


MARKING

This product marked  conforms to the essential requirements of the European Directives:
- Low voltage no. 2006/95/CE.
- Electromagnetic Compatibility no. 89/336 EEC, modified 92/31 and 93/68 EEC.



GB

CONTENTS

1 - General	2
2 - Presentation.....	2
3 - Installation of the unit.....	3
4 - Connections / Electrical wiring diagrams	4
5 - Accessories	10
6 - Starting	10
7 - Maintenance	10

1 - GENERAL

1.1 - FOREWORD

- The equipment must be installed, started-up and maintained by authorised and qualified personnel, in accordance with local rules and professional standards.

1.2 - GENERAL SUPPLY CONDITIONS

- Generally speaking, the material is transported at the consignee's risk.
- The consignee must immediately provide the carrier with written reserves if he finds any damage caused during transport.

1.3 - VOLTAGE

- Before any operation, check that the voltage and the frequency indicated on the device corresponds with that of the mains.

1.4 - PRECAUTIONS

1.4.1 - HYDRAULIC CIRCUIT

- Minimum water inlet temperature : 4°C.
- Maximum water inlet temperature : 60°C.
- Maximum operating pressure : 16 bar.

1.4.2 - AMBIENT AIR

- Minimum air recirculation temperature : 5°C.
- Maximum air recirculation temperature : 32°C.

Important: During installation shut-down, in case of ambient temperature near 0°C, there is a risk that the hoses may freeze. Envisage draining the hydraulic circuit.

1.5 - USE OF EQUIPMENT

- This equipment is intended for the air-conditioning of premises and to provide comfort for the personnel.

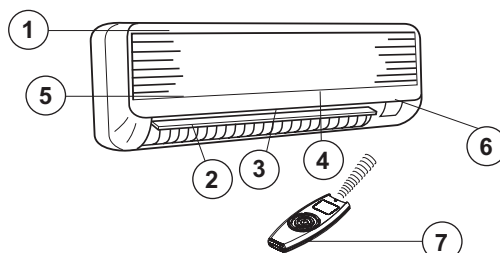
1.6 - MODELS

- "2-pipe" for all sizes.




2 - PRESENTATION

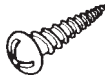


2.1 - DESCRIPTION

- 1 - Air inlet (suction).
- 2 - Air outlet (blowing).
- 3 - Vertical deflection louvre.
- 4 - Horizontal deflection louvre.
- 5 - Air filters.
- 6 - Lamps and receiver.
- 7 - Remote control unit.



2.2 - ACCESSORIES SUPPLIED WITH THE UNIT

Accessory	Qty	Use
1 - Support plate 	1	Wall support for the unit.
2 - Instructions 	2	Installation instructions. Operating instructions.
3 - Dowels 	6	For fixing the support plate.

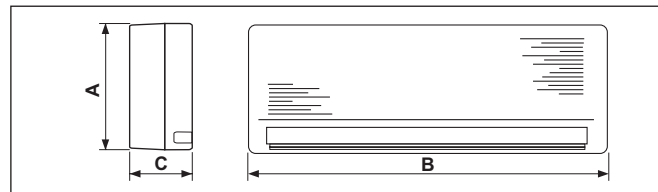
Accessory	Qty	Use
4 - Screws 	6	For fixing the support plate with the dowels.
5 - Seals 	2	Connection of flexible tubes on the installation (Ø 1/2" - 15 x 21)
6 - Remote control unit 	1	Remote control unit

2.3 - WEIGHT

	Net weight (kg)	Packed weight (kg)
MPW1-2	8	10
MPW3-4	12	14

	A	B	C
MPW1-2	270	805	177
MPW3-4	285	995	206

2.4 - DIMENSIONS

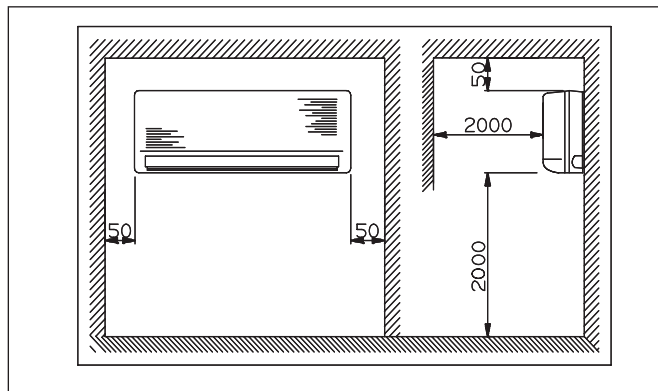


3 - INSTALLATION OF THE UNIT

3.1 - CHOOSING THE LOCATION

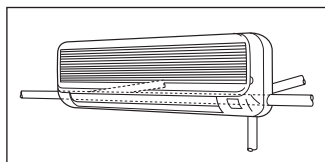
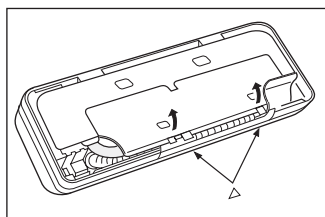
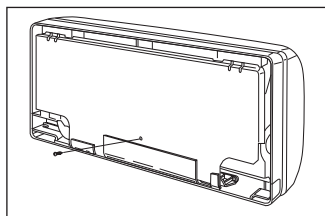
- Select the location for the unit on the basis of the following criteria:
 - The device is intended for installation in sheltered premises (IP 20). Do not install in very damp places or exposed to high speeds of water.
 - Do not place above electrical sockets.
 - The air intake and blowing grilles must be free from any obstacle so that blowing can occur correctly in the whole room.
 - The wall on which the air handler will be fixed must be sufficiently thick for there not to be any resonance and so as not to produce any noise.
 - Provide for the pipes and electric cables.
 - It is essential to leave the clear space around the unit (see drawing).

- Do not install units with electric heating near combustible materials or surfaces.

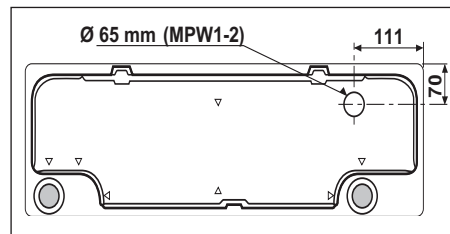


3.2 - INSTALLATION OF THE SUPPORT PLATE

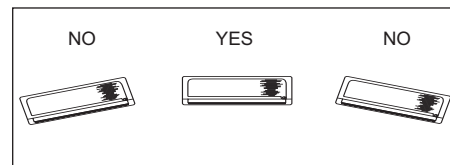
- Remove the mounting screw from the support plate.
- Press at the points indicated by a triangle to unhook the plate's two lugs.
- The unit may be connected at 5 different points:
 - on either the right or left-hand side,
 - at either the right or left-hand rear,
 - on the lower right-hand side.



- Use the support plate as a jig to locate the rear outlets. Place the plate level against the wall and mark the hole to be made. For an outlet at the left-hand rear of the unit, use the plate's most outside mark. The Ø 65 mm hole in the upper right-hand corner of the plate can also be used thus allowing the tubes to exit straight into the wall.

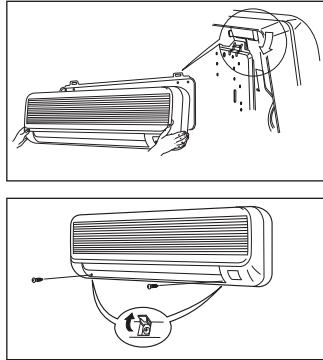


- Mount the plate on the wall using the supplied screws and dowels. To avoid vibrations, ensure that the panel is mounted securely against the wall.

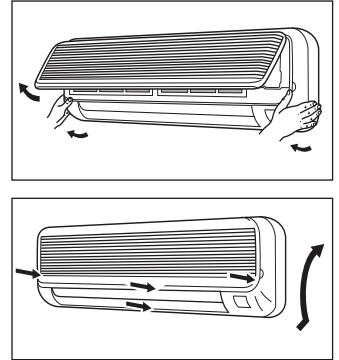


3.3 - HOOKING OF THE UNIT

- The unit can be mounted without removing the cover.
- Hook the unit onto the support plate nibs.
- To remove the cover, lift the small screw covers and remove the mounting screws.

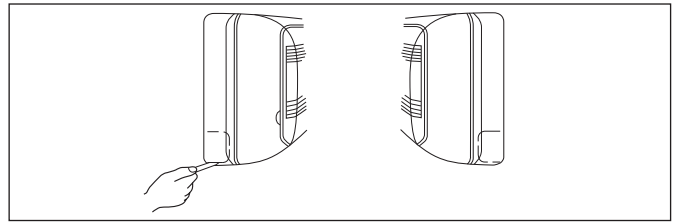


- To unhook the cover, pull the lower portion toward yourself, then slide the cover upward.
- To replace the cover, fit the lower portion of the cover first, then hook the upper portion. Press gently on the zones indicated.



4 - CONNECTIONS / ELECTRICAL DIAGRAMS

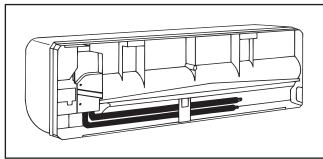
- Depending on the direction of the tube outlet chosen, open the pre-cut hole as required.
- For cold water use, a **motor-operated valve must be installed for the models where it is not provided**, otherwise there is a risk of condensate if the unit shuts down due to a thermostat disconnection.



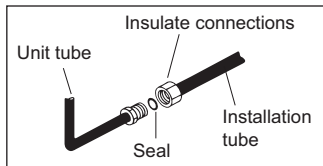
4.1 - HYDRAULIC CONNECTION

4.1.1 - GENERAL

- The unit is supplied with two ready-fitted flexible, insulated hoses, connected to the battery inside the unit.
- They are located on the back of the unit and can be shaped on request. **They do not crush on bending.**



- To connect them to the installation, they are fitted with 1/2" female brass connectors for gas.



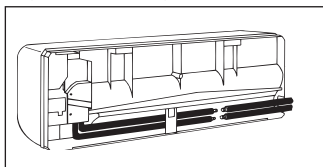
Caution:

- Respect the water circulation direction (see the label).
- Do not forget the seals, and insulate the connections properly to avoid condensation.

4.1.2 - INSTALLATION

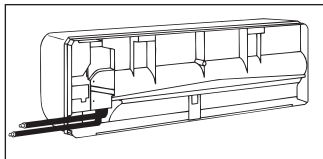
A - Left side outlet of the unit (side or back).

- Leave the tubes in place on the unit.
- Connect them to the installation tubes.
- **Note:** After wall-mounting the unit, these connections can be accessible. See paragraph 4.1.5.



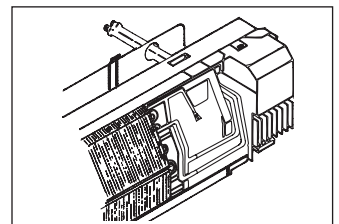
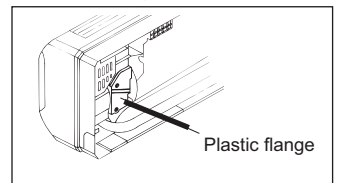
B - Right side outlet of the unit (side or back).

- Unfold the tubes at elbow.
- Bend them the other way so as to orientate them from the right.



C - Rear outlet of the unit (only MPW1-2)

- The tubes can be passed /through the 65 mm Ø hole made in the support plate (see page 3)
- In this case, take off the plastic tube-passage sealing flange (2 screws at back of unit)
- Unfold the hoses so as they are straight when removed.

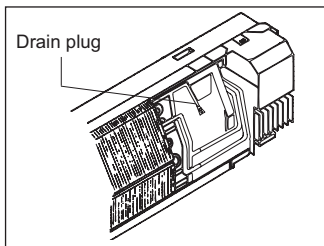


4.1.3 - INSULATION OF PIPES

- **This operation must be done carefully to avoid any risk of condensation.**
- Insulate the input and water inlet tubes which are not supplied with the unit.
- Use polyethylene sheathing at least 6 mm thick.

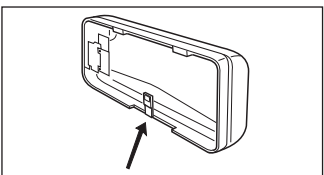
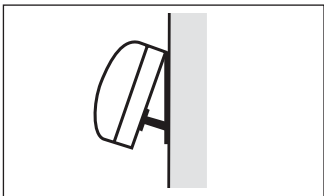
4.1.4 - PURGING THE AIR HANDLER'S WATER CIRCUIT

- This is done by means of a screw plug positioned on the internal piping.
- To gain access to the drain plug, remove the unit's cover (see par. 3-3 only for MPW1-2).
- Turn the drain plug with either a screwdriver or hex key.

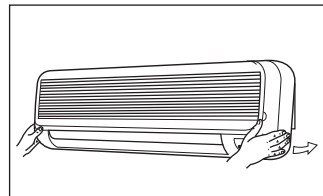


4.1.5 - NOTE

- If necessary, to facilitate certain operations which can be made at the end of installation (notably for access to connections in the case of a left-hand outlet), the unit can be placed in the position shown opposite.
- To do this, remove the small plate located under the unit and swing out the plastic support.

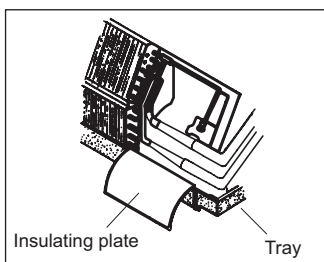
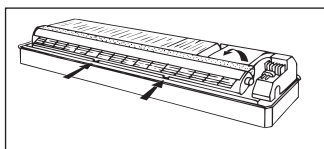


- When installation is completed, gently press the unit to hook it onto the support plate.

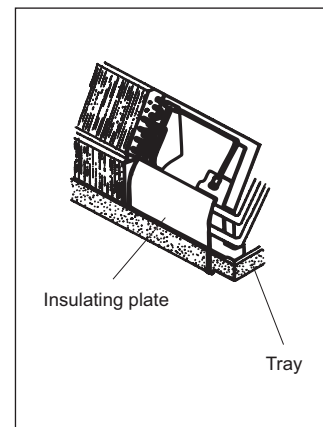


4.1.6 - ACCESS TO INTERNAL CONNECTIONS (ONLY MPW1)

- During installation, it may be necessary to intervene on the connections located inside the device (on the valve or the battery).
- To improve access to these connections, notably for the possible passage of spanners, slightly pull out the condensate tray by unhooking the snugs as shown, and pull the tray towards you.
- In this way detach the insulating plate.



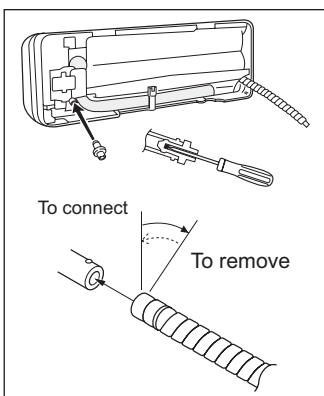
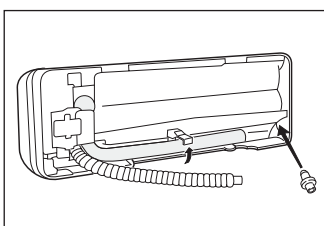
- After intervention, put the tray and insulating plate back in place correctly. **Caution:** this part must be carefully pressed down between the valve and cover, for it prevents condensation from the valve dripping outside the tray.



4.2 - CONNECTING THE CONDENSATE DISCHARGE PIPE

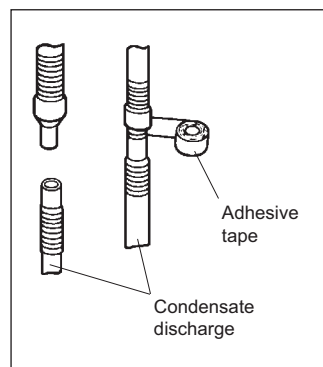
(For air handlers which can operate in cooling mode)

- The unit's condensation drain pan is fitted with two outlets. The drain tube is connected on the right-hand side of the unit. A rubber plug seals the left-hand side outlet.
- The drain tube may be placed on the other side. To do this, simply remove the tube by gently turning it counterclockwise. Then remove the rubber stopper placed at the outlet by pulling it with adjusting pliers. Switch the positions and replace the plug. Use a Phillips screwdriver to replace the stopper correctly.

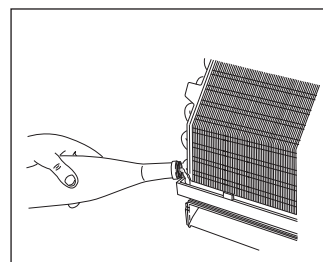


Take care not to pierce it when replacing.

- Connect the condensate pipe to a discharge pipe.
- Fix the two pipes using adhesive tape: Tube end OD: 18 mm.



- Ensure that the slope is correct and make a water trap, as required.
- Check that the condensation water drains correctly. To do this, use a bottle to pour water into the condensate recovery tray.



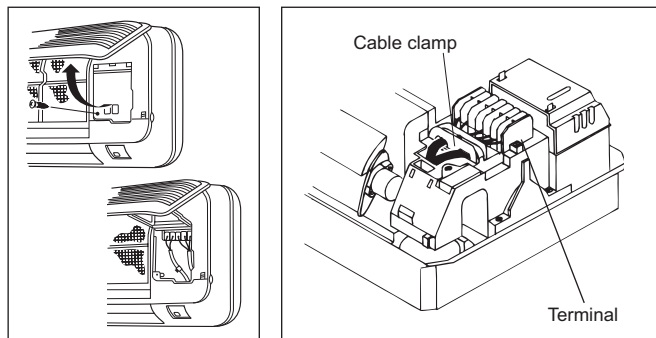
4.3 - ELECTRICAL CONNECTION

4.3.1 - GENERAL

- The electrical connection conduits must be fixed.
- Class 1 unit.
- The electrical installation must be carried out in compliance with the rules in force (especially NFC 15-100 \simeq CEI 364).

4.3.2 - DETAIL OF THE CONNECTION

- To have access to the terminal board:
 - the unit's cover may be removed (see page 3), but is not required,
 - simply open the terminal access hatch.
 To do this:
 - lift the front panel,
 - remove the screw from the hatch to gain access to the terminal strip.
- Thread the electric cables through the rear passage.
- Connect the wires to terminal.
- Use the cable clamp next to the main terminal strip.
- Make sure that the wires are correctly connected to the terminal board. Incorrect connection can cause operating problems as well as overheating which can cause fires.



4.3.3 - POWER SUPPLY

- 230V / 1+Earth / 50Hz power supply from a power supply and protection device (not included) in accordance with with the rules in force especially NFC 15-100 (\simeq CEI 364).
- The voltage variation tolerance is $\pm 10\%$ during operation.
- Max. protection rating: 6 A.
- The power connection is made on the main terminal strip (terminals L, N and Earth).

Models		MPW1-2	MPW3-4
Max. current consumption	A	0,11	0,40
Section	mm²	1,5	1,5

4.4 - ELECTRICAL WIRING DIAGRAMS

SYMBOLS OF COMPONENTS

C1	Capacitor
FLP	Flap motor
FMI	Indoor fan motor
PCB	Controller
TH1,2	Thermistor
RMV	Fan motor relay
R1	Resistance

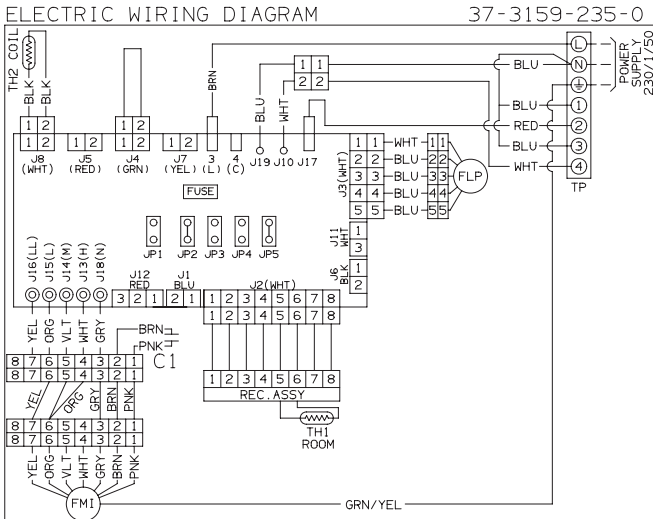
COLOURS OF WIRES

GRY Grey	BRN Brown	PNK Pink
YEL Yellow	BLK Black	RED Red
VLT Violet	ORG Orange	WHT White
BLU Blue	GRN/YEL Yellow/green	

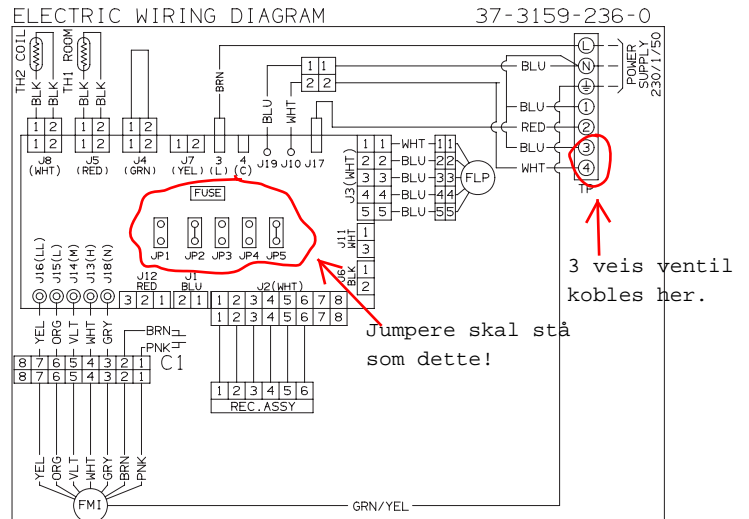
MPW1-2-3-4B WITH VALVE (ACCESSORY ON REQUEST)

GB

MPW1-2



MPW3-4



4.4.1 FACTORY SYSTEM CONFIGURATION: COOLING ONLY WITH VALVE (ACCESSORY ON REQUEST)

COOLING ONLY SYSTEM	FUNCTIONS					JUMPERS				
					FAN ONLY	JP1	JP2	JP3	JP4	JP5
	A	E	E	A	A	O	C	O	O	C

- 1 - Setting JUMPERS
C = Close
O = Open

- 2 - Function:
A = Available
E = Not available
(When selected, all leds blinking)

4.4.2 SYSTEM CONFIGURATION: COOLING OR HEATING WITH VALVE (ACCESSORY ON REQUEST)

COOLING OR HEATING SYSTEM	FUNCTIONS					JUMPERS				
					FAN ONLY	JP1	JP2	JP3	JP4	JP5
	A	A	E	A	A	O	O	O	O	C

NOTA: The different factory setting must be made to special worker

4.4.4 SYSTEM CONFIGURATION: HEATING ONLY WITH VALVE (ACCESSORY ON REQUEST)

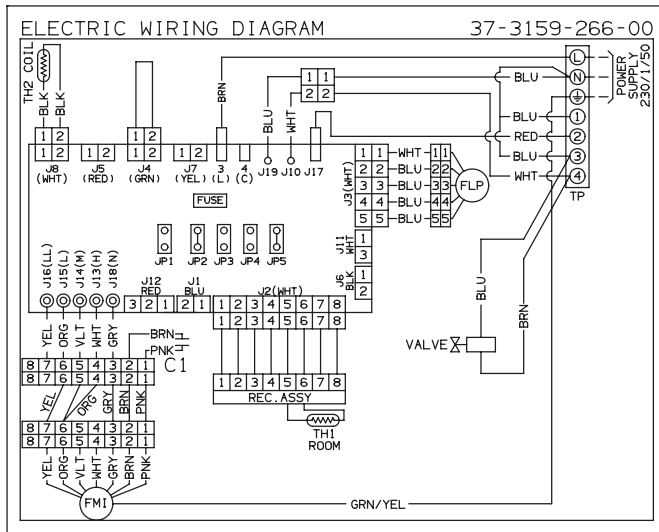
ONLY HEATING SYSTEM	FUNCTIONS					JUMPERS				
					FAN ONLY	JP1	JP2	JP3	JP4	JP5
	E	A	E	E	A	O	O	O	O	O

4.4.5 SYSTEM CONFIGURATION: COOLING WITH VALVE OR HEATING WITH VALVE (ACCESSORY ON REQUEST)

COOLING OR HEATING SYSTEM	FUNCTIONS					JUMPERS				
					FAN ONLY	JP1	JP2	JP3	JP4	JP5
	A	A	A	A	A	O	O	O	O	C

MPW1Z WITH INSTALLED VALVE

MPW1



4.4.1 FACTORY SYSTEM CONFIGURATION: COOLING ONLY WITH INSTALLED VALVE

COOLING ONLY SYSTEM	FUNCTIONS					JUMPERS				
					FAN ONLY	JP 1	JP 2	JP 3	JP 4	JP 5
	A	E	E	A	A	O	C	O	O	C

- 1 - Setting JUMPERS
C = Close
O = Open

- 2 - Fonction:
A = Available
E = Not available
(When selected, all leds blinking)

4.4.2 SYSTEM CONFIGURATION: COOLING OR HEATING WITH INSTALLED VALVE

COOLING OR HEATING SYSTEM	FUNCTIONS					JUMPERS				
					FAN ONLY	JP 1	JP 2	JP 3	JP 4	JP 5
	A	A	E	A	A	O	O	O	O	C

NOTA: The different factory setting must be made to special worker

4.4.4 SYSTEM CONFIGURATION: HEATING ONLY WITH INSTALLED VALVE

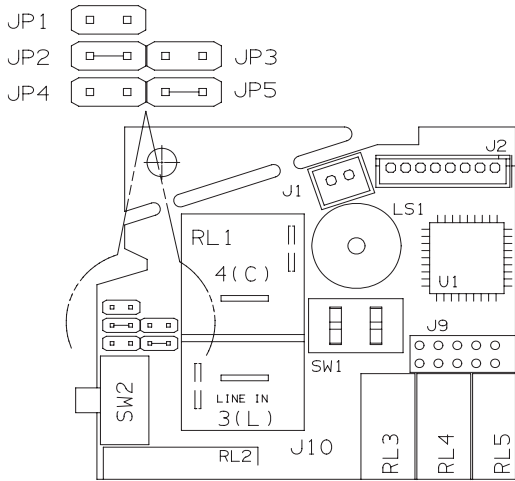
ONLY HEATING SYSTEM	FUNCTIONS					JUMPERS				
					FAN ONLY	JP 1	JP 2	JP 3	JP 4	JP 5
	E	A	E	E	A	O	O	O	O	O

4.4.5 SYSTEM CONFIGURATION: COOLING WITH VALVE OR HEATING WITH INSTALLED VALVE

COOLING OR HEATING SYSTEM	FUNCTIONS					JUMPERS				
					FAN ONLY	JP 1	JP 2	JP 3	JP 4	JP 5
	A	A	A	A	A	O	O	O	O	C

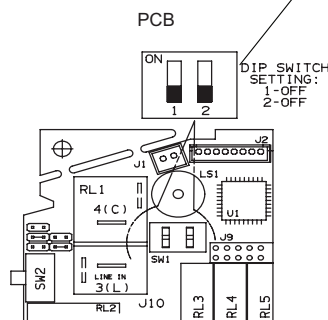
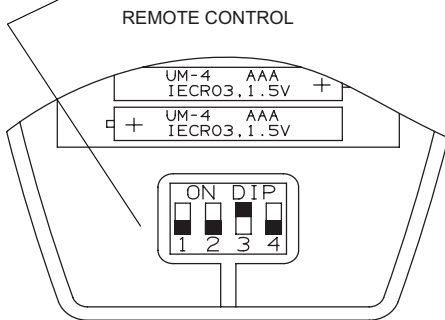
4.5 - JUMPERS CONFIGURATION

GB



4.6 - REMOTE CONTROL: ADDRESS SWITCHES

unit N°	remote control		indoor unit	
	1	2	1	2
1	OFF	OFF	OFF	OFF
2	ON	OFF	ON	OFF
3	ON	ON	ON	ON
4	OFF	ON	OFF	ON



WARNING

To avoid electric shock, be sure to turn the air conditioner off and disconnect the power before opening the unit.

If you are installing more than indoor unit (up to) in the same room, it is necessary for you to assign each unit its own address so each can be operated by its own remote control unit.

5 - ACCESSORIES

5.1 - ACTIVATED CARBON AIR FILTER - code 397021909 (MPW1-2) - 397021910 (MPW3-4)

- See "Operating instructions".

5.2 - 3-WAY VALVE + BY-PASS - code 70600071 (FOR THE MODELS WHERE IT IS NOT PROVIDED)

- The valve is supplied without coupling or tube and is to be installed outside of the unit.
- The thermic actuator must be connected following the system wiring diagram.

GB

6 - STARTING

IMPORTANT

Before doing any work on the air conditioner, make sure it is switched off and put out of bounds.
Any work must be carried out by personnel qualified and authorised to work on this type of air conditioner.

6.1 - PRELIMINARY CHECKS

• Make sure:

- that the water circulates correctly in the air handler,
- that the heat exchanger has been purged,
- that the connections are correctly tightened and have good thermal insulation,
- that there are no leaks,
- that the air handler is well fixed,
- that the power cables are well fixed to their connection terminals,
- that the electric cables are properly insulated from any pieces of sheet or metal parts which could damage them,
- that the unit is connected to earth,
- that no tools or any other objects have been left in the units (specially form packing-pieces in the discharge louvers),

- that the filter is correctly fitted,
- that the condensate discharge outlet is correctly connected,
- that the condensate collection tank is clean.

6.2 - SWITCH ON THE UNIT

- Using the isolation and protection device.

6.3 - STARTING

- See Operation Instruction manual.

7 - MAINTENANCE

IMPORTANT

Before doing any work on the air conditioner, make sure it is switched off and put out of bounds.
Any work must be carried out by personnel qualified and authorised to work on this type of air conditioner.

GENERAL MAINTENANCE

All equipment must be properly maintained in order to provide optimum performance over time. Faulty maintenance can result in the cancellation of the product guaranty. Depending on the products, maintenance operations consist in the cleaning of filters (air, water), internal and external exchangers, casings, and the cleaning and protection of condensate tanks. Treating odours and the disinfection of room surfaces and volumes also contributes to the cleanliness of the air breathed by users.

TECHNIBEL proposes a wide range of perfectly adapted professional cleaning, maintenance and repair products for complete and efficient maintenance. For an optimum result, TECHNIBEL air-conditioners must be maintained with TECHNIBEL maintenance products.

• Air filter:

- Clean every two weeks. See "Operating instructions".

• Electric connections:

- Once a year, check that the electric wires are well fastened to their terminals.

• Electric box:

- Dusting is recommended once a year.

• Condensate pumping system:

- This requires regular specific maintenance.
 - The maintenance cycle is determined by the conditions of operation (minimum operations to be performed each time the installation is restarted in cooling mode).
 - Clean the condensate recovery tray located under the heat exchanger and check hoses/pipes.
 - Clean with water containing 5% bleach.