



INSTALLATION MANUAL

EN

MANUALE DI INSTALLAZIONE

IT

NOTICE D'INSTALLATION

FR

INSTALLATIONSANLEITUNG

DE

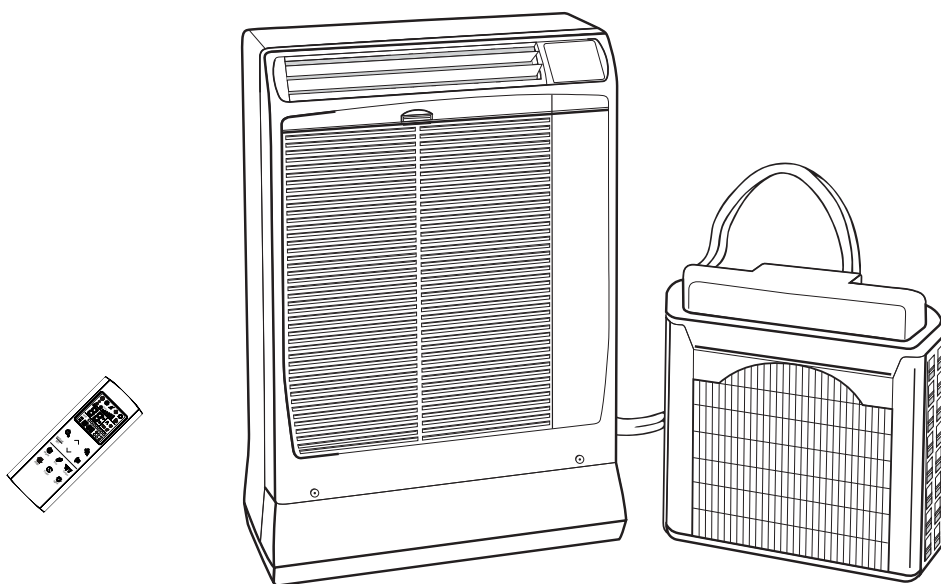
INSTRUCCIONES DE INSTALACIÓN

ES

INSTRUÇÕES 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

CONTENTS

EN

1 - General precaution	3
2 - Installation site selection.	3
3 - Accessories and tools required for installation	3
4 - Dimensions and weight	4
5 - Minimum operation and maintenance area	4
6 - Tubing length and elevation difference limits.	4
7 - Installation of outdoor unit	5
8 - Wall installation (through a hole in the wall)	7
9 - How to connect the flexible tube extension kit	9
10 - Remote control unit installation	10
11 - Maintenance of the refrigerant circuit.	10
12 - Match between remote controller and the unit	11
13 - Electrical wiring diagrams.	12

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 6m². 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

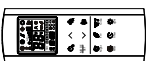
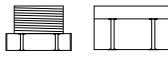
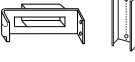
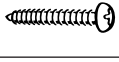
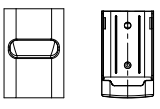
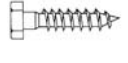
AVOID:

- 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			OUTDOOR UNIT SUPPORT BRACKET KIT			CONNECTION EXTENSION KITS - LENGTH OF 2 OR 4 m		
FIGURE	PARTS	NR°	ACCESSORY SUPPLIED ON REQUEST			ACCESSORY SUPPLIED ON REQUEST		
	REMOTE UNIT CONTROL	1		RAWL PLUG S X 10	3		EXTENSION KIT FOR CONNEC- TION TUBE	1
	BATTERIES FOR REMOTE CONTROL	2		SCREW 7x65	3		CONNECTIONS PLASTIC BOX	1
	PLASTIC PLUG (MALE AND FEMALE)	2 + 2		WASHER	3		RAWL PLUG	3
	FELT PADS	4		OUTDOOR UNIT SUPPORT AND GUIDE	1+1		TAPPING SCREW ø 3,5 x 45	3
	SUPPORTS FOR REMOTE UNIT CONTROL	2		SCREW 4,2x13	2		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)

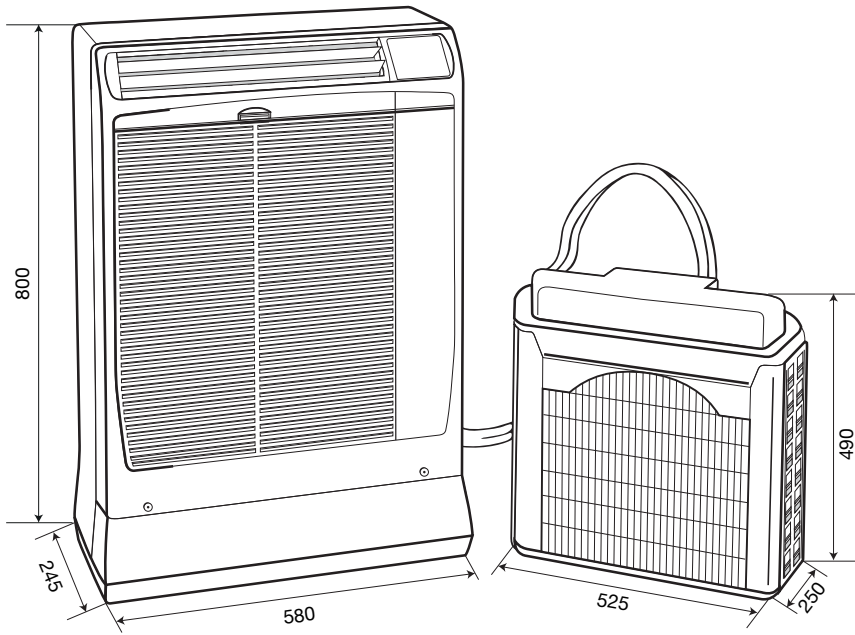
- Phillips head screw driver • Tape measure • Level • Hammer drill • Hole saw or key hole saw ø 50
- 19 mm wrench • 21 mm wrench • 24 mm wrench • Hammer • Hacksaw • Core bits 10 mm diameter drill bit.

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.

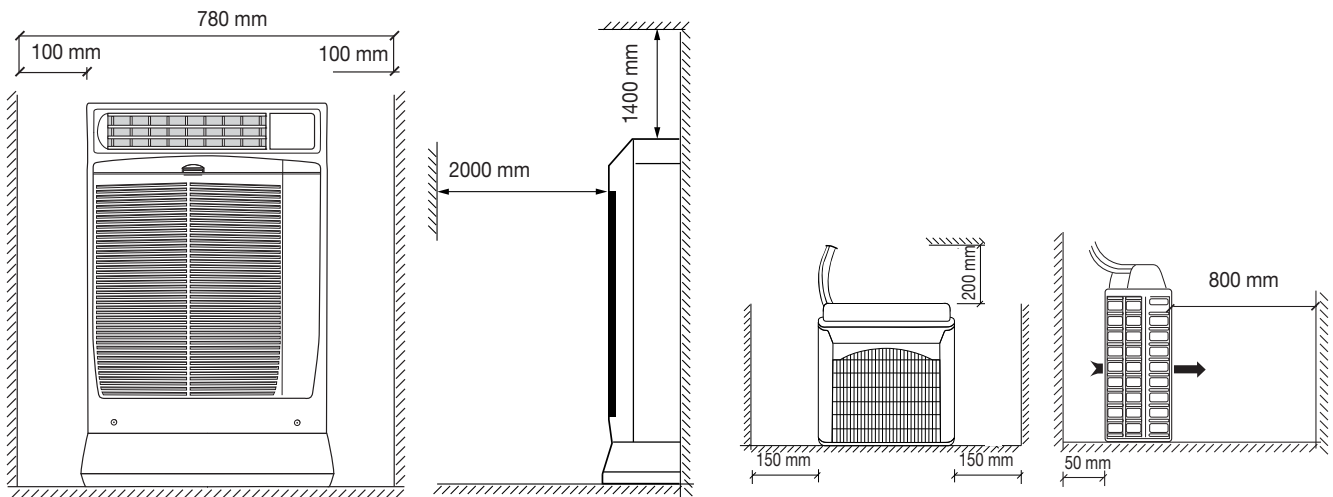
4 - DIMENSIONS AND WEIGHT

EN

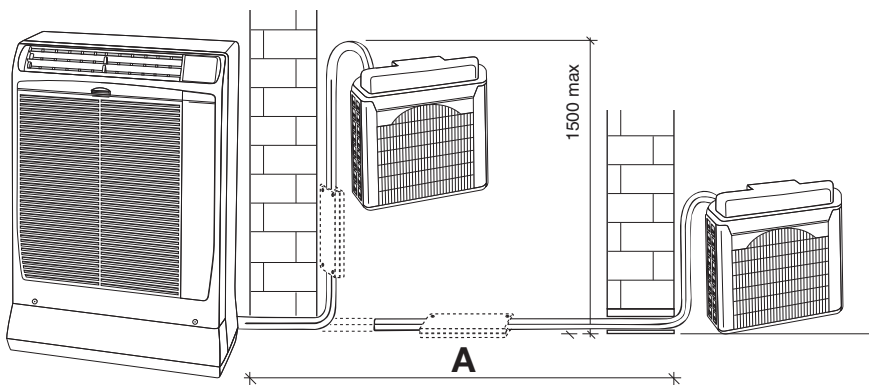


Unit: mm

5 - MINIMUM OPERATION AND MAINTENANCE AREA



6 - TUBING LENGTH AND ELEVATION DIFFERENCE LIMITS

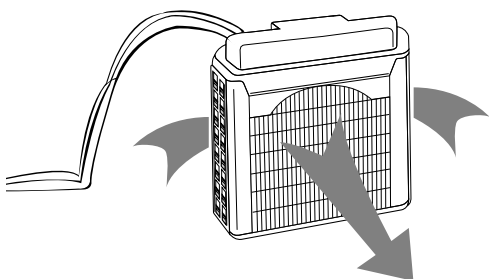
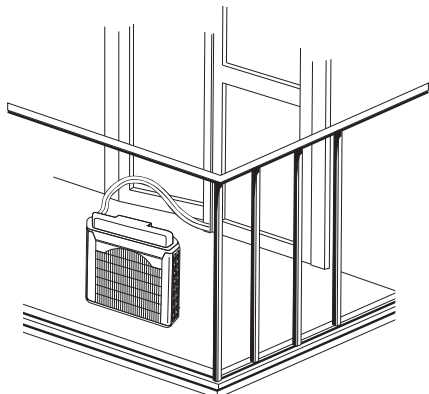


Standard mm	2 m system extension kit	4 m system extension kit
A 1500	A 3500	A 5500

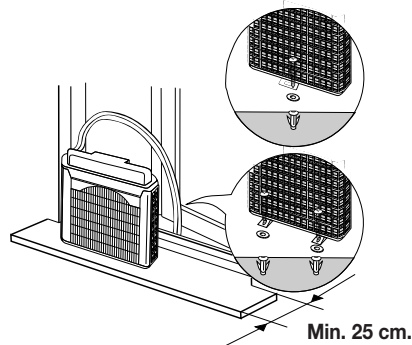
7 - INSTALLATION OF OUTDOOR UNIT

EN

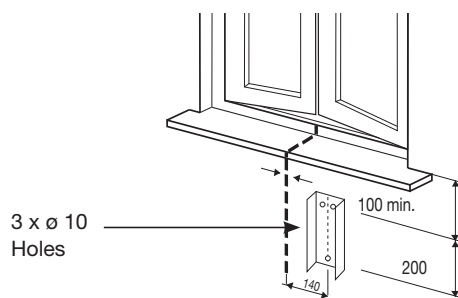
- A** The outdoor unit may be placed on a balcony. Make sure to put it in vertical position and levelled. During the installation do not kink the connection tube between the units. Verify the correct air circulation around the outdoor unit.



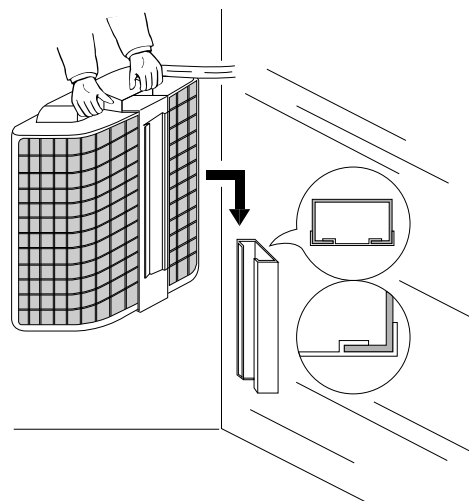
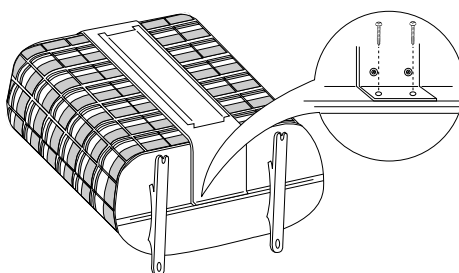
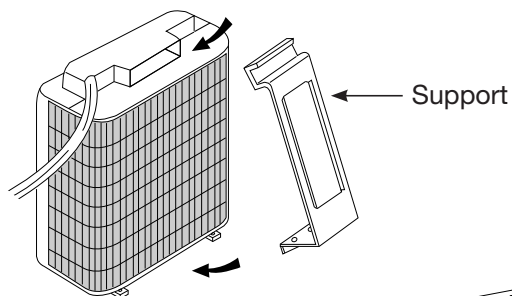
- B** Or fixed to the window sill.



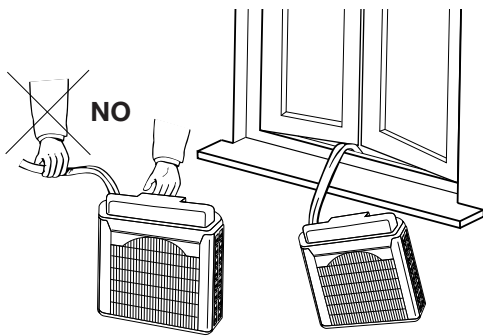
- C** Or hanged to the wall below the window sill using the support bracket kit (not supplied). After placing the unit in the support, check that it is levelled.



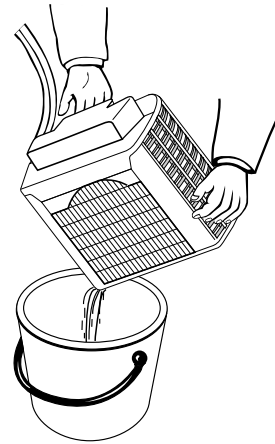
- D** Insert the support in the handle of the outdoor unit, turn the outdoor unit upside down (see the picture). Place the support and secure it at the edge of the unit. Insert the support guide fixed on the unit at the wall. Make sure it is levelled.



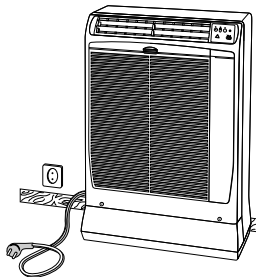
EN **E** Do not handle the outdoor unit improperly.



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.

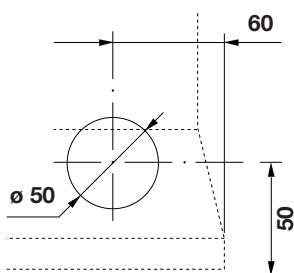


IMPORTANT

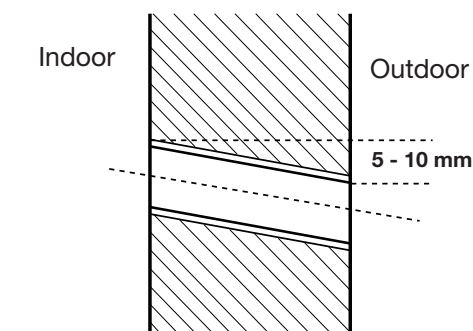
OPERATION TO BE EXECUTED BY COMPETENT OR QUALIFIED PERSONEL

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.

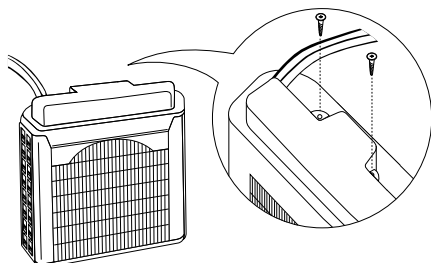
- A** Choose the best position where to install indoor unit. Mark the hole to be made in the wall.



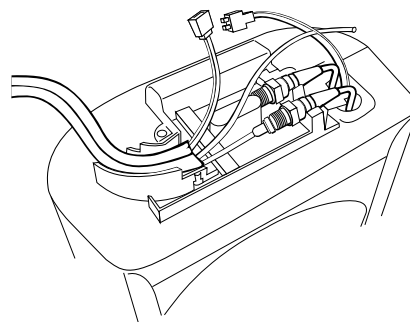
- B** Drill a 50 mm diameter hole, insert a PVC pipe.



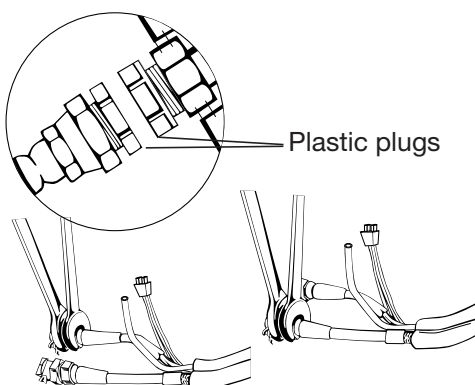
- C** Remove the coupling cover of the outdoor unit.



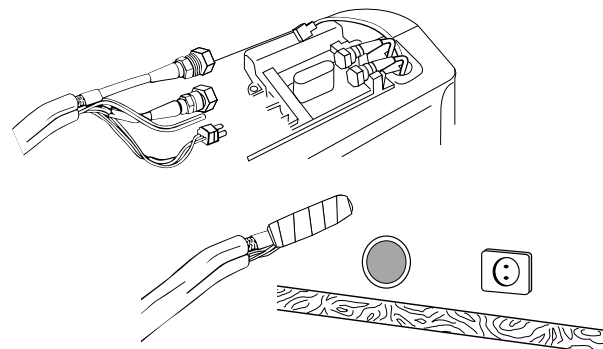
- D** Disconnect the condensate plastic tube and the electric connector.



- 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.

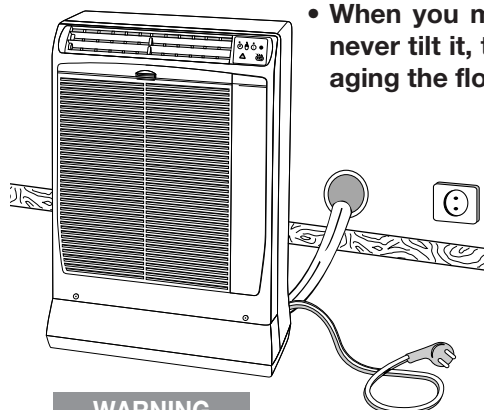


NOTE: When disconnecting or reconnecting the flexible tubes, always use two proper wrenches: one to hold the fixed part and one to screw/unscrew.

- 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**.

NOTES:

- 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 or use the supplied felt pads.

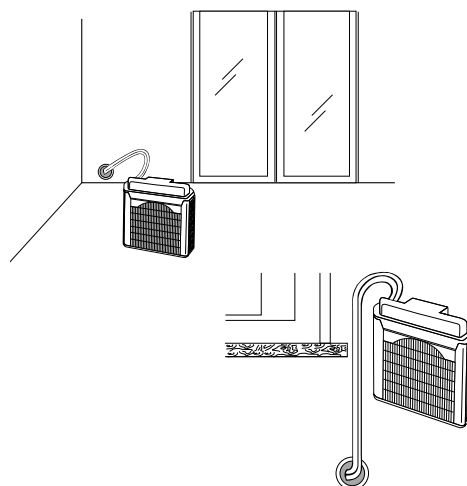


- When you move the unit, never tilt it, to avoid damaging the floor.

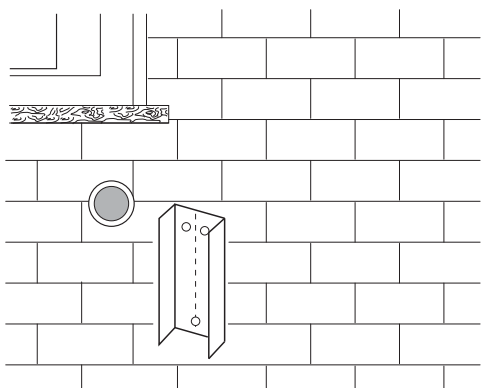
WARNING

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

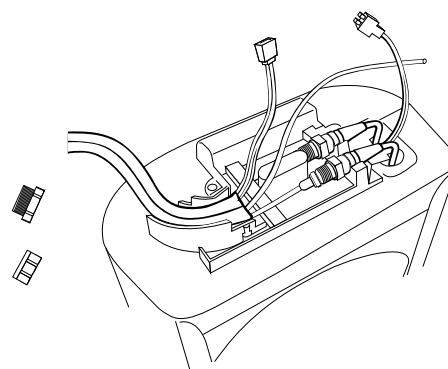
- H** The unit can be placed on a balcony or hanged to the wall using the support bracket kit (not supplied).



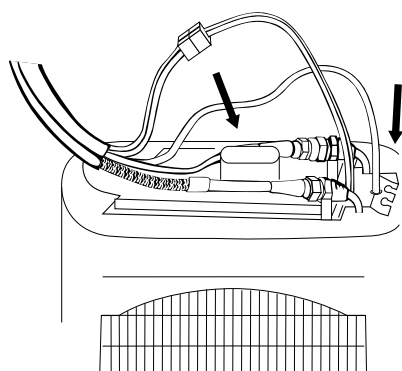
- I** Drill the holes and fix the support to the wall using the rawl plugs.



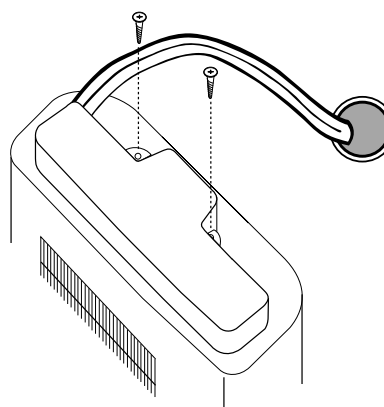
- L** Remove the plastic plugs from quick couplings, connect the couplings by hand, then tighten using the torque wrenches (tightening torque 150 ÷ 165 kgcm).



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

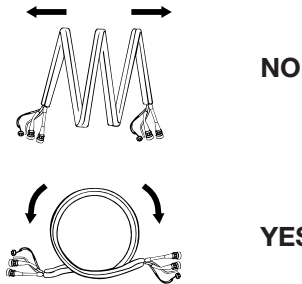


- N** Fix the coupling cover of the outdoor unit and seal the hole in the wall around the flexible tube.

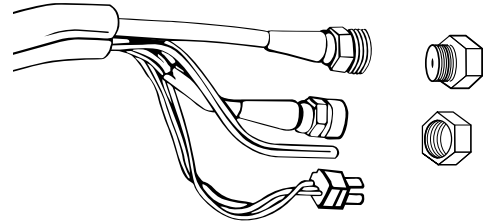


IMPORTANT OPERATION TO BE EXECUTED BY COMPETENT OR QUALIFIED PERSONEL

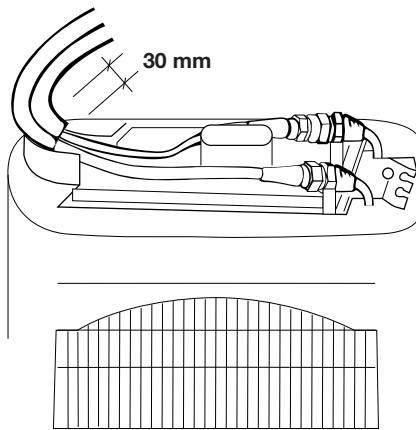
- A** Carefully unroll the extension tube; be careful not to twist nor kink it.



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

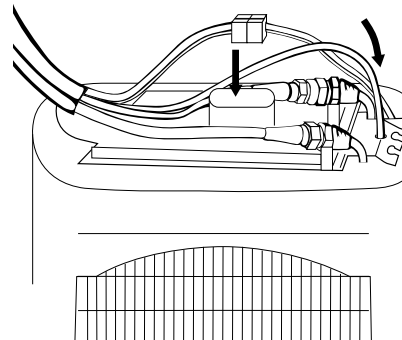


- C** Fit the copper tubes on the support bent side. Connect the couplings by hand, adjust carefully the tubes on unit top, then tighten using the torque wrenches (tightening torque $150 \div 165$ kgcm).

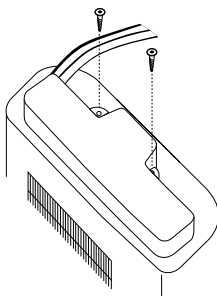


NOTE: When disconnecting or reconnecting the flexible tubes, always use two proper wrenches: one to hold the fixed part and one to screw/unscrew.

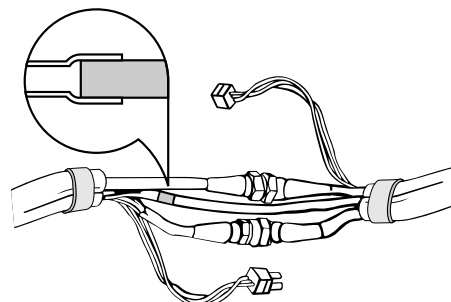
- D** Connect the condensate plastic tube and the electric connector.



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

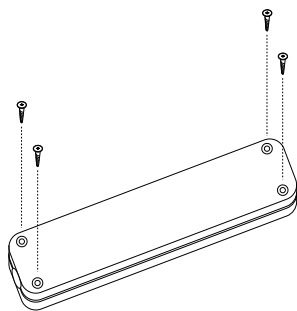


- F** Remove the plastic plugs from opposite end of flexible tube and connect quick couplings, first by hand and then using the spanners. Cut the PVC tube (soft kind) in excess then insert it into the stiff one.

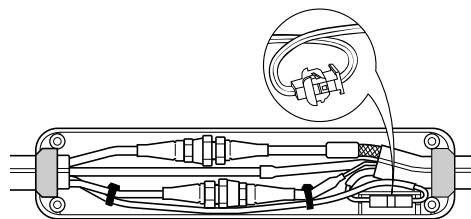


NOTE: When disconnecting or reconnecting the flexible tubes, always use two proper wrenches: one to hold the fixed part and one to screw/unscrew.

- 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

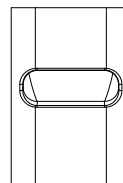
To ensure that the air conditioner operates correctly, DO NOT install the remote control unit in the following places:

- 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.

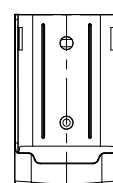
WALL-MOUNTED POSITION

- 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.

**TABLE
STAND**



**WALL
SUPPORT**



11 - MAINTENANCE OF THE REFRIGERANT CIRCUIT

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

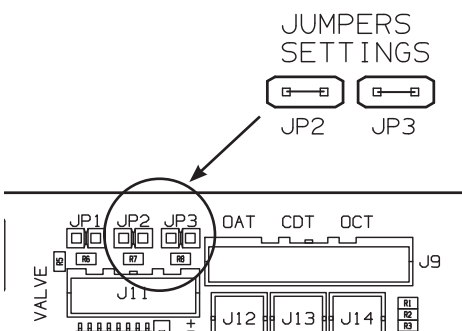
- Refrigerant charge apparatus, vacuum pump, hoses and adapters must be exclusively used for R32. Make sure that different types of refrigerant do not contaminate each other.
- It is suggested to charge the refrigerant in LIQUID state. Make sure that the refrigerant is the one required.
- Do not add 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.

12 - MATCH BETWEEN REMOTE CONTROLLER AND THE UNIT

The remote control can be addressed to use up to 4 different units installed in the same room.

You can get unified control by using a single remote control for all units or each remote control can be addressed to its own unit, in order to control separately temperature, timer and all other functions.

EN



PCB SETTING

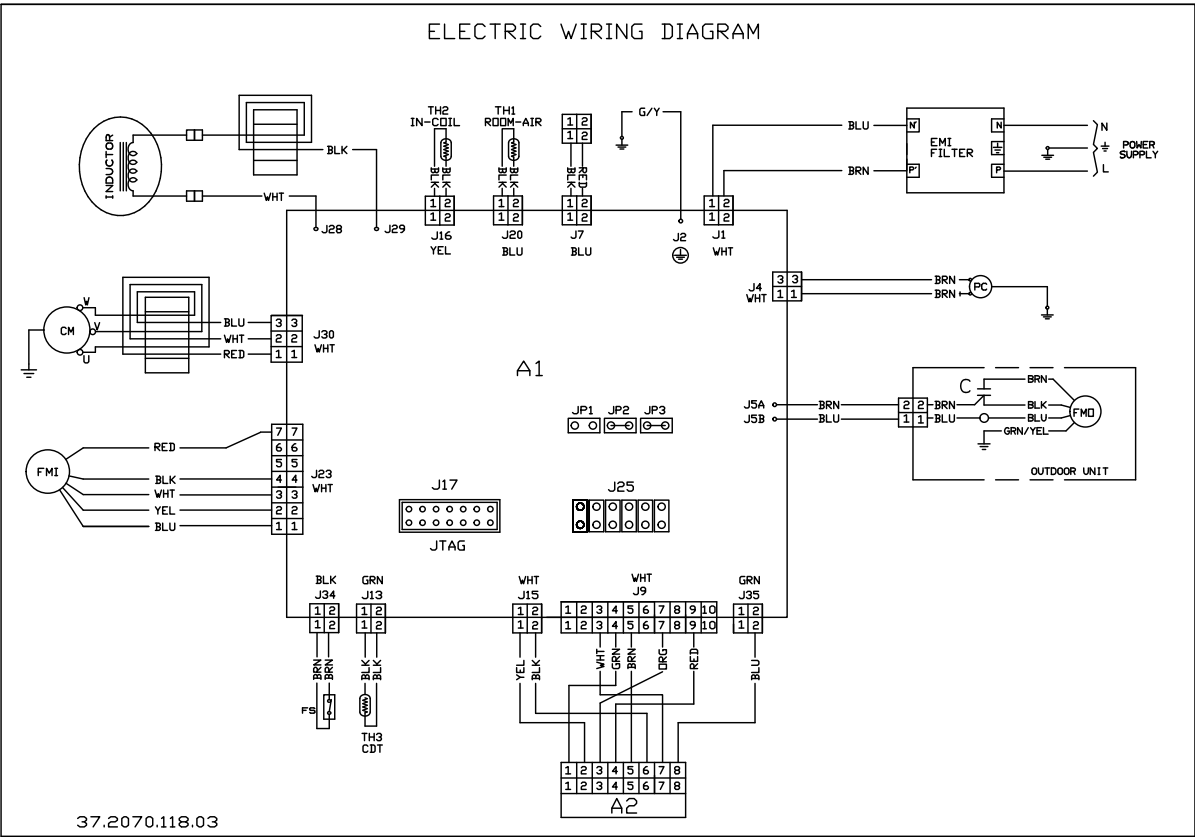
- Disconnect the unit power supply and wait at least 60 seconds, making sure that all the lamps go off.
- Remove the rear panel and the cover of the electrical box to access the pcb.
- Set JP2 and JP3 as shown in the table.
- Close the cover of the electrical box and the rear panel.
- Reconnect the unit power supply.

REMOTE CONTROLLER SETTING

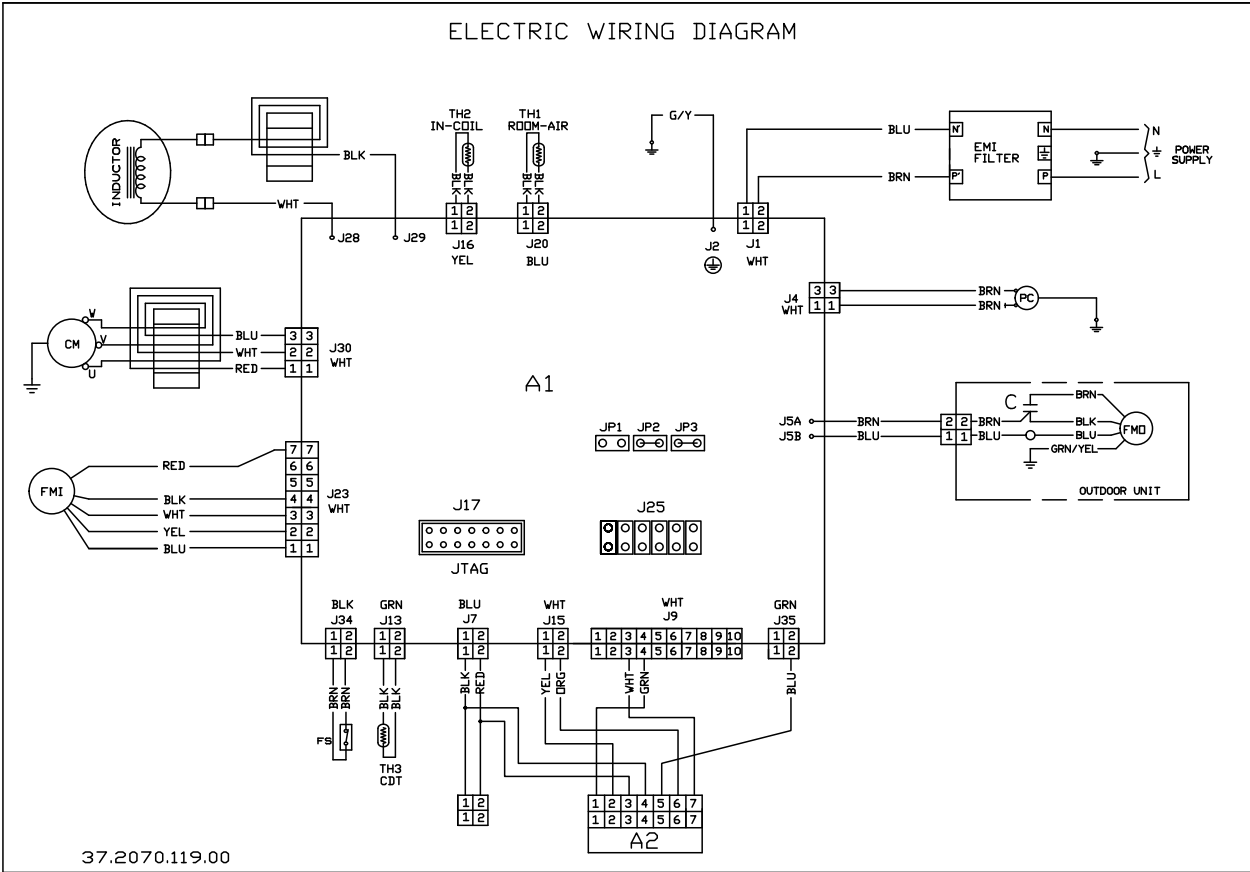
- Press the button for a few seconds.
- Press the arrow until you visualize 06.
- Press the button again for a few seconds: the number 0 (factory setting) at the bottom starts flashing.
- Press the arrow to set 1, 2 or 3.
- Confirm with the button .
- Press to exit the menu.

UNIT	REMOTE CONTROL UNIT	PCB
0 FACTORY STATE		 JP2=CLOSE JP3=CLOSE
1		 JP2=OPEN JP3=CLOSE
2		 JP2=CLOSE JP3=OPEN
3		 JP2=OPEN JP3=APERTO

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



WiFi MODELS



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

SYMBOL	EG	I	F	D	E	P
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	AUSSEN LÜFTERMOTOR	MOTOR VENTILADOR EXTERNO	MOTOR VENTILADOR EXTERNO
FMI	INDOOR FAN MOTOR	MOTORE INTERNO VENTOLA	MOTEUR DE VENTILATEUR INTÉRIEUR	INNEN LÜFTERMOTOR	MOTOR VENTILADOR INTERNO	MOTOR VENTILADOR INTERNO
IND. ASSY	INDICATOR ASSY	GRUPPO INDICATORI	ENSEMBLE INDICATEUR	ANZEIGE-BAUGRUPPE	GRUPPO DE INDICADORES	GRUPO INDICADORES
A1	CONTROLLER	SCHEDA ELETTRONICA	CONTRÔLEUR	STEUERGERÄT	CONTROLADOR	PLACA ELETRÔNICA
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
A2	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
Leyenda de los colores de los cable electricos
Legenda das cores dos fios elétricos**

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

argoclima s.p.a.

Via Alfeno Varo, 35 - 25020 Alfianello - BS - Italy

Tel. +39 0331 755111 - Fax +39 0331 755501

www.argoclima.com
