

# TECHNICAL & SERVICE MANUAL

## Series PLH Ceiling Cassettes R407C

**Indoor unit**  
[Model names]

PLH-P1.6KAH

PLH-P2KAH

PLH-P2.5KAH

[Service Ref.]

**PLH-P1.6KAH.UK**  
**PLH-P1.6KAH<sub>1</sub>.UK**  
**PLH-P2KAH.UK**  
**PLH-P2KAH<sub>1</sub>.UK**  
**PLH-P2.5KAH.UK**  
**PLH-P2.5KAH<sub>1</sub>.UK**

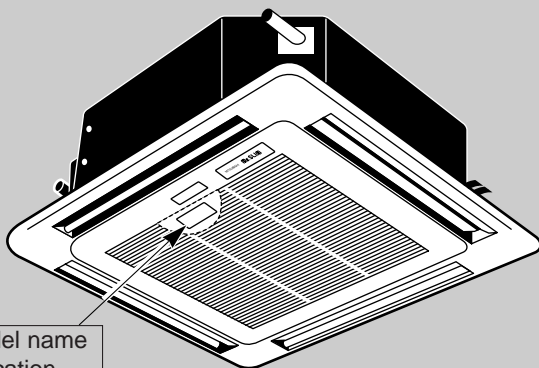
**Revision:**

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

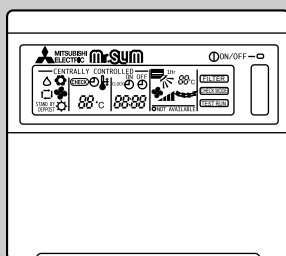
**Note:**

- 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.

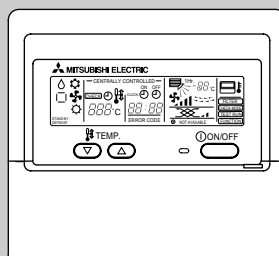
- Please void OC235 REVISED EDITION-A.



**INDOOR UNIT**



PLH-P1.6, 2, 2.5KAH.UK



PLH-P1.6, 2, 2.5KAH<sub>1</sub>.UK

**REMOTE CONTROLLER**

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**Revision:**

1. " **12. PARTS LIST** " has been modified on page 47.

Spare CONTROLLER BOARD for PLH-P1.6KAH.UK, PLH-P1.6KAH<sub>1</sub>.UK, PLH-P2KAH.UK, PLH-P2KAH<sub>1</sub>.UK, PLH-P3KAH.UK and PLH-P3KAH<sub>1</sub>.UK are unified.

<b>Page</b>	<b>Revise point</b>	<b>Service Ref.</b>	<b>Old parts code</b>	<b>New part code</b>
47	FUNCTIONAL PARTS No.13 CONTROLLER BOARD	PLH-P1.6KAH.UK PLH-P1.6KAH <sub>1</sub> .UK	S70 E13 310	S70 E20 310*
		PLH-P2KAH.UK PLH-P2KAH <sub>1</sub> .UK	S70 E14 310	
		PLH-P2.5KAH.UK PLH-P2.5KAH <sub>1</sub> .UK	S70 E15 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

PLH-P1.6KAH.UK → PLH-P1.6KAH<sub>1</sub>.UK      PLH-P2KAH.UK → PLH-P2KAH<sub>1</sub>.UK  
 PLH-P2.5KAH.UK → PLH-P2.5KAH<sub>1</sub>.UK

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

# 2

## COMBINATION OF INDOOR AND OUTDOOR UNITS

	Indoor unit	Outdoor unit											
		Heat pump type											
		PUH-P											
		1.6				2				2.5			
		VGA	YGA	VGAA.UK	YGAA.UK	VGA	YGA	VGAA.UK	YGAA.UK	VGA <sub>1</sub>	YGA <sub>1</sub>	VGAA.UK	YGAA.UK
Heat pump with electric heater	PLH-P1.6KAH.UK	○	○	○	○	—	—	—	—	—	—	—	—
	PLH-P1.6KAH <sub>1</sub> .UK	—	—	○	○	—	—	—	—	—	—	—	—
	PLH-P2KAH.UK	—	—	—	—	○	○	○	○	—	—	—	—
	PLH-P2KAH <sub>1</sub> .UK	—	—	—	—	—	—	○	○	—	—	—	—
	PLH-P2.5KAH.UK	—	—	—	—	—	—	—	—	○	○	○	○
	PLH-P2.5KAH <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.	

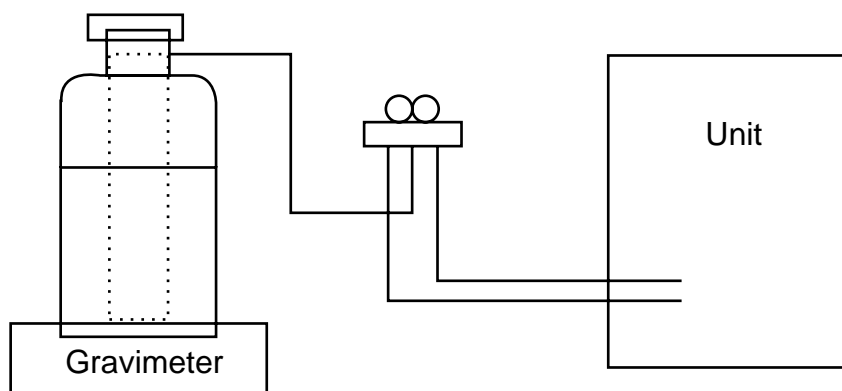
## [2] Notice on repair service

- 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

- ①Direct 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)

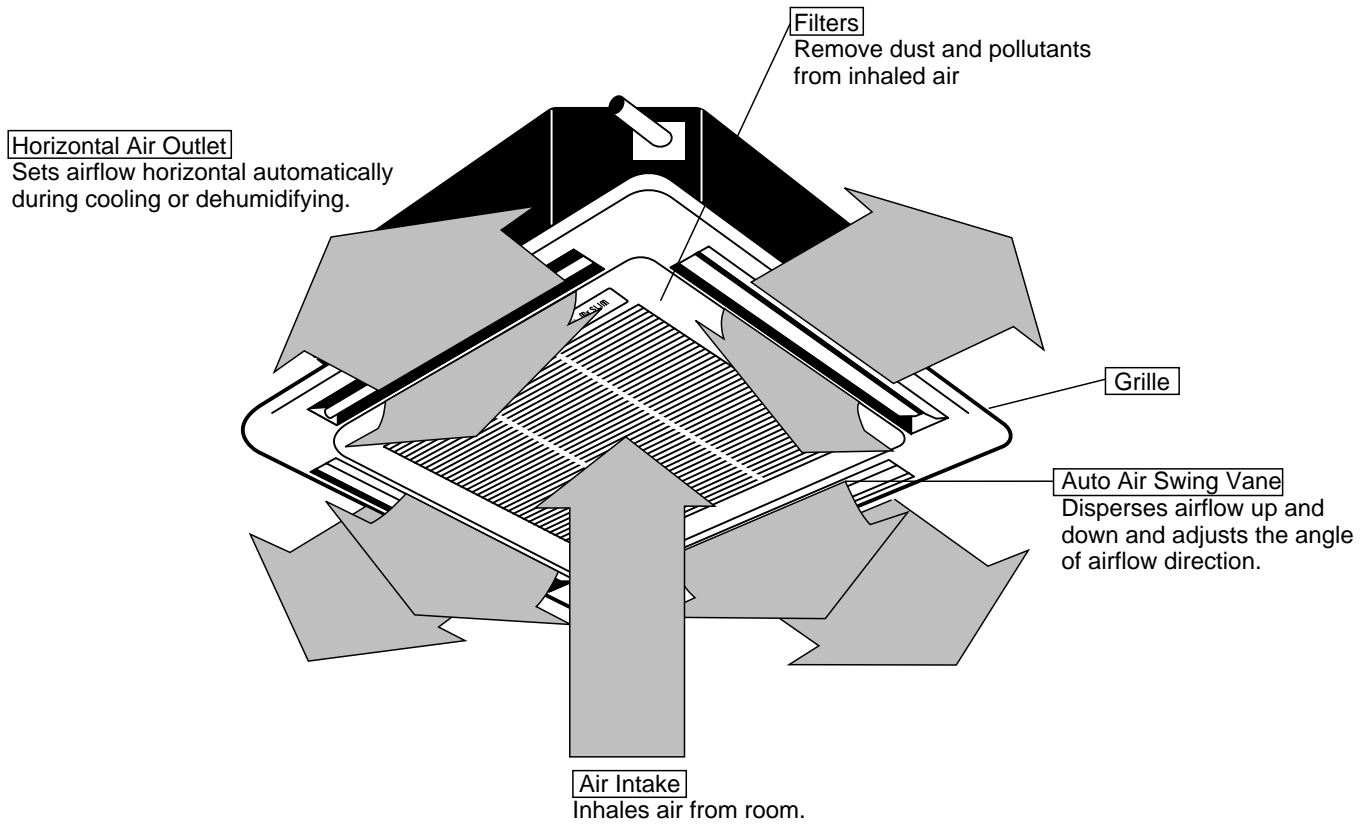


### (2) Recharge in refrigerant leakage case

- 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

PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK

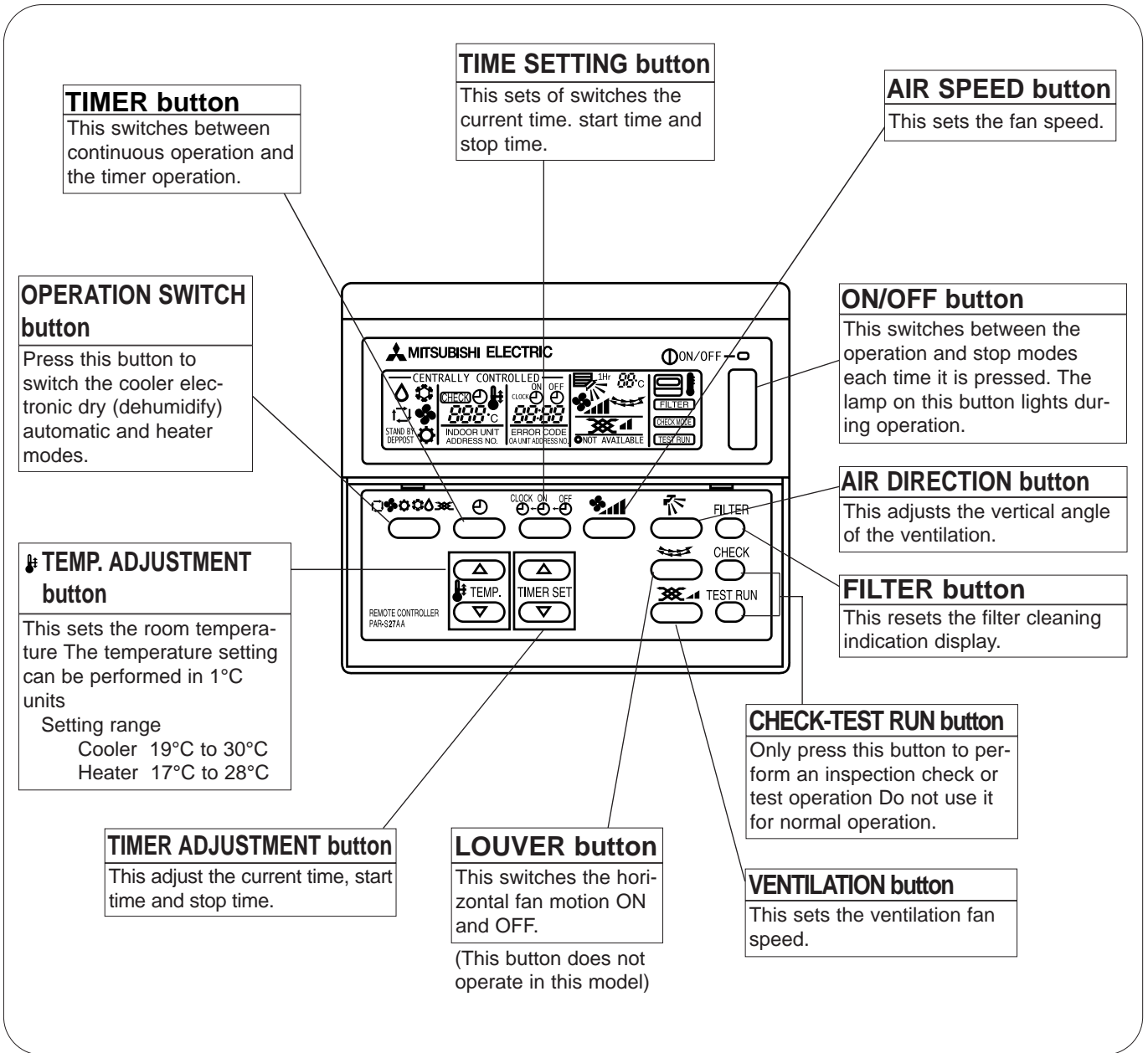
PLH-P1.6KAH<sub>1</sub>.UK, PLH-P2KAH<sub>1</sub>.UK, PLH-P2.5KAH<sub>1</sub>.UK

● Remote controller

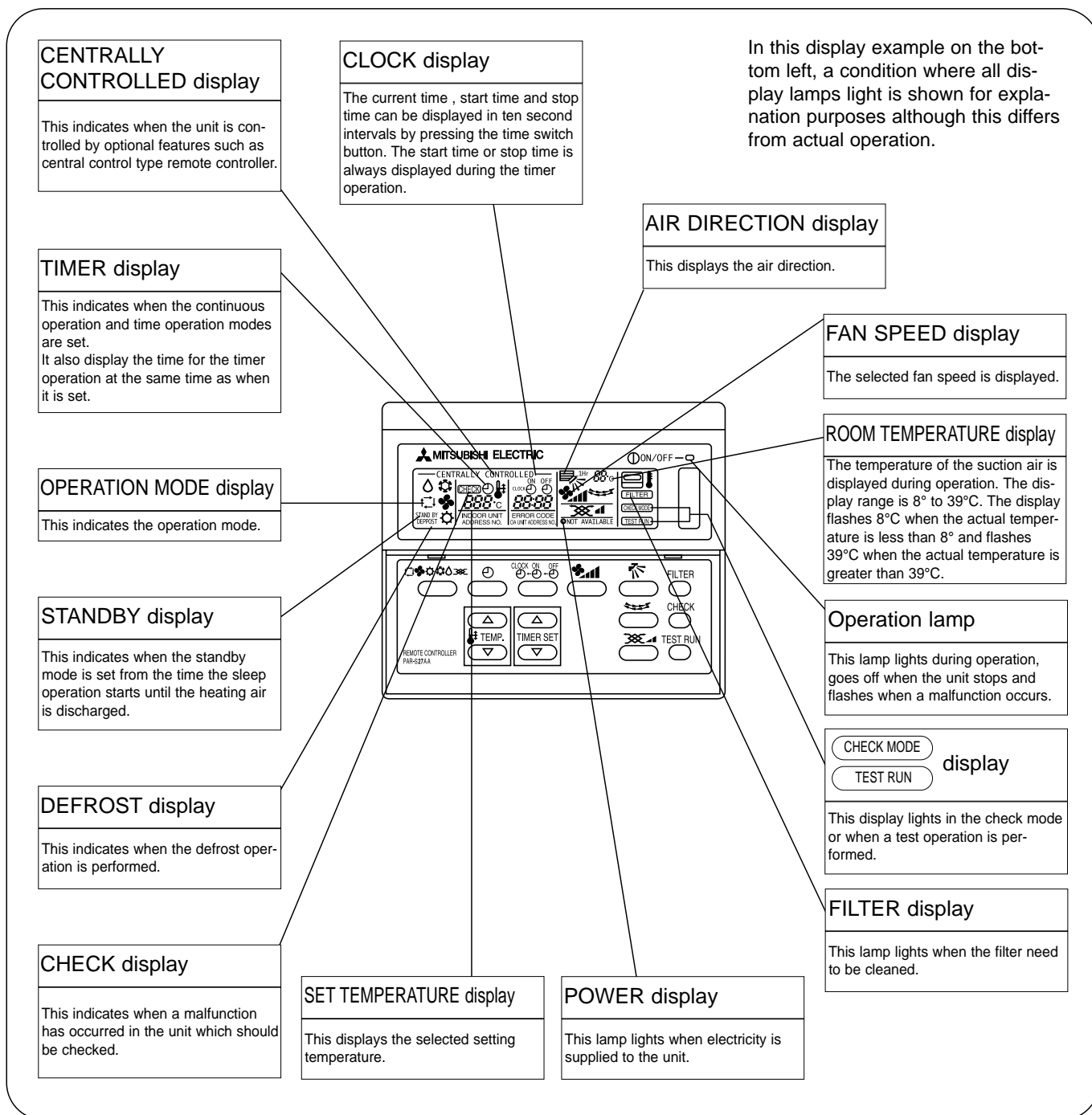
- Once the controls are set, the same operation mode can be repeated by simply pressing the ON/OFF button.

**PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK**

● Operation buttons [ PAR-S27A-E ]



## ● Display



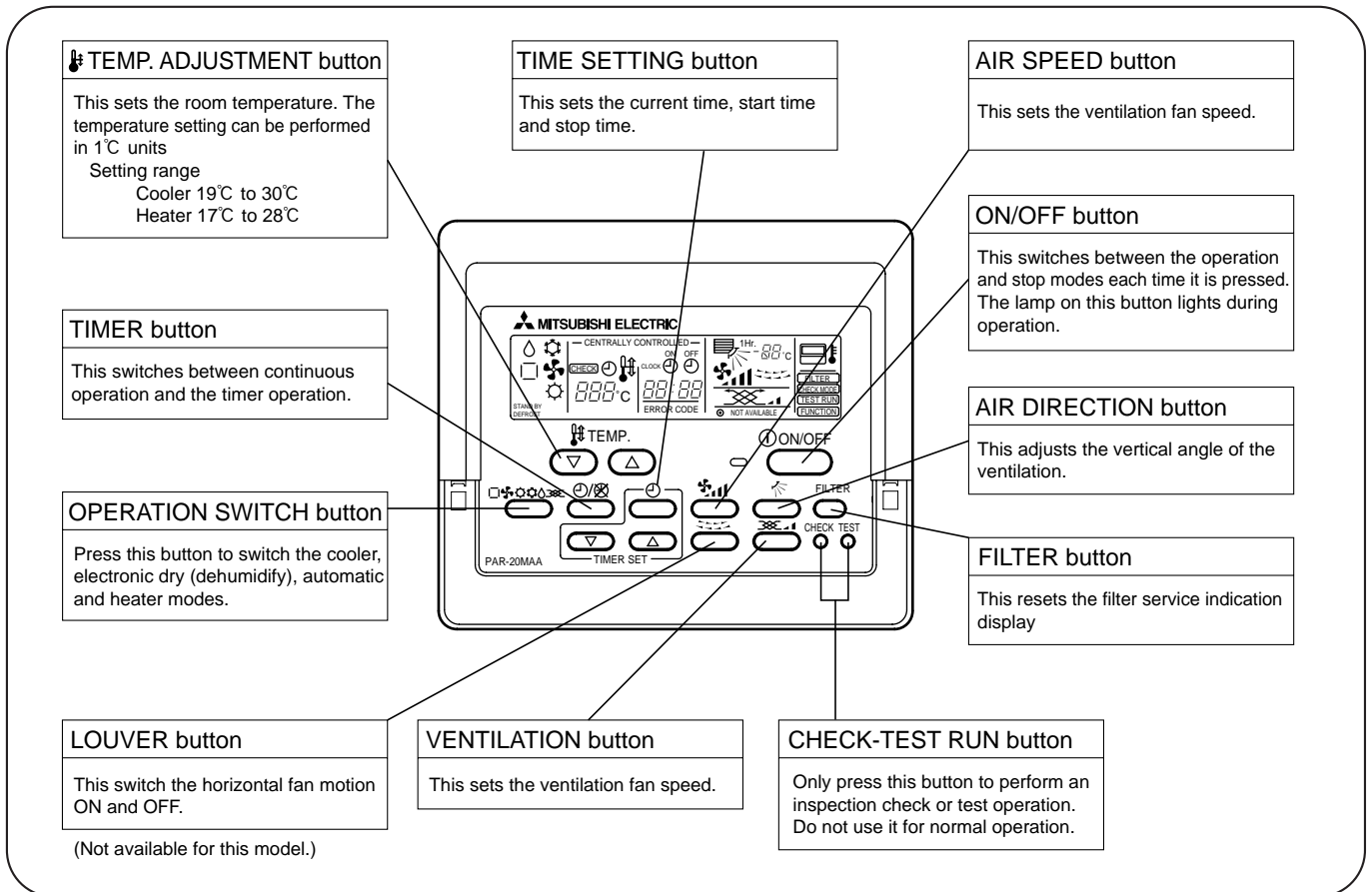
### Caution

- 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.

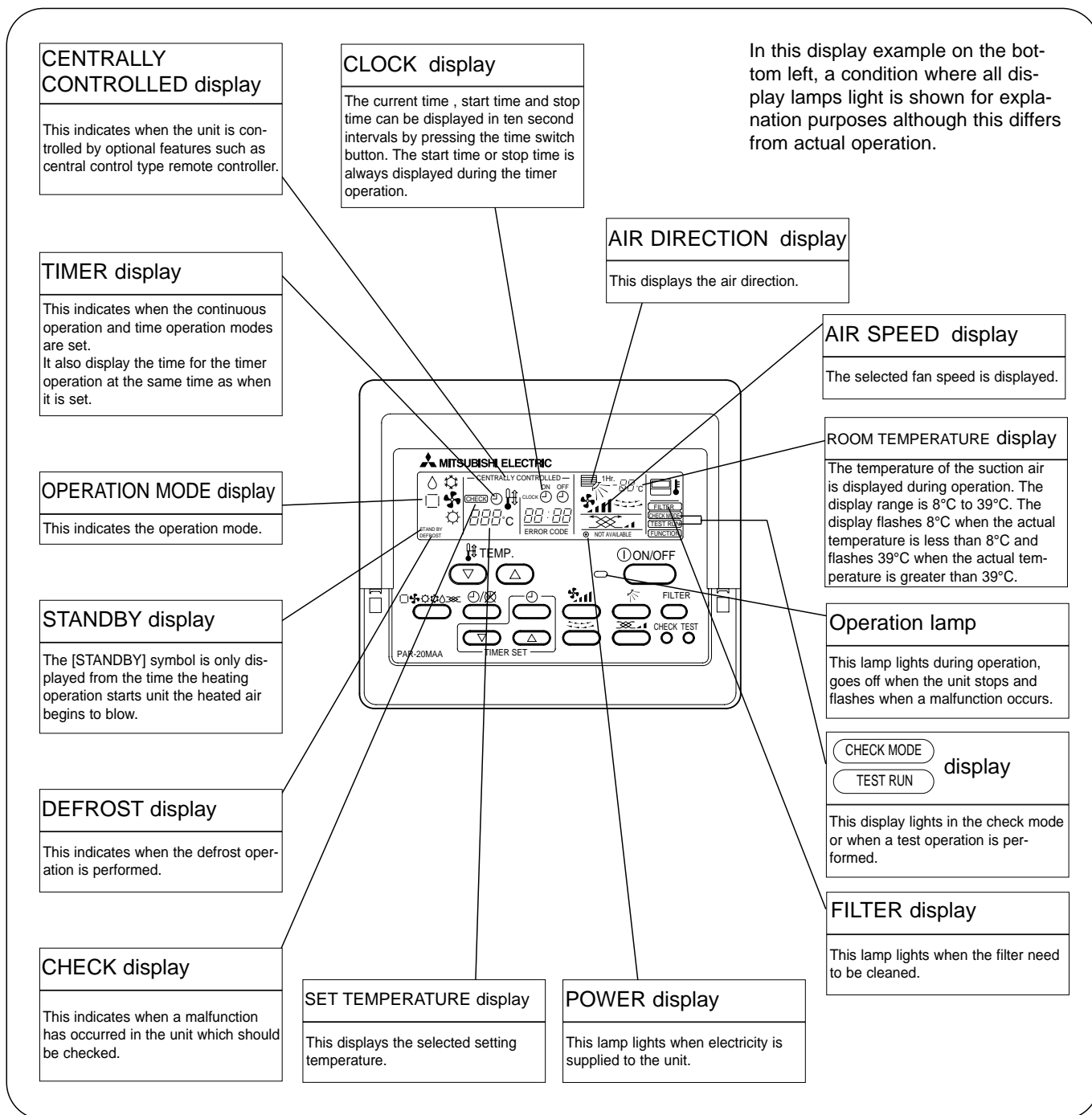


**PLH-P1.6KAH<sub>1</sub>.UK, PLH-P2KAH<sub>1</sub>.UK, PLH-P2.5KAH<sub>1</sub>.UK**

**● 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 disappear then start the operation.

Item		Service Ref.	PLH-P1.6KAH.UK	
Function			Cooling	Heating
Capacity	*1	Btu/h	15,000	17,100 (21,800)
		W	4,400	5,000 (6,400)
Total input	*1	kW	1.86	1.93 (3.33)
<b>Service Ref.</b>			<b>PLH-P1.6KAH.UK</b>	
Power supply (phase, cycle, voltage)			Single phase, 50Hz, 220-230-240V	
	Input	*2 kW	0.15	0.10 <1.40>
	Running current	*2 A	0.64	0.45 <5.83>
	Starting current	*2 A	0.70	0.50 <5.83>
External finish			Galvanized sheets with gray heat insulation	
Heat exchanger			Plate fin coil	
INDOOR UNIT	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)	
	Booster heater	*2 kW	<1.4>	
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 (1-1/8)	
Weight		kg (lbs)	UNIT : 20 (44) PANEL : 3.7 (8)	
<b>Service Ref.</b>			<b>PUH-P1.6VGA / PUH-P1.6YGA</b>	
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	
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	
OUTDOOR UNIT	Fan	Fan (drive) x No.	Propeller (direct) x 1	
		Fan motor output	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 PIPING				
Refrigerant			R407C	
	Charge	kg (lbs)	2.6 (5.7)	
	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	

Notes 1. 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

\*1 : ( ) Shows the total rating.

\*2 : < > Shows the only booster heater rating.

3. Above data based on indicated voltage

Indoor Unit 1 phase 240V 50Hz

Outdoor Unit 1 phase 240V 50Hz / 3 phase 415V 50Hz



Item		Service Ref.	PLH-P2KAH.UK	
Function			Cooling	Heating
Capacity	※1	Btu/h	18,400	21,300 (26,100)
		W	5,400	6,250 (7,650)
Total input	※1	kW	2.62	2.67 (4.07)
<b>Service Ref.</b>			<b>PLH-P2KAH.UK</b>	
Power supply (phase, cycle, voltage)			Single phase, 50Hz, 220-230-240V	
Input	※2	kW	0.14	0.10 <1.40>
		A	0.65	0.45 <5.83>
		A	0.72	0.50 <5.83>
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)		13-14-15-16 (459-494-530-565)	
	External static pressure		0 (direct blow)	
Booster heater	※2	kW	<1.4>	
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 (1-1/8)	
Weight		kg (lbs)	UNIT : 20 (44) PANEL : 3.7 (8)	
<b>Service Ref.</b>			<b>PUH-P2VGA / PUH-P2YGA</b>	
Power supply (phase, cycle, voltage)			Single phase, 50Hz, 220-230-240V / 3 phases, 50Hz, 380-400-415V (4wires)	
Running current		A	11.11 / 3.88	11.51 / 4.02
		A		74 / 30
Starting current		A		
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	
Fan	Fan (drive) x No.		Propeller (direct) x 1	
	Fan motor output		0.070	
	Airflow		55 (1,940)	
Defrost method			Reverse cycle	
Noise level		dB	48	
	Cooling	dB	49	
Dimensions	Heating	mm (in.)	900 (35-7/16)	
	W	mm (in.)	330+20 (13+3/4)	
	D	mm (in.)	855 (33-5/8)	
Weight	H	kg (lbs)	71 (157)	
Refrigerant			R407C	
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. 40m	
	Piping length		Max. 40m	

Notes 1. 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

※1 : ( ) Shows the total rating.  
※2 : < > Shows the only booster heater rating.

3. Above data based on indicated voltage  
Indoor Unit 1 phase 240V 50Hz  
Outdoor Unit 1 phase 240V 50Hz / 3 phase 415V 50Hz



Item			Service Ref.	PLH-P2.5KAH.UK	
Function				Cooling	Heating
Capacity	*1		Btu/h	21,500	25,200 (32,400)
			W	6,300	7,400 (9,500)
Total input	*1		kW	2.77	2.68 (4.78)
<b>Service Ref.</b>				<b>PLH-P2.5KAH.UK</b>	
Power supply (phase, cycle, voltage)				Single phase, 50Hz, 220-230-240V	
Input	*2		kW	0.14	0.10 <2.10>
		Running current	A	0.61	0.45 <8.75>
		Starting current	A	0.67	0.50 <8.75>
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)	
	Booster heater		*2	kW	<2.1>
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 (1-1/8)	
Weight			kg (lbs)	UNIT : 21 (46) PANEL : 3.7 (8)	
<b>Service Ref.</b>				<b>PUH-P2.5VGA<sub>1</sub> / PUH-P2.5YGA<sub>1</sub></b>	
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	
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			dB	48	
	Cooling		dB	50	
Dimensions	Heating		mm (in.)	900 (35-7/16)	
	W		mm (in.)	330+20 (13+3/4)	
	D		mm (in.)	855 (33-5/8)	
Weight		H	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	

Notes 1. 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

\*1 : ( ) Shows the total rating.

\*2 : < > Shows the only booster heater rating.

3. Above data based on indicated voltage

Indoor Unit 1 phase 240V 50Hz

Outdoor Unit 1 phase 240V 50Hz / 3 phase 415V 50Hz



Item		Service Ref.	PLH-P1.6KAH.UK / PLH-P1.6KAH.UK		
Function			Cooling	Heating	
Capacity	*1	Btu/h	15,000	17,100 (21,800)	
		W	4,400	5,000 (6,400)	
Total input	*1	kW	1.82	1.89 (3.29)	
<b>Service Ref.</b>			<b>PLH-P1.6KAH.UK / PLH-P1.6KAH.UK</b>		
Power supply (phase, cycle, voltage)			Single phase, 50Hz, 220-230-240V		
	Input	*2 kW	0.15	0.10 <1.40>	
	Running current	*2 A	0.64	0.45 <5.83>	
	Starting current	*2 A	0.70	0.50 <5.83>	
External finish			Galvanized sheets with gray heat insulation		
Heat exchanger			Plate fin coil		
INDOOR UNIT	Fan	Fan (drive) x No.	Turbo fan (direct) x 1		
		Fan motor output	kW	0.030	
		Airflow (Low-Medium2-Medium1-High)	m <sup>3</sup> /min (CFM)	13-14-15-16 (459-494-530-565)	
		External static pressure	Pa (mmAq)	0 (direct blow)	
Booster heater	*2	kW	<1.4>		
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 : 20 (44) PANEL : 3.7 (8)		
<b>Service Ref.</b>			<b>PUH-P1.6VGAA.UK / PUH-P1.6YGAA.UK</b>		
Power supply (phase, cycle, voltage)			Single phase, 50Hz, 220-230-240V / 3 phases, 50Hz, 380-400-415V (4wires)		
	Running current	A	7.36 / 2.94	7.59 / 2.56	
	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		
OUTDOOR UNIT	Fan	Fan (drive) x No.	Propeller (direct) x 1		
		Fan motor output	kW	0.070	
		Airflow	m <sup>3</sup> /min (CFM)	45 (1,590)	
Defrost method			Reverse cycle		
Noise level		dB	47		
	Cooling	dB	49		
Dimensions	Heating	mm (in.)	900 (35-7/16)		
	W	mm (in.)	330+20 (13+3/4)		
	D	mm (in.)	650 (25-5/8)		
Weight	H	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		

Notes 1. 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

\*1 : ( ) Shows the total rating.

\*2 : < > Shows the only booster heater rating.

3. Above data based on indicated voltage

Indoor Unit 1 phase 240V 50Hz

Outdoor Unit 1 phase 240V 50Hz / 3 phase 415V 50Hz



Item		Service Ref.	PLH-P2KAH.UK / PLH-P2KAH <sub>1</sub> .UK		
Function			Cooling	Heating	
Capacity	*1	Btu/h	18,000	20,300 (25,100)	
		W	5,300	5,950 (7,350)	
Total input	*1	kW	2.44	2.40 (3.80)	
<b>Service Ref.</b>			<b>PLH-P2KAH.UK / PLH-P2KAH<sub>1</sub>.UK</b>		
Power supply (phase, cycle, voltage)			Single phase, 50Hz, 220-230-240V		
	Input	*2 kW	0.14	0.10 <1.40>	
	Running current	*2 A	0.65	0.45 <5.83>	
	Starting current	*2 A	0.72	0.50 <5.83>	
External finish			Galvanized sheets with gray heat insulation		
Heat exchanger			Plate fin coil		
INDOOR UNIT	Fan	Fan (drive) x No.	Turbo fan (direct) x 1		
		Fan motor output	0.030 kW		
		Airflow (Low-Medium2-Medium1-High)	13-14-15-16 (459-494-530-565) m <sup>3</sup> /min (CFM)		
		External static pressure	0 (direct blow) Pa (mmAq)		
Booster heater	*2	kW	<1.4>		
Operation control & Thermostat			Remote controller & built-in		
Noise level (Low-Medium2-Medium1-High)			32-34-35.5-37 dB		
Unit drain pipe I.D.			32 (1-1/4) mm (in.)		
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-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		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	0.070 kW		
		Airflow	55 (1,940) m <sup>3</sup> /min (CFM)		
Defrost method			Reverse cycle		
Noise level		dB	48		
	Cooling	dB	49		
Dimensions	Heating	mm (in.)	900 (35-7/16)		
	W	mm (in.)	330+20 (13+3/4)		
	D	mm (in.)	855 (33-5/8)		
Weight	H	kg (lbs)	71 (157)		
REFRIGERANT PIPING	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		

Notes 1. 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

\*1 : ( ) Shows the total rating.

\*2 : < > Shows the only booster heater rating.

3. Above data based on indicated voltage

Indoor Unit 1 phase 240V 50Hz

Outdoor Unit 1 phase 240V 50Hz / 3 phase 415V 50Hz



Item		Service Ref.	PLH-P2.5KAH.UK / PLH-P2.5KAH.UK	
Function			Cooling	Heating
Capacity	※1	Btu/h	21,500	25,200 (32,400)
		W	6,300	7,400 (9,500)
Total input	※1	kW	2.63	2.57 (4.67)
<b>Service Ref.</b>			<b>PLH-P2.5KAH.UK / PLH-P2.5KAH.UK</b>	
Power supply (phase, cycle, voltage)			Single phase, 50Hz, 220-230-240V	
Input	※2	kW	0.14	0.10 <2.10>
		A	0.61	0.45 <8.75>
		A	0.67	0.50 <8.75>
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)		14-15-16-17 (494-530-565-600)	
	External static pressure		0 (direct blow)	
Booster heater	※2	kW	<2.1>	
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 : 21 (46) 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
		A	77 / 35	
		A		
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	
Fan	Fan (drive) x No.		Propeller (direct) x 1	
	Fan motor output		0.070	
	Airflow		m³/min (CFM) 50 (1,770)	
Defrost method			Reverse cycle	
Noise level		dB	48	
	Cooling	dB	50	
Dimensions	Heating	mm (in.)	900 (35-7/16)	
	W	mm (in.)	330+20 (13+3/4)	
	D	mm (in.)	855 (33-5/8)	
Weight	H	kg (lbs)	82 (181)	
Refrigerant			R407C	
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	

Notes 1. 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

※1 : ( ) Shows the total rating.

※2 : < > Shows the only booster heater rating.

3. Above data based on indicated voltage

Indoor Unit 1 phase 240V 50Hz

Outdoor Unit 1 phase 240V 50Hz / 3 phase 415V 50Hz



## 1. PERFORMANCE DATA

## 1) COOLING CAPACITY(1)

PLH-P1.6KAH.UK / PUH-P1.6VGA, PUH-P1.6YGA

(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)**

**PLH-P1.6KAH.UK / PUH-P1.6VGA, PUH-P1.6YGA**

**(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

**COOLING CAPACITY(3)**  
**PLH-P2KAH.UK / PUH-P2VGA, PUH-P2YGA**

**(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)**

**PLH-P2KAH.UK / PUH-P2VGA, PUH-P2YGA**

**(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

**COOLING CAPACITY(5)**

**PLH-P2.5KAH.UK / PUH-P2.5VGA<sub>1</sub>, PUH-P2.5YGA<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)**

**PLH-P2.5KAH.UK / PUH-P2.5VGA<sub>1</sub>, PUH-P2.5YGA<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)**

**PLH-P1.6KAH.UK, PLH-P1.6KAH<sub>i</sub>.UK / PUH-P1.6VGAA.UK, PUH-P1.6YGAA.UK**

**(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	1.46	4224	2957	0.70	1.54	4092	2864	0.70	1.63
20	18	4664	2705	0.58	1.48	4532	2629	0.58	1.57	4378	2539	0.58	1.67
20	20	5016	2307	0.46	1.53	4906	2257	0.46	1.60	4774	2196	0.46	1.71
22	16	4356	3398	0.78	1.46	4224	3295	0.78	1.54	4092	3192	0.78	1.63
22	18	4664	3078	0.66	1.48	4532	2991	0.66	1.57	4378	2889	0.66	1.67
22	20	5016	2709	0.54	1.53	4906	2649	0.54	1.60	4774	2578	0.54	1.71
24	16	4356	3746	0.86	1.46	4224	3633	0.86	1.54	4092	3519	0.86	1.63
24	18	4664	3451	0.74	1.48	4532	3354	0.74	1.57	4378	3240	0.74	1.67
24	20	5016	3110	0.62	1.53	4906	3042	0.62	1.60	4774	2960	0.62	1.71
26	16	4356	4095	0.94	1.46	4224	3971	0.94	1.54	4092	3846	0.94	1.63
26	18	4664	3824	0.82	1.48	4532	3716	0.82	1.57	4378	3590	0.82	1.67
26	20	5016	3511	0.70	1.53	4906	3434	0.70	1.60	4774	3342	0.70	1.71
28	16	4356	4356	1.00	1.46	4224	4224	1.00	1.54	4092	4092	1.00	1.63
28	18	4664	4198	0.90	1.48	4532	4079	0.90	1.57	4378	3940	0.90	1.67
28	20	5016	3912	0.78	1.53	4906	3827	0.78	1.60	4774	3724	0.78	1.71
30	16	4356	4356	1.00	1.46	4224	4224	1.00	1.54	4092	4092	1.00	1.63
30	18	4664	4571	0.98	1.48	4532	4441	0.98	1.57	4378	4290	0.98	1.67
30	20	5016	4314	0.86	1.53	4906	4219	0.86	1.60	4774	4106	0.86	1.71
32	16	4356	4356	1.00	1.46	4224	4224	1.00	1.54	4092	4092	1.00	1.63
32	18	4664	4664	1.00	1.48	4532	4532	1.00	1.57	4378	4378	1.00	1.67
32	20	5016	4715	0.94	1.53	4906	4612	0.94	1.60	4774	4488	0.94	1.71
34	16	4356	4356	1.00	1.46	4224	4224	1.00	1.54	4092	4092	1.00	1.63
34	18	4664	4664	1.00	1.48	4532	4532	1.00	1.57	4378	4378	1.00	1.67
34	20	5016	5016	1.00	1.53	4906	4906	1.00	1.60	4774	4774	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)**

**PLH-P1.6KAH.UK, PLH-P1.6KAH.UK / PUH-P1.6VGAA.UK, PUH-P1.6YGAA.UK**

**(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	1.75	3740	2618	0.70	1.87	3564	2495	0.70	2.03
20	18	4224	2450	0.58	1.79	4092	2373	0.58	1.93	3828	2220	0.58	2.07
20	20	4576	2105	0.46	1.84	4400	2024	0.46	1.97	4136	1903	0.46	2.11
22	16	3916	3054	0.78	1.75	3740	2917	0.78	1.87	3564	2780	0.78	2.03
22	18	4224	2788	0.66	1.79	4092	2701	0.66	1.93	3828	2526	0.66	2.07
22	20	4576	2471	0.54	1.84	4400	2376	0.54	1.97	4136	2233	0.54	2.11
24	16	3916	3368	0.86	1.75	3740	3216	0.86	1.87	3564	3065	0.86	2.03
24	18	4224	3126	0.74	1.79	4092	3028	0.74	1.93	3828	2833	0.74	2.07
24	20	4576	2837	0.62	1.84	4400	2728	0.62	1.97	4136	2564	0.62	2.11
26	16	3916	3681	0.94	1.75	3740	3516	0.94	1.87	3564	3350	0.94	2.03
26	18	4224	3464	0.82	1.79	4092	3355	0.82	1.93	3828	3139	0.82	2.07
26	20	4576	3203	0.70	1.84	4400	3080	0.70	1.97	4136	2895	0.70	2.11
28	16	3916	3916	1.00	1.75	3740	3740	1.00	1.87	3564	3564	1.00	2.03
28	18	4224	3802	0.90	1.79	4092	3683	0.90	1.93	3828	3445	0.90	2.07
28	20	4576	3569	0.78	1.84	4400	3432	0.78	1.97	4136	3226	0.78	2.11
30	16	3916	3916	1.00	1.75	3740	3740	1.00	1.87	3564	3564	1.00	2.03
30	18	4224	4140	0.98	1.79	4092	4010	0.98	1.93	3828	3751	0.98	2.07
30	20	4576	3935	0.86	1.84	4400	3784	0.86	1.97	4136	3557	0.86	2.11
32	16	3916	3916	1.00	1.75	3740	3740	1.00	1.87	3564	3564	1.00	2.03
32	18	4224	4224	1.00	1.79	4092	4092	1.00	1.93	3828	3828	1.00	2.07
32	20	4576	4301	0.94	1.84	4400	4136	0.94	1.97	4136	3888	0.94	2.11
34	16	3916	3916	1.00	1.75	3740	3740	1.00	1.87	3564	3564	1.00	2.03
34	18	4224	4224	1.00	1.79	4092	4092	1.00	1.93	3828	3828	1.00	2.07
34	20	4576	4576	1.00	1.84	4400	4400	1.00	1.97	4136	4136	1.00	2.11

Note CA : Capacity (W)

PC : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor



**COOLING CAPACITY(9)**

**PLH-P2KAH.UK, PLH-P2KAH.UK / PUH-P2VGAA.UK, PUH-P2YGAA.UK**

**(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	5247	3358	0.64	1.95	5088	3256	0.64	2.06	4929	3155	0.64	2.18
20	18	5618	2921	0.52	1.99	5459	2839	0.52	2.10	5274	2742	0.52	2.24
20	20	6042	2417	0.40	2.05	5910	2364	0.40	2.15	5751	2300	0.40	2.29
22	16	5247	3778	0.72	1.95	5088	3663	0.72	2.06	4929	3549	0.72	2.18
22	18	5618	3371	0.60	1.99	5459	3275	0.60	2.10	5274	3164	0.60	2.24
22	20	6042	2900	0.48	2.05	5910	2837	0.48	2.15	5751	2760	0.48	2.29
24	16	5247	4198	0.80	1.95	5088	4070	0.80	2.06	4929	3943	0.80	2.18
24	18	5618	3820	0.68	1.99	5459	3712	0.68	2.10	5274	3586	0.68	2.24
24	20	6042	3384	0.56	2.05	5910	3309	0.56	2.15	5751	3220	0.56	2.29
26	16	5247	4617	0.88	1.95	5088	4477	0.88	2.06	4929	4338	0.88	2.18
26	18	5618	4270	0.76	1.99	5459	4149	0.76	2.10	5274	4008	0.76	2.24
26	20	6042	3867	0.64	2.05	5910	3782	0.64	2.15	5751	3680	0.64	2.29
28	16	5247	5037	0.96	1.95	5088	4884	0.96	2.06	4929	4732	0.96	2.18
28	18	5618	4719	0.84	1.99	5459	4586	0.84	2.10	5274	4430	0.84	2.24
28	20	6042	4350	0.72	2.05	5910	4255	0.72	2.15	5751	4140	0.72	2.29
30	16	5247	5247	1.00	1.95	5088	5088	1.00	2.06	4929	4929	1.00	2.18
30	18	5618	5169	0.92	1.99	5459	5022	0.92	2.10	5274	4852	0.92	2.24
30	20	6042	4834	0.80	2.05	5910	4728	0.80	2.15	5751	4600	0.80	2.29
32	16	5247	5247	1.00	1.95	5088	5088	1.00	2.06	4929	4929	1.00	2.18
32	18	5618	5618	1.00	1.99	5459	5459	1.00	2.10	5274	5274	1.00	2.24
32	20	6042	5317	0.88	2.05	5910	5200	0.88	2.15	5751	5060	0.88	2.29
34	16	5247	5247	1.00	1.95	5088	5088	1.00	2.06	4929	4929	1.00	2.18
34	18	5618	5618	1.00	1.99	5459	5459	1.00	2.10	5274	5274	1.00	2.24
34	20	6042	5800	0.96	2.05	5910	5673	0.96	2.15	5751	5520	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)**

**PLH-P2KAH.UK, PLH-P2KAH.UK / PUH-P2VGAA.UK, PUH-P2YGAA.UK**

**(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	4717	3019	0.64	2.34	4505	2883	0.64	2.51	4293	2748	0.64	2.72
20	18	5088	2646	0.52	2.40	4929	2563	0.52	2.59	4611	2398	0.52	2.78
20	20	5512	2205	0.40	2.46	5300	2120	0.40	2.64	4982	1993	0.40	2.83
22	16	4717	3396	0.72	2.34	4505	3244	0.72	2.51	4293	3091	0.72	2.72
22	18	5088	3053	0.60	2.40	4929	2957	0.60	2.59	4611	2767	0.60	2.78
22	20	5512	2646	0.48	2.46	5300	2544	0.48	2.64	4982	2391	0.48	2.83
24	16	4717	3774	0.80	2.34	4505	3604	0.80	2.51	4293	3434	0.80	2.72
24	18	5088	3460	0.68	2.40	4929	3352	0.68	2.59	4611	3135	0.68	2.78
24	20	5512	3087	0.56	2.46	5300	2968	0.56	2.64	4982	2790	0.56	2.83
26	16	4717	4151	0.88	2.34	4505	3964	0.88	2.51	4293	3778	0.88	2.72
26	18	5088	3867	0.76	2.40	4929	3746	0.76	2.59	4611	3504	0.76	2.78
26	20	5512	3528	0.64	2.46	5300	3392	0.64	2.64	4982	3188	0.64	2.83
28	16	4717	4528	0.96	2.34	4505	4325	0.96	2.51	4293	4121	0.96	2.72
28	18	5088	4274	0.84	2.40	4929	4140	0.84	2.59	4611	3873	0.84	2.78
28	20	5512	3969	0.72	2.46	5300	3816	0.72	2.64	4982	3587	0.72	2.83
30	16	4717	4717	1.00	2.34	4505	4505	1.00	2.51	4293	4293	1.00	2.72
30	18	5088	4681	0.92	2.40	4929	4535	0.92	2.59	4611	4242	0.92	2.78
30	20	5512	4410	0.80	2.46	5300	4240	0.80	2.64	4982	3986	0.80	2.83
32	16	4717	4717	1.00	2.34	4505	4505	1.00	2.51	4293	4293	1.00	2.72
32	18	5088	5088	1.00	2.40	4929	4929	1.00	2.59	4611	4611	1.00	2.78
32	20	5512	4851	0.88	2.46	5300	4664	0.88	2.64	4982	4384	0.88	2.83
34	16	4717	4717	1.00	2.34	4505	4505	1.00	2.51	4293	4293	1.00	2.72
34	18	5088	5088	1.00	2.40	4929	4929	1.00	2.59	4611	4611	1.00	2.78
34	20	5512	5292	0.96	2.46	5300	5088	0.96	2.64	4982	4783	0.96	2.83

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

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

**COOLING CAPACITY(11)**

**PLH-P2.5KAH.UK, PLH-P2.5KAH.UK / PUH-P2.5VGAA.UK, PUH-P2.5YGAA.UK**

**(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	2.10	6048	3931	0.65	2.22	5859	3808	0.65	2.35
20	18	6678	3539	0.53	2.14	6489	3439	0.53	2.26	6269	3322	0.53	2.42
20	20	7182	2945	0.41	2.21	7025	2880	0.41	2.31	6836	2803	0.41	2.47
22	16	6237	4553	0.73	2.10	6048	4415	0.73	2.22	5859	4277	0.73	2.35
22	18	6678	4074	0.61	2.14	6489	3958	0.61	2.26	6269	3824	0.61	2.42
22	20	7182	3519	0.49	2.21	7025	3442	0.49	2.31	6836	3349	0.49	2.47
24	16	6237	5052	0.81	2.10	6048	4899	0.81	2.22	5859	4746	0.81	2.35
24	18	6678	4608	0.69	2.14	6489	4477	0.69	2.26	6269	4325	0.69	2.42
24	20	7182	4094	0.57	2.21	7025	4004	0.57	2.31	6836	3896	0.57	2.47
26	16	6237	5551	0.89	2.10	6048	5383	0.89	2.22	5859	5215	0.89	2.35
26	18	6678	5142	0.77	2.14	6489	4997	0.77	2.26	6269	4827	0.77	2.42
26	20	7182	4668	0.65	2.21	7025	4566	0.65	2.31	6836	4443	0.65	2.47
28	16	6237	6050	0.97	2.10	6048	5867	0.97	2.22	5859	5683	0.97	2.35
28	18	6678	5676	0.85	2.14	6489	5516	0.85	2.26	6269	5328	0.85	2.42
28	20	7182	5243	0.73	2.21	7025	5128	0.73	2.31	6836	4990	0.73	2.47
30	16	6237	6237	1.00	2.10	6048	6048	1.00	2.22	5859	5859	1.00	2.35
30	18	6678	6211	0.93	2.14	6489	6035	0.93	2.26	6269	5830	0.93	2.42
30	20	7182	5817	0.81	2.21	7025	5690	0.81	2.31	6836	5537	0.81	2.47
32	16	6237	6237	1.00	2.10	6048	6048	1.00	2.22	5859	5859	1.00	2.35
32	18	6678	6678	1.00	2.14	6489	6489	1.00	2.26	6269	6269	1.00	2.42
32	20	7182	6392	0.89	2.21	7025	6252	0.89	2.31	6836	6084	0.89	2.47
34	16	6237	6237	1.00	2.10	6048	6048	1.00	2.22	5859	5859	1.00	2.35
34	18	6678	6678	1.00	2.14	6489	6489	1.00	2.26	6269	6269	1.00	2.42
34	20	7182	6967	0.97	2.21	7025	6814	0.97	2.31	6836	6630	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)**

**PLH-P2.5KAH.UK, PLH-P2.5KAH.UK / PUH-P2.5VGAA.UK, PUH-P2.5YGAA.UK**

**(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	2.52	5355	3481	0.65	2.71	5103	3317	0.65	2.93
20	18	6048	3205	0.53	2.59	5859	3105	0.53	2.79	5481	2905	0.53	3.00
20	20	6552	2666	0.41	2.66	6300	2583	0.41	2.84	5922	2428	0.41	3.05
22	16	5607	4093	0.73	2.52	5355	3909	0.73	2.71	5103	3725	0.73	2.93
22	18	6048	3689	0.61	2.59	5859	3574	0.61	2.79	5481	3343	0.61	3.00
22	20	6552	3201	0.49	2.66	6300	3087	0.49	2.84	5922	2902	0.49	3.05
24	16	5607	4542	0.81	2.52	5355	4338	0.81	2.71	5103	4133	0.81	2.93
24	18	6048	4173	0.69	2.59	5859	4043	0.69	2.79	5481	3782	0.69	3.00
24	20	6552	3735	0.57	2.66	6300	3591	0.57	2.84	5922	3376	0.57	3.05
26	16	5607	4990	0.89	2.52	5355	4766	0.89	2.71	5103	4542	0.89	2.93
26	18	6048	4657	0.77	2.59	5859	4511	0.77	2.79	5481	4220	0.77	3.00
26	20	6552	4259	0.65	2.66	6300	4095	0.65	2.84	5922	3849	0.65	3.05
28	16	5607	5439	0.97	2.52	5355	5194	0.97	2.71	5103	4950	0.97	2.93
28	18	6048	5141	0.85	2.59	5859	4980	0.85	2.79	5481	4659	0.85	3.00
28	20	6552	4783	0.73	2.66	6300	4599	0.73	2.84	5922	4323	0.73	3.05
30	16	5607	5607	1.00	2.52	5355	5355	1.00	2.71	5103	5103	1.00	2.93
30	18	6048	5625	0.93	2.59	5859	5449	0.93	2.79	5481	5097	0.93	3.00
30	20	6552	5307	0.81	2.66	6300	5103	0.81	2.84	5922	4797	0.81	3.05
32	16	5607	5607	1.00	2.52	5355	5355	1.00	2.71	5103	5103	1.00	2.93
32	18	6048	6048	1.00	2.59	5859	5859	1.00	2.79	5481	5481	1.00	3.00
32	20	6552	5831	0.89	2.66	6300	5607	0.89	2.84	5922	5271	0.89	3.05
34	16	5607	5607	1.00	2.52	5355	5355	1.00	2.71	5103	5103	1.00	2.93
34	18	6048	6048	1.00	2.59	5859	5859	1.00	2.79	5481	5481	1.00	3.00
34	20	6552	6355	0.97	2.66	6300	6111	0.97	2.84	5922	5744	0.97	3.05

Note CA : Capacity (W)

P.C. : Power consumption (kW)

SHC(W) : Sensible heat capacity

SHF : Sensible heat factor

## 2) HEATING CAPACITY

PUH-P1.6VGA, PUH-P1.6YGA, PUH-P2VGA, PUH-P2VYGA, PUH-P2.5VGA, PUH-P2.5YGA

(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.
PLH-P1.6KAH.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
PLH-P2KAH.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
PLH-P2.5KAH.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

PUH-P1.6VGAA.UK, PUH-P1.6YGAA.UK  
 PUH-P2VGAA.UK, PUH-P2YGAA.UK  
 PUH-P2.5VGAA.UK, PUH-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.
PLH-P1.6KAH.UK PLH-P1.6KAH <sub>i</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
PLH-P2KAH.UK PLH-P2KAH <sub>i</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
PLH-P2.5KAH.UK PLH-P2.5KAH <sub>i</sub> .UK	15	4,699	1.52	5,106	1.62	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

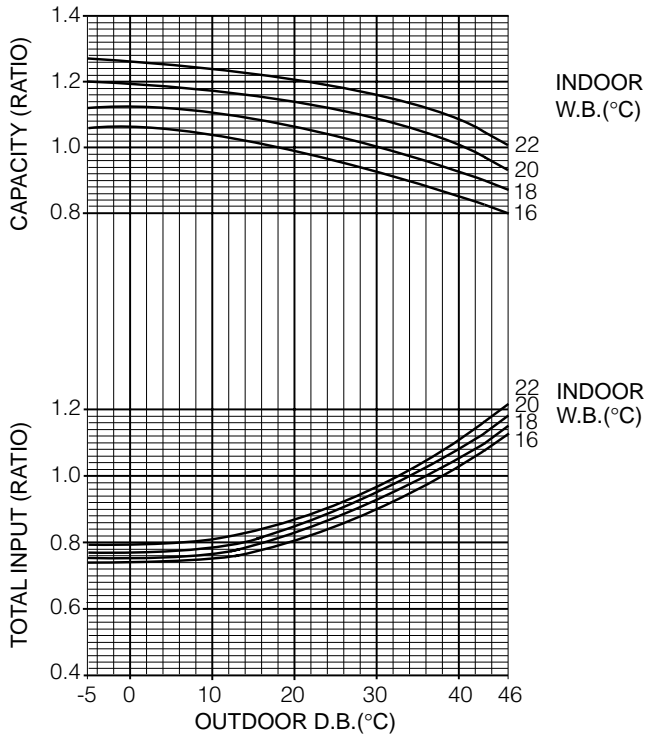
Service Ref.	Refrigerant piping length (one way)									
	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
PLH-P1.6KAH.UK PLH-P1.6KAH <sub>i</sub> .UK	1.00	0.993	0.984	0.978	0.969	0.961	0.956	0.948	—	—
PLH-P2KAH.UK PLH-P2KAH <sub>i</sub> .UK	1.00	0.993	0.984	0.978	0.969	0.961	0.956	0.948	—	—
PLH-P2.5KAH.UK PLH-P2.5KAH <sub>i</sub> .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

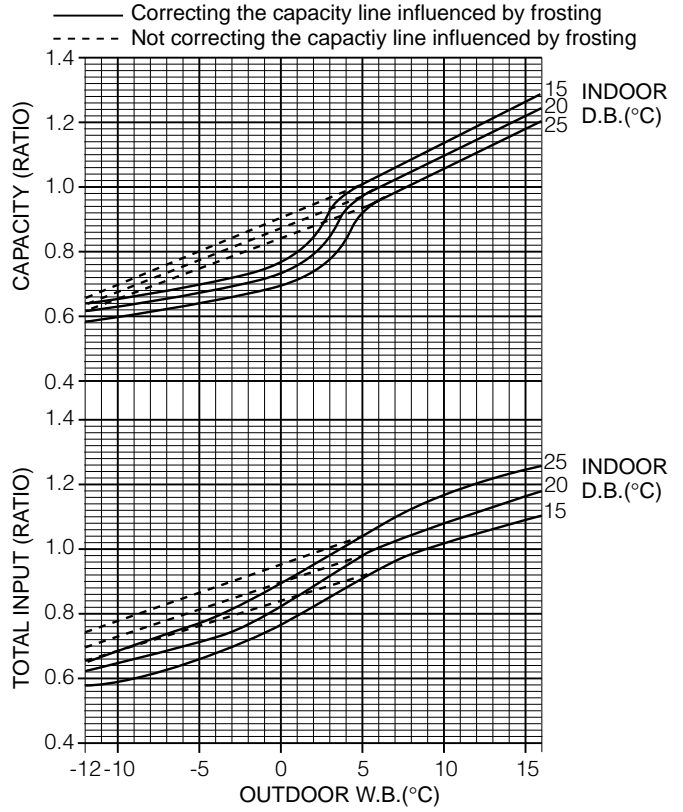
Service Ref.	Refrigerant piping length (one way)									
	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
PLH-P1.6KAH.UK PLH-P1.6KAH <sub>i</sub> .UK	1.00	0.998	0.995	0.993	0.990	0.988	0.985	0.983	—	—
PLH-P2KAH.UK PLH-P2KAH <sub>i</sub> .UK	1.00	0.998	0.995	0.993	0.990	0.988	0.985	0.983	—	—
PLH-P2.5KAH.UK PLH-P2.5KAH <sub>i</sub> .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)



### 3. ELECTRICAL DATA

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

Service Ref.	Indoor unit	PLH-P1.6KAH.UK				PLH-P2KAH.UK				PLH-P2.5KAH.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>						
Mode		Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat
Capacity (W)		4,300	4,900 (6,070)	4,300	4,900 (6,070)	5,300	6,150 (7,320)	5,300	6,150 (7,320)	6,200	7,100 (8,860)	6,200	7,100 (8,860)
Total Input (kW)	(In + Out) (In + Out + Heater)	1.73	1.78 (2.95)	1.73	1.78 (2.95)	2.52	2.56 (3.73)	2.52	2.56 (3.73)	2.70	2.56 (4.34)	2.70	2.56 (4.34)
Indoor unit	Input (kW)	0.12	0.08 <1.17>	0.12	0.08 <1.17>	0.12	0.08 <1.17>	0.12	0.08 <1.17>	0.12	0.09 <1.76>	0.12	0.09 <1.76>
	Current (A)	0.60	0.41 <5.32>	0.60	0.41 <5.32>	0.61	0.42 <5.32>	0.61	0.42 <5.32>	0.57	0.42 <8.00>	0.57	0.42 <8.00>
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

\* ( ) Shows the total rating.  
< > Shows the only booster heater rating.

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

Service Ref.	Indoor unit	PLH-P1.6KAH.UK				PLH-P2KAH.UK				PLH-P2.5KAH.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>						
Mode		Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat
Capacity (W)		4,350	4,950 (6,240)	4,350	4,950 (6,240)	5,350	6,200 (7,490)	5,350	6,200 (7,490)	6,250	7,250 (9,180)	6,250	7,250 (9,180)
Total Input (kW)	(In + Out) (In + Out + Heater)	1.81	1.85 (3.14)	1.81	1.85 (3.14)	2.57	2.62 (3.91)	2.57	2.62 (3.91)	2.74	2.63 (4.56)	2.74	2.63 (4.56)
Indoor unit	Input (kW)	0.14	0.09 <1.29>	0.14	0.09 <1.29>	0.13	0.09 <1.29>	0.13	0.09 <1.29>	0.13	0.09 <1.93>	0.13	0.09 <1.93>
	Current (A)	0.62	0.43 <5.61>	0.62	0.43 <5.61>	0.63	0.44 <5.61>	0.63	0.44 <5.61>	0.59	0.43 <8.39>	0.59	0.43 <8.39>
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

\* ( ) Shows the total rating.  
< > Shows the only booster heater rating.

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

Service Ref.	Indoor unit	PLH-P1.6KAH.UK				PLH-P2KAH.UK				PLH-P2.5KAH.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>						
Mode		Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat	Cool	Heat
Capacity (W)		4,400	5,000 (6,400)	4,400	5,000 (6,400)	5,400	6,250 (7,650)	5,400	6,250 (7,650)	6,300	7,400 (9,500)	6,300	7,400 (9,500)
Total Input (kW)	(In + Out) (In + Out + Heater)	1.86	1.93 (3.33)	1.86	1.93 (3.33)	2.62	2.67 (4.07)	2.62	2.67 (4.07)	2.77	2.68 (4.78)	2.77	2.68 (4.78)
Indoor unit	Input (kW)	0.15	0.10 <1.40>	0.15	0.10 <1.40>	0.14	0.10 <1.40>	0.14	0.10 <1.40>	0.14	0.10 <2.10>	0.14	0.10 <2.10>
	Current (A)	0.64	0.45 <5.83>	0.64	0.45 <5.83>	0.65	0.45 <5.83>	0.65	0.45 <5.83>	0.61	0.45 <8.75>	0.61	0.45 <8.75>
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

\* ( ) Shows the total rating.  
< > Shows the only booster heater rating.

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

Service Ref.	Indoor unit	PLH-P1.6KAH.UK PLH-P1.6KAH..UK				PLH-P2KAH.UK PLH-P2KAH..UK				PLH-P2.5KAH.UK PLH-P2.5KAH..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)	4,300	4,900 (6,070)	4,300	4,900 (6,070)	5,200	5,850 (7,020)	5,200	5,850 (7,020)	6,200	7,100 (8,860)	6,200	7,100 (8,860)	
Total Input (kW) <small>(In + Out) (In + Out + Heater)</small>	1.70	1.74 (2.91)	1.70	1.74 (2.91)	2.34	2.30 (3.47)	2.34	2.30 (3.47)	2.57	2.48 (4.24)	2.57	2.48 (4.24)	
Indoor unit	Input (kW)	0.12	0.08 <1.17>	0.12	0.08 <1.17>	0.12	0.08 <1.17>	0.12	0.08 <1.17>	0.12	0.09 <1.76>	0.12	0.09 <1.76>
	Current (A)	0.60	0.41 <5.32>	0.60	0.41 <5.32>	0.61	0.42 <5.32>	0.61	0.42 <5.32>	0.57	0.42 <8.00>	0.57	0.42 <8.00>
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

\* ( ) Shows the total rating.  
< > Shows the only booster heater rating.

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

Service Ref.	Indoor unit	PLH-P1.6KAH.UK PLH-P1.6KAH..UK				PLH-P2KAH.UK PLH-P2KAH..UK				PLH-P2.5KAH.UK PLH-P2.5KAH..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)	4,350	4,950 (6,240)	4,350	4,950 (6,240)	5,250	5,900 (7,190)	5,250	5,900 (7,190)	6,250	7,250 (9,180)	6,250	7,250 (9,180)	
Total Input (kW) <small>(In + Out) (In + Out + Heater)</small>	1.77	1.81 (3.10)	1.77	1.81 (3.10)	2.38	2.36 (3.65)	2.38	2.36 (3.65)	2.59	2.52 (4.45)	2.59	2.52 (4.45)	
Indoor unit	Input (kW)	0.14	0.09 <1.29>	0.14	0.09 <1.29>	0.13	0.09 <1.29>	0.13	0.09 <1.29>	0.13	0.09 <1.93>	0.13	0.09 <1.93>
	Current (A)	0.62	0.43 <5.61>	0.62	0.43 <5.61>	0.63	0.44 <5.61>	0.63	0.44 <5.61>	0.59	0.43 <8.39>	0.59	0.43 <8.39>
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

\* ( ) Shows the total rating.  
< > Shows the only booster heater rating.

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

Service Ref.	Indoor unit	PLH-P1.6KAH.UK PLH-P1.6KAH..UK				PLH-P2KAH.UK PLH-P2KAH..UK				PLH-P2.5KAH.UK PLH-P2.5KAH..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 (6,400)	4,400	5,000 (6,400)	5,300	5,950 (7,350)	5,300	5,950 (7,350)	6,300	7,400 (9,500)	6,300	7,400 (9,500)	
Total Input (kW) <small>(In + Out) (In + Out + Heater)</small>	1.82	1.89 (3.29)	1.82	1.89 (3.29)	2.44	2.40 (3.80)	2.44	2.40 (3.80)	2.63	2.57 (4.67)	2.63	2.57 (4.67)	
Indoor unit	Input (kW)	0.15	0.10 <1.40>	0.15	0.10 <1.40>	0.14	0.10 <1.40>	0.14	0.10 <1.40>	0.14	0.10 <2.10>	0.14	0.10 <2.10>
	Current (A)	0.64	0.45 <5.83>	0.64	0.45 <5.83>	0.65	0.45 <5.83>	0.65	0.45 <5.83>	0.61	0.45 <8.75>	0.61	0.45 <8.75>
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

\* ( ) Shows the total rating.  
< > Shows the only booster heater rating.



#### 4. STANDARD OPERATION DATA

Service Ref.			PLH-P1.6KAH.UK		PLH-P2KAH.UK		PLH-P2.5KAH.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	Indoor unit Service Ref.		PLH-P1.6KAH.UK		PLH-P2KAH.UK		PLH-P2.5KAH.UK		
	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	
	Outdoor unit Service Ref.		PUH-P1.6VGA PUH-P1.6YGA		PUH-P2VGA PUH-P2YGA		PUH-P2.5VGA PUH-P2.5YGA		
	Phase,Hz		1/3 , 50		1/3 , 50		1/3 , 50		
	Volts	V	240/415		240/415		240/415		
	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	
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
	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>)

Service Ref.			PLH-P1.6KAH.UK PLH-P1.6KAH.UK		PLH-P2KAH.UK PLH-P2KAH.UK		PLH-P2.5KAH.UK PLH-P2.5KAH.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	Indoor unit Service Ref.		PLH-P1.6KAH.UK PLH-P1.6KAH.UK		PLH-P2KAH.UK PLH-P2KAH.UK		PLH-P2.5KAH.UK PLH-P2.5KAH.UK		
	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	
	Outdoor unit Service Ref.		PUH-P1.6VGAA.UK PUH-P1.6YGAA.UK		PUH-P2VGAA.UK PUH-P2YGAA.UK		PUH-P2.5VGAA.UK PUH-P2.5YGAA.UK		
	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> )	2.08 (21.2)	2.45 (25.0)	2.31 (23.6)	2.50 (25.5)	1.95 (19.9)	2.21 (22.5)	
	Suction pressure	MPa (kgf/cm <sup>2</sup> )	0.50 (5.1)	0.44 (4.5)	0.48 (4.9)	0.46 (4.7)	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
	Discharge air temperature	D.B.	°C	16.3	36.5	15.0	40.0	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>)

## 5. OUTLET AIR SPEED AND COVERAGE RANGE

			PLH-P1.6KAH.UK PLH-P1.6KAH.UK	PLH-P2KAH.UK PLH-P2KAH.UK	PLH-P2.5KAH.UK PLH-P2.5KAH.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.

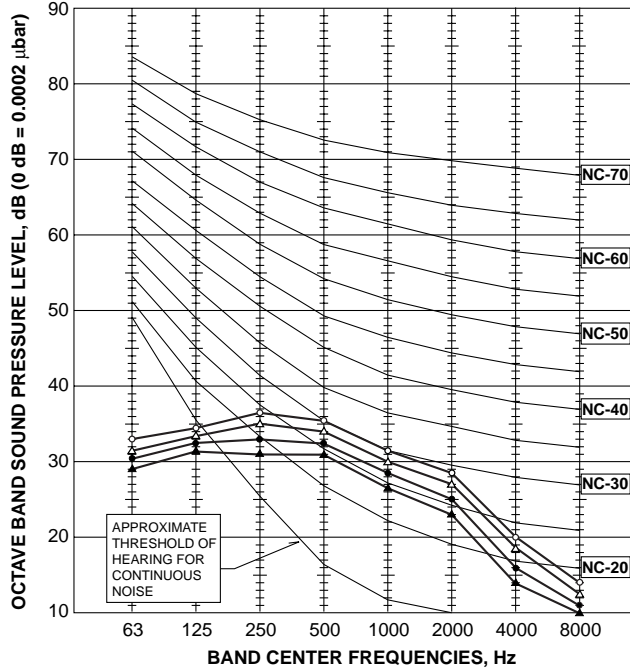
When air is blown out horizontally from the unit at the Hi notch position.

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

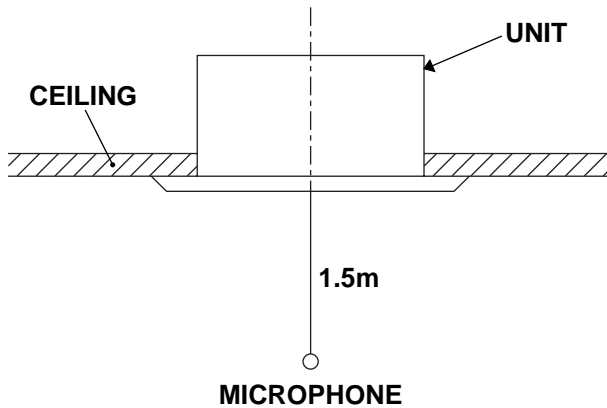
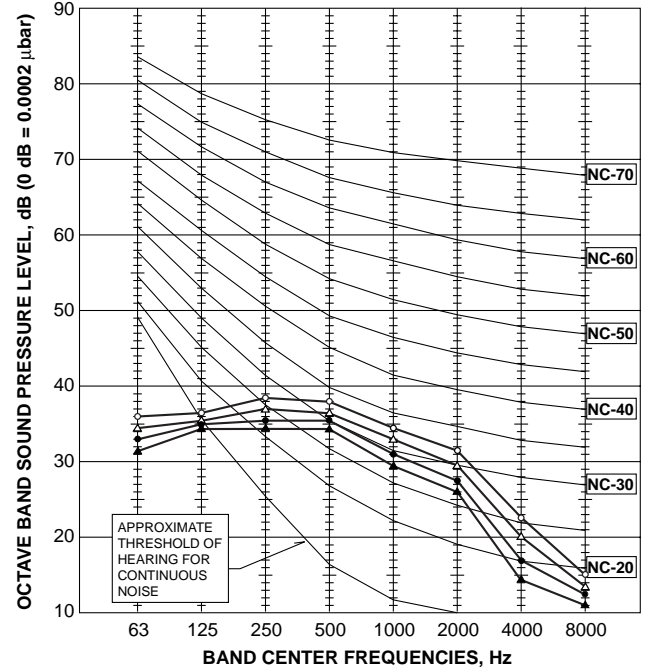
**PLH-P1.6KAH.UK**  
**PLH-P1.6KAH<sub>1</sub>.UK**  
**PLH-P2KAH.UK**  
**PLH-P2KAH<sub>1</sub>.UK**

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



**PLH-P2.5KAH.UK**  
**PLH-P2.5KAH<sub>1</sub>.UK**

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



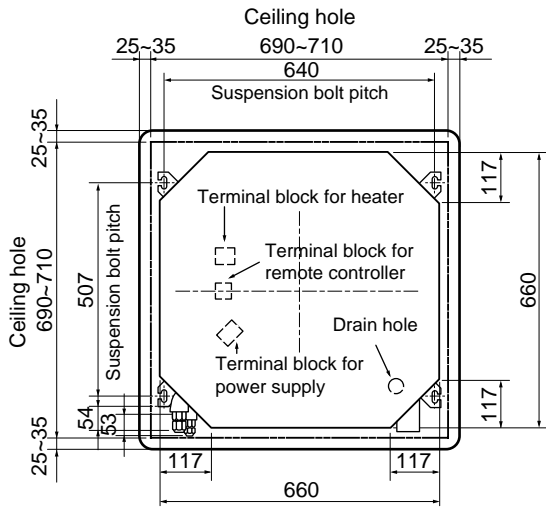
Ambient temperature 27°C

Test conditions are based on JIS Z8731

INDOOR UNIT

Unit : mm

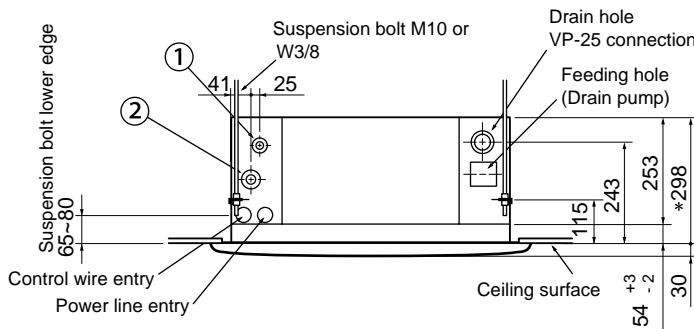
PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK  
 PLH-P1.6KAH<sub>i</sub>.UK, PLH-P2KAH<sub>i</sub>.UK, PLH-P2.5KAH<sub>i</sub>.UK



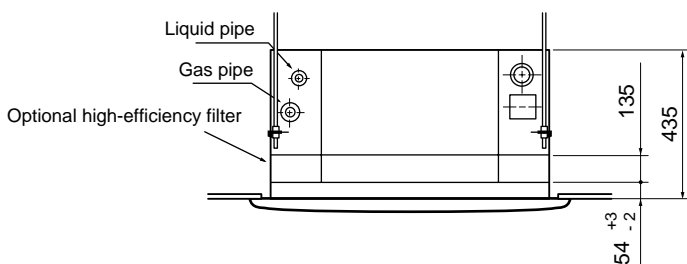
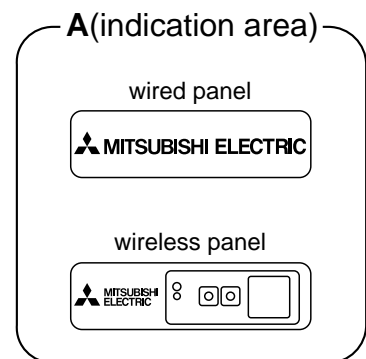
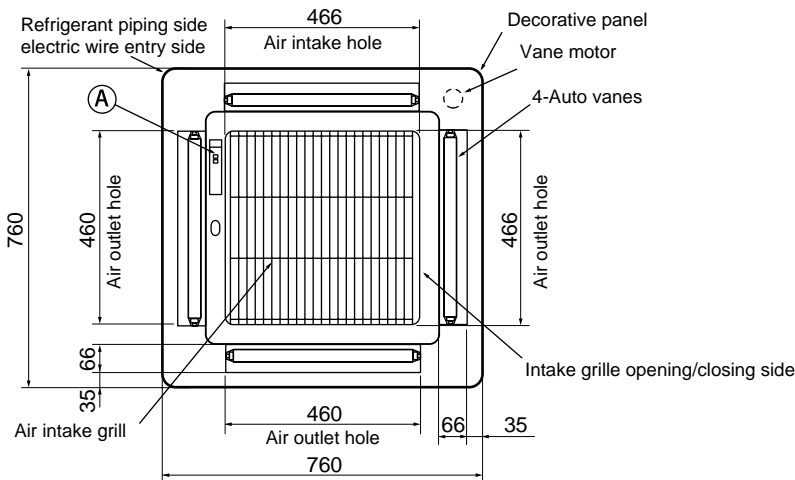
NOTE 1. The electrical parts box may be removed during servicing. When connecting the power line and the control wire, provide enough length to the electric wires.

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.)

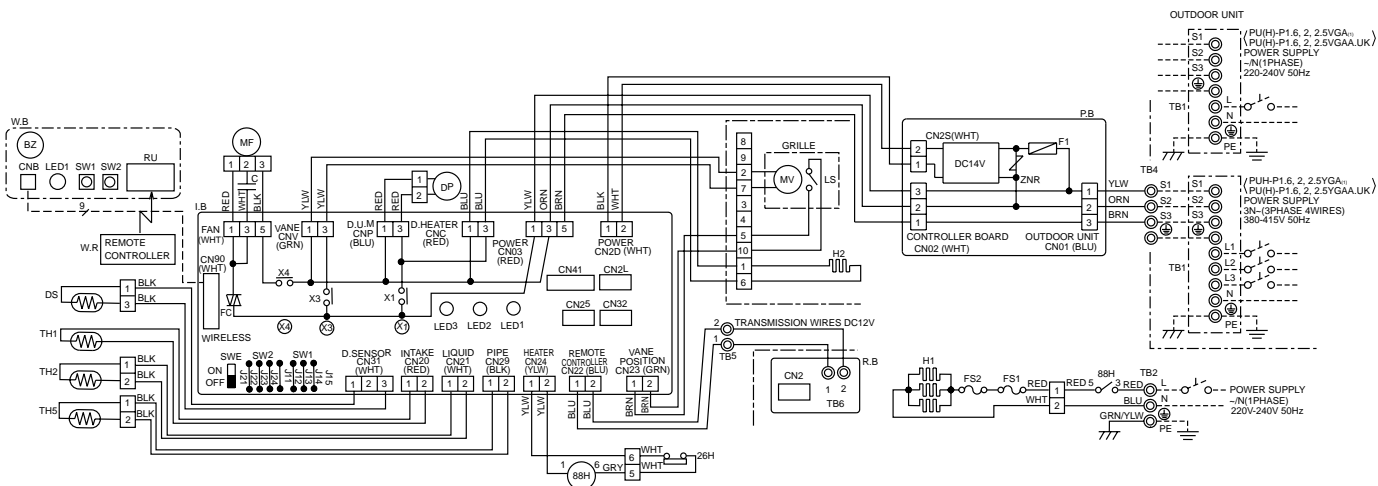
Models	①	②
PLH-P1.6KAH.UK PLH-P2KAH.UK PLH-P2.5KAH.UK	Refrigerant pipe ( $\phi$ 9.52mm)	Refrigerant pipe ( $\phi$ 15.88mm)
PLH-P1.6KAH <sub>i</sub> .UK PLH-P2KAH <sub>i</sub> .UK PLH-P2.5KAH <sub>i</sub> .UK	Flared connection 3/8F	Flared connection 5/8F



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



PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK  
 PLH-P1.6KAH<sub>i</sub>.UK, PLH-P2KAH<sub>i</sub>.UK, PLH-P2.5KAH<sub>i</sub>.UK



SW1		
MODELS	Manufacture	Service board
PLH-P1.6KAH.UK PLH-P1.6KAH <sub>i</sub> .UK PLH-P2KAH.UK PLH-P2KAH <sub>i</sub> .UK PLH-P2.5KAH.UK PLH-P2.5KAH <sub>i</sub> .UK		

SW2		
MODELS	Manufacture	service board
PLH-P1.6KAH.UK PLH-P1.6KAH <sub>i</sub> .UK		
PLH-P2KAH.UK PLH-P2KAH <sub>i</sub> .UK		
PLH-P2.5KAH.UK PLH-P2.5KAH <sub>i</sub> .UK		

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]

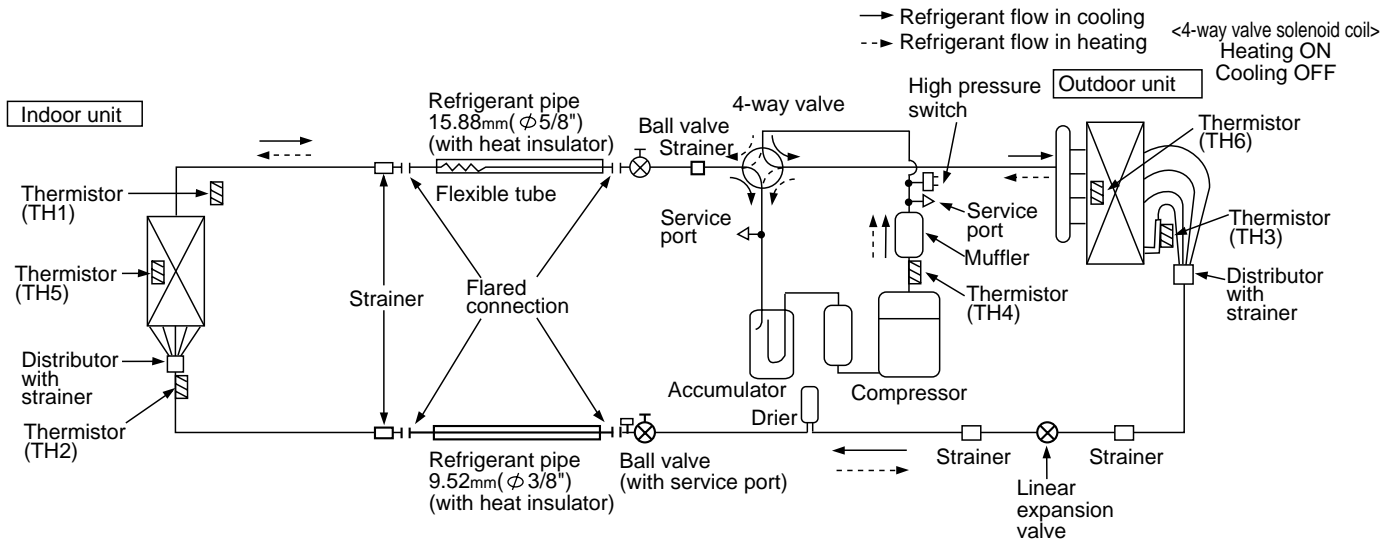
SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
P.B	INDOOR POWER BOARD	I.B	INDOOR CONTROLLER BOARD	LS	LIMIT SWITCH
F1	FUSE (4A)	CN2L	CONNECTOR (LOSSNAY)	MF	FAN MOTOR
ZNR	VARISTOR	CN25	CONNECTOR (HUMIDIFIER)	MV	VANE MOTOR
R.B	REMOTE CONTROLLER BOARD	CN32	CONNECTOR (REMOTE SWITCH)	TB2	TERMINAL BLOCK (HEATER)
CN2	CONNECTOR (PROGRAM TIMER)	CN41	CONNECTOR (HA TERMINAL-A)	TB4	TERMINAL BLOCK (INDOOR/OUTDOOR CONNECTING LINE)
TB6	TERMINAL BLOCK (REMOTE CONTROLLER TRANSMISSION LINE)	FC	FAN PHASE CONTROL	TB5	TERMINAL BLOCK (REMOTE CONTROLLER TRANSMISSION LINE)
W.B	WIRELESS REMOTE CONTROLLER BOARD (OPTION)	LED1	POWER SUPPLY (I.B)	TH1	ROOM TEMPERATURE THERMISTOR (0°C/15KΩ, 25°C/5.4KΩ DETECT)
RU	RECEIVING UNIT	LED2	POWER SUPPLY (R.B)	TH2	PIPE TEMPERATURE THERMISTOR/LIQUID (0°C/15KΩ, 25°C/5.4KΩ DETECT)
BZ	BUZZER	LED3	TRANSMISSION (INDOOR-OUTDOOR)	TH5	CONDENSER/EVAPORATOR TEMPERATURE THERMISTOR (0°C/15KΩ, 25°C/5.4KΩ DETECT)
LED1	LED (RUN INDICATOR)	SW1	JUMPER WIRE (MODEL SELECTION)	HEATER	
SW1	SWITCH (HEATING ON/OFF)	SW2	JUMPER WIRE (CAPACITY CODE)	FS1,2	THERMAL FUSE (98°C,10A), (77°C,10A)
SW2	SWITCH (COOLING ON/OFF)	SWE	SWITCH (EMERGENCY OPERATION)	H1	HEATER
W.R	WIRELESS REMOTE CONTROLLER (OPTION)	X1	RELAY (DRAIN PUMP/D.HEATER)	26H	HEATER THERMAL SWITCH
		X3	RELAY (VANE MOTOR)	88H	HEATER CONTACTOR
		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".

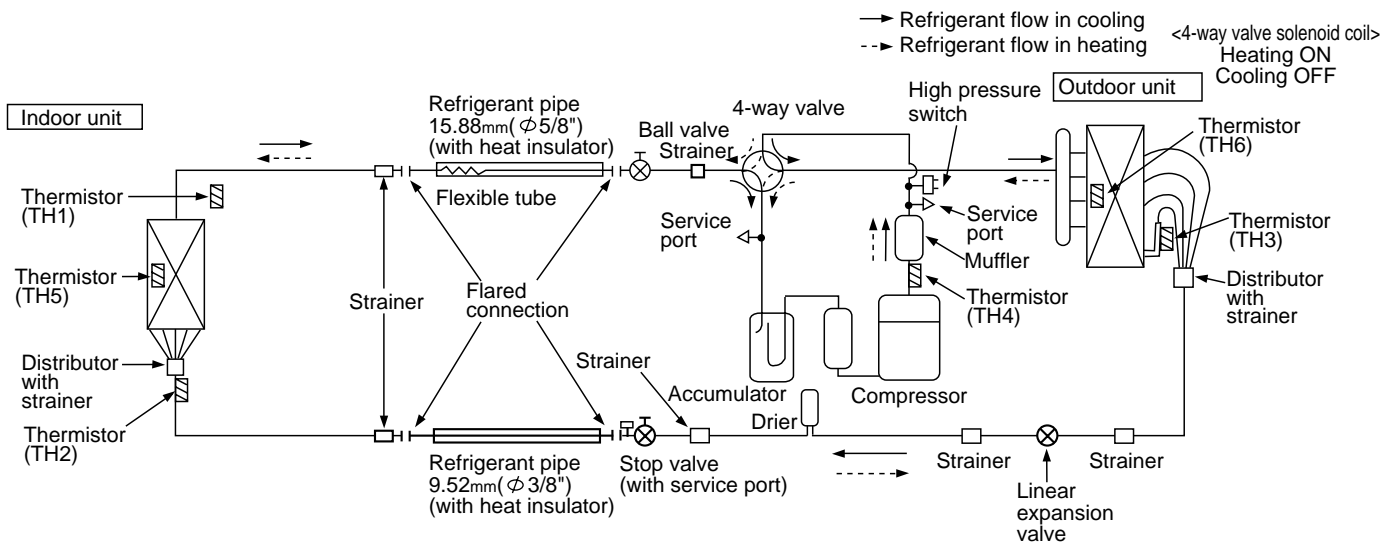
# REFRIGERANT SYSTEM DIAGRAM

PLH-P1.6KAH.UK / PUH-P1.6VGA, PUH-P1.6YGA  
 PLH-P2KAH.UK / PUH-P2VGA, PUH-P2YGA  
 PLH-P2.5KAH.UK / PUH-P2.5VGA<sub>1</sub>, PUH-P2.5YGA<sub>1</sub>

Unit : mm

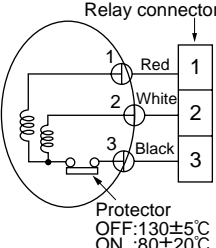
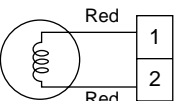
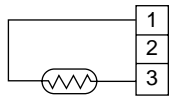


PLH-P1.6KAH.UK, PLH-P1.6KAH<sub>1</sub>.UK / PUH-P1.6VGAA.UK, PUH-P1.6YGAA.UK  
 PLH-P2KAH.UK, PLH-P2KAH<sub>1</sub>.UK / PUH-P2VGAA.UK, PUH-P2YGAA.UK  
 PLH-P2.5KAH.UK, PLH-P2.5KAH<sub>1</sub>.UK / PUH-P2.5VGAA.UK, PUH-P2.5YGAA.UK



**HOW TO CHECK THE PARTS**

**PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK  
 PLH-P1.6KAH<sub>1</sub>.UK, PLH-P2KAH<sub>1</sub>.UK, PLH-P2.5KAH<sub>1</sub>.UK**

Parts name	Check points									
Room temperature thermistor (TH1) Pipe temperature thermistor (TH2) Condenser/Evaporator temperature thermistor (TH5)	Disconnect the connector then measure the resistance using a tester. (Surrounding temperature 10°C ~30°C)  <table border="1" data-bbox="427 499 938 577"> <tr> <td>Normal</td> <td>Abnormal</td> </tr> <tr> <td>4.3kΩ~9.6kΩ</td> <td>Open or short</td> </tr> </table> (Refer to the thermistor)		Normal	Abnormal	4.3kΩ~9.6kΩ	Open or short				
Normal	Abnormal									
4.3kΩ~9.6kΩ	Open or short									
Vane motor	Measure the resistance between the terminals using a tester. (Surrounding temperature 20°C)  <table border="1" data-bbox="427 734 938 813"> <tr> <td>Normal</td> <td>Abnormal</td> </tr> <tr> <td>15kΩ</td> <td>Open or short</td> </tr> </table>		Normal	Abnormal	15kΩ	Open or short				
Normal	Abnormal									
15kΩ	Open or short									
Fan motor 	Measure the resistance between the terminals using a tester. (Surrounding temperature 20°C)  <table border="1" data-bbox="427 925 1468 1115"> <tr> <td>Motor terminal or Relay connector</td> <td>Normal</td> <td>Abnormal</td> </tr> <tr> <td>Red-Black</td> <td>87.2Ω</td> <td rowspan="2">Open or short</td> </tr> <tr> <td>White-Black</td> <td>104.1Ω</td> </tr> </table>		Motor terminal or Relay connector	Normal	Abnormal	Red-Black	87.2Ω	Open or short	White-Black	104.1Ω
Motor terminal or Relay connector	Normal	Abnormal								
Red-Black	87.2Ω	Open or short								
White-Black	104.1Ω									
Drain pump 	Measure the resistance between the terminals using a tester. (Surrounding temperature 20°C)  <table border="1" data-bbox="427 1249 938 1328"> <tr> <td>Normal</td> <td>Abnormal</td> </tr> <tr> <td>290Ω</td> <td>Open or short</td> </tr> </table>		Normal	Abnormal	290Ω	Open or short				
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)  <table border="1" data-bbox="427 1473 938 1552"> <tr> <td>Normal</td> <td>Abnormal</td> </tr> <tr> <td>0.6kΩ~6.0kΩ</td> <td>Open or short</td> </tr> </table> (Refer to the thermistor)		Normal	Abnormal	0.6kΩ~6.0kΩ	Open or short				
Normal	Abnormal									
0.6kΩ~6.0kΩ	Open or short									

<Thermistor Characteristic graph>

Thermistor for lower temperature

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

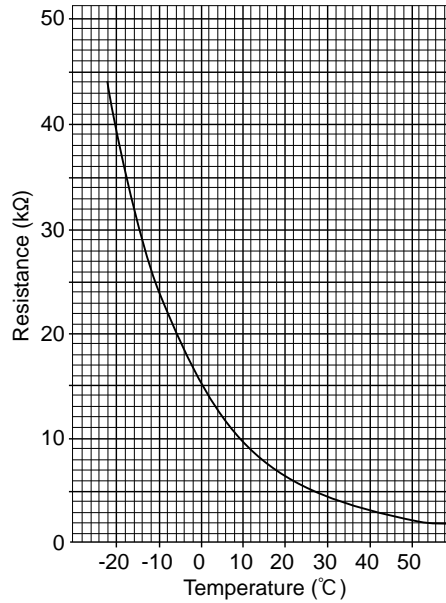
Thermistor  $R_0=15k\Omega \pm 3\%$

Fixed number of  $B=3480K \pm 2\%$

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

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 lower temperature >



Thermistor for drain sensor

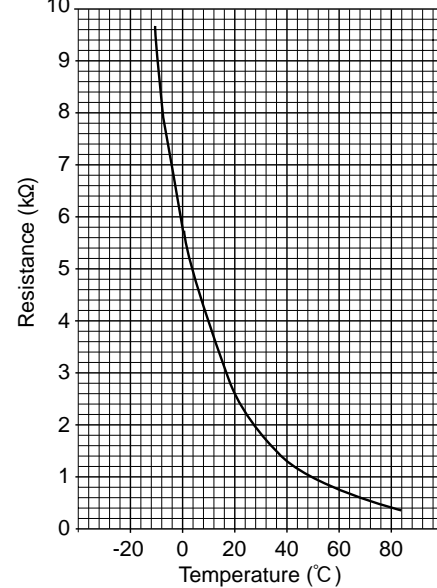
Thermistor  $R_0=6.0k\Omega \pm 5\%$

Fixed number of  $B=3390K \pm 2\%$

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

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

< Thermistor for drain sensor >

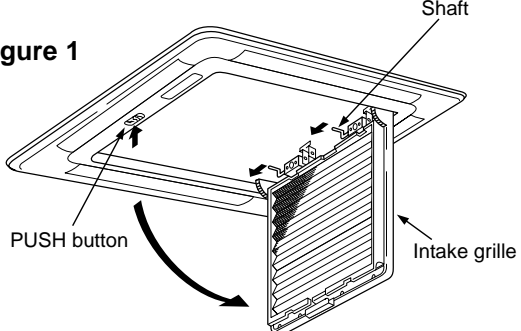
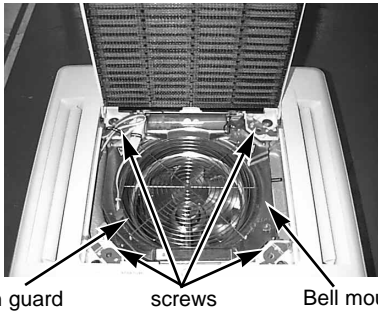
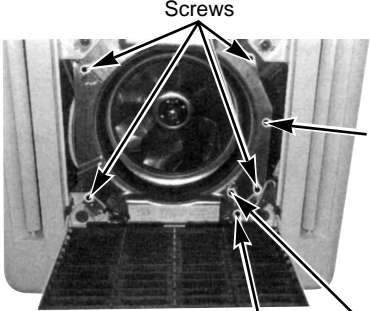
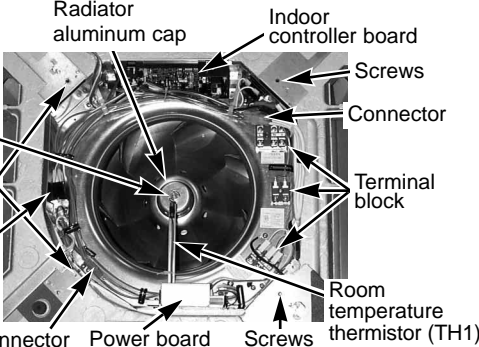
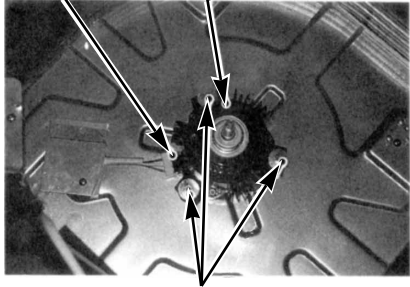




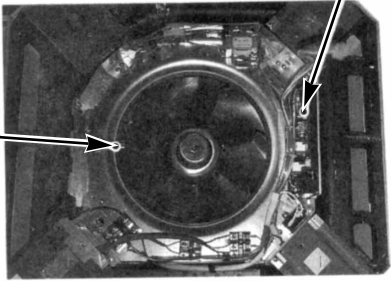
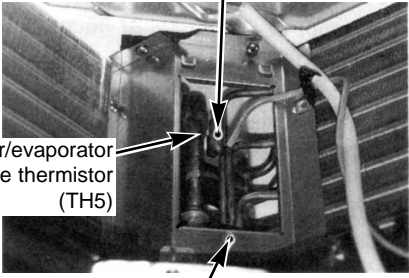
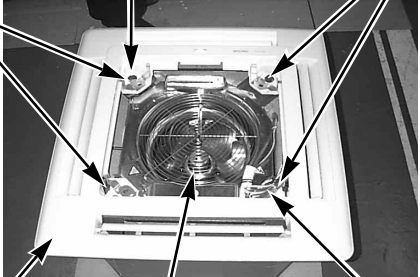
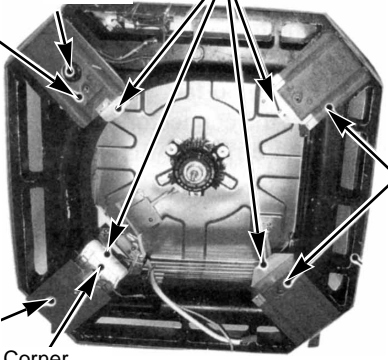
## 1. INDOOR UNIT

PLH-P1.6KAH.UK, PLH-P1.6KAH<sub>1</sub>.UK

Be careful on removing heavy parts.

OPERATING PROCEDURE	PHOTOS&ILLUSTRATIONS
<p><b>1. Removing the air intake grille</b></p> <ol style="list-style-type: none"> <li>(1) Press the <b>PUSH</b> 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> </ol>	<p><b>Figure 1</b></p> 
<p><b>2. Removing the bell mouth.</b></p> <ol style="list-style-type: none"> <li>(1) Open the intake grille.</li> <li>(2) Remove the 4 screws of the bell mouth.</li> </ol>	<p><b>Photo 1</b></p> 
<p><b>3. Removing the controller cover assy (electrical parts)</b></p> <ol 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 bell mouth.</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>Terminal block</li> <li>power board</li> <li>Indoor fan capacitor</li> <li>Room temperature thermistor (TH1)</li> <li>Indoor controller board</li> <li>Relay</li> </ul> </li> </ol>	<p><b>Photo 2</b></p>  <p><b>Photo 3</b></p> 
<p><b>4. Removing the fan motor</b></p> <ol 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> </ol>	<p><b>Photo 4</b></p> 



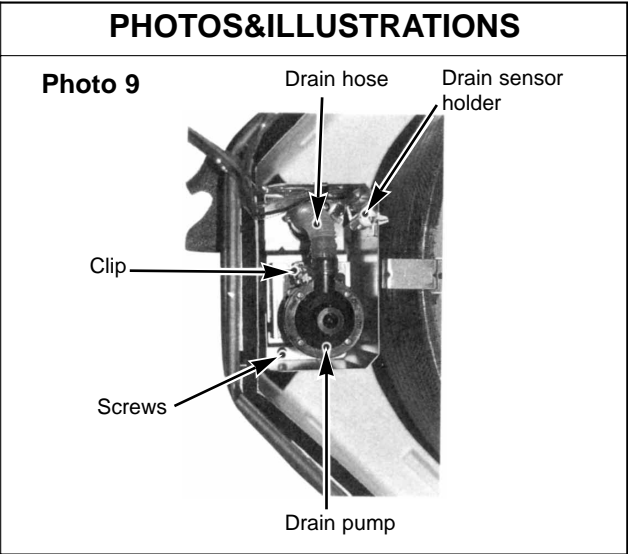
OPERATING PROCEDURE	PHOTOS&ILLUSTRATIONS
<p><b>5. Removing the room temperature thermistor</b></p> <ol style="list-style-type: none"><li>(1) Remove the bell mouth.</li><li>(2) Remove the holder and the room temperature thermistor by pulling the catch.</li><li>(3) Disconnect the red connector, CN20, on the indoor controller board.</li></ol>	<p><b>Photo 5</b></p>  <p>Indoor controller board</p> <p>Room temperature thermistor</p>
<p><b>6. Removing the pipe temperature thermistor and the condenser / evaporator temperature thermistor.</b></p> <ol style="list-style-type: none"><li>(1) Remove the bell mouth.</li><li>(2) Remove the controller cover assy.</li><li>(3) Remove the turbo fan.</li><li>(4) Remove the screw of the service panel.</li><li>(5) Remove the service panel.</li><li>(6) Remove the pipe temperature thermistor (TH2) and condenser / evaporator temperature thermistor (TH5) from the holder.</li><li>(7) Disconnect the 2-pin white connector.</li></ol>	<p><b>Photo 6</b></p>  <p>Pipe temperature thermistor (TH2)</p> <p>Condenser/evaporator temperature thermistor (TH5)</p> <p>Screw</p>
<p><b>7. Removing the panel</b></p> <ol style="list-style-type: none"><li>(1) Open the intake grille.</li><li>(2) Disconnect the connector the vane motor.</li><li>(3) Remove 4 screws of the panel.</li><li>(4) Pulling the temporary hanging hook, remove the panel.</li></ol>	<p><b>Photo 7</b></p>  <p>Temporary hanging hook</p> <p>screws</p> <p>Panel</p> <p>Fan guard</p> <p>Temporary hanging hook</p>
<p><b>8. Removing the drain pan</b></p> <ol style="list-style-type: none"><li>(1) Remove the panel.</li><li>(2) Remove the rubber bushing.</li><li>(3) Drain the remaining water in the drain pan.</li><li>(4) Remove the bell mouth.</li><li>(5) Remove the controller cover assy.</li><li>(6) Remove the screw of the V.A. cover, and remove the V.A. cover.</li><li>(7) Remove each screw of the corner supports 1, 2, and 3, and remove the corner supports 1, 2 and 3.</li><li>(8) Pull out the drain pan. *Pull the left and right of the pan gradually. Be careful not to crack or damage the pan.</li></ol>	<p><b>Photo 8</b></p>  <p>Rubber bush</p> <p>Screws</p> <p>Corner support 2</p> <p>Corner support 1</p> <p>VA cover</p> <p>Corner support 3</p>



**OPERATING PROCEDURE**

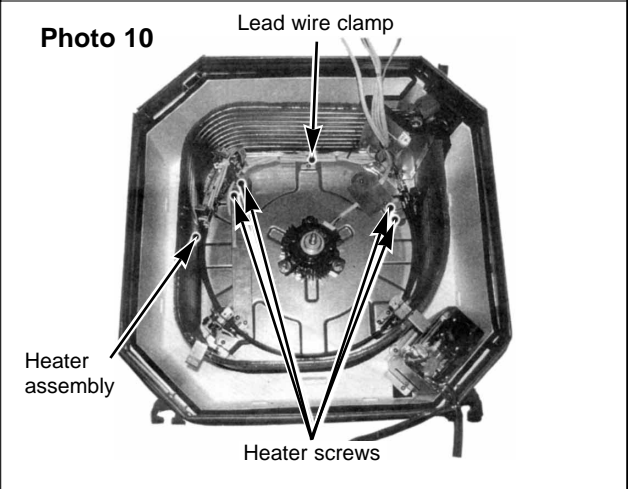
**9. Removing the drain pump and drain sensor**

- (1) Remove the panel.
- (2) Remove the bell mouth.
- (3) Remove the controller cover assy.
- (4) Remove the drain pan.
- (5) Remove 4 screws of the drain pump.
- (6) Pulling the clip of the drain hose, pull out the drain hose from the drain pump.
- (7) Remove the drain sensor and the holder.
- (8) Pull out the drain pump.



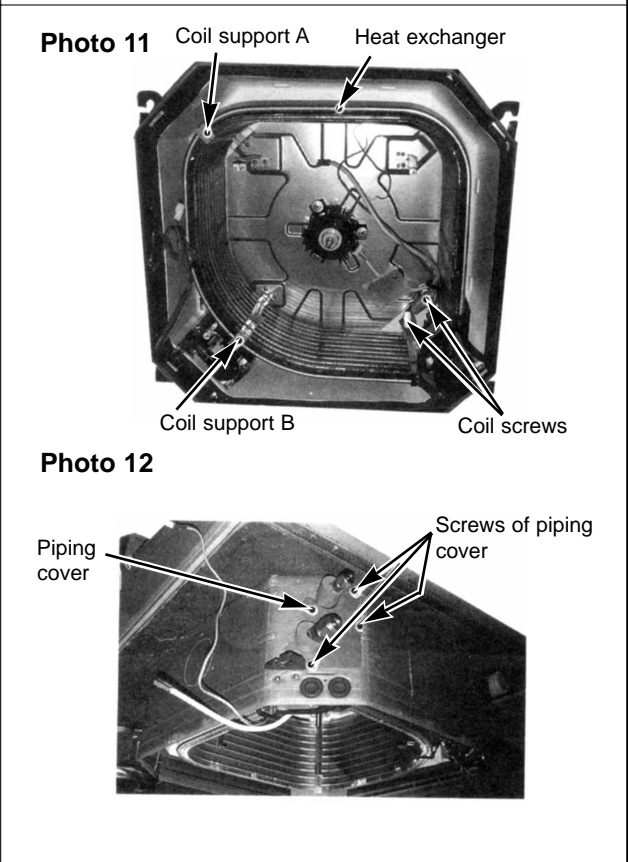
**10. Removing the heater**

- (1) Remove the panel.
- (2) Remove the bell mouth.
- (3) Remove the controller cover assy.
- (4) Remove the drain pan.
- (5) Remove the turbo fan.
- (6) Remove the 5 screws of the heater assembly.
- (7) Remove the clamp (1 screw) securing the lead wire.
- (8) Pull the heater assembly out.



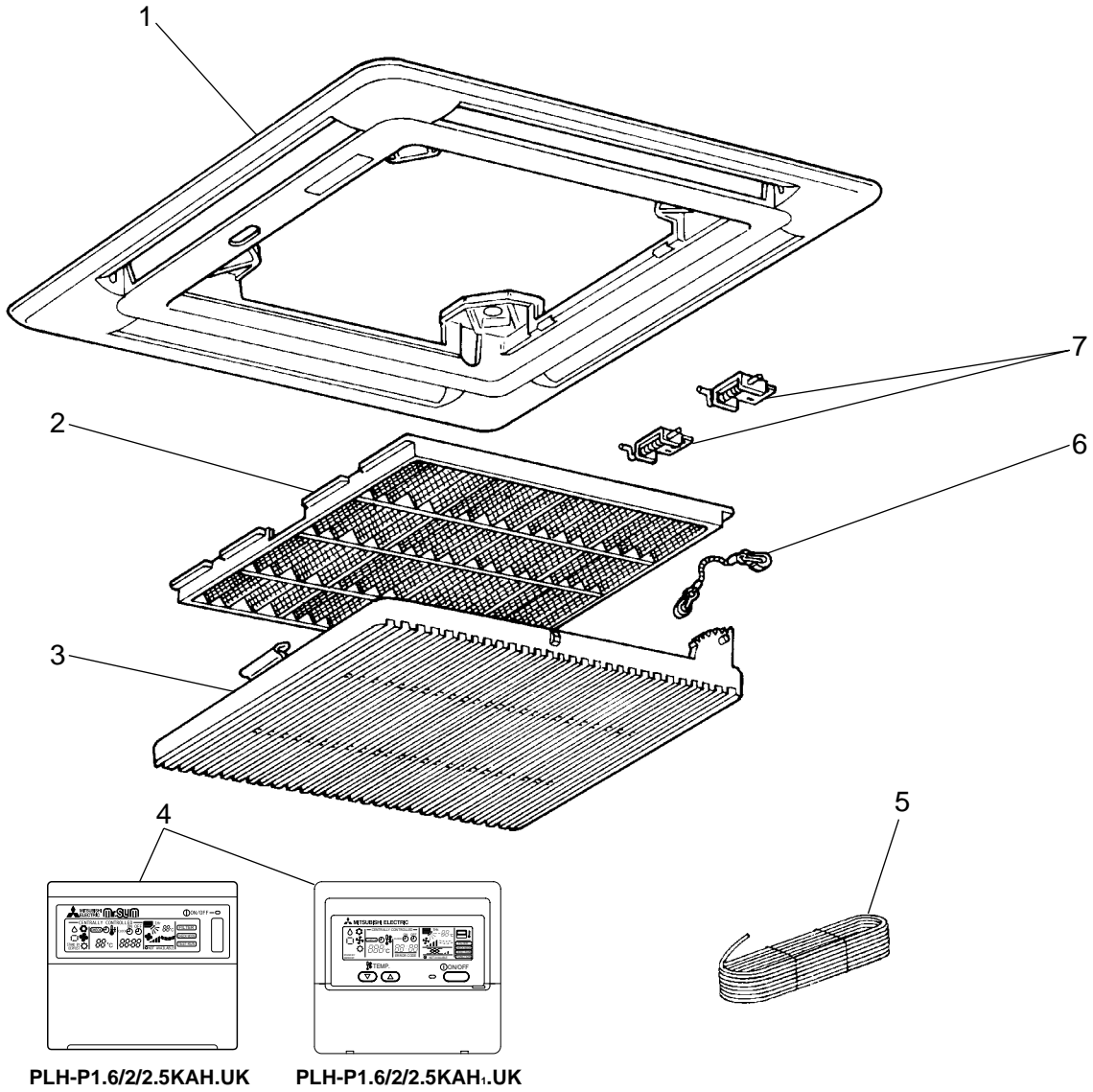
**11. Removing the heat exchanger**

- (1) Remove the panel.
- (2) Remove the bell mouth.
- (3) Remove the controller cover assy.
- (4) Remove the drain pan.
- (5) Remove the turbo fan.
- (6) Remove the screw of the coil support A.
- (7) Remove 2 screws of the coil support B.
- (8) Remove 2 screws of the coil.
- (9) Remove 4 screws of the piping cover of the outer wall, and pull out the piping cover.



PANEL PARTS

PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK  
 PLH-P1.6KAH<sub>1</sub>.UK, PLH-P2KAH<sub>1</sub>.UK, PLH-P2.5KAH<sub>1</sub>.UK

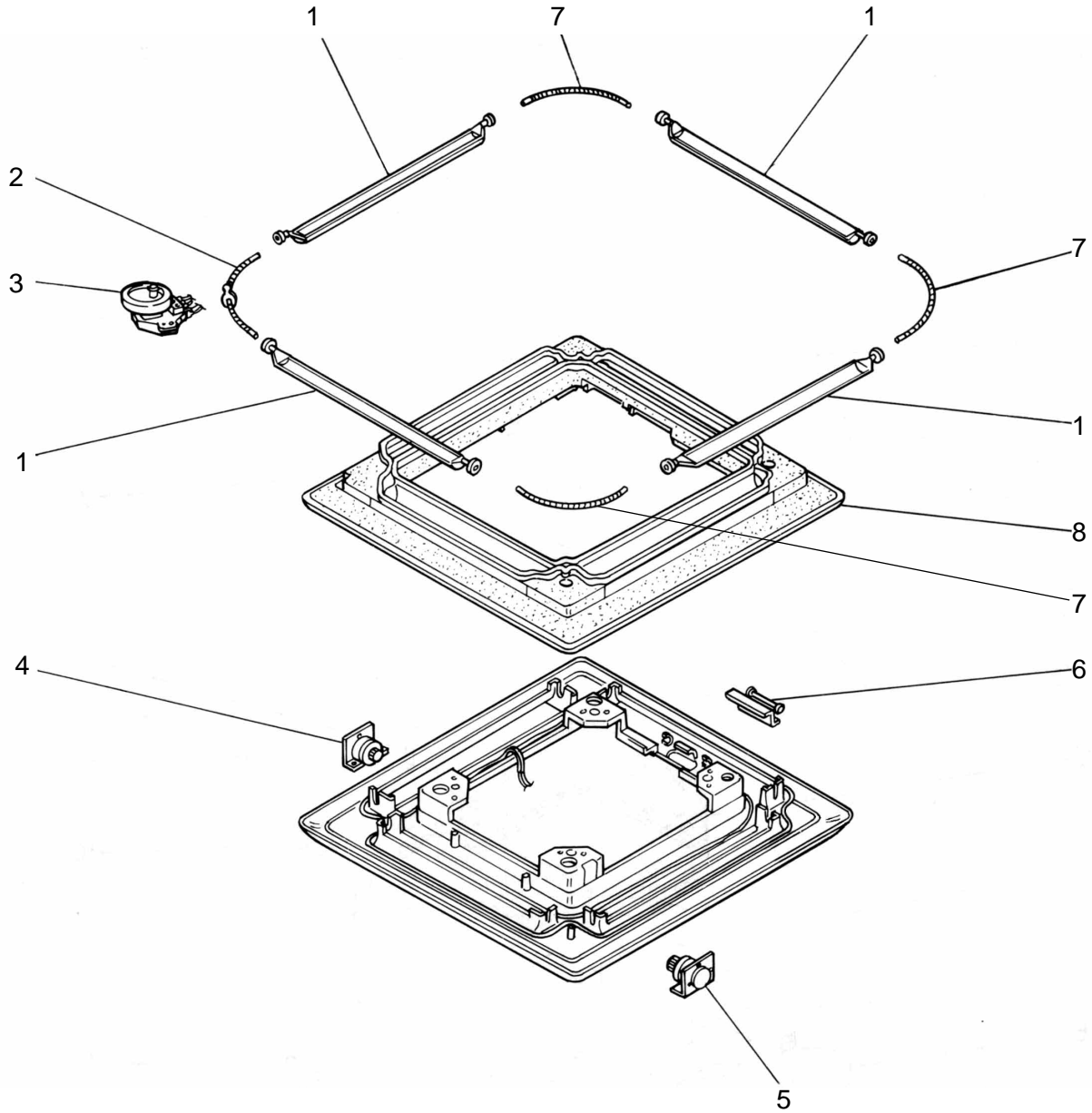


No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PLH-P1.6/2/2.5					Unit	Amount
				KAH.UK	KAH <sub>1</sub> .UK					
1	S70 560 003	AIR OUTLET GRILLE		1	1					
2	S70 29H 500	AIR FILTER		1	1					
3	S70 29H 691	INTAKE GRILLE		1	1					
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**

**PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK**

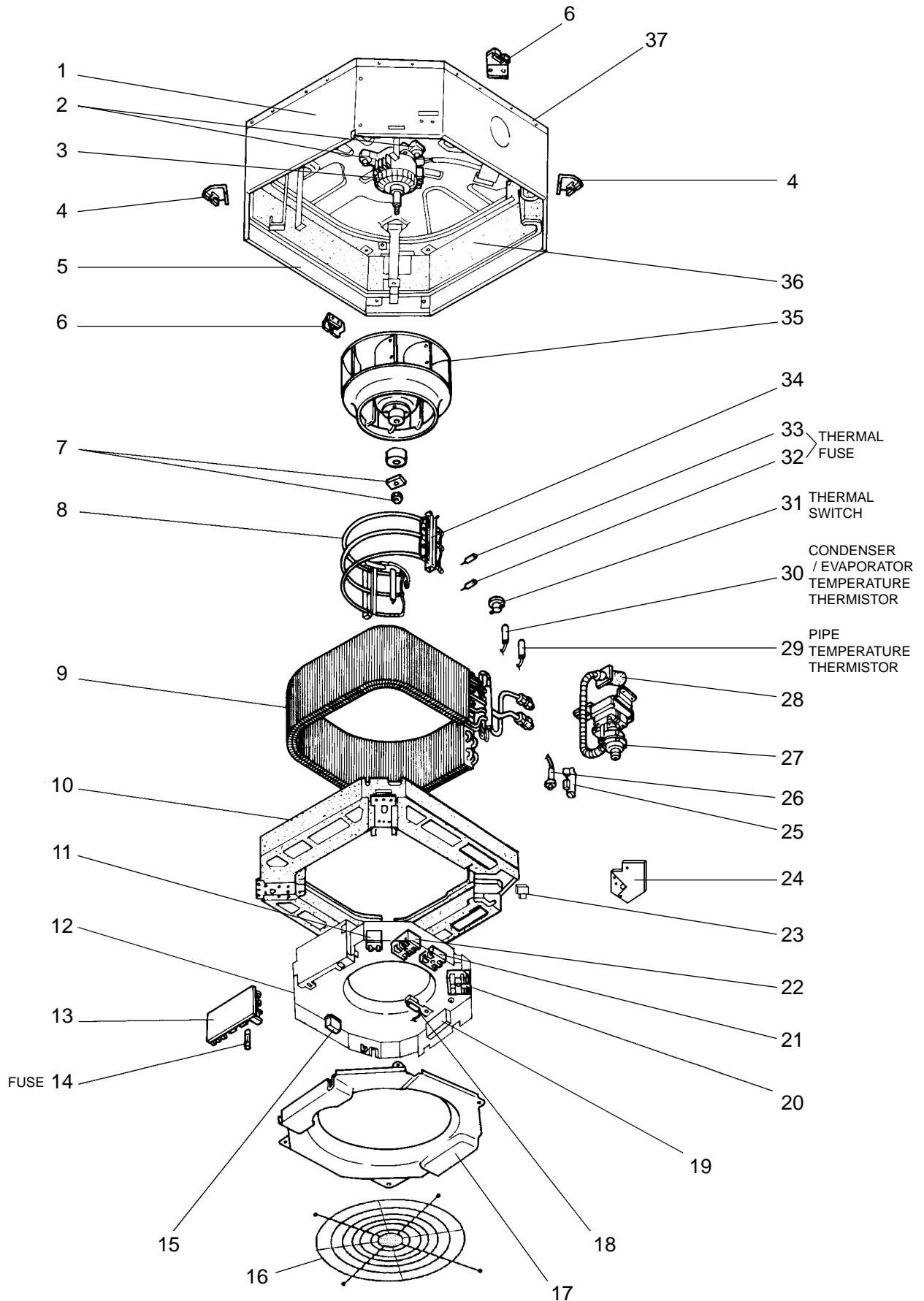
**PLH-P1.6KAH<sub>1</sub>.UK, PLH-P2KAH<sub>1</sub>.UK, PLH-P2.5KAH<sub>1</sub>.UK**



No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PLH-P1.6/2/2.5					Unit	Amount
				KAH.UK	KAH <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

PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK  
 PLH-P1.6KAH<sub>1</sub>.UK, PLH-P2KAH<sub>1</sub>.UK, PLH-P2.5KAH<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	
				PLH-P-KAH.UK			PLH-P-KAH.UK						Unit	Amount
				1.6	2	2.5	1.6	2	2.5					
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 A00 300	HEATER ELEMENT	467W 240V	3	3		3	3			H1			
	S70 A01 300	HEATER ELEMENT	700W 240V			3			3		H1			
9	S70 E23 480	HEAT EXCHANGER		1	1		1	1						
	S70 E29 480	HEAT EXCHANGER				1			1					
10	S70 A10 529	DRAIN PAN		1	1	1	1	1	1					
11	S70 29H 255	CAPACITOR	2.5μF 400V	1	1	1	1	1	1		C			
12	S70 003 501	CONTROL COVER ASSY		1	1	1	1	1	1					
13	S70 E20 310*	CONTROLLER BOARD		1	1	1	1	1	1		I.B ※			
14	S70 E00 239	FUSE	250V 4A	1	1	1	1	1	1		F1<P.B>			
15	S70 71G 215	RELAY	JC-1a DC12V	1	1	1	1	1	1		88H			
16	S70 A00 675	FAN GUARD		1	1	1	1	1	1					
17	S70 003 502	BELL MOUTH		1	1	1	1	1	1					
18	S70 E10 202	ROOM TEMPERATURE THERMISTOR	S/750XAP	1	1	1	1	1	1		TH1			
19	S70 E00 313	POWER BOARD		1	1	1	1	1	1		P.B			
20	S70 E01 716	TERMINAL BLOCK	3P(S1,S2,S3)	1	1	1	1	1	1		TB4			
21	S70 515 716	TERMINAL BLOCK	2P(1,2)	1	1	1	1	1	1		TB5			
22	S70 A14 716	TERMINAL BLOCK	3P(L,N,⊙)	1	1	1	1	1	1		TB2			
23	S70 A48 524	DRAIN PLUG		1	1	1	1	1	1					
24	S70 002 660	CORNER COVER		1	1	1	1	1	1					
25	S70 32K 241	SENSOR HOLDER		1	1	1	1	1	1					
26	S70 31K 266	DRAIN SENSOR		1	1	1	1	1	1		DS			
27	S70 55K 355	DRAIN PUMP		1	1	1	1	1	1		DP			
28	S70 29H 523	DRAIN SOCKET		1	1	1	1	1	1					
29	S70 08K 202	PIPE TEMPERATURE THERMISTOR		1	1	1	1	1	1		TH2			
30	S70 E09 202	CONDENSER / EVAPORATOR TEMPERATURE THERMISTOR		1	1	1	1	1	1		TH5			
31	S70 046 700	THERMAL SWITCH	OFF42°C ON32°C	1	1	1	1	1	1		26H			
32	S70 32K 706	THERMAL FUSE	77°C 250V 10A	1	1	1	1	1	1		FS2			
33	S70 33K 706	THERMAL FUSE	98°C 250V 10A	1	1	1	1	1	1		FS1			
34	S70 20J 303	INSULATOR		1	1	1	1	1	1					
35	S70 41N 114	TURBO FAN		1	1	1	1	1	1					
36	S70 002 659	INNER COVER		1	1	1	1	1	1					
37	S70 002 687	BASE		1	1	1	1	1	1					
38	S70 W28 527	DRAIN HOSE		1	1	1	1	1	1					

※ The part name of symbol "I.B" is "SPCB".

1. Program timer (PLH-P1.6 / 2 / 2.5KAH.UK)

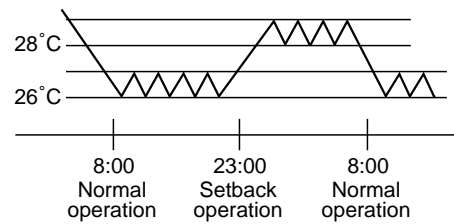
Part No.	PAC-SC32PTA (with set back function)
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK

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

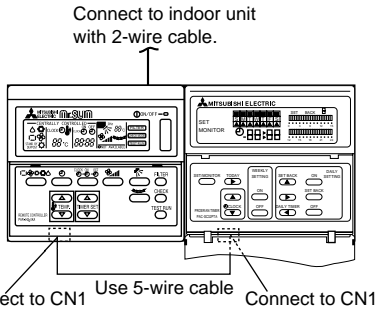
- (1) Daily timer function  
Daily timer can be set in 30 minutes units for up to 24 hours.  
Each unit can be set for unit ON, unit OFF, or setback operation.
- (2) Setback operation  
Set back operation is useful for reducing running costs  
e.g. At a hotel with a 24-hour system  
8:00~23:00 Cooling 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

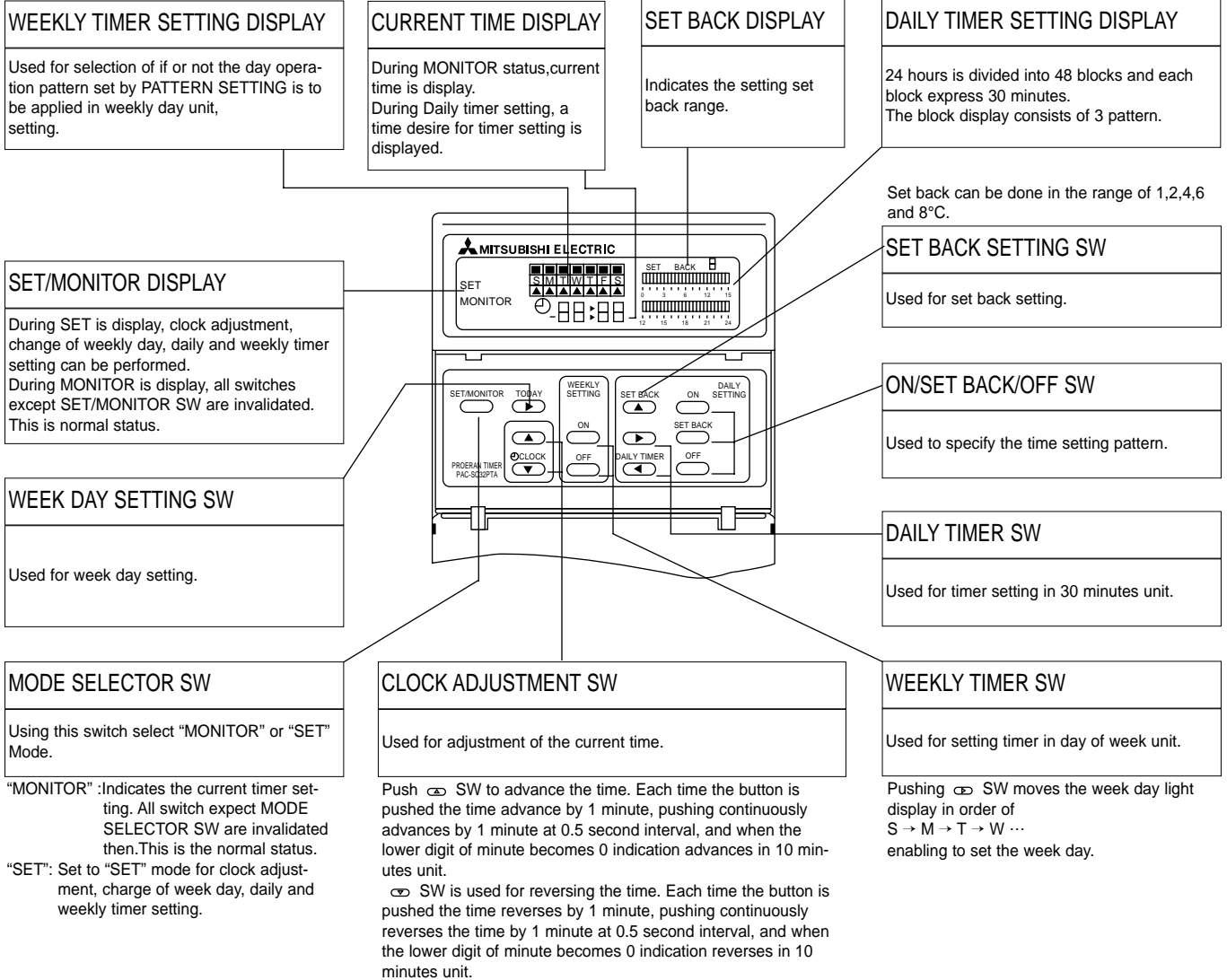
- (1) Install the program timer next to the remote controller the same way as the remote controller is installed.
- (2) Connect the program timer and the remote controller with a 5-wire cable as shown in the figure below



NOTE: While the program timer is connected to the remote controller, the 24hour ON/OFF timer on the remote controller will not operate.

### 1-4 Names and functions

<PAC-SC32PTA>

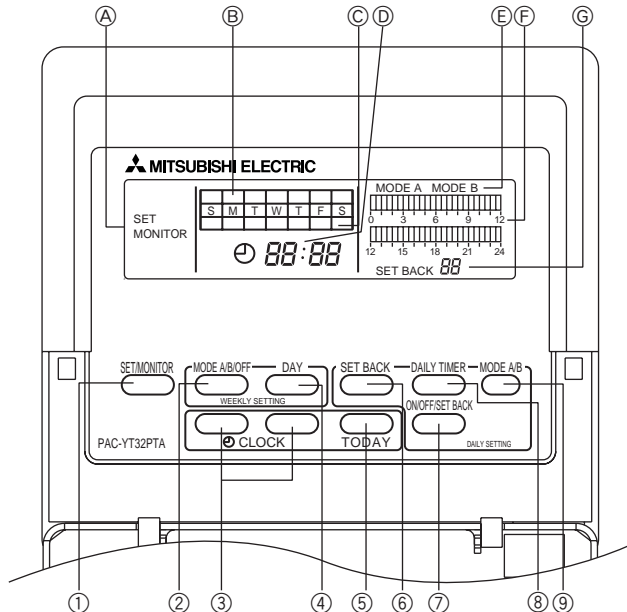


## 2. Program timer (PLH-P1.6 / 2 / 2.5KAH<sub>1</sub>.UK)

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

### 2-1 Names and functions

<PAC-YT32PTA>



- A 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.
- B 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.
- C CURRENT DAY DISPLAY:**  
Indicates the current day.
- D CURRENT TIME DISPLAY:**  
During MONITOR status, current time is displayed.  
During daily timer setting, a time desire for timer setting is displayed.
- E OPERATION MODE DISPLAY:**  
Indicates the operation mode.
- F 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.
- G 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 except 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.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

### 4. Space Panel

Part No.	PAC-SE01AS-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

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

Part No.	PAC-SE21TM-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

### 6. High-Efficiency Filter Element

Part No.	PAC-SE13KF-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

### 7. Grille + Wireless Remote Controller

Part No.	PLP-2.5KAL-E	PLP-2.5KLM
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK	PLH-P1.6 / 2 / 2.5KAH.UK

### 8. Remote Sensor

Part No.	PAC-SE41TS-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

### 9. Remote Operation Adapter

Part No.	PAC-SF40RM-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

### 10. Remote ON/OFF Adapter

Part No.	PAC-SE55RA-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

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