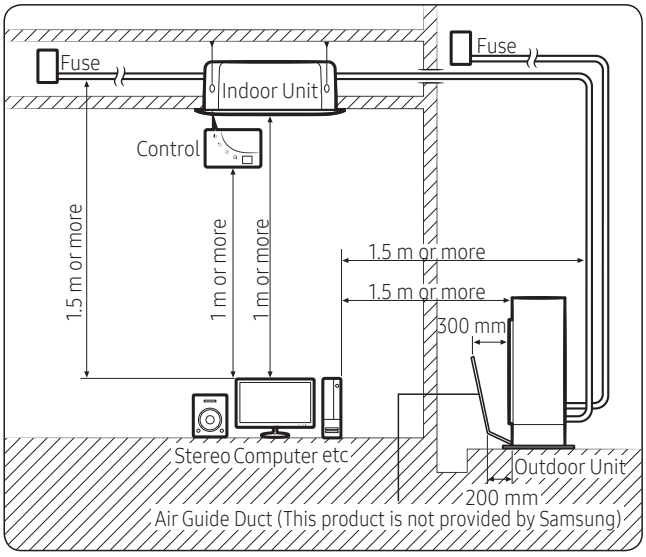
13. Installation

Choosing the installation location

Installation location requirements

- The outdoor unit shall be installed in an open space that is always ventilated.
- The local gas regulations shall be observed.
- For installation inside a building (this applies either to indoor or outdoor units installed inside) a minimum room floor area of space conditioned is mandatory according to IEC 60335-2-40:2018 (see the reference table into either the indoor or outdoor unit installation manual).
- To handle, purge, and dispose the refrigerant, or break into the refrigerant circuit, the worker should have a certificate from an industry-accredited authority.
- Do not install the indoor unit in the following areas:
  - Area filled with minerals, splashed oil, or steam. It will deteriorate plastic parts, causing failure or leakage.
  - Area that is close to heat sources.
  - Area that produces substances such as sulfuric gas, chlorine gas, acid, and alkali. It may cause corrosion of the pipings and brazed joints.
  - Area that can cause leakage of combustible gas and suspension of carbon fibers, flammable dust, or volatile flammables.
  - Area where refrigerant leaks and settles.
  - Area where animals may urinate on the product. Ammonia may be generated.
- Do not use the indoor unit for preservation of food items, plants, equipment, and art works. This may cause deterioration of their quality.
- Do not install the indoor unit if it has any drainage problem.
- Do not place the outdoor unit on its side or upside down. Failing to do so may cause the compressor lubrication oil to run into the cooling circuit and lead to a serious damage to the unit.
- Install the unit in a well-ventilated location away from direct sunlight or strong winds.
- Install the unit in a location that would not obstruct any passageways or thoroughfares.
- Install the unit in a location that would not inconvenience or disturb your neighbors, as they could be affected by the noise or the airflow coming from the unit.
- Install the unit in a location where the pipes and the cables can be easily connected to the indoor unit.
- Install the unit on a flat, stable surface that can withstand the weight of the unit. Otherwise, the unit can generate noise and vibration during operation.
- Install the unit so that the air flow is directed towards the open area.
- Maintain sufficient clearance around the outdoor unit, especially from a radio, computer, stereo system, etc.



- Install the unit at a height where its base can be firmly fixed in place.
- Make sure that the water dripping from the drain hose runs away correctly and safely.

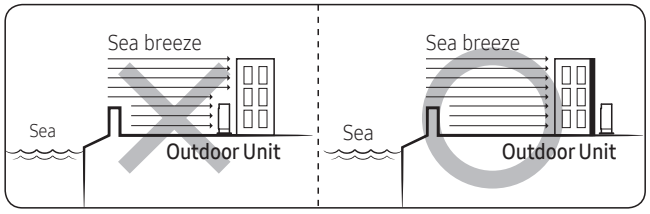
※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

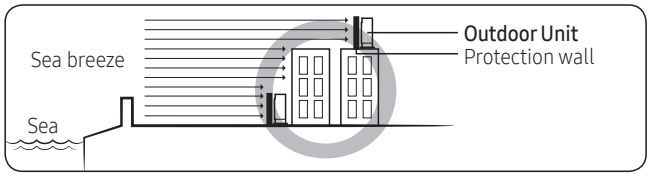
⚠ CAUTION

- You have just purchased a system air conditioner and it has been installed by your installation specialist.
- This device must be installed according to the national electrical rules.
- If your outdoor unit exceeds a net weight of 60 kg, do not install it on a suspended wall, but stand it on a floor.

  When installing the outdoor unit at the seaside, make sure that it is not directly exposed to sea breeze. If you cannot find an adequate place free from direct sea breeze, construct a protection wall or a protective fence.
  - Install the outdoor unit in a place (such as near buildings etc.) where it can be prevented from sea breeze. Failure to do so may cause a damage to the outdoor unit.



- If you cannot avoid installing the outdoor unit at the seaside, construct a protection wall around to block the sea breeze.
- Construct a protection wall with a solid material such as concrete to block the sea breeze. Make sure that the height and the width of the wall are 1.5 times larger than the size of the outdoor unit. Also, secure a space larger than 700 mm between the protection wall and the outdoor unit for exhausted air to ventilate.



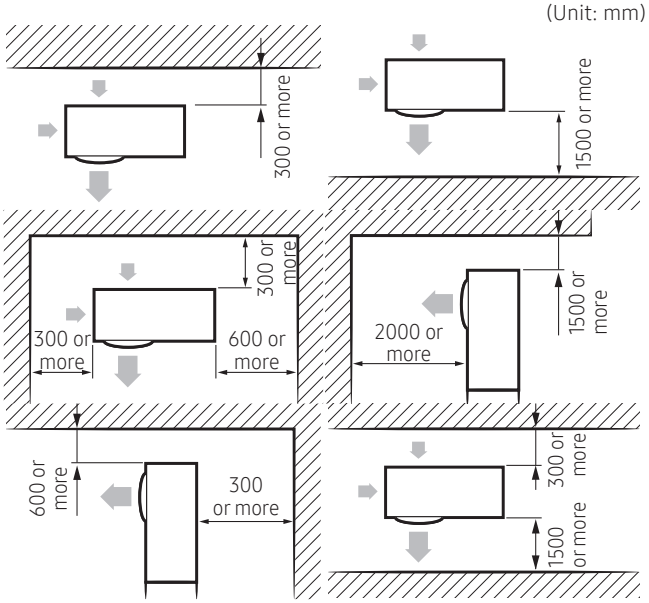
⚠ CAUTION

- Depending on the condition of power supply, unstable power or voltage may cause malfunction of the parts or control system. (At the ship or places using power supply from electric generator...etc)
- Install the unit in a place where water can drain smoothly.
- If you have any difficulty finding installation location as prescribed above, contact your manufacturer for details.
- Be sure to clean the sea water and the dust on the heat exchanger of the outdoor unit and apply a corrosion inhibitor on it. (At least once in a year.)

Minimum clearances for the outdoor unit

When installing 1 outdoor unit

(Unit: mm)

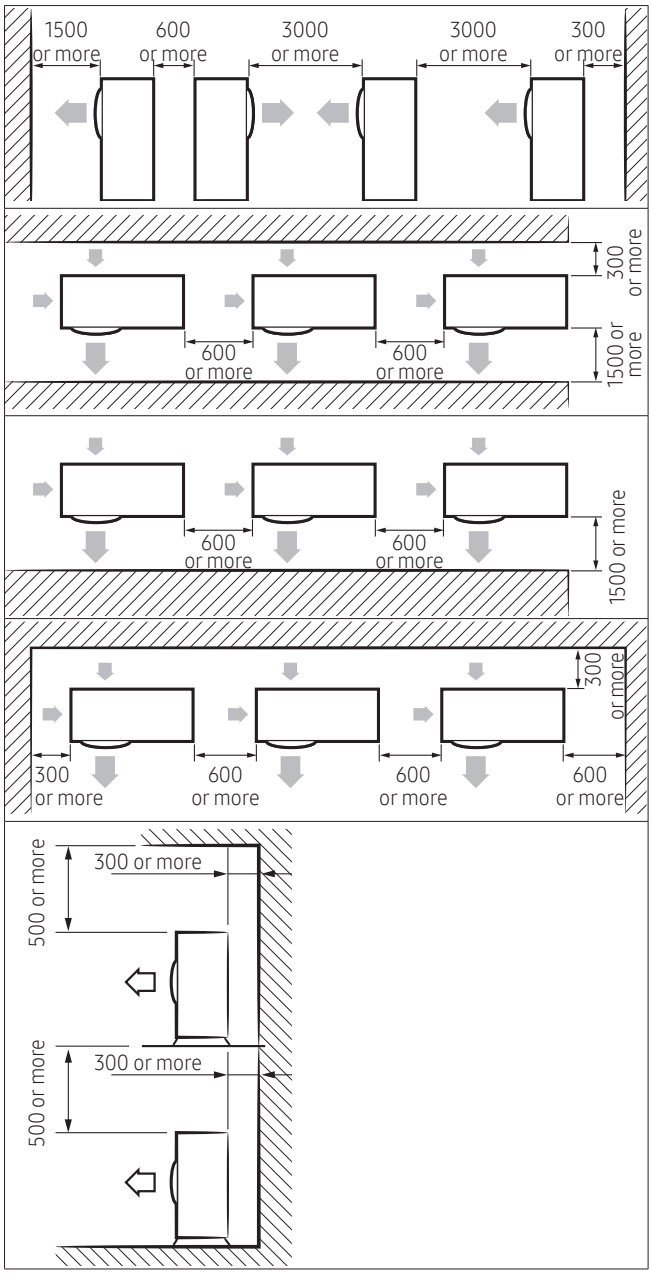


※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

When installing more than 1 outdoor unit

(Unit: mm)



⚠ CAUTION

- The outdoor unit must be installed according to the specified distances in order to permit accessibility from each side, to guarantee correct operation, maintenance, and repair of the unit.
  The components of the outdoor unit must be reachable and removable under safe conditions for people and the unit.

Fixing the outdoor unit in place

Install the outdoor unit on a rigid and stable base to prevent disturbance from any noise caused by vibration. When installing the unit at a height or in a location exposed to strong winds, fix the unit securely to a support (i.e., a wall or a ground).

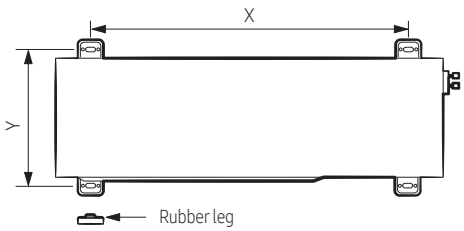
1 Position the outdoor unit so that the air flow is directed towards the outside, as indicated by the arrows on the top of the unit.

2 Attach the outdoor unit to the appropriate support using anchor bolts.
  - The earthing wire for the telephone line cannot be used to earth the air conditioner.

3 If the outdoor unit is exposed to strong winds, install shield plates around the outdoor unit, so that the fan can operate correctly.

NOTE

- Certainly fix up its rubber leg in order to prevent its vibration and noise.



(Unit : mm)

Model	X	Y
AJ040/050TXJ2KG	602	310
AJ052/068TXJ3KG AJ080TXJ4KG	660	340

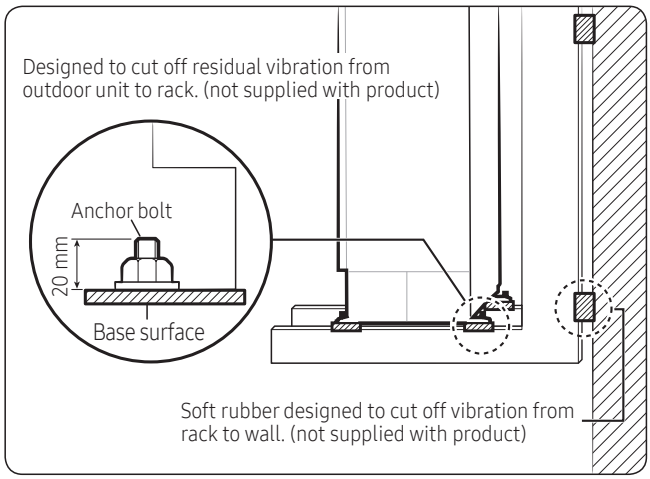
⚠ CAUTION

- Install a drain outlet at the lowest end around the base for outdoor unit drainage
- When installing the outdoor unit on the roof, waterproof the unit and check the ceiling strength.

※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

Optional: Fixing the outdoor unit to a wall with a rack



- Install a proper grommet in order to reduce noise and residual vibration transferred by the outdoor unit towards the wall.

⚠ CAUTION

- When installing an air guide duct, be sure to check the following:
  - The screws do not damage the copper pipe.
  - The air guide duct is fixed firmly on the guard fan.

Connecting the power cables, communication cable, and controllers

You must connect the following three electrical cables to the outdoor unit:

- The main power cable between the auxiliary circuit breaker and the outdoor unit.
- The outdoor-to-indoor power cable between the outdoor unit and the indoor unit.
- The communication cable between the outdoor unit and the indoor unit.

⚠ CAUTION

- During installation, make first the refrigerant connections and then the electrical connections. If the unit is uninstalled, first disconnect the electrical cables and then the refrigerant connections.
- Connect the air conditioner to the earthing system before making the electrical connections.

NOTE

- Especially, if your outdoor unit is the one designed for Russian and European markets, consult the supply authority, if necessary, to estimate and reduce the supply system impedance before installation.

⚠ CAUTION

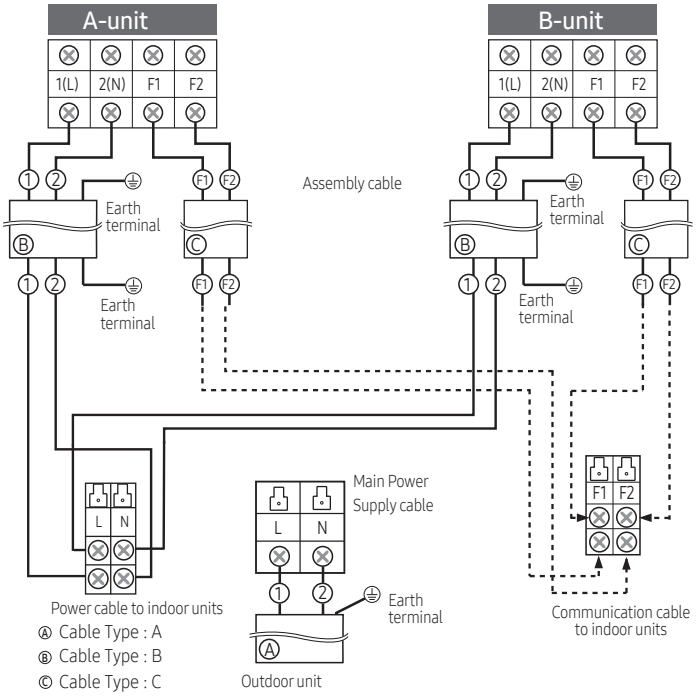
- For the product that uses the R-32 refrigerant, be cautious not to generate a spark by keeping the following requirements:
  - Do not remove the fuses with power on.
  - Do not disconnect the power plug from the wall outlet with power on.
  - It is recommended to locate the outlet in a high position. Place the cords so that they are not tangled.

※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

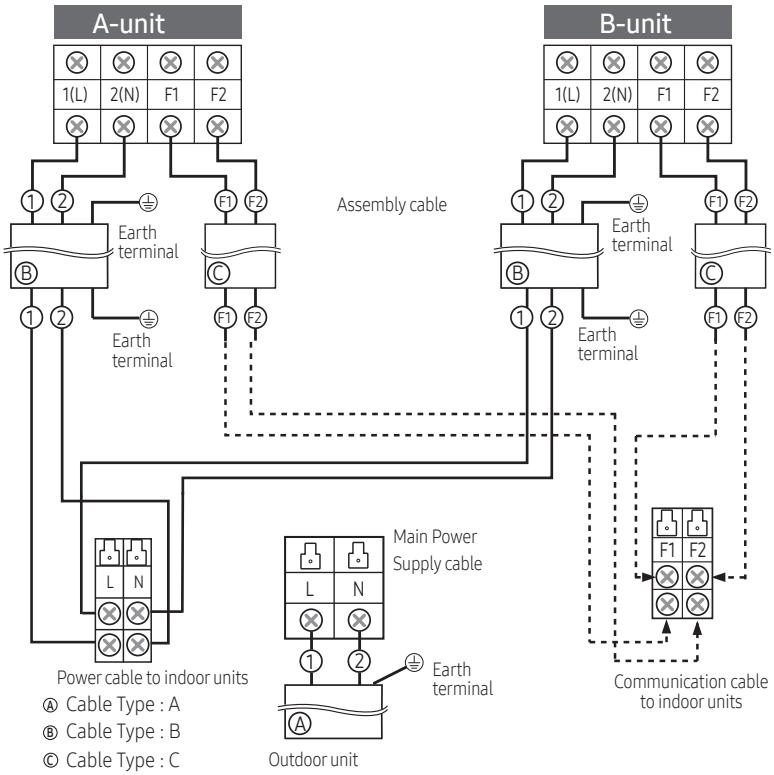
13. Installation

Conncting the cables to the outdoor unit

AJ040/050TXJ2KG



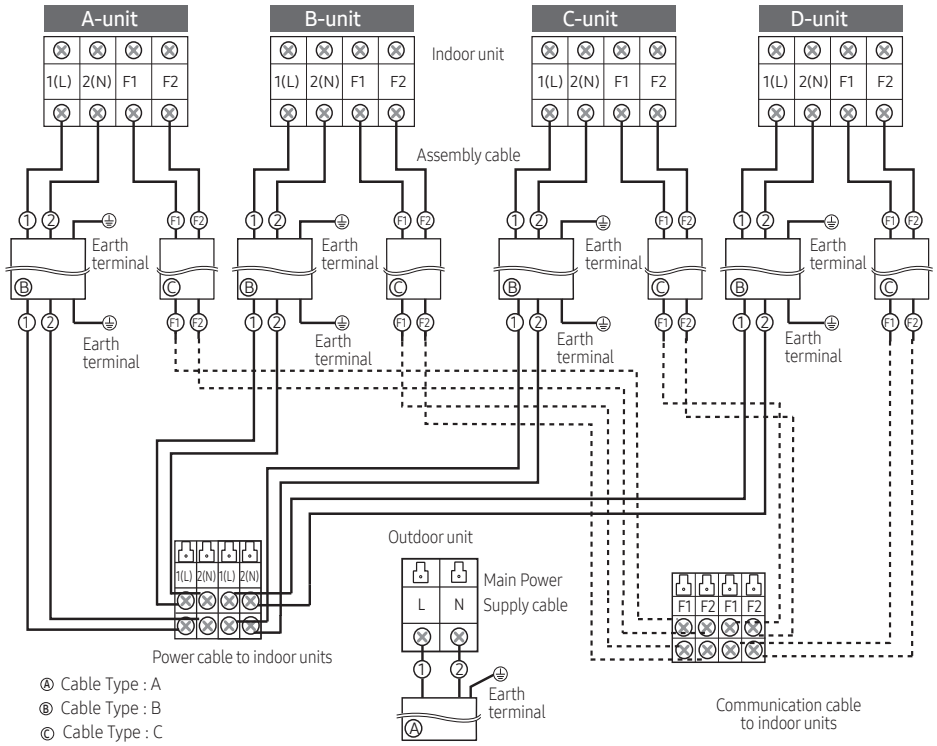
AJ052/068TXJ3KG



※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

AJ080TXJ4KG



Specification for circuit breaker and power supply cord

- Power supply cord is not supplied with air conditioner.
- Select the power supply cord in accordance with relevant local and national regulations.
- Wire size must comply with the applicable local and national code.
- Specifications for local wiring power supply cord and branch wiring are in compliance with local cord.

Model		Outdoor Units		Maximum Input Current[A]			Power Supply	
		Rated		Outdoor	Indoor(Max.)	Total	MCA	MFA
Outdoor Unit	Indoor Unit	Hz	Volts					
AJ040TXJ2KG	2 Room	50	1phase,220-240	8.5	0.8	9.3	9.30	10.63
AJ050TXJ2KG	2 Room	50	1phase,220-240	11.0	0.8	11.8	11.80	13.75
AJ052TXJ3KG	3 Room	50	1phase,220-240	11.0	1.2	12.2	12.20	13.75
AJ068TXJ3KG	3 Room	50	1phase,220-240	16.6	1.2	17.8	17.80	20.75
AJ080TXJ4KG	4 Room	50	1phase,220-240	16.6	1.6	18.2	18.20	20.75

NOTE

1. Power Supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F , IEC:60245 IEC 66 / CENELEC: H07RN-F)
2. Select power supply cord based on MCA.
3. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).
4. MCA represents maximum input current.
5. MFA represents capacity which may accept MCA.

Abbreviations

- MCA : Min. Circuit Amps. (A)
- MFA : Max. Fuse Amps. (A)

Screw	Tighten Torque(kgf.cm)	Position
M4	12.0~18.0	1(L),2(L),L,N,F1,F2

※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

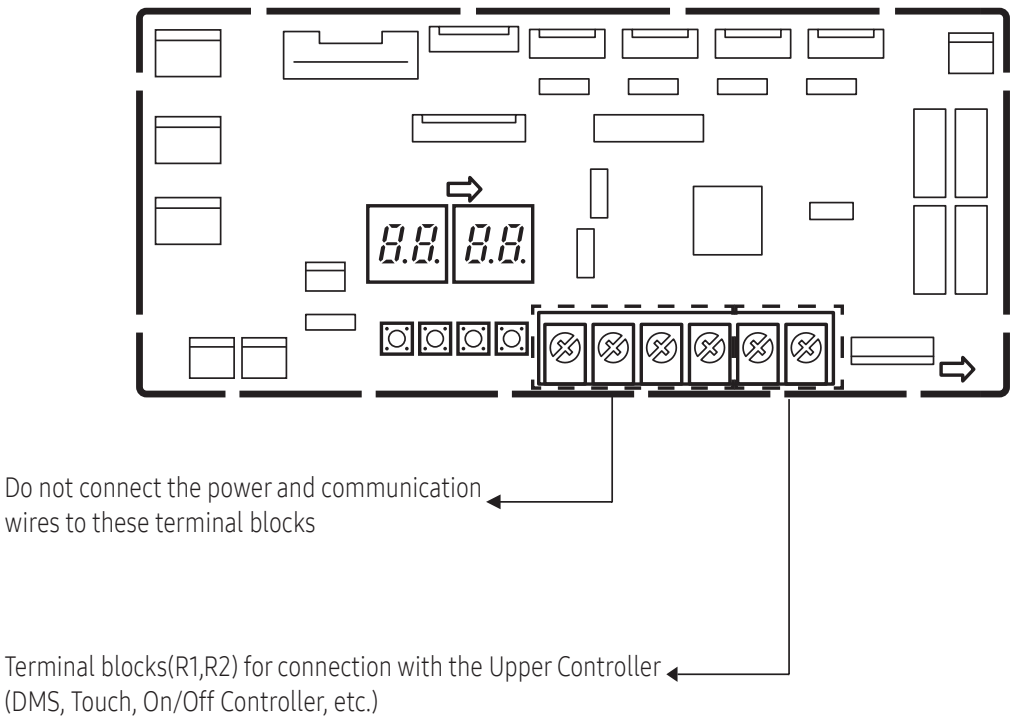
Tightening power terminal

- Connect the cables to the terminal board using the compressed ring terminal.
- Use rated cables only.
- Connect the cables with driver and wrench that can apply the rated torque to the screws.
- Make sure that appropriate tightening torque is applied for cable connection. If the terminal is loose, arc heat may occur and cause fire and if the terminal is connected too firmly, terminal may get damaged.

Transmitter installation(option)

- AJ040TXJ2KG/AJ050TXJ2KG/AJ052TXJ3KG/AJ068TXJ3KG/AJ080TXJ4KG

PCB MAIN - OUT



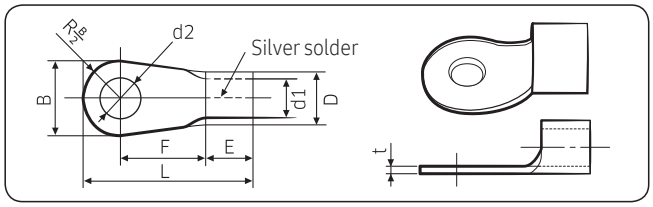
1. Turn the power off and take off the cover of the outdoor units.
2. Connect R1/R2 lines which are upper controller communication cables referring to upper figure . (Upper controller power should be off.)
3. Assemble a cover of the outdoor unit and turn the power on.
4. Check the communication status.
5. If you install a upper controller to the outdoor unit, every indoor unit which is connected to the outdoor unit can be controlled simultaneously.

※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

Outdoor-to-indoor power terminal specifications

- Connect the cables to the terminal board using the compressed ring terminal.
- Cover a solderless ring terminal and a connector part of the power cable and then connect it.



Norminal dimensions for cable (mm²)	Norminal dimensions for screw (mm)	B		D		d1		E	F	L	d2		t
		Standard dimension (mm)	Allowance (mm)	Standard dimension (mm)	Allowance (mm)	Standard dimension (mm)	Allowance (mm)	Min. (mm)	Min. (mm)	Max. (mm)	Standard dimension (mm)	Allowance (mm)	Min. (mm)
1.5	4	6.6	±0.2	3.4	+0.3 -0.2	1.7	±0.2	4.1	6	16	4.3	+0.2 0	0.7
	4	8											
2.5	4	6.6	±0.2	4.2	+0.3 -0.2	2.3	±0.2	6	6	17.5	4.3	+0.2 0	0.8
	4	8.5											
4	4	9.5	±0.2	5.6	+0.3 -0.2	3.4	±0.2	6	5	20	4.3	+ 0.2 0	0.9

- Connect the rated cables only.
- Connect using a driver which is able to apply the rated torque to the screws.
- If the terminal is loose, fire may occur caused by arc. If the terminal is connected too firmly, the terminal may be damaged.

Tightening torque (kgf • cm)	
M4	12.0 to 18.0
M5	20.0 to 30.0

- 1N · m = 10 kgf · cm

⚠ CAUTION

- When connecting cables, you can connect the cables to the electrical part or connect them through the holes below depending on the spot.
- Connect the communication cable between the indoor and outdoor units through a conduit to protect against external forces, and feed the conduit through the wall together with refrigerant piping.
- Remove all burrs at the edge of the knock-out hole and secure the cable to the outdoor knock-out using lining and bushing with an electrical insulation such as rubber and so on.
- Must keep the cable in a protection tube.
- Keep distances of 50mm or more between power cable and communication cable.
- When the cables are connected through the hole, remove the Plate bottom.

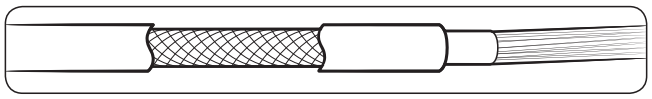
※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

Outdoor-to-indoor power and communication cables specifications

Indoor power supply		
Power supply	Max/Min (V)	Indoor power cable
1Φ, 220-240V, 50 Hz	±10%	1.5 mm² ↑, 3 wires
Communication cable		
0.75 to 1.5 mm², 2 wires		

- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F or IEC:60245 IEC 66 / CENELEC: H07RN-F)
- When installing the indoor unit in a computer room or net work room, server room or in the presence of risk of disturbance to the communication cable, use the double shielded (tape aluminium / polyester braid + copper) cable of FROHH2R type.

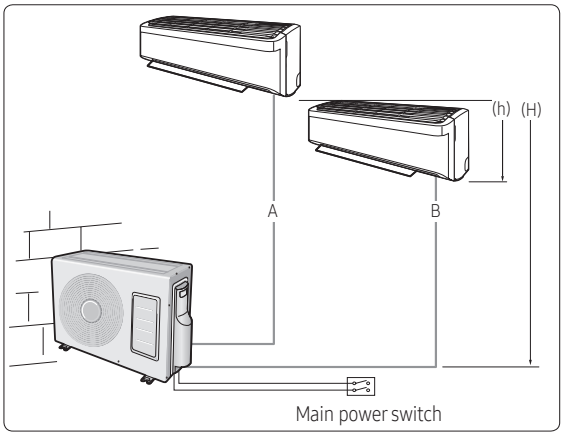


Connecting the refrigerant pipe

◆ **AJ040/050TXJ2KG**

1 Piping outside diameter

Indoor unit	Out unit	Power supply Ø, V, Hz	Outside diameter	
			Liquid	Gas
AR07/09/12********, AJ026/035TN*D*G	AJ040TXJ2KG	1,220-240, 50	1/4"	3/8"
AR07/09/12********, AJ016/020/026 /035TN*D*G	AJ050TXJ2KG	1,220-240, 50	1/4"	3/8"
AR18********, AJ052TNJDKG				1/2"

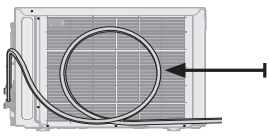


NOTE

- This product requires no additional refrigerant charge up to the maximum allowable pipe length.

Maximum allowable refrigerant charge amount	
AJ040TXJ2KG/EU	980 g
AJ050TXJ2KG/EU	1180 g

- AJ040TXJ2KG Outdoor unit cannot be connected to the following indoor unit combination.
  - AJ0**TNNDKG/AJ0**TNLDEG



2 Piping outside diameter

	1 Room max length	2 Room total max length	Max height between indoor unit & outdoor unit	Max height between indoor units
Dimension	20m	30m	15m	7.5m
Composition	A,B	A+B	(H)	(h)

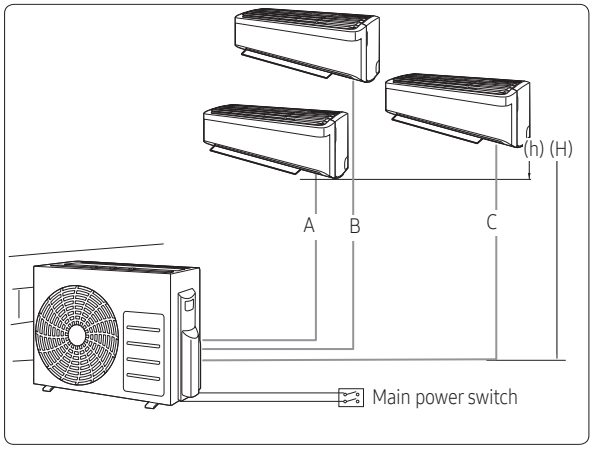
※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

◆ AJ052/068TXJ3KG

1 Piping outside diameter

Indoor unit	Out unit	Power supply Ø, V, Hz	Outside diameter	
			Liquid	Gas
AR07/09/12********, AJ016/020/026 /035TN*D*G	AJ052TXJ3KG AJ068TXJ3KG	1,220-240, 50	1/4"	3/8"
AR18********, AJ052TN*D*G				1/2"

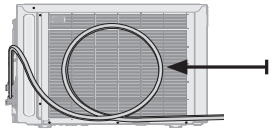


NOTE

- AJ052TXJ3KG Outdoor unit cannot be connected to the following indoor unit combination.
  - AJ052TNNDKG/AJ052TNMDEG
- AJ068TXJ3KG Outdoor unit cannot be connected to the following indoor unit combination.
  - AJ***TNJDKG

2 Piping outside diameter

	1 Room max length	3 Room total max length	Max height between indoor unit & outdoor unit	Max height between indoor units
Dimension	25m	50m	15m	7.5m
Composition	A,B,C	A+B+C	(H)	(h)

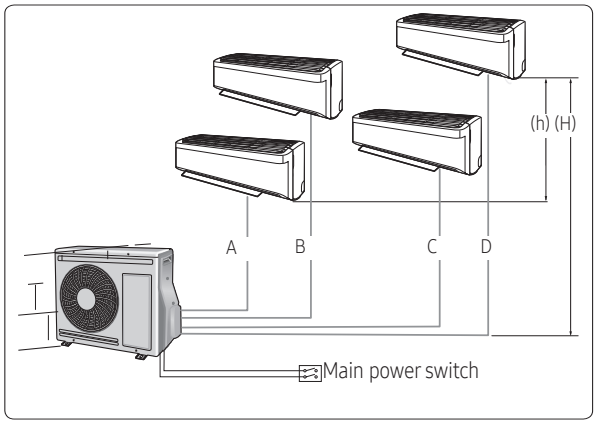


Make at least one round:
It will reduce noise and vibration

◆ AJ080TXJ4KG

1 Piping outside diameter

Indoor unit	Out unit	Power supply Ø, V, Hz	Outside diameter	
			Liquid	Gas
AR07/09/12********, AJ016/020/026 /035TN*D*G	AJ080TXJ4KG	1,220-240, 50	1/4"	3/8"
AR18********, AJ052TN*D*G				1/2"
AR24********				5/8"

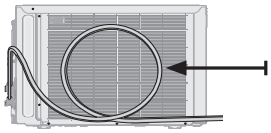


NOTE

- AJ080TXJ4KG Outdoor unit cannot be connected to the following indoor unit combination.
  - AJ***TNJDKG

2 Piping length and the height

	1 Room max length	4 Room total max length	Max height between indoor unit & outdoor unit	Max height between indoor units
Dimension	25m	70m	15m	7.5m
Composition	A,B,C,D	A+B+C+D	(H)	(h)



Make at least one round:
It will reduce noise and vibration

※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

- Because your air conditioner contains R-32 refrigerant, make sure that it is installed, operated, and stored it in a room whose floor area is larger than the minimum required floor area specified in the following table:

Minimum required room area (A,m²)			
m (kg)	Ceiling-mounted	Wall-mounted	Floor-standing
≤ 1.842	No requirement		
1.843	3.64	4.45	28.9
1.9	3.75	4.58	30.7
2.0	3.95	4.83	34.0
2.2	4.34	5.31	41.2
2.4	4.74	5.79	49.0
2.6	5.13	6.39	57.5
2.8	5.53	7.41	66.7
3.0	5.92	8.51	76.6
3.2	6.48	9.68	87.2
3.4	7.32	10.9	98.4
3.6	8.20	12.3	110
3.8	9.14	13.7	123
4.0	10.1	15.1	136
4.2	11.2	16.7	150
4.4	12.3	18.3	165
4.6	13.4	20.0	180
4.8	14.6	21.8	196
5.0	15.8	23.6	213

  - m : Total refrigerant charge in the system
  - A : Minimum required floor area
- IMPORTANT: it's mandatory to consider either the table above or taking into consideration the local law regarding the minimum living space of the premises.
- Minimum installation height of indoor unit is 0.6 m for floor mounted, 1.8 m for wall, 2.2 m for ceiling.

⚠ CAUTION

- 3 m as minimum pipe length: It will reduce noise and vibration.
- Tighten the nuts to the specified torques. If overtightened, the nuts could be broken so refrigerant may leak.
- Protect or enclose refrigerant tubing to avoid mechanical damage.

NOTE

- The appearance of the unit may be different from the diagram depending on the model.
- You can use the Cool and Heat modes in the following conditions :

Model	Cool	Heat
Outdoor temperature	-10 °C to 46 °C	-15 °C to 24 °C

  - It could take maximum 60 minutes to operate for the protection of the compressor,if the outdoor temperature is below -5°C.

Connecting up and removing air in the circuit

⚠ WARNING

- When installing, make sure there is no leakage. When recovering the refrigerant, ground the compressor first before removing the connection pipe. If the refrigerant pipe is not properly connected and the compressor works with the service valve open, the pipe inhales the air and it makes the pressure inside of the refrigerant cycle abnormally high. It may cause explosion and injury.

The outdoor unit is loaded with sufficient R-32 refrigerant.Do not vent R-32 into atmosphere: it is a fluorinated greenhouse gas, covered by Kyoto Protocol, with a Global Warming Potential (GWP) = 675.
You should purge the air in the indoor unit and in the pipe. If air remains in the refrigerant pipes, it affects the compressor. It may cause reduction of cooling capacity and malfunction. Refrigerant for air purging is not charged in the outdoor unit. Use Vacuum Pump as seen in the picture.

※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

1 Check the piping connections.

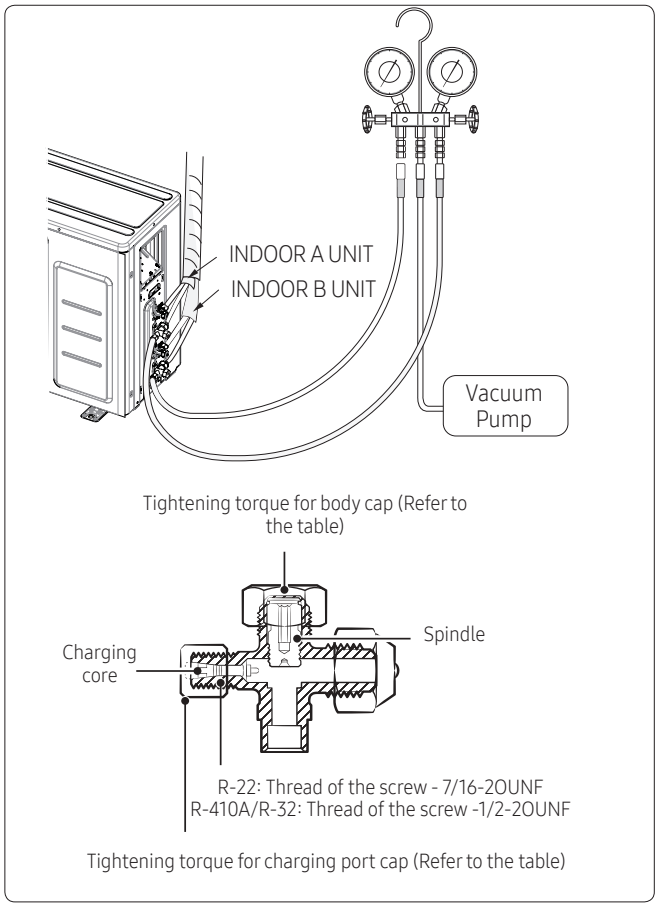
2 Connect the charging hose of low pressure side of manifold gauge to the packed valve having a service port .

Model Name	Valve	
	3/8''	1/2''
AJ040TXJ2KG AJ050TXJ2KG	2	-
AJ052TXJ3KG	2	1
AJ068TXJ3KG	1	2
AJ080TXJ4KG	2	2

- If the valve diameter of indoor and outdoor unit are different, please use Tube-connector.

⚠ CAUTION

- Make the electrical connection and leave the system into “stand by mode”. Do not turn on the system! This is necessary for better vacuum operation (full OPEN position of Electronic Expansion Valve - EEV -).



3 Open the valve of the low pressure side of manifold gauge counter clockwise.

4 Purge the air from the system using vacuum pump for about 30 minutes.

- Close the valve of the low pressure side of manifold gauge clockwise.
- Make sure that pressure gauge show -0.1MPa(-76cmHg) after about 1 hour. This procedure is very important in order to avoid gas leak.
- Turn off the vacuum pump.
- Remove the hose of the low pressure side of manifold gauge.

5 Set spindle of both liquid side and gas side of stop valve to the open position.

6 Mount the valve stem nuts and the service port cap to the valve, and tighten them with a torque wrench.

Outer diameter (mm)	Tightening torque	
	Body cap (N•m)	Charging port cap (N•m)
ø 6.35	20 to 25	10 to 12
ø 9.52	20 to 25	
ø 12.70	25 to 30	
ø 15.88	30 to 35	

Adding refrigerant (R-32)

Precautions on adding the R-32 refrigerant

In addition to the conventional charging procedure,. the following requirements shall be kept.

- Make sure that contamination by other refrigerants does not occur for charging.
- To minimize the amount of refrigerant, keep the hoses and lines as short as possible.
- The cylinders shall be kept upright.
- Make sure that the refrigeration system is earthed before charging.
- Label the system after charging, if necessary.
- Extreme care is required not to overcharge the system.
- Before recharging, the pressure shall be checked with nitrogen blowing.
- After charging, check for leakage before commissioning.
- Be sure to check for leakage before leaving the work area.

※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

Important information regulation regarding the refrigerant used

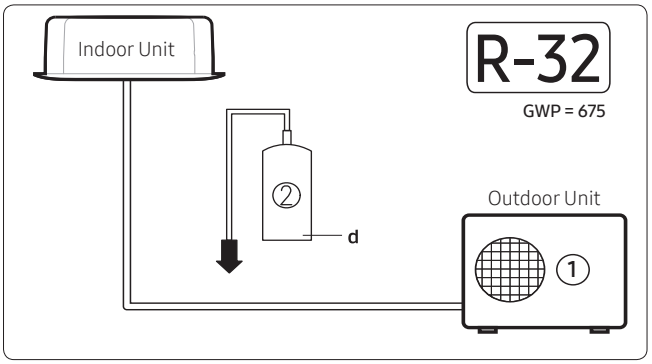
This product contains fluorinated greenhouse gases. Do not vent gases into the atmosphere.

⚠ CAUTION

- Inform user if system contains 5 tCO_2e or more of fluorinated greenhouse gases. In this case, it has to be checked for leakage at least once every 12 months, according to regulation n°517/2014. This activity has to be covered by qualified personnel only.
- In case situation above (5 tCO_2e or more of R-32), installer (or recognized person which has responsibility for final check) has to provide a maintenance book, with all the information recorded according to REGULATION (EU) No 517/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on fluorinated greenhouse gases.

Please fill in the following with indelible ink on the refrigerant charge label supplied with this product and on this manual.

- ①: The factory refrigerant charge of the product.
- ②: The additional refrigerant amount charged in the field.
- ① + ②: The total refrigerant charge.



Unit	kg	tCO_2e
①, a		
②, b		
① + ②, c		

Refrigerant type	GWP value
R-32	675

- GWP: Global Warming Potential
- Calculating tCO_2e : kg x GWP / 1000

NOTE

a Factory refrigerant charge of the product: see unit name plate
b Additional refrigerant amount charged in the field(Refer to the above information for the quantity of refrigerant replenishment.)
c Total refrigerant charge
d Refrigerant cylinder and manifold for charging

LEAK TEST WITH NITROGEN (before opening valves)

In order to detect basic refrigerant leaks, before recreating the vacuum and recirculating the R-32, it is the responsibility of the installer to pressurize the whole system with nitrogen (using a cylinder with pressure reducer) at a pressure above 4 MPa (gauge).

LEAK TEST WITH R-32 (after opening valves)

Before opening valves, discharge all the nitrogen into the system and create vacuum. After opening valves check leaks using a leak detector for refrigerant R-32. Once you have completed all the connections, check for possible leaks using leak detector specifically designed for HFC refrigerants.

※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.

13. Installation

Calculating the quantity of refrigerant to add

The quantity of additional refrigerant is variable according to the installation situation. Thus, make sure the outdoor unit situation before adding refrigerant.
If you install the excessive length of pipe, add additional refrigerant as 10g or 20g per unit meter ; refer to the table below. Refer to the Service Manual for more details on this operation.

Model	Total connecting pipe length (L)	Adding refrigerant
AJ040TXJ2KG AJ050TXJ2KG	LT≤30m	**Chargeless**
AJ052TXJ3KG AJ068TXJ3KG	LT≤30m	**Chargeless**
	LT≥30m	**(LT-30m)x10g**
AJ080TXJ4KG	LT≤30m	**Chargeless**
	LT≥30m	**(LT-30m)x20g**

⚠ CAUTION

- The filled-out label must be adhered in the proximity of the product charging port (e.g. onto the inside of the stop valve cover).
- Make sure that the total refrigerant charge does not exceed (**A**), the maximum refrigerant charge, which is calculated in the following formula: Maximum refrigerant charge (**A**)= factory refrigerant charge (**B**) + maximum additional refrigerant charge due to piping extension (**C**).
- Here below, the summary table with refrigerant charge limits for each products.

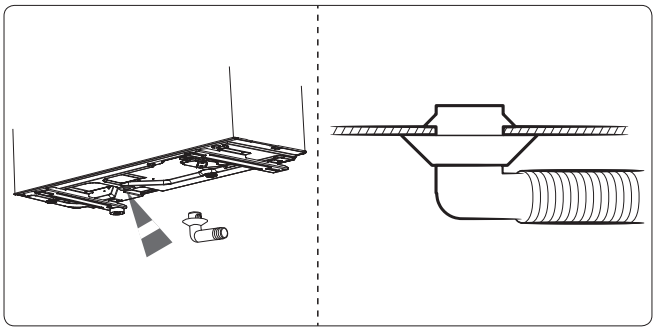
(Unit:g)

Model	A	B	C
AJ040TXJ2KG/EU	980	980	0
AJ050TXJ2KG/EU	1180	1180	0
AJ052TXJ3KG/EU	1750	1550	200
AJ068TXJ3KG/EU	2200	2000	200
AJ080TXJ4KG/EU	2800	2000	800

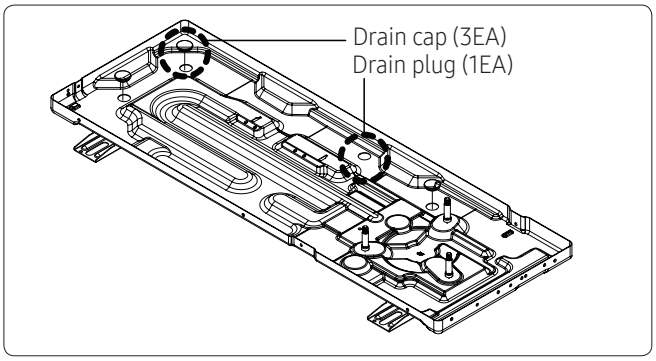
Connecting the drain hose to the outdoor unit

When heating, ice may accumulate. During the process of defrosting, check if condensation draining is adequate.
For adequate draining, do the following :

1 Insert the drain plug into the drain hole on the underside of the outdoor unit.
2 Connect the drain hose to the drain plug.
3 Ensure that condensation draining is adequate.



4 Be sure to plug the rest of drain holes not connected with drain plugs using drain caps.



- When installing the product, make sure that the rack is not placed under the drain hole.
- If the product is installed in a region of heavy snow, allow enough separation distance between the product and the ground.

※ In case you want more information about the controllers and accessories, please refer to the Controller and Accessory TDB on pvi.Samsung.com site or Global Partner Portal site.