SHW WALL HEAT PUMP MUNDOCLIMA AEROTHERM

User and Installation Manual





CL45091 BC 80L Wall-mounted CL45092 BC 100L Wall-mounted

Domestic use

Safety instructions



- It is necessary a correct connection to ground in the house.
- There must also be protection against electric shock.
- Do not remove the signs and labels attached to the unit.



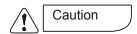
- The heat pump must be installed by qualified personnel to avoid a bad installation that may cause water leakage, electric shock or fire.
- The components used must be those recommended by the manufacturer.
- The electrical connections must comply with local legislations.
- If you need to remove or reinstall the unit, request this service to qualified personnel.
- The maintenance of the heat pump must be carried out by qualified personnel to avoid water leaks, electric shocks or fires.



- The plug where the heat pump is connected must have an effective earth connection and the power must be greater than 16 A. Keep the plug and plug dry to prevent leaks and check if they are properly connected. The checks will be carried out as follows: Plug in the unit and turn on the equipment, half an hour later unplug the unit and check if the plug is hot. If it is above 50 °C, please replace the plug with an approved one to avoid burns or fires caused by a bad connection.
- Because the water in the tank reaches high temperatures (water above 50 °C causes burns) you must adjust a suitable temperature before using it. Place a mixing valve at the outlet to ensure that we will never exceed temperatures at risk of burns.
- If the power cord is damaged, replace it with a good one immediately. Consult with a professional technician.
- If any component is damaged, require the specialized technician to only use original parts from the manufacturer.

Correct location of the unit

- 1) The Mundoclima Aerotherm 80 and 100 L Mural Heat Pumps are for domestic use.
- 2) The unit can be installed inside or outside the house. If the unit is outdoors, it should remain well protected from the sun and rain. It is recommended to install it in areas such as garage, basement, gallery or laundry.
- 3) Select a place where the sun's rays or other source of heat do not directly affect it. Cover the unit to avoid direct sunlight or rainwater penetration.
- 4) Do not install the unit in outdoor areas with high salinity in the air, for example near the beach.
- 5) There should be no obstacles in the entrance and exit of air. The location should not have strong wind currents.
- 6) The installation site must have sufficient space for maintenance and must be kept dry and closed.
- 7) The support surface must be leveled (Max inclination: 2°). The base must support the weight of the unit and absorb noise or operating vibrations.
- 8) The unit must be installed in a place where neither the noise nor the air outlet disturbs the neighbors.
- 9) The place of location cannot have flammable gases.
- 10) If the unit is installed in the metal part of the building, thermal insulation must be used according to technical regulations.



- Do not install the unit in places that meet the following characteristics:
- Public places.
- Place with high salinity of the air.
- Place where there are corrosive gases (sulfuric acid gas) e.g.: thermal springs.
- Where there are power fluctuations, for example near a factory.
- Located inside a vehicle or in a cabin.
- Place with flammable gases.
- Place with strong electromagnetic waves.
- Place with fuel gas and materials.
- Place with acid and alkaline gases.

For o their special places, please check.

Safety instructions

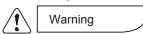
To avoid material damage and to use the unit correctly and safely, please read this manual carefully and follow the instructions

After a complete understanding of all the content (symbols and icons), read the text and observe the rules.

Symbols	Meaning of the symbols
Warning	Misuse of this unit can cause death.
Caution	Malfunction can cause serious injury or property damage.

Icon	Meaning of the icons
0	It means forbidden. The content in details is inside the icon or is expressed with a symbol or text near the icon.
0	It means mandatory. The details are inside the icon or in a symbol or text near the icon.
<u> </u>	It means attention included warning. The details are inside the icon or in a symbol or text near the icon.

- 1. The "injuries" are wounds without hospital admission nor long treatments. Generally blows, burns or electrocution.
- 2. Material damage means material and property loss.



Installation warning	You need a professional	The heat pump must be installed by qualified personnel to avoid a bad installation that may cause water leakage, electric shock or fire.
	Earth connection is required	Make sure the unit and the ground connection are correct, otherwise there is a risk of electric shock.
	Concentration limits	When installing the unit in a small room, take measures to avoid that a hypothetical refrigerant leak could cause suffocation.
Operation	NO	Under no circumstances put your fingers or objects in the air ducts of the unit.
Warning	Unplug the unit	If there is a fault or it smells weird, the unit must be disconnected. If the unit continues to run, a short circuit or fire may occur.

Installations to be aware of	Location selection	The unit should not be installed near flammable gases, it could cause leaks. If combustible gas accumulates around the unit, it may cause a fire.
	Unit well placed on a level surface.	Make sure the base is strong and solid.
	Check that the electric installation has a electrical leakage breaker.	Check if a leakage protection switch is installed. If the installation does not have an electrical protection switch, there are risks of electric shock or fire.

Move and repair	Technician	When the unit is moved or reinstalled, have a specialist technician perform the work. A bad installation would cause water leakage, electric shock, injury or fire.
	Forbidden	The user must not repair the unit on his own, otherwise the guarantee is invalidated.
	Technician	When the unit needs to be repaired, request specialized technicians to do the service. Improper repair or incorrect relocation of the unit can cause water leakage, electric shock, injury or fire.

	Warning	This device is not designed to be used by small children or people with physical or mental disabilities, only professionals should use it. Please read the manual carefully before start-up.
Operation alerts	Installation place	If the unit is not going to be used for a long period and the temperatures are below 0 °C, please drain the water in the tank to prevent it from freezing and the damage it causes.
	Unplug the unit	When cleaning the unit, unplug it, otherwise it risks watering and injury.
	Forbidden	Please use a suitable thermomagnetic switch; otherwise it may cause fires or breakdowns.
	Forbidden	Do not spray flammable substances near the unit, this could cause ignition.



- The installation must be carried out by a specialized technician. Otherwise a bad installation can cause leaks, fires, among others.
- Select a location where direct sunlight or other sources of direct radiation do not fall upon the unit. If you cannot avoid it, install a cover to prevent sunlight from falling upon the machine. Install the unit firmly or it may cause noise or shocks due to improper installation.
- Remove obstacles near the air inlet and outlet to avoid performance loss.

It contains fluorinated greenhouse gases according to the Kyoto protocol. GWP: 1430 = 0.79 tons of CO_2 equivalent.

It is hermetically sealed.

1. Characteristics

1.1 Dimensions

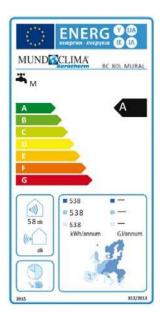
Model	Net weight (kg)	Measurements (mm, diameter X height)	Power supply
CL45091 - BC 80 L	69	Ф520 × 1215	220-240 V~, 50 Hz, 1 Ph
CL45092 - BC 100 L	73	Ф520 × 1340	220-240 V~, 50 Hz, 1 Ph

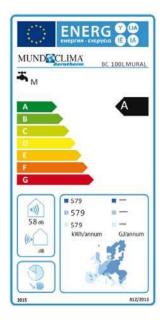
1.2 External appearance





1.3 Energy efficiency





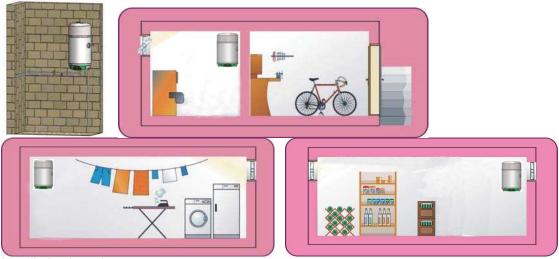
2. Wall heat pump Mundoclima Aerotherm for domestic hot water

2.1 Features

- Security:
- 1. The unit is isolated between the water circuit and the refrigerant circuit, without risk of leakage between the two fluids.
- 2. No potential contamination is possible; the coil condenser is wrapped around the inner tank.



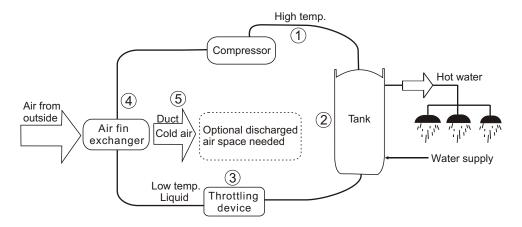
- Maximum outlet water temperature: 60 °C.
- Automatic on and off, automatic defrost that activates the resistance (2 10 min.). In the defrosting process, the unit's fan motor and compressor stop.
- According to the heat pump principle, this unit absorbs heat from the outside air and produces a thermal efficiency of hot water of about 3.7 (under condition A15 / 12 W15 / 45).
- Ambient temperature range from 0 °C to 43 °C.
- The system is designed to only have to connect the water pipes by additionally placing anti-dielectric sleeves.



Installation in a closet
Installation on a protected balcony
Installation in a garage
Installation in a ventilated garden well protected from rain and sun

2.2 Refrigeration Circuit

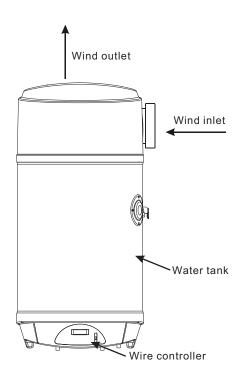
Diagram of the system:



Working principles:

- 1. The refrigerant is compressed in steam at high temperature and high pressure when it passes through the compressor.
- 2. On the discharge side of the compressor, the highly pressurized hot steam is cooled by heat exchange with the water in the tank, until it condenses at high pressure, lowering its temperature.
- 3. The pressure of the coolant drops when it passes through the expansion valve.
- 4. Finally, the refrigerant absorbs heat from the surrounding air and evaporates at low temperatures and low pressure and then returns to the compressor again.
- 5. The cold surrounding air can be directed to rooms that need air conditioning.

2.3 Diagram of the unit



Compact and high-performance design

Unit with energy saving, the average of the total consumption is only 75% of the water heater with Aerotherm and 25% of the water heater with resistance.

Environmental protection and safety

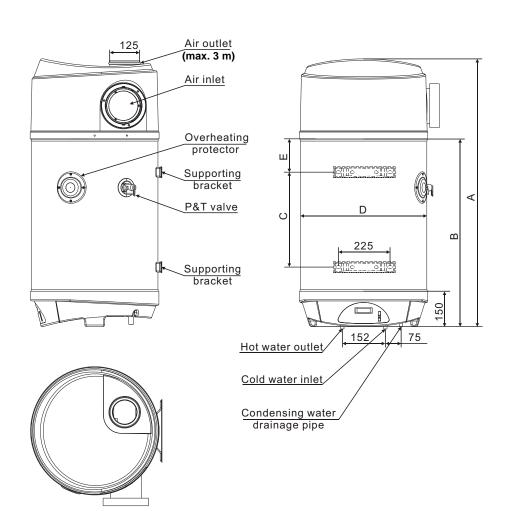
Unit electrically driven by a compressor that heats the domestic water through the condensation of the refrigerant gas.

Simple operation and wide range of use.

The unit allows you to adjust the water temperature according to the ambient temperature. We heat the water while using excess of internal heat.

2.4 Diagram

Dimensions mm	CL45091 - BC80L	CL45092 - BC100L
А	1215	1340
В	877	1002
С	407	512
D	520	520
E	288	308



Model		BC 80 L	BC 100 L
Heating capacity kW		1.0	
Water tank capacity	L	80 L	100 L
Consumption	kW	0	.27
Current	Α	1.2	
Electrical supply		230 V~/50 Hz	
Number of compressors			1
Compressor		Rot	tating
Temp. approx. water outlet		55	
Max. Pressure	Мра	(0.7
Noise	dB(A)		45
Dimensions water in/out	inch		1/2
Net dimensions mm		See diagram	
Packaging dimensions	mm	69	73
Net weight	kg	See label	
Shipping weight kg		See label	

Operating temperature:

Room temperature 15 - 13 °C / Water inlet 15 °C / Water outlet 45 °C

Operation temperature range

- (1) Ambient temperature is 0-43 °C
- (2) SHW outlet temperature range 10-60 °C

Operation parameters:

- (1) Operating water pressure range: 0.15 ~ 0.5 MPa
- (2) Maximum temperature of the water tank: 0.7 MPa

2.5 Operating modes and performances

The unit has three operating modes: Economic Mode, Electric Resistance Mode and Hybrid Mode.

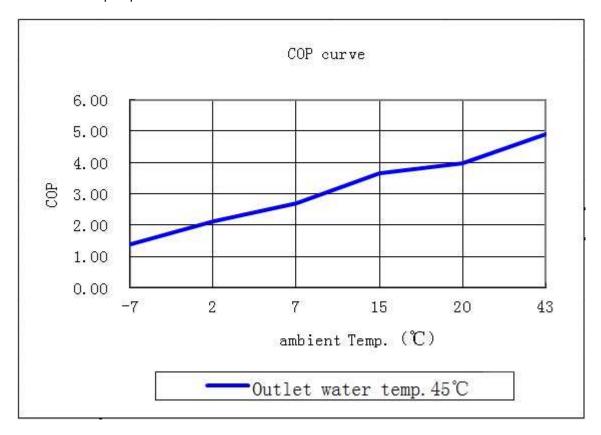
Electric resistance mode: The unit heats the water only by electrical resistance. It is used when the ambient temperature is very low. In this mode, neither the compressor nor the fan motor works. The operating mode must be selected manually.

Economic Mode: The unit heats the water only by the compressor according to the principle of the heat pump. In this mode, the system will adjust the fan motor speed automatically when it is hot. When it is cold, the system will defrost automatically and if the temperature is lower than 5 °C the electric resistance mode will be activated automatically.

Hybrid Mode: In case of large consumption of hot water, the system adjusts not only the operating capacities of the electric resistance but also the heat pump, taking into account the temperature of the water tank. In this mode, the system will adjust the working capacities of the electric heater and the heat pump according to the set temp. and the tank water temperature.

Thermal performance curve vs. ambient temperature

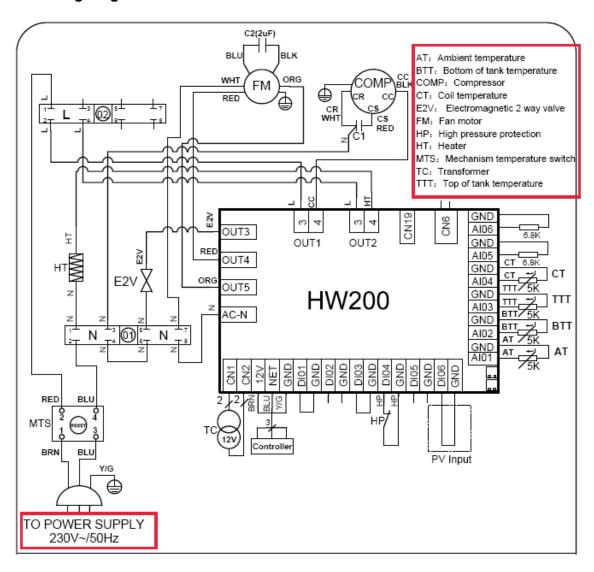
COP wall heat pump 80 and 100 liters:



Under test condition; Ambient Temperature of Dry bulb 15 °C & Wet bulb 13 °C; Water inlet 15 °C Water outlet 45 °C



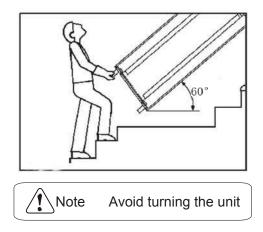
2.6 Wiring Diagram



2.7 Installation

Transport

- To avoid scratching or deformation of the surface of the unit, place protective panels around the contact surface.
- Do not touch the blades with your fingers or other objects.
- Do not tilt the unit more than 60° when moving it; keep it vertical when installing it. If it exceeds 60° after that the unit must be kept in vertical position, at least during one hour and then it can be turned on or tested.
- Slope limit > 60°

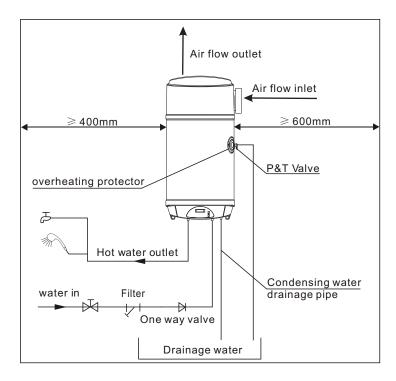


 The unit must be carried between two or more people. Failure to do so could result in equipment damage and injury to people.

Location and installation

- Sufficient space must be preserved for installation and maintenance.
- The entrance and exit of the air must not be obstructed by objects nor should the equipment be placed in the middle of air flows.
- The surface of the base must be flat and strong to stand the weight of the unit, with a maximum inclination of 2°.
- It should not be near flammable liquids, also take into account when placing pipes and wiring.
- If the unit has to be installed in a room, bear in mind that it can cause a decrease in temperature and noise, take the appropriate measures in this regard.
- If installed in closed spaces: The heat pump must be located in a space> 15 m² and must have enough air without restrictions (ensure air renewal for proper operation).

Maintenance space



The smallest distance allowed:

To avoid affecting the air inlet and outlet of the machine, confirm the installation distance as shown in the figure.



It is necessary to install the P&T safety pressure and temperature valve.

Do not touch the P&T valve when the unit is in operation.

Do not discharge the P&T valve in operation.

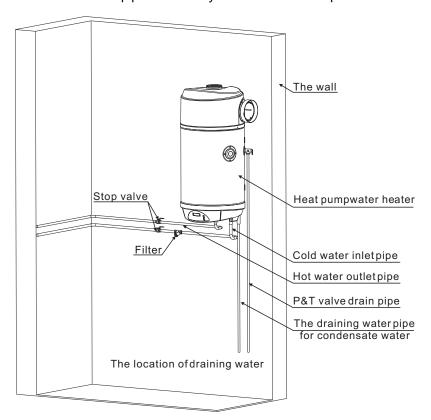
Avoid obstructions in the drain pipe.

The drain pipe must go to a drain.

These factors can cause injuries or explosions if precautions are not followed.

Hydraulic System

- If the unit is installed in a place where the outside temperature is below the freezing point, all hydraulic components must be isolated
- Water inlet and outlet pipes: The specification of the water inlet or outlet is R1/2", with external thread.
- Installation of the PT valve: The specification of the thread is R3/4", with internal thread. After installation, it must be confirmed that the outlet of the drain pipe is exposed to air (open circuit).
- When the flexible drain pipe is connected to the pressure relief port of this valve, it must be ensured that the drain pipe is vertically downwards and exposed to air.



- Installation of anti-return valve: It is recommended to install a non-return valve on the cold water inlet of R1/2". It is used to prevent water from flowing backwards.
- The drain pipe must be insulated to prevent water inside the pipe from freezing during the winter.
- Do not disassemble the PT valve and do not block the drain pipe.
- After the water connection of the pipes, open and close the outlet valve to empty the tank. When the water comes out of the outlet pipe, the tank is full, close all valves to check the pipe leak.

- If the inlet water pressure is less than 0.15 MPa, a pump must be installed in the water inlet. If the inlet water pressure is greater than 0.5 MPa, a pressure reducing valve must be installed in the water inlet pipe.
- Condensates may drip from the unit if the drain pipe is clogged, a condensate tray should be placed as explained below.
- In order for the condensates to come out more easily, the unit must be installed on a horizontal surface. Otherwise, the drain opening must be at the lowest point and an angle of inclination of the unit with respect to the ground of no more than 2° is recommended.

2.8 Electric system

The electrical installation must be in accordance with local regulations.

At the bottom of the unit there is a plug for the user to connect the unit to the power outlet.

When plugging in the unit, make sure that the electrical circuit has electrical protection by means of a thermomagnetic switch.

If the electric cable is damaged, an electrician must replace it with a new approved cable.

The installation of the wiring must be correct and must be carried out by an electrician in accordance with local regulations.

Checking before test operation

- 1. Check if the water tank is full and the pipes are properly installed.
- 2. Check if the voltage is the specified in the ground and electrical connection, and if all the cables are in good conditions.
- 3. Check the entire unit. When the unit is turned on, observe if the indicator light is on and if the control temperature is working properly.

Operation test

- 1. Turn on the unit using the control unit.
- 2. When the unit is operating, pay attention to the sounds it emits, if you hear something out of the ordinary turn off the unit and examine.
- 3. Check if the temperature of the water tank is correct.

The unit may need 5 to 15 hours to reach the desired temperature on the first use, it always depends on the temperature of the cold water.

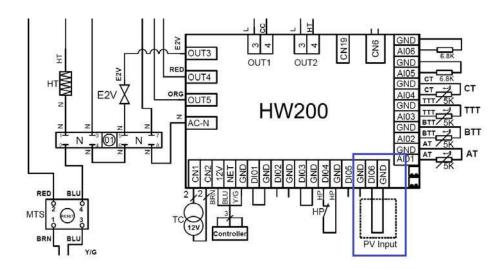
Compatibility with a photovoltaic solar energy installation for self-consumption network

If we have a potential free signal that we can connect to PV Input, the equipment will start up in Eco mode to take advantage of surplus electric power from a photovoltaic network installation.

The unit is provided standard with a cable that acts as a bridge between G106 and GND, assigned as PV Input. We can use that same cable to control the remote ignition of the heat pump. When the PV Input bridge is open, the setpoint temperature of the unit will go to 60 °C regardless of the setpoint temperature that we have preselected in the unit.



The setting temperature of the PV input is controlled by parameter 13, to change the set temperature, consult your professional installer.



2.9 Machine functions

Thermal function

• The hot inlet water absorbs heat from the surrounding air and transfers heat to the heat exchanger side. When the ambient temperature drops, the heating capacity may decrease accordingly.

Protection 3 minutes

• When the unit is turned off and the user turns it on again, it will take approx. about 3 min. to turn on. This is to protect the compressor.

Defrosting function

 If the unit makes ice, the machine will activate the defrost function automatically, it will take about (2 - 10 minutes). In the defrosting process, the unit's fan motor and compressor stop.

Water inlet

• The unit can only use tap water. Do not use well water that is not within the quality parameters established in this manual (see warranty section).

Power failure

• If the power supply fails during operation of the machine, the unit will stop immediately. If the unit is damaged by lightning, changing voltages, etc. unplug it

Power supply

• The unit must be connected through the electrical network by means of a thermal magneto switch

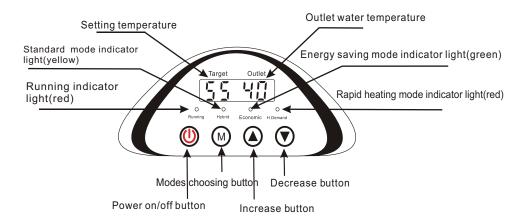
Electric protection

 If the water temperature reaches 75 °C, the electrical resistance will be turned off (automatic recovery). If the water temperature reaches 85 °C, the fuse (non-recovery) will activate.

Pressure protection

• The P&T valve will be installed in the water system. If the pressure in the tank reaches 0.7 Mpa or temp. would reach 99 °C, the P&T valve will open. If the outlet of the P&T valve is a drain hose, make sure it goes down and the outlet is open. At the same time, the valve must not be in an environment below 0 °C.

3. Diagram of the functions of the control panel



3.1 Operation of the control panel

1) Switched on

When the unit is turned on, the unit will be paused or running, this will depend on the last mode of the unit. When the unit is at rest, the red light will go out.

2 Mode view

Continue pressing the M button, to select the standard mode, energy saving mode or fast heating mode.



Standard mode



Energy saving mode



Rapid heating mode

The functions of three different modes are as follows:

1 Standard mode (Hybrid):

When the yellow light is on, the unit operates in standard mode. The unit works with the compressor and only uses the resistance when it is necessary due to a low outdoor temperature. This is the recommended mode to use throughout the year.

2 Energy saving mode (Economic):

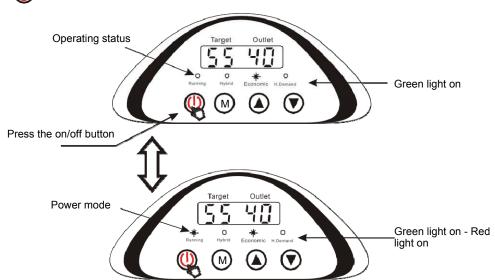
When the green light comes on, the unit is energy saving mode. In this mode, only the compressor works. This is the recommended mode when the ambient temperature is higher than $10\,^{\circ}\text{C}$.

3 **Fast heating mode (H. Demand):** When the red light comes on it means that the electrical resistance and the compressor work at the same time. This mode is suitable for rapid water heating. Users can select any mode according to the demand.

It is suggested to set the unit to standard mode.

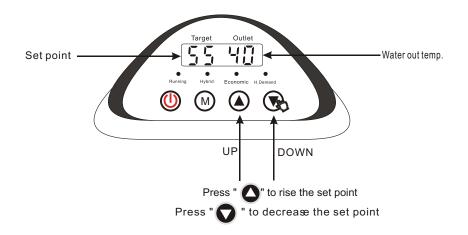
Power on / Power off

is to turn the unit on and off. When the unit is running, the red indicator light remains on.



Parameters settings

Power on and press " to rise the set point, press " to decrease the set point.



Automatic adjustment of the set point

The factory setting mode is automatic. The unit will change the value because a lower temp. can save energy. A correct set point value can save more energy in the summer and this setting will automatically increase for more comfort in the winter. The value can be adjusted manually, use the arrow up or down to adjust it.

The unit will disable the automatic function, after manual adjustment. You can press the mode button (M) keeping it pressed for 10 seconds and thus recover this function.

Normal failure and solution

Troubleshooting:

Failure	Code display	Cause	Solution
Switched on			
Operation temp.			
Failure of button sensor	P 01	The sensor is open or has a short circuit	Check and replace the lower temp sensor.
Failure of upper sensor	P 02	The sensor is open or has a short circuit	Check and replace the upper temp sensor.
Coil sensor failure	P 03	The sensor is open or has a short circuit	Check and replace the temp sensor. of the coil.
Failure of suction sensor	P 04	The sensor is open or has a short circuit	Check and replace the suction temp. sensor
Failure of ambient temp. sensor	P 05	The sensor is open or has a short circuit	Check and replace the ambient temp. sensor
High pressure protection	E 01	The high pressure is higher than 21 bar or the connection switch is open.	Check the connection and the cooling system.
Low pressure protection	E 02	The pressure switch connection is open.	Check the connection and the cooling system.
Thermal protection	E 03	The water temperature is very high, more than 85 °C	Check if there is enough water
Communication error	E 08	The communication cable is disconnected or has strong interference near the unit.	Check the PCB again.
Defrosting	Blinking		

Servicing

Check unit components and system pressure frequently (1 time per year). If there are faults, repair and replace immediately.

Check if the power cord is tight, the resistance does not work well and it smells funny. If so, repair and replace immediately.

Do not turn off the unit if you are not going to use it for a long time. The manufacturer is not responsible for breakages caused by long disconnection time.

Check if the plug is properly connected, if the ground connection is correct as well as the thermal protection.

In cold areas (under 0° C) if you do not use the unit for a long time, please, drain all the water and avoid ice formation. To ensure optimal work of the unit, clean the accumulated sediment every 6 months. Clean as follows:

Unplug the unit.

Close the water valve and open the hot water tap. Turn off the hot water tap after removing all the water.

Separate the piping from the discharge valve and place the drain pipe inside the drain hole.

Open the hot water tap and remove all the water from the tank. Use clean water several times if necessary.

Connect the cold water supply back to the unit and supply water to the tank. Connect the unit.

Use of over temperature protection

The overheating protector prevents accidents due to the temperature of the water inside the tank. The protector acts in case the heat pump is out of control and increases the water temperature. When the temperature inside the tank reaches the limit, the protector activates and the power supply is cut off. The unit must be manually reset to return to normal operation. The operation in details is as follows:



Why the compressor does not work when the unit is turned on?

Solution: When the unit is turned on after it has been stopped, the unit will not work until 3 minutes have passed. It is the automatic protection of the unit. When the ambient temperature is lower than 2 °C, the compressor stops and the electrical resistance will continue to work.

Why the unit does not stop when the temp. of water output on the screen reaches the set point? **Solution**: Because there are two sensors in the unit, upper and lower sensor. The temp. water output on the screen is only for the upper sensor.

The temperature of the water below will decrease when little water is consumed even if the temperature of water in the top of the tank has reached the set point. The unit will not produce heat until the sensor reaches the set point.

Why is the water temperature on the screen drops slowly?

Solution: Because the water temperature is different between the upper and lower part of the tank. When all the water in the tank has the same temperature, the values will increase faster on the screen.

Why does the on-screen water outlet temperature drop when the unit is heating?

Solution: If the temp. of the water above is much greater than the one below, the general temp. of the water will drop a bit due to the proximity of both levels.

Why the unit does not start heating when the output water temp. decreases?

Solution: The water temp. will go down due to heat loss if the hot water in the tank is not used for a long time. To prevent the machine from continuing to turn on and off, the unit will not turn on until the water temperature drops below 5 °C.

Why the temp. of water drops abruptly?

Solution: The temp. of hot and cold water in the tank are different. Cold water can rise and contact the upper sensor when hot water has been consumed.

Why hot water is still available when output temp. on the screen drops?

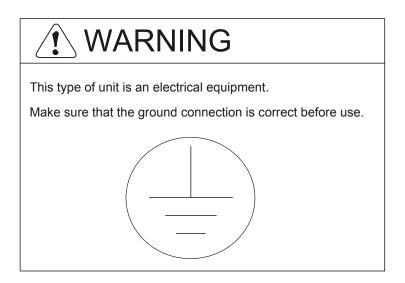
Solution: Because the upper sensor is positioned near the top of the tank, there is still 1/5 of hot water available when the temp. of water output on the screen goes down a lot.

Why does the compressor stop but the fan continue to work if the unit is in heating mode?

Solution: The unit needs defrosting when the evaporator freezes due to the low ambient temperature. The compressor will stop and the fan keeps running when the unit activates the defrost.

Why is the warm-up time so long, more than 10 hours?

Solution: Energy saving, low power and long warm-up time are features of the units. Normally, the warm-up time is 4-15 hours due to the temp. of water entry.

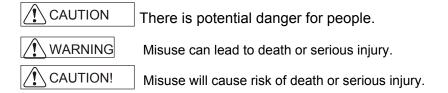


If there is a bad ground connection or it is non-existent, please do not use the unit. If you cannot be sure that the ground wire is in good condition, ask a specialized technician for help.

The most important thing is security!

Keep this manual near the unit, carefully read all the instructions for use before putting the system into operation.

There are labels of all security measures. Meaning:



4. Warranty

SALVADOR ESCODA S.A. guarantees the equipment Mundoclima Aerotherm BC 80 and 100L Mural for TWO YEARS from the invoice date, against any manufacturing defect. This warranty does not cover faults or deficiencies caused by improper use or improper installation of the equipment according to the instructions in this manual.

The guarantee includes the repair and/or replacement, if applicable, of the components and parts that could be defective. In no case will any repair carried out by the installer during the warranty period extend the original term.

This warranty does not cover faults caused by a faulty or poorly installation that forces the Aerotherm equipment to operate under different conditions for which it has been designed. The guarantee is automatically canceled, when the installation has been repaired, modified or disassembled, by persons unrelated to the technical service of Salvador Escoda S.A.

The guarantee will be canceled, if the drinking water that enters the equipment, has chloride concentrations higher than 150 mg/l, its conductivity is not between 100 and 2000 microSiemens/cm, the pH between 6-12 and running with water of hardness included in the established ranges s/UNE 112076: 2004 IN for the prevention of corrosion in water circuits (between 6 °F and 15 °F), or current regulations in each moment.

The warranty will be void if anti-dielectric sleeves are not installed directly on the cold water inlet and the hot water outlet.

SALVADOR ESCODA S.A. declines all responsibility and cancels its guarantee when external causes (wind, stones, theft, catastrophes, etc.) can cause damage, both in the wall heat pump, as it may cause to other goods.

The parties expressly submit, with strict waiver of any other that may correspond to the jurisdiction of the courts of Barcelona.

Once this guarantee is completed it will be sent, so that it will be valid to SALVADOR ESCODA S.A.

INSTALLER - Signature	SALVADOR ESCODA S.A Signature
USER - Signature	Send to SALVADOR ESCODA S.A. c/ Provenza, 392 pl.2 08025 BARCELONA ESPAÑA

Send to: SALVADOR ESCODA S.A. c/. Provenza, 392 pl. 2 08025 BARCELONA





BARCELONA-Sales and Head Offices: Provença, 392, 2nd floor-08025BARCELONA Tel. +34934462780-Fax+34934569032 www.salvadorescoda.com