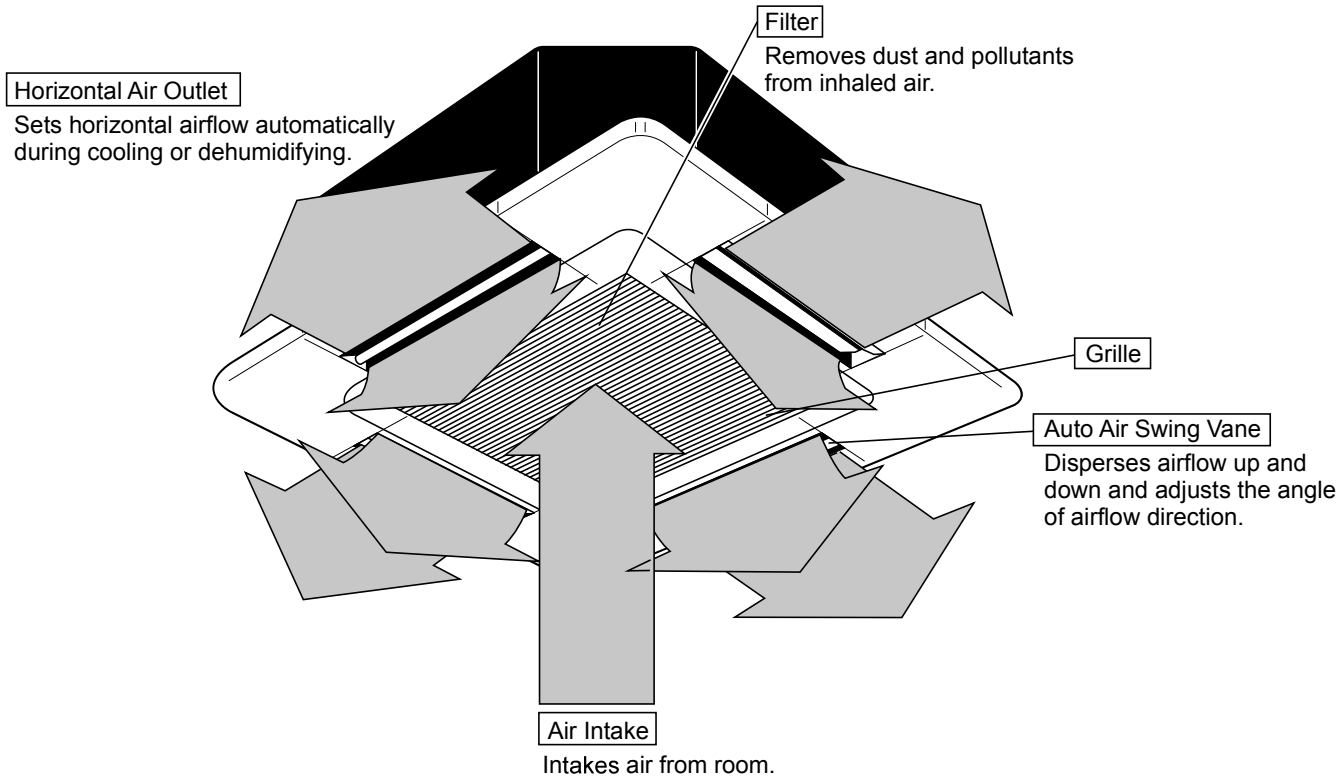
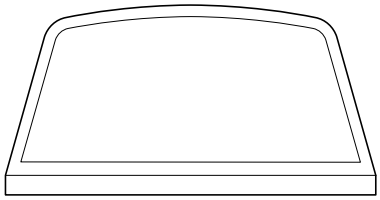
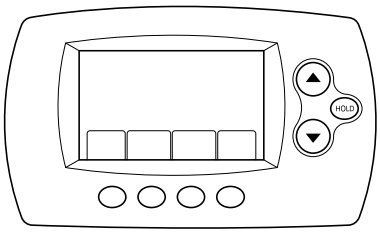
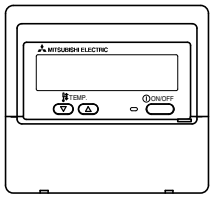
1 PART NAMES AND FUNCTIONS

Indoor Unit
SLZ-KA09NA.TH SLZ-KA12NA.TH SLZ-KA15NA.TH



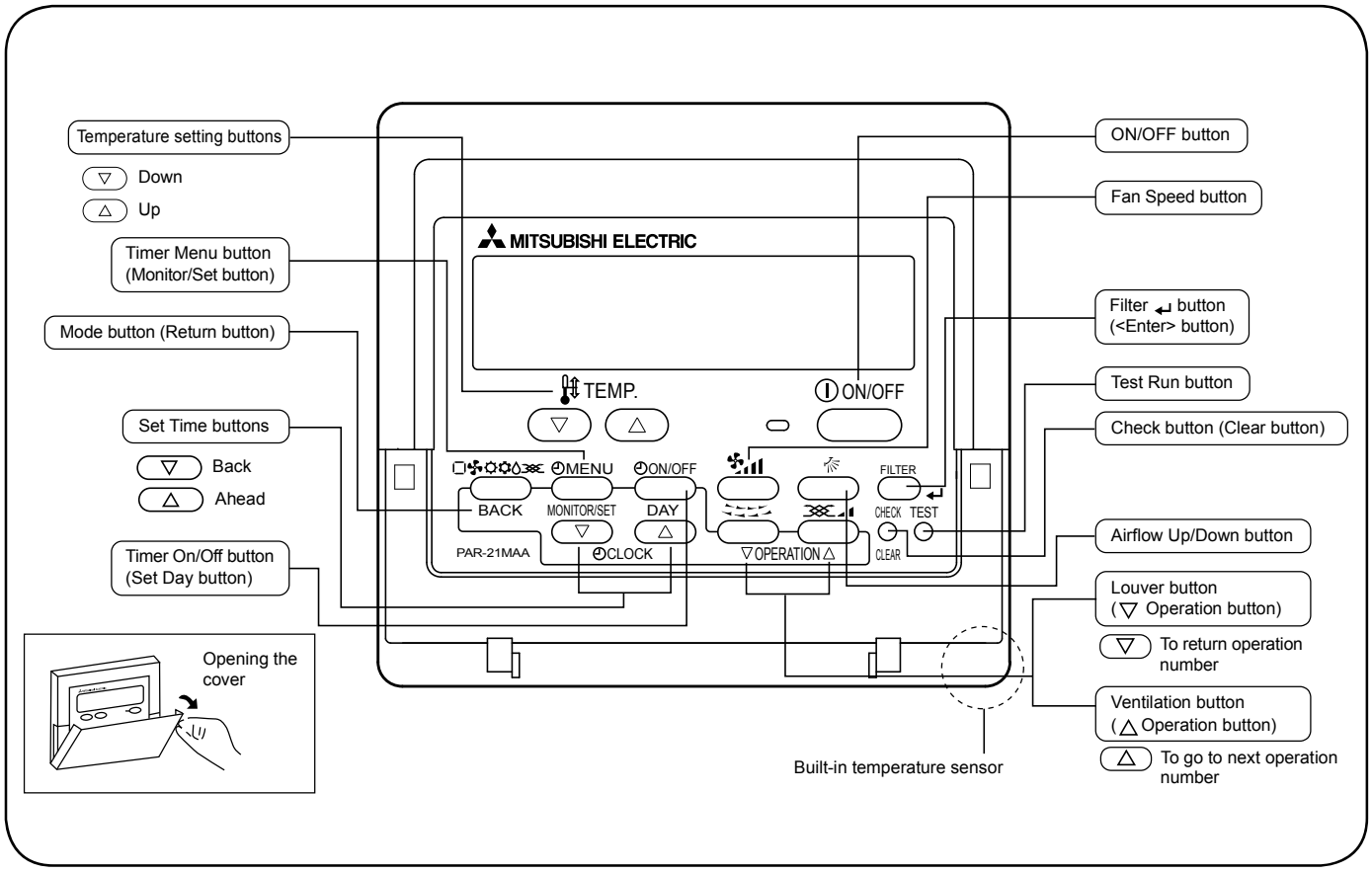
■ **Remote controller (Optional parts)**

Radio frequency interface	RF thermostat	Wired remote controller
		

Wired remote controller (Option)

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

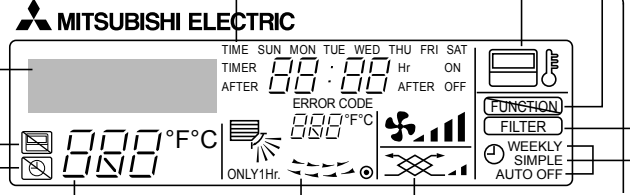
SLZ-KA09NA.TH SLZ-KA12NA.TH SLZ-KA15NA.TH



Wired remote controller (Option)

Display Section

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



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.

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.

Up/Down Air Direction indicator
Shows the direction of the outcoming airflow.

"One Hour Only" indicator
Displays if the airflow is set to low or downward during COOL or DRY mode. (Operation varies according to model.)
The indicator goes off in one hour, when the airflow direction also changes.

Room Temperature display
Shows the room temperature. The room temperature display range is 46~102°F. The display blinks if the temperature is less than 46°F or 102°F or more.

Louver display
Indicates the action of the swing louver. Does not appear if the louver is not running.

◉ (Power On indicator)
Indicates that the power is on.

"Sensor" indication
Displays 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.

2 SPECIFICATIONS

Indoor model			SLZ-KA09NA	SLZ-KA12NA	SLZ-KA15NA
Power supply	V, phase, Hz		208/230, 1, 60		
Max. fuse size (time delay)/Disconnect switch		A	15		
Min. circuit ampacity		A	1.0		
Fan motor		F.L.A	0.23	0.28	0.28
Air□ow (Low - Med. - High)	Dry	CFM	280-320-350	280-320-390	280-320-390
	Wet	CFM	250-290-320	250-290-350	250-290-350
Moisture removal		pt/h	1.2	2.3	4.5
Sound pressure level (Low - Med. - High)		dB(A)	29-32-38	30-34-39	31-35-40
External □nish color			Unit: Galvanized sheets with gray heat insulation Grille: ABS resin Munsell 6.4Y 8.9/0.4		
Dimensions unit <Grille>	W	in.	22-7/16 <25-19/32>		
	D	in.	22-7/16 <25-19/32>		
	H	in.	8-3/16 <25/32>		
Weight unit <Grille>		lb.	36 <7>		
Field drainpipe O.D.		in.	1-1/4		
Control voltage (by buit-in transformer)			12 - 24 VDC		

NOTE : Test conditions are based on AHRI 210/240.

2-1. Operating range

(1) Power supply

	Rated voltage	Guaranteed voltage (V)
Indoor unit	208/230 V 1 phase 60 Hz	Min. 187 208 230 Max. 253

(2) Operation

Mode	Condition	Intake air temperature (°F)			
		Indoor		Outdoor	
		DB	WB	DB	WB
Cooling	Standard temperature	80	67	95	—
	Maximum temperature	95	71	115	—
	Minimum temperature	67	57	14	—
	Maximum humidity	78%		—	
Heating	Standard temperature	70	60	47	43
	Maximum temperature	80	67	75	65
	Minimum temperature	70	60	-4	-5

2-2. Outlet air speed and coverage

Model	Function	Air□ow (CFM)	Air speed (ft./s.)	Coverage (ft.)
SLZ-KA09NA	Dry	350	11.2	12.1
	Wet	320	10.2	11.1
SLZ-KA12NA	Dry	390	12.1	13.5
	Wet	350	10.9	12.1
SLZ-KA15NA	Dry	390	12.1	13.5
	Wet	350	10.9	12.1

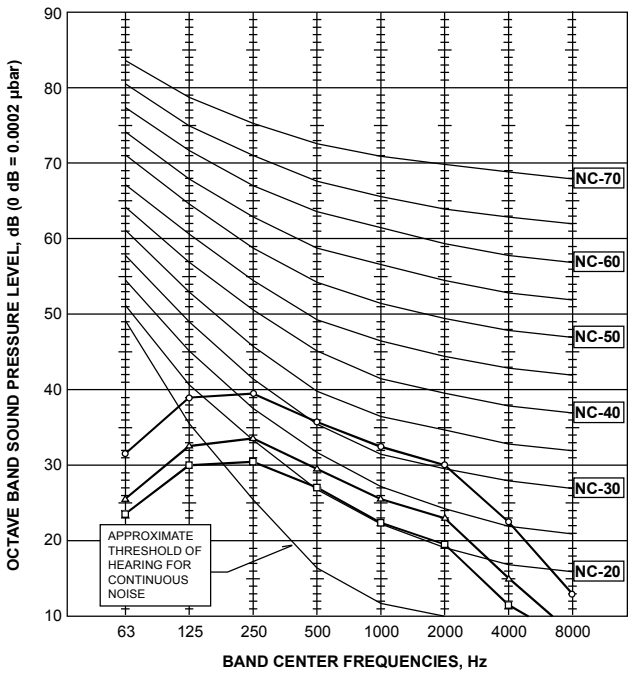
- The air coverage is the □gure up to the position where the air speed is 1 ft./s., when air is blown out horizontally from the unit properly at the High speed position.
  The coverage should be used only as a general guideline since it varies according to the size of the room and furniture arraged inside the room.

NOISE CRITERION CURVES

SLZ-KA09NA.TH

<60Hz>

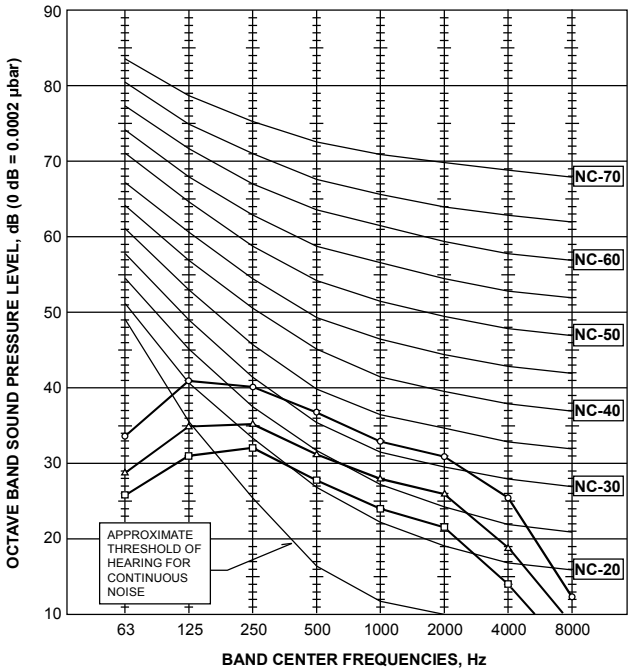
NOTCH	SPL(dB)	LINE
High	38	
Medium	22	
Low	29	



SLZ-KA12NA.TH

<60Hz>

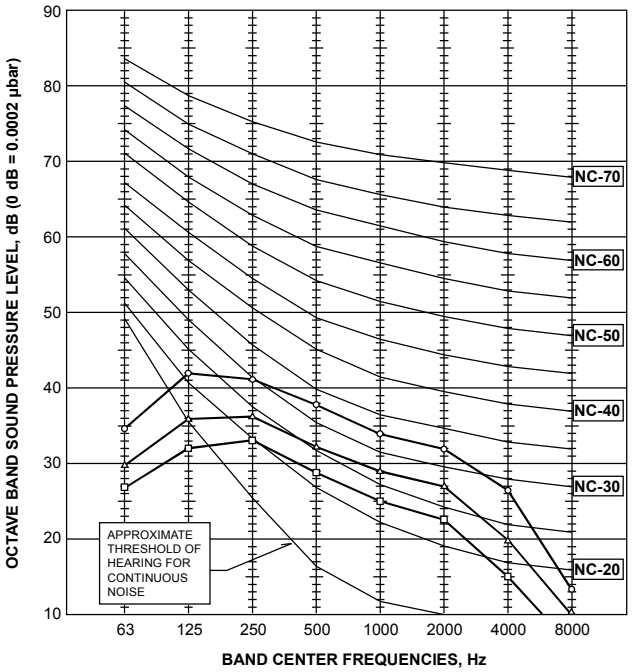
NOTCH	SPL(dB)	LINE
High	39	
Medium	40	
Low	30	

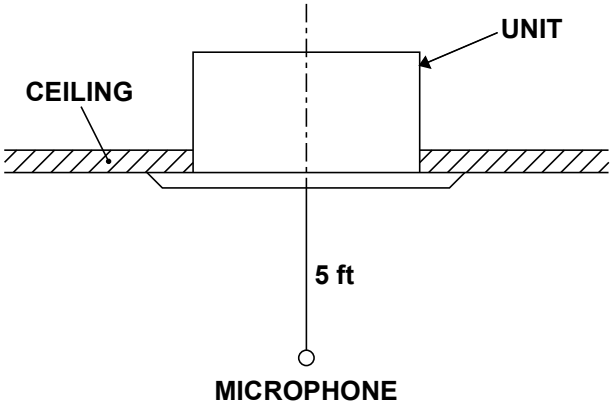


SLZ-KA15NA.TH

<60Hz>

NOTCH	SPL(dB)	LINE
High	40	
Medium	35	
Low	31	

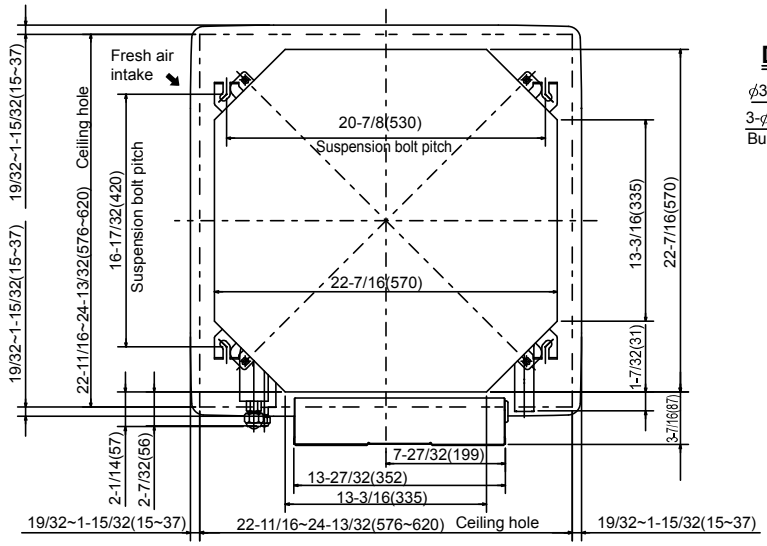




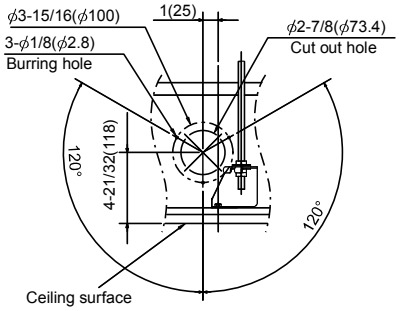
NOTE: The sound level is measured in an anechoic room where echoes are few, when compressor stops. The sound may be bigger than the indicated level in actual use due to surrounding echoes. The sound level can be higher by about 2 dB than the indicated level during cooling and heating operation.

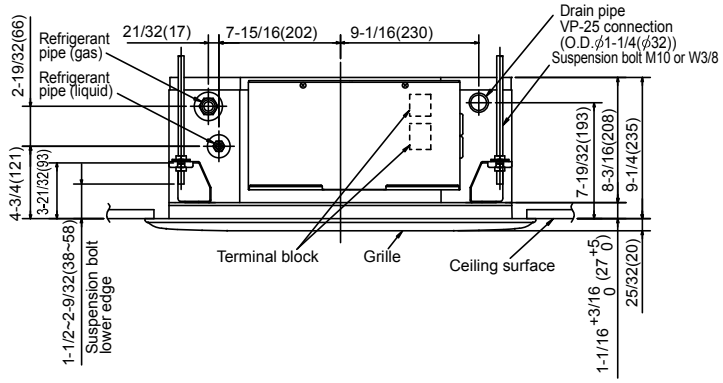
3 OUTLINES AND DIMENSIONS

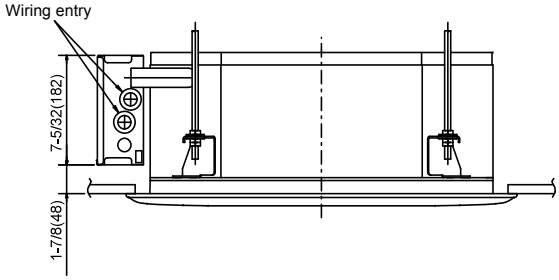
SLZ-KA09NA.TH SLZ-KA12NA.TH SLZ-KA15NA.TH **Unit : inch (mm)**

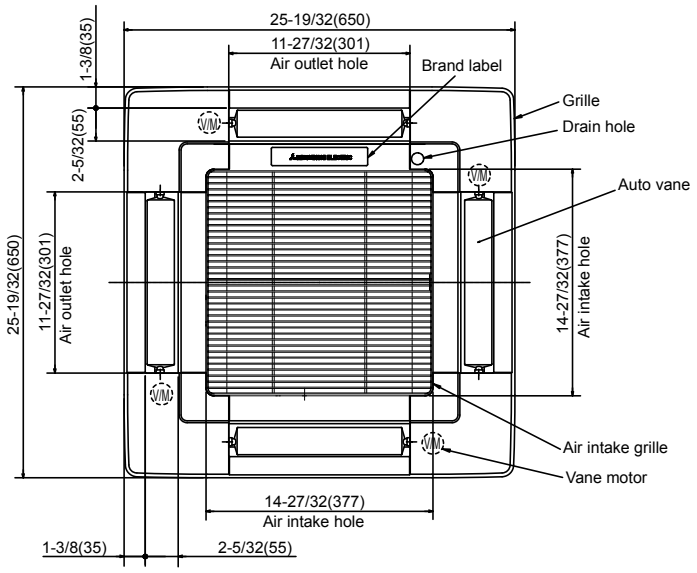


Detail drawing of fresh air intake





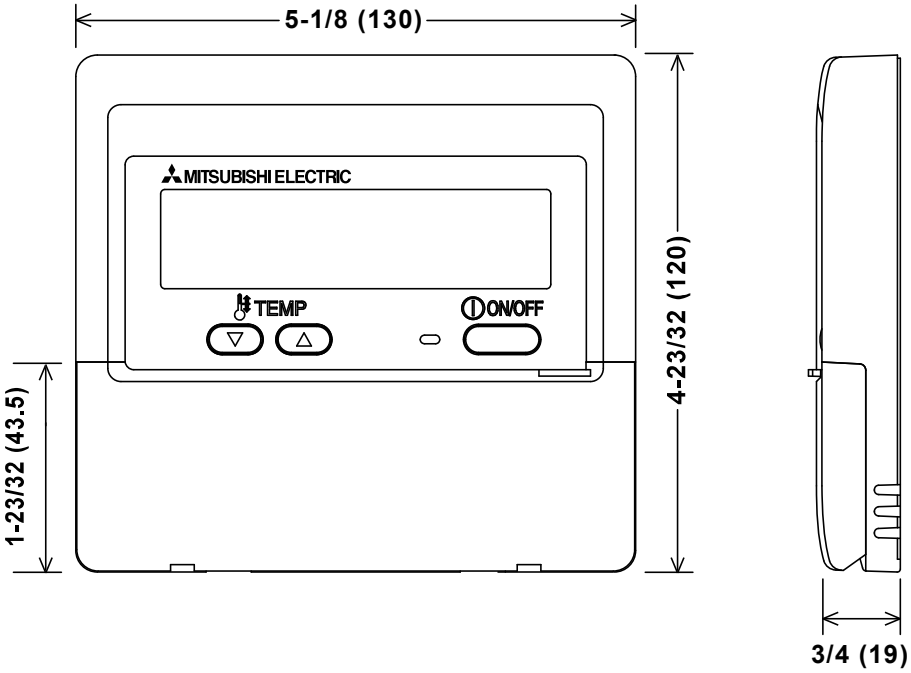


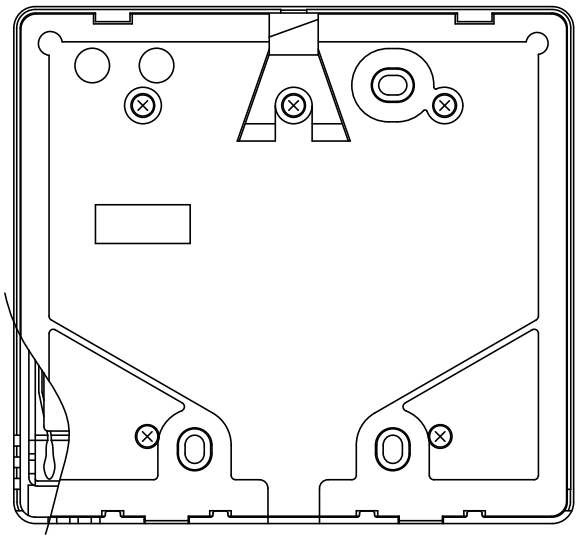


Models	Refrigerent pipe (liquid)	Refrigerent pipe (gas)
SLZ-KA09NA	1/4 inch (ϕ 6.35mm) flared connection	3/8 inch (ϕ 9.52mm) flared connection
SLZ-KA12NA	1/4 inch (ϕ 6.35mm) flared connection	3/8 inch (ϕ 9.52mm) flared connection
SLZ-KA15NA	1/4 inch (ϕ 6.35mm) flared connection	1/2 inch (ϕ 12.7mm) flared connection

WIRED REMOTE CONTROLLER (Option)

Unit : inch (mm)

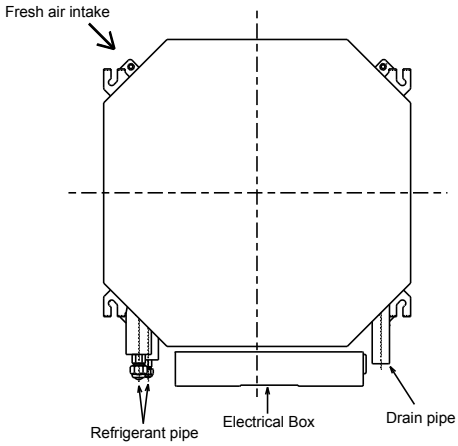




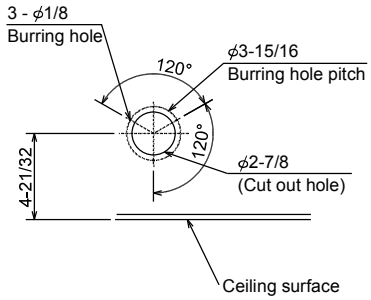
8 4-WAY AIR FLOW SYSTEM

8-1. FRESH AIR INTAKE (LOCATION FOR INSTALLATION)

At the time of installation, use the duct holes (cut out) located at the positions shown in following diagram, as and when required.



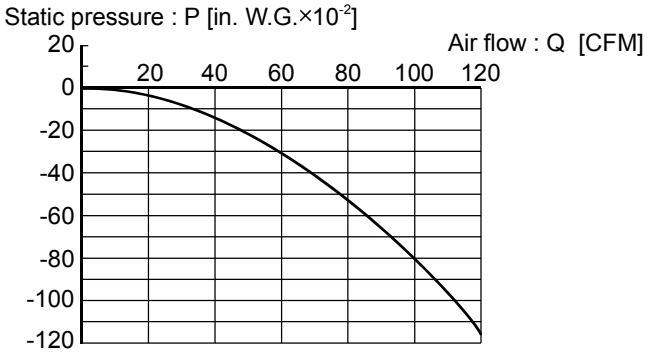
Fresh air intake hole diagram (Unit : inch)



8-2. FRESH AIR INTAKE AMOUNT & STATIC PRESSURE CHARACTERISTICS

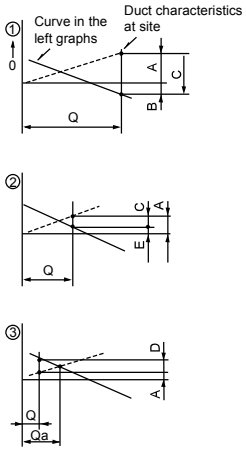
SLZ-KA09NA.TH SLZ-KA12NA.TH SLZ-KA15NA.TH

Taking air into the unit



NOTE: Fresh air intake amount should be 20% or less of whole air amount to prevent dew dripping.

How to read curves

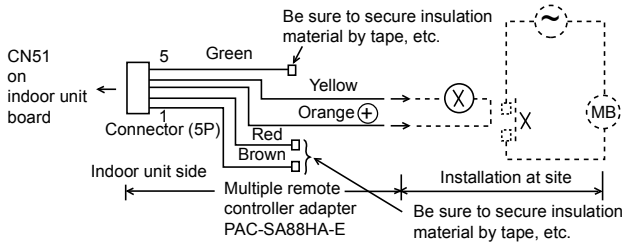


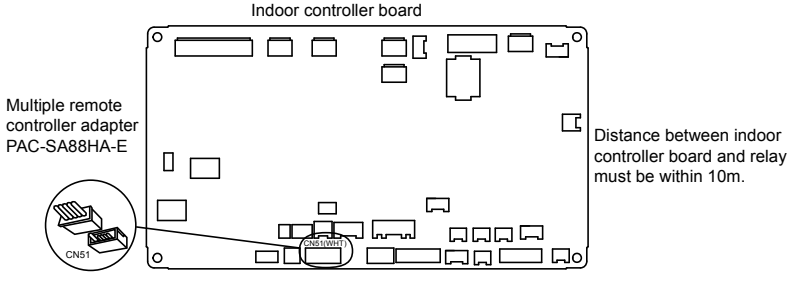
Q···Designed amount of fresh air intake <CFM>
A···Static pressure loss of fresh air intake duct system with air flow amount Q <in. W.G.×10-2>
B···Forced static pressure at air conditioner inlet with air flow amount Q <in. W.G.×10-2>
C···Static pressure of booster fan with air flow amount Q <in. W.G.×10-2>
D···Static pressure loss increase amount of fresh air intake duct system for air flow amount Q <in. W.G.×10-2>
E···Static pressure of indoor unit with air flow amount Q <in. W.G.×10-2>
Qa···Estimated amount of fresh air intake without D <CFM>

8-3. OPERATION IN CONJUNCTION WITH DUCT FAN (BOOSTER FAN)

- Whenever the indoor unit operates, the duct fan operates.
  (1)Connect the optional multiple remote controller adapter(PAC-SA88HA-E) to the connector CN51 on the indoor controller board.
  (2)Drive the relay after connecting the 12V DC relay between the Yellow and Orange connector wires.

Use a nonpolar relay of 1W or smaller.
MB: Electromagnetic switch power relay for duct fan.
X: Auxiliary relay (12V DC LY-1F)



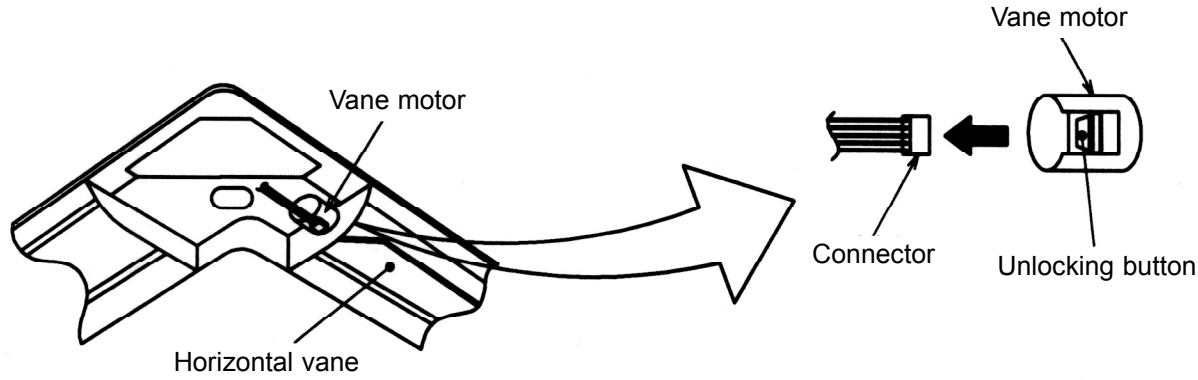


8-4. FIXING HORIZONTAL VANE

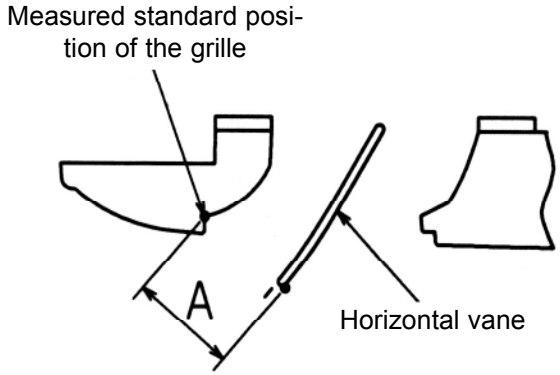
Horizontal vane of each air outlet can be fixed according to the environment where it is installed.

Setting procedure

1) Turn off a main power supply (Turn off a breaker).
2) Remove the vane motor connector in the direction of the arrow shown below with pressing the unlocking button as in the figure below.
   Insulate the disconnected connector with the plastic tape.



3) Set the vertical vane of the air outlet by hand slowly within the range in the table below.



< Specified range >

Up/down airflow direction	Horizontal 30°	Downward 45°	Downward 55°	Downward 70°
A	21 mm 13/16 inch	25 mm 31/32 inch	28 mm 1-3/32 inch	30 mm 1-3/16 inch

· The vanes can be set between 21mm, 13/16 inch and 30 mm, 1-3/16 inch.

⚠ **Caution:**
Do not set the up/down vanes passed the specified range. Condensation could form and drop from the ceiling, or the unit could malfunction.