



INSTALLATION MANUAL EN

MANUALE DI INSTALLAZIONE IT

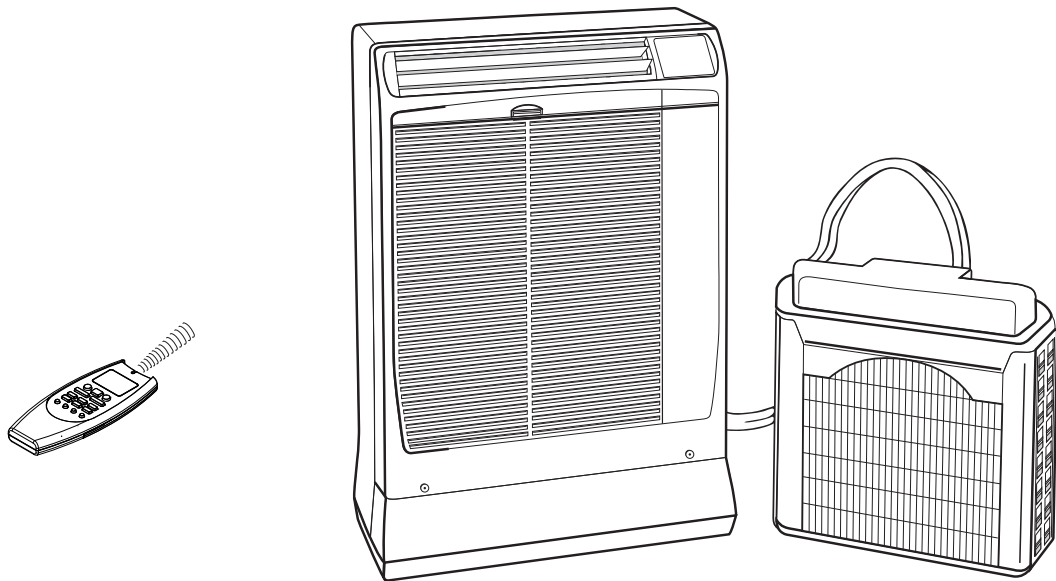
NOTICE D'INSTALLATION FR

INSTALLATIONSANLEITUNG DE

INSTRUCCIONES DE INSTALACIÓN ES

INSTRUCÇÕES DE INSTALAÇÃO PT

## ULISSE ECO



**Room air conditioner with remote condenser**  
**Condizionatore d'ambiente con condensatore remoto**  
**Climatiseur avec condenseur a air exterieur - Klimagerät mit außengerät**  
**Acondicionador de ambiente con condensador a distancia**  
**Ar Condicionado com condensador remoto**

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EN

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### REGULATION (EU) No. 517/2014 - F-GAS

The unit contains R32, a fluorinated greenhouse gas with a global warming potential (GWP) of 675. Do not release R32 into the atmosphere.

R32 (STANDARD): 0.750 kg / 0.506 Tonn. CO2 eq.  
R32 (STANDARD + 2 m): 0.785 kg / 0.530 Tonn. CO2 eq.  
R32 (STANDARD + 4 m): 0.820 kg / 0.554 Tonn. CO2 eq.

### Power supply:

220 - 240 V ~ / 1 / 50 Hz



The unit contains R32, a slightly flammable gas.



Before installing the unit, read this installation manual and strictly follow all safety instructions. Always contact an Argoclima Service Center.



Any repair must be performed by qualified personnel, following the instructions contained in the manufacturer's technical manual.

### IMPORTANT

- Do not try to accelerate the defrosting process or to clean the appliance in different ways other than those recommended by the manufacturer.
- The unit has to be stored in a room that doesn't have any continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn the unit.
- Be aware that refrigerants do not have any odour.
- This unit has to be installed, operated and stored in a room with a floor area larger than 6m<sup>2</sup>. The room must be well ventilated.

### IN CASE OF MAINTENANCE OF THE REFRIGERANT CIRCUIT

- The installer must be in possession of the F-GAS certification without any integration.
- The installer must have the appropriate equipment (vacuum pump and recuperator) certified for R32.

## 1 - GENERAL PRECAUTION

- Check that the voltage and frequency of the power supply match those required by the system.
- Check the possibility to have the power line to the indoor unit (**ELECTRIC CABLE LENGTH 3 m**).
- Install a double - pole switch, protected by 10 A fuses of the delayed type, upstream the electricity wall socket.
- Make sure that the electrical installation is suitable to supply continuously current necessary for the air conditioner in addition to that already used by other electric appliances (white goods, lighting). See the max electric input indicated on the name plate positioned on the air conditioner.
- **Before connecting the air conditioner to a power socket, make sure that the socket is provided with an earth connection in compliance with local codes.**

## 2 - INSTALLATION SITE SELECTION

### INDOOR UNIT

#### AVOID:

- Positioning the indoor unit into rooms where it could be sprinkled with water (i.e. laundries).
- Installation in areas where leakage of flammable gas or large amount of mist may be expected humidity location.
- Direct sunlight or near by heat source that may affect performance of the unit.
- Installing the unit behind curtains or furniture that obstruct air circulation.

#### DO:

- Choose a position which allows proper ventilation in the room.
- Verify respect of the minimum recommended maintenance space.

### OUTDOOR UNIT

#### AVOID:





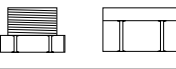

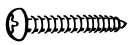


- Direct sunlight or area where hot air from exhaust fans investing the unit.

#### DO:

- Choose a place as cool as possible and well ventilated.


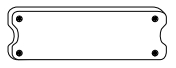
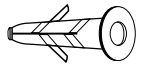


## 3 - ACCESSORIES AND TOOLS REQUIRED FOR INSTALLATION

### ACCESSORIES SUPPLIED WITH THE UNIT

FIGURE	PARTS	NR°
	REMOTE UNIT CONTROL	1
	RAWL PLUG S X 5	2
	SCREW 4,2x32	2
	WASHER	2
	PLASTIC PLUG (MALE AND FEMALE)	2 + 2
	RAWL PLUG S X 10	2/3
	SCREW 7x65	2/3
	WASHER	2/3
	OUTDOOR UNIT BASKET OR SUPPORT	1

### CONNECTION EXTENSION KITS - LENGTH OF 2 OR 4 m

#### ACCESSORY SUPPLIED ON REQUEST

FIGURE	PARTS	NR°
	EXTENSION KIT FOR CONNECTION TUBE	1
	CONNECTIONS PLASTIC BOX	1
	RAWL PLUG	3
	TAPPING SCREW ø 3,5 x 45	3
	CLAMP	2

#### THE EXTENSION KITS ARE SUPPLIED PRECHARGED

Before the installation, verify that they are fit for the unit.

NARROW TUBE OUTSIDE DIA.	LARGE TUBE OUTSIDE DIA.
6,35 mm	7,93 mm

### TOOLS REQUIRED FOR INSTALLATION (NOT SUPPLIED)

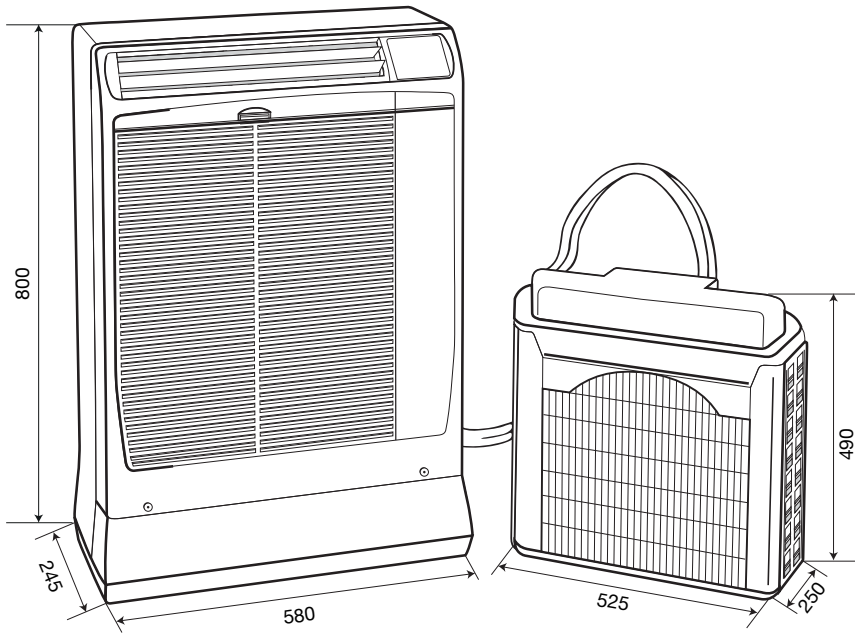
- Phillips head screw driver • Tape measure • Level • Hammer drill • Hole saw or key hole saw ø 50
- 19 mm wrench • 21 mm wrench • 24 mm wrench • Hammer • Hacksaw • Core bits 10 mm diameter drill bit.

### ADDITIONAL MATERIAL REQUIRED FOR INSTALLATION (NOT SUPPLIED)

- Synthetic oil HAB - Alkylbenzene type ex. EXXON ZERICE S, about 30 gr.
- PVC pipe to insulate hole in the wall, external diameter 50 mm. of minimum length as for thickness wall.

## 4 - DIMENSIONS AND WEIGHT

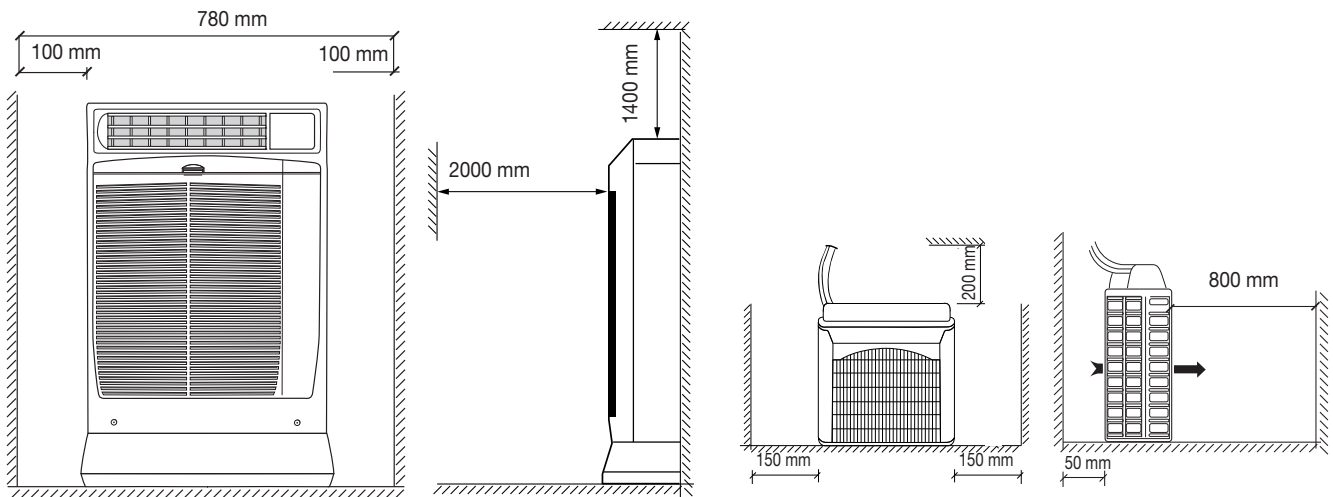
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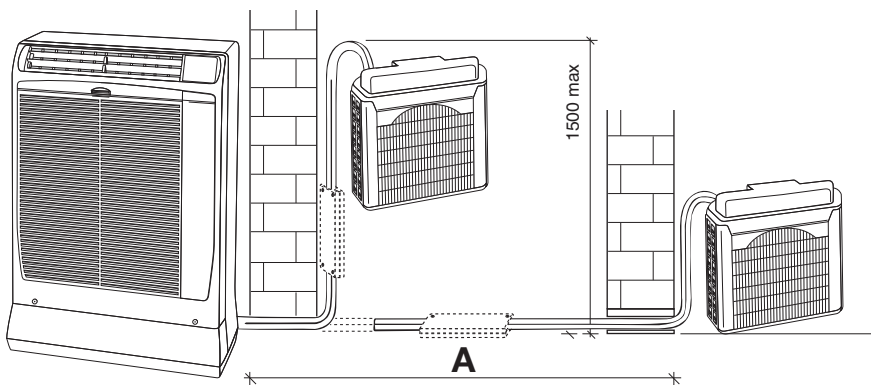
Net weight: 57 Kg

Unit: mm

## 5 - MINIMUM OPERATION AND MAINTENANCE AREA



## 6 - TUBING LENGTH AND ELEVATION DIFFERENCE LIMITS

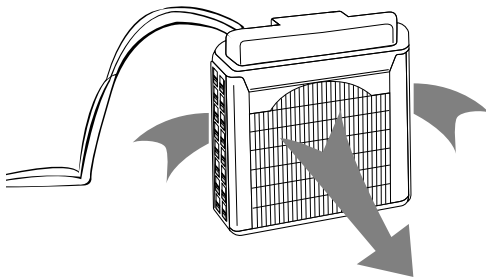
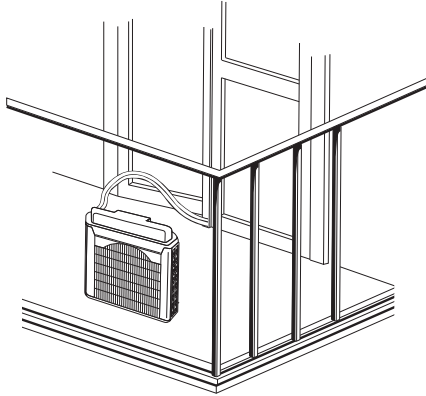


Standard mm	2 m system extension kit	4 m system extension kit
<b>A</b> 1500	<b>A</b> 3500	<b>A</b> 5500

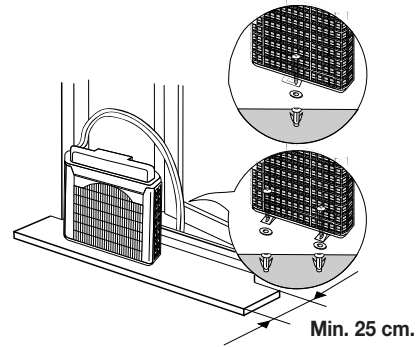
## 7 - INSTALLATION OF OUTDOOR UNIT

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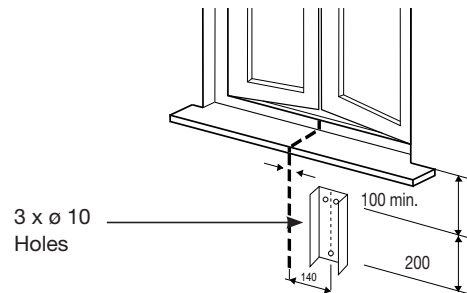
- A** The outdoor unit may be placed on a balcony. Make sure to put it in vertical position and levelled. During the installation do not kink the connection tube between the units. Verify the correct air circulation around the outdoor unit.



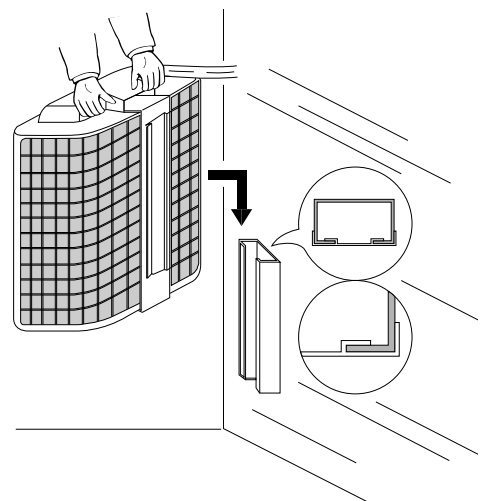
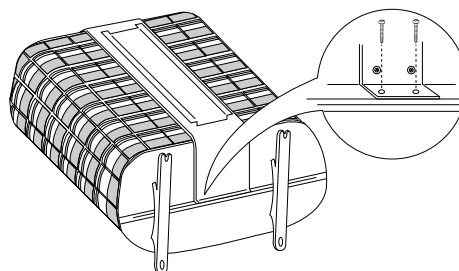
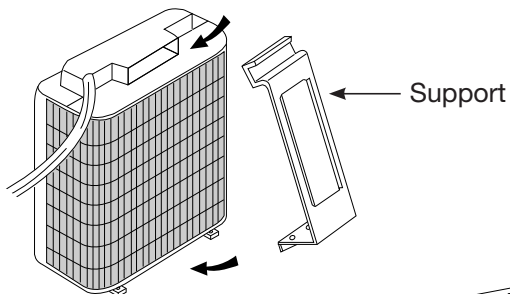
- B** Or fixed to the window sill.



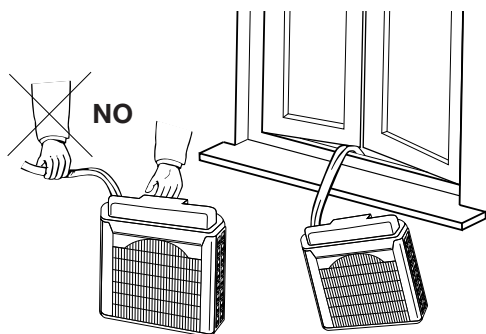
- C** Or hanged to the wall below the window sill using the support supplied as accessory. After placing the unit in the support, check that it is levelled.



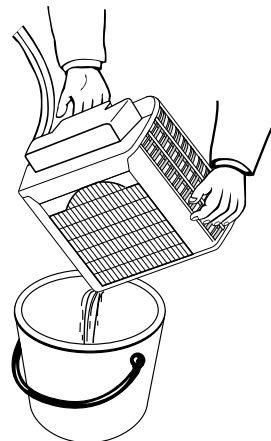
- D** Insert the support in the handle of the outdoor unit, turn the outdoor unit upside down (see the picture). Place the support and secure it at the edge of the unit. Insert the support guide fixed on the unit at the wall. Make sure it is levelled.



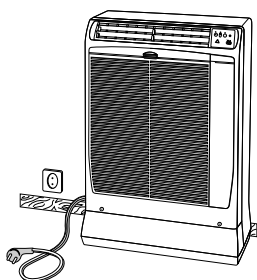
**EN** **E** Do not handle the outdoor unit improperly.



**F** When recovering the outdoor unit after operation drain away any remaining condensate by tilting the unit.



**G** Place the indoor unit against the wall next to an electric socket.

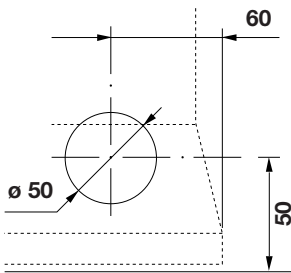


**IMPORTANT**

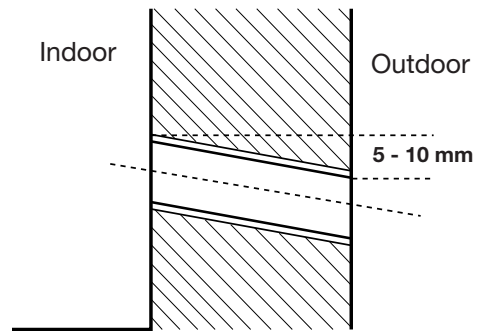
**OPERATION TO BE EXECUTED BY COMPETENT OR QUALIFIED PERSONEL**

1. Before disassembling the outdoor unit (disjoin the rapid couplings): connect the air conditioner to a socket and let the compressor work for 5 minutes. During the disassembling operation, beat lightly with a spanner on the rapid coupling brass body (exagonal part).
2. Lubricate the joint surfaces (rapid coupling) with a little bit of HAB oil only (synthetic oil Alkylbenzene type ex. EXXON ZERICE S).
3. When you disjoin the outdoor unit, follow the described succession: first, disconnect the power supply of the air conditioner (disconnect the plug), disconnect the electric connector, then the pipes of the frigorific connection.

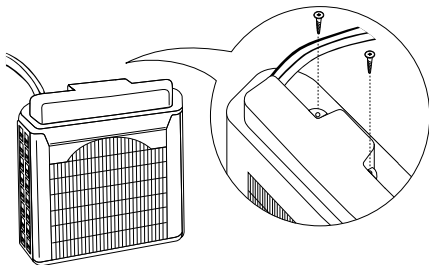
**A** Choose the best position where to install indoor unit. Mark the hole to be made in the wall.



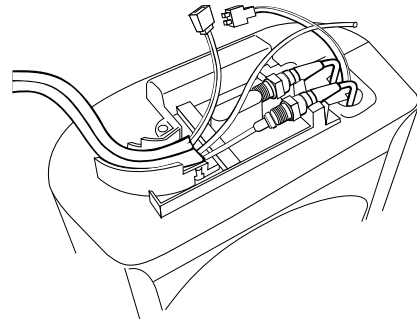
**B** Drill a 50 mm diameter hole, insert a PVC pipe.



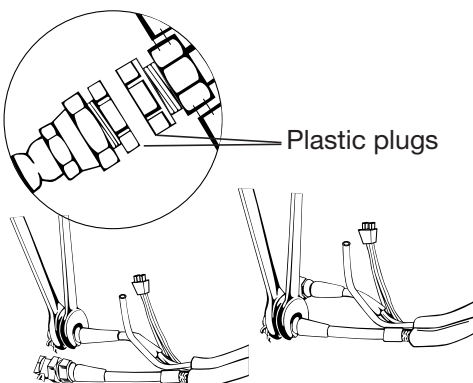
**C** Remove the coupling cover of the outdoor unit.



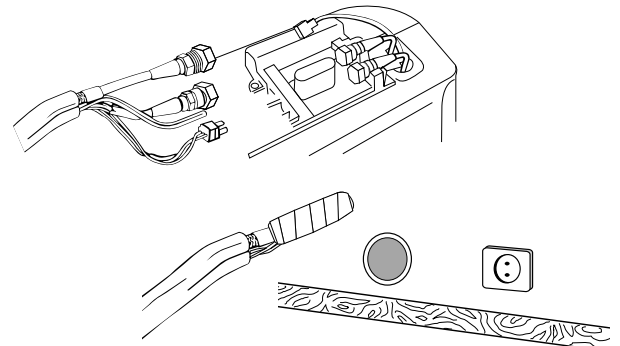
**D** Disconnect the condensate plastic tube and the electric connector.



**E** Loosen the quick coupling using the 19-21 mm spanners first and then the 19-24 mm spanners. Unscrew the flare nuts by hand and disconnect the flexible tube.

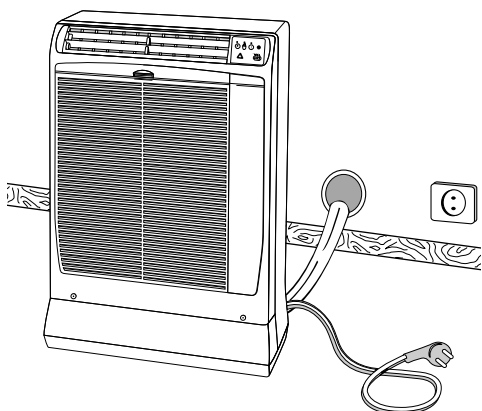


**F** Protect quick coupling (on flexible tube and outdoor unit) with plastic plugs supplied as accessories. To insert the tubing into the hole in the wall easily and without damages, join the pipe ends and wrap them with adhesive tape.



- G** Insert the flexible tube into the hole drilled in the wall. Place the unit against the wall, if necessary, adjust the four antivibration supports **in order to keep the unit levelled**.

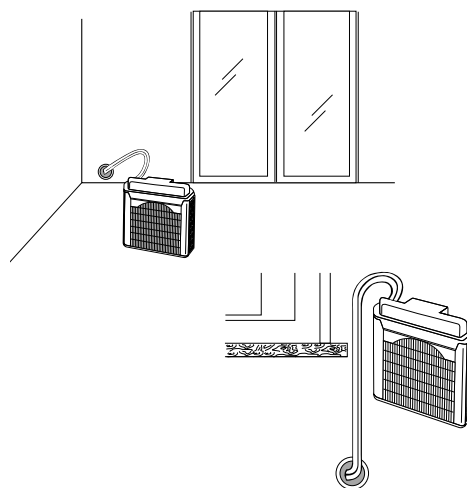
**NOTE: The four antivibration supports are rubber made and they could mark the floor; in this case the application of proper material under the support is recommended.**



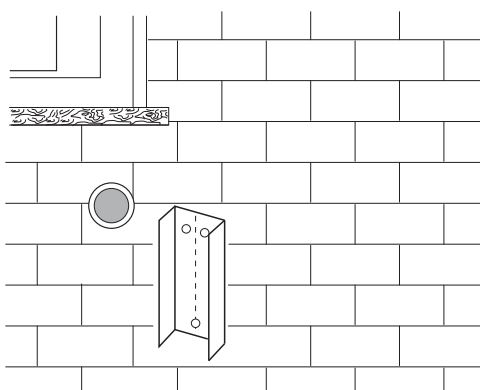
#### WARNING

**When you assemble the outside unit, follow the described succession: first, connect the pipes for frigorific connection, then the electric connector.**

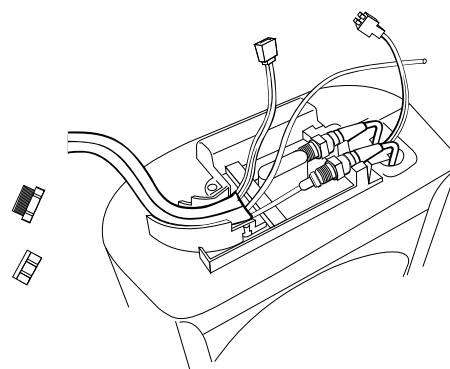
- H** The unit can be placed on a balcony or hung to the wall using the supplied support.



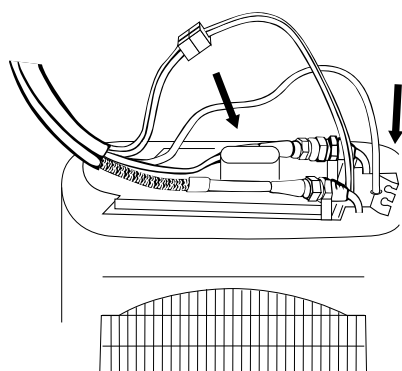
- I** Drill the holes and fix the support to the wall using the rawl plugs supplied as accessory.



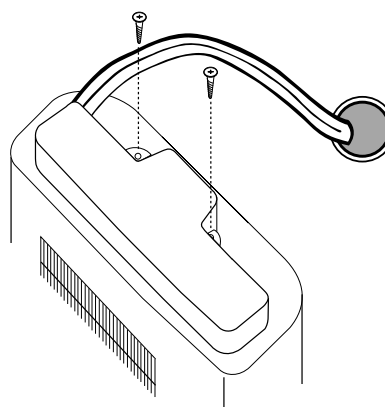
- L** Remove the plastic plugs from quick couplings, connect the couplings by hand, then tighten using the torque wrenches (tightening torque  $150 \div 165$  kgcm).



- M** Connect the condensate plastic tube and the electric connector.



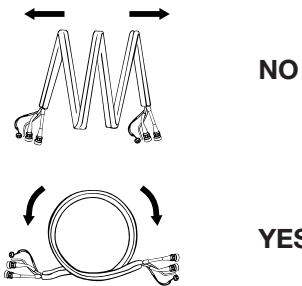
- N** Fix the coupling cover of the outdoor unit and seal the hole in the wall around the flexible tube.



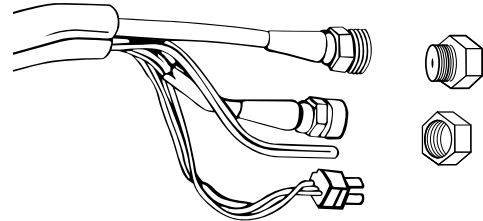


**IMPORTANT OPERATION TO BE EXECUTED BY COMPETENT OR QUALIFIED PERSONEL**

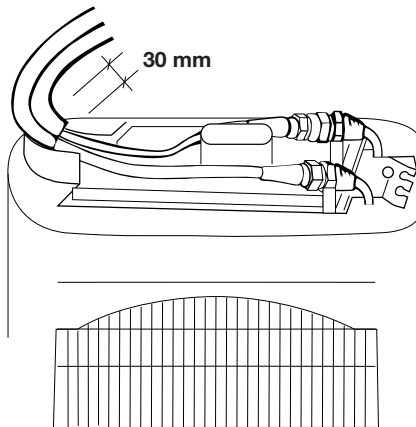
**A** Carefully unroll the extension tube; be careful not to twist nor kink it.



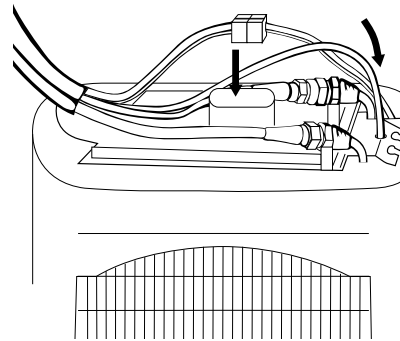
**B** Remove the plastic plug from extension tube ends (preformed tubes side).



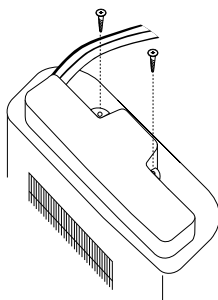
**C** Fit the copper tubes on the support bent side. Connect the couplings by hand, adjust carefully the tubes on unit top, then tighten using the torque wrenches (tightening torque  $150 \div 165$  kgcm).



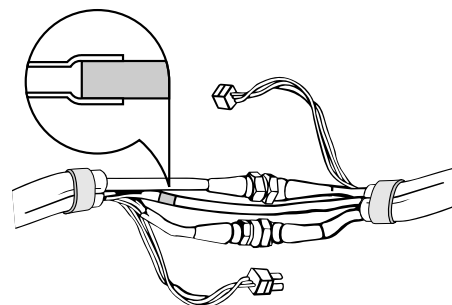
**D** Connect the condensate plastic tube and the electric connector.



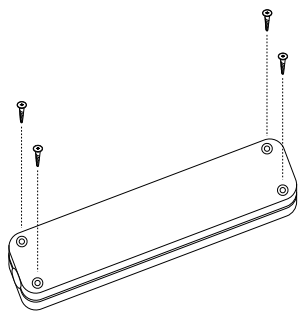
**E** Fix the coupling cover of the outdoor unit.



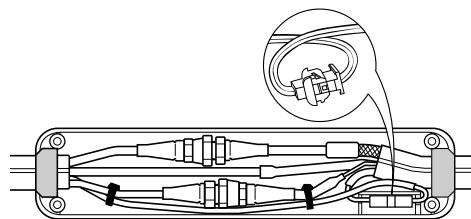
**F** Remove the plastic plugs from opposite end of flexible tube and connect quick couplings, first by hand and then using the spanners. Cut the PVC tube (soft kind) in excess then insert it into the stiff one.



- G** Open the quick coupling box.



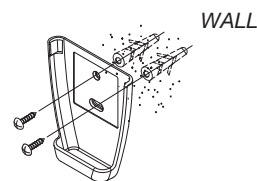
- H** Adjust the couplings in the box, connect the electric cable connector then turn it by 180°. Place the electric cable and fix it to the pipe with the smallest diameter through hose clamps. Fix the gaskets on the connections box ends.



## 10 - REMOTE CONTROL UNIT INSTALLATION

To ensure that the air conditioner operates correctly, DO NOT install the remote control unit in the following places:

- In direct sunlight.
- Behind a curtain or other places where it is covered.
- More than 8 m. away from the air conditioner.
- In the path of the air conditioner airstream.
- Where it may become extremely hot or cold.
- Where it may be subject to electrical or magnetic noise.
- Where there is an obstacle between the remote control unit and air conditioner.



### WALL-MOUNTED POSITION

- Momentarily place the remote control unit in the desired mounting position.
- Verify that the remote control unit can operate from this position.
- Fix the support at the wall with two screws and hang the remote control unit.

## 11 - ON/OFF CONTACT CONNECTION

The air conditioner is equipped with an ON / OFF contact (in very low voltage, to be connected to a clean contact, not in tension); when opening the contact, the air conditioner is in stand-by.

Through this contact it is possible to connect an external device that inhibits the operation of the air conditioner, as for example: window opening contact, remote on / off, infrared presence sensor, enabling badge, etc.

It is recommended to use a double insulation cable.

The unit is supplied with a pre-installed jumper on the connector J36 of the PCB; in order to connect the remote ON / OFF contact, remove the jumper and connect the contact to the connector J36 using the HOME AUTOMATION KIT (code 38.7027.132 - TO BE BOUGHT SEPARATELY, ACCESSORY NOT SUPPLIED WITH THE UNIT) .



## NOTES

## IMPORTANT FOR MAINTENANCE

- Make sure there is no heat source or potential heat source in the maintenance area. The open flames are forbidden in the maintenance area and the “no smoking” sign must be hanged.
- Verify that the warning sign is in good condition, otherwise replace it.

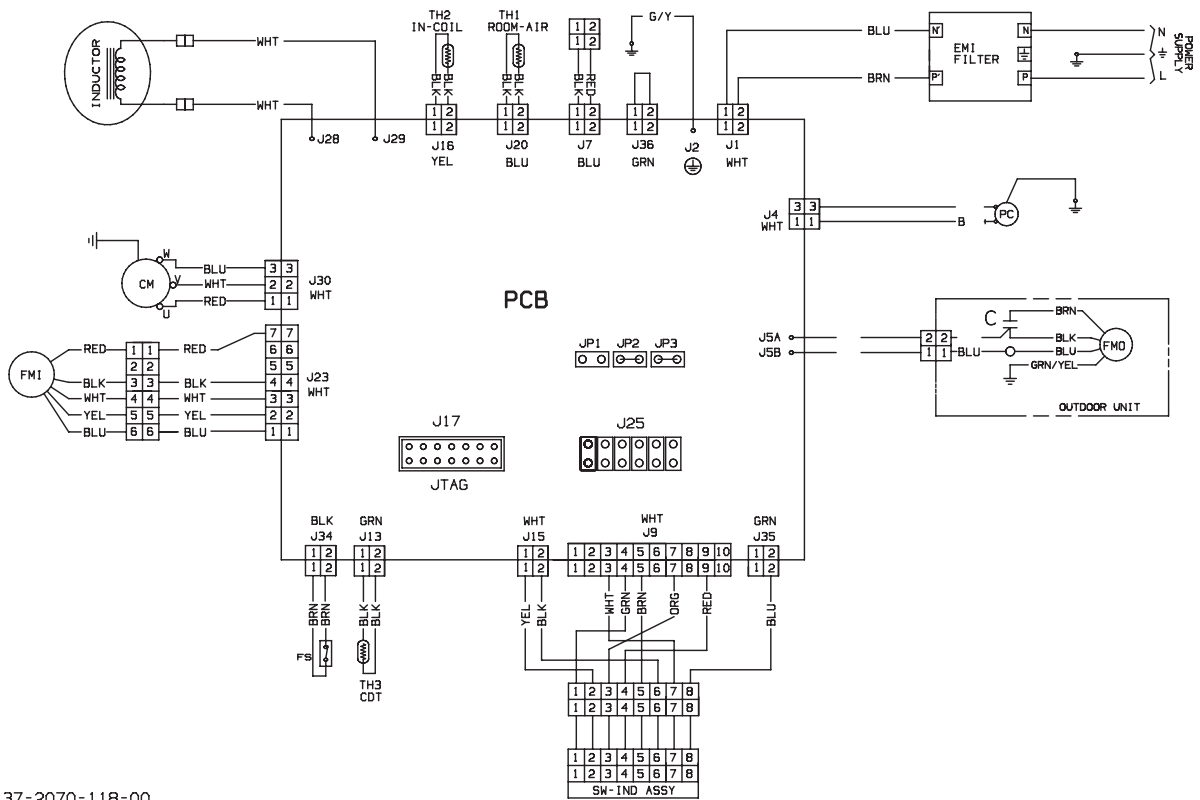
**Refrigerant recovery in case of maintenance or removal of the unit**

- If it is necessary to cut and weld the refrigeration circuit pipes during maintenance operations or to empty the refrigerant circuit in the event of removal of the unit, carry out the following operations:
  1. Turn off the unit and disconnect the power supply.
  2. Recover the gas.
  3. Make a vacuum with the vacuum pump.
  4. Clean the pipes with N2 gas.
  5. Cut and weld or bring the unit to the Service Center for welding.
  6. Make a leak detection check.
- The refrigerant must be recovered in the appropriate storage tank for R32 gas.
- Ensure that there is no naked flame near the vacuum pump outlet and that the area is well ventilated.

**Charge of the refrigeration circuit**

- Refrigerant charge apparatus, vacuum pump, hoses and adapters must be exclusively used for R32. Make sure that different types of refrigerant do not contaminate each other.
- It is suggested to charge the refrigerant in LIQUID state. Make sure that the refrigerant is the one required.
- Do not add any OIL to the compressor because precharged oil is specially selected for R410A.
- The refrigerant tank should be kept upright during filling of the refrigerant circuit.
- Stick the label on the system after you finish the refrigerant charge.
- Do not overfill.
- After completing the charge, check for leaks before doing the test run.

**13 - ELECTRICAL WIRING DIAGRAMS - SCHEMI ELETTRICI - SCHÉMAS ÉLECTRIQUES - ELEKTRISCHE ANSCHLUSSPLÄNE - ESQUEMAS ELÉCTRICOS - DIAGRAMAS ELÉTRICOS**



37-2070-118-00

**Electrical wiring diagrams' symbols / Simboli schemi elettrici / Symboles des schemas électriques  
 Legende: Anschlusspläne / Símbolos de los esquemas eléctricos / Símbolos de diagramas eléctricos**

<b>SYMBOL</b>	<b>EG</b>	<b>I</b>	<b>F</b>	<b>D</b>	<b>E</b>	<b>P</b>
PC	CONDENSATE PUMP	POMPA SCARICO CONDENSA	POMPE D'EVACUATION DES CONDENSATS	KONDENSWASSERAUSLASS-PUMPE	BOMBA DE DESCARGA DEL LIQUIDO DE COND.	BOMBA DE DRENAGEM DE CONDENSADO
CM	COMPRESSOR MOTOR	MOTORE COMPRESSORE	MOTEUR DE COMPRESSEUR	KOMPRESSORMOTOR	MOTOR DEL COMPRESOR	MOTOR DO COMPRESSOR
C1, 2, 3	CAPACITOR	CONDENSATORE	CONDENSATEUR	KONDENSATOR	CONDENSADOR	CAPACITOR
IND. U.	INDOOR UNIT	UNITA' INTERNA	UNITÉ INTÉRIEURE	INNENEINHEITEN	UNIDAD INTERIOR	UNIDADE INTERNA
OUTD. U.	OUTDOOR UNIT	UNITA' ESTERNA	UNITÉ EXTÉRIEURE	AUBENEINHEITEN	UNIDAD EXTERIOR	UNIDADE EXTERNA
FMO	OUTDOOR FAN MOTOR	MOTORE ESTERNO VENTOLA	MOTEUR DE VENTILATEUR EXTÉRIEUR	AUSSENLÜFTERMOTOR	MOTOR VENTILADOR EXTERNO	MOTOR VENTILADOR EXTERNO
FMI	INDOOR FAN MOTOR	MOTORE INTERNO VENTOLA	MOTEUR DE VENTILATEUR INTÉRIEUR	INNENLÜFTERMOTOR	MOTOR VENTILADOR INTERNO	MOTOR VENTILADOR INTERNO
IND. ASSY	INDICATOR ASSY	GRUPPO INDICATORI	ENSEMBLE INDICATEUR	ANZEIGE-BAUGRUPPE	GRUPPO DE INDICADORES	GRUPO INDICADORES
POB1, 2,3	CONTROLLER	SCHEDA ELETRONICA	CONTRÔLEUR	STEUERGERÄT	CONTROLADOR	PLACA ELETRÓNICA
FS	SAFETY FLOAT SWITCH	INT. SICUREZZA A GALL.	INTERR. DE SECURITE A FLOTTEUR	SCHWEMM-SCHUTZSCHALTER	INTERR. DE SEGURIDAD DE FLOTADOR	INTERRUPTOR DE SEGURANÇA EM FLOAT
SW ASSY	SWITCH ASSY	GRUPPO INTERRUPTORI	ENSEMBLE INTERRUPTEUR	SCHALTER-BAUGRUPPE	GRUPPO DE INTERRUPTORES	GRUPO INTERRUPTORES
TH1, 2	THERMISTOR	TERMISTORE	THERMISTOR	THERMISTOR	TERMISTOR	TERMISTOR
INDUCTOR	INDUCTOR	INDUTTORE	INDUCTOR	INDUCTOR	INDUCTOR	INDUCTOR
EMI FILTER	EMI FILTER	FILTRO DI RETE	FILTRE DE RESEAU	NETZFILTER	FILTRO DE RED	FILTRO DE REDE

**Wires color legend  
 Legenda colori fili elettrici  
 Légende des couleurs des fils électriques  
 Beschriftung der Leitungs-Farben  
 Legenda de los colores de los cable eléctricos  
 Legenda das cores dos fios elétricos**

<b>EG</b>	<b>I</b>	<b>F</b>	<b>D</b>	<b>E</b>	<b>P</b>
BLK	NERO	NOIR	SCHWARZ	NEGRO	PRETO
BLU	BLU	BLEU	BLAU	AZUL	AZUL
BRN	MARRONE	MARRON	BRAUN	MARRON	MARRON
GRN / YEL	VERDE / GIALLO	VERT / JAUNE	GRÜN / GELB	VERDE / AMARILLO	VERDE / AMARELO
GRY	GRIGIO	GRIS	GRAU	GRIS	CINZA
ORG	ARANCIONE	ORANGE	ORANGE	ANARANJADO	LARANJA
PNK	ROSA	ROSE	ROSA	ROSA	ROSA
RED	ROSSO	ROUGE	ROT	ROJO	VERMELHO
VLT	VIOLA	VIOLET	VIOLETT	VIOLETA	VIOLETA
WHT	BIANCO	BLANC	WEISS	BLANCO	BRANCO
YEL	GIALLO	JAUNE	GELB	AMARILLO	AMARELO

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