

BAXI



en	BAXI ASTRA: DC inverter air conditioner with heat pump mode.
	<i>Installation and Support Manual</i>
	JSGNW 25/35/50/70
	LSGT 25-S/35-S/50-S/70-S

CE

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The appliance can be used by children aged 8 or over and by people with reduced physical, sensory or mental faculties, or who do not have the required experience or knowledge, provided they are supervised or have received instructions on using the appliance safely and understanding its intrinsic hazards. Children must not play with the appliance. The cleaning and maintenance operations reserved to the user must not be performed by unsupervised children.

1. SAFETY PRECAUTIONS

1.1. WARNINGS FOR INSTALLERS

- The air conditioner may only be installed, plumbed in and wired by persons who meet the technical and professional requirements to install and maintain such systems.
- This air conditioner must be installed in accordance with national plant engineering regulations. Pay particular attention to the aspects concerning safety and the proper connection of electrical cables. Errors while connecting cables may lead to fires.
- Connect the air conditioner to the mains or to a power socket with a suitable voltage and frequency. A power supply with an incorrect voltage and frequency may result in damage to the unit with a consequent fire risk. The voltage must be stable and without excessive fluctuations.
- Install the condensation drainage piping so as to ensure that the condensation is removed correctly. Also adopt the most appropriate solutions to prevent heat loss and the resulting formation of condensation. An incorrect piping configuration may lead to water leakage and wet furniture and objects in the indoor environment.
- The air conditioner must be earthed. Incomplete or poorly set-up earthing may cause electric shocks. Do not connect the earthing cable to other pipes, water pipes, lightning rods or the telephone earthing wire.
- Install an omnipolar switch (with a minimum contact distance of at least 3 mm on all poles) on the power supply circuit to prevent possible discharge to ground and short circuits.
- The omnipolar switch and any socket must be installed in an easily accessible location.
- Do not remove the power cable while the unit is running or with wet hands. Doing so risks electric shocks and fires.
- Use cables that are intact and whose cross-section is appropriate for the load for the power supply.
- Do not make joints on the power cable. Use a longer cable if necessary. Joints can cause overheating or fire.
- In the event that the power cable is damaged, it must be replaced. Use a type of cable featured in the manual only.
- Install a noise filter if the power supply emits too much noise.
- Do not leave any cables in direct contact with the refrigerant piping which could reach excessive temperatures.
- Do not leave any cables in direct contact with moving parts, such as fans. Make sure the communication cables between the units are connected to the correct terminals.
- Only replace fuses with ones identical to the original.
- If the filter is very dirty, this will significantly reduce the cooling capacity of the appliance.
- Tighten the nut to the torque indicated in the device manual. Overtightening can lead to leakage of refrigerant.

- Do not install the indoor unit outside. Doing so may result in damage and electrical losses.
- During installation of the indoor unit(s), consider the distribution of air in each indoor unit in the room in order to select the most suitable position and ensure a temperature as uniform as possible within the environment.
- Do not install the indoor unit in a location directly exposed to sunlight.
- Do not install the unit near liquids and highly flammable gases. Install the unit in locations with the minimum content of dust, smoke, air humidity and corrosive agents.
- Place the indoor unit at a distance of at least 1 meter from televisions, radios and general electrical equipment whose electromagnetic waves may directly influence the electrical box or remote control.
- Pay particular attention to the installation warnings and conditions of use if the indoor units are located in hospitals, near medical equipment or generally in places with significant electromagnetic waves.
- If the indoor units are installed in areas exposed to high concentrations of magnetic interference, you must use shielded twisted cables for communication links between units.
- Do not install in laundries.
- This type of indoor unit does not use an electric heater. You cannot install an electric heater or an electric stove at the installation site.
- The installation height of the indoor unit must be at least 2.3 meters. The filter must also be easily accessible. Make sure there is enough space to maintenance. Install the indoor unit on a solid surface that can support the weight of the air conditioner. Make sure that the support is securely installed and the unit is stable even after running for an extended period. If not properly secured, the unit may fall and cause damage or injury to objects and persons.
- Do not place objects of any kind inside the indoor unit. Remember to check that there are no foreign objects inside the unit before installation and testing.
- For the outdoor unit, choose an installation location where the noise and the air jet do not disturb neighbors.
- Avoid placing the outdoor unit in a location where it causes an obstacle to pedestrians.
- Position the outdoor unit in line with local architectural rules.
- Respect the dimensions given in the manual, the lengths of the refrigerant lines and the height difference between units.
- Ensure that the appliances are not accessible by disabled persons or children. Do not block the entrances to the air inlets and outlets. Doing so will significantly reduce the heating and cooling capacity.
- Do not place objects on the outdoor unit or climb over it. Perform a test after carrying out wiring.
- Wiring diagrams are subject to ongoing updates. It is therefore compulsory to refer to those on the machine itself.
- Before turning on the air conditioner, make sure that the electrical cables, condensation drainage pipes and refrigerant connections are properly configured and installed. This eliminates the risk of water or refrigerant gas leaks or electric shocks.
- Periodically check the conditions of installation of the unit. Have the system checked by qualified personnel.
- After switching on the air conditioner, do not switch it off for at least 5 minutes. This prevents oil from returning to the compressor.
- Do not disassemble or repair the unit while it is running.

1.2. SPECIFIC WARNINGS FOR R32 GAS USE

- **GENERAL R32 WARNINGS**

- Do not mix other refrigerants or products that are not the specified refrigerant (R32)
- The maximum amount of R32 refrigerant allowed per room is 1.7 kg.
- If there is a loss of refrigerant gas, it is necessary to immediately provide complete ventilation of the environment. If the R32 refrigerant comes in contact with a flame it could cause the presence of toxic gas in the environment.
- All equipment required for installation and maintenance (vacuum pump, pressure gauge, load hose, gas leak detector, etc.) must be certified for use with R32 refrigerant gas
- Do not use the same instrumentation (vacuum pump, pressure gauge, load hose, gas leak detector, etc.) with different types of refrigerants. The use of different refrigerant gases can cause damage to the instrument itself or to the air conditioner.
- Comply with the instructions contained in this manual regarding the installation, maintenance and equipment required for R32 refrigerant gas.
- Respect the current regulations for the use of R32 refrigerant gas.
- Check the status of the existing refrigerant pipes carefully. The R32 is an high pressure gas (similar to R410A) and therefore the use of old and/or worn pipes could expose to the risk of explosion.

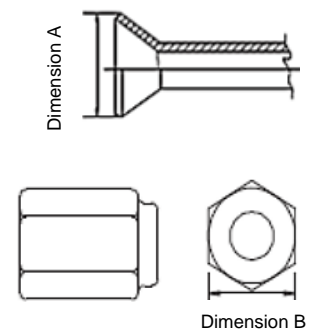
- **R32 required equipment**

EQUIPMENT	
To be used exclusively with R32 gas (not use these instruments if they have been already used with R22 or R407C)	Gauge manifold, charging hose, refrigerant recovery equipment, refrigerant cylinder, refrigerant cylinder charging port, gas leak detector, vacuum pump (if it is not the type with the reverse-flow check valve).
Equipment used in the past with R22 and R407C gas that could also be used with R32	Vacuum pump with reverse-flow check valve, bender, torque wrench, pipe cutter, welder and nitrogen cylinder, refrigerant charging meter, vacuum gauze.

- **R32 PIPES**

The regulation for refrigerant gas pipes is EN12735. According to this standard, the pipes required must be copper only, have a thickness of at least 0.8mm and of the type C1220T-O (only the pipes with dimension $\frac{3}{4}$ " require the use of pipes of the type 1 / 2H). In essence, therefore, the restrictions on the pipes are absolutely the same as those of R410A, if a pipe meets the specific regulations for R410A, it is also suitable for R32. Therefore also the procedure of replacing old machines in R22 or R407 is absolutely identical between R410 and R32.

Please refer to the table below for the characteristics of the pipes.



PIPES					
Dimension (mm)	Dimension (inch)	Radial thickness (mm)	Type	Dimens. A flare (mm)	Dimens. B flare nuts type 2 (mm)
∅ 6.35	1/4"	0.8	Pipes type O	9.1	17.0
∅ 9.52	3/8"	0.8	Pipes type O	13.2	22.0
∅ 12.7	1/2"	0.8	Pipes type O	16.6	26.0
∅ 15.88	5/8"	1.0	Pipes type O	19.7	29.0
∅ 19.05	3/4"	1.0	Pipes type 1/2H or H	24.0	36.0

The choice of the most suitable copper pipes must take into account the higher operating pressure of the R32 gas compared to the old R22 and R407C refrigerants. Please refer to the table below.

GAS TYPE	MAX OPERATING PRESSURE
R32	4.15 MPa
R407C, R22	3.40 MPa

- MINIMUM ROOM DIMENSIONS FOR R32 INSTALLATION**

The area of the room in which R32 refrigerant air conditioner is installed cannot be less than the minimum area specified in the table below, to avoid potential safety problems due to out-of-limit of refrigerant concentration inside the room caused by leakage of refrigerant from refrigeration system of the indoor unit.

The height of installation of wall type air conditioners is 1.8 m. That one of the floor/ceiling type is 0.6 m, and finally cassettes one is 2.2 m.

Minimum Room Area

Type	LFL kg/m ³	hv m	Total Mass Charged/kg Minimum Room Area/m ²						
			1.224	1.836	2.448	3.672	4.896	6.12	7.956
R32	0.306	0.6		29	51	116	206	321	543
		1.0		10	19	42	74	116	196
		1.8		3	6	13	23	36	60
		2.2		2	4	9	15	24	40

1.3. WEEE WARNINGS

Do not dispose of electronic equipment as household waste. Use proper disposal facilities. Contact your local council for more information about the collection systems available. If electrical appliances are disposed of in landfills, hazardous substances can leak out, contaminate water and reach the food chain, affecting our health and wellbeing. When old appliances are replaced by new ones, the retailer is legally obliged to take back your old appliance for disposal free of charge.



2. ACCESSORIES INCLUDED

2.1. INDOOR UNIT

N.	NAME	UNIT	QUANTITY
1.	Indoor unit	Kit	1
2.	User manual	Items	1
3.	Remote controller	Items	1
4.	Batteries	Items	2
5.	Certificates	Items	1

2.2. OUTDOOR UNIT

N.	NAME	UNIT	QUANTITY
1.	Outdoor unit	Kit	1
2.	User manual	Items	1
3.	Drainage connector	Items	1
4.	Certificates	Items	1
5.	Brass nuts	Items	4

NOTE

All the descriptions and figures shown in this manual are approximate and may differ slightly from the actual appliance purchased or its conditions of use. If there are any differences, always refer to the latter conditions.

3. TECHNICAL DATA

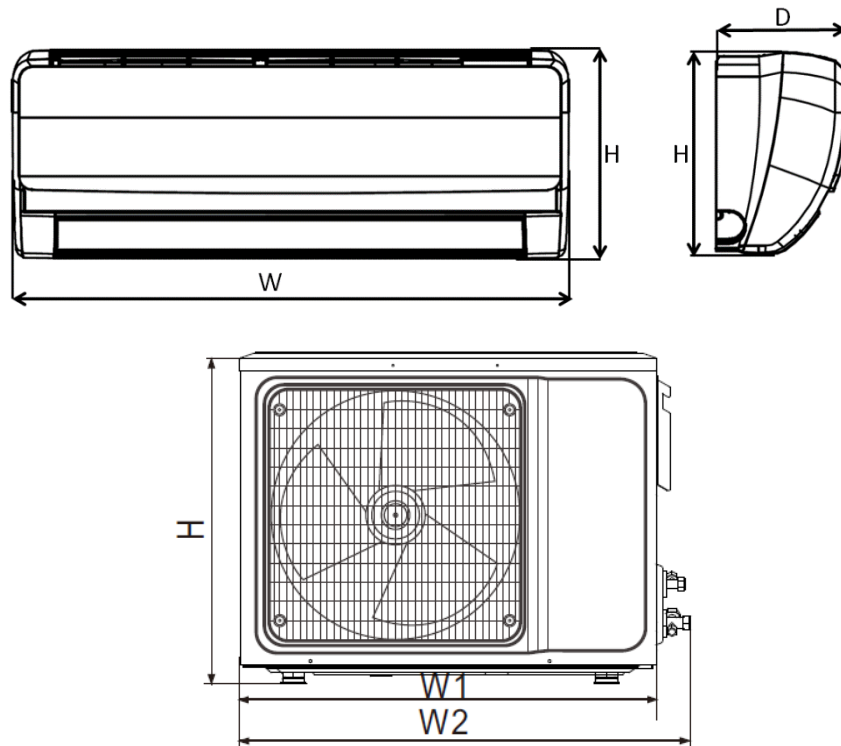
SIZE	9000	12000	18000	24000
Type	DC Inverter	DC Inverter	DC Inverter	DC Inverter
Rated cooling power (min-max) (kW)	2.55 (1.00-3.30)	3.60 (1.20-3.80)	5.30 (1.90-5.50)	7.03 (2.90-7.30)
Rated cooling power (min-max) (kcal/h)	8.700 (3.400-11.300)	12.300 (4.100-13.000)	18.100 (6.500-18.800)	24.000 (9.900-24.900)
Rated heating capacity (min-max) (kW)	2.65 (1.10-3.30)	3.70 (1.00-3.80)	5.40 (1.40-5.60)	7.05 (2.10-8.00)
Rated heating capacity (min-max) (kcal/h)	9.000 (3.700-11.300)	12.600 (3.400-13.000)	18.400 (4.800-19.100)	24.000 (7.200-27.300)
SEER	6.50	6.18	6.55	6.36
SCOP	4.20	4.22	4.07	4.32
Energy class in cooling/heating mode	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Rated power consumpt. in cooling mode (kW)	0.78 (0.10-1.44)	1.08 (0.10-1.60)	1.60 (0.21-1.73)	2.12 (0.37-2.90)
Rated current consumpt. in cooling mode (A)	3.40 (0.60-6.40)	4.90 (0.60-7.10)	7.36 (0.90-7.70)	10.30 (1.60-12.80)
Rated power consumpt. in heating mode (kW)	0.66 (0.20-1.40)	0.94 (0.20-1.35)	1.39 (0.31-2.00)	1.81 (0.44-2.60)
Rated current consumpt. in heating mode (A)	3.20 (0.90-6.20)	4.50 (0.90-6.00)	6.95 (1.40-8.80)	10.50 (1.90-11.50)
Maximum power consumption (kW)	1.50	1.90	2.90	3.70
Maximum current consumption (A)	8.00	9.50	12.00	16.00
Power supply voltage (V)	220-240	220-240	220-240	220-240
Power supply frequency	50	50	50	50
Diameter of the liquid conduits (inch/mm)	1/4" / 6.35	1/4" / 6.35	1/4" / 6.35	1/4" / 6.35
Diameter of the gas conduits (inch/mm)	3/8" / 9.52	3/8" / 9.52	1/2" / 12.70	5/8" / 15.88
Wiring between the two units (mm ²)	4 x 1.5 + T	4 x 1.5 + T	4 x 2.5 + T	4 x 2.5 + T
INDOOR UNIT	JSGNW25	JSGNW35	JSGNW50	JSGNW70
Dimensions of the indoor unit width/height/depth (mm)	792/292/201	792/292/201	940/316/224	1132/330/232
Weight of the indoor unit (kg)	8	8	12	15
Air flow rate (m ³ /h)	600	600	900	1150
Sound pressure of the indoor unit dB(A)	42	42	46	47
Sound power dB(A)	53	52	58	60
OUTDOOR UNIT	LSGT25-S	LSGT35-S	LSGT50-S	LSGT70-S
Power supply (mm ²)	U.E. (2x1,5+T)	U.E. (2x1,5+T)	U.E. (2x2,5+T)	U.E. (2x2,5+T)
Dimensions of the outdoor unit width/height/depth (mm)	720/540/260	720/540/260	802/535/298	900/681/343
Weight of the outdoor unit (kg)	27	27	35	45
Air flow rate (m ³ /h)	1800	1800	2700	3200
Sound pressure of the outdoor unit dB(A)	50	50	53	53
Sound power dB(A)	60	58	62	62
Refrigerant type	R32			
Related gas GWP	675			
Gas quantity (kg)	0.58	0.68	1.28	1.44
tCO ₂ equivalent	391.5	459.0	864.0	972.0
Maximum distance of the refrigerant connections with precharge (m)	7	7	7	7
Additional charge (g/m)	15	15	25	30
Maximum discharge pressure (MPa)	4.3	4.3	4.3	4.3
Maximum intake pressure (MPa)	1.2	1.2	1.2	1.2

OPERATING LIMITS

		INDOOR UNIT	OUTDOOR UNIT
COOLING	MAX		52°C
	MIN	15 °C	16°C
HEATING	MAX	30 °C	30°C
	MIN		-15°C

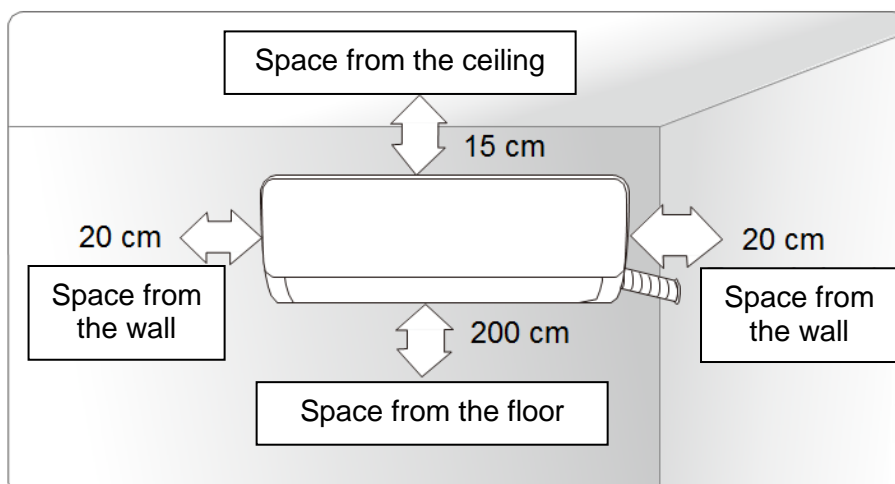
4. INSTALLATION

4.1. CHOOSING THE INSTALLATION POSITION



UNIT	MODEL	DIMENSIONS (mm)
INDOOR UNIT (WxHxD)	JSGNW25	792*292*201
OUTDOOR UNIT (W1(W2)xHxD)	LSGT25-S	720(780)*540*260
INDOOR UNIT (WxHxD)	JSGNW35	792*292*201
OUTDOOR UNIT (W1(W2)xHxD)	LSGT35-S	720(780)*540*260
INDOOR UNIT (WxHxD)	JSGNW50	940*316*224
OUTDOOR UNIT (W1(W2)xHxD)	LSGT50-S	802(860)*535*298
INDOOR UNIT (WxHxD)	JSGNW70	1132*330*232
OUTDOOR UNIT (W1(W2)xHxD)	LSGT70-S	900(950)*681*343

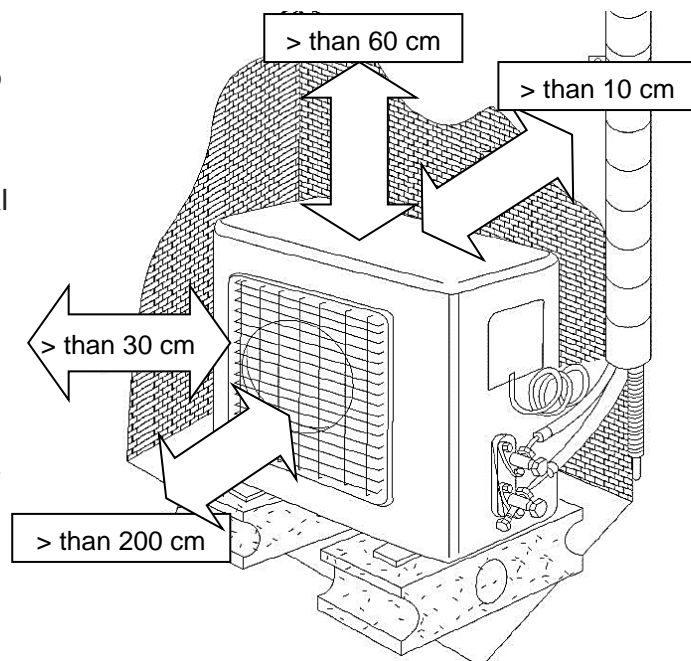
INDOOR UNIT



- Consider the distribution of air from the indoor unit to the home and select a suitable position in order to achieve a uniform air temperature in the place of installation.
- Make sure that there are no sources of heat and/or steam nearby.
- Maintain good air circulation.
- Consider adopting measures to reduce noise.
- Do not install the unit near doors and/or windows.
- Make sure that the indoor unit is installed at a distance of not less than 15 cm from the roof and side walls so as to ensure the air intake from the environment.
- Install the indoor unit at least 2.3 meters from the floor.

OUTDOOR UNIT

- If you decide to protect the outdoor unit from rain and direct sunlight with a special canopy, be careful not to hinder heat radiation by the compressor.
- Do not grow plants or raise animals in the vicinity of the compressor because the heat could affect normal growth.
- Make sure there is a suitable distance from ceilings, walls, furniture and other obstacles.
- Secure the unit away from heat sources and/or flammable gases.
- The installation base and support frame must be adequate and secure. The machine must normally be installed on a flat surface.



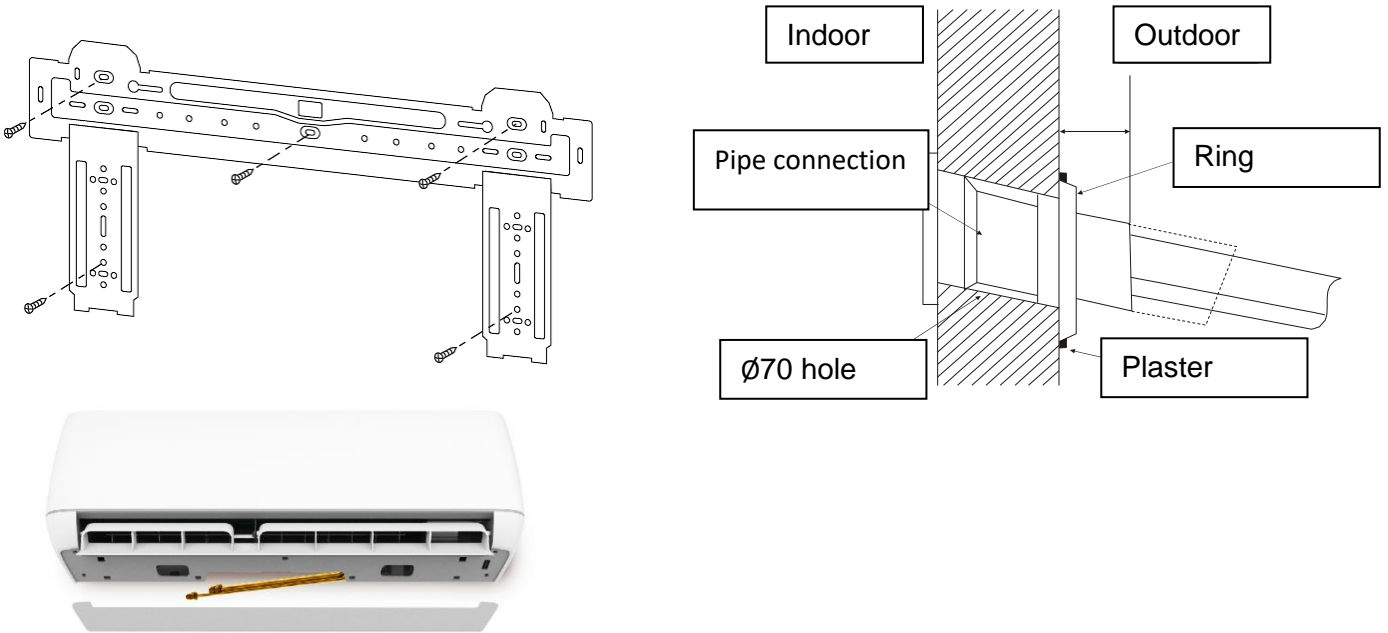
LENGTH OF REFRIGERANT CONNECTIONS

Before installing the equipment, consider the maximum length of the refrigerant connections:

	LSGT25-S	LSGT35-S	LSGT50-S	LSGT70-S
Minimum distance Outdoor/indoor units (m)	5	5	5	5
Maximum distance Outdoor/indoor units (m)	20	20	25	25
Maximum height difference (m)	10	10	15	15
Max distance with precharge (m)	7	7	7	7
Additional charge (g/m)	15	15	25	30

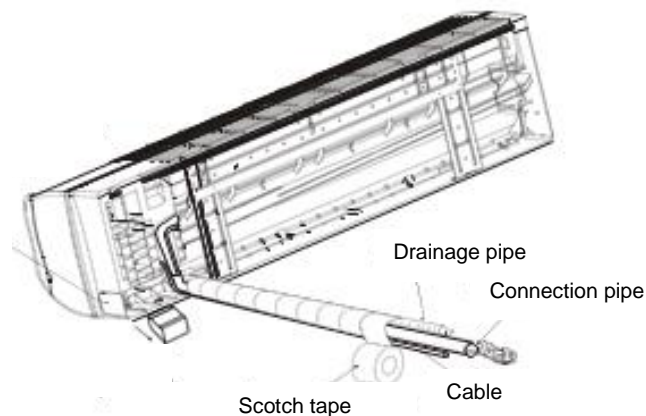
4.2. INSTALLING THE INDOOR UNIT

- First drill the wall and make sure it is solid and suitable to support 20 kg.
- Using suitable crosshead screwdrivers, secure the support bracket to the wall.
- Use a spirit level to make sure that the support stays horizontal and is perpendicular to the vertical direction. If not there may be water leakage from the indoor unit when the air conditioner is operating in cooling mode.
- It is possible to realize the pipe connection on Baxi Astra Indoor Unit by simply removing the below cover panel in the inferior part of the unit.

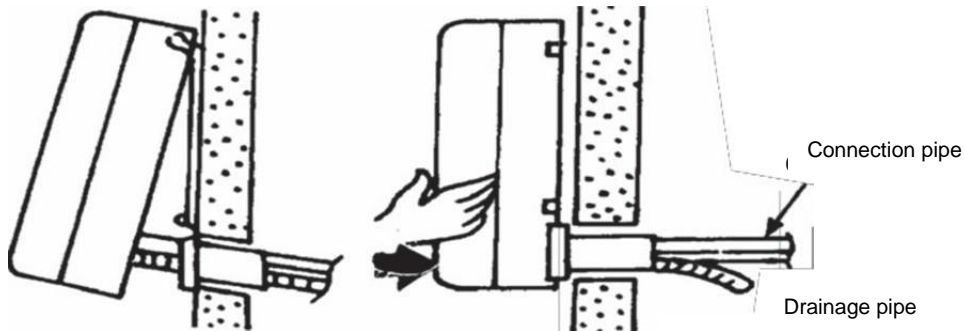


INSTALLING THE CONNECTIONS BETWEEN THE TWO UNITS

- Drill a hole 70 mm in diameter on the left side (rear view) or right side (front view) with a slight downward slope.
- Use adhesive tape to hold the indoor unit fitting in place. Then wrap the connection with electrical tape to prevent condensation.
- Secure the refrigeration pipes, the electrical cables and the drainage pipe together using plastic cable ties.
- Set out the pipes and cables as shown in the figure:



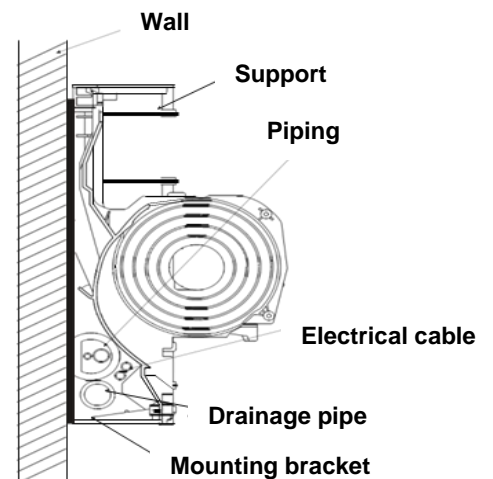
- Hang the indoor unit on the support using the upper tabs. Make sure that the indoor unit is in the middle.



- Position and push the indoor unit onto the mounting plate until the hooks attach firmly into the guides and you hear them "click" into place.

INSTALLATION WITH SIDE CONNECTIONS

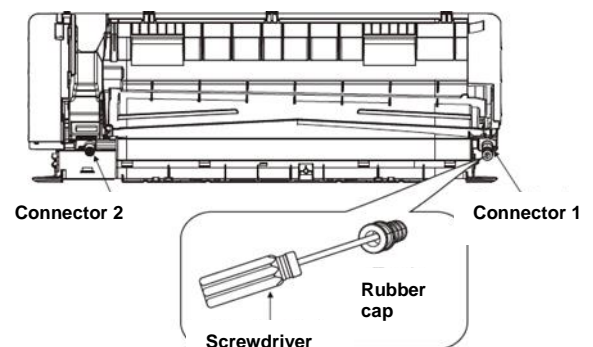
- It is also possible to install the indoor units using the existing side pre-shearing.
- Please note that the wiring, the drainage, and the refrigerant connections are fully suited for connection on either side of the unit.
- Even when installing with feedthrough connections, wrap up all the connections to prevent condensation problems.



DRAINAGE PIPE

- Bear in mind that water drainage takes place due to gravity.
- Connect the drainage pipe to the thermally isolated plastic pipe from the right side of the indoor unit (rear view).
- Make sure the drainage pipe comes out from the indoor unit with a negative slope (downwards). The highest point of the outlet connections must not exceed the position of the tank.

NOTE: The drainage pipe can be connected to either connector 1 or 2. If it is necessary to change the side of the drainage pipe, remove the rubber cap on the connector and secure it on the unused side using a screwdriver.



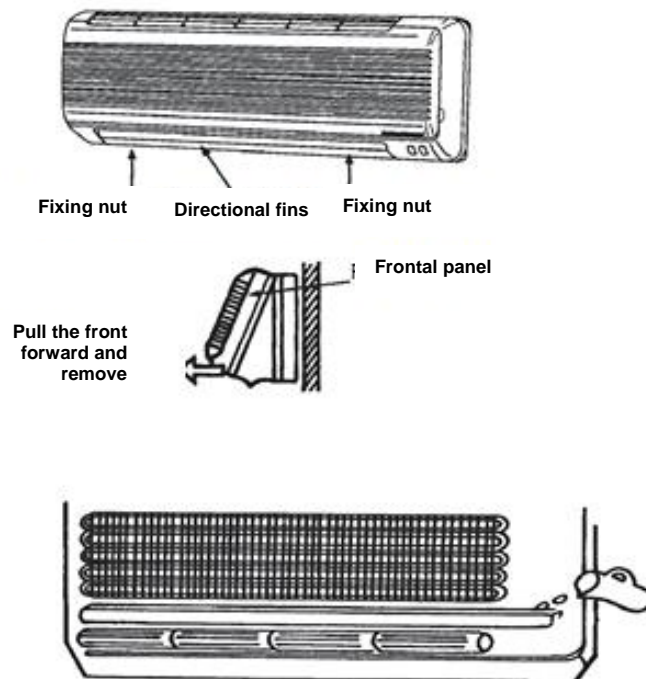
CHECKING WATER DRAINAGE

Remove the front panel from the unit according to the following instructions:

- Open the front fin on the indoor unit (rotate it downwards)
- As shown in the figures below, remove the two protections from the front panel, then remove the two fixing screws.
- Pull the panel towards you to remove it.

Checking water drainage

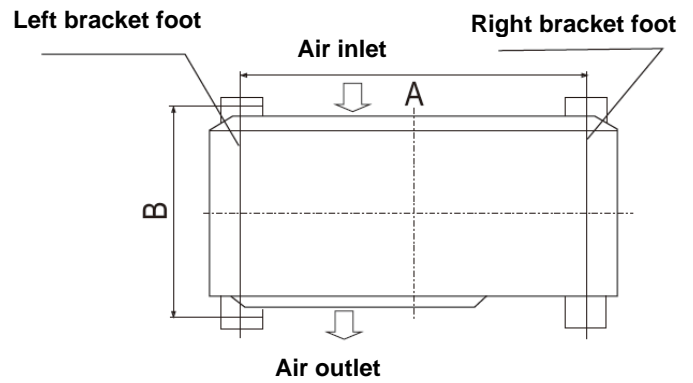
- Place a container beneath the drainage channel.
- Check that drainage passes through the appropriate hole.



4.3. INSTALLING THE OUTDOOR UNIT

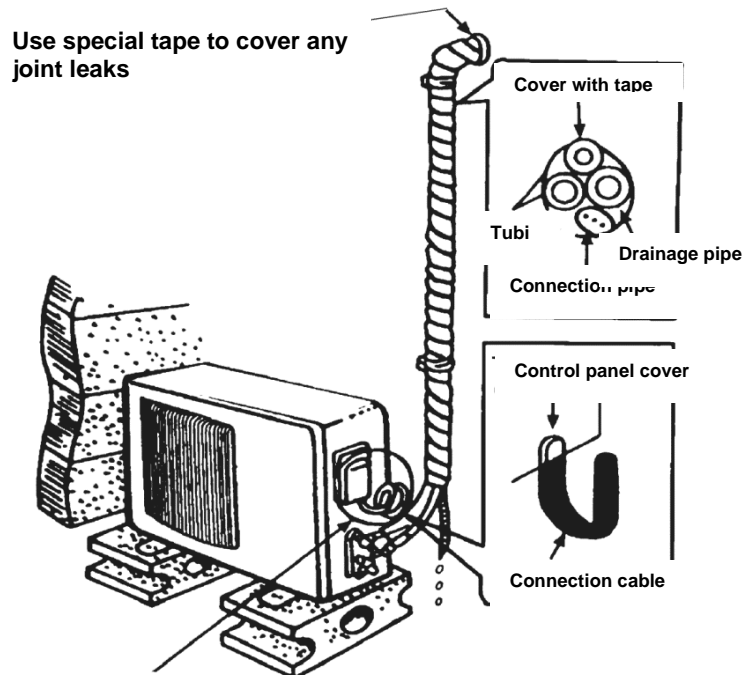
- Make sure that outdoor unit is fastened securely to prevent strong wind from pulling it off.
- Install the unit in accordance with the information contained in the table below.
- If installing in marine environments or in locations that are very high in relation to the ground floor and/or in the presence of strong winds, use a locking plate and fit it against the wall so that the compressor can operate properly.
- If installing in a normal location, the structure of the support base must be made of concrete or material with equivalent strength and have necessary support ability. Alternatively, adopt by all the support measures needed to prevent the unit from vibrating.

MODEL	A (mm)	B (mm)
LSGT25-S	539	287
LSGT35-S	539	287
LSGT50-S	546	316
LSGT70-S	632	355



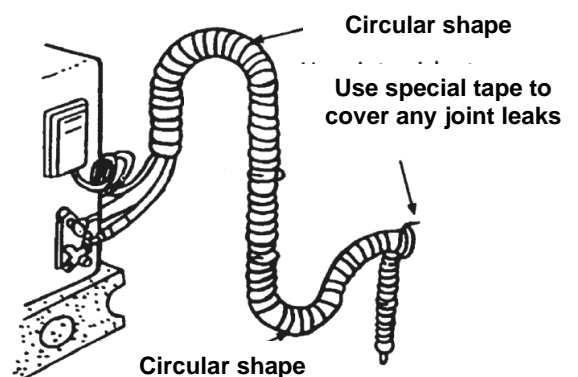
CONNECTING THE PIPING

Wrap all the pipes, the drainage pipe and the electrical cables from the top to the bottom. Wrap the pipes with tape along the route and secure them to the wall with the special clips. These steps only concern cases where the outdoor unit is installed below the indoor one.



Round at this point to prevent moisture from infiltrating the electrical parts

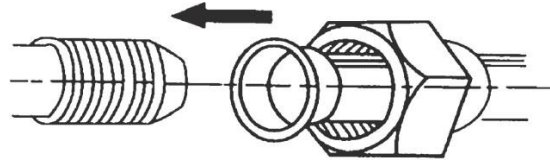
- If you want to add additional water drainage, keep at a certain distance from the ground and from the surface of the water. Do not immerse the pipe(s) in the water.
- Secure the pipe(s) to the wall so they are not affected by the wind.
- Wrap the pipes and electrical cables well from bottom to top.
- Wrap the pipes and shape them, especially around corners to prevent water from infiltrating the home.
- Use clamps or other accessories to secure the pipes to the wall.



5. REFRIGERANT GAS PIPING

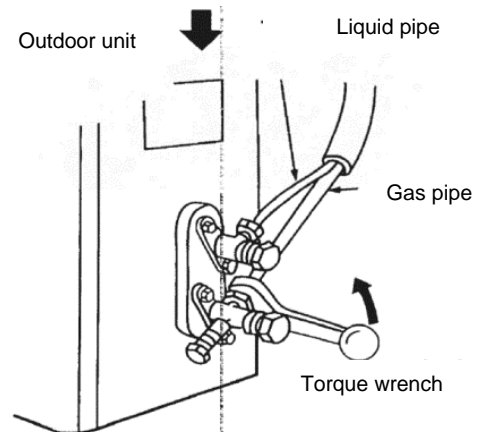
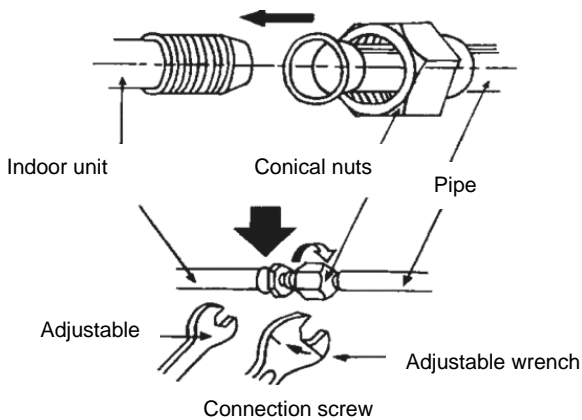
5.1. CONNECTING THE PIPING

- The method for connecting the piping is the same for both units, indoor and outdoor.
- Connect the pipes to the unit. Tighten until the connection becomes firm and secure. Follow the directions shown in the figure.



Reference image for the direction of connection

- Focusing on the center of the pipe, tighten the screw firmly.
- Tighten the conical nuts as shown in the figure by applying the corresponding torque according to the diameter of the pipe.



PIPE DIAMETER	TORQUE
Ø 6,36mm(1/4")	15~25 N.m
Ø 9,52mm(3/8")	35~40 N.m
Ø 12,7mm(1/2")	45~60 N.m
Ø 15,88mm(5/8")	73~78 N.m

5.2. LEAK TEST

Once all the refrigerant pipes have been connected, perform a test by pressurizing the system with nitrogen to make sure there are no leaks.

METHOD

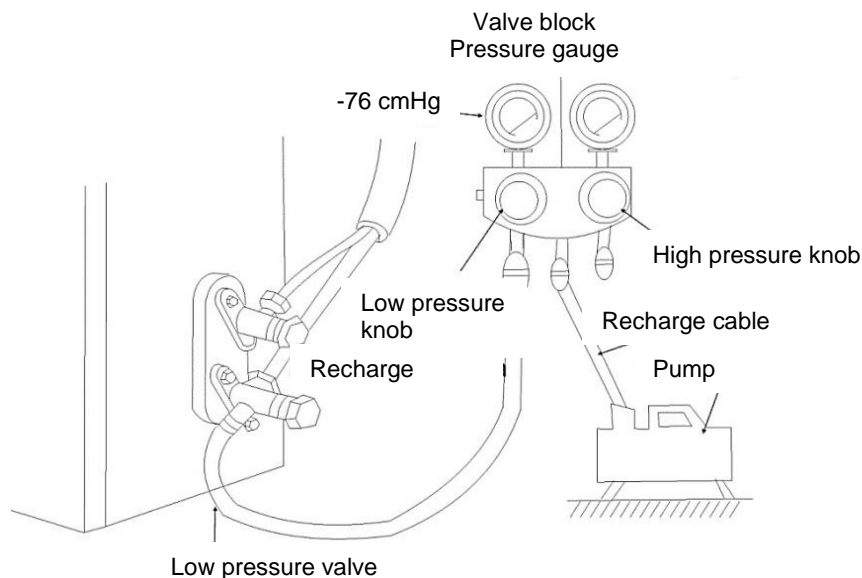
1. Connect the pressure gauge unit to the service valve on the outdoor unit gas pipe.
2. With the outdoor unit service valves closed, connect the nitrogen cylinder to the pressure gauge unit so as to charge the pipes.
3. Charge the installation (pipes and indoor unit) with nitrogen at a pressure of about 40 bar.
4. Close the pressure gauge unit valves on the cylinder side. Then wait for the pressure to stabilize.
5. Make sure that the pressure does not decrease. Once the pressure has stabilized, the test time can be about 30 minutes.
6. After checking that the system is not leaking (using special leak detection devices), close the valve on the pressure gauge unit to remove the nitrogen cylinder.

5.3. CREATING THE VACUUM

After connecting the pipes and checking that there are no leaks, it is very important to create a vacuum in the system to eliminate the moist air from inside it. Failure to do so could cause problems to the compressor. Use a pump specifically certified for R32 gas.

METHOD

1. Connect the vacuum pump to the pressure gauge unit on the central socket.
2. Connect the low pressure side of the pressure gauge unit to the service valve on the outdoor unit (gas side).
3. Open the low pressure side of the pressure gauge unit, with the service valve on the outdoor unit still closed.
4. Start up the vacuum pump. Leave the pump running until the pressure gauge indicates a pressure value of -76cm/Hg .
5. This operation will last 15 minutes or more.
6. Once the process has been completed, close the valve on the unit and turn off the vacuum pump.



5.4. REFRIGERANT GAS CHARGE

If you need to install a length of pipe longer than standard (the length for which the unit is pre-charged), you must add the appropriate refrigerant charge.

	LSGT25-S	LSGT35-S	LSGT50-S	LSGT70-S
Additional charge (g/m)	15	15	25	30

METHOD

1. Calculate the refrigerant charge to be added considering the parameters specified in the "LENGTH OF REFRIGERANT CONNECTIONS" section in this manual.
2. Connect the R32 refrigerant cylinder in a position where the liquid can be charged into the pressure gauge unit valve where the nitrogen cylinder or the vacuum pump have been collected.
3. Connect the pressure gauge unit to the outdoor unit charging valve (gas). When injecting the liquid refrigerant through the gas valve, you must act slowly and pay close attention so as to prevent liquid hammer to the compressor.
4. Place the refrigerant cylinder on an electronic scale.
5. Open the valve to allow the refrigerant to pass through.
6. Close the valve when the weight of the cylinder coincides with the amount to be charged.

6. WIRING

The connection cables must comply with the specifications listed in the table below.

Outdoor unit model	LSGT25-S	LSGT35-S	LSGT50-S	LSGT70-S
Connection cable specification	4 x 1,5 mm ²	4 x 1,5 mm ²	4 x 2,5 mm ²	4 x 2,5 mm ²
Power cable specification	2 x 1,5 mm ²	2 x 1,5 mm ²	2 x 2,5 mm ²	2 x 2,5 mm ²

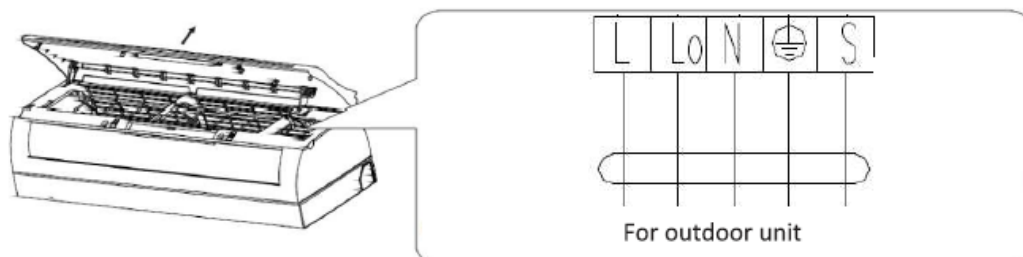
N.B.

Connection cables are those cables connecting the outdoor unit and the indoor unit.

Power cables are those cables connecting the outdoor unit and the electrical mains.

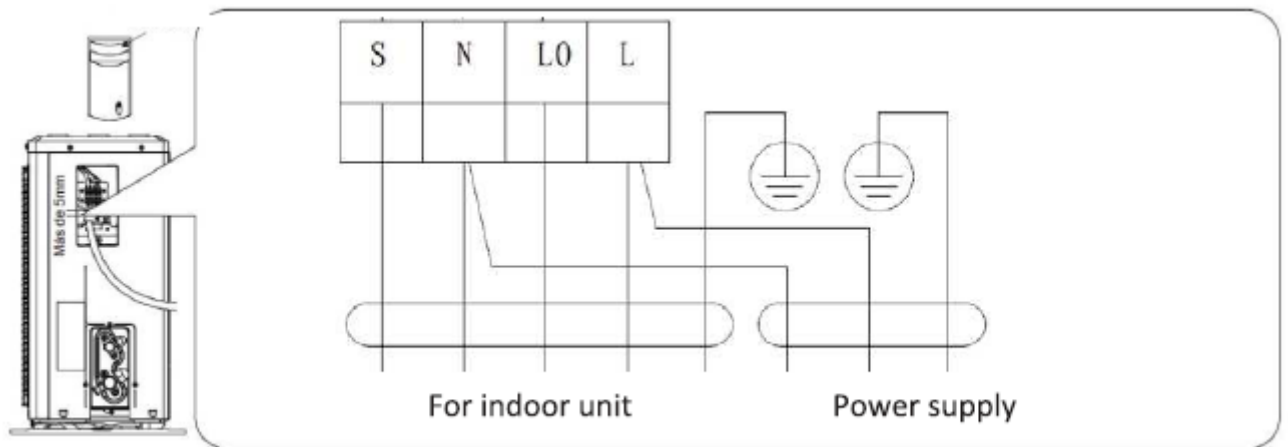
6.1. WIRING THE INDOOR UNIT

Open the front, insert the connection cables from the base of the air conditioner by connecting them to the respective terminals and secure them using appropriate cable glands present near the terminals (as shown in the figure below).



6.2. WIRING THE OUTDOOR UNIT

Unscrew the front panel, remove the unit cover panel.



- Connect the earthing wire to the corresponding screw.
- Connect all the cables to the terminal block.
- Reinstall the panels correctly

NOTE

- Connect the earthing cable correctly or it may cause the failure of any of electrical component, shocks or fire.
- Do not reverse the power supply polarity.
- Secure the cable clamping screw slowly at first, then tighten it firmly once the cable has been inserted.

7. OPERATING TEST

7.1. TEST PROCEDURES

- Make sure that both the liquid and gas valves are fully open. Make sure there are no refrigerant leaks.
- Make sure that the electrical wiring of the indoor and outdoor units is connected as shown in "WIRING".
- Make sure that each terminal (L, N) is correctly connected to the mains.
- Turn on the air conditioner in cooling mode *for* 30 minutes or more.

7.2. EVALUATING PERFORMANCE

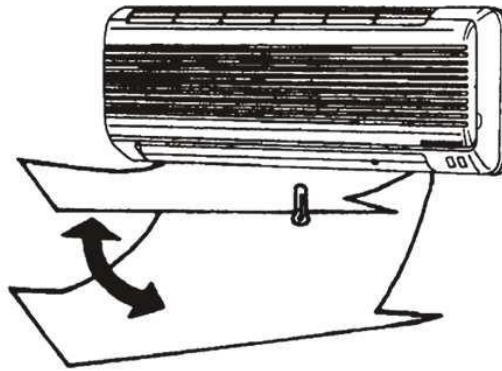
MODEL:

SERIAL NUMBER:

CUSTOMER NAME AND ADDRESS:

DATE:

- Is the direction of rotation of the indoor unit fan correct?
- Is the direction of rotation of the outdoor unit fan correct?
- Can you hear any abnormal compressor noises?
- Has the unit continued to run *for* at least 30 minutes?
- Checking the temperature in the room:
In: BS___/BU___°C
Out: BS___/BU___°C
- Checking the outdoor temperature:
In: BS___/BU___°C
Out: BS___/BU___°C
- Checking the pressure:
Discharge pressure: Ps=___Bar
Intake pressure: Pa=___Bar
- Checking the voltage:
Rated voltage:___V
- Check the current reaching the compressor
Power consumption:___kW
Current consumption:___A
- Is the refrigerant charge sufficient?
- Are the devices *for* controlling operation working correctly?
- Are the safety devices working correctly?
- Has the unit been checked *for* refrigerant leaks?
- Is the unit clean both inside and outside?
- Is all the equipment secured?
- Is the equipment secured so that it does not make any noise?
- Is the filter clean?
- Is the heat exchanger clean?
- Are the gas and liquid service valves open?
- Does the wastewater drain away without any problems?



8. ERROR CODES

The possible error codes that may appear on the display of the indoor unit are as follows:

CODICE DI ERRORE	PROBLEMA
E1	Fault with the room temperature sensor
E2	Fault with the refrigerant temperature sensor on the outdoor unit
E3	Fault with the refrigerant temperature sensor on the indoor unit
E4	Fault with the fan motor on the indoor unit (PG motor)
E5 (5E)	Communication error between the outdoor unit and the indoor unit
F0	Fault with the fan motor on the outdoor unit (DC motor)
F1	Fault with the inverter module protection (1PM)
F2	Fault with the outdoor unit board protection (PFC)
F3	Fault with the compressor synchronism
F4	Fault with the discharge temperature sensor
F5	Fault with the overheating protection on the compressor head
F6	Fault with the outdoor temperature sensor
F7	Fault with the over-voltage or low voltage protection
F8	Communication fault between the outdoor unit and the outdoor unit control board unit (model LSGT70-S only)
F9	Fault with the outdoor unit EPROM
FA	Fault with the intake temperature sensor
P4	Overload protection in cooling mode
P5	Overload protection in heating mode
P6	Anti-overheating protection of indoor unit in heating mode
P7	Anti-freeze protection of indoor unit in cooling mode
P8	Overcurrent protection in outdoor unit

Our company declares that these products feature the CE marking in accordance with the essential requirements of the following directives:

- 2014/35/UE – Low Voltage Directive
- 2014/30/UE – Electromagnetic Compatibility Directive
- 2009/125/CE – ErP Directive
- 2017/1369 – Energy Labelling Regulation
- 2012/206 – Ecodesign Regulation
- 2011/626 – Energy Labelling Regulation
- 2011/65/UE – RoHS2 Hazardous Substances Directive



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