

July 2005

No. OC333

SERVICE MANUAL

Series PMH Ceiling Cassettes R407C

Indoor unit

[Model names]

PMH-P25BA

PMH-P35BA

PMH-P50BA

[Service Ref.]

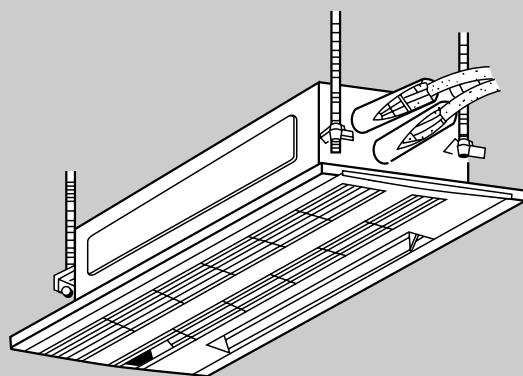
PMH-P25BA

PMH-P35BA

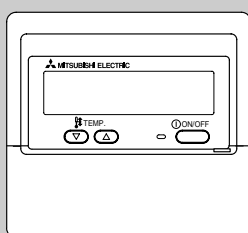
PMH-P50BA

NOTE:

- This manual describes only service data of the indoor units.



INDOOR UNIT



REMOTE CONTROLLER

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Mr. SLIM™

1 REFERENCE MANUAL

1-1. OUTDOOR UNIT'S SERVICE MANUAL

Service Ref.	Service Manual No.
PU(H)-P-VGAA.UK PU(H)-P-YGAA.UK	OC336

1-2. TECHNICAL DATA BOOK

Series (Outdoor unit)	Manual No.
PU(H)-P-VGAA.UK PU(H)-P-YGAA.UK	OCS02

2 SAFETY PRECAUTION

CAUTIONS RELATED TO NEW REFRIGERANT

Caution for units utilising refrigerant R407C

Do not use the existing refrigerant piping.

The old refrigerant and lubricant in the existing piping contains a large amount of chlorine which may cause the lubricant deterioration of the new unit.

Use "low residual oil piping"

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

Store the piping to be used during installation indoors with keep both ends 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 , ETHER or HAB as the lubricant to coat flares and flange connection parts.

If large amount of mineral oil enter, that can cause deterioration of refrigerant oil etc.

Use liquid refrigerant to charge the system.

If gas refrigerant is used to seal 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 lubricant deterioration.

Use a vacuum pump with a reverse flow check valve.

The vacuum pump oil may flow back into the refrigerant cycle and cause the lubricant deterioration.

Ventilate the room if refrigerant leaks during operation. If refrigerant comes into contact with a flame, poisonous gases will be released.

[1] Cautions for service

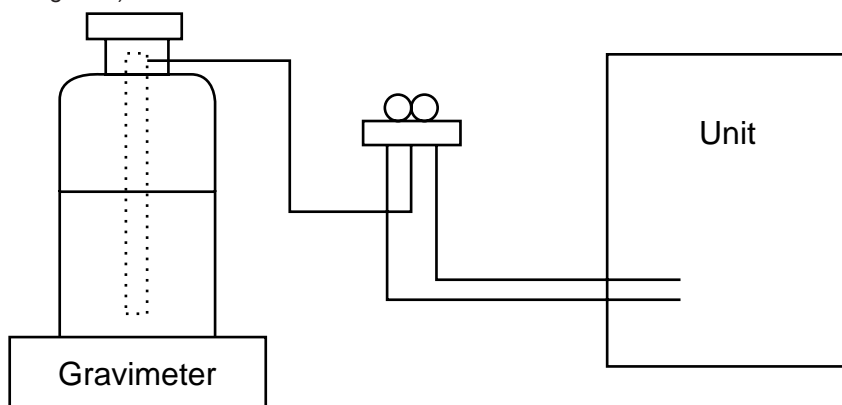
- After recovering the all refrigerant in the unit, proceed to working.
- Do not release refrigerant in the air.
- After completing the repair service, recharge the cycle with the specified amount of liquid refrigerant.

[2] Refrigerant recharging

(1) Refrigerant recharging process

① Direct charging from the cylinder.

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



(2) Recharge in refrigerant leakage case

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

[3] Service tools

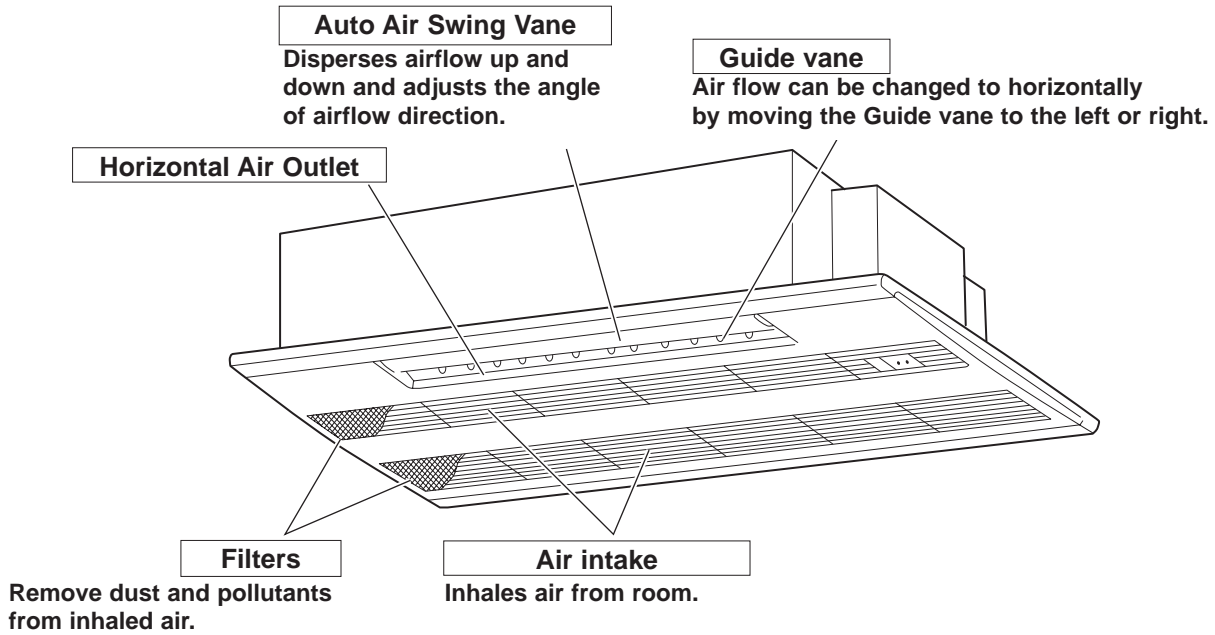
Use the below service tools as exclusive tools for R407C refrigerant.

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 R134a or 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.	

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PART NAMES AND FUNCTIONS

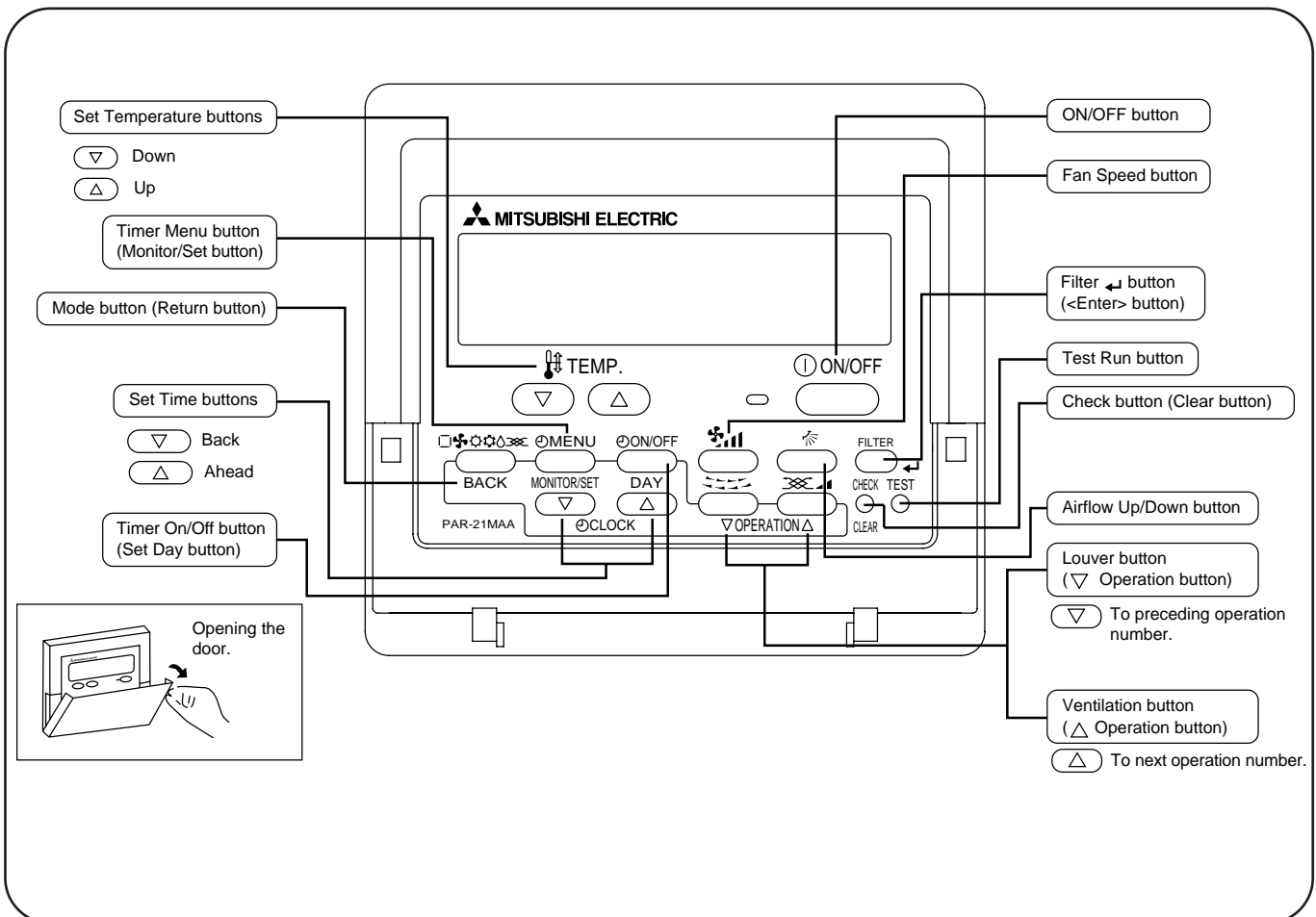
● Indoor Unit



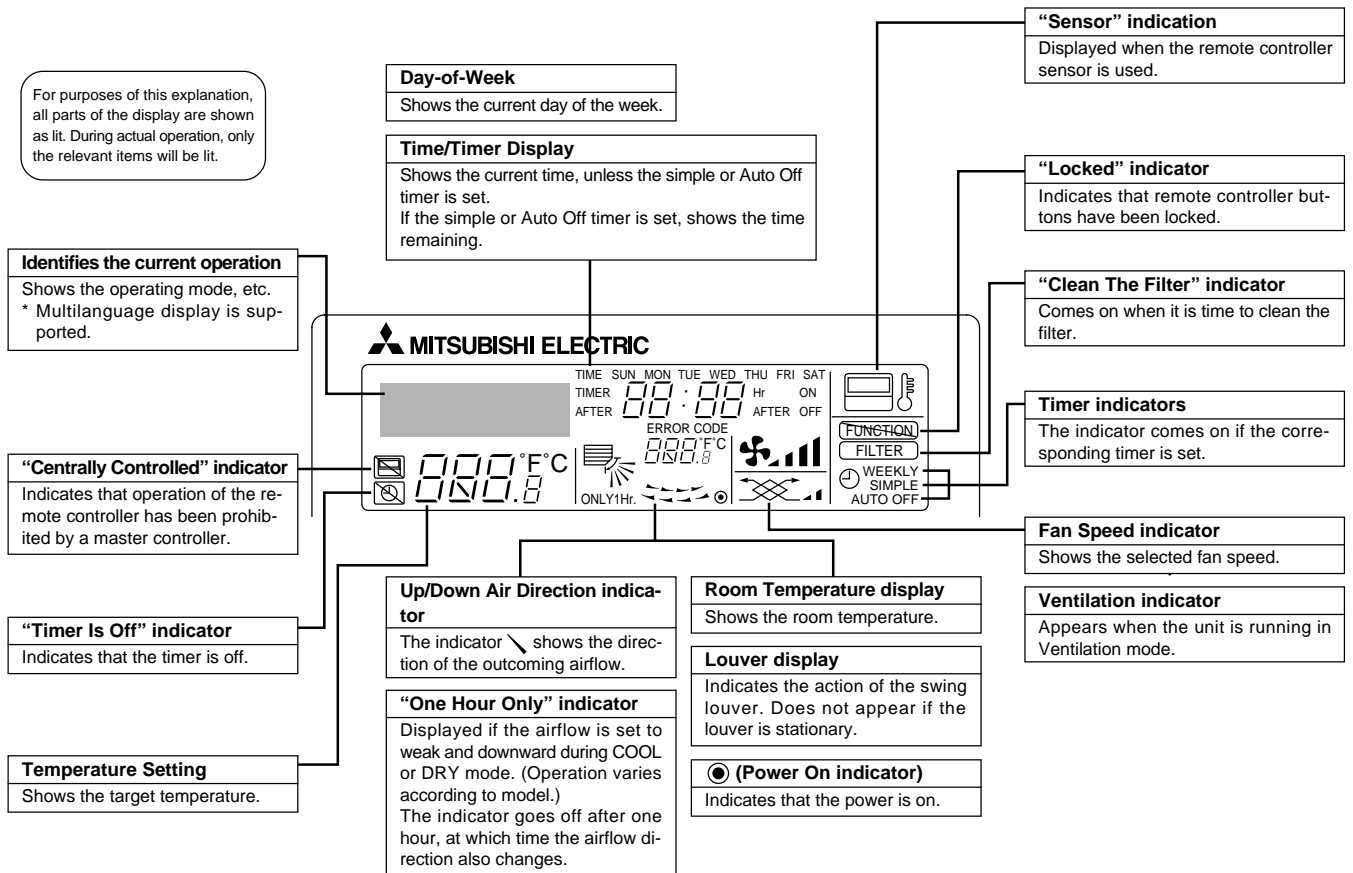
● Remote controller

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

● Operation buttons



● Display



Caution

- Only the Power on indicator lights when the unit is stopped and power supplied to the unit.
- If you press a button for a feature that is not installed at the indoor unit, the remote controller will display the “Not Available” message.
If you are using the remote controller to drive multiple indoor units, this message will appear only if the feature is not present at the parent unit.
- When power is turned ON for the first time, it is normal that “PLEASE WAIT” is displayed on the room temperature indication (For max. 2minutes). Please wait until this “PLEASE WAIT” indication disappear then start the operation.

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SPECIFICATIONS

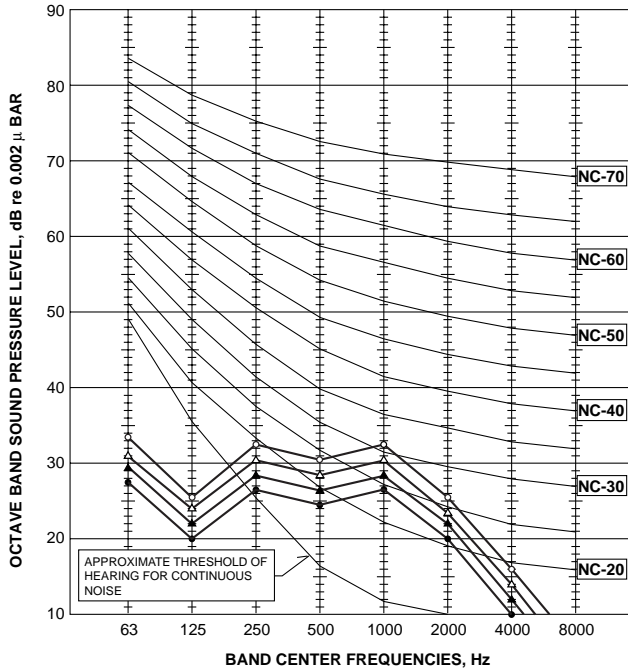
Service Ref.			PMH-P25BA	
Mode			Cooling	Heating
Power supply(phase, cycle, voltage)			Single phase, 50Hz, 230V	
Input	kW		0.04	0.04
Running current	A		0.19	0.19
Starting current	A		0.21	0.21
External finish			Unit : Galvanized sheets with gray heat insulation, Grille munsell 0.98Y 8.99/0.63	
Heat exchanger			Plate fin coil	
INDOOR UNIT	Fan	Fan(drive) × No.	Lineflow fan (direct) × 1	
		Fan motor output	kW	0.028
		Airflow(Low-Medium2-Medium1-High)	m ³ /min(CFM)	6.3-6.8-7.6-8.4(222-240-268-297)
		External static pressure	Pa(mmAq)	0(direct blow)
Operation control & Thermostat			Remote controller & built-in	
Noise level(Low-Medium2-Medium1-High)			dB	
Unit drain pipe I.D.			mm(in.)	
Dimensions	W	mm(in.)	UNIT : 854(33-5/8) PANEL : 1000(39-3/8)	
	D	mm(in.)	UNIT : 395(15-9/16) PANEL : 470(18-1/2)	
	H	mm(in.)	UNIT : 230(9-1/16) PANEL : 30(1-3/16)	
Weight			kg(lbs)	UNIT : 14(31) PANEL : 3(6.6)

Service Ref.			PMH-P35BA	
Mode			Cooling	Heating
Power supply(phase, cycle, voltage)			Single phase, 50Hz, 230V	
Input	kW		0.06	0.06
Running current	A		0.29	0.29
Starting current	A		0.32	0.32
External finish			Unit : Galvanized sheets with gray heat insulation, Grille munsell 0.98Y 8.99/0.63	
Heat exchanger			Plate fin coil	
INDOOR UNIT	Fan	Fan(drive) × No.	Lineflow fan (direct) × 1	
		Fan motor output	kW	0.028
		Airflow(Low-Medium2-Medium1-High)	m ³ /min(CFM)	7.0-8.0-9.0-10.0(247-282-318-353)
		External static pressure	Pa(mmAq)	0(direct blow)
Operation control & Thermostat			Remote controller & built-in	
Noise level(Low-Medium2-Medium1-High)			dB	
Unit drain pipe I.D.			mm(in.)	
Dimensions	W	mm(in.)	UNIT : 854(33-5/8) PANEL : 1000(39-3/8)	
	D	mm(in.)	UNIT : 395(15-9/16) PANEL : 470(18-1/2)	
	H	mm(in.)	UNIT : 230(9-1/16) PANEL : 30(1-3/16)	
Weight			kg(lbs)	UNIT : 14(31) PANEL : 3(6.6)

Service Ref.			PMH-P50BA	
Mode			Cooling	Heating
Power supply(phase, cycle, voltage)			Single phase, 50Hz, 230V	
Input	kW		0.06	0.06
Running current	A		0.29	0.29
Starting current	A		0.32	0.32
External finish			Unit : Galvanized sheets with gray heat insulation, Grille munsell 0.98Y 8.99/0.63	
Heat exchanger			Plate fin coil	
INDOOR UNIT	Fan	Fan(drive) × No.	Lineflow fan (direct) × 1	
		Fan motor output	kW	0.028
		Airflow(Low-Medium2-Medium1-High)	m ³ /min(CFM)	8.0-9.0-10.0-11.0(282-318-353-388)
		External static pressure	Pa(mmAq)	0(direct blow)
Operation control & Thermostat			Remote controller & built-in	
Noise level(Low-Medium2-Medium1-High)			dB	
Unit drain pipe I.D.			mm(in.)	
Dimensions	W	mm(in.)	UNIT : 854(33-5/8) PANEL : 1000(39-3/8)	
	D	mm(in.)	UNIT : 395(15-9/16) PANEL : 470(18-1/2)	
	H	mm(in.)	UNIT : 230(9-1/16) PANEL : 30(1-3/16)	
Weight			kg(lbs)	UNIT : 14(31) PANEL : 3(6.6)

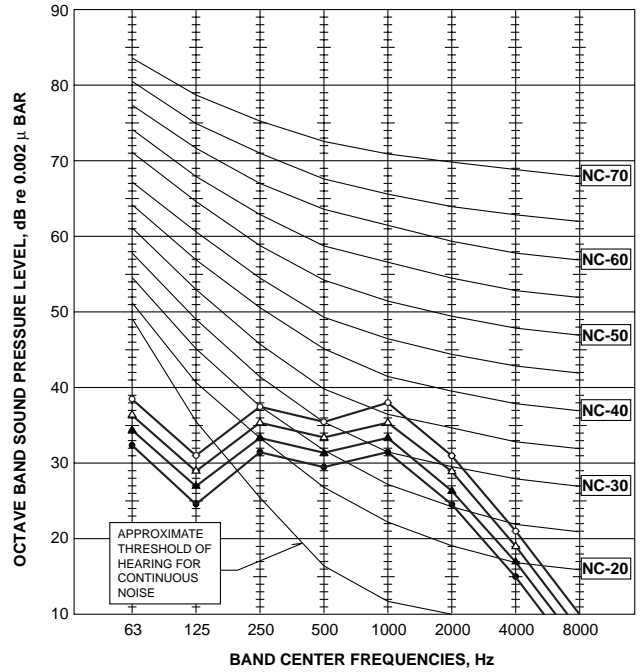
PMH-P25BA

NOTCH	SPL(dB)	LINE
High	35	○—○
Medium1	33	△—△
Medium2	31	▲—▲
Low	29	●—●



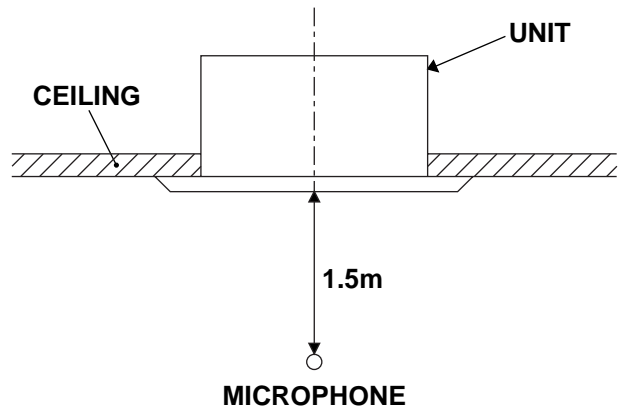
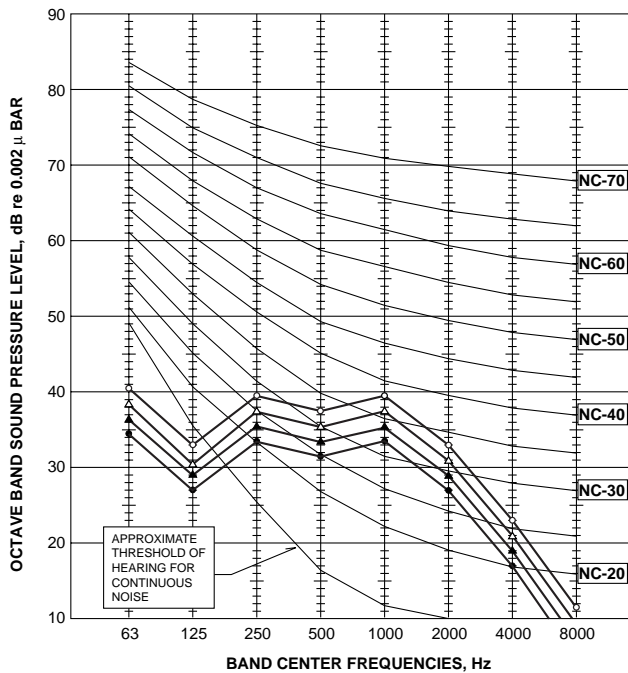
PMH-P35BA

NOTCH	SPL(dB)	LINE
High	40	○—○
Medium1	38	△—△
Medium2	36	▲—▲
Low	34	●—●



PMH-P50BA

NOTCH	SPL(dB)	LINE
High	42	○—○
Medium1	40	△—△
Medium2	38	▲—▲
Low	36	●—●



Ambient temperature 27°C

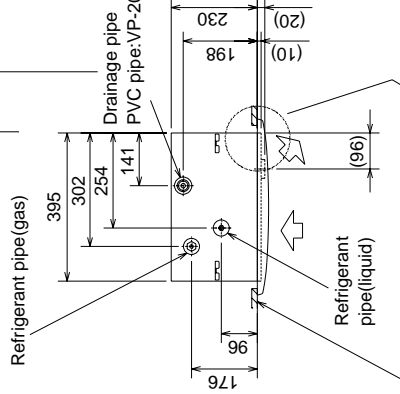
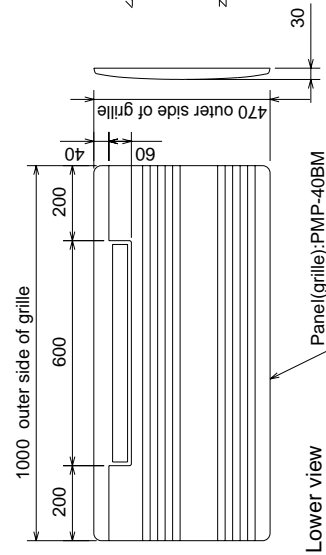
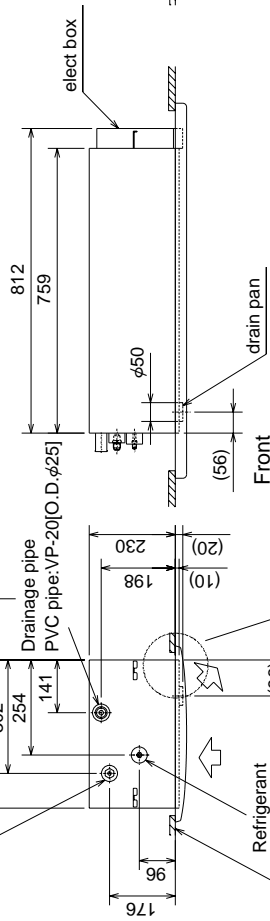
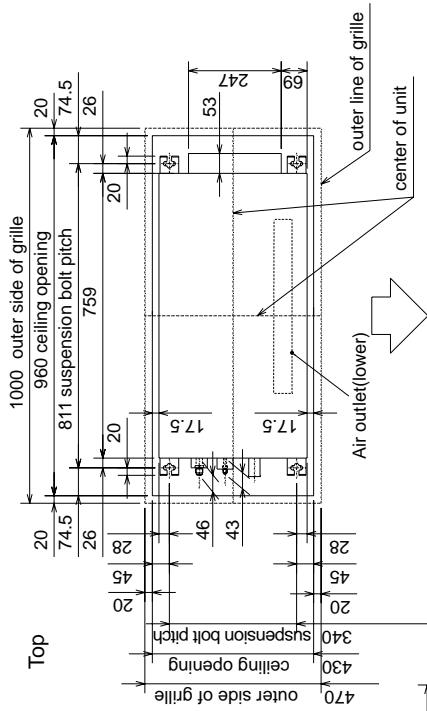
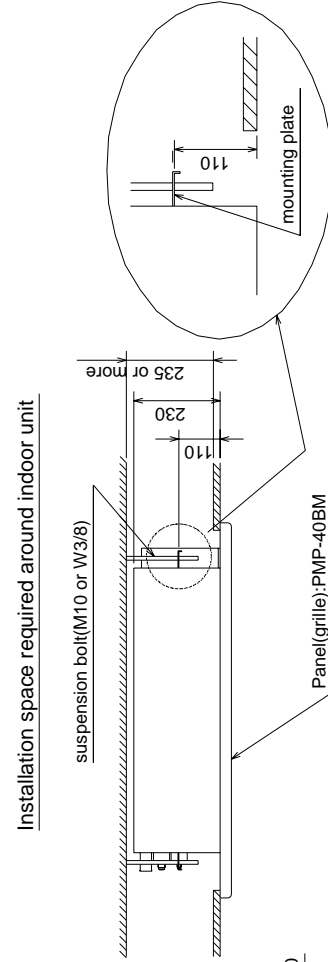
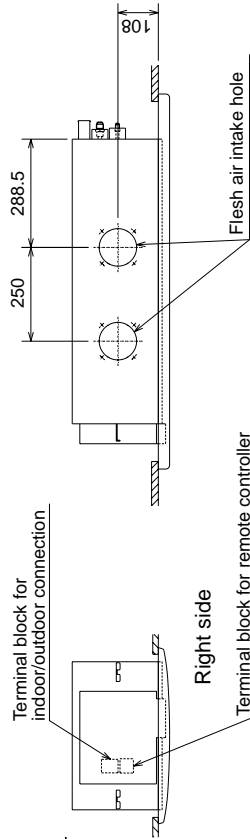
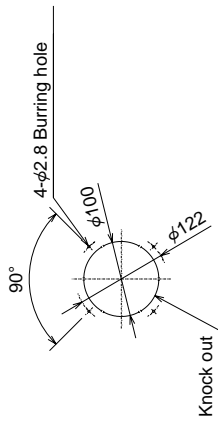
Test conditions are based on JIS Z8731

PMH-P25BA
 PMH-P35BA
 PMH-P50BA

Unit : mm

	PMH-P25BA	PMH-P35BA PMH-P50BA
pipe cover	O.D.φ35	
Refrigerant piping	Liquid pipe	O.D.φ6.35(1/4") O.D.φ9.52(3/8")
	Gas pipe	O.D.φ12.7(1/2") O.D.φ15.88(5/8")
Drainage piping	PVC pipe:VP-20[O.D.φ25(1")]	

Details of fresh air intake hole



PMH-P25BA
PMH-P35BA
PMH-P50BA

[LEGEND]

SYMBOL	NAME
I.B	INDOOR CONTROLLER BOARD
CN2L	CONNECTOR(LOSSNAY)
CN32	CONNECTOR(REMOTE SWITCH)
CN41	CONNECTOR(HA TERMINAL-A)
FUSE	FUSE(6.3A , 250V)
LED1	POWER SUPPLY(I.B)
LED2	POWER SUPPLY(R.B)
LED3	TRANSMISSION(INDOOR-OUTDOOR)
SW1	JUMPER WIRE(MODEL SELECTION)
SW2	JUMPER WIRE(CAPACITY CORD)
SWE	SWITCH(EMERGENCY OPERATION)
T	TRANSFORMER
X1	RELAY(DRAIN PUMP)
ZNR	VARISTOR
R.B	WIRED REMOTE CONTROLLER BOARD
DP	DRAIN-UP MACHINE
DS	DRAIN SENSOR
MF	FAN MOTOR
MV	VANE MOTOR
TB4	TERMINAL BLOCK (INDOOR / OUTDOOR CONNECTING LINE)
TB5,TB6	TERMINAL BLOCK (REMOTE CONTROL TRANSMISSION LINE)
TH1	ROOM TEMP, THERMISTOR (0°C /15kΩ/ptg 25°C /5.4kΩ DETECT)
TH2	PIPE TEMP, THERMISTOR / LIQUID (0°C /15kΩ/ptg 25°C /5.4kΩ DETECT)
TH5	COND, / EVA, TEMP, THERMISTOR (0°C /15kΩ/ptg 25°C /5.4kΩ DETECT)

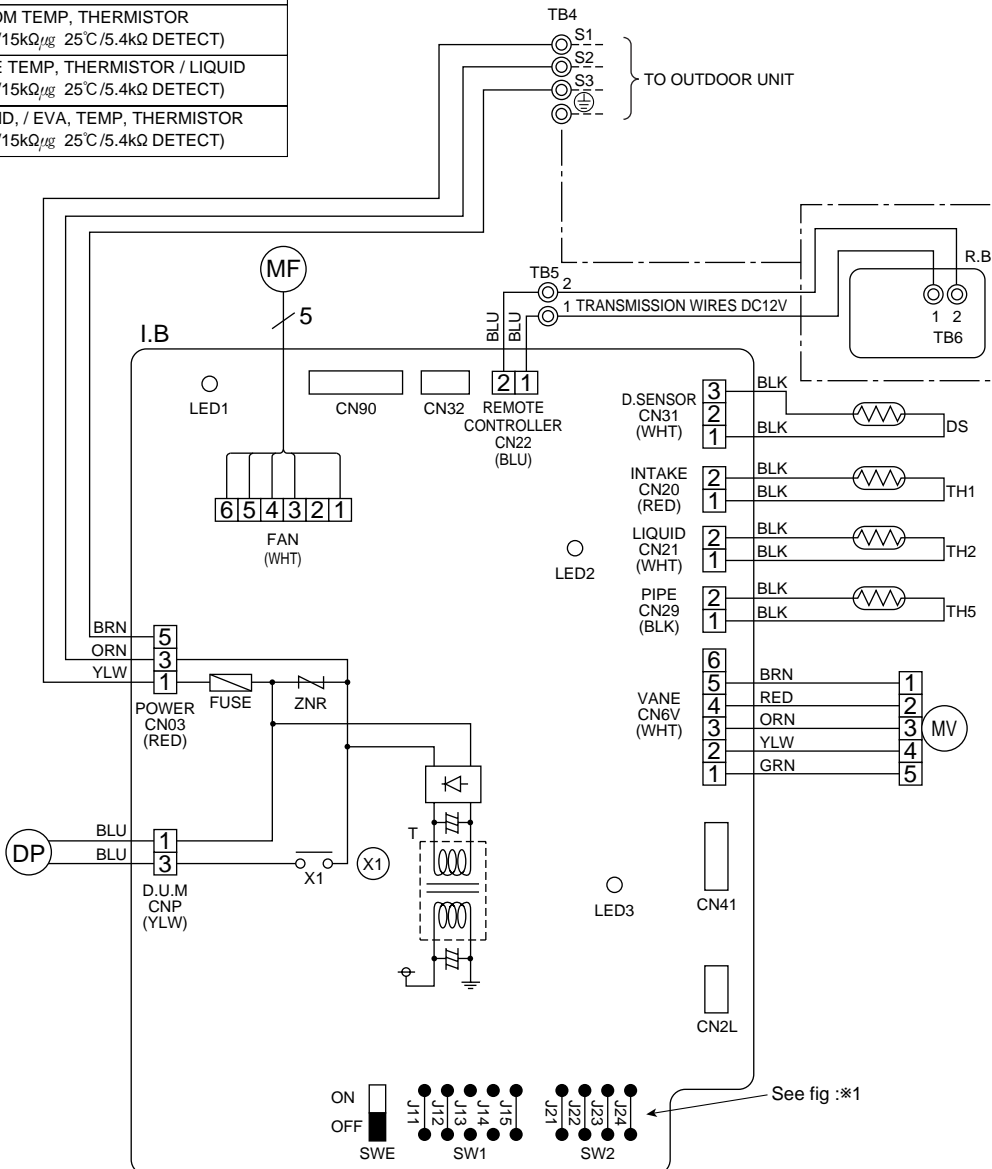
NOTES:

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. Symbols used in wiring diagram above are,
□ □ □ : Connector, ⊙ : Terminal (block).

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

<※1>

	MODELS	Manufacture	Service board
SW1	PMH-P25/35/50BA	J11 J12 J13 J14 J15	
SW2	PMH-P25BA	J21 J22 J23 J24	
	PMH-P35BA	J21 J22 J23 J24	
	PMH-P50BA	J21 J22 J23 J24	

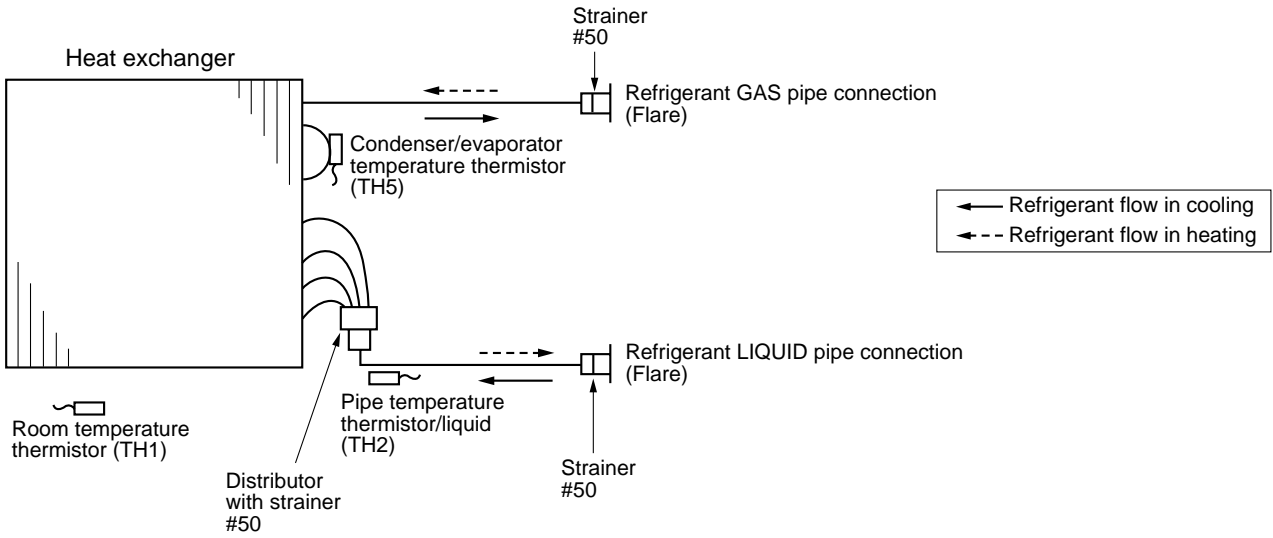


8

REFRIGERANT SYSTEM DIAGRAM

PMH-P25BA
PMH-P35BA
PMH-P50BA

Unit : mm



9-1. TROUBLESHOOTING

<Error code display by self-diagnosis and actions to be taken for service (summary)>

Present and past error codes are logged and displayed on the wired remote controller or controller board of outdoor unit. Actions to be taken for service and the inferior phenomenon reoccurrence at field are summarized in the table below. Check the contents below before investigating details.

Unit conditions at service	Error code	Actions to be taken for service (summary)
The inferior phenomenon is reoccurring.	Displayed	Judge what is wrong and take a corrective action according to "SELF-DIAGNOSIS ACTION TABLE" (9-2).
	Not displayed	Identify the cause of the inferior phenomenon and take a corrective action according to "TROUBLESHOOTING BY INFERIOR PHENOMENA" (9-3).
The inferior phenomenon is not reoccurring.	Logged	<ul style="list-style-type: none"> ①Consider the temporary defects such as the work of protection devices in the refrigerant circuit including compressor, poor connection of wiring, noise and etc. Re-check the symptom, and check the installation environment, refrigerant amount, weather when the inferior phenomenon occurred, and wiring related. ②Reset error code logs and restart the unit after finishing service. ③There is no abnormality in electrical components, controller boards, and remote controller.
	Not logged	<ul style="list-style-type: none"> ①Recheck the abnormal symptom. ②Identify the cause of the inferior phenomenon and take a corrective action according to "TROUBLESHOOTING BY INFERIOR PHENOMENA" (9-3). ③Continue to operate unit for the time being if the cause is not ascertained. ④There is no abnormality in electrical components, controller boards, remote controller etc.

Note: Refer to the manual of outdoor unit for the details of display such as F, U, and other E.

9-2. SELF-DIAGNOSIS ACTION TABLE

Error Code	Meaning of error code and detection method	Cause	Countermeasure
P1	<p>Abnormality of room temperature thermistor (TH1)</p> <p>① The unit is in three-minute resume prevention mode if short/open of thermistor is detected. Abnormal if the unit does not reset normally after three minutes. (The unit returns to normal operation, if it has normally reset.)</p> <p>② Constantly detected during cooling, drying, and heating operation. Short: 90°C or more Open: -40°C or less</p>	<p>① Defective thermistor characteristics.</p> <p>② Contact failure of connector (CN20) on the indoor controller board. (Insert failure)</p> <p>③ Breaking of wire or contact failure of thermistor wiring.</p> <p>④ Defective indoor controller board.</p>	<p>①–③ Check resistance value of thermistor. 0°C15.0kΩ 10°C9.6kΩ 20°C6.3kΩ 30°C4.3kΩ 40°C3.0kΩ If you put force on (draw or bend) the lead wire with measuring resistance value of thermistor breaking of wire or contact failure can be detected.</p> <p>② Check contact failure of connector (CN20) on the indoor controller board. Refer to 9-6. Turn the power on again and check restart after inserting connector again.</p> <p>④ Check room temperature display on remote controller. Replace indoor controller board if there is abnormal difference with actual room temperature.</p> <p>Turn the power off, and on again to operate after check.</p>
P2	<p>Abnormality of pipe temperature thermistor/Liquid (TH2)</p> <p>① The unit is in three-minute resume prevention mode if short/open of thermistor is detected. Abnormal if the unit does not reset normally after three minutes. (The unit returns to normal operation, if it has normally reset.)</p> <p>② Constantly detected during cooling, drying, and heating (except defrosting) operation. Short: 90°C or more Open: -40°C or less</p>	<p>① Defective thermistor characteristics.</p> <p>② Contact failure of connector (CN21) on the indoor controller board. (Insert failure)</p> <p>③ Breaking of wire or contact failure of thermistor wiring.</p> <p>④ Defective refrigerant circuit is causing thermistor temperature of 90°C or more or -40°C or less.</p> <p>⑤ Defective indoor controller board.</p>	<p>①–③ Check resistance value of thermistor. For characteristics, refer to (P1) above.</p> <p>② Check contact failure of connector (CN21) on the indoor controller board. Refer to 9-6. Turn the power on and check restart after inserting connector again.</p> <p>④ Check pipe <liquid> temperature with remote controller in test run mode. If pipe <liquid> temperature is exclusively low (in cooling mode) or high (in heating mode), refrigerant circuit may have defective.</p> <p>⑤ Check pipe <liquid> temperature with remote controller in test run mode. If there is exclusive difference with actual pipe <liquid> temperature, replace indoor controller board.</p> <p>Turn the power off, and on again to operate after check.</p>
P4	<p>Abnormality of drain sensor (DS)</p> <p>① Suspensive abnormality, if short/open of thermistor is detected for 30 seconds continuously. Turn off compressor and indoor fan.</p> <p>② Short/open is detected for 30 seconds continuously during suspensive abnormality. (The unit returns to normal operation, if it has normally reset.)</p> <p>③ Detect the following condition.</p> <ul style="list-style-type: none"> • During cooling and drying operation. • In case that pipe <liquid> temperature - room temperature <-10deg (Except defrosting) • When pipe <liquid> temperature or room temperature is short/open temperature. • During drain pump operation. 	<p>① Defective thermistor characteristics</p> <p>② Contact failure of connector (CN31) on the indoor controller board. (Insert failure).</p> <p>③ Breaking of wire or contact failure of drain sensor wiring.</p> <p>④ Defective indoor controller board.</p>	<p>①–③ Check resistance value of thermistor. 0°C6.0kΩ 10°C3.9kΩ 20°C2.6kΩ 30°C1.8kΩ 40°C1.3kΩ</p> <p>② Check contact failure of connector (CN31) on the indoor controller board. Refer to 9-6. Turn the power on again and check restart after inserting connector again.</p> <p>④ Replace indoor controller board if drain pump operates with the line of drain sensor connector CN31-① and ② is short-circuited, and abnormality reappears.</p> <p>Turn the power off, and on again to operate after check.</p>
P5	<p>Malfunction of drain pump (DP)</p> <p>① Suspensive abnormality, if thermistor of drain sensor is let heat itself and temperature rises slightly. Turn off compressor and indoor fan.</p> <p>② Drain pump is abnormal if the condition above is detected during suspensive abnormality.</p> <p>③ Constantly detected during drain pump operation.</p>	<p>① Malfunction of drain pump</p> <p>② Defective drain Clogged drain pump Clogged drain pipe</p> <p>③ Attached drop of water at the drain sensor</p> <ul style="list-style-type: none"> • Drops of drain trickles from lead wire. • Clogged filter is causing wave of drain. <p>④ Defective indoor controller board.</p>	<p>① Check if drain-up machine works.</p> <p>② Check drain function.</p> <p>③ Check the setting of lead wire of drain sensor and check clogs of the filter.</p> <p>④ Replace indoor controller board if drain pump operates with the line of drain sensor connector CN31-① and ② is short-circuited and abnormality reappears. Refer to 9-6.</p> <p>Turn the power off, and on again to operate after check.</p>



Error Code	Meaning of error code and detection method	Cause	Countermeasure
P6	<p>Freezing/overheating protection is working</p> <p>① Freezing protection (Cooling mode) The unit is in six-minute resume prevention mode if pipe <liquid or condenser/evaporator> temperature stays under -15°C for three minutes, three minutes after the compressor started. Abnormal if it stays under -15°C for three minutes again within 16 minutes after six-minute resume prevention mode. <Frost prevention mode> If pipe <liquid or condenser-evaporator> temperature is 2°C or below when 16 minutes has passed after compressor starts operating, unit will start operating in frost prevention mode which stops compressor operation. After that, when pipe <liquid or condenser/evaporator> temperature stays 10°C or more for 3 minutes, frost prevention mode will be released and compressor will restart its operation.</p> <p>② Overheating protection (Heating mode) The units is in six-minute resume prevention mode if pipe <condenser / evaporator> temperature is detected as over 70°C after the compressor started. Abnormal if the temperature of over 70°C is detected again within 10 minutes after six-minute resume prevention mode.</p>	<p>(Cooling or drying mode)</p> <p>① Clogged filter (reduced airflow) ② Short cycle of air path ③ Low-load (low temperature) operation beyond the tolerance range ④ Defective indoor fan motor • Fan motor is defective. • Indoor controller board is defective.</p> <p>⑤ Defective outdoor fan control ⑥ Overcharge of refrigerant ⑦ Defective refrigerant circuit (clogs)</p> <p>(Heating mode)</p> <p>① Clogged filter (reduced airflow) ② Short cycle of air path ③ Over-load (high temperature) operation beyond the tolerance range ④ Defective indoor fan motor • Fan motor is defective. • Indoor controller board is defective.</p> <p>⑤ Defective outdoor fan control ⑥ Overcharge of refrigerant ⑦ Defective refrigerant circuit (clogs) ⑧ Bypass circuit of outdoor unit is defective.</p>	<p>(Cooling or drying mode)</p> <p>① Check clogs of the filter. ② Remove shields.</p> <p>④ Refer to 9-5.</p> <p>⑤ Check outdoor fan motor. ⑥⑦ Check operating condition of refrigerant circuit.</p> <p>(Heating mode)</p> <p>① Check clogs of the filter. ② Remove shields.</p> <p>④ Refer to 9-5.</p> <p>⑤ Check outdoor fan motor. ⑥-⑧ Check operating condition of refrigerant circuit.</p>
P8	<p>Abnormality of pipe temperature <Cooling mode> Detected as abnormal when the pipe temperature is not in the cooling range 3 minutes later of compressor start and 6 minutes later of the liquid or condenser/evaporator pipe is out of cooling range. Note 1) It takes at least 9 min. to detect. Note 2) Abnormality P8 is not detected in drying mode. Cooling range : -3 deg \geq (TH-TH1) TH: Lower temperature between: liquid pipe temperature (TH2) and condenser/evaporator temperature (TH5) TH1: Intake temperature</p> <p><Heating mode> When 10 seconds have passed after the compressor starts operation and the hot adjustment mode has finished, the unit is detected as abnormal when condenser/evaporator pipe temperature is not in heating range within 20 minutes.</p> <p>Note 3) It takes at least 27 minutes to detect abnormality. Note 4) It excludes the period of defrosting (Detection restarts when defrosting mode is over) Heating range : 3 deg \leq (TH5-TH1)</p>	<p>① Slight temperature difference between indoor room temperature and pipe <liquid or condenser / evaporator> temperature thermistor • Shortage of refrigerant • Disconnected holder of pipe <liquid or condenser / evaporator> thermistor • Defective refrigerant circuit</p> <p>② Converse connection of extension pipe (on plural units connection) ③ Converse wiring of indoor/outdoor unit connecting wire (on plural units connection) ④ Defective detection of indoor room temperature and pipe <condenser / evaporator> temperature thermistor ⑤ Stop valve is not opened completely.</p>	<p>①~④ Check pipe <liquid or condenser / evaporator> temperature with room temperature display on remote controller and outdoor controller circuit board. Pipe <liquid or condenser / evaporator> temperature display is indicated by setting SW2 of outdoor controller circuit board as follows.</p> <p>(Conduct temperature check with outdoor controller circuit board after connecting 'A-Control Service Tool(PAC-SK52ST)')</p> <p>②③ Check converse connection of extension pipe or converse wiring of indoor/outdoor unit connecting wire.</p>

Error Code	Meaning of error code and detection method	Cause	Countermeasure
P9	<p>Abnormality of pipe temperature thermistor / Condenser-Evaporator (TH5)</p> <p>① The unit is in three-minute resume protection mode if short/open of thermistor is detected. Abnormal if the unit does not get back to normal within three minutes. (The unit returns to normal operation, if it has normally reset.)</p> <p>② Constantly detected during cooling, drying, and heating operation (except defrosting) Short: 90°C or more Open: -40°C or less</p>	<p>① Defective thermistor characteristics</p> <p>② Contact failure of connector (CN29) on the indoor controller board. (Insert failure)</p> <p>③ Breaking of wire or contact failure of thermistor wiring.</p> <p>④ Temperature of thermistor is 90°C or more or -40°C or less caused by defective refrigerant circuit.</p> <p>⑤ Defective indoor controller board.</p>	<p>①-③ Check resistance value of thermistor. For characteristics, refer to (P1) above.</p> <p>② Check contact failure of connector (CN29) on the indoor controller board. Refer to 9-6. Turn the power on and check restart after inserting connector again.</p> <p>④ Operate in test run mode and check pipe <condenser / evaporator> temperature with outdoor controller circuit board. If pipe <condenser / evaporator> temperature is exclusively low (in cooling mode) or high (in heating mode), refrigerant circuit may have defective.</p> <p>⑤ Operate in test run mode and check pipe <condenser / evaporator> temperature with outdoor control circuit board. If there is exclusive difference with actual pipe <condenser / evaporator> temperature replace indoor controller board. There is no abnormality if none of above comes within the unit. Turn the power off and on again to operate.</p> <p>(In case of checking pipe temperature with outdoor controller circuit board, be sure to connect A-control service tool (PAC-SK52ST).)</p>
E0 or E4	<p>Remote controller transmission error(E0)/signal receiving error(E4)</p> <p>① Abnormal if main or sub remote controller can not receive normally any transmission from indoor unit of refrigerant address "0" for three minutes. (Error code : E0)</p> <p>② Abnormal if sub remote controller could not receive for any signal for two minutes. (Error code: E0)</p> <p>① Abnormal if indoor controller board can not receive normally any data from remote controller board or from other indoor controller board for three minutes. (Error code: E4)</p> <p>② Indoor controller board cannot receive any signal from remote controller for two minutes. (Error code: E4)</p>	<p>① Contact failure at transmission wire of remote controller</p> <p>② All remote controllers are set as "sub" remote controller. In this case, E0 is displayed on remote controller, and E4 is displayed at LED (LED1, LED2) on the outdoor controller circuit board.</p> <p>③ Mis-wiring of remote controller.</p> <p>④ Defective transmitting receiving circuit of remote controller</p> <p>⑤ Defective transmitting receiving circuit of indoor controller board of refrigerant address "0".</p> <p>⑥ Noise has entered into the transmission wire of remote controller.</p>	<p>① Check disconnection or looseness of indoor unit or transmission wire of remote controller.</p> <p>② Set one of the remote controllers "main". If there is no problem with the action above.</p> <p>③ Check wiring of remote controller.</p> <ul style="list-style-type: none"> • Total wiring length: max.500m (Do not use cable 3 or more) • The number of connecting indoor units: max.16units • The number of connecting remote controller: max.2units <p>When it is not the above-mentioned problem of ①-③</p> <p>④ Diagnose remote controllers.</p> <p>a) When "RC OK" is displayed, Remote controllers have no problem. Put the power off, and on again to check. If abnormality generates again, replace indoor controller board.</p> <p>b) When "RC NG" is displayed, Replace remote controller.</p> <p>c) When "RC E3" is displayed,</p> <p>d) When "ERC 00-06" is displayed, [c),d)→Noise may be causing abnormality.]</p> <p>* If the unit is not normal after replacing indoor controller board in group control, indoor controller board of address "0" may be abnormal.</p>
E3 or E5	<p>Remote controller transmission error(E3)/signal receiving error(E5)</p> <p>① Abnormal if remote controller could not find blank of transmission path for six seconds and could not transmit. (Error code: E3)</p> <p>② Remote controller receives transmitted data at the same time, compares the data, and when detecting it, judges different data to be abnormal 30 continuous times. (Error code: E3)</p> <p>① Abnormal if indoor controller board could not find blank of transmission path. (Error code: E5)</p> <p>② Indoor controller board receives transmitted data at the same time, compares the data, and when detecting it, judges different data to be abnormal 30 continuous times. (Error code: E5)</p>	<p>① Two remote controller are set as "main." (In case of 2 remote controllers)</p> <p>② Remote controller is connected with two indoor units or more.</p> <p>③ Repetition of refrigerant address.</p> <p>④ Defective transmitting receiving circuit of remote controller.</p> <p>⑤ Defective transmitting receiving circuit of indoor controller board.</p> <p>⑥ Noise has entered into transmission wire of remote controller.</p>	<p>① Set a remote controller to main, and the other to sub.</p> <p>② Remote controller is connected with only one indoor unit.</p> <p>③ The address changes to a separate setting.</p> <p>④-⑥ Diagnose remote controller.</p> <p>a) When "RC OK" is displayed, remote controllers have no problem. Put the power off, and on again to check. When becoming abnormal again, replace indoor controller board.</p> <p>b) When "RC NG" is displayed, replace remote controller.</p> <p>c) When "RC E3" or "ERC 00-66" is displayed, noise may be causing abnormality.</p>



Error Code	Meaning of error code and detection method	Cause	Countermeasure
E6	<p>Indoor/outdoor unit communication error (Signal receiving error)</p> <p>① Abnormal if indoor controller board cannot receive any signal normally for six minutes after putting the power on.</p> <p>② Abnormal if indoor controller board cannot receive any signal normally for three minutes.</p> <p>③ Consider the unit abnormal under the following condition: When two or more indoor units are connected to one outdoor unit, indoor controller board cannot receive a signal for three minutes from outdoor controller circuit board, a signal which allows outdoor controller circuit board to transmit signals.</p>	<p>① Contact failure, short circuit or, mis-wiring (converse wiring) of indoor/outdoor unit connecting wire</p> <p>② Defective transmitting receiving circuit of indoor controller board</p> <p>③ Defective transmitting receiving circuit of indoor controller board</p> <p>④ Noise has entered into indoor/outdoor unit connecting wire.</p>	<p>* Check LED display on the outdoor control circuit board. (Connect A-control service tool, PAC-SK52ST.) Refer to EA-EC item if LED displays EA-EC.</p> <p>① Check disconnection or looseness of indoor/outdoor unit connecting wire of indoor unit or outdoor unit. Check all the units in case of twin triple indoor unit system.</p> <p>②-④ Turn the power off, and on again to check. If abnormality generates again, replace indoor controller board or outdoor controller circuit board.</p> <p>* Other indoor controller board may have defective in case of twin triple indoor unit system.</p>
E7	<p>Indoor/outdoor unit communication error (Transmitting error)</p> <p>Abnormal if "1" receiving is detected 30 times continuously though indoor controller board has transmitted "0".</p>	<p>① Defective transmitting receiving circuit of indoor controller board</p> <p>② Noise has entered into power supply.</p> <p>③ Noise has entered into outdoor control wire.</p>	<p>①-③ Turn the power off, and on again to check. If abnormality generates again, replace indoor controller board.</p>
E1 or E2	<p>Abnormality of remote controller control board</p> <p>① Abnormal if data cannot be normally read from the nonvolatile memory of the remote controller control board. (Error code: E1)</p> <p>② Abnormal if the clock function of remote controller cannot be normally operated. (Error code: E2)</p>	<p>① Defective remote controller.</p>	<p>① Replace remote controller.</p>

9-3. TROUBLESHOOTING BY INFERIOR PHENOMENA

Note: Refer to the manual of outdoor unit for the detail of remote controller.

Phenomena	Factor	Countermeasure
(1)LED2 on indoor controller board is off.	<ul style="list-style-type: none"> • When LED1 on indoor controller board is also off. ① Power supply of 220~240V is not supplied to outdoor unit. ② Defective outdoor controller circuit board. ③ Power supply of 220~240V is not supplied to indoor unit. ④ Defective indoor controller board. 	<ul style="list-style-type: none"> ① Check the voltage of outdoor power supply terminal block (L, N) <ul style="list-style-type: none"> • When AC 220~240V is not detected. Check the power wiring to outdoor unit and the breaker. • When AC 220~240V is detected. —Check ② (below). ② Check the voltage between outdoor terminal block S1 and S2. <ul style="list-style-type: none"> • When AC 220~240V is not detected. Check the fuse on outdoor controller circuit board (10A). Check the wiring connection. • When AC 220~240V is detected. —Check ③ (below). ③ Check the voltage between indoor terminal block S1 and S2. <ul style="list-style-type: none"> • When AC 220~240V is not detected. Check indoor/outdoor unit connecting wire for mis-wiring. • When AC 220~240V is detected. —Check ④ (below). ④ If no problems are found(①~③), indoor controller board is defective.
	<ul style="list-style-type: none"> • When LED1 on indoor controller board is lit. ① Mis-setting of refrigerant address for outdoor unit (There is no unit corresponding to refrigerant address "0".) 	<ul style="list-style-type: none"> ① Reconfirm the setting of refrigerant address for outdoor unit. Set the refrigerant address to "0". (For grouping control system under which 2 or more outdoor units are connected, set one of the units to "0".) Set refrigerant address using SW1 on outdoor controller circuit board.
(2)LED2 on indoor controller board is blinking.	<ul style="list-style-type: none"> • When LED1 on indoor controller board is also blinking. Connection failure of indoor/outdoor unit connecting wire • When LED1 is lit. Mis-wiring of remote controller wires. Under twin triple indoor unit system, 2 or more indoor units are wired together. ① Refrigerant address for outdoor unit is wrong or not set. Under grouping control system, there are some units whose refrigerant address is 0. ② Short-cut of remote controller wires ③ Defective remote controller 	<ul style="list-style-type: none"> Check indoor/outdoor unit connecting wire for connection failure. Check the connection of remote controller wires in case of twin triple indoor unit system. When 2 or more indoor units are wired in one refrigerant system, connect remote controller wires to one of those units. ① Check the setting of refrigerant address in case of grouping control system. If there are some units whose refrigerant addresses are 0 in one group, set one of the units to 0 using SW1 on outdoor controller circuit board. ②③ Remove remote controller wires and check LED2 on indoor controller board. <ul style="list-style-type: none"> • When LED2 is blinking, check the short-cut of remote controller wires. • When LED2 is lit, connect remote controller wires again and: if LED2 is blinking, remote controller is defective; if LED2 is lit, connection failure of remote controller terminal block etc. has returned to normal.
(3)Upward/downward vane performance failure	<ul style="list-style-type: none"> ① The vane is not downward during defrosting and heat preparation and when the thermostat is OFF in HEAT mode. (Working of COOL protection function) ② Vane motor does not rotate. <ul style="list-style-type: none"> • Defective vane motor • Breaking of wire or connection failure of connector ③ Upward/downward vane does not work. <ul style="list-style-type: none"> • The vane is set to fixed position. 	<ul style="list-style-type: none"> ① Normal operation (The vane is set to horizontal regardless of remote control.) ② Check ② (left). <ul style="list-style-type: none"> • Check the vane motor. (Refer to "How to check the parts".) • Check for breaking of wire or connection failure of connector. ③ Normal operation (Each connector on vane motor side is disconnected.)

9-4. WHEN WIRED REMOTE CONTROLLER OR INDOOR UNIT MICRO COMPUTE TROUBLES

1. If there is not any other wrong when trouble occurs, emergency operation starts as the indoor controller board switch (SWE) is set to ON.

During the emergency operation the indoor unit is as follows;

- (1) Indoor fan high speed operation (2) Drain-up machine operation

2. When emergency operating for COOL or HEAT, setting of the switch (SWE) in the indoor controller board and outdoor unit emergency operation are necessary.

3. Check items and notices as the emergency operation

(1) Emergency operation cannot be used as follows;

- When the outdoor unit is something wrong.
- When the indoor fan is something wrong.
- When drain over flow protected operation is detected during self-diagnosis. (Error code : P5)

(2) Emergency operation will be serial operation by the power supply ON/OFF.

ON/OFF or temperature, etc. adjustment is not operated by the remote controller.

(3) Do not operate for a long time as cold air is blown when the outdoor unit starts defrosting operation during heat emergency operation.

(4) Cool emergency operation must be within 10 hours. Otherwise, heat exchanger of indoor unit may get frosted.

(5) After completing the emergency operation, return the switch setting, etc. in former state.

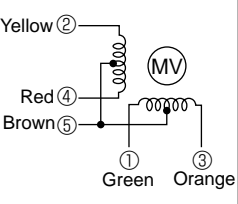
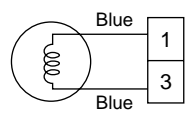
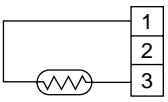
(6) Since vane does not work at emergency operation, position the vane slowly by hand.

9-5. HOW TO CHECK THE PARTS

PMH-P25BA

PMH-P35BA

PMH-P50BA

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" style="margin-left: 20px;"> <thead> <tr> <th>Normal</th> <th>Abnormal</th> </tr> </thead> <tbody> <tr> <td>4.3kΩ~9.6kΩ</td> <td>Open or short</td> </tr> </tbody> </table> (Refer to <Thermistor Characteristic graph> in detail.)	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 ~30°C) <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Connector</th> <th>Normal</th> <th>Abnormal</th> </tr> </thead> <tbody> <tr> <td>Brown — Yellow</td> <td rowspan="4">380Ω ±7%</td> <td rowspan="4">Open or short</td> </tr> <tr> <td>Brown — Red</td> </tr> <tr> <td>Brown — Orange</td> </tr> <tr> <td>Brown — Green</td> </tr> </tbody> </table>	Connector	Normal	Abnormal	Brown — Yellow	380Ω ±7%	Open or short	Brown — Red	Brown — Orange	Brown — Green
Connector	Normal	Abnormal								
Brown — Yellow	380Ω ±7%	Open or short								
Brown — Red										
Brown — Orange										
Brown — Green										
Drain-up mechanism 	Measure the resistance between the terminals using a tester. (Surrounding temperature 20°C) <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Normal</th> <th>Abnormal</th> </tr> </thead> <tbody> <tr> <td>400Ω~480Ω</td> <td>Open or short</td> </tr> </tbody> </table>	Normal	Abnormal	400Ω~480Ω	Open or short					
Normal	Abnormal									
400Ω~480Ω	Open or short									
Drain sensor 	Measure the resistance between the terminals using a tester. (Surrounding temperature 20°C ~30°C) <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Normal</th> <th>Abnormal</th> </tr> </thead> <tbody> <tr> <td>0.6kΩ~6.0kΩ</td> <td>Open or short</td> </tr> </tbody> </table> (Refer to <Thermistor Characteristic graph> in detail.)	Normal	Abnormal	0.6kΩ~6.0kΩ	Open or short					
Normal	Abnormal									
0.6kΩ~6.0kΩ	Open or short									

Check method of indoor fan motor (fan motor / control p.c.board)

① Notes

- High voltage is applied to the connector (FAN) for the fan motor. Give attention to the service.
- Do not pull out the connector (Fan) for the motor with the power supply on.
(It causes trouble of the control p.c.board)

② Self check

Conditions : The indoor fan cannot turn around.

Wiring contact check
Contact of fan motor connector (FAN)
Contact of power supply cable.



Was contact caused good? → No → Wiring recovery

↓Yes

Fan motor check
Measure the resistance between the fan motor connector ①(+) and ③(-).
(With the connector is pulled out from the p.c.board)



Is the resistance 1MΩ or more? → No → Trouble of the fan motor Replacement of the motor

↓Yes

Power supply check
Check the voltage in the indoor control p.c.board
Approx. 310~340V between the connector (FAN) ①(+) and ③(-).
Approx. 1~3V between the connector (FAN) ⑤(+) and ③(-).
(The voltage between the ⑤ and ③ is a value during the fan motor operation.)
(In the case that the fan motor off, the voltage is 0V.)



Is the voltage normal? → No → Trouble of the indoor p.c.board
Replacement of the indoor control p.c.board

↓Yes

Fan motor position sensor signal check
Turn around the fan motor more than one revolution slowly, and check
the voltage between the connector (FAN) ⑥(+) and ③(-).



Does the voltage repeat DC0V and DC15V? → No → Trouble of the fan motor
Replacement of the motor

↓Yes

Replacement of the indoor control p.c.board

<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 $B = 3480 \pm 2\%$

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

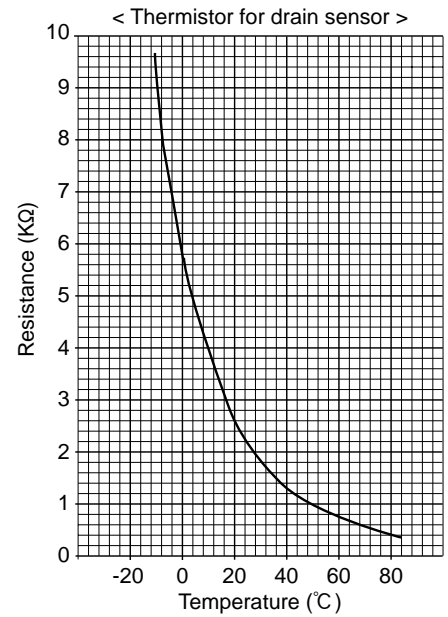
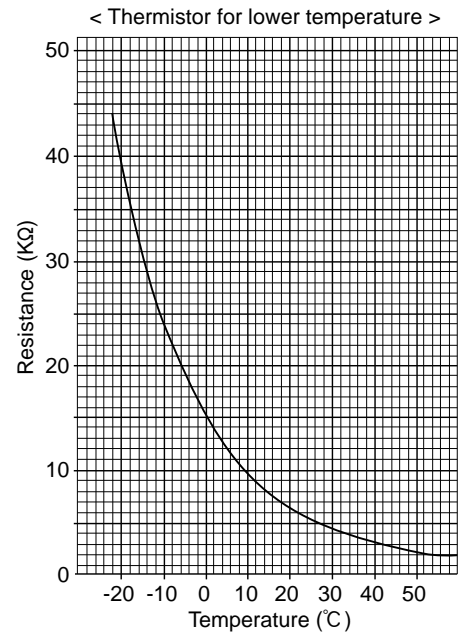
0°C	15kΩ
10°C	9.6kΩ
20°C	6.3kΩ
25°C	5.4kΩ
30°C	4.3kΩ
40°C	3.0kΩ

Thermistor for drain sensor

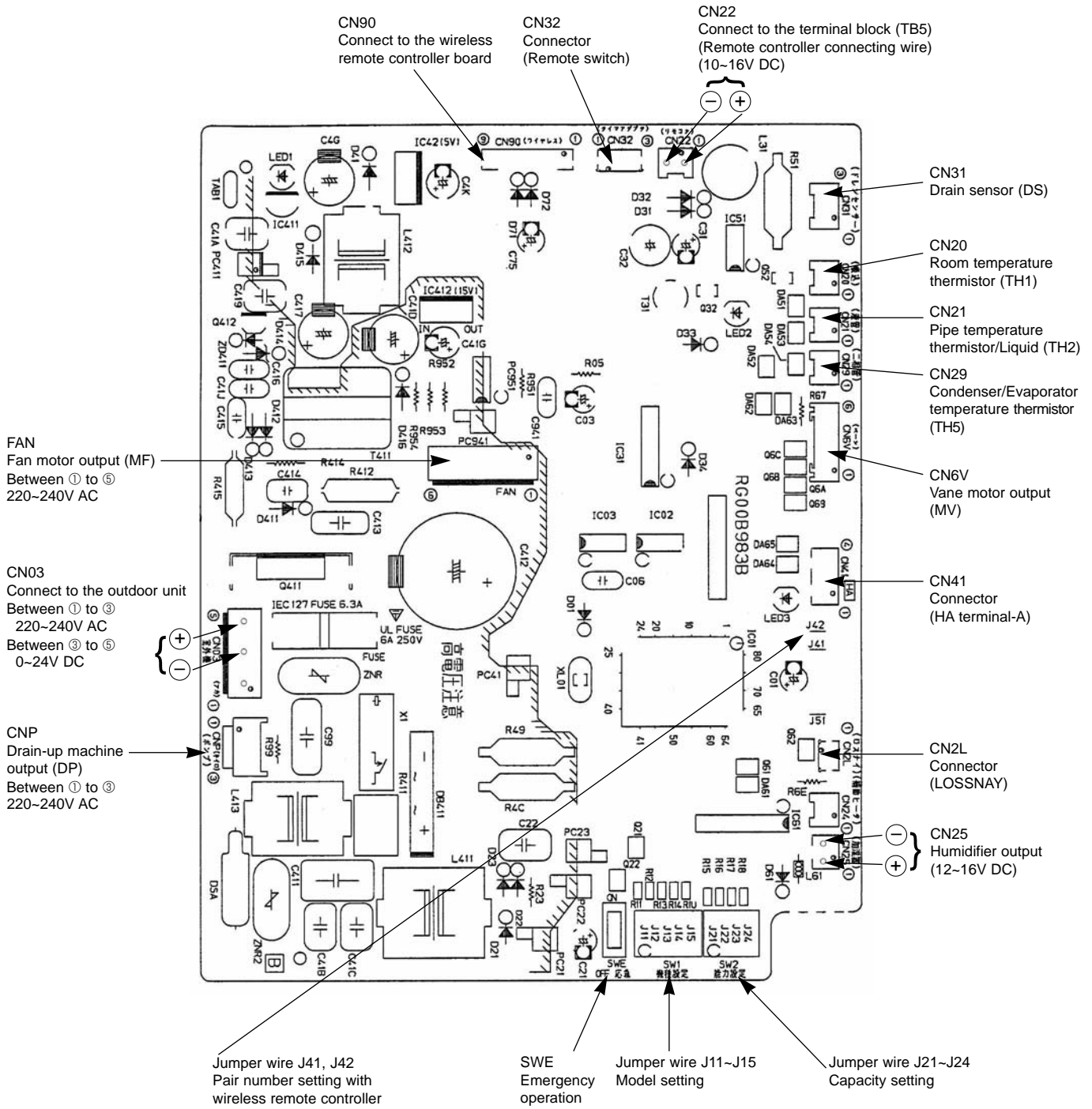
Thermistor $R_0 = 6.0k\Omega \pm 5\%$
 Fixed number of $B = 3390 \pm 2\%$

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

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



9-6. TEST POINT DIAGRAM
Indoor controller board
PMH-P25BA
PMH-P35BA
PMH-P50BA



9-7. FUNCTIONS OF JUMPER WIRE

Each function is controlled by the jumper wire on control p.c. board. For service parts, J11- J15 and J21-J24, DIP switches (SW1 and SW2) are equipped with jumper wire.

(Marks in the table below) Jumper wire (○ : Short × : Open)
DIP switch (○ : ON × : OFF)

Jumper wire	Functions	Open/short of jumper wire	Remarks																	
J11~J15 (SW1)	Model settings	<table border="1"> <thead> <tr> <th></th> <th>MODELS</th> <th>Manufacture</th> <th>Service board</th> </tr> </thead> <tbody> <tr> <td>SW1</td> <td>PMH-P25/35/50BA</td> <td> </td> <td> </td> </tr> </tbody> </table>		MODELS	Manufacture	Service board	SW1	PMH-P25/35/50BA												
	MODELS	Manufacture	Service board																	
SW1	PMH-P25/35/50BA																			
J21~J24 (SW2)	Capacity settings	<table border="1"> <thead> <tr> <th></th> <th>MODELS</th> <th>Manufacture</th> <th>Service board</th> </tr> </thead> <tbody> <tr> <td rowspan="3">SW2</td> <td>PMH-P25BA</td> <td> </td> <td> </td> </tr> <tr> <td>PMH-P35BA</td> <td> </td> <td> </td> </tr> <tr> <td>PMH-P50BA</td> <td> </td> <td> </td> </tr> </tbody> </table>		MODELS	Manufacture	Service board	SW2	PMH-P25BA			PMH-P35BA			PMH-P50BA						
	MODELS	Manufacture	Service board																	
SW2	PMH-P25BA																			
	PMH-P35BA																			
	PMH-P50BA																			
J41 J42	Pair number setting with wireless remote controller	<table border="1"> <thead> <tr> <th rowspan="2">Wireless remote controller setting</th> <th colspan="2">Control PCB setting</th> </tr> <tr> <th>J41</th> <th>J42</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>○</td> <td>○</td> </tr> <tr> <td>1</td> <td>×</td> <td>○</td> </tr> <tr> <td>2</td> <td>○</td> <td>×</td> </tr> <tr> <td>3 ~ 9</td> <td>×</td> <td>×</td> </tr> </tbody> </table>	Wireless remote controller setting	Control PCB setting		J41	J42	0	○	○	1	×	○	2	○	×	3 ~ 9	×	×	<p><Settings at time of factory shipment> Wireless remote controller: 0 Control PCB: ○ (for both J41 and J42) Four pair number settings are supported. The pair number settings of the wireless remote controller and indoor control PCB (J41/J42) are given in the table on the left. ('×' in the table indicates the jumper line is disconnected.)</p>
Wireless remote controller setting	Control PCB setting																			
	J41	J42																		
0	○	○																		
1	×	○																		
2	○	×																		
3 ~ 9	×	×																		

PMH-P25BA
 PMH-P35BA
 PMH-P50BA

Be careful on removing heavy parts.

OPERATING PROCEDURE

PHOTOS&ILLUSTRATIONS

1. Removing the intake grille

Opening the air intake grille

- (1) Press the **PUSH** of the air intake grille.(See figure 1)
- (2) Put your figure on the both end of nut of the air intake grille and put it down after the grille clicked.

Removing the air intake grille

- (1) Press the **PUSH** of air intake grille, and pull down the both end of nut with your fingers after the grille clicked. (See figure 1)
- (2) Pull out the handle of air intake grille strong toward you. (See figure 2)
- (3) Draw the string of air intake grille to prevent the grille from dropping.(see figure 3)

Photo 1

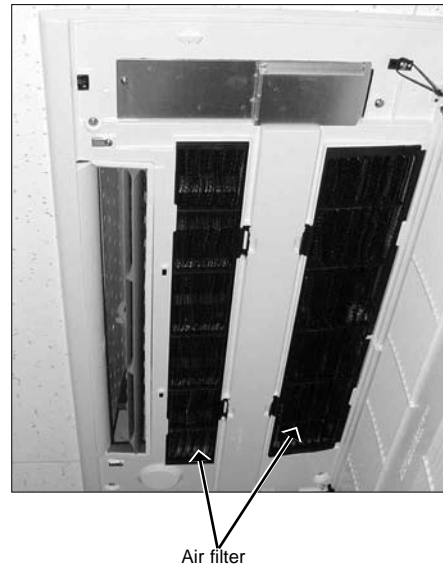


Figure 1

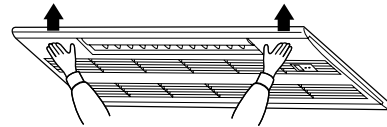


Figure 2

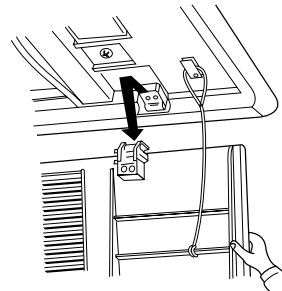
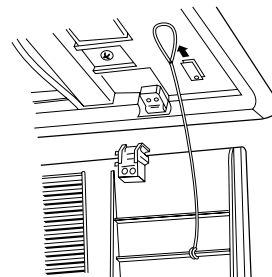


Figure 3

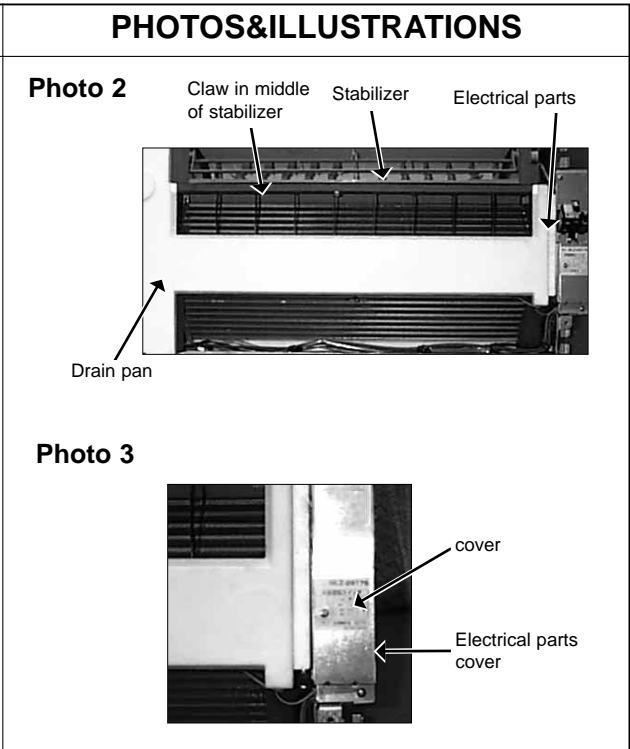




OPERATING PROCEDURE

2. Removing the electrical parts box

- (1) Remove the panel.
- (2) Remove the cover.
- (3) Remove the electrical parts cover.
- (4) Disconnect the connectors of fan motor, vane motor, drain pump, room temperature thermistor, pipe temperature thermistor, condenser/evaporator temperature thermistor and drain sensor on the electrical controller board.
- (5) Disconnect the lead wire and earth wire from terminal block.
- (6) Remove the electrical parts box.

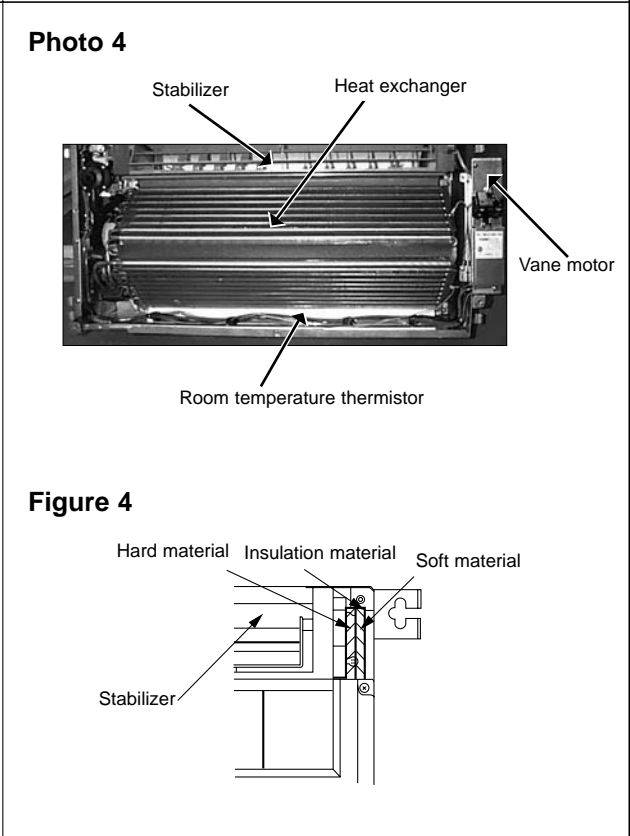


3. Removing the stabilizer

Note when the stabilizer is removed

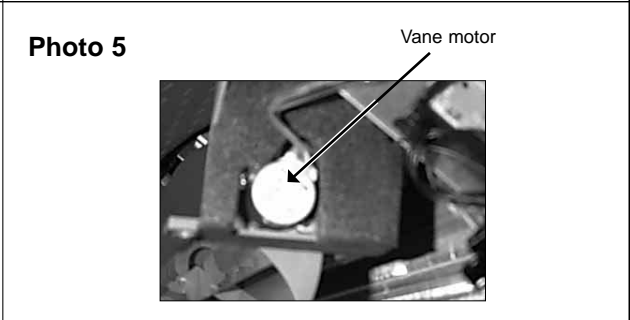
- Since the insulation material (white) which prevents water-drops from putting is mounted to the side of vane motor, remove the insulation material when the stabilizer is removed.(See figure 4)
- After completing the service, mount the insulation material as before as shown in right figure.
- The insulation material consists of soft and hard layers. Mount the insulation with the hard layer on the stabilizer side.

- (1) Remove the panel.
- (2) Remove the room temperature thermistor.
- (3) Unhook the claw in the middle of stabilizer and remove the drain pan. (5 screws) (See photo 2)
- (4) Remove the stabilizer side of the heat exchanger. (2 screws)
- (5) Remove the cover.
- (6) Remove the electrical parts cover.
- (7) Disconnect the connector of vane motor.
- (8) Remove the insulation material (white) on the right side of stabilizer.
- (9)Remove the stabilizer. (6 screws)



4. Removing the vane motor

- (1) Remove the stabilizer. Refer to above-mentioned (3) Removing the stabilizer.
- (2) Remove the vane motor.





11

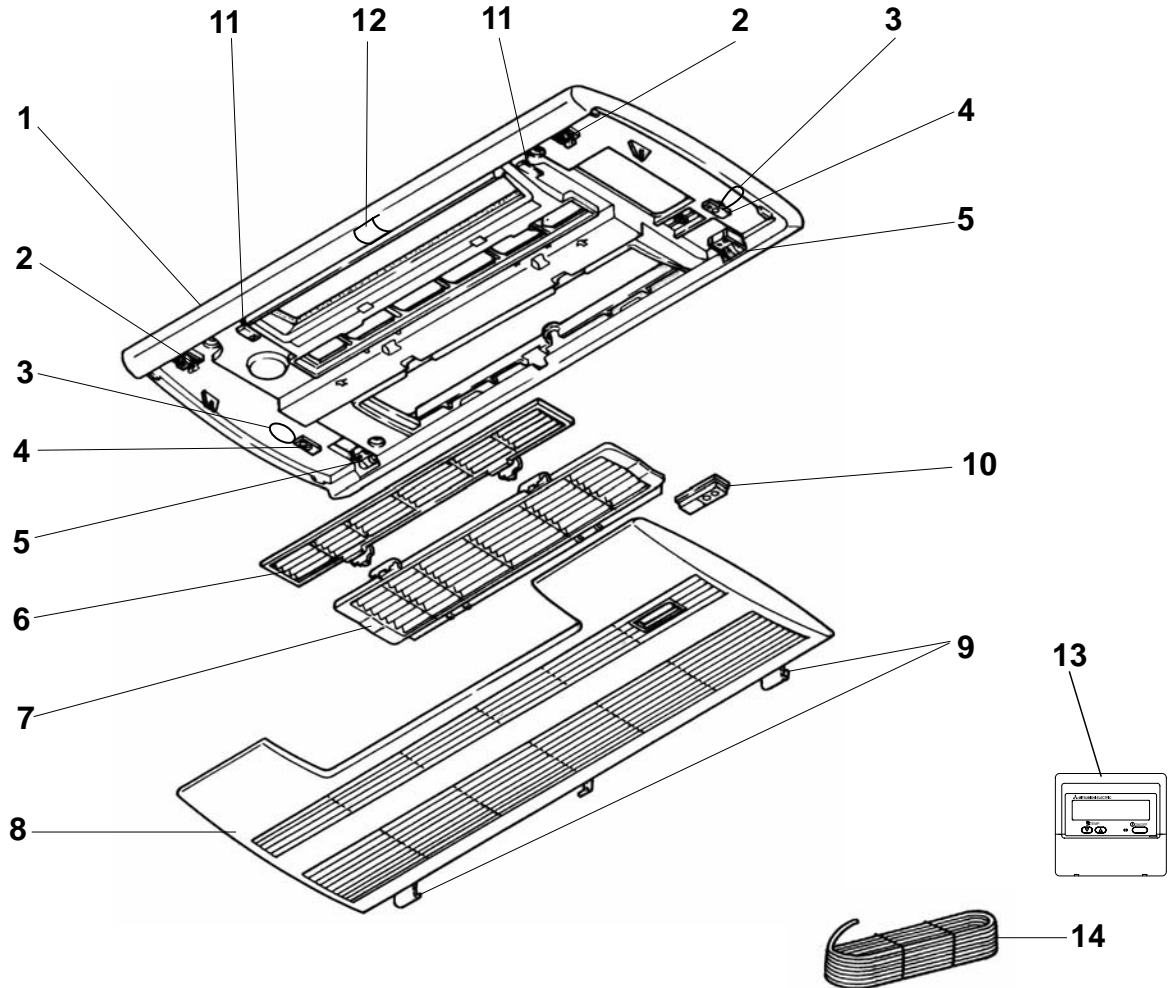
PARTS LIST

PANEL PARTS

PMH-P25BA

PMH-P35BA

PMH-P50BA



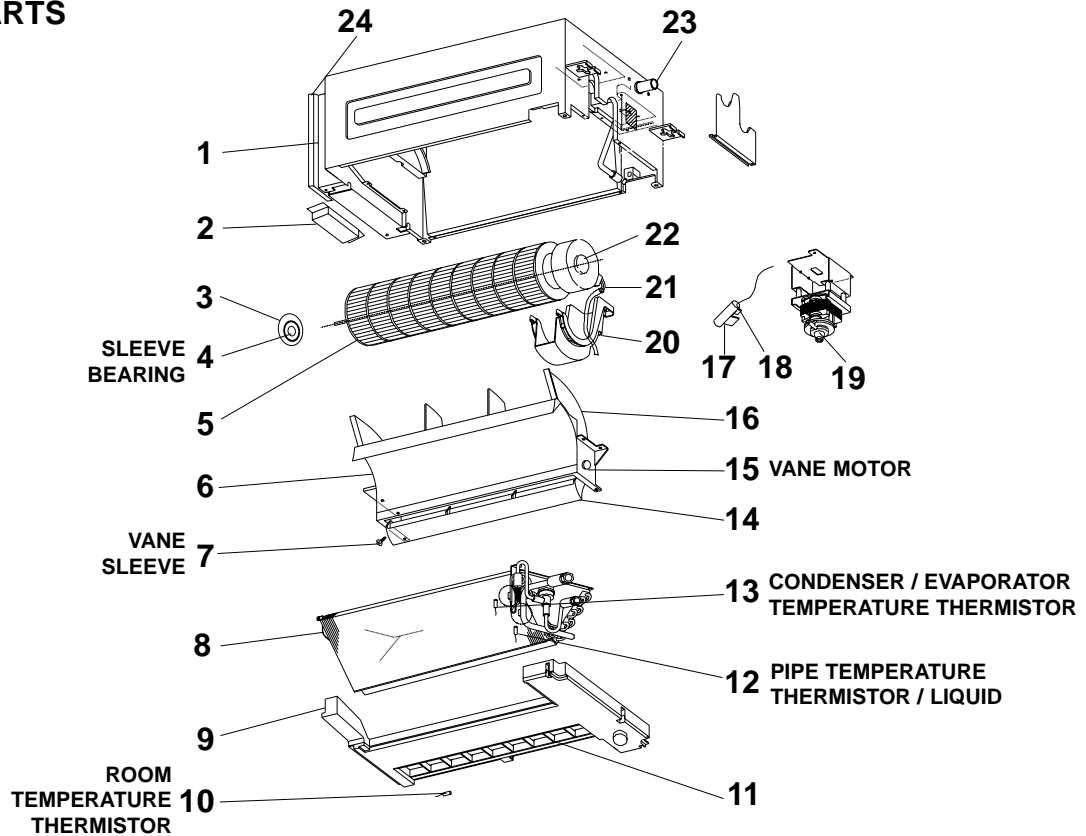
No.	Part No.	Part Name	Specification	Q'ty/set	Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PMH-P25/35/50BA				Unit	Amount
1	T7W E11 003	AIR OUTLET GRILLE		1					
2	R01 E00 055	LATCH		2					
3	—	HANGER		2	(DT88D360H03)				
4	R01 E00 099	PANEL HOOK		2					
5	R01 E01 054	GRILLE CATCH		2					
6	R01 E01 500	LL.FILTER		1					
7	R01 E02 500	LL.FILTER		1					
8	T7W E01 691	INTAKE GRILLE		1					
9	R01 E00 054	GRILLE CATCH		2					
10	R01 E00 648	RECEIVER COVER		1					
11	R01 E00 044	MAGNET		2					
12	R01 E00 096	SCREW CAP		1					
13	T7W E08 713	REMOTE CONTROLLER		1					
14	T7W E01 305	REMOTE CONTROLLER CABLE		1					

FUNCTIONAL PARTS

PMH-P25BA

PMH-P35BA

PMH-P50BA



Part number that is circled in the figure.

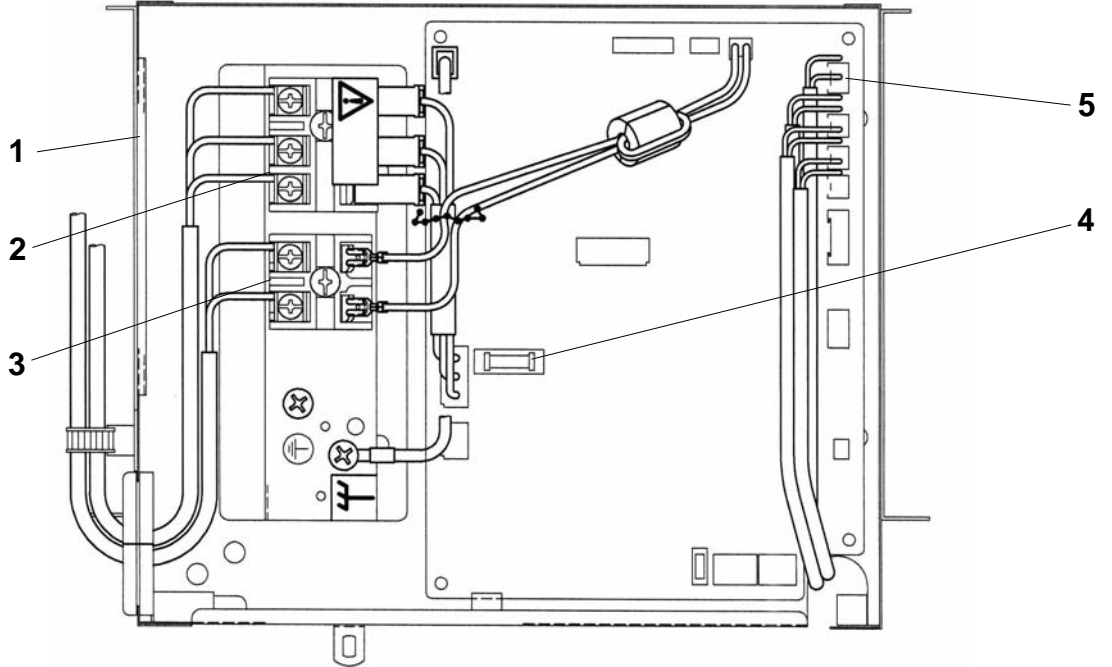
No.	Part No.	Part Name	Specification	Q'ty/set			Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PMH-P-BA						Unit	Amount
				25	35	50					
1	—	CABINET		1	1	1	(DT00A478G81)				
2	—	COVER		1	1	1	(RG02L277H02)				
3	R01 22A 102	BEARING MOUNT		1	1	1					
4	R01 005 103	SLEEVE BEARING		1	1	1					
5	R01 E02 114	LINE FLOW FAN		1	1	1					
6	T7W E01 079	STABILIZER ASSY		1	1	1					
7	R01 E00 092	VANE SLEEVE		1	1	1					
8	T7W E69 480	HEAT EXCHANGER		1							
	T7W E70 480	HEAT EXCHANGER			1	1					
9	R01 E10 529	DRAIN PAN		1	1	1					
10	R01 E00 202	ROOM TEMPERATURE THERMISTOR		1	1	1		TH1			
11	R01 E00 038	GUIDE VANE		1	1	1					
12	R01 E41 202	PIPE TEMPERATURE THERMISTOR / LIQUID		1	1	1		TH2			
13	R01 E44 202	CONDENSER / EVAPORATOR TEMPERATURE THERMISTOR		1	1	1		TH5			
14	R01 E01 002	VANE		1	1	1					
15	R01 E01 223	VANE MOTOR		1	1	1		MV			
16	R01 E00 110	CASING		1	1	1					
17	R01 31K 241	SENSOR HOLDER		1	1	1					
18	R01 E01 266	DRAIN SENSOR		1	1	1		DS			
19	T7W E02 355	DRAIN PUMP		1	1	1		DP			
20	R01 E00 130	MOTOR SUPPORT		1	1	1					
21	R01 E14 220	FAN MOTOR		1	1	1		MF			
22	R01 E07 105	MOTOR MOUNT		1	1	1					
23	R01 E00 527	DRAIN PIPE		1	1	1					
24	—	CONTROL BOX COVER		1	1	1	(RG00L311G19)				
②5	R01 E01 673	SCREW ASSY		1	1	1					

ELECTRICAL PARTS

PMH-P25BA

PMH-P35BA

PMH-P50BA



No.	Part No.	Part Name	Specification	Q'ty/set	Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PMH-P25/35/50 BA				Unit	Amount
1	—	CONTROL BOX		1	(RG02B337G16)				
2	T7W E13 716	TERMINAL BLOCK	3P (S1, S2, S3)	1		TB4			
3	T7W 515 716	TERMINAL BLOCK	2P (1, 2)	1		TB5			
4	T7W 520 239	FUSE	250V 6.3A	1		FUSE			
5	T7W E26 310	INDOOR CONTROLLER BOARD		1		I.B			

Mr. SLIM™

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