INSTALLATION MANUAL

MODELS

Floor/Ceiling unit

SXV 007 SXV 009
SXV 012 SXV 015
SXV 018 SXV 021
SXV 024

SAFETY PRECAUTIONS

- Read the following "SAFETY PRECAUTIONS" carefully before installation.
- Carry out test running to confirm that no abnormality occurs after the installation. Then, explain to user the operation, care and maintenance as stated in instructions. Please remind the customer to keep the operating instructions for future reference.

⚠WARNING	This indication shows the possibility of causing death or serious injury.

⚠CAUTION	This indication shows the possibility of causing harm or damage the equipment.

⚠ WARNING

1) Use qualified installer and follow carefully this instructions. Otherwise it will cause electrical shock, water leakage, or esthetic problem.
2) Install at a strong and firm location which is able to withstand the set's weight. If the strength is not enough or installation is not properly done, the set will drop and cause injury.
3) For electrical work, follow the local national wiring standard, regulation and this installation instruction. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in electrical work, it will cause electrical shock or fire.
4) Use the specified cable and connect tightly for indoor connection. Connect tightly and clamp the cable so that no external force will be acted on the terminal. If connection or fixing is not perfect, it will cause heat-up or fire at the connection.
5) Wire routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will cause heat-up at connection point of terminal, fire or electrical shock.
6) When carrying out piping connection, take care not to let air substances other than the specified refrigerant go into refrigeration cycle. Otherwise, it will cause lower capacity, abnormal high pressure in the refrigeration cycle, explosion and injury.
7) Do not damage or use unspecified power supply cord. Otherwise, it will cause fire or electrical shock.
8) This equipment must be earthed. It may cause electrical shock if the grounding is not perfect.
9) Do not install the unit at place where leakage of flammable gas may occur. In case gas leaks and accumulates at surrounding of the unit, it may cause fire.

⚠ CAUTION

1) Selection of the installation location.
   Select a installation location which is rigid and strong enough to support or hold the unit, and select a location for easy maintenance.
2) Do not release refrigerant.
   Do not release refrigerant during piping work for installation, reinstallation and during repairing a refrigeration parts. Take care of the liquid refrigerant. it may cause frostbite.
3) It may need two people to carry out the installation work.
4) Do not install this appliance in a laundry room or other location where water may drip from the ceiling, etc.
5) Carry out drainage pipes as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture.

Required tools for installation works

1.Screw driver	4.Hexagonal wrench	7. Knife
2.Electric drill, hole core drill (60 mm)	5.Pipe cutter	8.Measuring tape
3.Spanner	6.Reamer	9.Torque wrench

Attached accessories

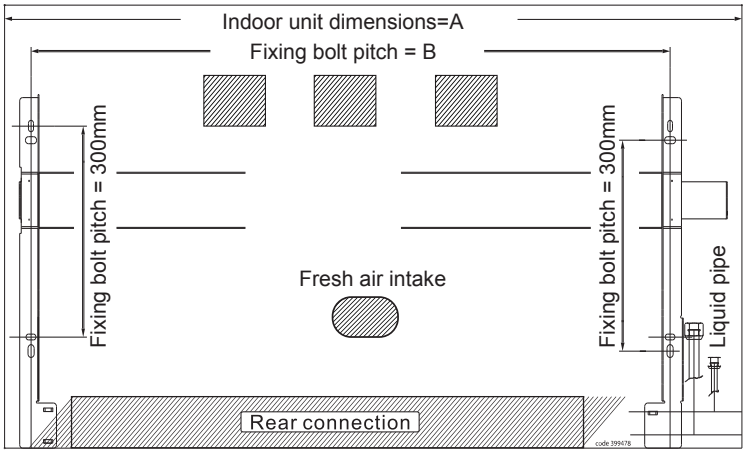
No .	Accessories parts	Qty.	No .	Accessories parts	Qty.	No .	Accessories parts	Qty.
1	Mounting plate 	1	2	Tube locating template 	1	3	Unit operation manual Installation manual 	2

1 SELECT THE BEST LOCATION

- ❑ There should not be any heat source or steam near the unit.
- ❑ There should not be any obstacles blocking the air circulation.
- ❑ A place where air circulation in the room is good.
- ❑ A place where drainage can be easily done.
- ❑ Do not install the unit near the door way.
- ❑ Recommended installation height for indoor unit shall be at least 2.3m(for ceiling unit).

2 INSTALLATION OF UNIT SUPPORT

- ❑ Install the wall support of the SXV using the installation template supplied with the unit. (Fig 1)
- ❑ The cut-outs for the unit are shown on this template.
- ❑ Reminder of MINIMUM clearances to be provided. (Fig 2)
- ❑ Coolant connections can be made on the LH side, on the RH side or at the rear. (Fig 3)
- ❑ Condensate evacuation possibilities: right, left, rear and front in the case of a ceiling mounted unit. (2 condensate outputs are available on the recovery tray).



Model SXV 007/009/012 A= 820mm B= 660mm
Model SXV 015/018/021/024 A= 1200mm B= 1040mm

Fig 1

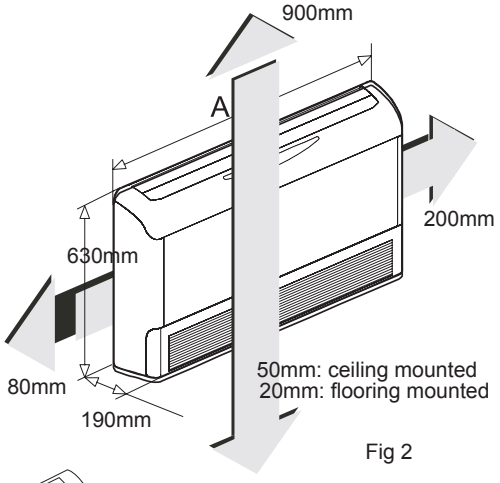


Fig 2

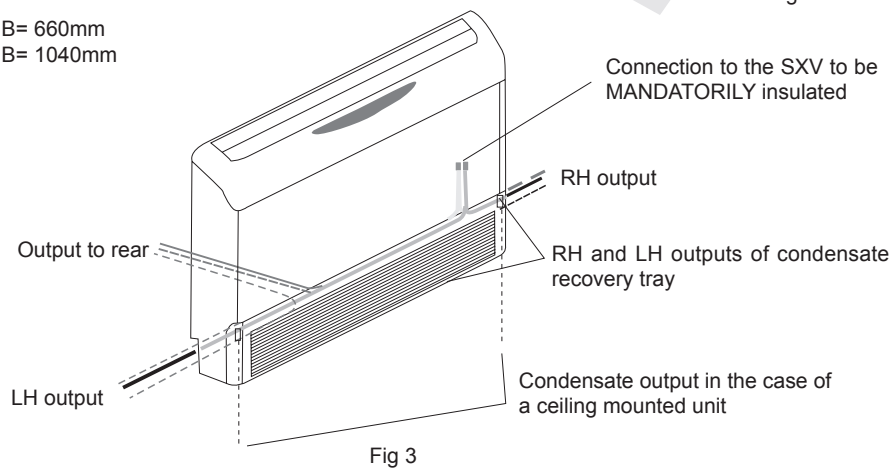
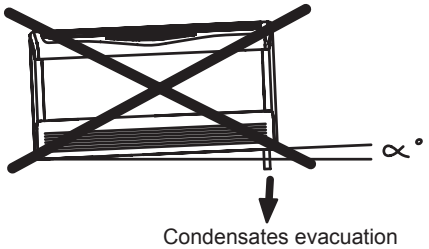


Fig 3

INSTALLATION

- ❑ Remove the wall support mounted the rear of your SXV.
- ❑ To install the wall support, locate the template in order to observe the correct distance between mounting holes marked on it.
- ❑ Secure the wall support with 4 screws (not supplied).

NOTE for flooring installation:
After determining the outlet for the condensate evacuation (LH, RH, rear),
take care to install with a positive slop for condensate drainage.



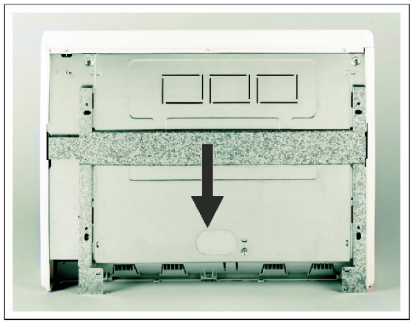
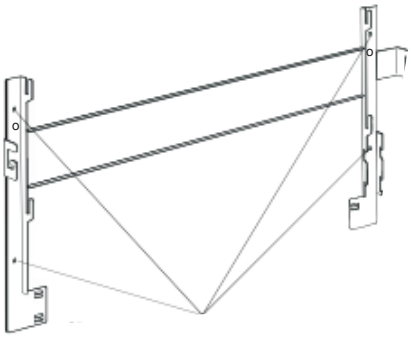
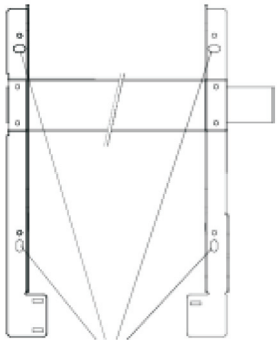


Fig 4



Mounting holes for wall installation

Fig 5



Location of threaded rods (Dia 8mm max) for ceiling installations.

Fig 6

3 PIPE SELECTION AND PRE-INSTALLATION

- ❑ The main advantage of your SXV products is to give the possibility of locating the coolant tubing on the wall support before installing the unit (using the template supplied).
- ❑ Place the tube locating template on the wall support. (Fig 7-1, Fig 7-2)
- ❑ After choosing your coolant tubing input location(right, left or rear), you can set up your tubing. To do this, use the installation template in order to form the tube correctly and thus facilitate connection.
- ❑ Locate the liquid pipe above the gas pipe.

Fig 7-1

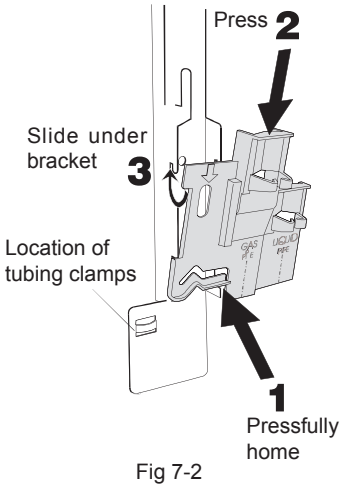


Fig 7-2

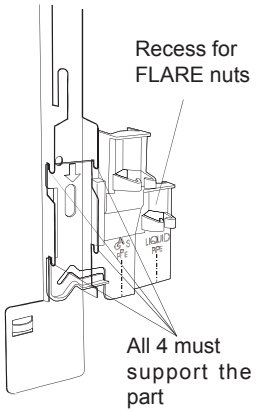


Fig 7-3

	Φ Liquid Pipe	Φ Gas Pipe
SXV 007	1/4"	1/2"
SXV 009	1/4"	1/2"
SXV 012	1/4"	1/2"
SXV 015	1/4"	1/2"
SXV 018	1/4"	1/2"
SXV 021	3/8"	5/8"
SXV 024	3/8"	5/8"

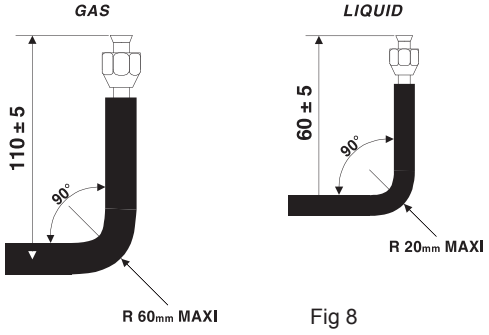
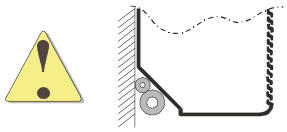
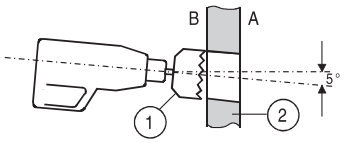


Fig 8

❑ Fit the nuts of the (for med) tubing into the recess provided on the template. (Fig 7-2)
❑ Secure the tubing with the clamps provided. (Fig 9)
❑ Remove the tubing template; you can now install your unit on its support.



NOTE
output from the rear
❑ The slanted hole prevents condensates or rain from entering the unit.
❑ Fit a Dia. 70 mm sleeve into the hole.



A	***Outside***
B	***Inside***
1	***Drill Dia. 70 mm***
2	***Wall***

Fig 10

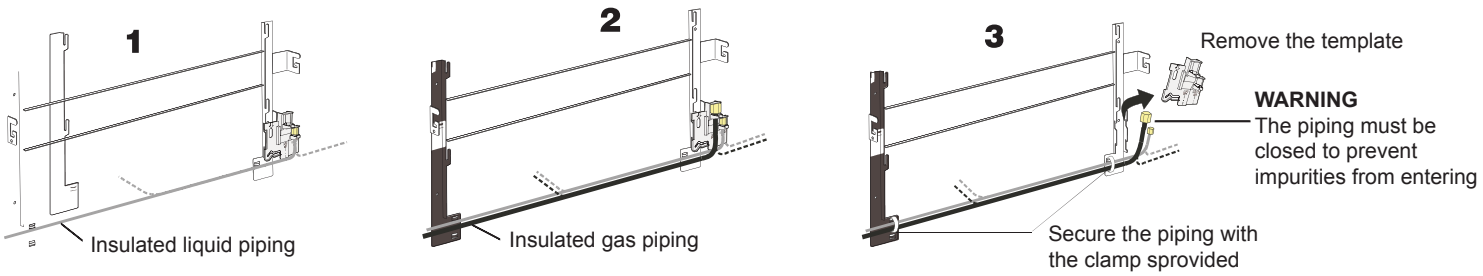


Fig 9

4 UNIT INSTALLATION

A Install the unit to wall support

FOR THE AIR INLET GRILL:

1 Pull the grill forwards.
2 Remove the two end screws.
3 Unscrew the central screw, but do not remove it completely.
4 Unhook the grid.

FOR THE SIDE PANELS:

5 Remove the side panels (downward movement).

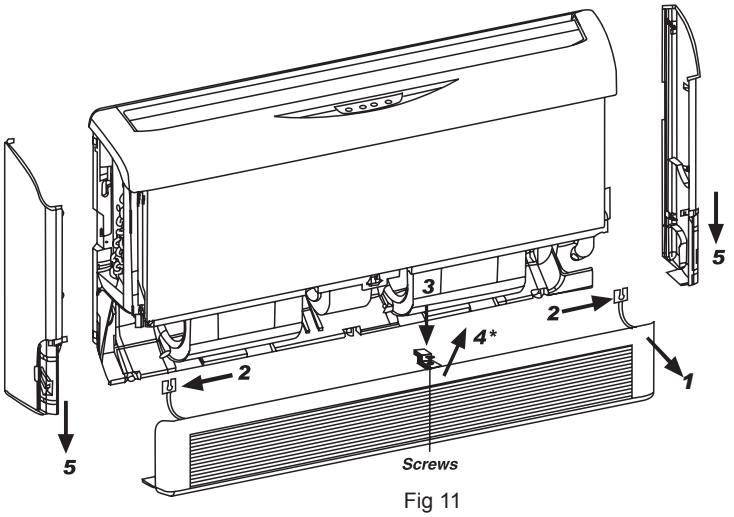


Fig 11

B Installation of the SXV on the wall support

- Refer to the diagram below, for installation of the SXV.
- Ceiling mounting (refer to the NOTE below).

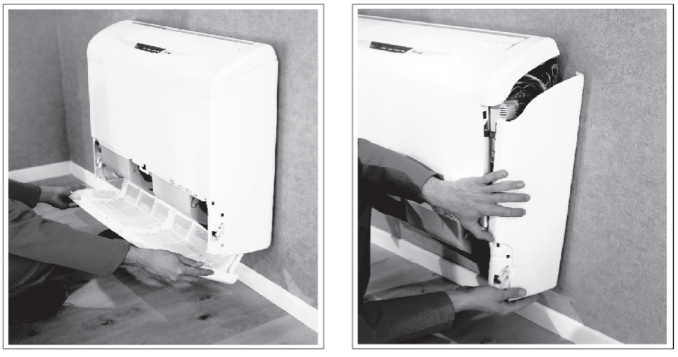


Fig 13

IMPERATIVE
- For ceiling mounting, install the two clamp screws (provided) for the unit on the support.

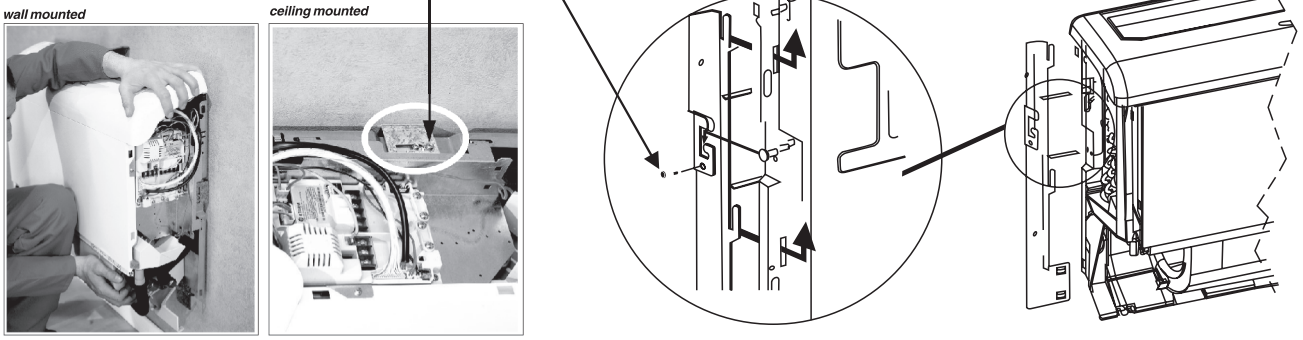


Fig 12

5 DRAINAGE PIPE CONNECTION

A Connect the drain pipe

- Water condensation must be evacuated directly to the outside; observe an appropriate slope for the evacuation duct, which should slopedownwards the case of a connection to the wastewater system (2.5 cm/m slope).
- An S-bend must be installed on the evacuation duct, below the level of the recovery tray of the unit.
- Provide insulation for the evacuation piping in the case of a risk of freezing or condensation.
- Evacuation with pump kit: (refer to instructions provided with kit).
  a.The unit is supplied with an evacuation piping.
  b.The right and left outlets are blocked off by a plug. Do not forget to remove this plug before connecting the evacuation piping.
- In the case of a ceiling mounted installation, run the evacuation piping down along the side panel and secure it with clamps as shown below. Also break the preformed cut-out in the coner of the intake grid.

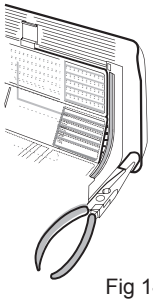


Fig 14

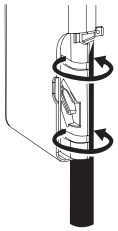


Fig 15

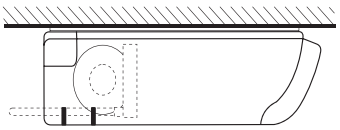


Fig 16

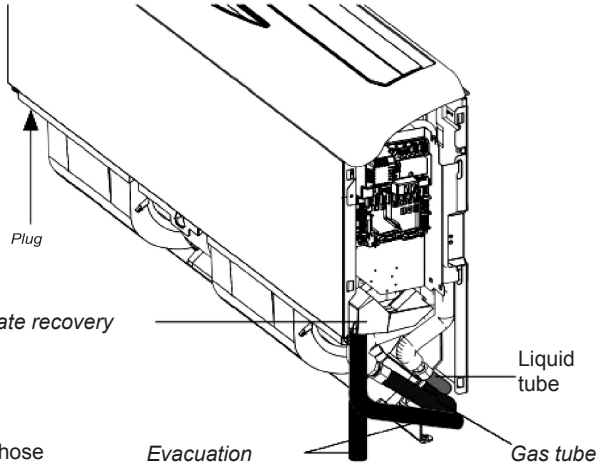


Fig 17

B Drainage test

Pour a glass of water into the drain tray-styrofoam,ensure that water flows out from drain hose of the indoor unit,a long of 1 min is allowed before discharging, according to the length of the drain pipe, and check whether water leaks from the joints.

CAUTIONS: If there is any malfunction, please resolve it immediately.

6 HEIGHT COMPENSATION SETTING

The compensation setting according to installation height can be done by using the dip switch 11 and 12 on controller PCB.

Installation Height	Height Code	DS11	DS12
2.3-2.7(m)	H0	OFF	OFF
2.7-3.1(m)	H1	OFF	ON
3.1-3.5(m)	H2	ON	OFF
>3.5(m)	H3	ON	ON

Note
1.Please disconnect the unit from power supply when change these settings.
2.If you feel too noisy, please set DS11 and DS12 to lower height code level.

7 ELECTRICAL WIRING CONNECTION

Power supply wiring

1.Unscrew and remove the electrical box cover.
2.Connect the power supply wirings to the power supply terminal block.
3.When doing this, press the power supply wirings cunder the wire clip.

Mainbus communication and R/C wiring

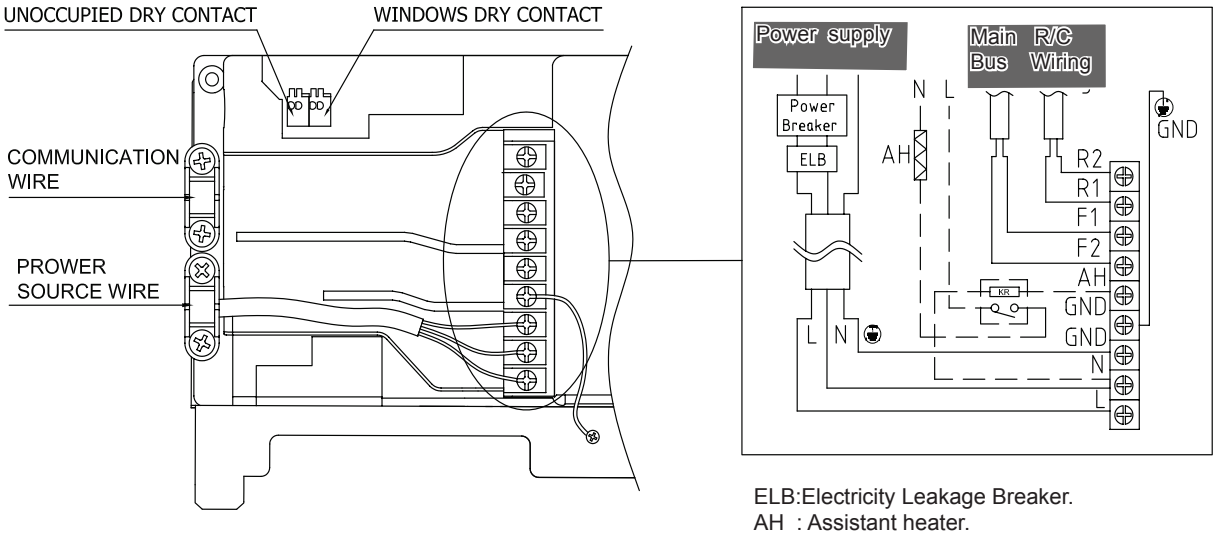
1.Unscrew and remove the electrical box cover.
2.Connect R/C wirings to R1,R2 terminal block and the mainbus wirings to F1,F2 terminal block.
3.Press the wirings under the wire clip tightly.

NOTE:
For how to cnnect the power wire and communication wire between outdoor unit and indoor units, please refer to chapter 9 “Field wiring” in outdoor unit installation manual.

Tightening torque for the terminal screws

Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened. If the terminal screws are tightened too hard, screws might be damage. Refer to the table right for the tightening torque of the terminal screws.

Terminal	Size	Tightening torque
Terminal block	M3.5	0.8~1.0N.m



ELB:Electricity Leakage Breaker.
AH : Assistant heater.

Electrical characteristics

Unit			Power supply		Fan motor	
Model	Hz	Volts	MCA	MFA	KW	FLA
SXV007	50	220~240	0.37	16	0.06	0.18
SXV009			0.37	16	0.06	0.18
SXV012			0.37	16	0.06	0.18
SXV015			0.68	16	0.13	0.41
SXV018			0.68	16	0.13	0.41
SXV021			0.68	16	0.13	0.41
SXV024			0.68	16	0.13	0.41

MCA : Min. Circuit Amps (A)
MFA : Max. Fuse Amps(A)
KW : Fan Motor Rated output(KW)
FLA : Full Load Amps(A)

Specifications for field supplied ELB and wire

Model	Power supply wiring		Remote controller wiring communication wiring	
	Field ELB	Wire and Size	Wire	Size
SXV007	16A	Must comply with maximum current and local codes(0.75mm^2)	Twisted-pair wires	1.0mm^2
SXV009				
SXV012				
SXV015				
SXV018				
SXV021				
SXV024				

NOTE:
For the piping and wiring methods,leakage test,vacuum process and installation setting through HMI, please refter to “Outdoor unit Installation Manual”.

NOTE:

- ❑ All field supplied parts and materials and electrics works must conform to local codes.
- ❑ Use copper wire only.
- ❑ All wiring must be performed by an authorized electrician.
- ❑ Every indoor unit must have a sub circle breaker and the whole system must have a main circle breaker.
- ❑ Be sure to ground the air conditioner.
- ❑ The appliance shall be installed in accordance with national wiring regulations ,and shall be provided to ensure all-pole disconnection from the supply mains, and distance between the poles shall be more than 3 mm .

CHECK ITEMS

BEFORE POWER ON

- ■ Is there any gas leakage at flare nut connections?
- ■ Has the heat insulation been carried out at flare nut connection?
- ■ Is the connecting cable being fixed to terminal board firmly?
- ■ Is the connecting cable being clamped firmly?
- ■ Is the drainage ok? (Refer to "Drainage test section)
- ■ Is the earth wire connection properly done?
- ■ Is the indoor unit properly hooked to the installation plate?
- ■ Is the power supply voltage complied with rated value?

AFTER POWER ON

- ■ Is there any abnormal sound?
- ■ Is the cooling operation normal?
- ■ Is the thermostat operation normal?
- ■ Is the remote control's LCD operation normal?