

1**TECHNICAL CHANGES****PCA-A24GA₁ → PCA-A24GA₂****PCA-A30GA₁ → PCA-A30GA₂****PCA-A36GA₁ → PCA-A36GA₂****PCA-A42GA₁ → PCA-A42GA₂**

- Indoor controller board(I.B) has been changed(11.SPECIAL FUNCTION is added).

PCA-A24GA → PCA-A24GA₁**PCA-A30GA → PCA-A30GA₁****PCA-A36GA → PCA-A36GA₁****PCA-A42GA → PCA-A42GA₁**

- Indoor controller board(I.B) has been changed.

2**REFERENCE MANUAL****2-1. OUTDOOR UNIT SERVICE MANUAL**

Service Ref.	Service Manual No.
PUZ-A18/24/30/36/42NHA PUZ-A18/24/30/36/42NHA-BS PUY-A12/18/24/30/36/42NHA ⁽¹⁾ PUY-A12/18/24/30/36/42NHA ⁽¹⁾ -BS	OC367

2-2. TECHNICAL DATA BOOK

Series (Outdoor unit)	Data Book No.
PUZ-A·NHA PUZ-A·NHA-BS PUY-A·NHA PUY-A·NHA-BS	OCS04

3-1. ALWAYS OBSERVE FOR SAFETY

Before obtaining access to terminals, all supply circuits must be disconnected.

3-2. CAUTIONS RELATED TO NEW REFRIGERANT

Cautions for units utilising refrigerant R410A

Use new refrigerant pipes.

Make sure that the inside and outside of refrigerant piping is clean and it has no contamination such as sulfur hazardous for use, oxides, dirt, shaving particles, etc.
In addition, use pipes with specified thickness.

Contamination inside refrigerant piping can cause deterioration of refrigerant oil etc.

Store the piping to be used during installation indoors and keep both ends of the piping sealed until just before brazing. (Leave elbow joints, etc. in their packaging.)

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.

Use ester oil, ether oil or alkylbenzene oil (small amount) as the refrigerant oil applied to flares and flange connections.

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

Charge refrigerant from liquid phase of gas cylinder.

If the refrigerant is charged from gas phase, composition change may occur in refrigerant and the efficiency will be lowered.

Do not use refrigerant other than R410A.

If other refrigerant (R22 etc.) is used, chlorine in refrigerant can cause deterioration of refrigerant oil etc.

Use a vacuum pump with a reverse flow check valve.

Vacuum pump oil may flow back into refrigerant cycle and that can cause deterioration of refrigerant oil etc.

Use the following tools specifically designed for use with R410A refrigerant.

The following tools are necessary to use R410A refrigerant.

Tools for R410A	
Gauge manifold	Flare tool
Charge hose	Size adjustment gauge
Gas leak detector	Vacuum pump adaptor
Torque wrench	Electronic refrigerant charging scale

Keep the tools with care.

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of the refrigerant oil or malfunction of the compressor.

Do not use a charging cylinder.

If a charging cylinder is used, the composition of refrigerant will change and the efficiency will be lowered.

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

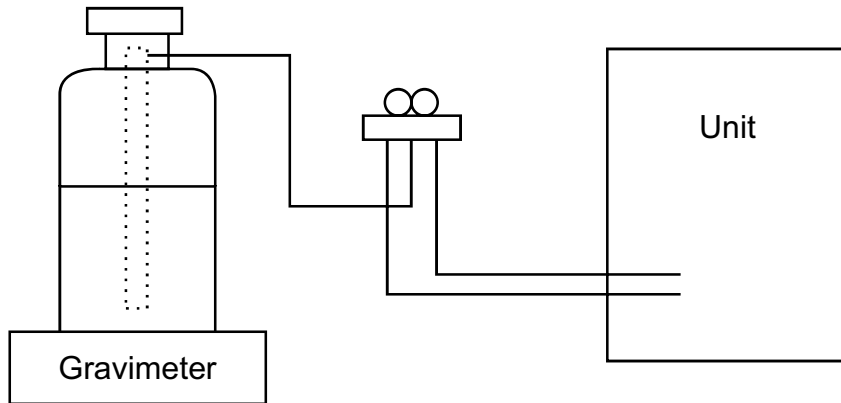
[1] Cautions for service

- (1) Perform service after recovering the refrigerant left in a unit completely.
- (2) Do not release refrigerant in the air.
- (3) After completing service, charge the cycle with specified amount of refrigerant.
- (4) When performing service, install a filter drier simultaneously.
Be sure to use a filter drier for new refrigerant.

[2] Additional refrigerant charge

When charging directly from cylinder

- Check that cylinder for R410A on the market is syphon type.
- Charging should be performed with the cylinder of syphon stood vertically. (Refrigerant is charged from liquid phase.)



[3] Service tools

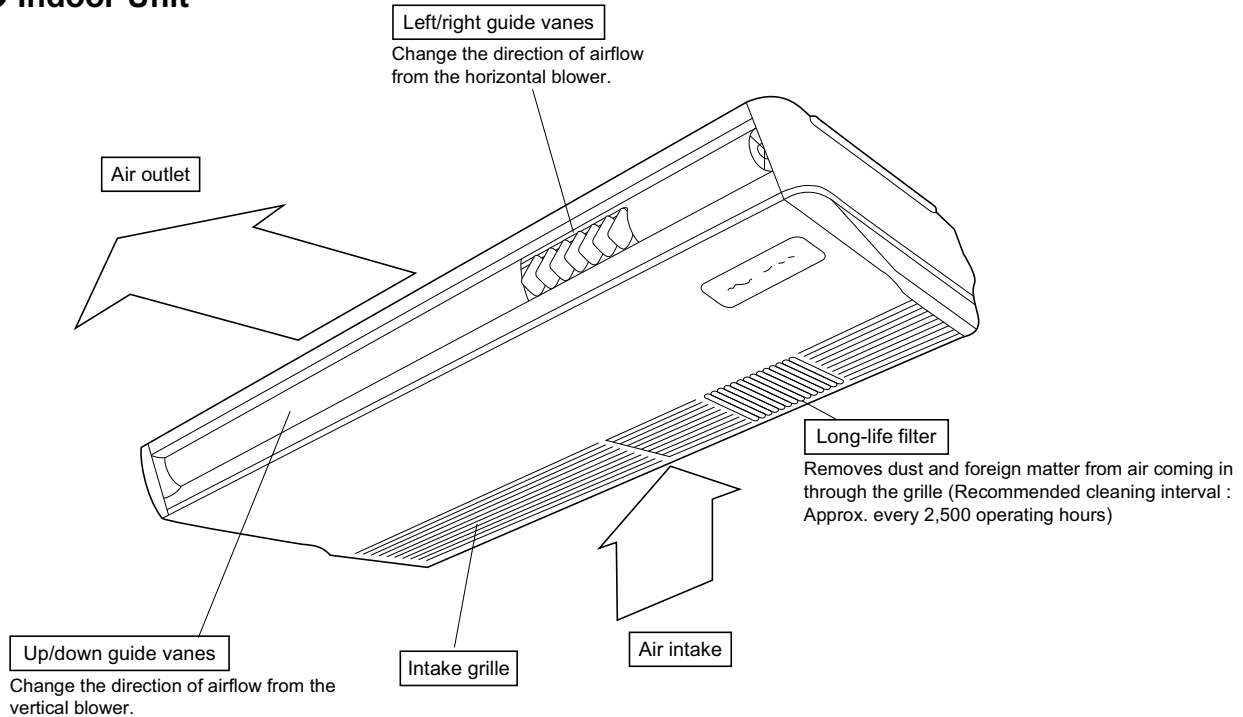
Use the below service tools as exclusive tools for R410A refrigerant.

No.	Tool name	Specifications
①	Gauge manifold	·Only for R410A
		·Use the existing fitting specifications. (UNF1/2)
		·Use high-tension side pressure of 5.3MPa·G or over.
②	Charge hose	·Only for R410A
		·Use pressure performance of 5.09MPa·G or over.
③	Electronic scale	—
④	Gas leak detector	·Use the detector for R134a, R407C or R410A.
⑤	Adaptor for reverse flow check	·Attach on vacuum pump.
⑥	Refrigerant charge base	—
⑦	Refrigerant cylinder	·Only for R410A ·Top of cylinder (Pink)
		·Cylinder with syphon
⑧	Refrigerant recovery equipment	—

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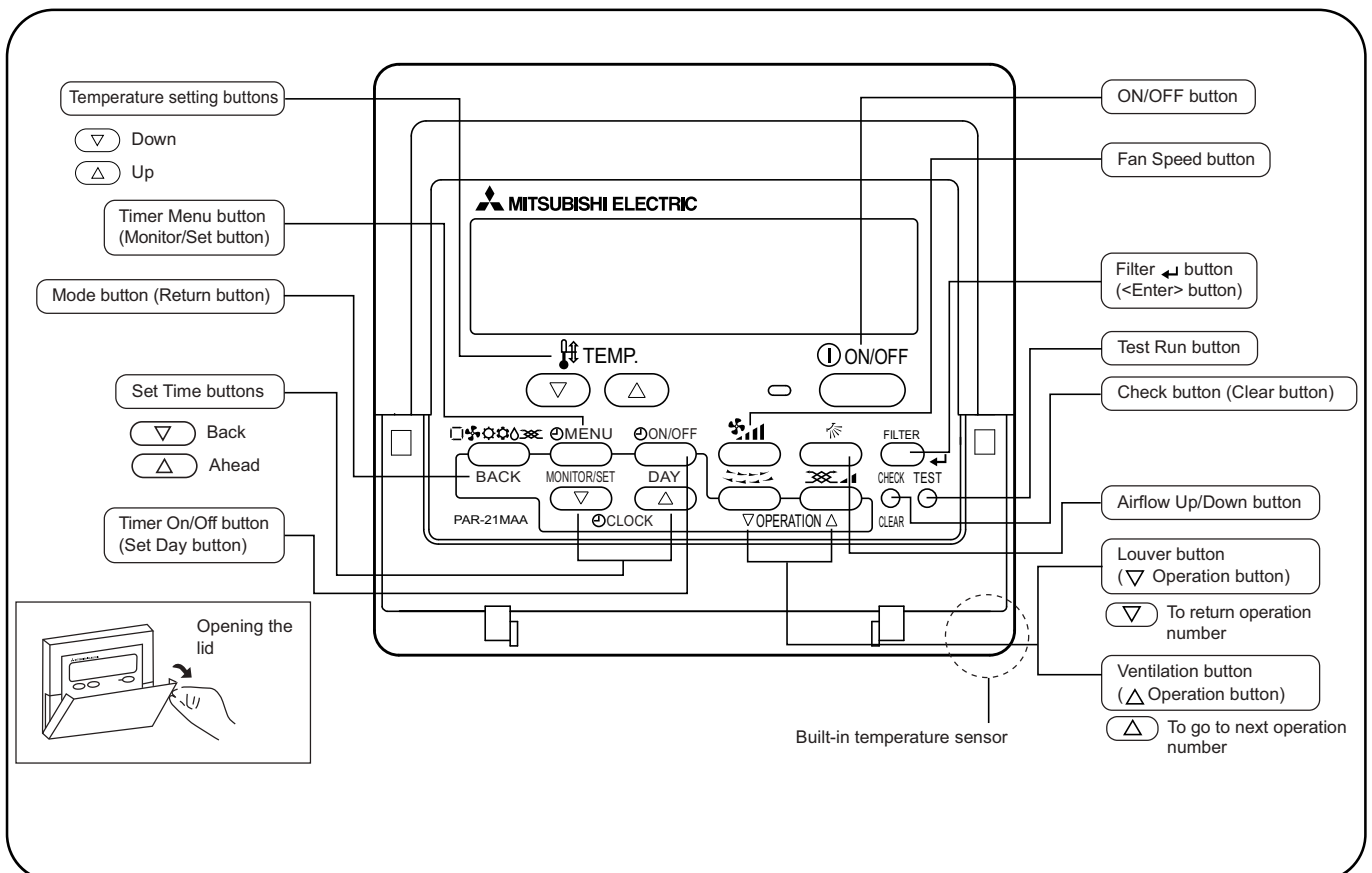
PART NAMES AND FUNCTIONS

● Indoor Unit



● Wired remote controller

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



● Wired remote controller

Display Section

For purposes of this explanation, all parts of the display are shown as lit. During actual operation, only the relevant items will be lit.

Identifies the current operation
Shows the operating mode, etc.
*Multilanguage display is available.

“Centrally Controlled” indicator
Indicates that operation from the remote controller has been prohibited by a master controller.

“Timer is Off” indicator
Indicates that the timer is off.

Temperature Setting
Shows the target temperature.

Day-of-Week
Shows the current day of the week.

Time/Timer Display
Shows the current time, unless the simple or Auto Off timer is set.
If the simple or Auto Off timer is set, the time to be switched off is shown.

“Sensor” indication
Displayed when the remote controller sensor is used.

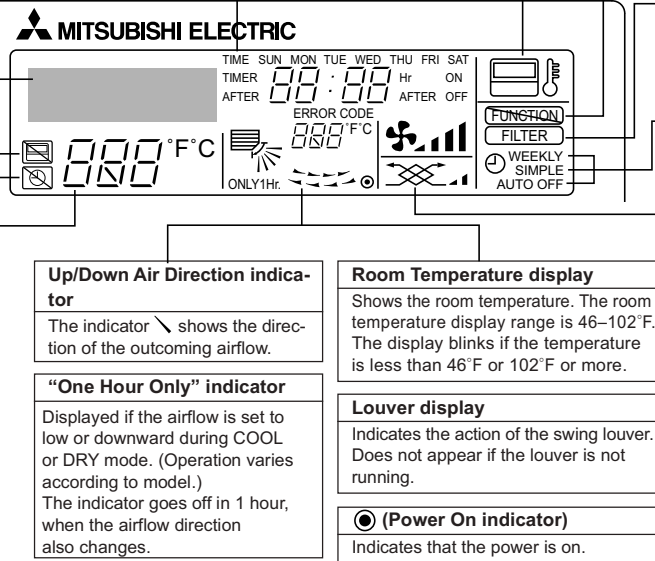
“Locked” indicator
Indicates that remote controller buttons have been locked.

“Clean The Filter” indicator
To be displayed on when it is time to clean the filter.

Timer indicators
The indicator comes on if the corresponding timer is set.

Fan Speed indicator
Shows the selected fan speed.

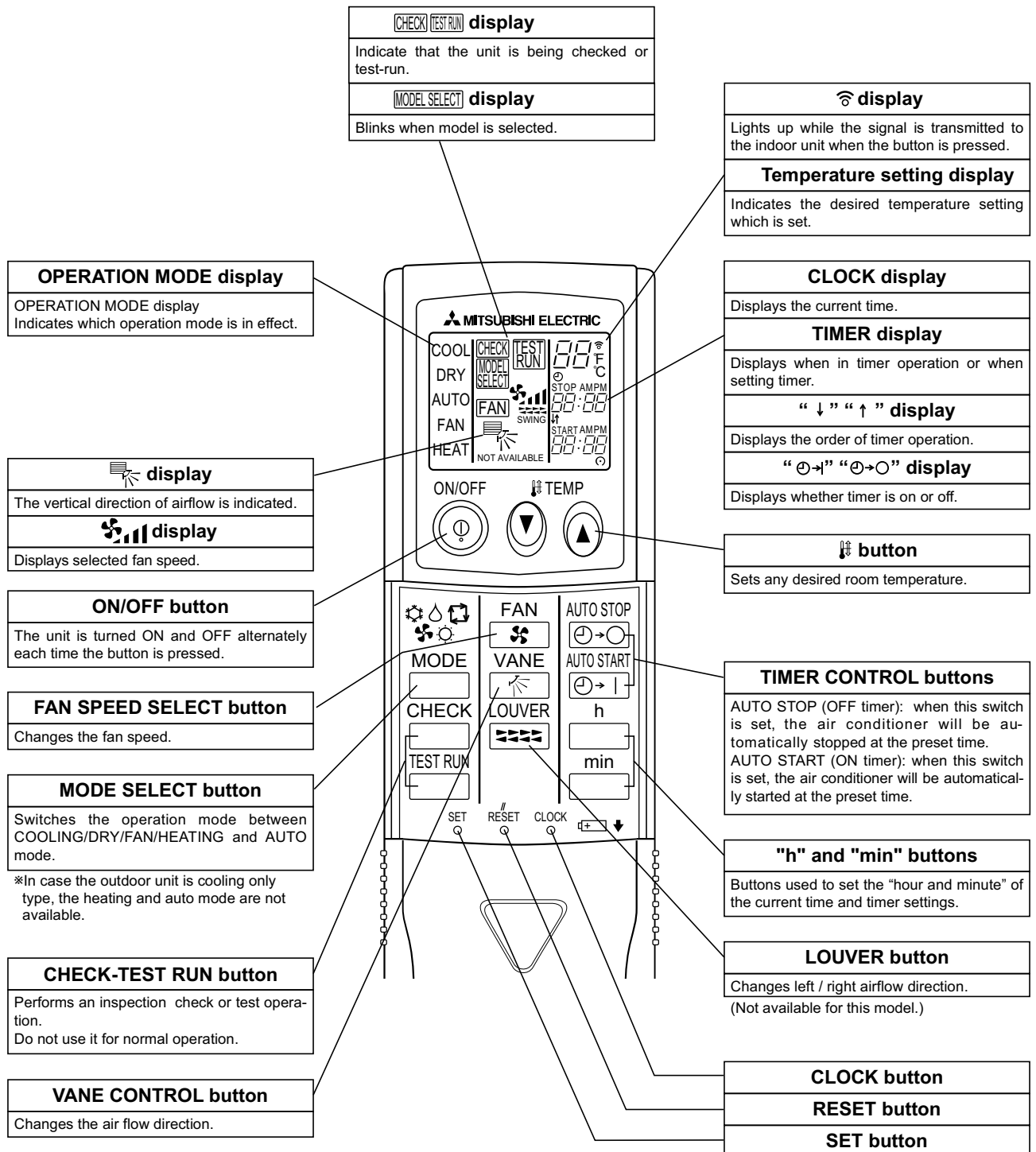
Ventilation indicator
Appears when the unit is running in Ventilation mode.



Note:

- “PLEASE WAIT” message
This message is displayed for approximately 3 minutes when power is supplied to the indoor unit or when the unit is recovering from a power failure.
- “NOT AVAILABLE” message
This message is displayed if an invalid button is pressed (to operate a function that the indoor unit does not have).
If a single remote controller is used to operate multiple indoor units simultaneously that are different types, this message will not be displayed as far as any of the indoor units is equipped with the function.

● Wireless remote controller



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SPECIFICATIONS

Service Ref.			PCA-A24GA, PCA-A24GA ₁ , PCA-A24GA ₂
INDOOR UNIT	Power supply(phase, cycle, voltage)		Single phase, 60Hz, 208/230V
	Max. Fuse Size	A	15
	Min.Circuit Ampacity	A	1
	External finish		Munsell 0.70Y 8.59/0.97
	Heat exchanger		Plate fin coil
	Fan	Fan(drive) × No.	Sirocco fan (direct) × 3
		Fan motor output	0.070
		Fan motor	0.53
		Airflow(Low-Medium2-Medium1-High)	Dry: 14-15-16-18(495-530-565-635) Wet: 13-14-15-16(445-480-510-570)
		External static pressure	0(direct blow)
	Operation control & Thermostat		Remote controller & built-in
	Noise level(Low-Medium2-Medium1-High)		37-39-41-43
	Field drain pipe O.D.		26(1-1/32)
	Dimensions	W	1,310(51-9/16)
		D	680(26-25/32)
		H	210(8-9/32)
	Weight		34(75)

Service Ref.			PCA-A30GA, PCA-A30GA ₁ , PCA-A30GA ₂
INDOOR UNIT	Power supply(phase, cycle, voltage)		Single phase, 60Hz, 208/230V
	Max. Fuse Size	A	15
	Min.Circuit Ampacity	A	1
	External finish		Munsell 0.70Y 8.59/0.97
	Heat exchanger		Plate fin coil
	Fan	Fan(drive) × No.	Sirocco fan (direct) × 3
		Fan motor output	0.070
		Fan motor	0.53
		Airflow(Low-Medium2-Medium1-High)	Dry: 14-15-16-18(495-530-565-635) Wet:13-14-15-16(445-480-510-570)
		External static pressure	0(direct blow)
	Operation control & Thermostat		Remote controller & built-in
	Noise level(Low-Medium2-Medium1-High)		37-39-41-43
	Field drain pipe O.D.		26(1-1/32)
	Dimensions	W	1,310(51-9/16)
		D	680(26-25/32)
		H	210(8-9/32)
	Weight		34(75)

Service Ref.			PCA-A36GA, PCA-A36GA ₁ , PCA-A36GA ₂
INDOOR UNIT	Power supply(phase, cycle, voltage)		Single phase, 60Hz, 208/230V
	Max. Fuse Size	A	15
	Min.Circuit Ampacity	A	1
	External finish		Munsell 0.70Y 8.59/0.97
	Heat exchanger		Plate fin coil
	Fan	Fan(drive) × No.	Sirocco fan (direct) × 3
		Fan motor output	0.090
		Fan motor	0.69
		Airflow(Low-Medium2-Medium1-High)	Dry: 20-21-23-25(705-740-810-885) Wet:18-19-21-22(635-670-730-790)
		External static pressure	0(direct blow)
	Operation control & Thermostat		Remote controller & built-in
	Noise level(Low-Medium2-Medium1-High)		40-41-43-45
	Field drain pipe O.D.		26(1-1/32)
	Dimensions	W	1,310(51-9/16)
		D	680(26-25/32)
		H	270(10-5/8)
	Weight		37(82)

INDOOR UNIT	Service Ref.		PCA-A42GA, PCA-A42GA₁, PCA-A42GA₂	
	Power supply(phase, cycle, voltage)		Single phase, 60Hz, 208/230V	
	Max. Fuse Size	A	15	
	Min.Circuit Ampacity	A	1	
	External finish		Munsell 0.70Y 8.59/0.97	
	Heat exchanger		Plate fin coil	
	Fan		Sirocco fan (direct) × 3	
	Fan(drive) × No.			
	Fan motor output	kW	0.090	
	Fan motor	F.L.A	0.69	
	Airflow(Low-Medium2-Medium1-High)	m ³ /min(CFM)	Dry: 20-21-23-25(705-740-810-885)	
			Wet:18-19-21-22(635-670-730-790)	
	External static pressure	Pa(mmAq)	0(direct blow)	
	Operation control & Thermostat		Remote controller & built-in	

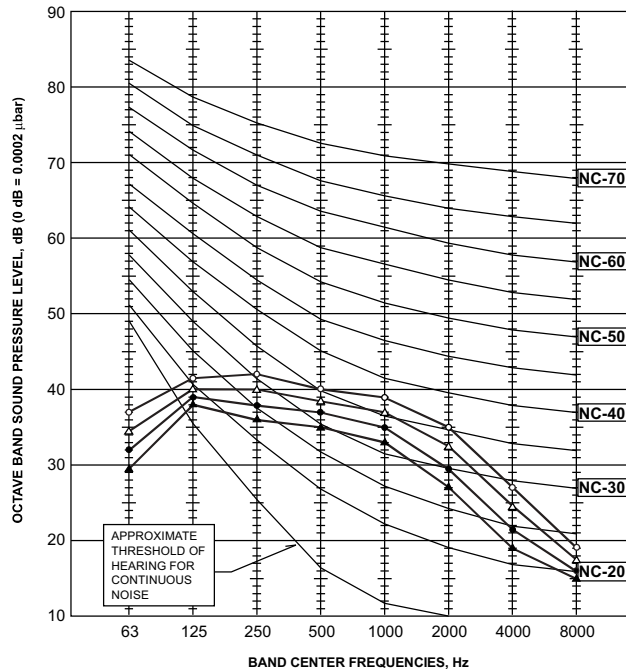
Noise level(Low-Medium2-Medium1-High)		dB	40-41-43-45
Field drain pipe O.D.		mm(in.)	26(1-1/32)
Dimensions	W	mm(in.)	1,310(51-9/16)
	D	mm(in.)	680(26-25/32)
	H	mm(in.)	270(10-5/8)
Weight		kg(lbs)	37(82)

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NOISE CRITERION CURVES

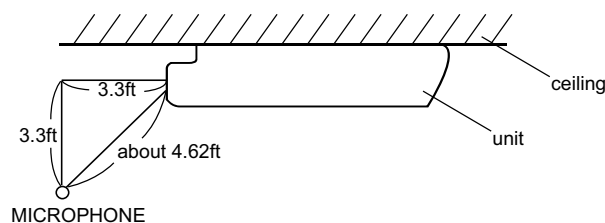
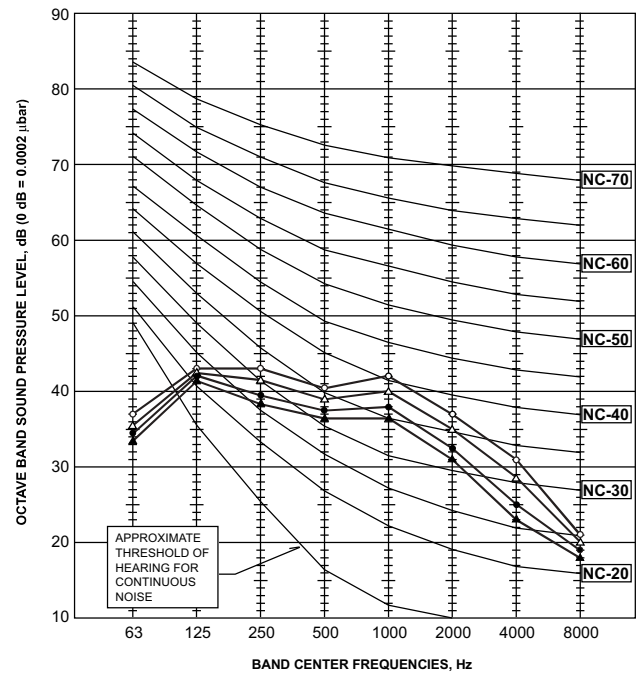
PCA-A24GA PCA-A24GA₂
PCA-A30GA PCA-A30GA₂
PCA-A24GA₁
PCA-A30GA₁

NOTCH	SPL(dB)	LINE
High	43	○—○
Medium1	41	△—△
Medium2	39	●—●
Low	37	▲—▲



PCA-A36GA PCA-A36GA₂
PCA-A42GA PCA-A42GA₂
PCA-A36GA₁
PCA-A42GA₁

NOTCH	SPL(dB)	LINE
High	45	○—○
Medium1	43	△—△
Medium2	41	●—●
Low	40	▲—▲



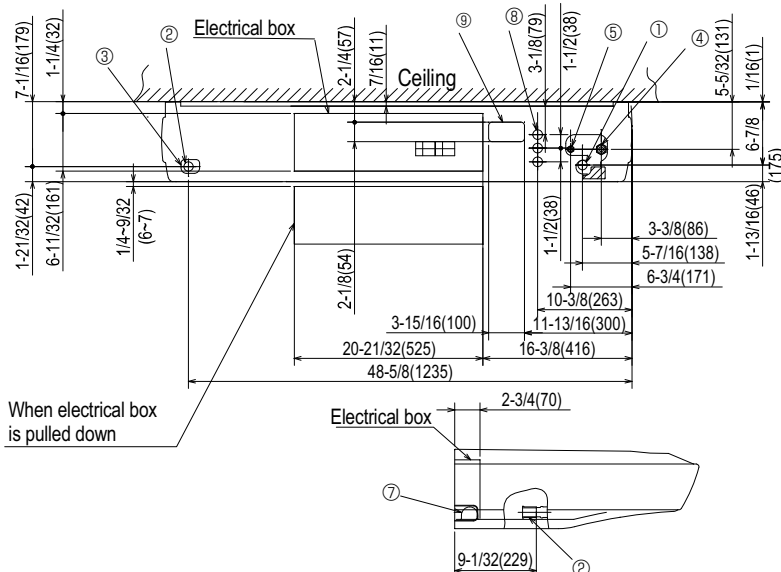
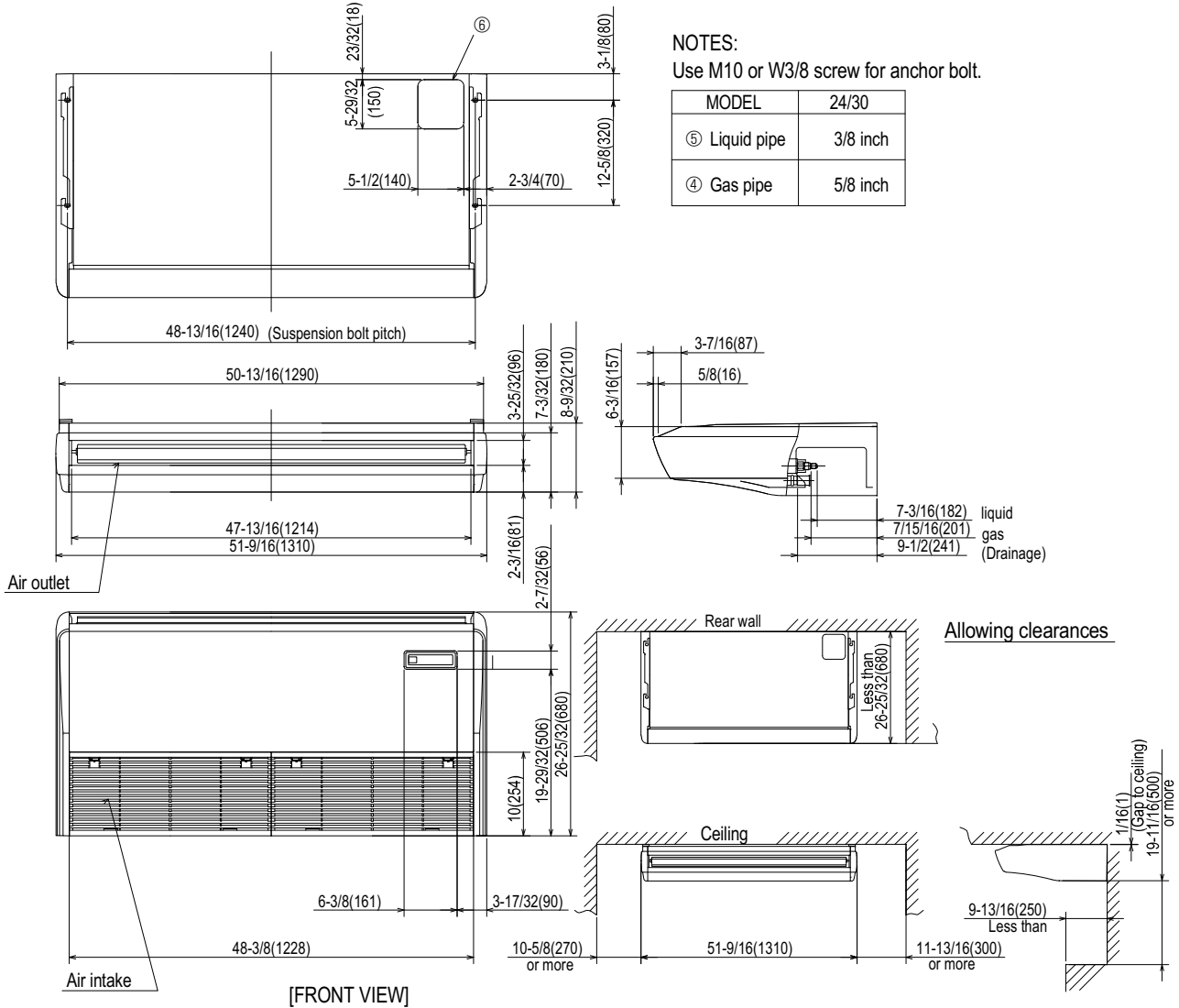
PCA-A24GA PCA-A24GA₁ PCA-A24GA₂
 PCA-A30GA PCA-A30GA₁ PCA-A30GA₂

Unit : inch(mm)

NOTES:

Use M10 or W3/8 screw for anchor bolt.

MODEL	24/30
⑤ Liquid pipe	3/8 inch
④ Gas pipe	5/8 inch



- ① Drainage pipe connection(1-1/32(26mm)I.D.)
- ② Drainage pipe connection(for the left arrangement)
- ③ Knockout hole for left drain-piping arrangement
- ④ Refrigerant-pipe connection(gas pipe side/flared connection)
- ⑤ Refrigerant-pipe connection(liquid pipe side/flared connection)
- ⑥ Knockout hole for upper pipe arrangement
- ⑦ Knockout hole for left drain pipe arrangement
- ⑧ Knockout hole for wiring arrangement
- ⑨ Knockout hole for fresh air intake

PCA-A36GA PCA-A36GA₁ PCA-A36GA₂
PCA-A42GA PCA-A42GA₁ PCA-A42GA₂

Unit : inch(mm)

