68	3.09
32	16	4806	4806	1.00	2.52	4590	4590	1.00	2.70	4374	4374	1.00	2.92
32	18	5184	5184	1.00	2.58	5022	5022	1.00	2.78	4698	4698	1.00	2.99
32	20	5616	4942	0.88	2.65	5400	4752	0.88	2.83	5076	4467	0.88	3.04
32	22	6048	4596	0.76	2.70	5832	4432	0.76	2.91	5508	4186	0.76	3.09
34	16	4806	4806	1.00	2.52	4590	4590	1.00	2.70	4374	4374	1.00	2.92
34	18	5184	5184	1.00	2.58	5022	5022	1.00	2.78	4698	4698	1.00	2.99
34	20	5616	5391	0.96	2.65	5400	5184	0.96	2.83	5076	4873	0.96	3.04
34	22	6048	5080	0.84	2.70	5832	4899	0.84	2.91	5508	4627	0.84	3.09

Note CA : Capacity (W)  
P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity  
SHF : Sensible heat factor

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**COOLING CAPACITY(5)**
**PLA-P2.5KA.UK / PUH-P2.5VGA<sub>1</sub>, PUH-P2.5YGA<sub>1</sub>, PU-P2.5VGA<sub>1</sub>**
**(240V)**

Indoor Intake air D.B.(°C)	Indoor Intake air W.B.(°C)	Outdoor intake air D.B.(°C)											
		20				25				30			
		CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.
20	16	6237	4054	0.65	2.22	6048	3931	0.65	2.34	5859	3808	0.65	2.48
20	18	6678	3539	0.53	2.26	6489	3439	0.53	2.38	6269	3322	0.53	2.55
20	20	7182	2945	0.41	2.33	7025	2880	0.41	2.44	6836	2803	0.41	2.60
22	16	6237	4553	0.73	2.22	6048	4415	0.73	2.34	5859	4277	0.73	2.48
22	18	6678	4074	0.61	2.26	6489	3958	0.61	2.38	6269	3824	0.61	2.55
22	20	7182	3519	0.49	2.33	7025	3442	0.49	2.44	6836	3349	0.49	2.60
24	16	6237	5052	0.81	2.22	6048	4899	0.81	2.34	5859	4746	0.81	2.48
24	18	6678	4608	0.69	2.26	6489	4477	0.69	2.38	6269	4325	0.69	2.55
24	20	7182	4094	0.57	2.33	7025	4004	0.57	2.44	6836	3896	0.57	2.60
24	22	7655	3445	0.45	2.38	7497	3374	0.45	2.52	7308	3289	0.45	2.69
26	16	6237	5551	0.89	2.22	6048	5383	0.89	2.34	5859	5215	0.89	2.48
26	18	6678	5142	0.77	2.26	6489	4997	0.77	2.38	6269	4827	0.77	2.55
26	20	7182	4668	0.65	2.33	7025	4566	0.65	2.44	6836	4443	0.65	2.60
26	22	7655	4057	0.53	2.38	7497	3973	0.53	2.52	7308	3873	0.53	2.69
28	16	6237	6050	0.97	2.22	6048	5867	0.97	2.34	5859	5683	0.97	2.48
28	18	6678	5676	0.85	2.26	6489	5516	0.85	2.38	6269	5328	0.85	2.55
28	20	7182	5243	0.73	2.33	7025	5128	0.73	2.44	6836	4990	0.73	2.60
28	22	7655	4669	0.61	2.38	7497	4573	0.61	2.52	7308	4458	0.61	2.69
30	16	6237	6237	1.00	2.22	6048	6048	1.00	2.34	5859	5859	1.00	2.48
30	18	6678	6211	0.93	2.26	6489	6035	0.93	2.38	6269	5830	0.93	2.55
30	20	7182	5817	0.81	2.33	7025	5690	0.81	2.44	6836	5537	0.81	2.60
30	22	7655	5282	0.69	2.38	7497	5173	0.69	2.52	7308	5043	0.69	2.69
32	16	6237	6237	1.00	2.22	6048	6048	1.00	2.34	5859	5859	1.00	2.48
32	18	6678	6678	1.00	2.26	6489	6489	1.00	2.38	6269	6269	1.00	2.55
32	20	7182	6392	0.89	2.33	7025	6252	0.89	2.44	6836	6084	0.89	2.60
32	22	7655	5894	0.77	2.38	7497	5773	0.77	2.52	7308	5627	0.77	2.69
34	16	6237	6237	1.00	2.22	6048	6048	1.00	2.34	5859	5859	1.00	2.48
34	18	6678	6678	1.00	2.26	6489	6489	1.00	2.38	6269	6269	1.00	2.55
34	20	7182	6967	0.97	2.33	7025	6814	0.97	2.44	6836	6630	0.97	2.60
34	22	7655	6506	0.85	2.38	7497	6372	0.85	2.52	7308	6212	0.85	2.69

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

**COOLING CAPACITY(6)**
**PLA-P2.5KA.UK / PUH-P2.5VGA<sub>1</sub>, PUH-P2.5YGA<sub>1</sub>, PU-P2.5VGA<sub>1</sub>**
**(240V)**

Indoor Intake air D.B.(°C)	Indoor Intake air W.B.(°C)	Outdoor intake air D.B.(°C)											
		35				40				45			
		CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.	CA	SHC(W)	SHF	P.C.
20	16	5607	3645	0.65	2.66	5355	3481	0.65	2.85	5103	3317	0.65	3.09
20	18	6048	3205	0.53	2.73	5859	3105	0.53	2.94	5481	2905	0.53	3.16
20	20	6552	2666	0.41	2.80	6300	2583	0.41	2.99	5922	2428	0.41	3.21
22	16	5607	4093	0.73	2.66	5355	3909	0.73	2.85	5103	3725	0.73	3.09
22	18	6048	3689	0.61	2.73	5859	3574	0.61	2.94	5481	3343	0.61	3.16
22	20	6552	3201	0.49	2.80	6300	3087	0.49	2.99	5922	2902	0.49	3.21
24	16	5607	4542	0.81	2.66	5355	4338	0.81	2.85	5103	4133	0.81	3.09
24	18	6048	4173	0.69	2.73	5859	4043	0.69	2.94	5481	3782	0.69	3.16
24	20	6552	3735	0.57	2.80	6300	3591	0.57	2.99	5922	3376	0.57	3.21
24	22	7056	3175	0.45	2.85	6804	3062	0.45	3.07	6426	2892	0.45	3.27
26	16	5607	4990	0.89	2.66	5355	4766	0.89	2.85	5103	4542	0.89	3.09
26	18	6048	4657	0.77	2.73	5859	4511	0.77	2.94	5481	4220	0.77	3.16
26	20	6552	4259	0.65	2.80	6300	4095	0.65	2.99	5922	3849	0.65	3.21
26	22	7056	3740	0.53	2.85	6804	3606	0.53	3.07	6426	3406	0.53	3.27
28	16	5607	5439	0.97	2.66	5355	5194	0.97	2.85	5103	4950	0.97	3.09
28	18	6048	5141	0.85	2.73	5859	4980	0.85	2.94	5481	4659	0.85	3.16
28	20	6552	4783	0.73	2.80	6300	4599	0.73	2.99	5922	4323	0.73	3.21
28	22	7056	4304	0.61	2.85	6804	4150	0.61	3.07	6426	3920	0.61	3.27
30	16	5607	5607	1.00	2.66	5355	5355	1.00	2.85	5103	5103	1.00	3.09
30	18	6048	5625	0.93	2.73	5859	5449	0.93	2.94	5481	5097	0.93	3.16
30	20	6552	5307	0.81	2.80	6300	5103	0.81	2.99	5922	4797	0.81	3.21
30	22	7056	4869	0.69	2.85	6804	4695	0.69	3.07	6426	4434	0.69	3.27
32	16	5607	5607	1.00	2.66	5355	5355	1.00	2.85	5103	5103	1.00	3.09
32	18	6048	6048	1.00	2.73	5859	5859	1.00	2.94	5481	5481	1.00	3.16
32	20	6552	5831	0.89	2.80	6300	5607	0.89	2.99	5922	5271	0.89	3.21
32	22	7056	5433	0.77	2.85	6804	5239	0.77	3.07	6426	4948	0.77	3.27
34	16	5607	5607	1.00	2.66	5355	5355	1.00	2.85	5103	5103	1.00	3.09
34	18	6048	6048	1.00	2.73	5859	5859	1.00	2.94	5481	5481	1.00	3.16
34	20	6552	6355	0.97	2.80	6300	6111	0.97	2.99	5922	5744	0.97	3.21
34	22	7056	5998	0.85	2.85	6804	5783	0.85	3.07	6426	5462	0.85	3.27

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

**COOLING CAPACITY(7)**
**PLA-P1.6KA.UK, PLA-P1.6KA1.UK / PU(H)-P1.6VGAA.UK, PU(H)-P1.6YGAA.UK**
**(240V)**

Indoor intake air DB°C	Indoor intake air WB°C	Outdoor intake air DB°C											
		20				25				30			
		CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.
20	16	4,356	3,049	0.70	1.46	4,224	2,957	0.70	1.54	4,092	2,864	0.70	1.63
20	18	4,664	2,705	0.58	1.48	4,532	2,629	0.58	1.57	4,378	2,539	0.58	1.67
20	20	5,016	2,307	0.46	1.53	4,906	2,257	0.46	1.60	4,774	2,196	0.46	1.71
22	16	4,356	3,398	0.78	1.46	4,224	3,295	0.78	1.54	4,092	3,192	0.78	1.63
22	18	4,664	3,078	0.66	1.48	4,532	2,991	0.66	1.57	4,378	2,889	0.66	1.67
22	20	5,016	2,709	0.54	1.53	4,906	2,649	0.54	1.60	4,774	2,578	0.54	1.71
24	16	4,356	3,746	0.86	1.46	4,224	3,633	0.86	1.54	4,092	3,519	0.86	1.63
24	18	4,664	3,451	0.74	1.48	4,532	3,354	0.74	1.57	4,378	3,240	0.74	1.67
24	20	5,016	3,110	0.62	1.53	4,906	3,042	0.62	1.60	4,774	2,960	0.62	1.71
26	16	4,356	4,095	0.94	1.46	4,224	3,971	0.94	1.54	4,092	3,846	0.94	1.63
26	18	4,664	3,824	0.82	1.48	4,532	3,716	0.82	1.57	4,378	3,590	0.82	1.67
26	20	5,016	3,511	0.70	1.53	4,906	3,434	0.70	1.60	4,774	3,342	0.70	1.71
28	16	4,356	4,356	1.00	1.46	4,224	4,224	1.00	1.54	4,092	4,092	1.00	1.63
28	18	4,664	4,198	0.90	1.48	4,532	4,079	0.90	1.57	4,378	3,940	0.90	1.67
28	20	5,016	3,912	0.78	1.53	4,906	3,827	0.78	1.60	4,774	3,724	0.78	1.71
30	16	4,356	4,356	1.00	1.46	4,224	4,224	1.00	1.54	4,092	4,092	1.00	1.63
30	18	4,664	4,571	0.98	1.48	4,532	4,441	0.98	1.57	4,378	4,290	0.98	1.67
30	20	5,016	4,314	0.86	1.53	4,906	4,219	0.86	1.60	4,774	4,106	0.86	1.71
32	16	4,356	4,356	1.00	1.46	4,224	4,224	1.00	1.54	4,092	4,092	1.00	1.63
32	18	4,664	4,664	1.00	1.48	4,532	4,532	1.00	1.57	4,378	4,378	1.00	1.67
32	20	5,016	4,715	0.94	1.53	4,906	4,612	0.94	1.60	4,774	4,488	0.94	1.71
34	16	4,356	4,356	1.00	1.46	4,224	4,224	1.00	1.54	4,092	4,092	1.00	1.63
34	18	4,664	4,664	1.00	1.48	4,532	4,532	1.00	1.57	4,378	4,378	1.00	1.67
34	20	5,016	5,016	1.00	1.53	4,906	4,906	1.00	1.60	4,774	4,774	1.00	1.71

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

**COOLING CAPACITY(8)**
**PLA-P1.6KA.UK, PLA-P1.6KA1.UK / PU(H)-P1.6VGAA.UK, PU(H)-P1.6YGAA.UK**
**(240V)**

Indoor intake air DB°C	Indoor intake air WB°C	Outdoor intake air DB°C											
		35				40				45			
		CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.
20	16	3,916	2,741	0.70	1.75	3,740	2,618	0.70	1.87	3,564	2,495	0.70	2.03
20	18	4,224	2,450	0.58	1.79	4,092	2,373	0.58	1.93	3,828	2,220	0.58	2.07
20	20	4,576	2,105	0.46	1.84	4,400	2,024	0.46	1.97	4,136	1,903	0.46	2.11
22	16	3,916	3,054	0.78	1.75	3,740	2,917	0.78	1.87	3,564	2,780	0.78	2.03
22	18	4,224	2,788	0.66	1.79	4,092	2,701	0.66	1.93	3,828	2,526	0.66	2.07
22	20	4,576	2,471	0.54	1.84	4,400	2,376	0.54	1.97	4,136	2,233	0.54	2.11
24	16	3,916	3,368	0.86	1.75	3,740	3,216	0.86	1.87	3,564	3,065	0.86	2.03
24	18	4,224	3,126	0.74	1.79	4,092	3,028	0.74	1.93	3,828	2,833	0.74	2.07
24	20	4,576	2,837	0.62	1.84	4,400	2,728	0.62	1.97	4,136	2,564	0.62	2.11
26	16	3,916	3,681	0.94	1.75	3,740	3,516	0.94	1.87	3,564	3,350	0.94	2.03
26	18	4,224	3,464	0.82	1.79	4,092	3,355	0.82	1.93	3,828	3,139	0.82	2.07
26	20	4,576	3,203	0.70	1.84	4,400	3,080	0.70	1.97	4,136	2,895	0.70	2.11
28	16	3,916	3,916	1.00	1.75	3,740	3,740	1.00	1.87	3,564	3,564	1.00	2.03
28	18	4,224	3,802	0.90	1.79	4,092	3,683	0.90	1.93	3,828	3,445	0.90	2.07
28	20	4,576	3,569	0.78	1.84	4,400	3,432	0.78	1.97	4,136	3,226	0.78	2.11
30	16	3,916	3,916	1.00	1.75	3,740	3,740	1.00	1.87	3,564	3,564	1.00	2.03
30	18	4,224	4,140	0.98	1.79	4,092	4,010	0.98	1.93	3,828	3,751	0.98	2.07
30	20	4,576	3,935	0.86	1.84	4,400	3,784	0.86	1.97	4,136	3,557	0.86	2.11
32	16	3,916	3,916	1.00	1.75	3,740	3,740	1.00	1.87	3,564	3,564	1.00	2.03
32	18	4,224	4,224	1.00	1.79	4,092	4,092	1.00	1.93	3,828	3,828	1.00	2.07
32	20	4,576	4,301	0.94	1.84	4,400	4,136	0.94	1.97	4,136	3,888	0.94	2.11
34	16	3,916	3,916	1.00	1.75	3,740	3,740	1.00	1.87	3,564	3,564	1.00	2.03
34	18	4,224	4,224	1.00	1.79	4,092	4,092	1.00	1.93	3,828	3,828	1.00	2.07
34	20	4,576	4,576	1.00	1.84	4,400	4,400	1.00	1.97	4,136	4,136	1.00	2.11

Note CA : Capacity (W)

SHC(W) : Sensible heat capacity

P.C. : Power consumption (kW)

SHF : Sensible heat factor

## **COOLING CAPACITY(9)**

**PLA-P2KA.UK, PLA-P2KA<sub>1</sub>.UK / PU(H)-P2VGAA.UK, PU(H)-P2YGAA.UK**

(240V)

Indoor intake air	Indoor intake air	Outdoor intake airDB°C											
		20				25				30			
		DB°C	WBC	CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.	CA	SHC
20	16	5,247	3,358	0.64	1.95	5,088	3,256	0.64	2.06	4,929	3,155	0.64	2.18
20	18	5,618	2,921	0.52	1.99	5,459	2,839	0.52	2.10	5,274	2,742	0.52	2.24
20	20	6,042	2,417	0.40	2.05	5,910	2,364	0.40	2.15	5,751	2,300	0.40	2.29
22	16	5,247	3,778	0.72	1.95	5,088	3,663	0.72	2.06	4,929	3,549	0.72	2.18
22	18	5,618	3,371	0.60	1.99	5,459	3,275	0.60	2.10	5,274	3,164	0.60	2.24
22	20	6,042	2,900	0.48	2.05	5,910	2,837	0.48	2.15	5,751	2,760	0.48	2.29
24	16	5,247	4,198	0.80	1.95	5,088	4,070	0.80	2.06	4,929	3,943	0.80	2.18
24	18	5,618	3,820	0.68	1.99	5,459	3,712	0.68	2.10	5,274	3,586	0.68	2.24
24	20	6,042	3,384	0.56	2.05	5,910	3,309	0.56	2.15	5,751	3,220	0.56	2.29
26	16	5,247	4,617	0.88	1.95	5,088	4,477	0.88	2.06	4,929	4,338	0.88	2.18
26	18	5,618	4,270	0.76	1.99	5,459	4,149	0.76	2.10	5,274	4,008	0.76	2.24
26	20	6,042	3,867	0.64	2.05	5,910	3,782	0.64	2.15	5,751	3,680	0.64	2.29
28	16	5,247	5,037	0.96	1.95	5,088	4,884	0.96	2.06	4,929	4,732	0.96	2.18
28	18	5,618	4,719	0.84	1.99	5,459	4,586	0.84	2.10	5,274	4,430	0.84	2.24
28	20	6,042	4,350	0.72	2.05	5,910	4,255	0.72	2.15	5,751	4,140	0.72	2.29
30	16	5,247	5,247	1.00	1.95	5,088	5,088	1.00	2.06	4,929	4,929	1.00	2.18
30	18	5,618	5,169	0.92	1.99	5,459	5,022	0.92	2.10	5,274	4,852	0.92	2.24
30	20	6,042	4,834	0.80	2.05	5,910	4,728	0.80	2.15	5,751	4,600	0.80	2.29
32	16	5,247	5,247	1.00	1.95	5,088	5,088	1.00	2.06	4,929	4,929	1.00	2.18
32	18	5,618	5,618	1.00	1.99	5,459	5,459	1.00	2.10	5,274	5,274	1.00	2.24
32	20	6,042	5,317	0.88	2.05	5,910	5,200	0.88	2.15	5,751	5,060	0.88	2.29
34	16	5,247	5,247	1.00	1.95	5,088	5,088	1.00	2.06	4,929	4,929	1.00	2.18
34	18	5,618	5,618	1.00	1.99	5,459	5,459	1.00	2.10	5,274	5,274	1.00	2.24
34	20	6,042	5,800	0.96	2.05	5,910	5,673	0.96	2.15	5,751	5,520	0.96	2.29

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

**COOLING CAPACITY(10)**
**PLA-P2KA.UK, PLA-P2KA<sub>1</sub>.UK / PU(H)-P2VGAA.UK, PU(H)-P2YGAA.UK**
**(240V)**

Indoor intake air DB°C	Indoor intake air WB°C	Outdoor intake air DB°C											
		35				40				45			
		CA	SHC (W)	SHF	P.C.	CA	SHC (W)	SHF	P.C.	CA	SHC (W)	SHF	P.C.
20	16	4,717	3,019	0.64	2.34	4,505	2,883	0.64	2.51	4,293	2,748	0.64	2.72
20	18	5,088	2,646	0.52	2.40	4,929	2,563	0.52	2.59	4,611	2,398	0.52	2.78
20	20	5,512	2,205	0.40	2.46	5,300	2,120	0.40	2.64	4,982	1,993	0.40	2.83
22	16	4,717	3,396	0.72	2.34	4,505	3,244	0.72	2.51	4,293	3,091	0.72	2.72
22	18	5,088	3,053	0.60	2.40	4,929	2,957	0.60	2.59	4,611	2,767	0.60	2.78
22	20	5,512	2,646	0.48	2.46	5,300	2,544	0.48	2.64	4,982	2,391	0.48	2.83
24	16	4,717	3,774	0.80	2.34	4,505	3,604	0.80	2.51	4,293	3,434	0.80	2.72
24	18	5,088	3,460	0.68	2.40	4,929	3,352	0.68	2.59	4,611	3,135	0.68	2.78
24	20	5,512	3,087	0.56	2.46	5,300	2,968	0.56	2.64	4,982	2,790	0.56	2.83
26	16	4,717	4,151	0.88	2.34	4,505	3,964	0.88	2.51	4,293	3,778	0.88	2.72
26	18	5,088	3,867	0.76	2.40	4,929	3,746	0.76	2.59	4,611	3,504	0.76	2.78
26	20	5,512	3,528	0.64	2.46	5,300	3,392	0.64	2.64	4,982	3,188	0.64	2.83
28	16	4,717	4,528	0.96	2.34	4,505	4,325	0.96	2.51	4,293	4,121	0.96	2.72
28	18	5,088	4,274	0.84	2.40	4,929	4,140	0.84	2.59	4,611	3,873	0.84	2.78
28	20	5,512	3,969	0.72	2.46	5,300	3,816	0.72	2.64	4,982	3,587	0.72	2.83
30	16	4,717	4,717	1.00	2.34	4,505	4,505	1.00	2.51	4,293	4,293	1.00	2.72
30	18	5,088	4,681	0.92	2.40	4,929	4,535	0.92	2.59	4,611	4,242	0.92	2.78
30	20	5,512	4,410	0.80	2.46	5,300	4,240	0.80	2.64	4,982	3,986	0.80	2.83
32	16	4,717	4,717	1.00	2.34	4,505	4,505	1.00	2.51	4,293	4,293	1.00	2.72
32	18	5,088	5,088	1.00	2.40	4,929	4,929	1.00	2.59	4,611	4,611	1.00	2.78
32	20	5,512	4,851	0.88	2.46	5,300	4,664	0.88	2.64	4,982	4,384	0.88	2.83
34	16	4,717	4,717	1.00	2.34	4,505	4,505	1.00	2.51	4,293	4,293	1.00	2.72
34	18	5,088	5,088	1.00	2.40	4,929	4,929	1.00	2.59	4,611	4,611	1.00	2.78
34	20	5,512	5,292	0.96	2.46	5,300	5,088	0.96	2.64	4,982	4,783	0.96	2.83

Note CA : Capacity (W)

SHC(W) : Sensible heat capacity

P.C. : Power consumption (kW)

SHF : Sensible heat factor

## **COOLING CAPACITY(11)**

**LOADING CAPACITY (T)** PLA-P2.5KA.UK, PLA-P2.5KA<sub>1</sub>.UK / PU(H)-P2.5VGAA.UK, PU(H)-P2.5YGAA.UK

(240V)

Indoor intake air DB°C	Indoor intake air WB°C	Outdoor intake air DB°C											
		20				25				30			
		CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.
20	16	6,237	4,054	0.65	2.10	6,048	3,931	0.65	2.22	5,859	3,808	0.65	2.35
20	18	6,678	3,539	0.53	2.14	6,489	3,439	0.53	2.26	6,269	3,322	0.53	2.42
20	20	7,182	2,945	0.41	2.21	7,025	2,880	0.41	2.31	6,836	2,803	0.41	2.47
22	16	6,237	4,553	0.73	2.10	6,048	4,415	0.73	2.22	5,859	4,277	0.73	2.35
22	18	6,678	4,074	0.61	2.14	6,489	3,958	0.61	2.26	6,269	3,824	0.61	2.42
22	20	7,182	3,519	0.49	2.21	7,025	3,442	0.49	2.31	6,836	3,349	0.49	2.47
24	16	6,237	5,052	0.81	2.10	6,048	4,899	0.81	2.22	5,859	4,746	0.81	2.35
24	18	6,678	4,608	0.69	2.14	6,489	4,477	0.69	2.26	6,269	4,325	0.69	2.42
24	20	7,182	4,094	0.57	2.21	7,025	4,004	0.57	2.31	6,836	3,896	0.57	2.47
26	16	6,237	5,551	0.89	2.10	6,048	5,383	0.89	2.22	5,859	5,215	0.89	2.35
26	18	6,678	5,142	0.77	2.14	6,489	4,997	0.77	2.26	6,269	4,827	0.77	2.42
26	20	7,182	4,668	0.65	2.21	7,025	4,566	0.65	2.31	6,836	4,443	0.65	2.47
28	16	6,237	6,050	0.97	2.10	6,048	5,867	0.97	2.22	5,859	5,683	0.97	2.35
28	18	6,678	5,676	0.85	2.14	6,489	5,516	0.85	2.26	6,269	5,328	0.85	2.42
28	20	7,182	5,243	0.73	2.21	7,025	5,128	0.73	2.31	6,836	4,990	0.73	2.47
30	16	6,237	6,237	1.00	2.10	6,048	6,048	1.00	2.22	5,859	5,859	1.00	2.35
30	18	6,678	6,211	0.93	2.14	6,489	6,035	0.93	2.26	6,269	5,830	0.93	2.42
30	20	7,182	5,817	0.81	2.21	7,025	5,690	0.81	2.31	6,836	5,537	0.81	2.47
32	16	6,237	6,237	1.00	2.10	6,048	6,048	1.00	2.22	5,859	5,859	1.00	2.35
32	18	6,678	6,678	1.00	2.14	6,489	6,489	1.00	2.26	6,269	6,269	1.00	2.42
32	20	7,182	6,392	0.89	2.21	7,025	6,252	0.89	2.31	6,836	6,084	0.89	2.47
34	16	6,237	6,237	1.00	2.10	6,048	6,048	1.00	2.22	5,859	5,859	1.00	2.35
34	18	6,678	6,678	1.00	2.14	6,489	6,489	1.00	2.26	6,269	6,269	1.00	2.42
34	20	7,182	6,967	0.97	2.21	7,025	6,814	0.97	2.31	6,836	6,630	0.97	2.47

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

**COOLING CAPACITY(12)**

PLA-P2.5KA.UK, PLA-P2.5KA<sub>1</sub>.UK / PU(H)-P2.5VGAA.UK, PU(H)-P2.5YGAA.UK

(240V)

Indoor intake air DB°C	Indoor intake air WB°C	Outdoor intake air DB°C											
		35				40				45			
		CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.
20	16	5,607	3,645	0.65	2.52	5,355	3,481	0.65	2.71	5,103	3,317	0.65	2.93
20	18	6,048	3,205	0.53	2.59	5,859	3,105	0.53	2.79	5,481	2,905	0.53	3.00
20	20	6,552	2,686	0.41	2.66	6,300	2,583	0.41	2.84	5,922	2,428	0.41	3.05
22	16	5,607	4,093	0.73	2.52	5,355	3,909	0.73	2.71	5,103	3,725	0.73	2.93
22	18	6,048	3,689	0.61	2.59	5,859	3,574	0.61	2.79	5,481	3,343	0.61	3.00
22	20	6,552	3,210	0.49	2.66	6,300	3,087	0.49	2.84	5,922	2,902	0.49	3.05
24	16	5,607	4,542	0.81	2.52	5,355	4,338	0.81	2.71	5,103	4,133	0.81	2.93
24	18	6,048	4,173	0.69	2.59	5,859	4,043	0.69	2.79	5,481	3,782	0.69	3.00
24	20	6,552	3,735	0.57	2.66	6,300	3,591	0.57	2.84	5,922	3,376	0.57	3.05
26	16	5,607	4,990	0.89	2.52	5,355	4,766	0.89	2.71	5,103	4,542	0.89	2.93
26	18	6,048	4,657	0.77	2.59	5,859	4,511	0.77	2.79	5,481	4,220	0.77	3.00
26	20	6,552	4,259	0.65	2.66	6,300	4,095	0.65	2.84	5,922	3,849	0.65	3.05
28	16	5,607	5,439	0.97	2.52	5,355	5,194	0.97	2.71	5,103	4,950	0.97	2.93
28	18	6,048	5,141	0.85	2.59	5,859	4,980	0.85	2.79	5,481	4,659	0.85	3.00
28	20	6,552	4,783	0.73	2.66	6,300	4,599	0.73	2.84	5,922	4,323	0.73	3.05
30	16	5,607	5,607	1.00	2.52	5,355	5,355	1.00	2.71	5,103	5,103	1.00	2.93
30	18	6,048	5,625	0.93	2.59	5,859	5,449	0.93	2.79	5,481	5,097	0.93	3.00
30	20	6,552	5,307	0.81	2.66	6,300	5,103	0.81	2.84	5,922	4,797	0.81	3.05
32	16	5,607	5,607	1.00	2.52	5,355	5,355	1.00	2.71	5,103	5,103	1.00	2.93
32	18	6,048	6,048	1.00	2.59	5,859	5,859	1.00	2.79	5,481	5,481	1.00	3.00
32	20	6,552	5,831	0.89	2.66	6,300	5,607	0.89	2.84	5,922	5,271	0.89	3.05
34	16	5,607	5,607	1.00	2.52	5,355	5,355	1.00	2.71	5,103	5,103	1.00	2.93
34	18	6,048	6,048	1.00	2.59	5,859	5,859	1.00	2.79	5,481	5,481	1.00	3.00
34	20	6,552	6,355	0.97	2.66	6,300	6,111	0.97	2.84	5,922	5,744	0.97	3.05

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or via email at [john.smith@researchinstitute.org](mailto:john.smith@researchinstitute.org).

## 2) HEATING CAPACITY

**PUH-P1.6VGA, PUH-P1.6YGA, PUH-P2VGA, PUH-P2YGA, PUH-P2.5VGA<sub>1</sub>, PUH-P2.5YGA<sub>1</sub>, PU-P1.6VGA, PU-P2VGA, PU-P2.5VGA<sub>1</sub>**

(240V)

Service Ref.	Indoor intake air D.B.(°C)	Outdoor intake air W.B.(°C)											
		-10		-5		0		5		10		15	
		CA	P.C.	CA	P.C.	CA	P.C.	CA	P.C.	CA	P.C.	CA	P.C.
PLA-P1.6KA.UK	15	3,175	1.14	3,450	1.25	3,850	1.45	5,050	1.74	5,700	1.93	6,350	2.08
	20	3,050	1.24	3,300	1.35	3,650	1.56	4,875	1.87	5,500	2.08	6,125	2.24
	25	2,950	1.31	3,200	1.47	3,500	1.70	4,600	1.99	5,300	2.23	5,900	2.40
PLA-P2KA.UK	15	3,969	1.58	4,313	1.74	4,813	2.00	6,313	2.40	7,125	2.67	7,938	2.88
	20	3,813	1.71	4,125	1.87	4,563	2.16	6,094	2.59	6,875	2.88	7,656	3.10
	25	3,688	1.82	4,000	2.03	4,375	2.35	5,750	2.75	6,625	3.08	7,375	3.32
PLA-P2.5KA.UK	15	4,699	1.56	5,106	1.72	5,698	1.98	7,474	2.38	8,436	2.64	9,398	2.85
	20	4,514	1.69	4,884	1.85	5,402	2.14	7,215	2.56	8,140	2.85	9,065	3.06
	25	4,366	1.80	4,736	2.01	5,180	2.32	6,808	2.72	7,844	3.05	8,732	3.29

**PU(H)-P1.6VGAA.UK, PU(H)-P1.6YGAA.UK, PU(H)-P2VGAA.UK, PU(H)-P2YGAA.UK**

**PU(H)-P2.5VGAA.UK, PU(H)-P2.5YGAA.UK**

(240V)

Service Ref.	Indoor intake air D.B.(°C)	Outdoor intake air W.B.(°C)											
		-10		-5		0		5		10		15	
		CA	P.C.	CA	P.C.	CA	P.C.	CA	P.C.	CA	P.C.	CA	P.C.
PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK	15	3,175	1.12	3,450	1.23	3,850	1.42	5,050	1.70	5,700	1.89	6,350	2.04
	20	3,050	1.21	3,300	1.32	3,650	1.53	4,875	1.83	5,500	2.04	6,125	2.19
	25	2,950	1.29	3,200	1.44	3,500	1.66	4,600	1.95	5,300	2.18	5,900	2.35
PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK	15	3,778	1.42	4,106	1.56	4,582	1.80	6,010	2.16	6,783	2.40	7,557	2.59
	20	3,630	1.54	3,927	1.68	4,344	1.94	5,801	2.33	6,545	2.59	7,289	2.78
	25	3,511	1.63	3,808	1.82	4,165	2.11	5,474	2.47	6,307	2.77	7,021	2.99
PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK	15	4,699	1.52	5,106	1.67	5,698	1.93	7,474	2.31	8,436	2.57	9,398	2.78
	20	4,514	1.64	4,884	1.80	5,402	2.08	7,215	2.49	8,140	2.78	9,065	2.98
	25	4,366	1.75	4,736	1.95	5,180	2.26	6,808	2.65	7,844	2.97	8,732	3.20

Note CA : Capacity (W)

P.C. : Power consumption (kW)

#### Cooling capacity correction factors

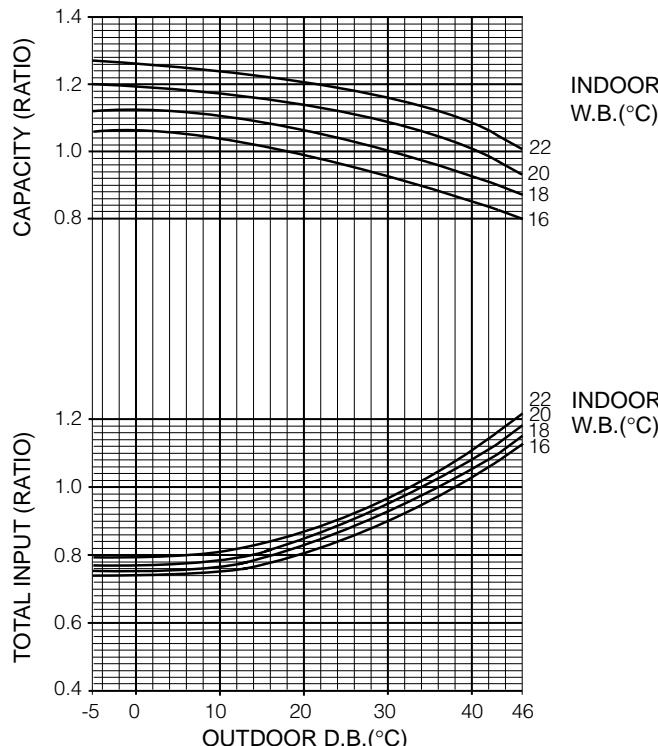
Service Ref.	Refrigerant piping length (one way)									
	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
PLA-P1.6KA.UK PLA-P1.6KA1.UK	1.00	0.993	0.984	0.978	0.969	0.961	0.956	0.948	—	—
PLA-P2KA.UK PLA-P2KA1.UK	1.00	0.993	0.984	0.978	0.969	0.961	0.956	0.948	—	—
PLA-P2.5KA.UK PLA-P2.5KA1.UK	1.00	0.989	0.980	0.970	0.960	0.950	0.940	0.930	0.920	0.910

### **Heating capacity correction factors**

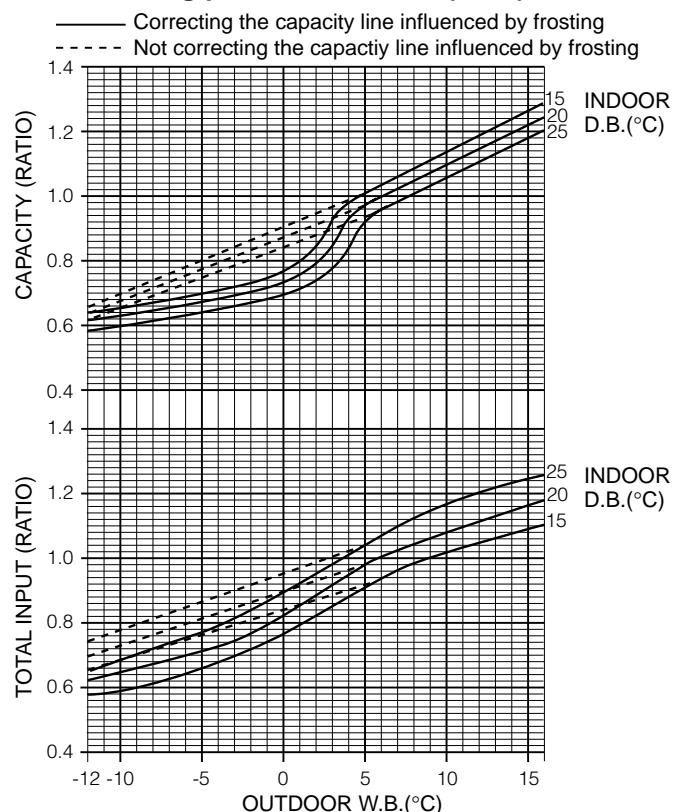
Service Ref.	Refrigerant piping length (one way)									
	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
PLA-P1.6KA.UK	1.00	0.998	0.995	0.993	0.990	0.988	0.985	0.983	—	—
PLA-P1.6KA.UK	1.00	0.998	0.995	0.993	0.990	0.988	0.985	0.983	—	—
PLA-P2.5KA.UK	1.00	0.998	0.995	0.993	0.990	0.988	0.985	0.983	0.980	0.978
PLA-P2.5KA.UK	1.00	0.998	0.995	0.993	0.990	0.988	0.985	0.983	0.980	0.978

## 2. PERFORMANCE CURVE

**Cooling performance curve(50Hz)**



**Heating performance curve(50Hz)**



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### 3. ELECTRICAL DATA

3.1. Heat pump type

Indoor unit ... 220V 50Hz Single phase    Outdoor unit... 220V 50Hz Single phase / 380V 50Hz 3 phases

Service Ref.	Indoor unit	PLA-P1.6KA.UK				PLA-P2KA.UK				PLA-P2.5KA.UK			
	Outdoor unit	PUH-P1.6VGA	PUH-P1.6YGA	PUH-P2VGA	PUH-P2YGA	PUH-P2.5VGA <sub>1</sub>	PUH-P2.5YGA <sub>1</sub>	PUH-P2.5VGA <sub>2</sub>	PUH-P2.5YGA <sub>2</sub>	PUH-P2.5VGA <sub>3</sub>	PUH-P2.5YGA <sub>3</sub>		
Mode		Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat
Capacity (W)		4,300	4,900	4,300	4,900	5,300	6,150	5,300	6,150	6,200	7,100	6,200	7,100
Total Input (kW) (In + Out)		1.73	1.78	1.73	1.78	2.52	2.56	2.52	2.56	2.70	2.56	2.70	2.56
Indoor unit	Input (kW)	0.12	0.08	0.12	0.08	0.12	0.08	0.12	0.08	0.12	0.09	0.12	0.09
	Current (A)	0.60	0.41	0.60	0.41	0.61	0.42	0.61	0.42	0.57	0.42	0.57	0.42
Outdoor unit	Starting current (A)	33	33	18	18	68	68	28	28	70	70	29	29
	Current (A)	7.54	7.96	2.75	2.90	11.13	11.50	4.01	4.14	11.96	11.54	4.31	4.16

Indoor unit ... 230V 50Hz Single phase    Outdoor unit... 230V 50Hz Single phase / 400V 50Hz 3 phases

Service Ref.	Indoor unit	PLA-P1.6KA.UK				PLA-P2KA.UK				PLA-P2.5KA.UK			
	Outdoor unit	PUH-P1.6VGA	PUH-P1.6YGA	PUH-P2VGA	PUH-P2YGA	PUH-P2.5VGA <sub>1</sub>	PUH-P2.5YGA <sub>1</sub>	PUH-P2.5VGA <sub>2</sub>	PUH-P2.5YGA <sub>2</sub>	PUH-P2.5VGA <sub>3</sub>	PUH-P2.5YGA <sub>3</sub>		
Mode		Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat
Capacity (W)		4,350	4,950	4,350	4,950	5,350	6,200	5,350	6,200	6,250	7,250	6,250	7,250
Total Input (kW) (In + Out)		1.81	1.85	1.81	1.85	2.57	2.62	2.57	2.62	2.74	2.63	2.74	2.63
Indoor unit	Input (kW)	0.14	0.09	0.14	0.09	0.13	0.09	0.13	0.09	0.13	0.09	0.13	0.09
	Current (A)	0.62	0.43	0.62	0.43	0.63	0.44	0.63	0.44	0.59	0.43	0.59	0.43
Outdoor unit	Starting current (A)	35	35	19	19	71	71	29	29	74	74	31	31
	Current (A)	7.64	8.05	2.71	2.85	11.05	11.45	3.91	4.06	11.82	11.50	4.19	4.07

Indoor unit ... 240V 50Hz Single phase    Outdoor unit... 240V 50Hz Single phase / 415V 50Hz 3 phases

Service Ref.	Indoor unit	PLA-P1.6KA.UK				PLA-P2KA.UK				PLA-P2.5KA.UK			
	Outdoor unit	PUH-P1.6VGA	PUH-P1.6YGA	PUH-P2VGA	PUH-P2YGA	PUH-P2.5VGA <sub>1</sub>	PUH-P2.5YGA <sub>1</sub>	PUH-P2.5VGA <sub>2</sub>	PUH-P2.5YGA <sub>2</sub>	PUH-P2.5VGA <sub>3</sub>	PUH-P2.5YGA <sub>3</sub>		
Mode		Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat
Capacity (W)		4,400	5,000	4,400	5,000	5,400	6,250	5,400	6,250	6,300	7,400	6,300	7,400
Total Input (kW) (In + Out)		1.86	1.93	1.86	1.93	2.62	2.67	2.62	2.67	2.77	2.68	2.77	2.68
Indoor unit	Input (kW)	0.15	0.10	0.15	0.10	0.14	0.10	0.14	0.10	0.14	0.10	0.14	0.10
	Current (A)	0.64	0.45	0.64	0.45	0.65	0.45	0.65	0.45	0.61	0.45	0.61	0.45
Outdoor unit	Starting current (A)	36	36	20	20	74	74	30	30	77	77	32	32
	Current (A)	7.66	8.19	2.67	2.86	11.11	11.51	3.88	4.02	11.78	11.55	4.11	4.03

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or via email at [john.smith@researchinstitute.org](mailto:john.smith@researchinstitute.org).

Indoor unit ··· 220V 50Hz Single phase      Outdoor unit···220V 50Hz Single phase / 380V 50Hz 3 phases

Service Ref.	Indoor unit	PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK				PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK				PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK			
	Outdoor unit	PUH-P•GAA.UK											
		1.6V		1.6Y		2V		2Y		2.5V		2.5Y	
Mode		Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat
Capacity (W)		4,300	4,900	4,300	4,900	5,200	5,850	5,200	5,850	6,200	7,100	6,200	7,100
Total Input (kW) (In + Out)		1.70	1.74	1.70	1.74	2.34	2.30	2.34	2.30	2.57	2.48	2.57	2.48
Indoor unit	Input (kW)	0.12	0.08	0.12	0.08	0.12	0.08	0.12	0.08	0.12	0.09	0.12	0.09
	Current (A)	0.60	0.41	0.60	0.41	0.61	0.42	0.61	0.42	0.57	0.42	0.57	0.42
Outdoor unit	Starting current (A)	33	33	18	18	62	62	31	31	71	71	32	32
	Current (A)	8.03	8.28	2.71	2.80	11.19	11.53	4.05	4.17	12.98	12.56	4.89	4.73

Indoor unit ··· 230V 50Hz Single phase      Outdoor unit···230V 50Hz Single phase / 400V 50Hz 3 phases

Service Ref.	Indoor unit	PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK				PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK				PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK			
	Outdoor unit	PUH-P•GAA.UK											
		1.6V		1.6Y		2V		2Y		2.5V		2.5Y	
Mode		Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat
Capacity (W)		4,350	4,950	4,350	4,950	5,250	5,900	5,250	5,900	6,250	7,250	6,250	7,250
Total Input (kW) (In + Out)		1.77	1.81	1.77	1.81	2.38	2.36	2.38	2.36	2.59	2.52	2.59	2.52
Indoor unit	Input (kW)	0.14	0.09	0.14	0.09	0.13	0.09	0.13	0.09	0.13	0.09	0.13	0.09
	Current (A)	0.62	0.43	0.62	0.43	0.63	0.44	0.63	0.44	0.59	0.43	0.59	0.43
Outdoor unit	Starting current (A)	35	35	19	19	62	62	31	31	74	74	34	34
	Current (A)	7.68	7.92	2.58	2.66	10.71	11.03	3.84	3.96	12.42	12.01	4.65	4.50

Indoor unit ··· 240V 50Hz Single phase      Outdoor unit···240V 50Hz Single phase / 415V 50Hz 3 phases

Service Ref.	Indoor unit	PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK				PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK				PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK			
		PUH-P•GAA.UK											
	Outdoor unit		1.6V		1.6Y		2V		2Y		2.5V		2.5Y
Mode		Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat
Capacity (W)		4,400	5,000	4,400	5,000	5,300	5,950	5,300	5,950	6,300	7,400	6,300	7,400
Total Input (kW) (In + Out)		1.82	1.89	1.82	1.89	2.44	2.40	2.44	2.40	2.63	2.57	2.63	2.57
Indoor unit	Input (kW)	0.15	0.10	0.15	0.10	0.14	0.10	0.14	0.10	0.14	0.10	0.14	0.10
	Current (A)	0.64	0.45	0.64	0.45	0.65	0.45	0.65	0.45	0.61	0.45	0.61	0.45
Outdoor unit	Starting current (A)	36	36	20	20	62	62	31	31	77	77	35	35
	Current (A)	7.36	7.59	2.49	2.56	10.26	10.57	3.70	3.82	11.90	11.51	4.48	4.34

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or via email at [john.smith@researchinstitute.org](mailto:john.smith@researchinstitute.org).

### 3.2. Cooling only type

Indoor unit ⋯ 220V 50Hz Single phase

Outdoor unit···220V 50Hz Single phase

Service Ref.		Indoor unit Outdoor unit	PLA-P1.6KA.UK PU-P1.6VGA	PLA-P2KA.UK PU-P2VGA	PLA-P2.5KA.UK PU-P2.5VGA
Mode			Cool	Cool	Cool
Capacity (W)			4,300	5,300	6,200
Total Input (kW) (In +Out)			1.73	2.52	2.70
Indoor unit	Input (kW)		0.12	0.12	0.12
	Current (A)		0.60	0.61	0.57
Outdoor unit	Starting current (A)		33	68	70
	Current (A)		7.54	11.13	11.96

Indoor unit ⋯ 230V 50Hz Single phase

Outdoor unit···230V 50Hz Single phase

Service Ref.		Indoor unit Outdoor unit	PLA-P1.6KA,UK PU-P1.6VGA	PLA-P2KA,UK PU-P2VGA	PLA-P2.5KA,UK PU-P2.5VGA
Mode			Cool	Cool	Cool
Capacity (W)			4,350	5,350	6,250
Total Input (kW) (In +Out)			1.81	2.57	2.74
Indoor unit	Input (kW)		0.14	0.13	0.13
	Current (A)		0.62	0.63	0.59
Outdoor unit	Starting current (A)		35	71	74
	Current (A)		7.64	11.05	11.82

Indoor unit ⋯ 240V 50Hz Single phase

Outdoor unit···240V 50Hz Single phase

Service Ref.	Indoor unit Outdoor unit	PLA-P1.6KA,UK PU-P1.6VGA	PLA-P2KA,UK PU-P2VGA	PLA-P2.5KA,UK PU-P2.5VGA <sub>1</sub>
Mode		Cool	Cool	Cool
Capacity (W)		4,400	5,400	6,300
Total Input (kW) (In +Out)		1.86	2.62	2.77
Indoor unit	Input (kW)	0.15	0.14	0.14
	Current (A)	0.64	0.65	0.61
Outdoor unit	Starting current (A)	36	74	77
	Current (A)	7.66	11.11	11.78

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or via email at [john.smith@researchinstitute.org](mailto:john.smith@researchinstitute.org).

Indoor unit 220V 50Hz Single phase  
Outdoor unit 220V 50Hz Single phase

Service Ref.	Indoor unit	PLA-P1.6KA.UK PLA-P1.6KA1.UK		PLA-P2KA.UK PLA-P2KA1.UK		PLA-P2.5KA.UK PLA-P2.5KA1.UK		
	Outdoor unit	PU-P•GAA.UK						
		1.6V	1.6Y	2V	2Y	2.5V	2.5Y	
Mode		Cool	Cool	Cool	Cool	Cool	Cool	
Capacity (W)		4,300	4,300	5,200	5,200	6,200	6,200	
Total Input (kW) (In +Out)		1.70	1.73	2.34	2.34	2.70	2.70	
Indoor unit	Input (kW)	0.12	0.12	0.12	0.12	0.12	0.12	
	Current (A)	0.60	0.60	0.61	0.61	0.57	0.57	
Outdoor unit	Starting current (A)	33	18	62	31	70	70	
	Current (A)	8.03	2.71	11.19	4.05	12.98	4.89	

Service Ref.		Indoor unit	PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK		PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK		PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK	
		Outdoor unit	PU-P•GAA.UK					
			1.6V	1.6Y	2V	2Y	2.5V	2.5Y
Mode		Cool	Cool	Cool	Cool	Cool	Cool	Cool
Capacity (W)		4,350	4,350	5,250	5,250	6,250	6,250	6,250
Total Input (kW) (In +Out)		1.77	1.77	2.38	2.38	2.59	2.59	2.59
Indoor unit	Input (kW)	0.14	0.14	0.13	0.13	0.13	0.13	0.13
	Current (A)	0.62	0.62	0.63	0.63	0.59	0.59	0.59
Outdoor unit	Starting current (A)	35	19	62	31	74	74	34
	Current (A)	7.68	2.58	10.71	3.84	12.42	12.42	4.65

Service Ref.		Indoor unit	PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK		PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK		PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK	
		Outdoor unit	PU-P•GAA.UK					
			1.6V	1.6Y	2V	2Y	2.5V	2.5Y
Mode		Cool	Cool	Cool	Cool	Cool	Cool	Cool
Capacity (W)		4,400	4,400	5,300	5,300	6,300	6,300	6,300
Total Input (kW) (In +Out)		1.82	1.82	2.44	2.44	2.63	2.63	2.63
Indoor unit	Input (kW)	0.15	0.15	0.14	0.14	0.14	0.14	0.14
	Current (A)	0.64	0.64	0.65	0.65	0.61	0.61	0.61
Outdoor unit	Starting current (A)	36	20	62	31	77	77	35
	Current (A)	7.36	2.49	10.26	3.70	11.90	11.90	4.48

## 4. STANDARD OPERATION DATA (1)

### 4.1. Heat pump type(1)

Service Ref.			PLA-P1.6KA.UK		PLA-P2KA.UK		PLA-P2.5KA.UK		
Mode			Cooling	Heating	Cooling	Heating	Cooling	Heating	
Total	Capacity	W	4,400	5,000	5,400	6,250	6,300	7,400	
	Input	kW	1.86	1.93	2.62	2.67	2.77	2.64	
Electrical circuit	<b>Indoor unit Service Ref.</b>			<b>PLA-P1.6KA.UK</b>		<b>PLA-P2KA.UK</b>		<b>PLA-P2.5KA.UK</b>	
	Phase, Hz			1,50		1,50		1,50	
	Volts	V	240		240		240		
	Amperes	A	0.64	0.45	0.65	0.45	0.61	0.45	
	<b>Outdoor unit Service Ref.</b>			<b>PUH-P1.6VGA</b> <b>PUH-P1.6YGA</b>		<b>PUH-P2VGA</b> <b>PUH-P2YGA</b>		<b>PUH-P2.5VGA<sub>1</sub></b> <b>PUH-P2.5YGA<sub>1</sub></b>	
	Phase, Hz			1/3 , 50		1/3 , 50		1/3 , 50	
	Volts	V	240/415		240/415		240/415		
Refrigerant circuit	Amperes	A	7.66/2.67	8.19/2.86	11.11/3.88	11.51/4.02	11.78/4.11	11.55/4.03	
	Discharge pressure	MPa (kgf/cm <sup>2</sup> )	2.13 (21.7)	2.49 (25.4)	2.41 (24.6)	2.57 (26.2)	2.08 (21.2)	2.23 (22.7)	
	Suction pressure	MPa (kgf/cm <sup>2</sup> )	0.50 (5.1)	0.44 (4.5)	0.50 (5.1)	0.44 (4.5)	0.50 (5.1)	0.42 (4.3)	
	Discharge temperature	°C	87.1	84.5	87.8	93.2	77.5	83.4	
	Condensing temperature	°C	48.3	47	53.4	53	48.5	50	
	Suction temperature	°C	12	2	4.5	0.8	6.3	0.8	
Indoor side	Ref. pipe length	m	5	5	5	5	5	5	
	Intake air temperature	D.B. °C	27	20	27	20	27	20	
		W.B. °C	19	15	19	15	19	15	
	Discharge air temperature	D.B. °C	16.3	36.5	14.8	41.0	13.5	43.7	
Outdoor side	Intake air temperature	D.B. °C	35	7	35	7	35	7	
		W.B. °C	24	6	24	6	24	6	
SHF			0.80	—	0.74	—	0.75	—	
BF			0.26	—	0.22	—	0.12	—	

The unit of pressure has been changed to MPa based on international SI system.

The conversion factor is : 1(MPa)=10.2(kgf/cm<sup>2</sup>)

#### 4.1. Heat pump type(2)

Service Ref.			PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK		PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK		PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK		
Mode			Cooling	Heating	Cooling	Heating	Cooling	Heating	
Total	Capacity	W	4,400	5,000	5,300	5,950	6,300	7,400	
	Input	kW	1.82	1.89	2.44	2.40	2.63	2.57	
Electrical circuit	<b>Indoor unit Service Ref.</b>			<b>PLA-P1.6KA.UK PLA-P1.6KA<sub>1</sub>.UK</b>		<b>PLA-P2KA.UK PLA-P2KA<sub>1</sub>.UK</b>		<b>PLA-P2.5KA.UK PLA-P2.5KA<sub>1</sub>.UK</b>	
	Phase, Hz			1,50		1,50		1,50	
	Volts	V	240		240		240		
	Amperes	A	0.64	0.45	0.65	0.45	0.61	0.45	
	<b>Outdoor unit Service Ref.</b>			<b>PUH-P1.6VGAA.UK PUH-P1.6YGAA.UK</b>		<b>PUH-P2VGAA.UK PUH-P2YGAA.UK</b>		<b>PUH-P2.5VGAA.UK PUH-P2.5YGAA.UK</b>	
	Phase, Hz			1/3 , 50		1/3 , 50		1/3 , 50	
	Volts	V	240/415		240/415		240/415		
	Amperes	A	7.36/2.49	7.59/2.56	10.26/3.70	10.57/3.82	11.90/4.48	11.51/4.34	
Refrigerant circuit	Discharge pressure	MPa (kgf/cm <sup>2</sup> )	2.13 (21.7)	2.49 (25.4)	2.41 (24.6)	2.57 (26.2)	2.08 (21.2)	2.23 (22.7)	
	Suction pressure	MPa (kgf/cm <sup>2</sup> )	0.50 (5.1)	0.44 (4.5)	0.50 (5.1)	0.44 (4.5)	0.50 (5.1)	0.42 (4.3)	
	Discharge temperature	°C	87.1	84.5	87.8	93.2	77.5	83.4	
	Condensing temperature	°C	48.3	47	53.4	53	48.5	50	
	Suction temperature	°C	12	2	4.5	0.8	6.3	0.8	
	Ref. pipe length	m	5	5	5	5	5	5	
Indoor side	Intake air temperature	D.B.	°C	27	20	27	20	27	20
		W.B.	°C	19	15	19	15	19	15
Outdoor side	Discharge air temperature	D.B.	°C	16.3	36.5	15.0	40.0	13.5	43.7
	Intake air temperature	D.B.	°C	35	7	35	7	35	7
		W.B.	°C	24	6	24	6	24	6
SHF			0.80	—	0.74	—	0.75	—	
BF			0.26	—	0.22	—	0.12	—	

The unit of pressure has been changed to MPa based on international SI system.

The conversion factor is : 1(MPa)=10.2(kgf/cm<sup>2</sup>)

## 4. STANDARD OPERATION DATA (2)

### 4.2. Cooling only type(1)

Service Ref.			PLA-P1.6KA.UK	PLA-P2KA.UK	PLA-P2.5KA.UK
Mode			Cooling	Cooling	Cooling
Total	Capacity	W	4,400	5,400	6,300
	Input	kW	1.86	2.62	2.77
Electrical circuit	Indoor unit Service Ref.			PLA-P1.6KA.UK	PLA-P2KA.UK
	Phase,Hz			1,50	1,50
	Volts	V	240	240	240
	Amperes	A	0.64	0.65	0.61
	Outdoor unit Service Ref.			PU-P1.6VGA	PU-P2VGA
	Phase,Hz			1,50	1,50
	Volts	V	240	240	240
	Amperes	A	7.66	11.11	11.78
Refrigerant circuit	Discharge pressure		MPa (kgf/cm <sup>2</sup> )	2.13 (21.7)	2.41 (24.6)
	Suction pressure		MPa (kgf/cm <sup>2</sup> )	0.50 (5.1)	0.50 (5.1)
	Discharge temperature		°C	87.1	87.8
	Condensing temperature		°C	48.3	53.4
	Suction temperature		°C	12	4.5
	Ref. pipe length		m	5	5
Indoor side	Intake air temperature	D.B.	°C	27	27
		W.B.	°C	19	19
	Discharge air temperature	D.B.	°C	16.3	14.8
Outdoor side	Intake air temperature	D.B.	°C	35	35
		W.B.	°C	24	24
	SHF			0.80	0.74
BF			0.26	0.22	0.12

The unit of pressure has been changed to MPa based on international SI system.

The conversion factor is : 1(MPa)=10.2(kgf/cm<sup>2</sup>)

#### 4.2. Cooling only type(2)

Service Ref.			PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK	PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK	PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK	
Mode			Cooling	Cooling	Cooling	
Total	Capacity	W	4,400	5,300	6,300	
	Input	kW	1.82	2.44	2.63	
Electrical circuit	<b>Indoor unit Service Ref.</b>			<b>PLA-P2KA.UK PLA-P2KA<sub>1</sub>.UK</b>	<b>PLA-P2.5KA.UK PLA-P2.5KA<sub>1</sub>.UK</b>	
	Phase,Hz			1,50	1,50	
	Volts	V	240	240	240	
	Amperes	A	0.64	0.65	0.61	
	<b>Outdoor unit Service Ref.</b>			<b>PU-P1.6VGAA.UK PU-P1.6YGAA.UK</b>	<b>PU-P2VGAA.UK PU-P2YGAA.UK</b>	
	Phase,Hz			1/3 , 50	1/3 , 50	
	Volts	V	240/415	240/415	240/415	
	Amperes	A	7.36 / 2.49	10.26 / 3.70	11.90 / 4.48	
Refrigerant circuit	Discharge pressure	MPa (kgf/cm <sup>2</sup> )	2.13 (21.7)	2.41 (24.6)	2.08 (21.2)	
	Suction pressure	MPa (kgf/cm <sup>2</sup> )	0.50 (5.1)	0.50 (5.1)	0.50 (5.1)	
	Discharge temperature	°C	87.1	87.8	77.5	
	Condensing temperature	°C	48.3	53.4	48.5	
	Suction temperature	°C	12	4.5	6.3	
	Ref. pipe length	m	5	5	5	
Indoor side	Intake air temperature	D.B.	27	27	27	
		W.B.	19	19	19	
Outdoor side	Discharge air temperature	D.B.	16.3	15.0	13.5	
	Intake air temperature	D.B.	35	35	35	
		W.B.	24	24	24	
SHF			0.80	0.74	0.75	
BF			0.26	0.22	0.12	

The unit of pressure has been changed to MPa based on international SI system.

The conversion factor is : 1(MPa)=10.2(kgf/cm<sup>2</sup>)

#### 5. OUTLET AIR SPEED AND COVERAGE RANGE

			PLA-P1.6KA.UK PLA-P1.6KA <sub>1</sub> .UK	PLA-P2KA.UK PLA-P2KA <sub>1</sub> .UK	PLA-P2.5KA.UK PLA-P2.5KA <sub>1</sub> .UK
Standard	Air flow	m <sup>3</sup> /min	16.0	16.0	17.0
	Air speed	m/sec.	5.6	5.6	5.9
	Coverage range	m	6.0	6.0	6.4
High ceiling	Air flow	m <sup>3</sup> /min	17.0	17.0	18.0
	Air speed	m/sec.	5.9	5.9	6.3
	Coverage range	m	6.4	6.4	6.8

\* The air coverage range is the value up to the position where the air speed is 0.25m/sec.

When air is blown out horizontally from the unit at the Hi notch position.

The coverage range should be used only as a general guideline since it varies according to the size of the room and the furniture inside the room.

## 6. NOISE CRITERION CURVES

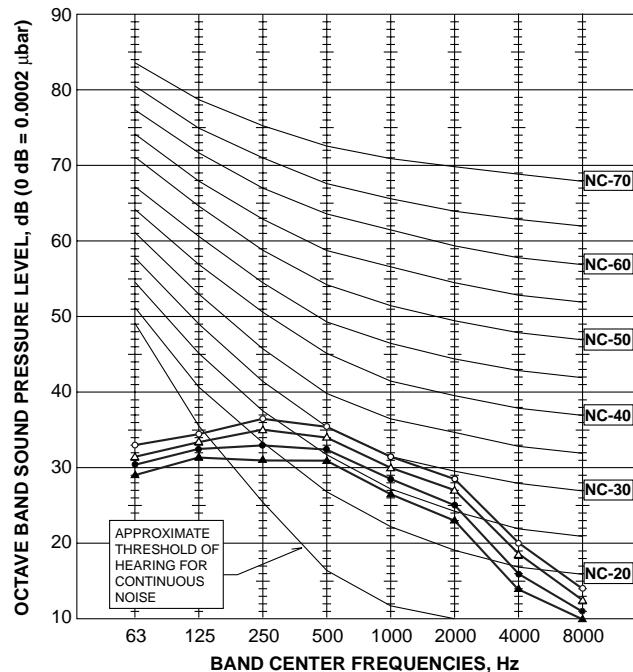
**PLA-P1.6KA.UK**

**PLA-P1.6KA<sub>1</sub>.UK**

**PLA-P2KA.UK**

**PLA-P2KA<sub>1</sub>.UK**

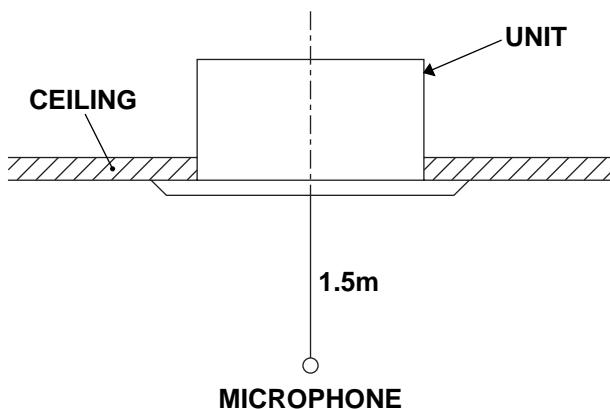
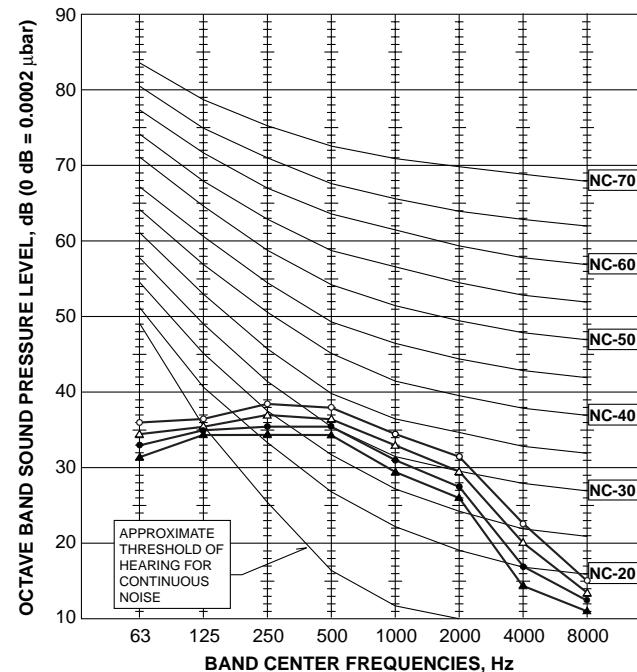
NOTCH	SPL(dB)	LINE
High	37	○—○
Medium1	35.5	△—△
Medium2	34	●—●
Low	32	▲—▲



**PLA-P2.5KA.UK**

**PLA-P2.5KA<sub>1</sub>.UK**

NOTCH	SPL(dB)	LINE
High	39.5	○—○
Medium1	38	△—△
Medium2	36.5	●—●
Low	35	▲—▲



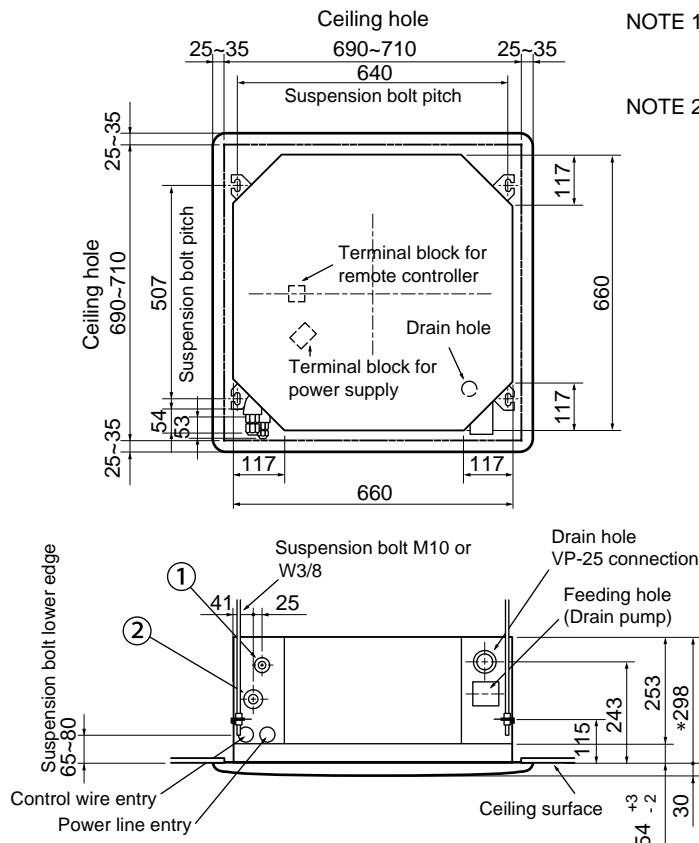
Ambient temperature 27°C

Test conditions are based on JIS Z8731

## INDOOR UNIT

Unit : mm

**PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK**  
**PLA-P1.6KA<sub>1</sub>.UK, PLA-P2KA<sub>1</sub>.UK, PLA-P2.5KA<sub>1</sub>.UK**

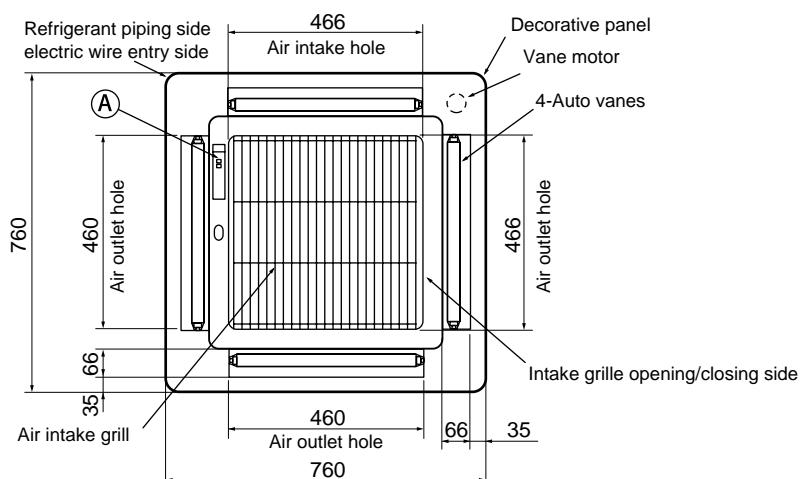


NOTE 1. The electrical parts box may be removed during servicing. When connecting the power line and the control wire, provide enough length to the electric wires.

NOTE 2. When installing the optional high-efficiency filter, the dimension between the transom and ceiling shall be more than 440mm. Also, when installing the optional fresh air intake casement or the multi-functional casement, the dimension between the transom and ceiling shall be more than 440mm. (The optional high-efficiency filter can also be installed.)

Models	①	②
PLA-P1.6KA.UK	Refrigerant pipe ( $\phi$ 9.52mm)	Refrigerant pipe ( $\phi$ 15.88mm)
PLA-P2KA.UK	Flared connection	Flared connection
PLA-P2.5KA.UK	3/8F	5/8F
PLA-P1.6KA <sub>1</sub> .UK		
PLA-P2KA <sub>1</sub> .UK		
PLA-P2.5KA <sub>1</sub> .UK		

\*Leave space of 10~15mm between the top surface of the unit and the ceiling slab.

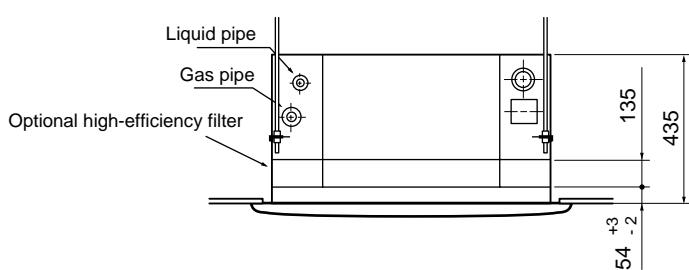
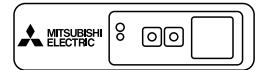


A(indication area)

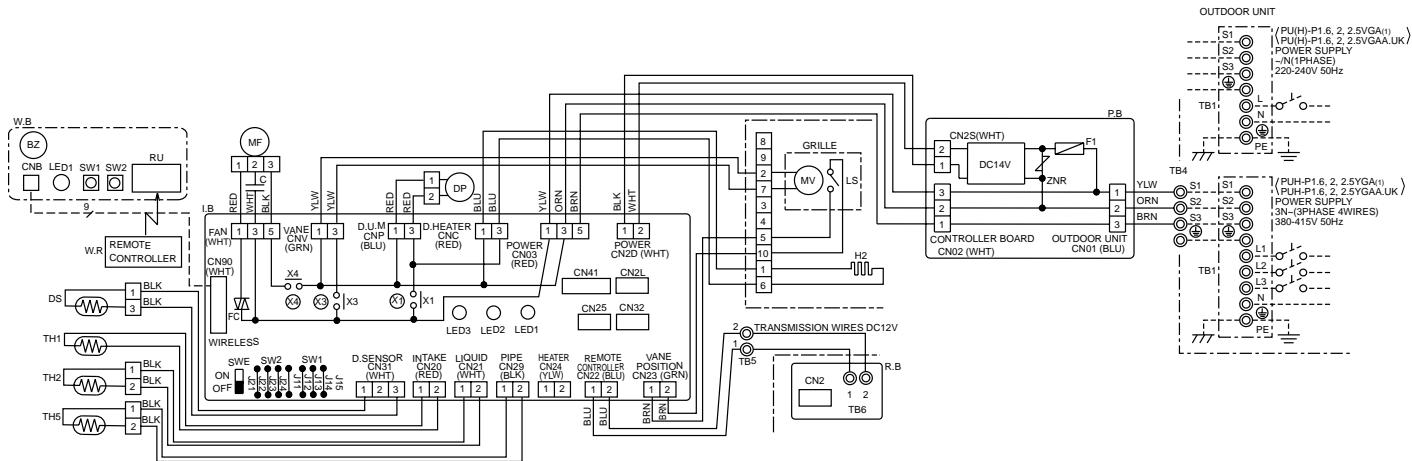
wired panel



wireless panel



**PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK  
PLA-P1.6KA<sub>1</sub>.UK, PLA-P2KA<sub>1</sub>.UK, PLA-P2.5KA<sub>1</sub>.UK**



SW1												
MODELS	Manufacture	Service board										
PLA-P1.6KA.UK												
PLA-P2KA.UK												
PLA-P2.5KA.UK												
PLA-P1.6KA..UK	● ●											
PLA-P2KA..UK	J11 J12 J13 J14 J15	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td> </tr> <tr> <td>■</td><td>■</td><td>■</td><td>■</td><td>■</td> </tr> </table>	1	2	3	4	5	■	■	■	■	■
1	2	3	4	5								
■	■	■	■	■								
PLA-P2.5KA..UK		ON OFF										

SW2		
MODELS	Manufacturer	Service board
PLA-P1.6KA.UK PLA-P1.6KA1.UK	 J21J22J23J24	 ON OFF
PLA-P2KA.UK PLA-P2KA1.UK	 J21J22J23J24	 ON OFF
PLA-P2.5KA.UK PLA-P2.5KA1.UK	 J21J22J23J24	 ON OFF

Please set the voltage using the remote controller. For the setting method, please refer to the indoor unit Installation Manual.

**NOTES:**

1. Since the outdoor side electric wiring may change be sure to check the outdoor unit electric wiring for servicing.
  2. Indoor and outdoor connecting wires are made with polarities, make wiring matching terminal numbers(S1,S2,S3).
  3. Make sure that the main power supply of the booster heater is independent.
  4. Symbols used in wiring diagram above are,  :Connector,  :Terminal block.

[LEGEND]

[LEGEND]		NAME		NAME		NAME	
SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
P.B	INDOOR POWER BOARD	I.B	INDOOR CONTROLLER BOARD	LS	LIMIT SWITCH		
F1	FUSE (4A)		CN2L CONNECTOR (LOSSNAY)	MF	FAN MOTOR		
ZNR	VARISTOR		CN25 CONNECTOR (HUMIDIFIER)	MV	VANE MOTOR		
R.B	REMOTE CONTROLLER BOARD	CN32 CONNECTOR (REMOTE SWITCH)	TB4	TERMINAL BLOCK (INDOOR/OUTDOOR CONNECTING LINE)			
	CN2 CONNECTOR (PROGRAM TIMER)	CN41 CONNECTOR (HA TERMINAL-A)	FC	FAN PHASE CONTROL	TB5	TERMINAL BLOCK (REMOTE CONTROLLER TRANSMISSION LINE)	
	TB6 TERMINAL BLOCK (REMOTE CONTROLLER TRANSMISSION LINE)	LED1 POWER SUPPLY (I.B)	LED2 POWER SUPPLY (R.B)				
W.B	WIRELESS REMOTE CONTROLLER BOARD (OPTION)	LED3 TRANSMISSION (INDOOR-OUTDOOR)	TH1	ROOM TEMPERATURE THERMISTOR (0°C/15kΩ, 25°C/6.4kΩ DETECT)			
	RU RECEIVING UNIT	SW1 JUMPER WIRE (MODEL SELECTION)	TH2	PIPE TEMPERATURE THERMISTOR/LIQUID (0°C/15kΩ, 25°C/5.4kΩ DETECT)			
	BZ BUZZER	SW2 JUMPER WIRE (CAPACITY CODE)					
	LED1 LED (RUN INDICATOR)	SWE SWITCH (EMERGENCY OPERATION)	TH5	CONDENSER/EVAPORATOR TEMPERATURE THERMISTOR (0°C/15kΩ, 25°C/5.4kΩ DETECT)			
	SW1 SWITCH (HEATING ON/OFF)	X1 RELAY (DRAIN PUMP/D.HEATER)					
	SW2 SWITCH (COOLING ON/OFF)	X3 RELAY (VANE MOTOR)					
	W.R WIRELESS REMOTE CONTROLLER (OPTION)	X4 RELAY (FAN MOTOR)					
		C CAPACITOR (FAN MOTOR)					
		DP DRAIN-UP MACHINE					
		DS DRAIN SENSOR					
		H2 DEW PREVENTION HEATER					

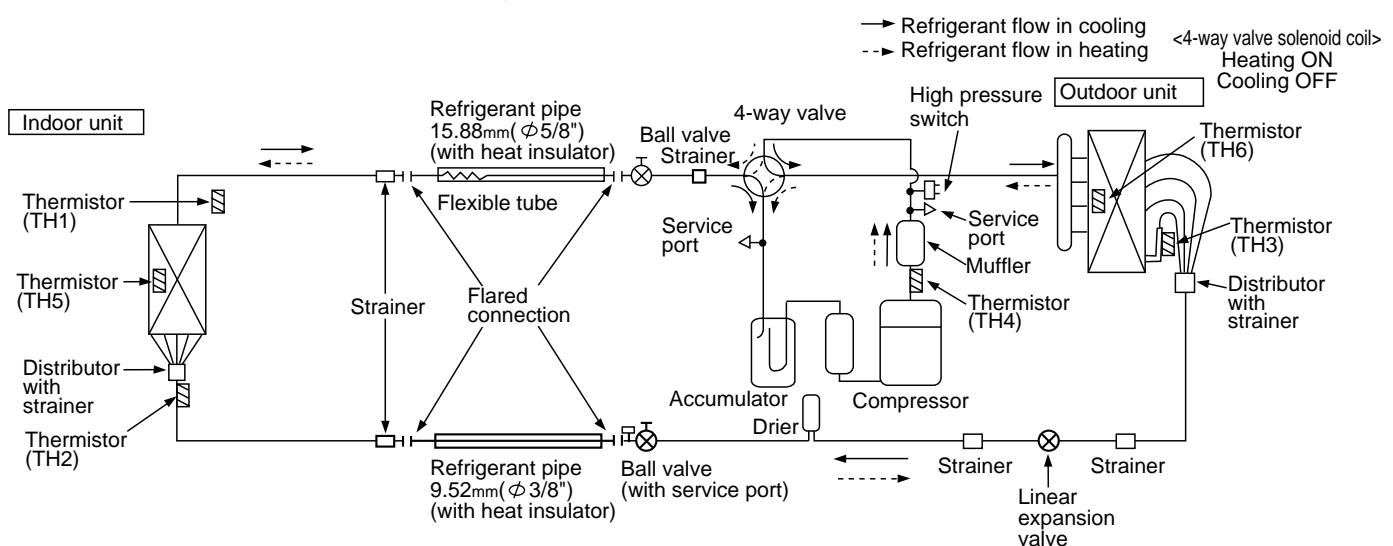
\* The part name of symbol “I.B” is “SPCB”.

**PLA-P1.6KA.UK / PUH-P1.6VGA, PUH-P1.6YGA**

**PLA-P2KA.UK / PUH-P2VGA, PUH-P2YGA**

**PLA-P2.5KA.UK / PUH-P2.5VGA<sub>1</sub>, PUH-P2.5YGA<sub>1</sub>**

Unit : mm

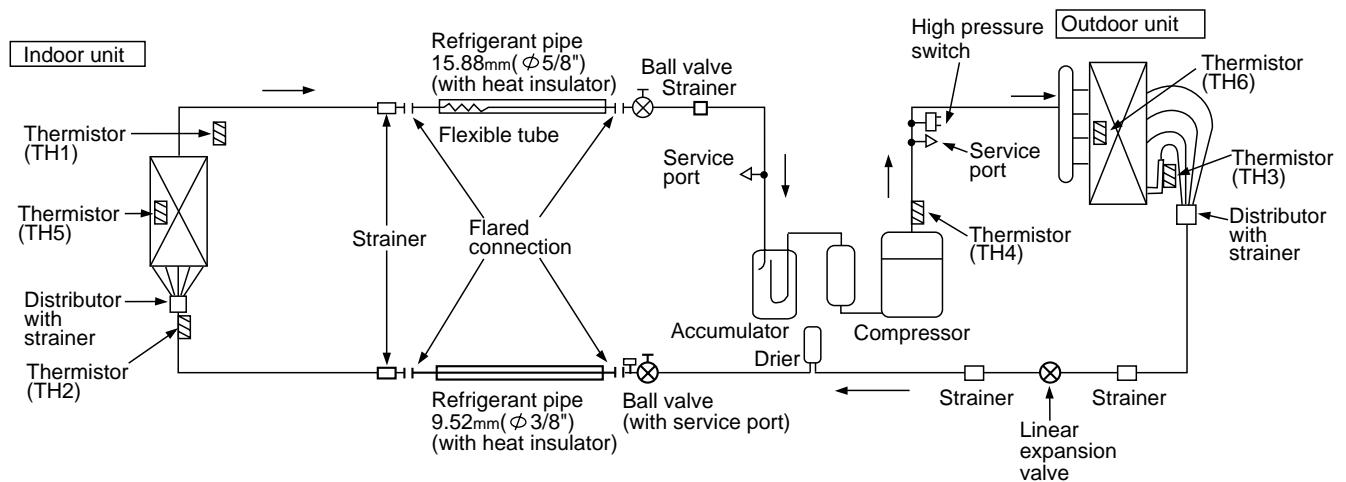


**PLA-P1.6KA.UK / PUH-P1.6VGA**

**PLA-P2KA.UK / PUH-P2VGA**

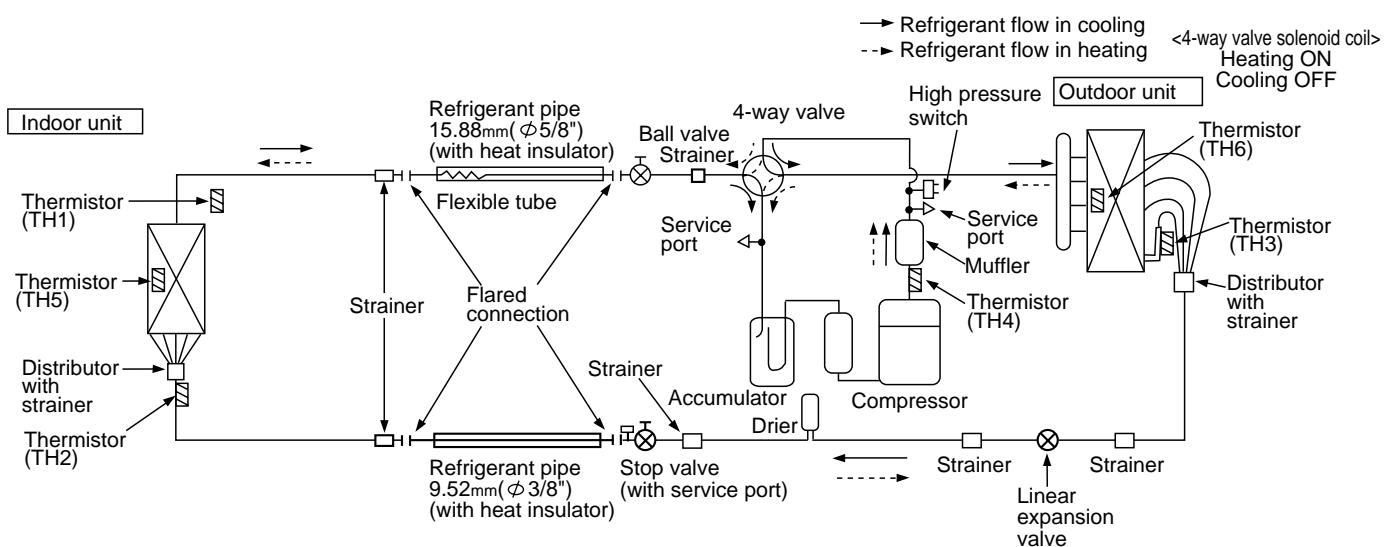
**PLA-P2.5KA.UK / PUH-P2.5VGA<sub>1</sub>**

→ Refrigerant flow in cooling



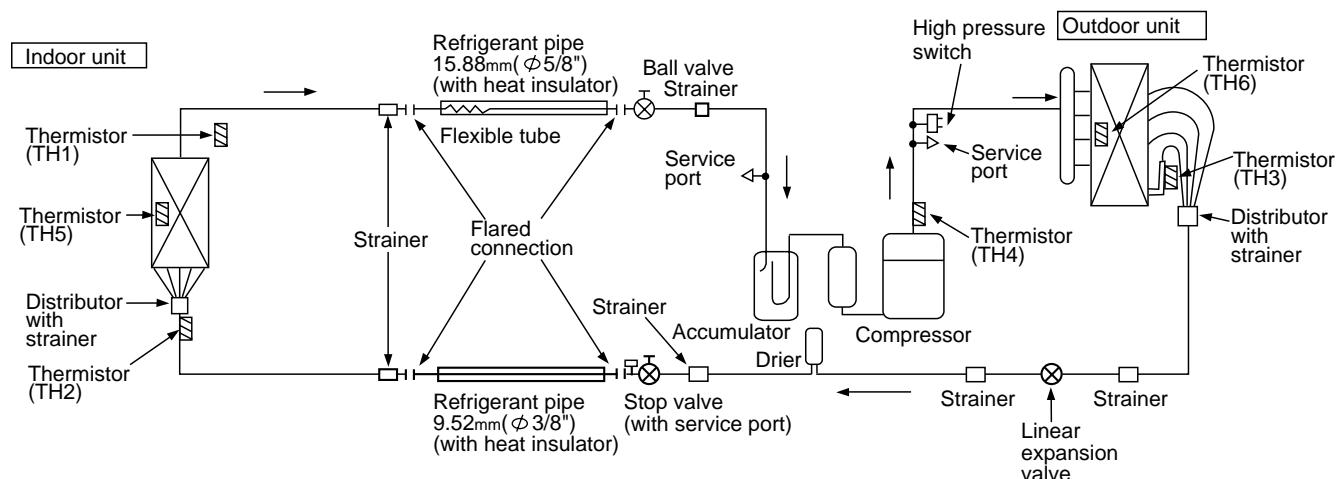
**PLA-P1.6KA.UK, PLA-P1.6KA<sub>1</sub>.UK / PUH-P1.6VGAA.UK, PUH-P1.6YGAA.UK  
 PLA-P2KA.UK, PLA-P2KA<sub>1</sub>.UK / PUH-P2VGAA.UK, PUH-P2YGAA.UK  
 PLA-P2.5KA.UK, PLA-P2.5KA<sub>1</sub>.UK / PUH-P2.5VGAA.UK, PUH-P2.5YGAA.UK**

Unit : mm



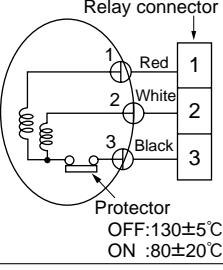
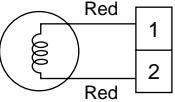
**PLA-P1.6KA.UK, PLA-P1.6KA<sub>1</sub>.UK / PUH-P1.6VGAA.UK, PUH-P1.6YGAA.UK  
 PLA-P2KA.UK, PLA-P2KA<sub>1</sub>.UK / PUH-P2VGAA.UK, PUH-P2YGAA.UK  
 PLA-P2.5KA.UK, PLA-P2.5KA<sub>1</sub>.UK / PUH-P2.5VGAA.UK, PUH-P2.5YGAA.UK**

→ Refrigerant flow in cooling



## HOW TO CHECK THE PARTS

**PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK  
PLA-P1.6KA<sub>1</sub>.UK, PLA-P2KA<sub>1</sub>.UK, PLA-P2.5KA<sub>1</sub>.UK**

Parts name	Check points			
Room temperature thermistor (TH1)	Disconnect the connector then measure the resistance using a tester. (Surrounding temperature 10°C~30°C)			
Pipe temperature thermistor (TH2)	Normal	Abnormal		
Condenser/evaporator temperature thermistor (TH5)	4.3kΩ~9.6kΩ	Open or short	(Refer to the thermistor)	
Vane motor	Measure the resistance between the terminals using a tester. (Surrounding temperature 20°C)			
Fan motor	Normal	Abnormal		
	15kΩ	Open or short		
	Measure the resistance between the terminals using a tester. (Surrounding temperature 20°C)			
	Relay connector	Motor terminal or Relay connector	Normal	
		PLA-P	Abnormal	
		1.6/2/2.5KA.UK		
	Protector OFF:130±5°C ON :80±20°C	Red-Black	87.2Ω	
		White-Black	104.1Ω	Open or short
Drain pump	Measure the resistance between the terminals using a tester. (Surrounding temperature 20°C)			
		Normal	Abnormal	
		290Ω	Open or short	
Drain sensor	Measure the resistance between the terminals using a tester. Measure the resistance after 3 minutes have passed since the power supply was intercepted. (Surrounding temperature 0°C~60°C)			
	Normal	Abnormal		
	0.6kΩ~6.0kΩ	Open or short	(Refer to the thermistor)	

<Thermistor Characteristic graph>

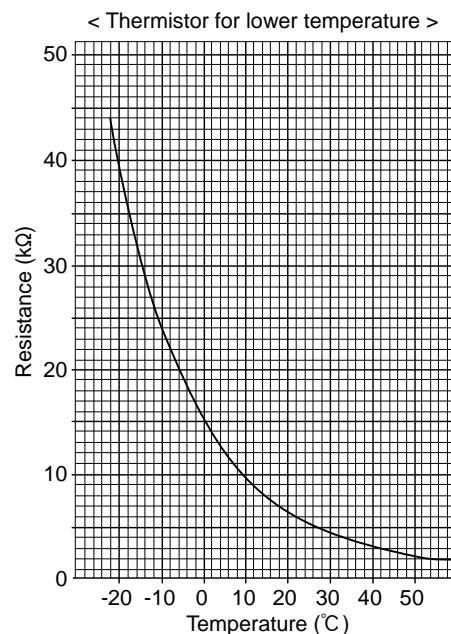
**Thermistor for lower temperature**

Room temperature thermistor(TH1)  
 Pipe temperature thermistor(TH2)  
 Condenser/evaporator temperature  
 thermistor(TH5)

Thermistor  $R_0=15\text{k}\Omega \pm 3\%$   
 Fixed number of  $B=3480\text{K} \pm 2\%$

$$R_t = 15 \exp \left\{ 3480 \left( \frac{1}{273+t} - \frac{1}{273} \right) \right\}$$

0°C	15kΩ
10°C	9.6kΩ
20°C	6.3kΩ
25°C	5.2kΩ
30°C	4.3kΩ
40°C	3.0kΩ

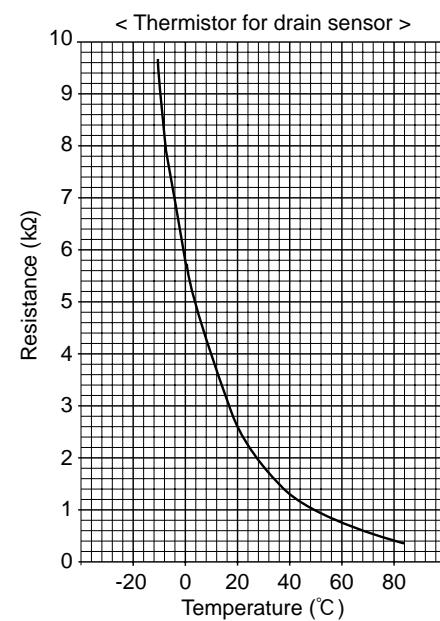


**Thermistor for drain sensor**

Thermistor  $R_0=6.0\text{k}\Omega \pm 5\%$   
 Fixed number of  $B=3390\text{K} \pm 2\%$

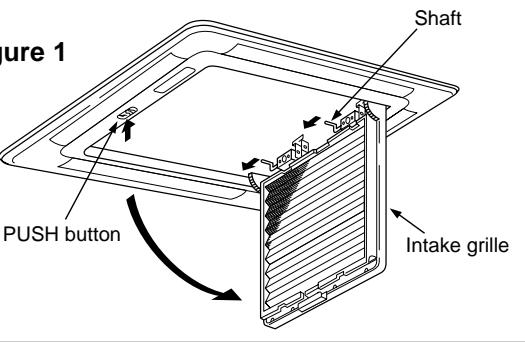
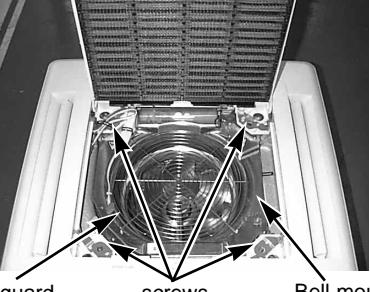
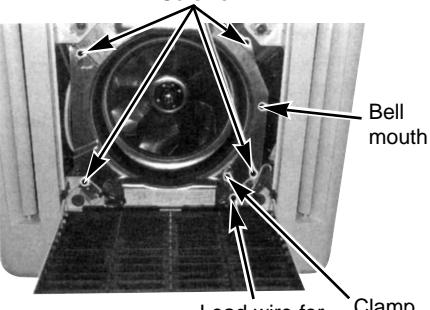
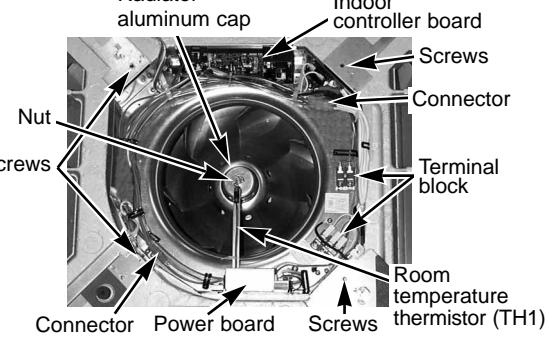
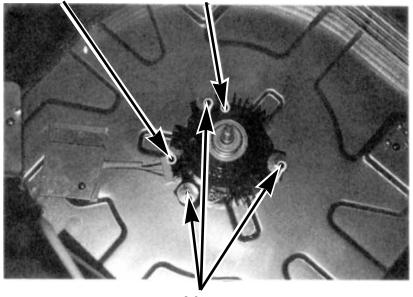
$$R_t = 6 \exp \left\{ 3390 \left( \frac{1}{273+t} - \frac{1}{273} \right) \right\}$$

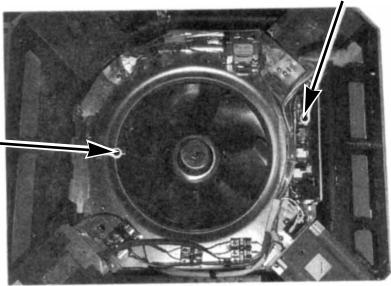
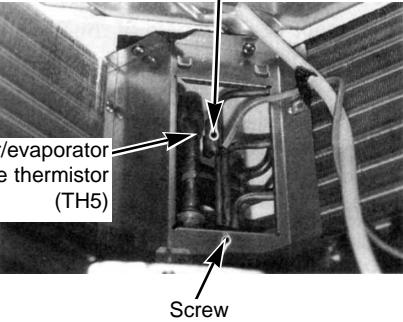
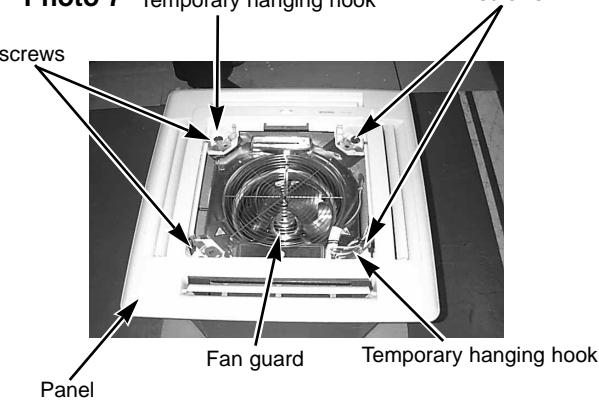
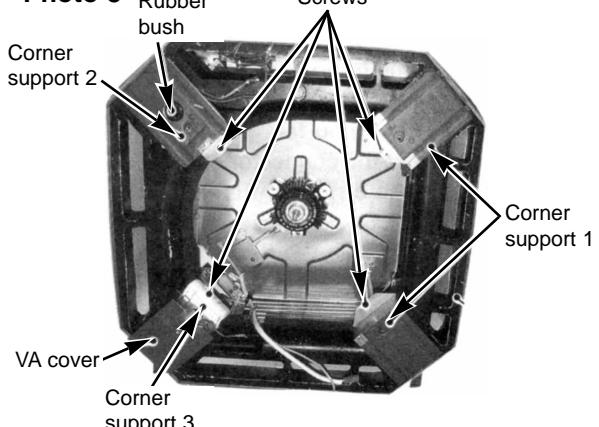
0°C	6.0kΩ
10°C	3.9kΩ
20°C	2.6kΩ
25°C	2.2kΩ
30°C	1.8kΩ
40°C	1.3kΩ
60°C	0.6kΩ

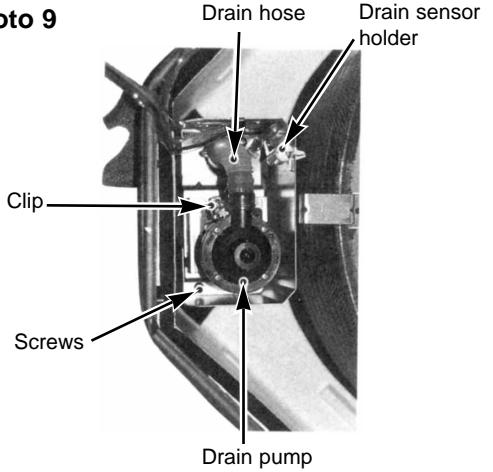
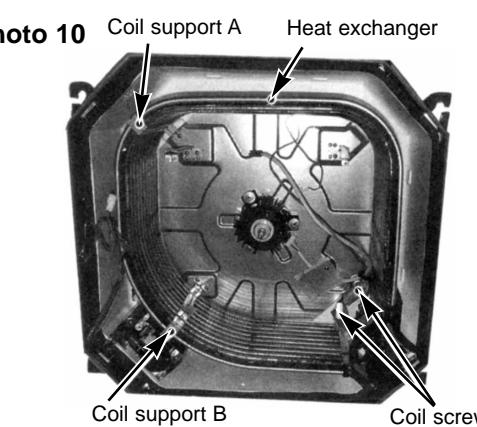
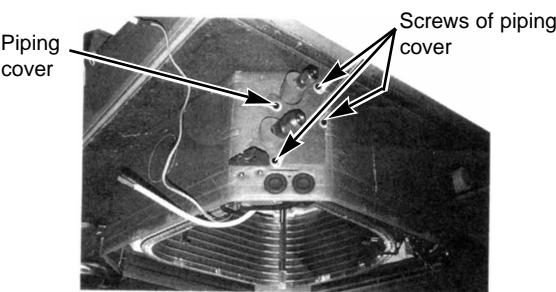


**• INDOOR UNIT**PLA-P1.6KA.UK, PLA-P1.6KA<sub>1</sub>.UK

Be careful on removing heavy parts.

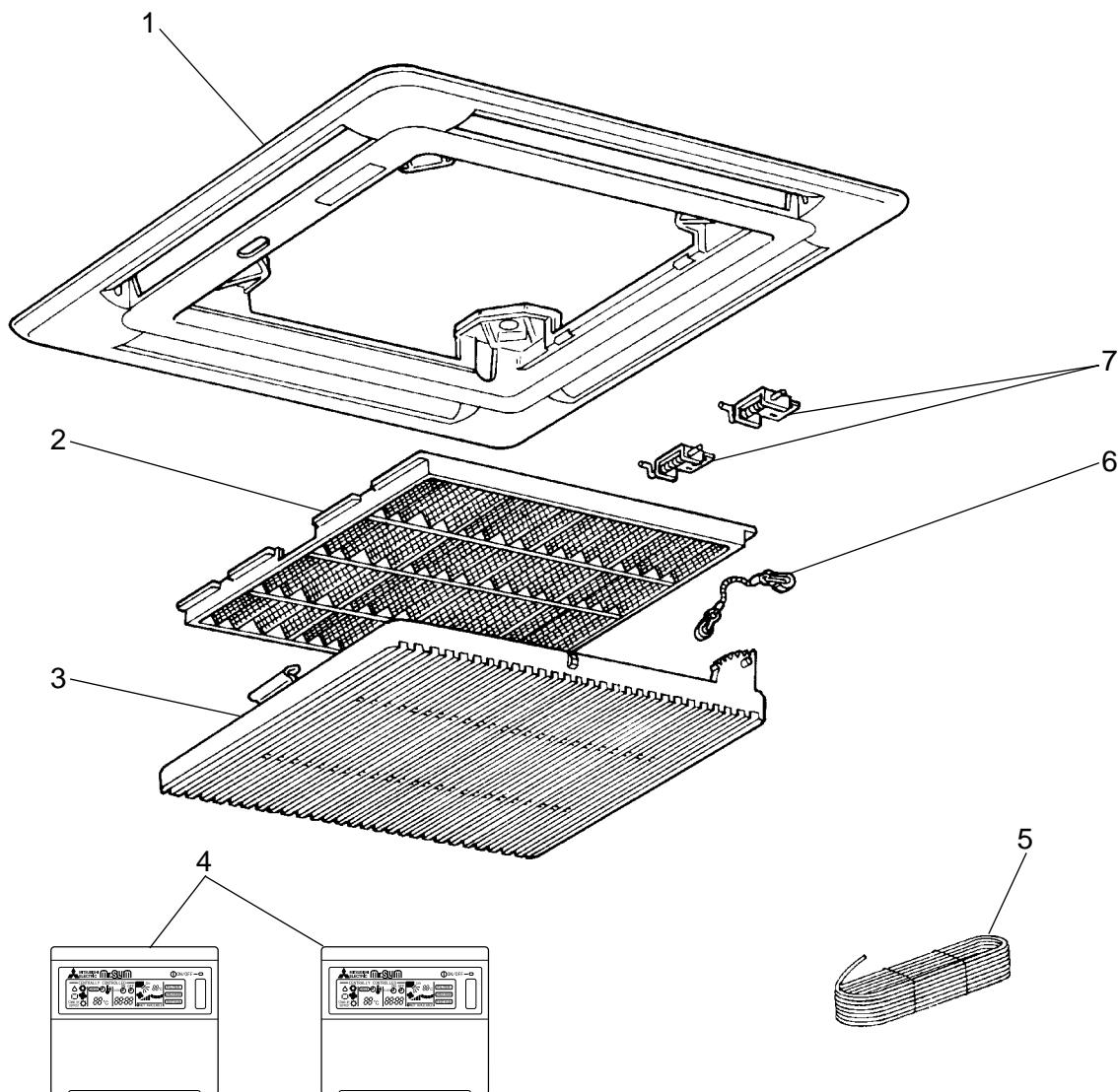
OPERATING PROCEDURE	PHOTOS&ILLUSTRATIONS
<b>1. Removing the air intake grille</b> <ul style="list-style-type: none"> <li>(1) Press the [PUSH] button.</li> <li>(2) Open the intake grille 90°.</li> <li>(3) Remove the chip.</li> <li>(4) Slide the shaft in the hinge to the left and remove the intake grille.</li> </ul>	 <p><b>Figure 1</b></p>
<b>2. Removing the bell mouth.</b> <ul style="list-style-type: none"> <li>(1) Open the intake grille.</li> <li>(2) Remove the 4 screws of the bell mouth.</li> </ul>	 <p><b>Photo 1</b></p>
<b>3. Removing the controller cove assy (electrical parts)</b> <ul style="list-style-type: none"> <li>(1) Disconnect the lead wire of the vane motor from the clamp, and disconnect the red connector (10P).</li> <li>(2) Remove 2 of 4 screws from the bell mouth.</li> <li>(3) Remove the electrical parts cover.</li> <li>(4) Disconnect the following connectors from the box.           <ul style="list-style-type: none"> <li>White (3P) for the fan motor</li> <li>White (2P) for the pipe temperature thermistor (TH2)</li> <li>Blue (2P) for the drain pump</li> <li>White (3P) for the drain sensor</li> </ul> </li> <li>(5) Disconnect the blue ground wire of the controller cover assy.</li> <li>(6) Remove 3 of 4 screws from the controller cover assy, and loosen the other screw.</li> <li>(7) Pull out the controller cover assy.           <ul style="list-style-type: none"> <li>(Electrical parts inside the controller cover assy)</li> <li>Terminal block</li> <li>power board</li> <li>Indoor fan capacitor</li> <li>Room temperature thermistor (TH1)</li> <li>Indoor controller board</li> </ul> </li> </ul>	 <p><b>Photo 2</b></p>  <p><b>Photo 3</b></p>
<b>4. Removing the fan motor</b> <ul style="list-style-type: none"> <li>(1) Remove the turbo fan nut and radiator aluminum cap.</li> <li>(2) Pull out the turbo fan.</li> <li>(3) Disconnect the connector of the fan motor lead wire.</li> <li>(4) Remove the 3 nuts of fan motor.</li> </ul>	 <p><b>Photo 4</b></p>

OPERATING PROCEDURE	PHOTOS&ILLUSTRATIONS
<p><b>5. Removing the room temperature thermistor</b></p> <p>(1) Remove the bell mouth.  (2) Remove the holder and the room temperature thermistor by pulling the catch.  (3) Disconnect the red connector, CN20, on the indoor controller board.</p>	<p><b>Photo 5</b></p>  <p>Indoor controller board Room temperature thermistor</p>
<p><b>6. Removing the pipe temperature thermistor and the condenser / evaporator temperature thermistor.</b></p> <p>(1) Remove the bell mouth.  (2) Remove the controller cover assy.  (3) Remove the turbo fan.  (4) Remove the screw of the service panel.  (5) Remove the service panel.  (6) Remove the pipe temperature thermistor(TH2) and condenser / evaporator temperature thermistor(TH5) from the holder.  (7) Disconnect the 2-pin white connector.</p>	<p><b>Photo 6</b></p>  <p>Pipe temperature thermistor(TH2) Condenser/evaporator temperature thermistor (TH5) Screw</p>
<p><b>7. Removing the panel</b></p> <p>(1) Open the intake grille.  (2) Disconnect the connector the vane motor.  (3) Remove 4 screws of the panel.  (4) Pulling the temporary hanging hook, remove the panel.</p>	<p><b>Photo 7</b></p>  <p>screws Temporary hanging hook Fan guard Temporary hanging hook Panel</p>
<p><b>8. Removing the drain pan</b></p> <p>(1) Remove the panel.  (2) Remove the rubber bushing.  (3) Drain the remaining water in the drain pan.  (4) Remove the bell mouth.  (5) Remove the controller cover assy.  (6) Remove the screw of the V.A. cover, and remove the V.A. cover.  (7) Remove each screw of the corner supports 1,2, and 3, and remove the corner supports 1,2 and 3.  (8) Pull out the drain pan.  *Pull the left and right of the pan gradually.  Be careful not to crack or damage the pan.</p>	<p><b>Photo 8</b></p>  <p>Screws Rubber bush Corner support 2 Corner support 1 VA cover Corner support 3</p>

OPERATING PROCEDURE	PHOTOS&ILLUSTRATIONS
<p><b>9. Removing the drain pump and drain sensor</b></p> <ul style="list-style-type: none"> <li>(1) Remove the panel.</li> <li>(2) Remove the bell mouth.</li> <li>(3) Remove the controller cover assy.</li> <li>(4) Remove the drain pan.</li> <li>(5) Remove 4 screws of the drain pump.</li> <li>(6) Pulling the clip of the drain hose, pull out the drain hose from the drain pump.</li> <li>(7) Remove the drain sensor and the holder.</li> <li>(8) Pull out the drain pump.</li> </ul>	<p><b>Photo 9</b></p> 
<p><b>10. Removing the heat exchanger</b></p> <ul style="list-style-type: none"> <li>(1) Remove the panel.</li> <li>(2) Remove the bell mouth.</li> <li>(3) Remove the controller cover assy.</li> <li>(4) Remove the drain pan.</li> <li>(5) Remove the turbo fan.</li> <li>(6) Remove the screw of the coil support A.</li> <li>(7) Remove 2 screws of the coil support B.</li> <li>(8) Remove 2 screws of the coil.</li> <li>(9) Remove 4 screws of the piping cover of the outer wall, and pull out the piping cover.</li> </ul>	<p><b>Photo 10</b></p>  <p><b>Photo 11</b></p> 

## PANEL PARTS

PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK  
 PLA-P1.6KA<sub>1</sub>.UK, PLA-P2KA<sub>1</sub>.UK, PLA-P2.5KA<sub>1</sub>.UK

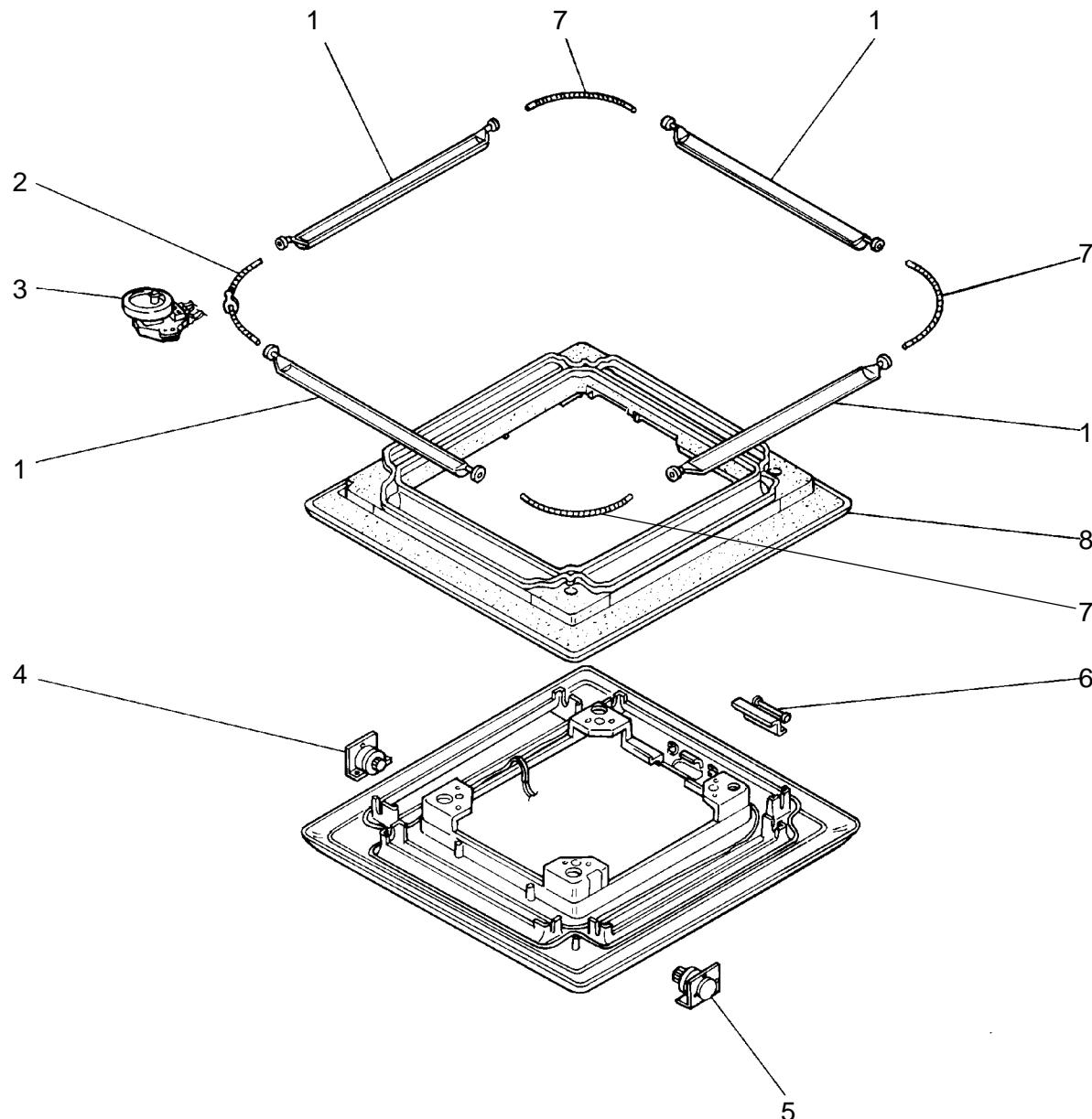


PLA-P1.6/2/2.5KA.UK PLA-P1.6/2/2.5KA<sub>1</sub>.UK

No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PLA-P1.6/2/2.5 KA.UK	KA <sub>1</sub> .UK				Unit	Amount
1	S70 560 003	AIR OUTLET GRILLE		1	1					
2	S70 29H 500	AIR FILTER		1	1					
3	S70 29H 691	INTAKE GRILLE		1	1					
4	S70 E00 713	REMOTE CONTROLLER	PAR-S27A-E	1			R.B			
	S70 E13 713	REMOTE CONTROLLER	PAR-20MAA-E		1		R.B			
5	S70 58A 246	CORD		1	1					
6	S70 29H 098	GRILLE HANGER		1	1					
7	S70 29H 061	HINGE		2	2					

## PANEL PARTS

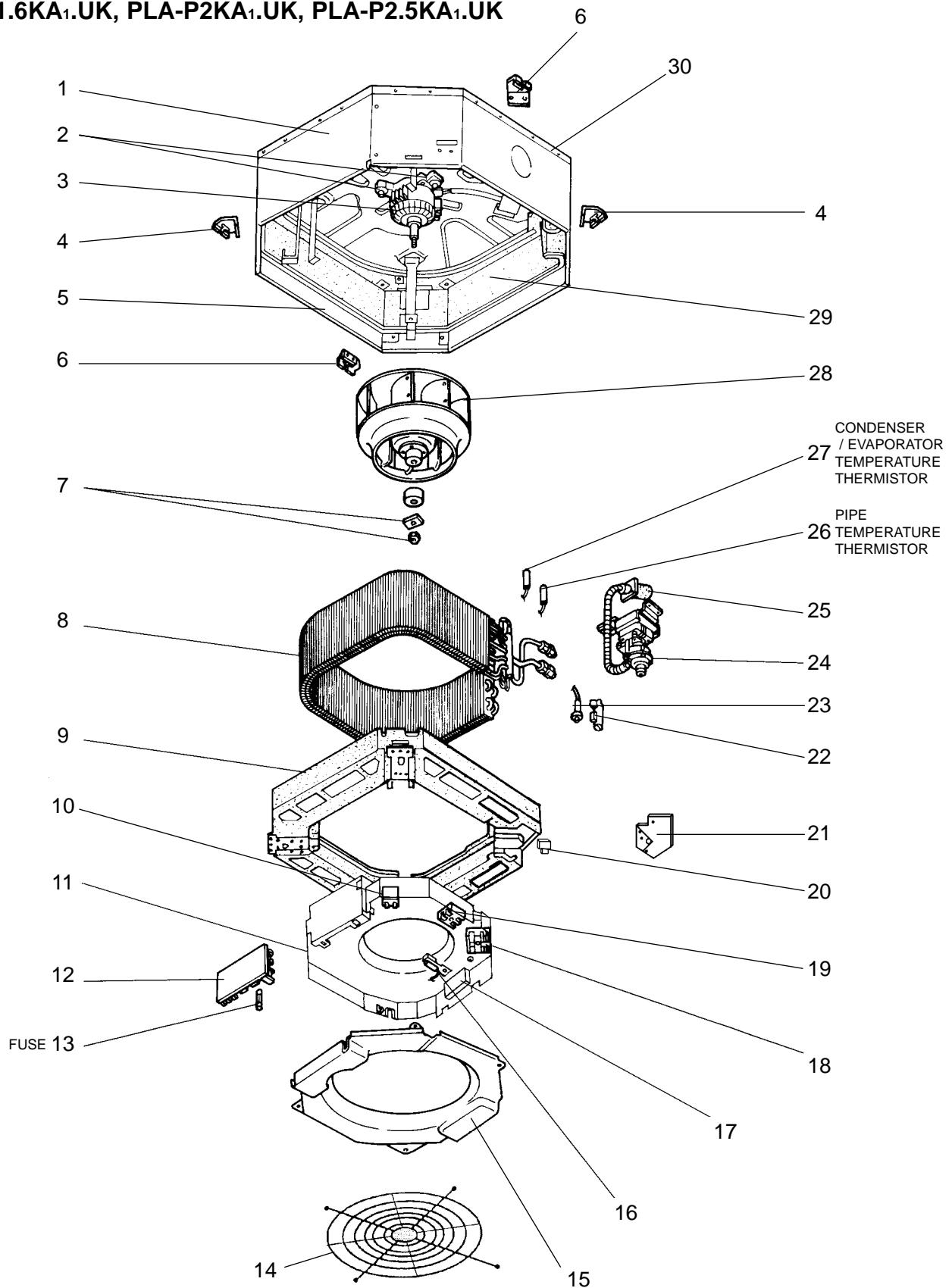
**PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK  
PLA-P1.6KA<sub>1</sub>.UK, PLA-P2KA<sub>1</sub>.UK, PLA-P2.5KA<sub>1</sub>.UK**



No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price				
				PLA-P1.6/2/2.5					Unit	Amount			
				KA.UK	KA <sub>1</sub> .UK								
1	S70 29H 002	AUTO VANE		4	4								
2	S70 31H 063	SPRING JOINT 2		1	1								
3	S70 29H 223	VANE MOTOR		1	1	MV							
4	S70 29H 041	GRILLE GEAR LEFT		1	1								
5	S70 29H 040	GRILLE GEAR RIGHT		1	1								
6	S70 29H 056	PUSH BUTTON		1	1								
7	S70 29H 063	SPRING JOINT 1		1	1	<3/SET>							
8	S70 29H 085	AIR GUIDE		1	1								

## FUNCTIONAL PARTS

**PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK  
PLA-P1.6KA<sub>1</sub>.UK, PLA-P2KA<sub>1</sub>.UK, PLA-P2.5KA<sub>1</sub>.UK**



Part numbers that is circled is not shown in the figure.

No.	Part No.	Part Name	Specification	Q'ty/set						Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PLA-P-KA.UK	PLA-P-KA.UK	1.6	2	2.5	1.6				Unit	Amount
1	S70 003 688	DRUM1 ASSY		1	1	1	1	1	1					
2	S70 29H 105	MOTOR MOUNT		3	3	3	3	3	3					
3	S70 E00 762	FAN MOTOR	PAI-V30F-1	1	1	1	1	1	1		MF			
4	S70 100 130	LEG		2	2	2	2	2	2					
5	S70 004 688	DRUM2 ASSY		1	1	1	1	1	1					
6	S70 101 130	LEG		2	2	2	2	2	2					
7	S70 08K 097	SPL WASHER		1	1	1	1	1	1					
8	S70 E23 480	HEAT EXCHANGER		1	1		1	1						
	S70 E29 480	HEAT EXCHANGER				1			1					
9	S70 A00 529	DRAIN PAN		1	1	1	1	1	1					
10	S70 29H 255	CAPACITOR	2.5μF 400V	1	1	1	1	1	1		C			
11	S70 003 502	BELL MOUTH		1	1	1	1	1	1					
12	S70 E20 310*	CONTROLLER BOARD		1	1	1	1	1	1		I.B *			
13	S70 E00 239	FUSE	250V 4A	1	1	1	1	1	1		F1<P.B>			
14	S70 A00 675	FAN GUARD		1	1	1	1	1	1					
15	S70 003 501	CONTROL COVER ASSY		1	1	1	1	1	1					
16	S70 E10 202	ROOM TEMPERATURE THERMISTOR	S / 750XAP	1	1	1	1	1	1		TH1			
17	S70 E00 313	POWER BOARD		1	1	1	1	1	1		P.B			
18	S70 E01 716	TERMINAL BLOCK	3P(S1,S2,S3)	1	1	1	1	1	1		TB4			
19	S70 515 716	TERMINAL BLOCK	2P(1,2)	1	1	1	1	1	1		TB5			
20	S70 A48 524	DRAIN PLUG		1	1	1	1	1	1					
21	S70 002 660	CORNER COVER		1	1	1	1	1	1					
22	S70 32K 241	SENSOR HOLDER		1	1	1	1	1	1					
23	S70 31K 266	DRAIN SENSOR		1	1	1	1	1	1		DS			
24	S70 55K 355	DRAIN PUMP		1	1	1	1	1	1		DP			
25	S70 29H 523	DRAIN SOCKET		1	1	1	1	1	1					
26	S70 08K 202	PIPE TEMPERATURE THERMISTOR		1	1	1	1	1	1		TH2			
27	S70 E09 202	CONDENSER / EVAPORATOR TEMPERATURE THERMISTOR		1	1	1	1	1	1		TH5			
28	S70 41N 114	TURBO FAN		1	1	1	1	1	1					
29	S70 001 659	INNER COVER		1	1	1	1	1	1					
30	S70 002 687	BASE		1	1	1	1	1	1					
31	S70 W28 527	DRAIN HOSE		1	1	1	1	1	1					

\* The part name of symbol "I.B" is "SPCB".

## 1. Program timer (PLA-P1.6 / 2 / 2.5KA.UK)

Part No.	PAC-SC32PTA (with set back function)
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK

### 1-1 Program timer specifications

Part name	Program timer
Parts No.	PAC-SC32PTA
Exterior dimensions (inch)	5-4/32X4-23/32X23/32 (130X120X18mm)
Installation	Wall mount
Type of clock	Quartz
Clock accuracy	±50 second / month at 25°C
Display-Time	Liquid crystal display
-Week	Liquid crystal display
-Timer setting unit	Liquid crystal display
Program cycle	24 hours
Timer setting unit	30 minutes
No. of set points	48 / day
Power rating	5V DC ±5% (Supplied by Remote Controller)

### 1-2 Feature of program timer

#### (1) Daily timer function

Daily timer can be set in 30 minutes units for up to 24 hours.

Each unit can be set for unit ON, unit OFF, or setback operation.

#### (2) Setback operation

Set back operation is useful for reducing running costs

e.g. At a hotel with a 24-hour system

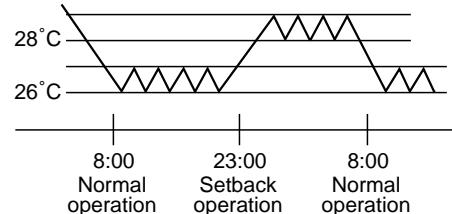
8:00~23:00 Cooling operation with set temperature at 26°C

23:00~8:00 Setback operation with 2 degrees of setback

As shown in the chart on the right, the set temperature rises 2 degrees automatically during the setback operation. When the setback operation ends, normal operation will begin.

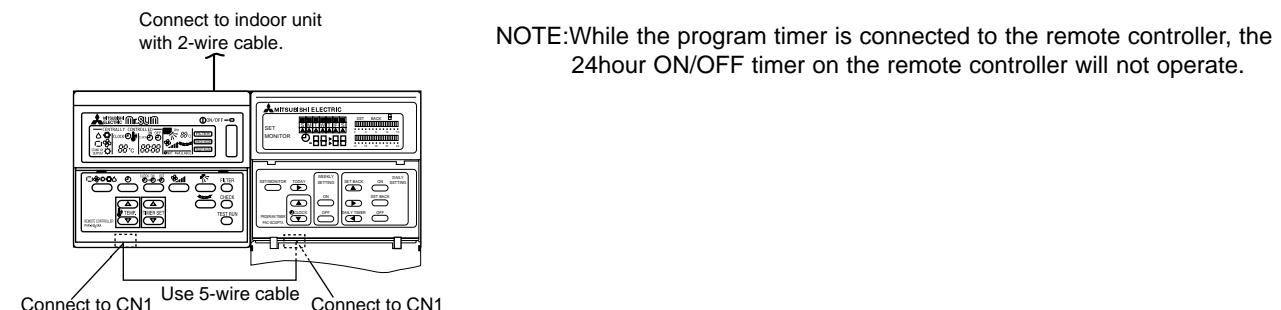
#### (3) Weekly timer function

Daily timer function can apply to each day of the week.



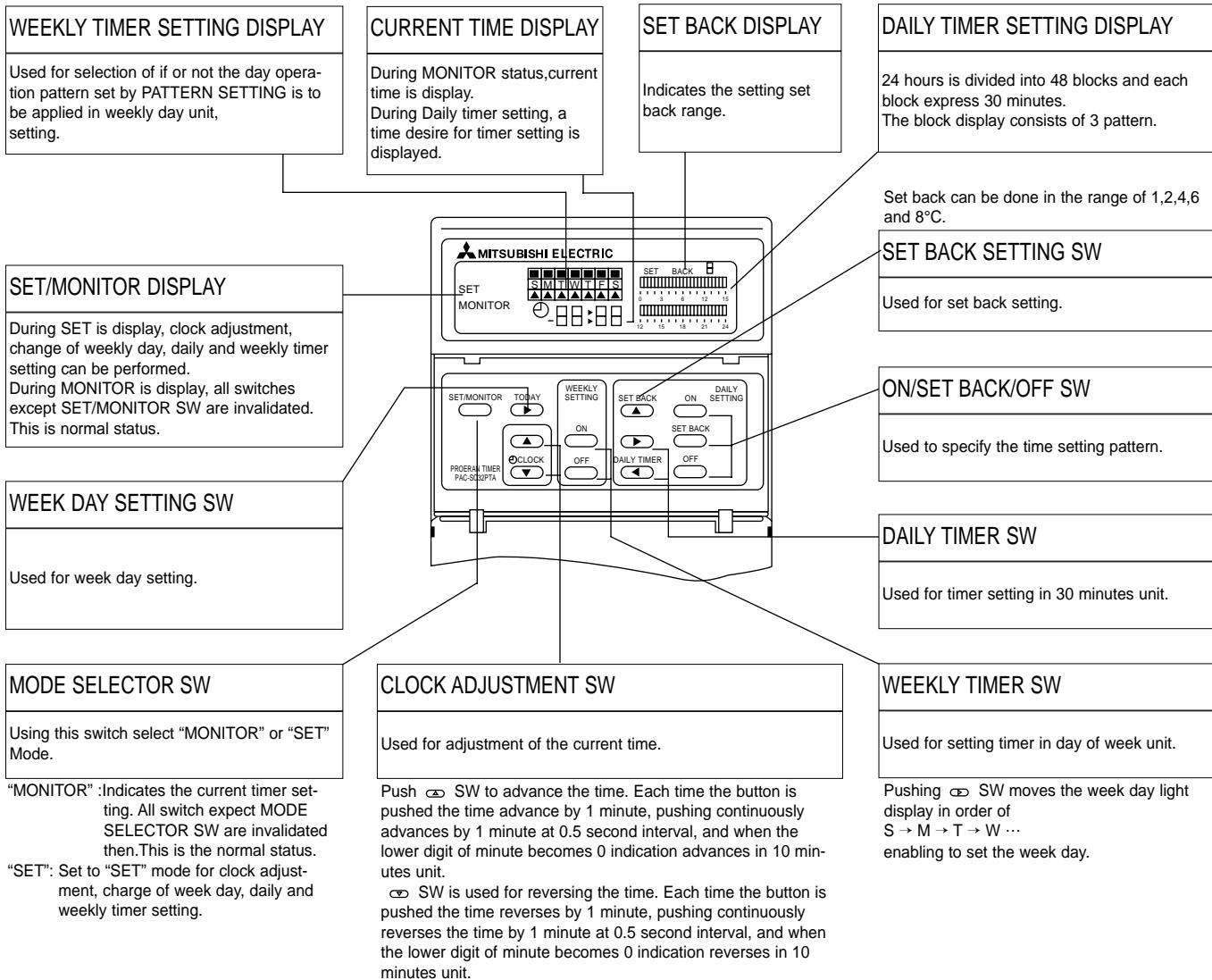
### 1-3 How to connect program timer

- (1) Install the program timer next to the remote controller the same way as the remote controller is installed.
- (2) Connect the program timer and the remote controller with a 5-wire cable as shown in the figure below



### 1-4 Names and functions

<PAC-SC32PTA>

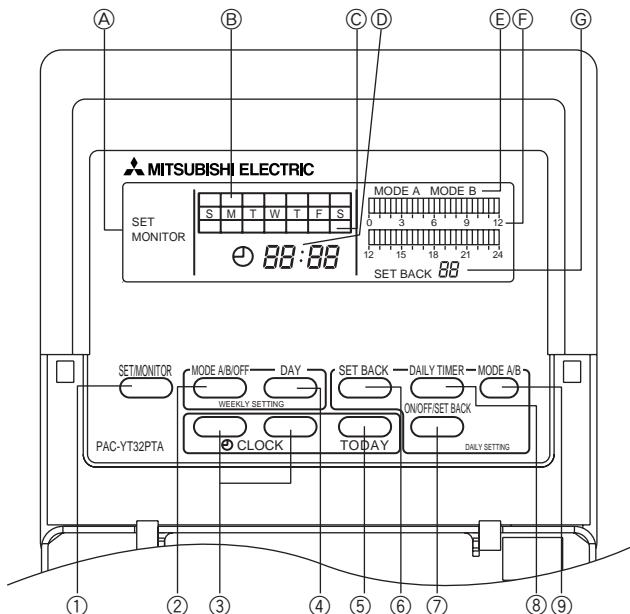


## 2. Program timer (PLA-P1.6 / 2 / 2.5KA<sub>1</sub>.UK)

Part No.	PAC-YT32PTA
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA <sub>1</sub> .UK

### 2-1 Names and functions

<PAC-YT32PTA>



Ⓐ SET/MONITOR DISPLAY:

When SET is displayed, clock adjustment, change of day, and daily and weekly timer settings can be performed. When MONITOR is displayed, all switches except SET/MONITOR SW are invalidated. This is normal status.

Ⓑ WEEKLY TIMER SETTING DISPLAY:

Used to select whether the operation pattern set using the PATTERN SETTING can be applied to different days of the week.

Ⓒ CURRENT DAY DISPLAY:

Indicates the current day.

Ⓓ CURRENT TIMEDIPLAY:

During MONITORstatus, current time is display.

During daily timer setting, a time desire for timer setting is displayed.

Ⓔ OPERATION MODE DISPLAY:

Indicates the operation mode.

Ⓕ DAILY TIMER SETTING DISPLAY:

24 hours is divided into 48 blocks and each block is expressed in 30 minutes.

The block display consists of 3 patterns.

Ⓖ SET BACK DISPLAY

Indicates the set back value.

① SET/MONITOR Button

Using this switch, select "MONITOR" or "SET" Mode.

"MONITOR": Indicates the current timer setting. All switches expect MODE SELECTOR SW are invalidated then. This is the normal status.

"SET": Set to "SET" mode for clock adjustment, change of day and daily and weekly timer settings.

② MODE A/B/OFF Button

Used for setting timer in day of week unit.

③ CLOCK ADJUSTMENT Button

Used for adjustment of the current time.

Push [▲] SW to advance the time. Each time the button is pushed the time advances by 1 minute, pushing continuously advances by 1 minute at 0.5 second intervals, and when the lower digit of the minute becomes "0" the time advances in 10 minute units.

[▼] SW is used for reversing the time. Each time the button is pushed the time reverses by 1 minute, pushing continuously reverses the time by 1 minute at 0.5 second intervals, and when the lower digit of the minute becomes "0" the time reverses in 10 minute units.

④ DAY SETTING Button

Used when setting the day.

⑤ WEEK DAY SETTING Button

Used for week day setting.

Pushing [▶] SW moves the week day light display in order of S → M → T → W → ... enabling to set the week day.

⑥ SET BACK SETTING Button

Used for set back setting.

Set back can be done in the range of 1, 2, 4, 6 and 8°C (2, 4, 8, 12 and 16°F).

⑦ ON/OFF/SET BACK Button

Used to specify the time setting pattern.

⑧ DAILY TIMER Button

Used for timer setting in 30 minute units.

⑨ MODE A/B Button

Used to set A Mode or B Mode when specifying the operation time.



### 3. Wide Panel

Part No.	PAC-SE06WP-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA <sub>1</sub> .UK

### 4. Space Panel

Part No.	PAC-SE01AS-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA <sub>1</sub> .UK

### 5. Multi-Functional Casement (For HIGH EFFICIENCY FILTER AND FRESH AIR INTAKE)

Part No.	PAC-SE21TM-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA <sub>1</sub> .UK

### 6. High-Efficiency Filter Element

Part No.	PAC-SE13KF-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA <sub>1</sub> .UK

### 7. Grille + Wireless Remote Controller

Part No.	PLP-2.5KAL-E	PLP-2.5KLM
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK	PLA-P1.6 / 2 / 2.5KA <sub>1</sub> .UK

### 8. Remote Sensor

Part No.	PAC-SE41TS-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA <sub>1</sub> .UK

### 9. Remote Operation Adapter

Part No.	PAC-SF40RM-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA <sub>1</sub> .UK

### 10. Remote ON/OFF Adapter

Part No.	PAC-SE55RA-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA <sub>1</sub> .UK

mr.SLIM™

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