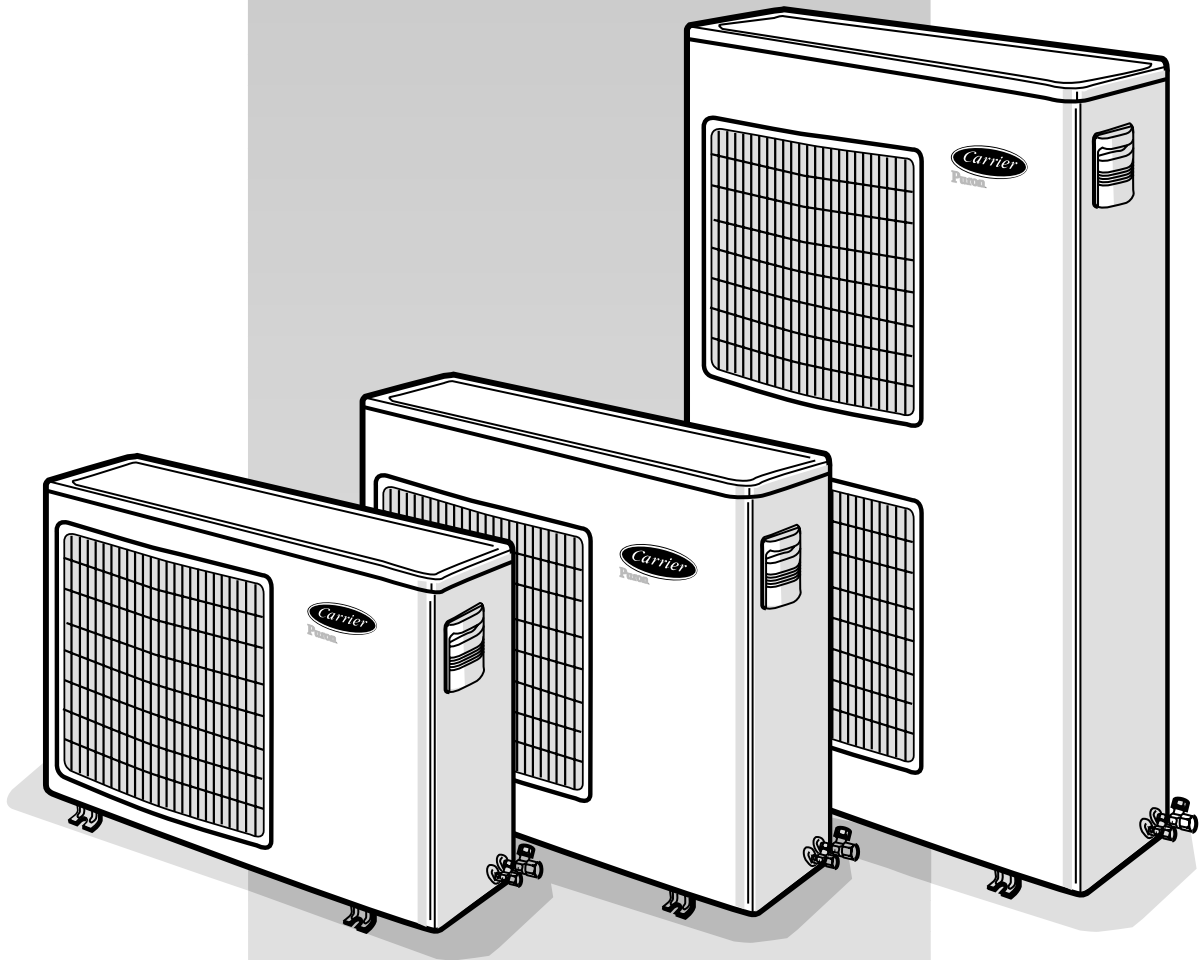




38GLP---G/38GLP---G9



R-410A

INSTALLATION MANUAL

38GLP---G / 38GLP---G9 **R-410A**

Cooling only split system outdoor units

For operation and maintenance instructions of this unit as well as installation instructions of the indoor unit, refer to the relevant manuals

Contents

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ATTENTION INSTALLERS AND SERVICE TECHNICIANS! AIR CONDITIONER WITH R-410A—QUICK REFERENCE GUIDE

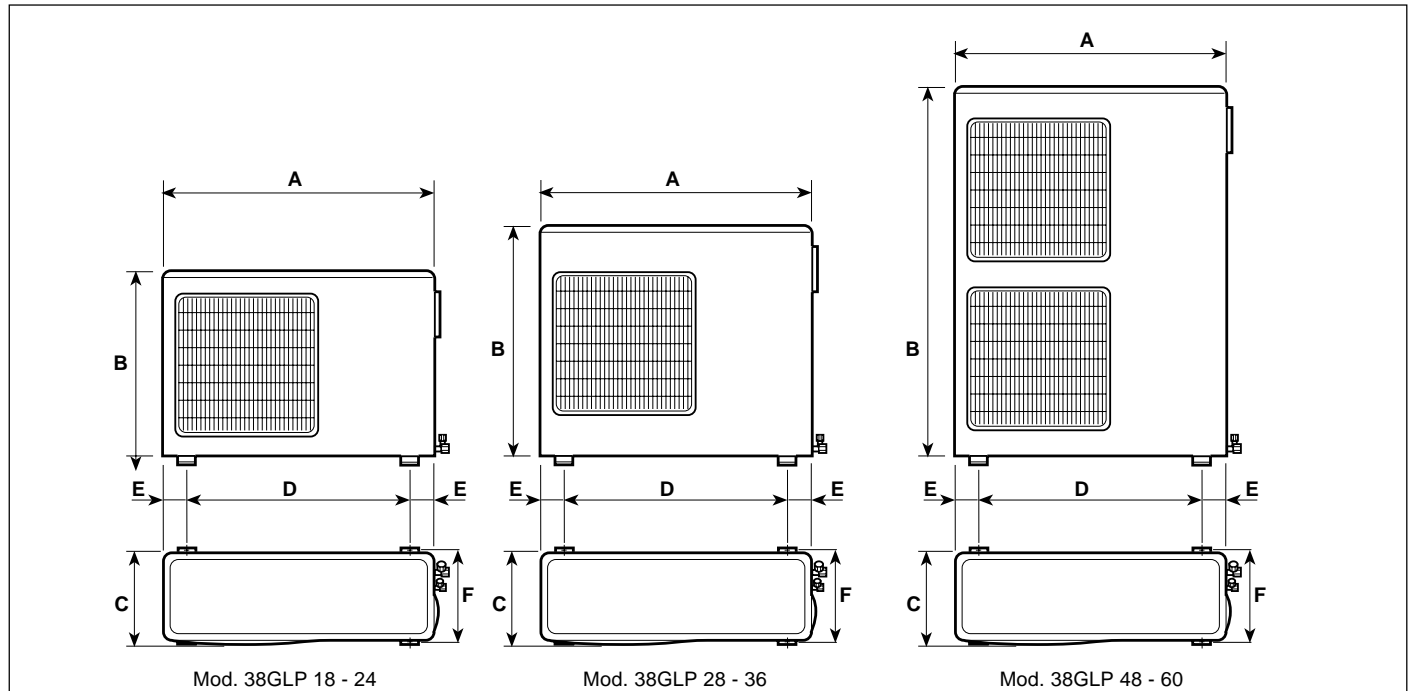
- R-410A refrigerant operates at 50%-70% higher pressures than R-22. Be sure that servicing equipment and replacement components are designed to operate with R-410A.
- R-410A refrigerant cylinders are pink.
- R-410A refrigerant cylinders have a dip tube which allows liquid to flow out of cylinder in an upright position.
- R-410A systems should be charged with liquid refrigerant. Use a commercial type metering device in the manifold hose in order to vaporize the liquid refrigerant before it enters in the unit.
- The R-410A, as for other HFC, is only compatible with oils chosen by the compressor manufacturer. For this reason, for the type of oil to be used, always refer to the plate on the compressor and the unit.
- A vacuum pump is not enough to remove moisture from oil.
- POE oils absorb moisture rapidly. Do not expose oil to atmosphere.
- Never open system to atmosphere while it is under vacuum.
- In case the system should be opened for maintenance, stop the vacuum function with dry nitrogen and replace the drier filters, if any.
- Do not vent R-410A into the atmosphere.
- Use only Carrier matching indoor units (Table I).

Table I

Cooling only models	Power supply	Hi-Wall		Cassette	Console	Satellite	
38GLP018G 38GLP024G	230V ~ 50Hz	42PHQ018N 42PHQ024N	42PHQ018P 42PHQ024P	40KMC018 40KMC024	42VMC018 42VMC024	40SMC018N 40SMC024N	40DMC018 40DMC024
38GLP018G9 38GLP024G9 38GLP028G9 38GLP036G9 38GLP048G9 38GLP060G9	400V 3N ~ 50Hz	42PHQ018N 42PHQ024N	42PHQ018P 42PHQ024P	40KMC018 40KMC024 40KMC028 40KMC036 40KMC048 40KMC060	42VMC018 42VMC024 42VMC028 42VMC036 42VMC048	40SMC018N 40SMC024N 40SMC028N 40SMC036N 40SMC048N 40SMC060N	40DMC018 40DMC024 40DMC028 40DMC036 40DMC036 40DMC060

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Dimensions and weight



Mod.	38GLP					
	18	24	28	36	48	60
A mm	800	800	800	800	800	800
B mm	590	590	803	803	1264	1264
C mm	300	300	300	300	300	300
D mm	508	508	508	508	508	508
E mm	146	146	146	146	146	146
F mm	330	330	330	330	330	330
kg	45	51	65	65	92	94

Conessioni

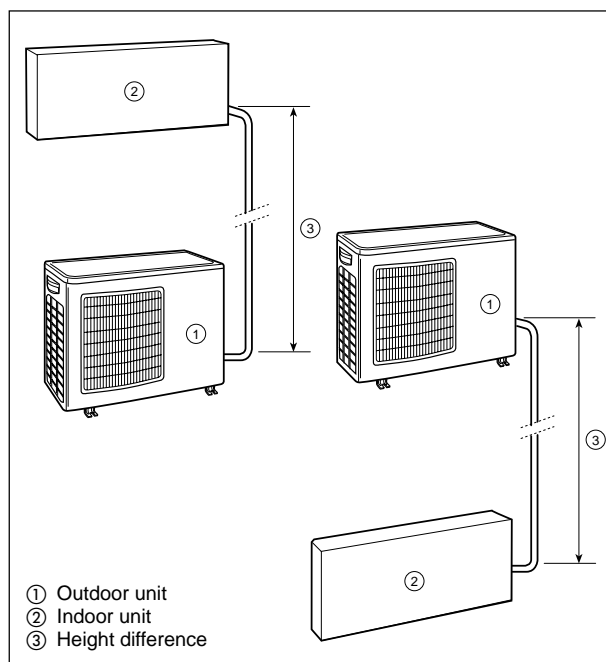


Table II: Connections

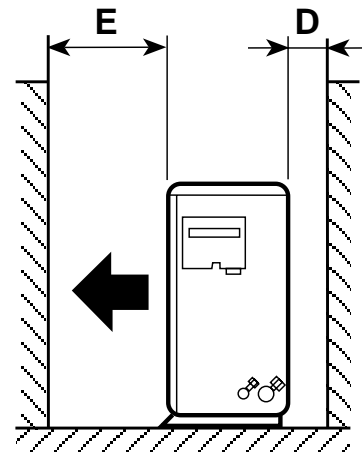
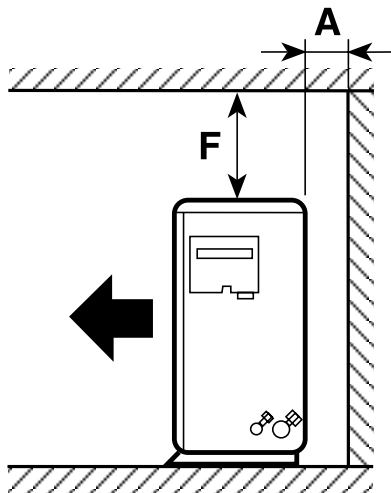
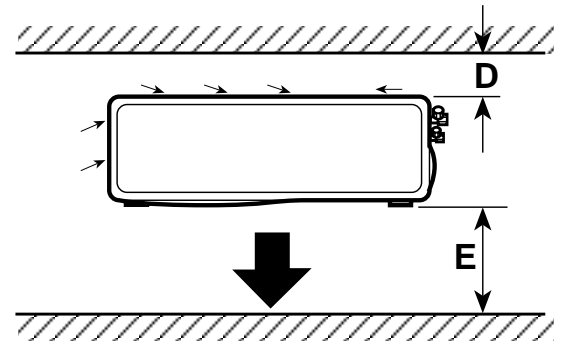
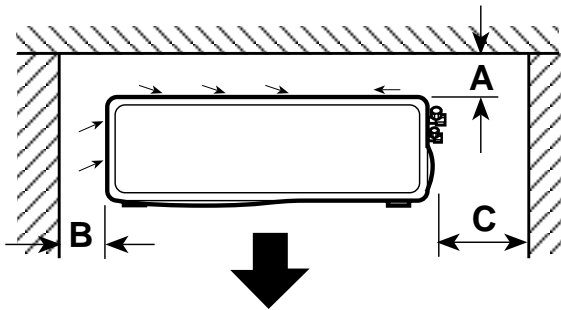
	Model					
	18	24	28	36	48	60
Max. pipe length	30 m	40 m	40 m	50 m	50 m	50 m
Max. height difference	10 m	15 m	25 m	30 m	30 m	30 m

All fittings are flare type.

Use only refrigeration grade pipes, (Cu DHP type according to ISO 1337), seamless, degreased, deoxidized and suitable for operating pressures of at least 4200 kPa and with a burst pressure of 20700 kPa.

Under no circumstances must sanitary type copper pipe be used.

Model	Pipe diameter		Pipe diameter	
	Gas	Liquid	Gas	Liquid
	mm		inches	
18 24	12.70	6.35	1/2"	1/4"
28	15.87	6.35	5/8"	1/4"
36 48 60	19.05	9.52	3/4"	3/8"



Mod.		18	24	28	36	48	60
A	mm	100	100	100	100	100	100
B	mm	250	250	250	250	250	250
C	mm	500	500	500	500	500	500
D	mm	50	50	100	100	100	100
E	mm	470	470	670	670	670	670
F	mm	400	400	400	400	400	400

General information

Unit installation

R-410A systems operate at higher pressures than standard R-22 systems.

Do not use R-22 service equipment or components on R-410A equipment.

Read this instruction manual thoroughly before starting the installation.

- **This unit complies with low-voltage (EEC/73/23) and electro-magnetic compatibility (EEC/89/336) directives.**
- For trouble-free installation, it should be carried out by a qualified installer.
- Follow all current national safety code requirements. In particular ensure that a properly sized and connected ground wire is in place.
- Check that voltage and frequency of the mains power supply are those required; the available power must be adequate to operate any other possible appliances connected to the same line. Also ensure that national safety code requirements have been followed for the mains supply circuit.
- The mains supply must be connected to the outdoor unit.
- Connect indoor and outdoor units with field-supplied copper pipes by means of flare connections. Use insulated seamless refrigeration grade pipe only, (Cu DHP type according to ISO1337), degreased and deoxidized, suitable for operating pressures of at least 4200 kPa and for burst pressure of at least 20700 kPa. Under no circumstances must sanitary type copper pipe be used.
- After installation thoroughly test the system operation and explain all system functions to the owner.
- Leave this manual with the owner for consultation during future periodic maintenance.
- Use this unit only for factory approved applications: **the unit is suitable for outdoor installation.**
- The outdoor unit and its components must be periodically inspected to check for loose, damaged or broken parts. If these faults are found and not eliminated, the unit could cause physical injury to persons and damage to goods and property.
- This installation manual describes the installation procedures of the outdoor unit of a residential split system consisting of two units manufactured by Carrier. Consult factory or a qualified system engineer prior to connecting this unit to any other manufacturer's indoor unit. Coupling units which have different control systems, may cause irreversible damage and void the warranty protection. The manufacturer declines any liability for system malfunction resulting from unapproved coupling.

IMPORTANT:

During the unit installation make first refrigerant connections and then electrical connections.

If unit is uninstalled first disconnect electrical cables, then refrigerant connections.

WARNING:

Disconnect the mains power supply switch before servicing the system or handling any internal parts of the unit.

- The manufacturer declines any liability for damage resulting from modifications or errors in the electrical or refrigerant connections.
- Failure to observe the installation instructions or use of the unit under conditions other than those indicated in Table III "Operating limits", will immediately void the unit warranty.
- Failure to observe electric safety codes may cause a fire hazard in case of short circuits.
- Inspect equipment for damage due to improper transportation or handling: file an immediate claim with the shipping company. Do not install or use damaged units.
- In case of any malfunctioning turn the unit off, disconnect the mains power supply and contact a qualified service engineer.
- This equipment contains R-410A refrigerant, a substance that is not depleting the ozone layer.

- **All of the manufacturing and packaging materials used for your new appliance are compatible with the environment and can be recycled.**
- Dispose of the packaging material in accordance with local requirements.
- This equipment contains refrigerant that must be disposed of in a proper manner. When disposing of the unit after its operational life, remove it carefully. The unit must then be delivered to an appropriate disposal center or to the original equipment dealer.
- When lifting the unit, absolutely do not use hooks inserted in the side handles, use special equipment (e.g. lifting devices, trolleys, etc...).
- Carefully recover refrigerant within this unit before final disposal or when servicing. Never vent refrigerant to atmosphere. Use approved recovery equipment for R-410A refrigerant. Do not use R-22 equipment.

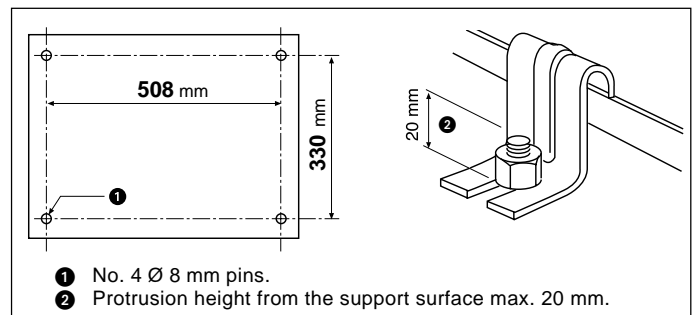
Choosing the installation site

Positions to avoid:

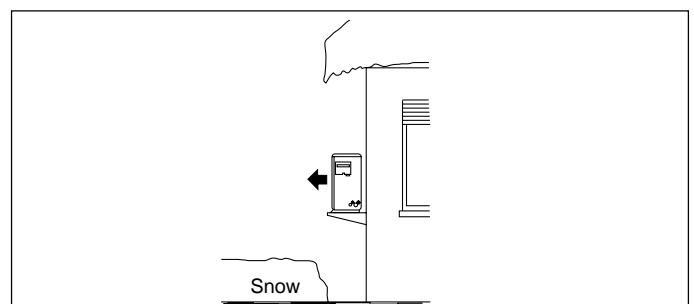
- Exposed to direct sun.
- Too close to sources of heat radiation, vapour or flammable gas.
- Particularly dusty areas.

Recommendations:

- Choose a position protected from opposing winds.
- Choose a position sheltered from direct sun.
- Choose an area where air outlet and unit noise will not bother your neighbours.
- Choose a position that allows for the clearances required.
- Floor structure should be adequately strong to support unit weight and minimize vibration transmission.
- Consider a position which will not obstruct passageways or doors.

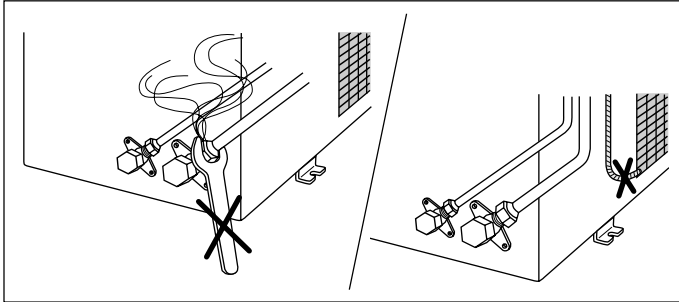


- Fix the unit with locally purchased bolts buried in the block to prevent overturning due to strong gusts of wind.

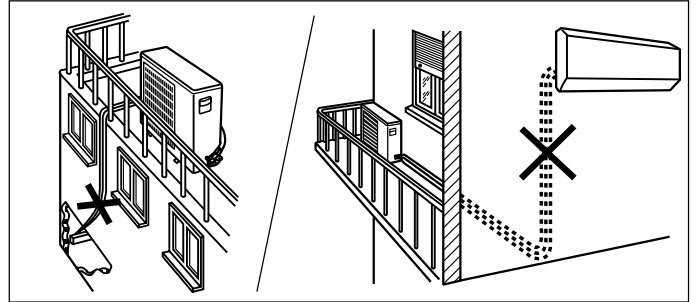


- If the unit is installed in areas where heavy snowfalls may occur, it is necessary to raise its level at least 200 mm above the usual snow level or alternatively to use the outdoor unit bracket kit.

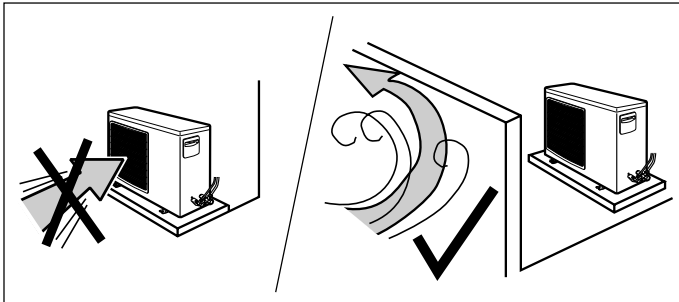
Warnings: avoid....



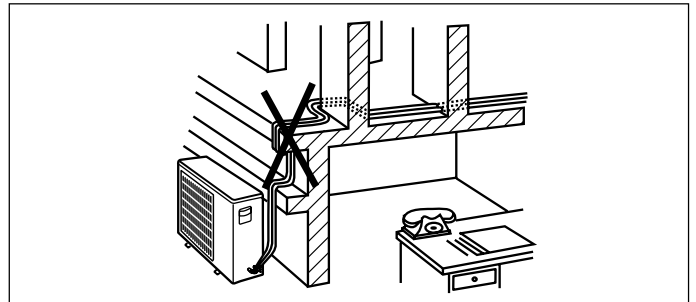
Disconnecting the refrigerant connections after installation: this will cause refrigerant leaks.
Connecting the condensate drain pipe to the outdoor unit.



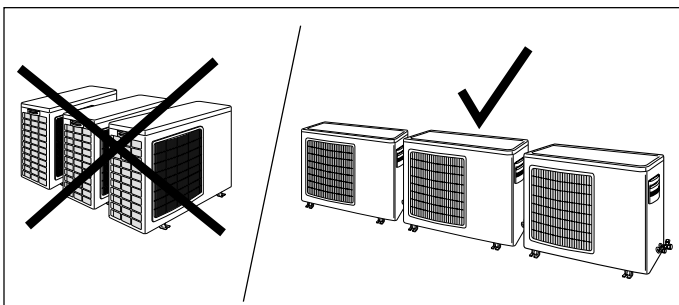
Excessive height difference between indoor and outdoor unit (see Table II "Connections"). Excessive distance between indoor and outdoor units. (see Table II "Connections").



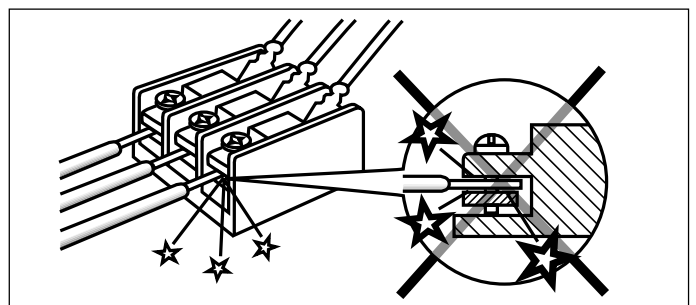
Predominant head winds.



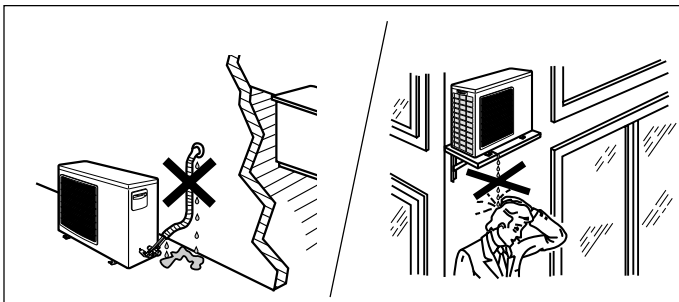
Unnecessary turns and bends in the connecting pipes.



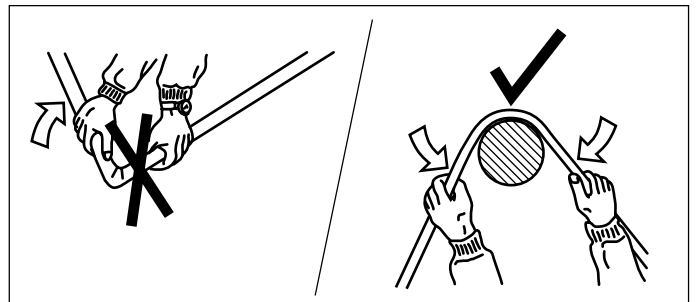
Multiple unit installation with units facing each other.



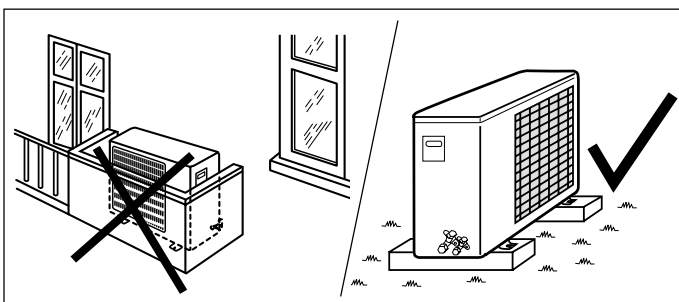
Any slack in the electrical connections.



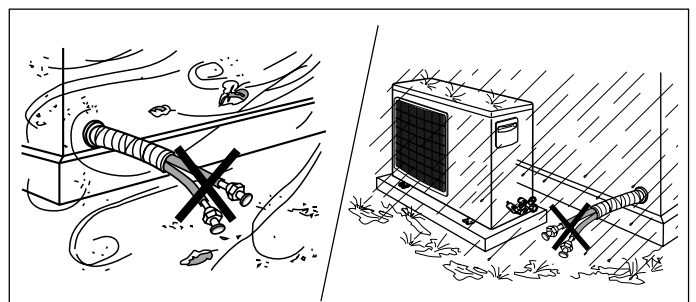
Insulating the connecting pipes only partially, which will cause dripping. Dripping into passageways.



Flattening or kinking of refrigerant or condensate pipes.



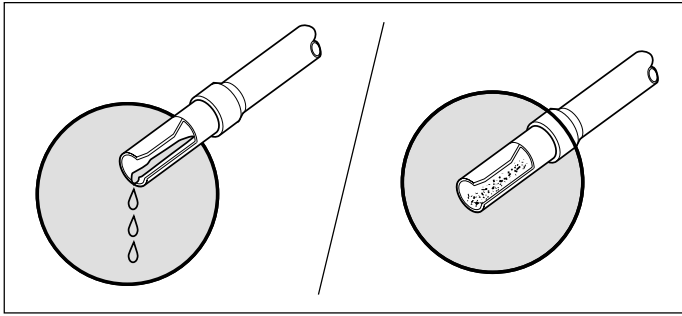
Any obstruction of the unit air outlet and intake or any obstacle that is too close (see minimum clearances required). Installation on grassy ground or soft surfaces (in these cases a solid foundation must be included).



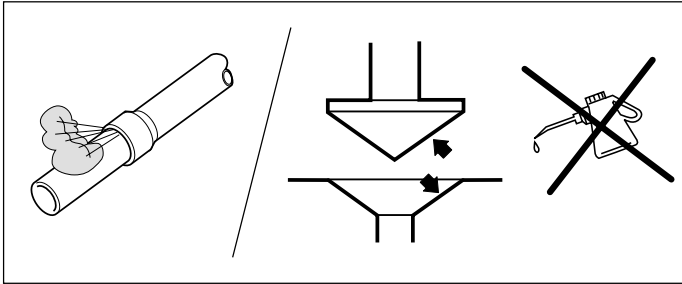
Soiling of pipe ends.
Allowing piping to get wet before connection.

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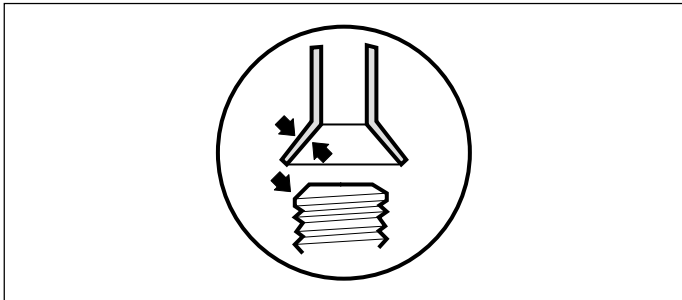
Refrigerant connections



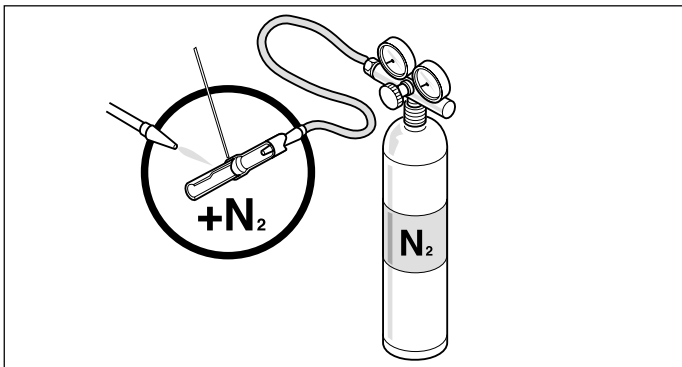
No moisture.
No dust.



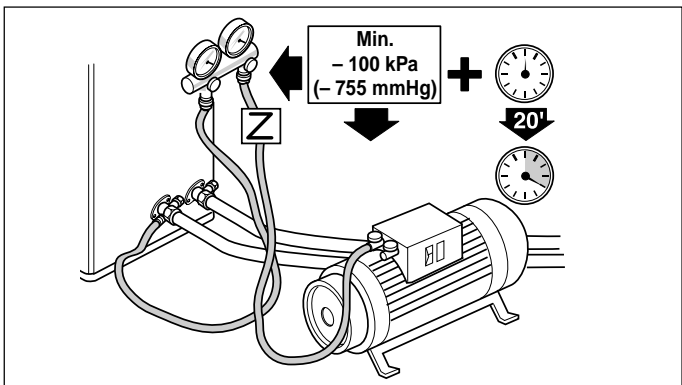
No leak.
No mineral oil.



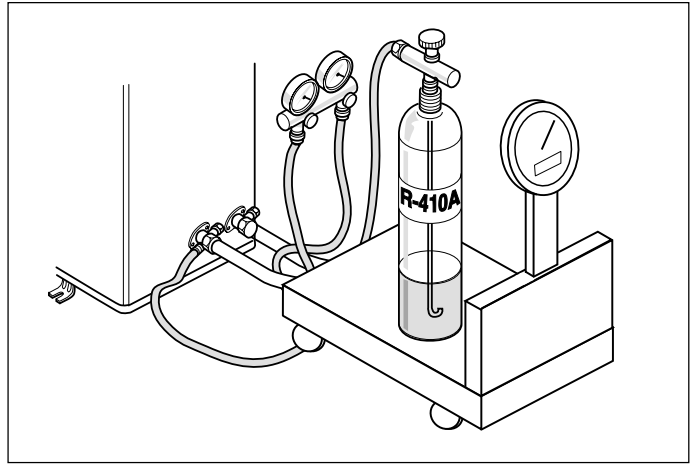
Neat.



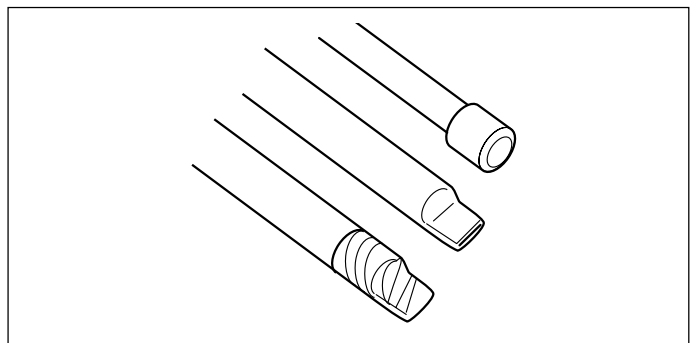
Dry nitrogen brazing.



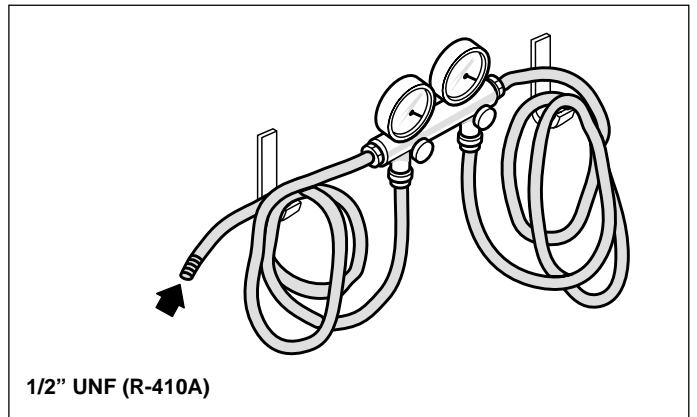
Vacuum.



Charge liquid-no gas.

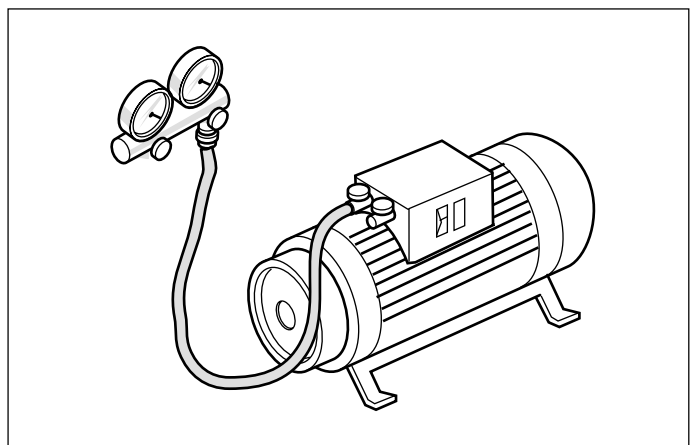


Copper tubes during storage.



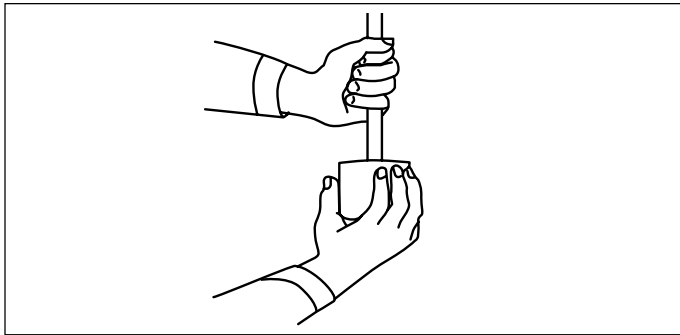
1/2" UNF (R-410A)

Use tools designed for R-410A higher pressure.
Keep inside clean.



2-stage vacuum pump. Replace oil regularly.

Flaring the ends of the tubing



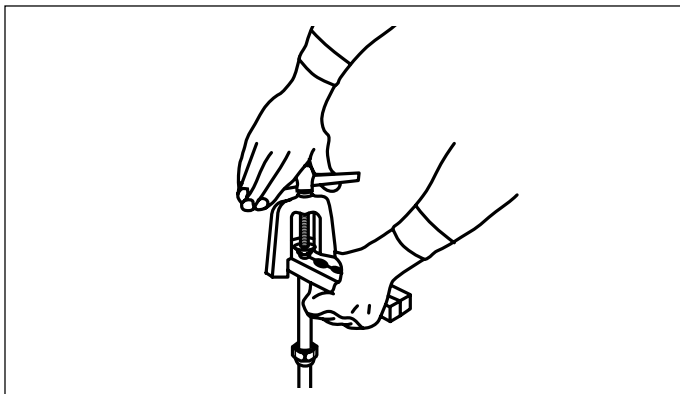
Remove protective caps from copper tube ends. Position tube end downward, cut the tube to the requested length and remove the burrs with a reamer.

Do not leave system open to atmosphere any longer than minimum required for installation.

Oil in the compressor is extremely susceptible to moisture absorption.

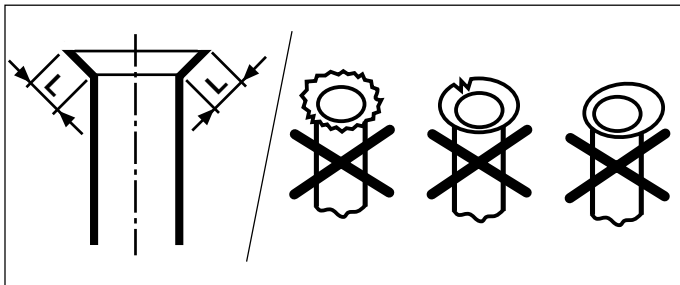
Always keep ends of tubing sealed during installation.

The maximum residual quantity of oil used for tubing is 40 mg/10 m.

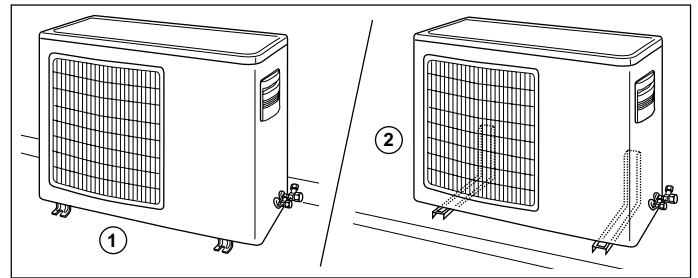


Remove flare nuts from the unit connections and place them on the tube end.

Flare the tube with the flaring tool.



Flare end must not have any burrs or imperfections. The length of the flared walls must be uniform.

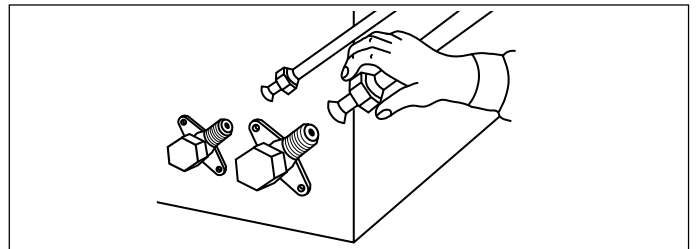


The unit can be installed:

- ① on the floor;
- ② on the wall using the bracket kit.

Connect tubing in accordance with the limits shown on Table II (Connections).

Finger-tighten the fitting several turns, then tighten it with a wrench by applying the tightening torque indicated in the table.

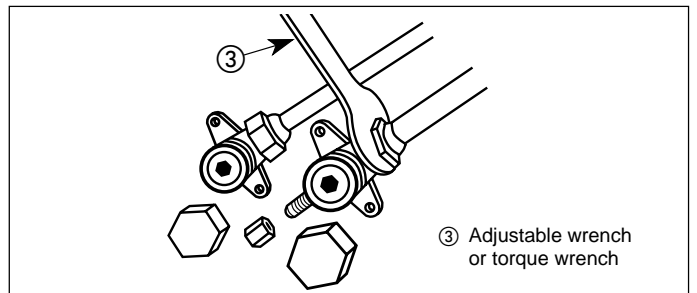


Where required, the unit must be charged with additional refrigerant.

Additional charge must be added using electronic scales and the service port (5/16") on the suction line.

Charge refrigerant only in liquid phase (bottle turned upside down or using the specific connection on bottle; see page 1).

Connection to unit



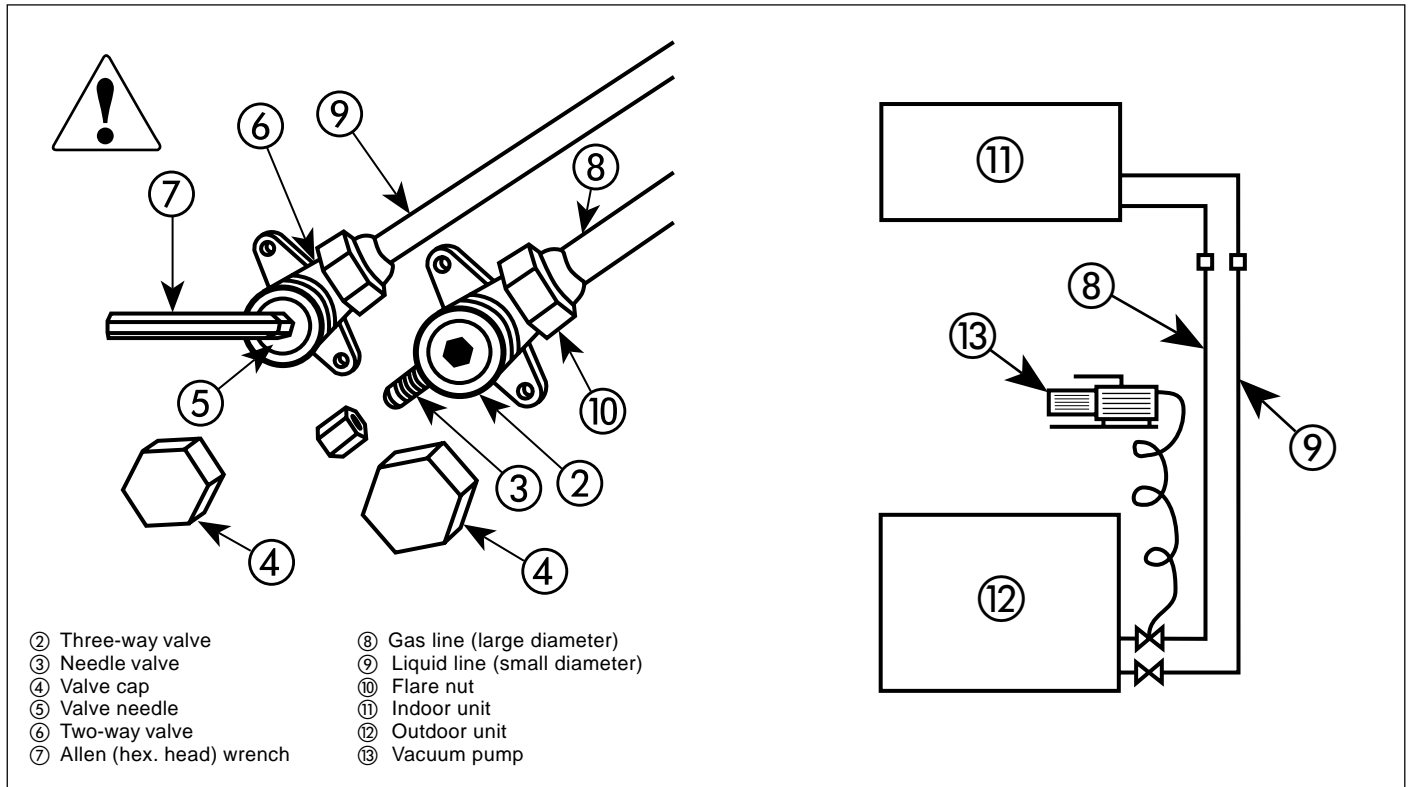
Insufficient tightening torque will cause gas leaks. Overtightening the fittings will damage the tube flaring and cause gas leaks.

Pipe diameter	Tightening torque Nm
6.35 mm (1/4")	18
9.52 mm (3/8")	42
12.70 mm (1/2")	55
15.87 mm (3/8")	65
19.05 mm (1/2")	100

Tightening torque					
Valve	Flare nut Nm	Valve cap Nm	Pressure port cap Nm	Valve needle Nm	Pressure port Nm
1/4"	18	20	-	9	-
3/8"	42	20	-	9	-
1/2"	55	40	16 - 18	13	0.34
5/8"	65	40	16 - 18	13	0.34
3/4"	100	40	16 - 18	13	0.34

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Refrigerant connections



Air purging

Use only a vacuum pump to purge air from the piping.

NEVER use the system compressor as a vacuum pump.

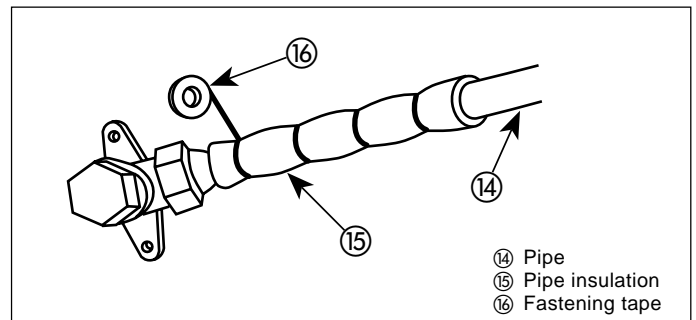
NEVER use the unit refrigerant gas to purge the connecting pipes.

No additional refrigerant has been provided in the unit for this purpose. Remove the caps from the two and three-way valves. Create a vacuum with a vacuum pump connected to the service connection of the suction shut-off valve, as shown, keeping the shut-off valves completely shut until a 50 Pa (0.5 mbar) vacuum has been reached.

Now open the two-way valve for 3 sec., then quickly shut it to check for possible leaks.

⚠ After the leak check, fully open the two and three-way valves. Do not go beyond the valve stop limit.

Replace caps and check for leaks.



Once all connections have been completed, check for leaks by using a leak detector specific for HFC refrigerants. Finally wrap the valves and pipes with anti-condensate insulation and tighten this with tape, without exerting too much pressure on the insulation. Repair and cover any possible cracks in the insulation. Fix the pipes to the wall with hooks or conduits.

Table III: Operating limits ⁽¹⁾

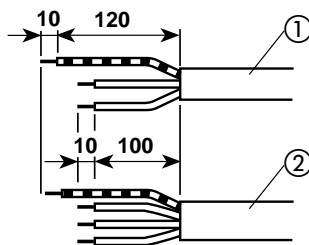
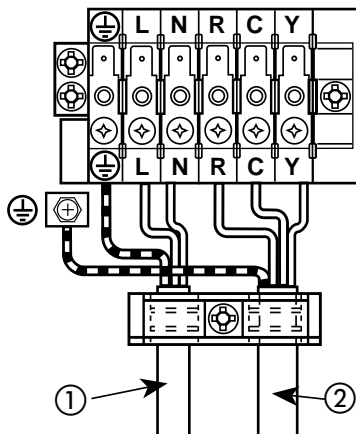
Cooling (2)	Maximum conditions	outdoor temperature 43°C indoor temperature 32°C d.b.; 23°C w.b.
	Minimum conditions	outdoor temperature -15°C ⁽³⁾ indoor temperature 21°C d.b.; 15°C w.b.
Mains power supply 38GLP---G	Nominal single-phase voltage Operating voltage limits	230V ~ 1pH 50Hz min. 198V – max. 264V
Mains power supply 38GLP---G9	Nominal three-phase voltage Operating voltage limits	400V 3N ~ 50Hz min. 342V – max. 462V

Notes: 1. Data referred to the outdoor unit only.
 2. According to ISO 5151.2/T1.
 3. The 38GLP units are fitted with Head Pressure Controller and can operate at an outside temperature up to -15°C.

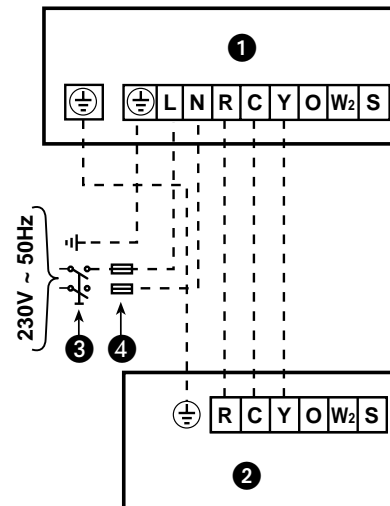
d.b. - dry bulb w.b. - wet bulb

Single-phase version

Cooling only unit



Cooling only system



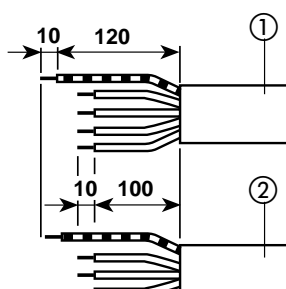
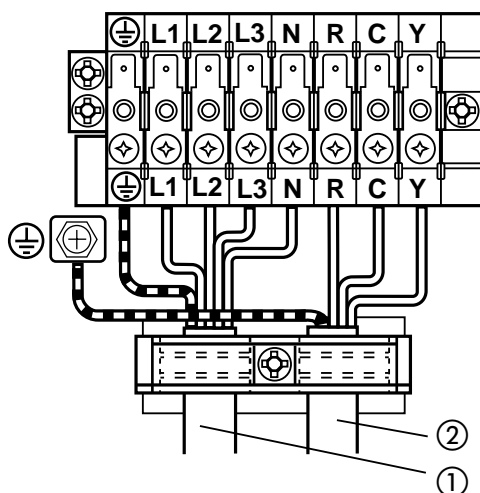
Terminal box legend, all models

- ⊕ Earth
- L Live power supply.
- L1 Live power supply.
- L2 Live power supply.
- L3 Live power supply.
- N Neutral power supply.
- R Live connection indoor/outdoor unit.
- C Neutral connection indoor/outdoor unit.
- Y Compressor interlocking contact.

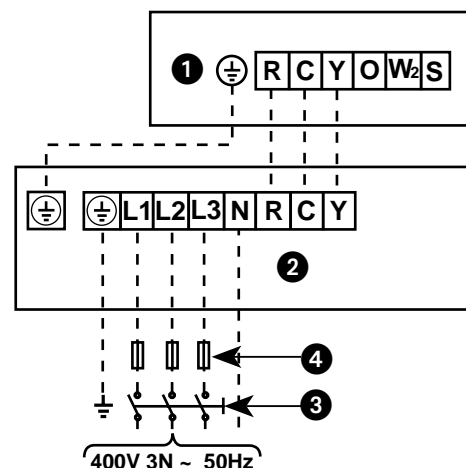
- ① Mains supply connecting cable (field wiring).
- ② Connecting cable Outdoor unit – Indoor unit (R - C - Y - ⊕) - (field wiring).
- ① Indoor unit
- ② Outdoor unit
- ③ Main switch
- ④ Time-delay fuse or circuit breaker (see table IV "Electrical data").

Three-phase version

Cooling only unit

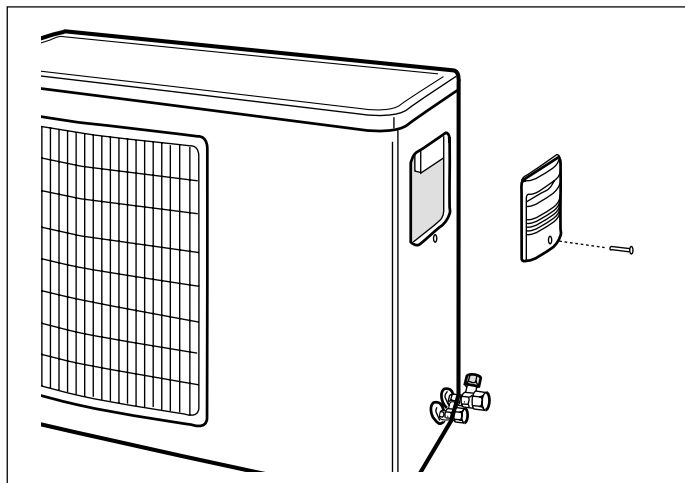


Cooling only system



38GLP---G / 38GLP---G9 (R-410A)

Electrical connections



- **Make refrigerant connections before electrical connections.** When disconnecting, disconnect electrical connections before refrigerant connections.

IMPORTANT:
Make ground connection prior to any other electrical connections.

Note:
All field electrical connections are the responsibility of the installer.

Refer to the indoor unit installation manual for sizing the connection wires between units.

- Remove electric box cover.
- Make electrical connections between units prior to proceeding to mains supply unit connection.
- Connect the wires to the terminals according to the wiring diagram and firmly tighten.

- **For 230 V ~ 1 pH 50 Hz single-phase unit**
Before proceeding with the unit connection to the mains supply locate live **L** and neutral **N**, then make connections as shown in the wiring diagram.

- **For 400V 3N ~50 Hz three-phase unit**
Before proceeding with the unit connection to the mains supply locate live **L1,L2,L3** and neutral **N**, then make connections as shown in the wiring diagram.

When the electric supply cables **L1 (R)**, **L2 (S)**, **L3 (T)** are connected inversely, a special "PSC" phase inversion protection device blocks the compressor to prevent the same from rotating inversely.

In this case, switch off the electrical supply and check the correctness of the sequence of the cables of the supply line connected to the main terminal block (they are probably inverted).

The compressor will only be allowed to work if the phase sequence is correct.

The phase sequence protection device also continuously monitors the electrical supply line and if one of the phases is completely missing it blocks the compressor.

The device only re-starts the compressor after the supply line is correctly restored.

All the three phase compressors have identical internal wiring.

For this reason when the correct phase connections for a specific system have been determined, the rotation direction will always be correct if the same connections are made to the terminal block (for the other equipment).

- According to the installation instructions, the disconnecting switches from the mains power supply should have a contact gap (4 mm) such that total disconnection can be ensured under the conditions provided for by overvoltage class III.

- The mains supply indoor unit – outdoor unit connecting cable must be H07 RN-F (60245IEC66) type synthetic rubber insulation with neoprene coating.

Note:
After connections have been completed, replace electric box cover.

Table IV: Electrical data ⁽¹⁾

	Starting current (2)	Power input ⁽⁵⁾								Main power connections ⁽⁶⁾	
		Cooling				Heating				Time-delay fuse gL type	Wire size (3-4)
		Nominal conditions 230V ~ 50Hz ISO 5151.2/T1 indoor 27°C d.b. 19°C w.b. outdoor 35°C d.b. 24°C w.b.		Peak conditions 198V ~ 50Hz ISO 5151.2/T1 indoor 32°C d.b. 23°C w.b. outdoor 43°C d.b. 32°C w.b.		Nominal conditions 230V ~ 50Hz ISO 5151.2/High+ indoor 20°C d.b. 15°C w.b. outdoor 7°C d.b. 6°C w.b.		Peak conditions 198V ~ 50Hz ISO 5151.2/High+ indoor 27°C outdoor 24°C d.b. 18°C w.b.			
Cooling only	A	A	W	A	W	A	W	A	W	A	mm ²
38GLP018G	40	9.3	2110	13.1	2560	---	---	---	---	20	2.5
38GLP024G	60	10.1	2300	15.1	3100	---	---	---	---	25	2.5
38GLP018G9	24	3.8	1950	4.4	2600	---	---	---	---	10	2.5
38GLP024G9	32	4.5	2270	5.3	3060	---	---	---	---	10	2.5
38GLP028G9	37	4.8	2900	5.5	3450	---	---	---	---	16	2.5
38GLP036G9	39	4.9	3100	6.4	3800	---	---	---	---	16	2.5
38GLP048G9	54	6.3	3300	7.5	3950	---	---	---	---	16	2.5
38GLP060G9	60	6.8	4580	9.2	5480	---	---	---	---	25	2.5

- Notes:**
1. Unit is suitable for outdoor installation.
 2. Starting current duration is usually lower than 1 sec.
 3. Wire size shown applies to line length up to 15 m.
 4. If the indoor unit is provided with an electric heater, consult indoor unit installation manual for correct sizing of the wires.
 5. Data referred to the outdoor unit only.
 6. The mains supply connecting cable must be H07 RN-F (60245IEC66) type synthetic rubber insulation with neoprene coating.

Pump Down and check the refrigerant charge

Pump-down

Pump-down is an operation intended to collect all the system refrigerant in the outdoor unit.

This operation must be carried out before disconnecting the refrigerant tubing in order to avoid refrigerant loss to the atmosphere, if it becomes necessary to disconnect the refrigerant connections for unit repair, removal or disposal; in this case, after removal, unit must be delivered to an appropriate disposal centre or the original dealer.

Shut off the liquid valve with the Allen wrench.

Turn the system on in cooling with fan operating at high velocity. (Compressor will immediately start, provided 3 minutes have elapsed since the last stop).

After 2 minutes of operation, shut the suction valve with the same wrench.

Turn the system off and switch mains supply off.

Disconnect tubing.

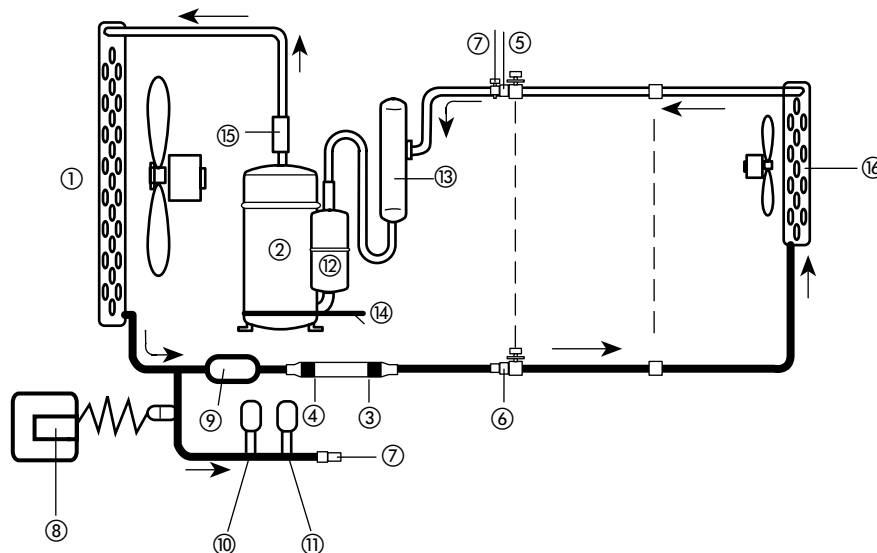
After disconnection, protect valves and tubing ends from dust.

Compressor damage may occur if run at a negative suction pressure.

Check the refrigerant charge

- This check becomes necessary after any refrigerant leak due to incorrect connection, or after replacement of the compressor.
- The best method to correctly charge refrigerant is to completely empty the refrigerant circuit using refrigerant recovery equipment. Then charge the exact quantity of refrigerant according to the data shown on the unit nameplate. This can be done with charging equipment of the "Dial a charge" type.
- **R-410A refrigerant cylinders contain a dip tube which allows liquid refrigerant to flow from the cylinder in an upright position. Charge R-410A units with cylinder in upright position and a commercial-type metering device in manifold hose in order to vaporize the liquid refrigerant before it enters in the unit. Charge refrigerant into suction-line.**

**Refrigerant circuit
Cooling only unit**



Legend:

- ① Outdoor coil
- ② Compressor
- ③ Metering device
- ④ Strainer
- ⑤ Vapor valve
- ⑥ Liquid valve
- ⑦ Service pressure port
- ⑧ Pressure transducer on head pressure controller board

- ⑨ Drier filter
- ⑩ High pressure switch
- ⑪ Low pressure switch
- ⑫ Rotary compressor storage battery*
- ⑬ Additional storage battery*
- ⑭ Crankcase heater
- ⑮ Discharge muffler*
- ⑯ Indoor unit coil

(* according to the models)

- Gas
- Liquid + Gas
- Liquid

38GLP---G / 38GLP---G9 (R-410A)

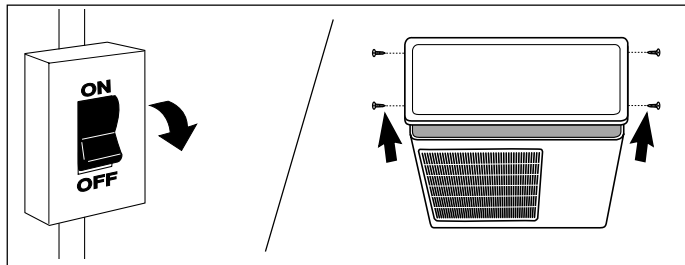
Unit maintenance, troubleshooting and guide for the owner

Indoor unit coil

The following maintenance operations must be carried out by qualified personnel.

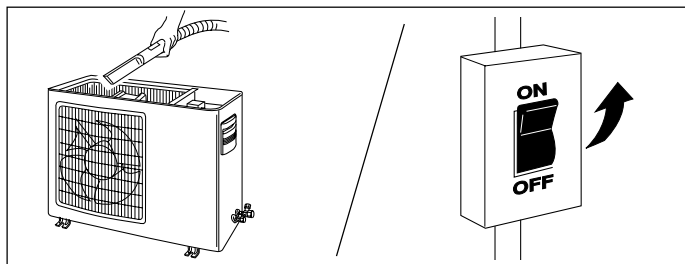
Cleaning the coil

When necessary, proceed as follows for more careful cleaning of the coil:



Switch the mains supply OFF.

Remove unit top cover by loosening holding screws and lifting the cover.



Carefully clean the coil with a vacuum cleaner from inside to outside. With the same vacuum cleaner, dust the inside of the fan compartment and the fan blades.

Avoid any damage to the blades which may cause future vibrations and noise.

Replace the unit cover and tighten the screws.

After long shutdown periods and at commissioning

Energize the system by putting the main switch to ON without starting the unit. (Remote control must be in the OFF position). Do not disconnect the main switch during the unit operating season.

Troubleshooting

Compressor and fan of the outdoor unit will not start:

- Unit not energized; check the mains power connections.
- Main switch OFF; check and put to the ON position.
- Main switch fuses have blown; replace.
- Wait for 3 minutes; compressor cycling protection is on.
- Pressure switch open; check and eliminate cause.
- Mains voltage too low.
- Electrical connections loose or wrong; check and repair.

Compressor will not start, but outdoor fan is running:

- Electrical connections of compressor loose or wrong; check and repair.
- Compressor burnt out, seized or protection device on; check for the cause and replace compressor if necessary.
- Run capacitor faulty (single-phase models); replace.

Compressor starts, but stops due to its overtemperature protection (other than stops caused by the normal operation of the thermostat):

- Wrong refrigerant charge (excessive or low) or air or other non condensable gases in the circuit; drain refrigerant (see note 1), evacuate and recharge.
- Mains voltage wrong (too high or too low).

- Condenser coil (outdoor or indoor, in case of heat pump operation) obstructed; remove obstructions.
- Outdoor fan off; check cause and repair.
- Run capacitor faulty; check and replace.
- Refrigerant circuit clogged; check and remove obstructions.
- Expansion device clogged or covered with ice; drain refrigerant (see note 1), evacuate and recharge.

Compressor runs continuously:

- Unit selected too small for actual air conditioning needs.
- Unit selected at a too low indoor temperature (cool only); change selection.
- Refrigerant charge low; check and add refrigerant.
- Outdoor unit fan faulty; replace.
- Air or other non condensable gases in the circuit; drain refrigerant (see note 1), evacuate and recharge.
- Obstructions at air intake or dirty indoor unit filters; remove obstruction or clean filter.

Discharge pressure too high:

- Outdoor coil dirty or obstructed; clean or remove obstructions.
- Condenser fan (outdoor or indoor, in case of heat pump operation) faulty; replace.
- Refrigerant charge too high; drain some refrigerant (see note 1).
- Air or other non-condensable gases in the circuit; drain refrigerant (see note 1), evacuate and recharge.
- Head pressure controller prevents the fan motor from reaching the maximum speed. Check the head pressure controller operation by connecting the fan directly.

Discharge pressure too low:

- Refrigerant charge too low; add refrigerant.
- The indoor coil or gas pipe are clogged; remove the obstruction.
- Indoor unit air filter dirty; clean filter.

Suction pressure too high:

- Refrigerant charge too high; drain some refrigerant (see note 1).

Suction pressure too low:

- Refrigerant charge too low; add refrigerant.
- Evaporator coil (indoor or outdoor, in case of heat pump models), covered with ice; see the following points.
- Air shortage to the evaporator unit; check and repair and check indoor unit fan operation.
- Expansion device or suction line clogged; check and repair.
- The outdoor unit fan does not work according to head pressure; check the controller operation.

Outdoor fan cycling due to its overtemperature protection:

- Fan capacitor faulty; replace.
- Electrical connection loose; check connections.
- Fan bearing seized; check and repair.
- Head pressure controller faulty. Check the controller operation by connecting it directly to the outdoor fan.

Note 1: Do not release refrigerant to the atmosphere; use refrigerant recovery equipment.

Guide for the owner

When installation and tests are completed explain the Operation and Maintenance Manual to the owner, with particular attention to the main operating modes of the air conditioner, such as:

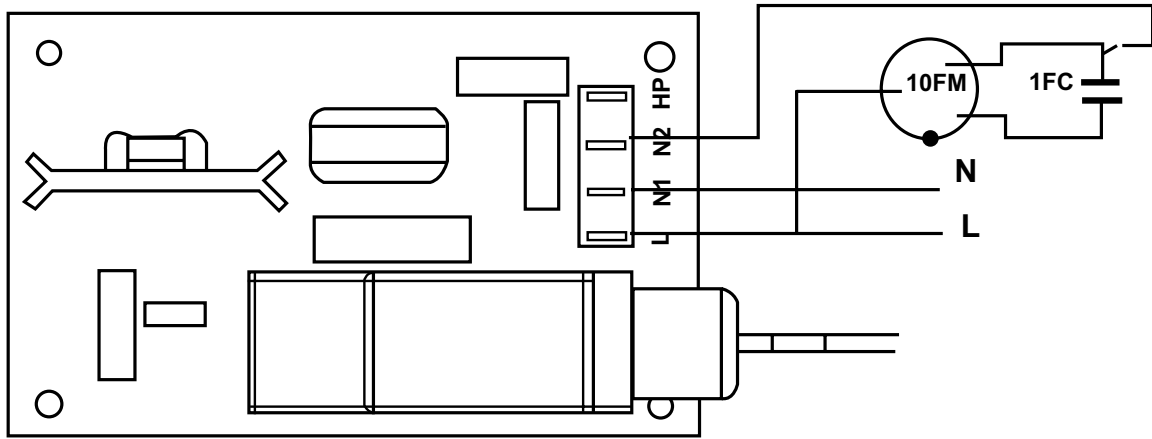
- Turning the unit on and off.
- Functions of the remote control.
- Removal and cleaning of the air filters.

Leave the two installation manuals for the indoor and outdoor units with the owner for future use during maintenance operations or for any other needs.

Table V: Accessoires

Description	Part number	Mod. 38GLP					
		18	24	28	36	48	60
Wall bracket kit	38YL-900---001-40	●	●				

Head pressure controller: wiring diagram



1FC - Fan Capacitor
10FM - Fan motor

Troubleshooting

See paragraph "Troubleshooting".

Note:

At start-up or in case of re-start after a stop of several hours at -10°C , with low voltage supply (198V), high pressure switch HIP may trip off the unit. In this case, reset the system by switching OFF and ON the power supply.



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The manufacturer reserves the right to change any product specifications without notice.