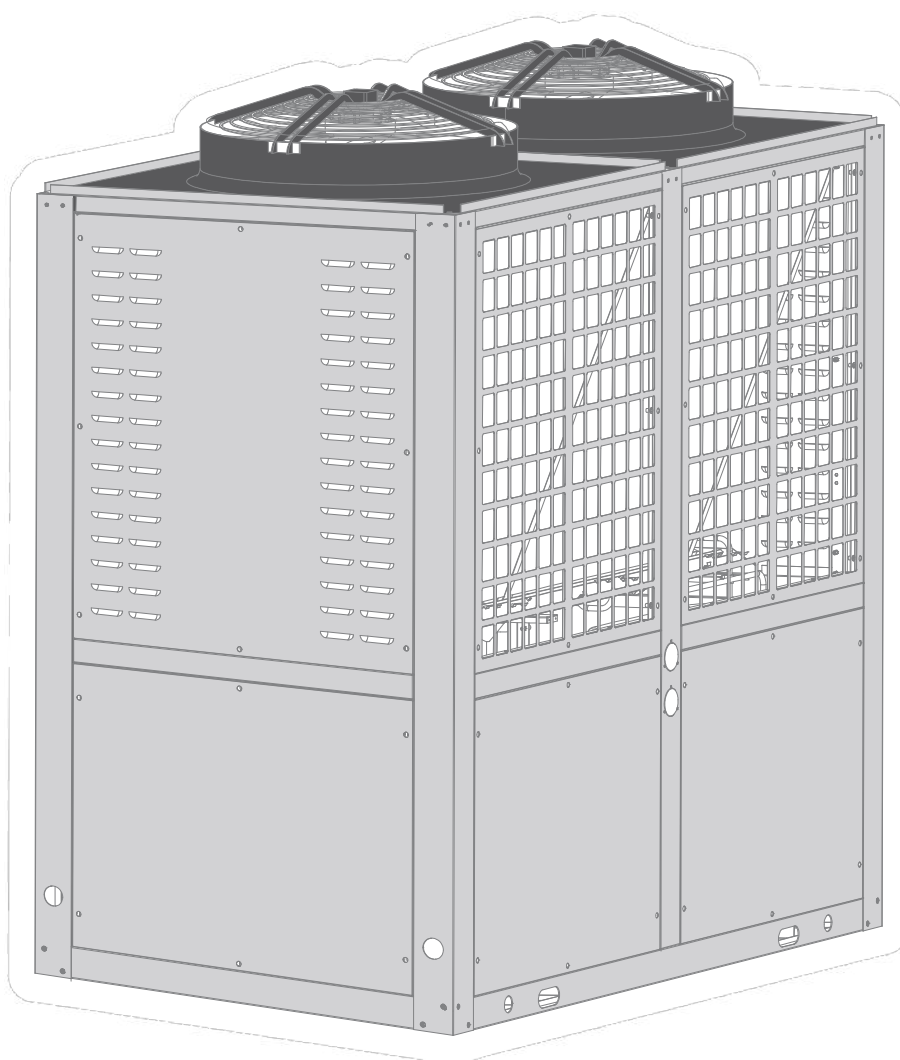




## INSTALLATION AND USER MANUAL

# Atecpool MegaHigh Inverter Heat Pump

AMHP70  
AMHP100  
AMHP130



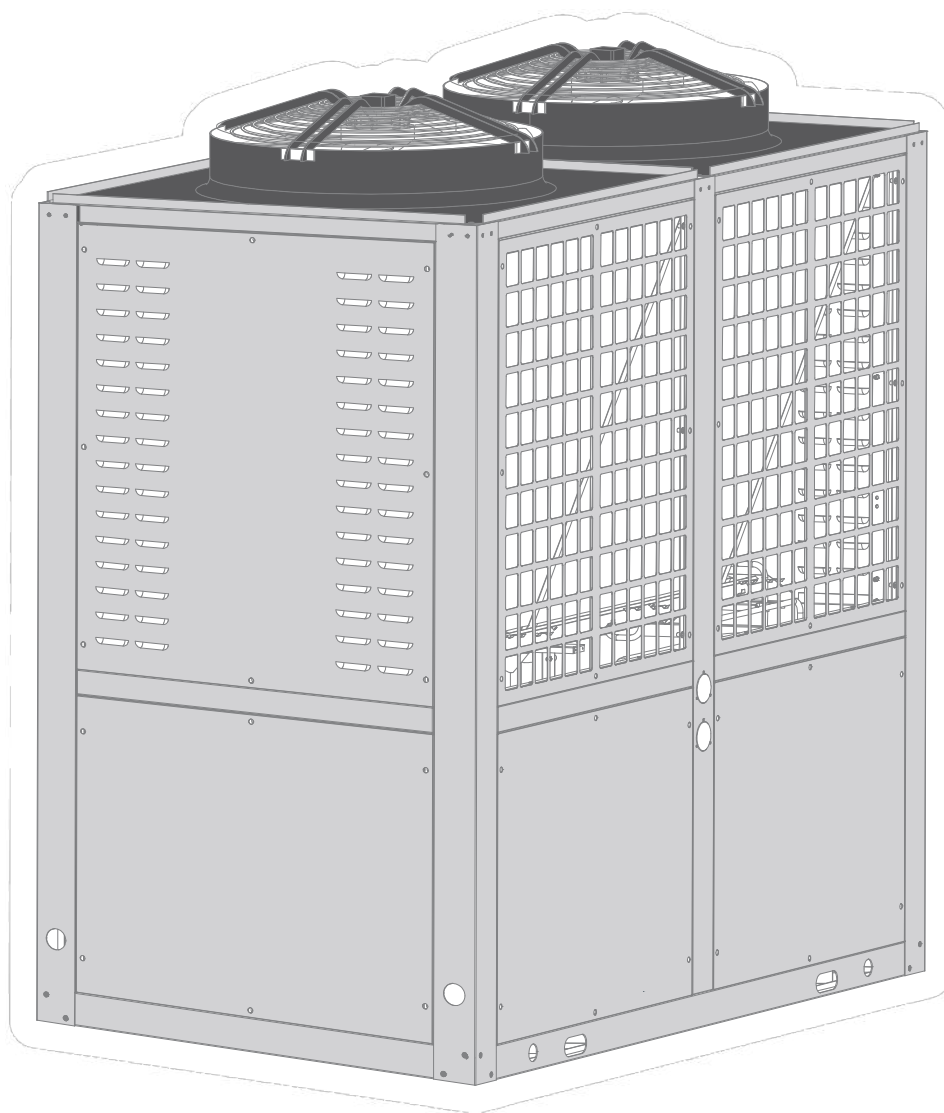


*Dear customer,*

*Thank you for your purchase and for the trust you place in our products.*

*Our products are the result of years of research in the design and production of swimming pool heat pumps. Our ambition is to provide you with a quality product with exceptional performance.*

*We have compiled this manual with extreme care so that you can take full advantage of our heat pumps.*





# READ CAREFULLY



**These installation instructions are an integral part of the product.  
They must be given to the installer and retained by the user.**

The indications and warnings contained in this manual must be read carefully and understood as they provide important information regarding the safe handling and operation of the heat pump.

**Keep this manual in an accessible place to facilitate future consultations.**

**The installation must be carried out by a qualified professional** in accordance with current regulations and the manufacturer's instructions. An installation error can lead to physical injury to people or animals as well as mechanical damage for which the manufacturer cannot be held responsible.

**After unpacking the heat pump, please check the contents for any damage.  
Please also check that the pressure indicated by the manometer is above 80 psi,  
otherwise it may indicate a refrigerant leak.**

Before connecting the heat pump, make sure that the data provided by this manual is compatible with the actual installation conditions and does not exceed the maximum limits authorized for the product in question.

**In the event of a fault and / or malfunction of the heat pump, the power supply must be cut off** and no attempt to repair the fault should be made.

Repair work should only be carried out by an authorized technical support service in using original spare parts. Failure to comply with the above clauses can have a negative influence on the safe operation of the heat pump.

To ensure the efficiency and proper functioning of the heat pump, it is important to ensure that it is regularly maintained in accordance with the instructions provided.

In the event that the heat pump is sold or transferred, always make sure that all the technical documentation is sent with the material to the new owner.

This heat pump is exclusively designed to heat a swimming pool. All other uses should be considered inappropriate, incorrect or even dangerous.

All contractual or extra-contractual responsibilities of the manufacturer / distributor will be considered null and void for damage caused by errors in installation or operation, or for failure to comply with the instructions provided by this manual or the standards of installation in force for the equipment covered by this document.

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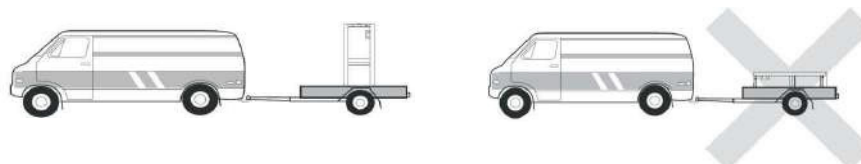
# 1. Generality



## 1.1 General delivery conditions

All equipment, even postage and packaging paid, travels at the risk and peril of its recipient.

**The person in charge of receiving the device must carry out a visual inspection to note any damage suffered by the heat pump during transport (refrigeration circuit, bodywork, electrical cabinet, chassis). The latter must make written reservations on the carrier's delivery note if he notices any damage caused during transport and confirm them within 48 hours by registered mail to the carrier.**



The device must always be stored and transported in an upright position on a pallet and in the original packaging. If the device is stored or transported in a horizontal position, wait at least 24 hours before plugging it in.

## 1.2 Safety instructions



### CAUTION :

**Please read the safety instructions carefully before using the device.**

**Since the instructions given below are essential for safety, please adhere to them strictly.**

### *During installation and maintenance*

Only a qualified person can take over the installation, start-up, maintenance and troubleshooting, in accordance with current standards.

Before any intervention on the device (installation, commissioning, use, maintenance), the person in charge of these interventions must be familiar with all the instructions in the heat pump installation manual as well as the technical elements of the file.

Do not install the device near a source of heat, combustible materials, or a building air return vent.

If the installation is not located in a place with restricted access, the heat pump protection grid is mandatory.

Do not step on the piping during installation, troubleshooting and maintenance, as this can cause serious burns.

Before any intervention on the refrigeration circuit, stop the heat pump and wait a few minutes before installing the temperature or pressure sensors, otherwise serious burns may occur.

Check the refrigerant level when servicing the heat pump.

Check that the high and low pressure switches are correctly connected to the refrigeration circuit and that they cut the electrical circuit in the event of tripping during the annual leak check of the device.

Check that if there are no traces of corrosion or oil stains around the refrigeration components.

If the device is installed outdoors in an area subject to snowfall, a snow guard must be installed at least 2m above the device.

# 1. Generality



## *When in use*

Never touch the fan while it is running, as this could cause serious injury.

Do not leave the heat pump within the reach of children, as this could cause serious injury from the fins of the heat exchanger.

Never put the unit in working order if there is no water in the pool or if the circulation pump is off.

Check the water flow monthly and clean the sand filter if necessary.

## *When cleaning*

Switch off the power supply to the device.

Close the water inlet and outlet valves.

Do not put anything into the air or water inlet and outlet ports.

Do not rinse the device with plenty of water or high pressure, only use a suitable cleaner (CleanPac type).

## *When troubleshooting*

Work on the refrigeration circuit must in accordance with current safety regulations.

The brazing operation is performed by the refrigeration engineer.

If you want to replace a faulty refrigeration component, please use only parts certified by our technical center.

If the pipe is replaced, only copper pipes that comply with the standard NF EN12735-1 can be used for troubleshooting.

## 1.3 Water treatment

Our pool heat pumps can be used with all types of water treatment.

However, it is imperative that the treatment system (Cl, pH, Br metering pumps and / or electrolyser) is installed after the heat pump in the hydraulic circuit.

**To prevent damage to the heat pump, the pH of the water should be maintained between 6.9 and 8.0.**

## 2. Description



### 2.1 Package contents

Heat pump unit.

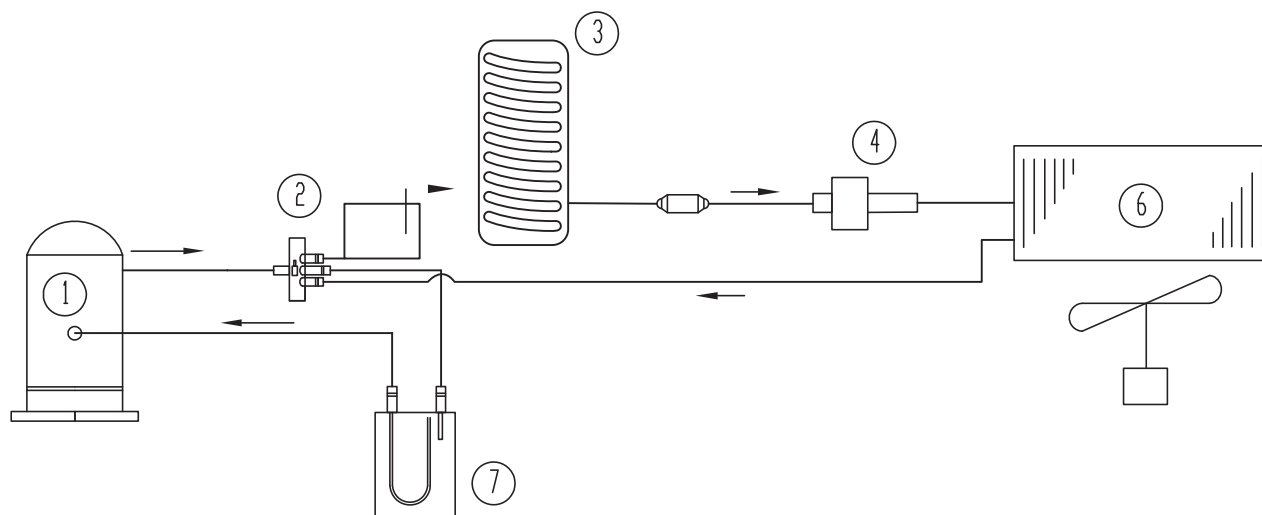
Installation and user manual.

### 2.2 Main Features

First of all, our heat pump has the following advantages:

- ▶ A CE and TÜV certified device, compliant with the European RoHS directive.
- ▶ High efficiency, saving up to 80% energy compared to a conventional heating system.
- ▶ A clean and efficient R32 ecological refrigerant.
- ▶ One (or more) reliable and efficient great brand compressor (s) .
- ▶ Large hydrophilic aluminum evaporators for low temperature use.
- ▶ Intuitive, easy-to-use remote control.
- ▶ Quiet design.
- ▶ Double antifreeze system to prevent frost damage:
  - Revolutionary heat exchanger incorporating a patented antifreeze system,
  - Intelligent monitoring system to preserve the piping and the lining without emptying the pool in winter.

### 2.3 Flowsheet diagram



- 1. Compressor
- 2. 4-way valve
- 3. Exchanger
- 4. Electronic expansion valve

- 5. Fan
- 6. Evaporator
- 7. Gas / liquid separation bottle

## 2. Description



### 2.4 Technical characteristics

Model		AMHP70	AMHP100	AMHP130
Heating Capacity at Air 26°C, Water 26°C, Humidity 80%				
Heating Capacity	kW	70~16.5	103~24.8	136~32.4
Power Input	kW	10.03~1.02	14.80~3.56	19.46~4.63
COP		16.11~6.98	16.09~6.96	16.15~6.99
Heating Capacity at Air 15°C, Water 26°C, Humidity 70%				
Heating Capacity	kW	51~12.1	76~18.3	101~23.9
Power Input	kW	10.24~1.6	15.29~2.42	20.24~3.15
COP		7.56~4.98	7.55~4.97	7.59~4.99
Cooling Capacity at Air 43°C, Water 26°C				
Cooling Capacity	kW	38~9.1	58~14.38	76~18.5
Power Input	kW	8.83~1.78	13.4~2.82	17.67~3.62
EER		5.1~4.3	5.1~4.3	5.1~4.3
Rated Power Input	kW	11	16	21
Rated Current	A	18	27	36
Power Supply	V/Ph/Hz	380-415V/3N-/50-60Hz		
Refrigerant		R410A		
Compressor Type		Mitsubishi DC inverter		
Heat Exchanger		Titanium		
Expansion Valve		Electronic EEV		
Air Flow Direction		Vertical		
Fan Quantity		2	1	2
Fan Power Input	W	200x2	615x1	695x2
Fan Rotate Speed	rpm	850	850	850
Fan Airflow	cfm	8000	9500	18000
Water Flow Volume	m³/h	20	30	40
Net Dimensions(LxWxH)	mm	1416x752x1055	1250x1080x1870	2150x1080x2180
Operating Air Temperature	°C	0°C~50°C	0°C~50°C	0°C~50°C
Noise 1m	dB(A)	≤59	≤62	≤65
Net Weight	kg	280	420	750
Water Connection	mm	63	63	75

The technical characteristics of our heat pumps are given for information only, we reserve the right to modify these data without notice.

- 1、Ambient Technical
- 2、Initial water temperature
- 3、Noise at 1m , 4m, and 10m according to EN ISO 3741 and EN ISO 354

Measurement conditions of table :

Cooling: Outdoor air temp: 43°C , Inlet water temp: 26°C

Heating: Outdoor air temp: 26°C , Inlet water temp: 26°C

Models, parameters, performance will change for the improvement of product, please forgive for

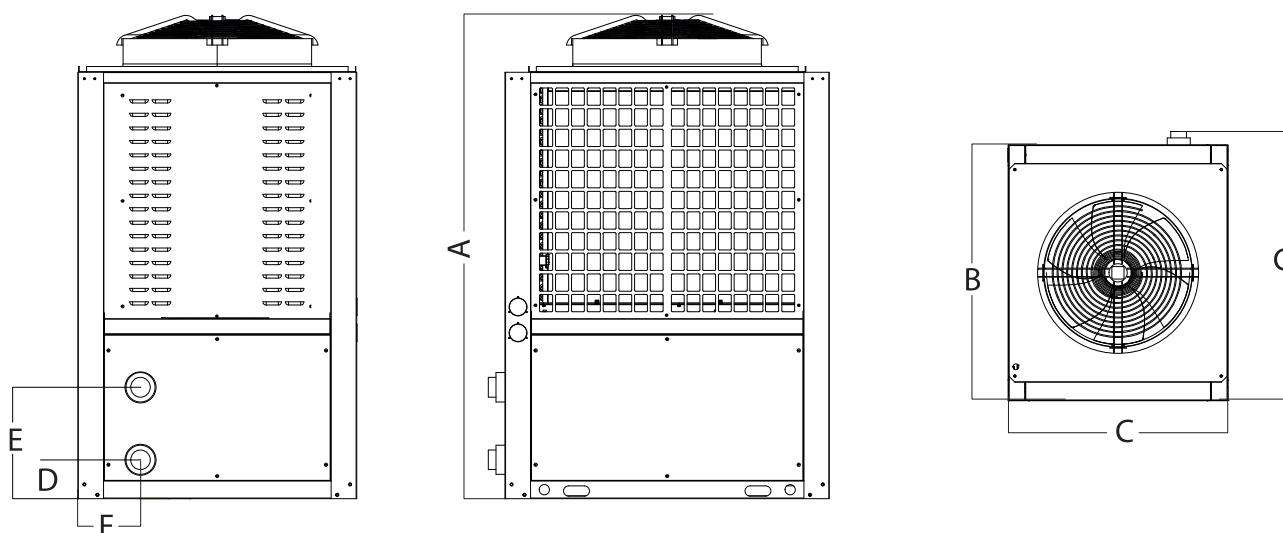
no especial notice. Specific parameters is on the base of nameplate

## 2. Description

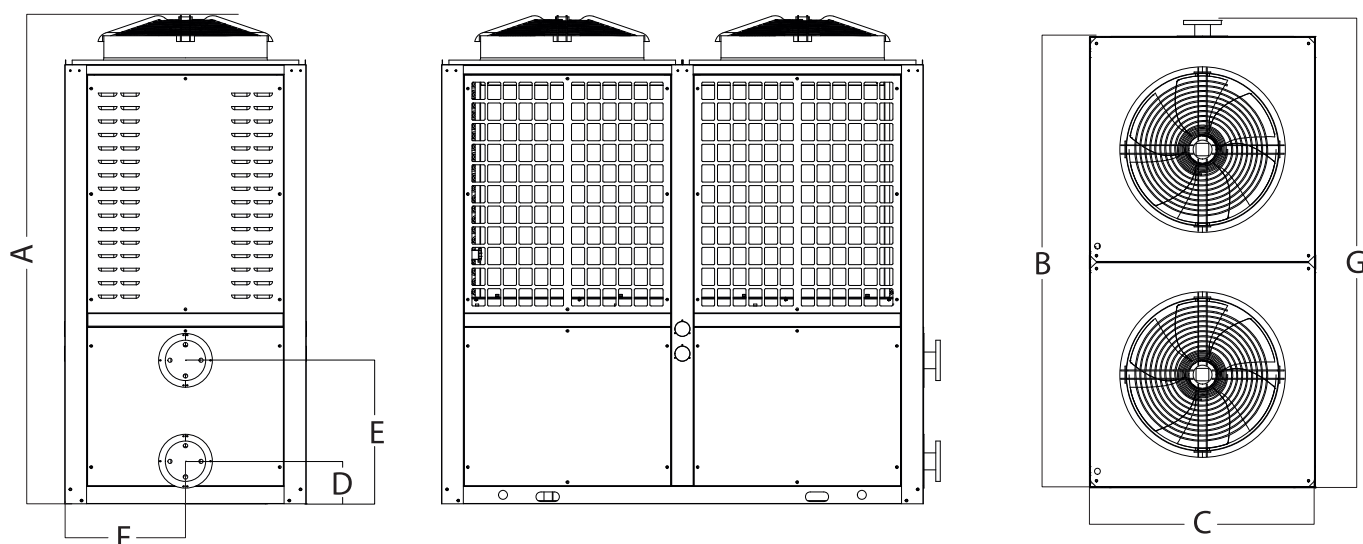


### 2.5 Dimensions of the devices

#### AMHP100



#### AMHP130



Dimensions in mm

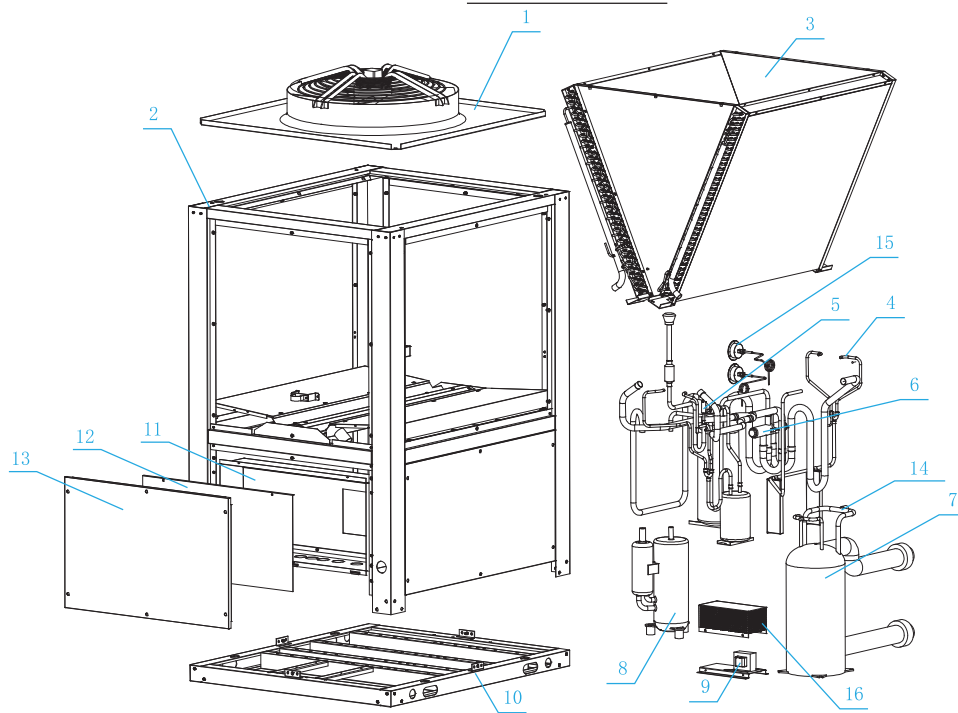
Model	AMHP100	AMHP130
A	1865	2176
B	1252	2148
C	1076	1076
D	150	190
E	430	640
F	242	242
G	1317	2224

## 2. Description

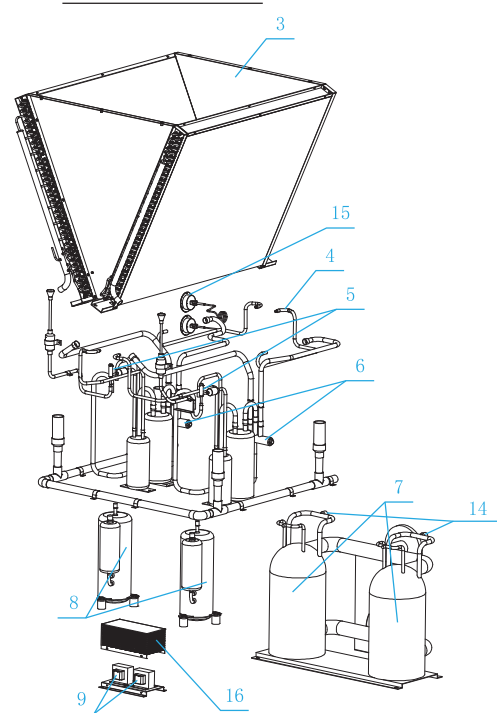


### 2.6 Exploded view

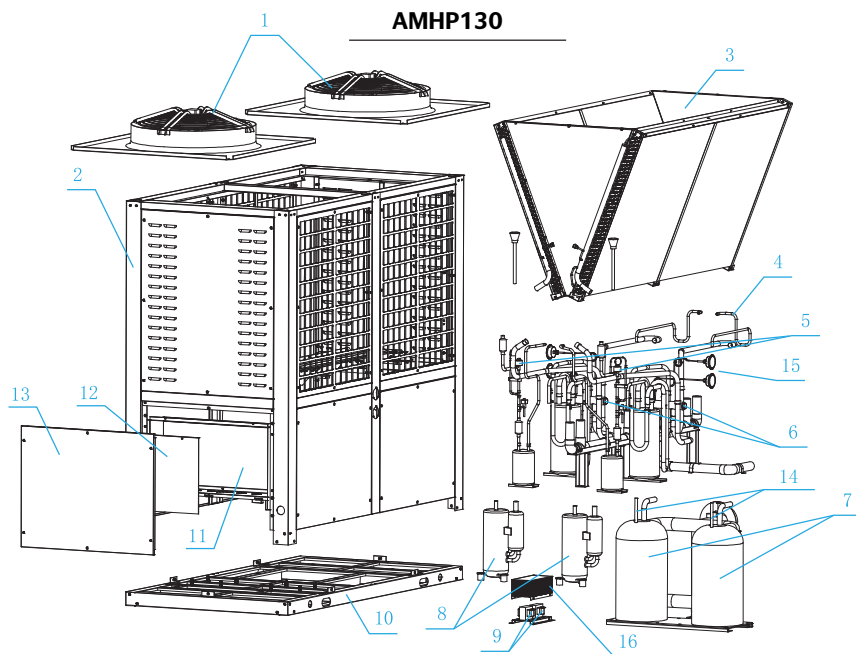
AMHP70



AMHP100



AMHP130



1. Fan and motor
2. Chassis
3. Evaporator
4. Gas piping
5. Electronic expansion valve
6. Four-way valve
7. Heat exchanger
8. Compressor
9. Electrical transformer
10. Support base
11. Electric control box
12. Electrical box cover
13. Front panel
14. Flow sensor
15. Pressure gauge
16. Electrical terminal

# 3. Installation



**ATTENTION: Installation must be carried out by a qualified professional**

**This chapter is purely indicative and must be checked and adapted if necessary depending on the installation conditions.**

## 3.1 Preparation

### Material required for the installation of your heat pump:

A power cable adapted to the power of the device.

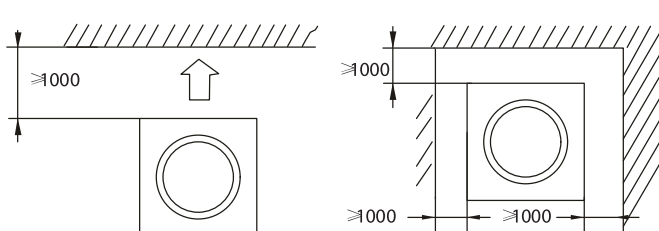
A By-Pass kit and a set of PVC tubes suitable for your installation as well as stripper, PVC glue and sandpaper.

Appropriate concrete blocks can be used to raise the device.

## 3.2 Location

### Please observe the following rules for the choice of the location of the heat pump

1. The future location of the device must be easily accessible for easy operation and maintenance.
2. The device must be installed on the ground, ideally fixed on a level concrete floor. Make sure that the floor is sufficiently stable and can support the weight of the device.
3. A water drainage device must be provided near the appliance to preserve the area where it is installed.
4. If necessary, the device can be raised using suitable pedestals designed to support the weight of the device.
5. Check that the device is properly ventilated, air outlet is not directed towards the windows of neighboring buildings and that return of stale air is possible or not. In addition, allow sufficient space around the device for servicing and maintenance.
6. The device should not be installed in a place exposed to oil, flammable gases, corrosive products, sulphurous compounds or near high frequency equipment.
7. Do not install the device near a road or a path to avoid splashing mud.
8. To prevent neighborhood nuisances, make sure to install the device so that it is oriented towards the area least sensitive to noise.
9. Keep the device out of the reach of children as much as possible.



Dimensions in mm

**Do not put anything less than one meter in front of the heat pump.**

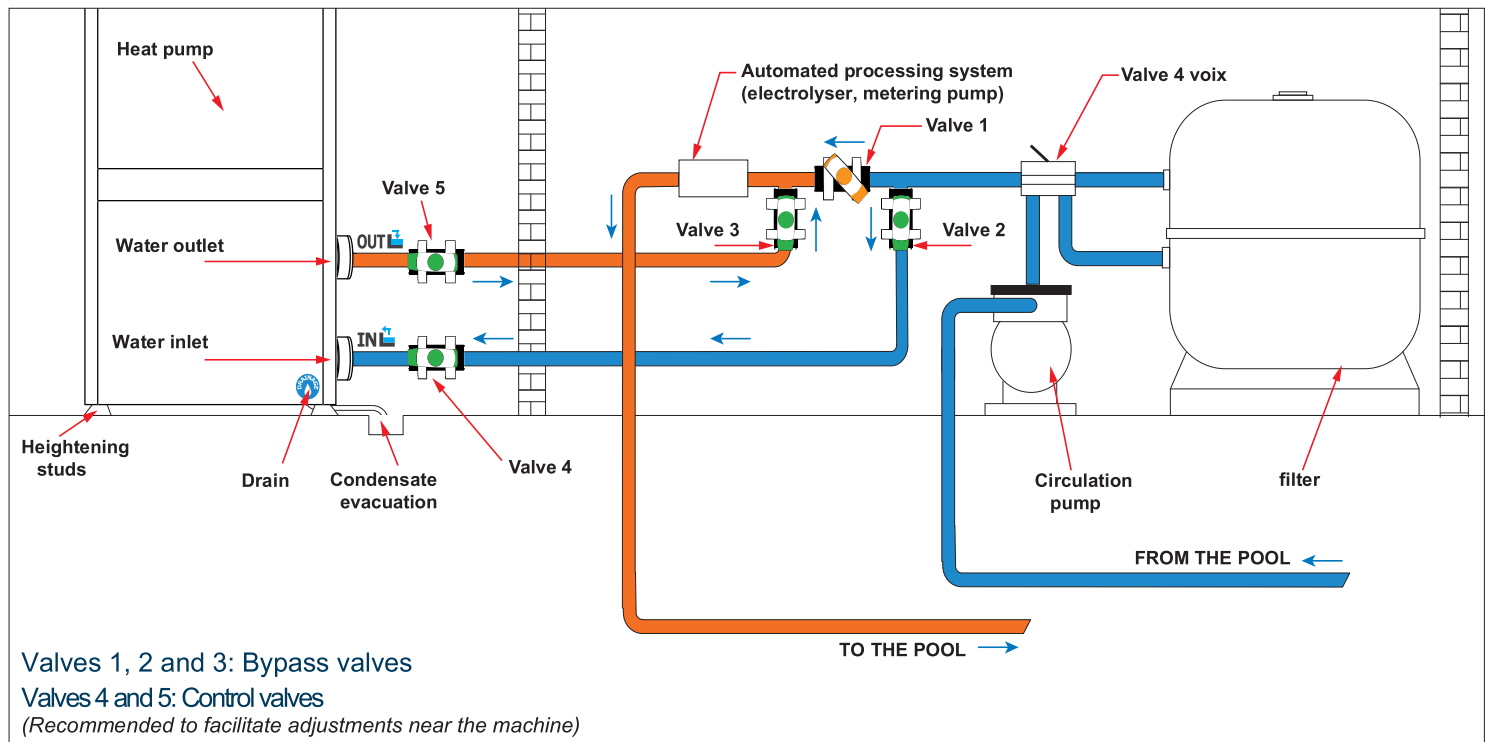
**Leave 100 cm of empty space on the sides and rear of the heat pump and free ventilation above**

**Do not leave any obstacles above or in front of the device!**

# 3. Installation



## 3.3 Installation diagram



## 3.4 Condensate evacuation

During operation, the heat pump is subject to condensation. This will result in a flow of water, more or less important depending on the humidity level. To guide this flow, we advise you to install a condensate drain (not supplied). In order to obtain the best condensate discharge, the equipment must be level.



# 3. Installation



**ATTENTION:** Installation must be carried out by qualified professionals.

This chapter is purely indicative and must be checked and adapted if necessary depending on the installation conditions.

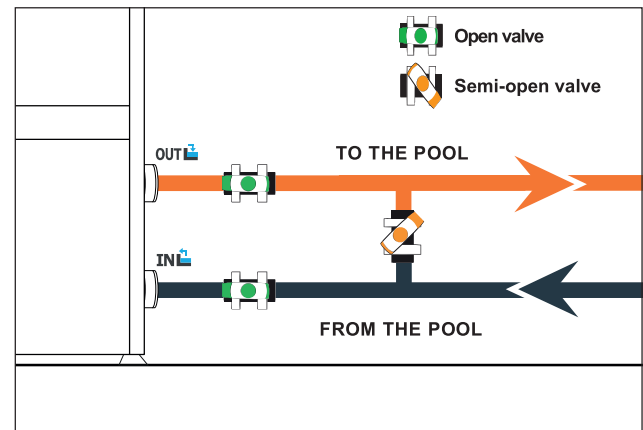
## 3.5 Hydraulic connection

### By-Pass assembly

The heat pump must be connected to the pool using a By-Pass assembly.

A By-Pass is an assembly made up of 3 valves making it possible to regulate the flow circulating in the heat pump.

During maintenance operations, the By-Pass allows the heat pump to be isolated from the circuit without stopping your installation.

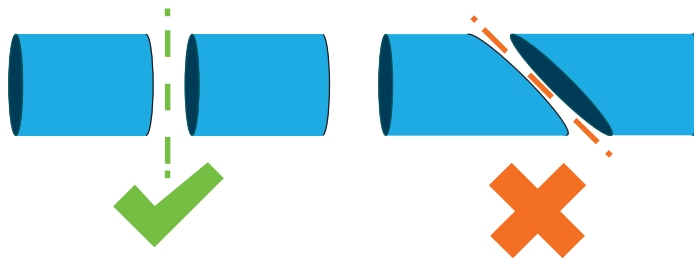


### Making a hydraulic connection with the By-Pass kit

**ATTENTION :** Do not allow water to flow into the hydraulic circuit for 2 hours after bonding

Step 1: Take the necessary measurements for cutting your pipes.

Step 2: Cut the PVC pipes with a saw, making a straight cut.



Step 3: Do not glue when assembling the hydraulic circuit to check whether it is fully suitable for your installation, and then remove the pipe to be connected.

Step 4: Deburr the ends of the cut pipes with sandpaper.

Step 5: Apply paint stripper to the ends of the pipes that are going to be connected

Step 6: Apply glue to the same position.

Step 7: Assemble the pipes.

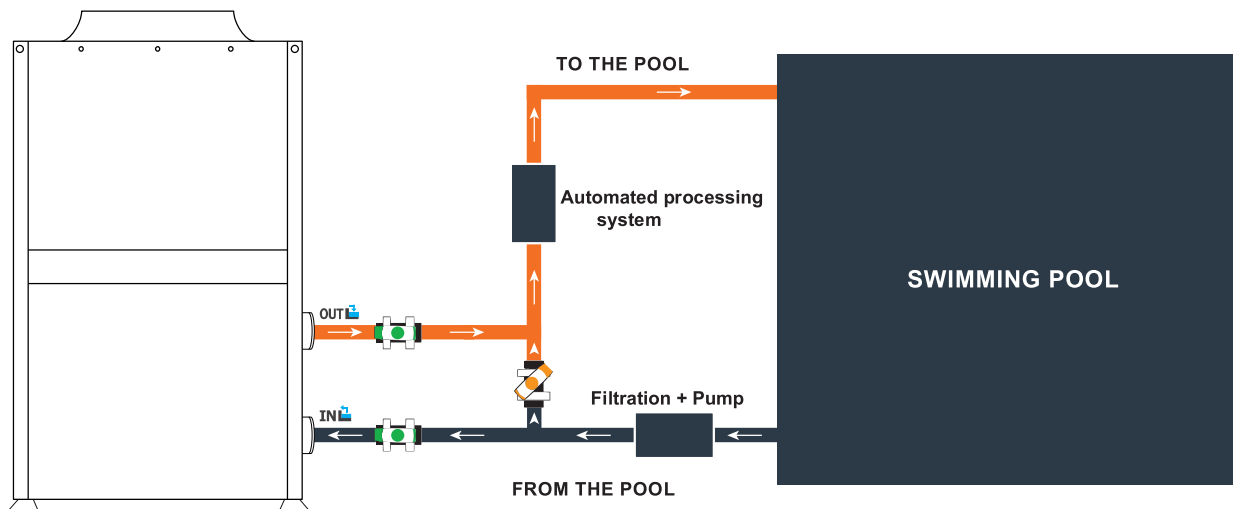
Step 8: Clean the remaining glue on the PVC

Step 9: Leave to dry for at least 2 hours before filling the hydraulic circuit with water

# 3. Installation



## By-Pass installation of a heat pump

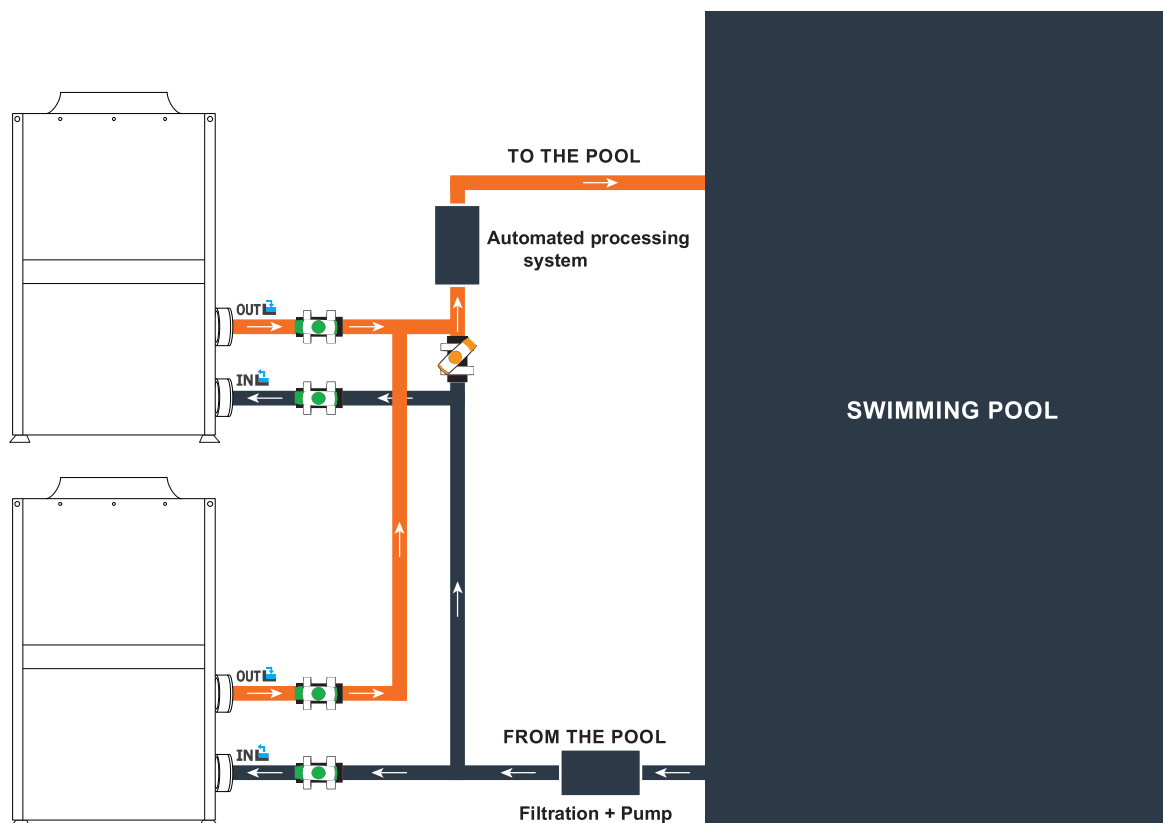


Semi-open valve



Open valve

## By-Pass installation of several heat pumps



Semi-open valve



Open valve

The filter located upstream of the heat pump must be cleaned regularly so that the water in the circuit is clean and thus avoid operating problems related to dirt or clogging of the filter.

# 3. Installation



**ATTENTION: Installation must be carried out by qualified professionals.**



**This chapter is purely indicative and must be checked and adapted if necessary depending on the installation conditions.**

## 3.6 Electrical Installation

To operate safely and maintain the integrity of your electrical installation, the device must be connected to a general power supply in accordance with the following rules:

Upstream, the general power supply must be protected by a 30 mA differential switch.

The heat pump must be connected to a suitable curve D circuit breaker (see table below) in accordance with the standards and regulations in force in the country where the system is installed.

The power cable must be adapted according to the power of the device and the length of cable required for installation (see table below). The cable must be suitable for outdoor use.

In the case of a three-phase system, it is essential to respect the order of connection of the phases. In the event of phase inversion, the heat pump compressor will not work.

In public places, the installation of an emergency stop button near the heat pump is mandatory.

The appliance is equipped with an anti-freeze system. Do not cut off the power supply, or the antifreeze system can not start.

Model	Power Supply	Maximum current	Cable diameter 1	Magneto-thermal protection (curve D)
AMHP70	Three phase 380-415V/3N~50Hz	27 A	RO2V 5x 6mm <sup>2</sup>	32A
AMHP100		39 A	RO2V 5x 10mm <sup>2</sup>	40A
AMHP130		54 A	RO2V 5x 16mm <sup>2</sup>	60A

<sup>1</sup> Cable section intended for a maximum length of 10m.  
Beyond that please seek the advice of an electrician.

# 3. Installation



## 3.7 Electrical connection



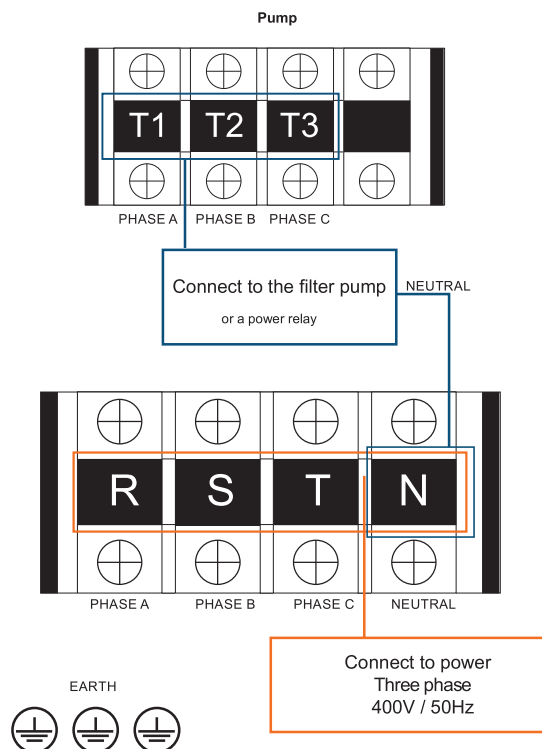
**ATTENTION :** The power supply to the heat pump must be cut off before any intervention.

Please follow the electrical instructions below to connect the heat pump.

**Step 1 :** Remove the electrical panel using a screwdriver to access the electrical terminal block.

**Step 2 :** Insert the cable into the heat pump unit through the opening provided.

**Step 3 :** Connect the power cable to the terminal block according to the diagram below.



**ATTENTION :** 400V power supply, Recover the earth on the power supply terminal block

**Step 4 :** Close the heat pump panel carefully.

### Control of a circulation pump

Depending on the type of installation, you can also connect a circulation pump so that it works together with the heat pump.

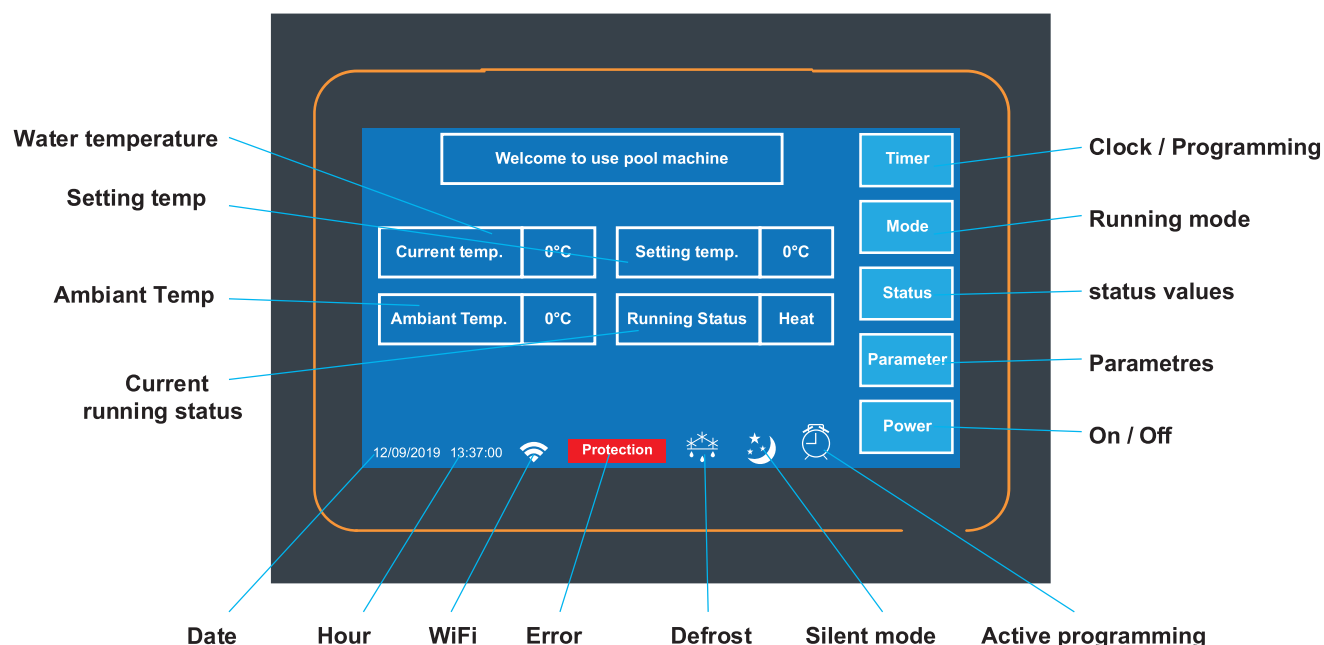


**ATTENTION :** The control of a pump with a power greater than 5A (1000W) requires the use of a power relay.

## 4. Usage



### 4.1 Wired remote controller



### 4.2 Choice of operating mode



Before you start, make sure the filter pump is running and water is flowing through the heat pump.

Before setting your target temperature, you must first choose the operating mode of your heat pump:

**Heat**

#### *Heating Mode*

Choose the heating mode so that the heat pump heats the water in your pool.

**Cool**

#### *Cooling Mode*

Choose the cooling mode so that the heat pump cools the water in your pool.



#### *Silence Mode*

Activate this mode, to limit the noise of the heat pump, the heat pump automatically starts heating or cooling depending on the setting temperature.



#### *Defrost mode*

This pictogram is displayed when the heat pump is defrosting.

## 4. Usage



### 4.3 Standby Mode

**When the control panel is off:** Tap the screen once to light it up.

When the control panel is unlocked and no action is taken for 1 minute, the control panel automatically turns off.

### 4.4 Choice of operating mode

**Step 1 :** Enter into the main menu by unlocking the control panel.

**Step 2 :** Press the Mode button to change the operating mode.

Mode

Heat



Cool



### 4.5 Clock Setting

**Step 1 :** In the main panel, tap the clock.  
at the bottom left of the screen.

**Step 2 :** Enter the current time and date.

**Step 3 :** Return to the main screen to validate the modification.

12/09/2019 13:37:00

### 4.6 Setting the time schedule

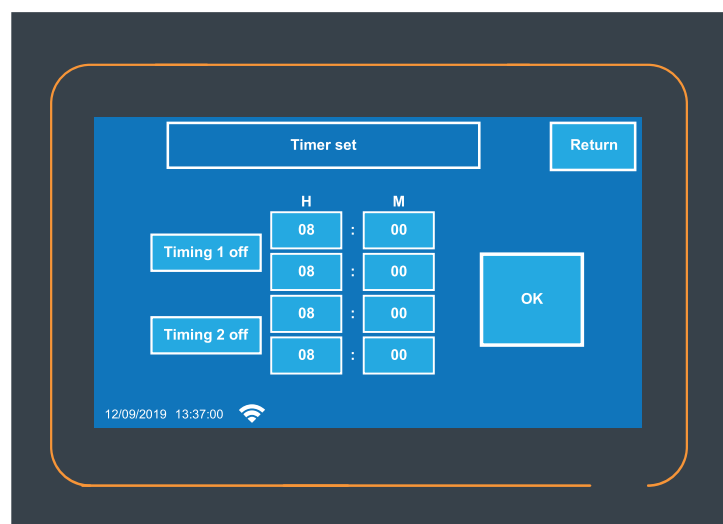
**Step 1 :** Go to the main menu by unlocking the control panel.

**Étape 2 :** Press Timer to enter in the configuration of the On / off groups.

**Étape 3 :** **Configure the switch-on time**  
route and stop for group 1 or 2  
of timetables

Press OK then return to the menu

When programming is activated, the following pictogram is displayed on the main page



## 4. Usage

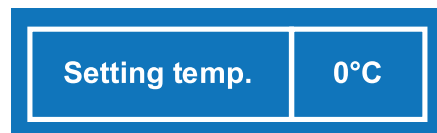


### 4.7 Activation of time programming

- Step 1 :** Go to the main menu by unlocking the control panel.
- Step 2 :** Press Timer 1 On / Off to activate or deactivate the programming

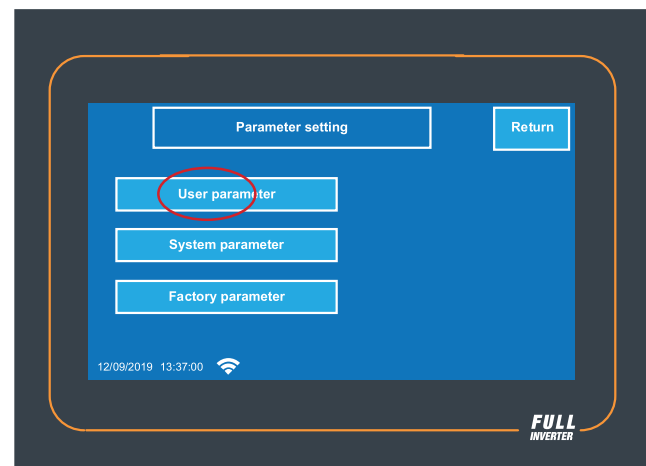
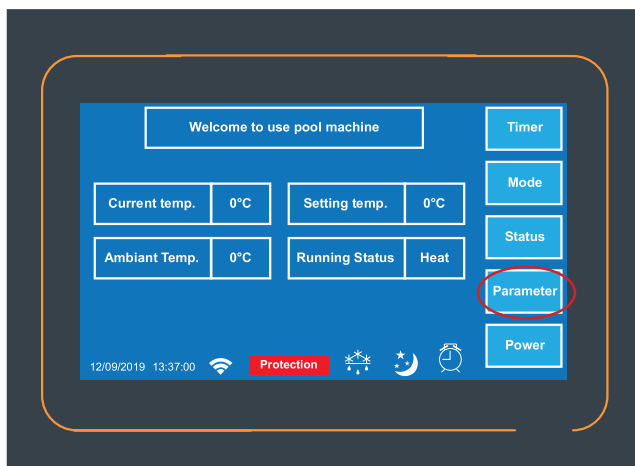
### 4.8 Adjust the setting temperature

- Step 1 :** Go to the main menu by unlocking the control panel.
- Step 2 :** Press "Setting Temp." to change the desired temperature
- Step 3 :** Press + or - to change the setting temperature



### 4.9 Parameter table

- Step 1 :** Go to the main menu by unlocking the control panel.
- Step 2 :** Press the "Parameter" button to access the various parameters.

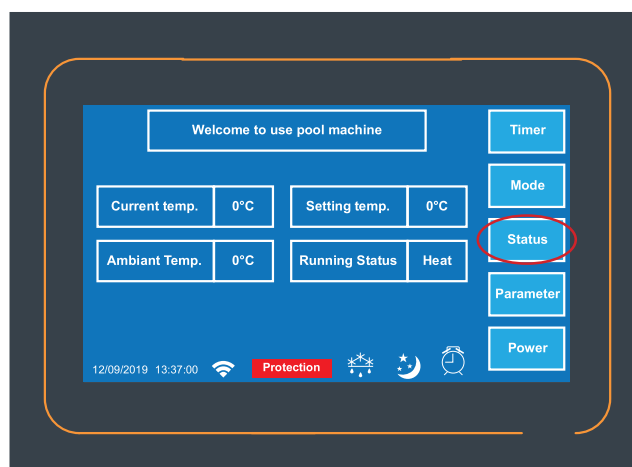


Code	Item	Description	Setting range	Factory setting
P05	Heating Setting Temp.	Heating temperature adjustment	8°C ~ 28°C	27°C
P04	Cooling Setting Temp.	Cooling temperature adjustment	15°C ~ 40°C	27°C
P01	Hystersis Temp.	Setting the trigger temperature delta	1°C ~ 18°C	1°C
P28	Pump Mode	Control of the filtration pump	0=stop; 1=Non-stop	0

## 4. Usage



### 4.10 Status table



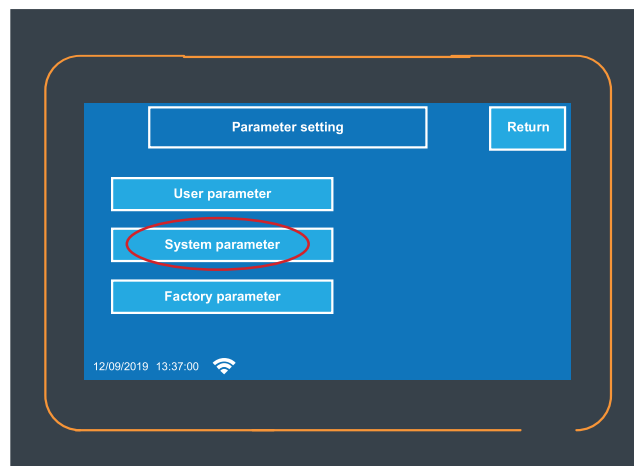
Code		Description
Current Temp.	Water inlet temperature	-30~99°C
Outlet Temp.	Water outlet temperature	-30~99°C
Ambiant Temp.	Air temperature	-30~99°C
1#Exhaust Temp.	Compressor 1 outlet temperature	0~125°C
1#Suction Temp.	Compressor 1 inlet temperature	-30~99°C
1#Coil Temp.	Heat exchanger 1 inlet temperature	-30~99°C
1#Inside Coil Temp.	Heat exchanger 1 outlet temperature	-30~99°C
1#Opening of EEV	Opening of electronic valve 1	
1# Fan Speed	Fan 1 speed	
1#Comp. Cur.	Compressor 1 speed	
1#Fin Temp.	Heat exchanger 1 outlet temperature	
1#DC Voltage	DC power supply voltage 1	
1#Operating Freq	Operating frequency 1	
2# Fan Speed	Fan 2 speed	
2#Exhaust Temp.	Compressor 2 outlet temperature	0~125°C
2#Suction Temp.	Compressor 2 inlet temperature	-30~99°C
2#Coil Temp.	Heat exchanger 2 inlet temperature	-30~99°C
2#Inside Coil Temp.	Heat exchanger 2 outlet temperature	-30~99°C
2#Opening of EEV	Opening the electronic valve 2	
2#Comp. Cur.	Compressor 2 speed	
2#Fin Temp.	Heat exchanger 2 outlet temperature	
2#DC Voltage	DC power supply voltage 2	
2#Operating Freq	Operating frequency 2	



## 4. Usage



### 4.11 System Parameter



	Code	Description
P06	Exhaust Temp.Too High	Compressor outlet temperature too high
P07	Exhaust Recover Temp.	
P09	Compensated Temp.	Adjustment of the coeff. temperature probe compensation
P11	Defrost Intervals	Auto-activation time before the start of defrost
P12	Defrost Temp.	Defrost temperature
P13	Defrosting Max Time	Maximum defrost time
P14	Exit Defrosting Temp.	Defrost deactivation temperature
P15	Defrost A_C $\Delta$ T	
P16	Defrost Ambient Temp.	
P17	EEV Cycle	
P18	Heating Overheat	Overheating (heating mode)
P19	Adjust EEV Temp.	Opening temperature of the expansion valve
P20	Defrost EEV Opening	Opening of the expansion valve in defrost mode
P21	EEV minimum opening	Minimum opening of the expansion valve
P22	EEV Mode	Selection of the expansion valve mode
P23	EEV Manual Steps	Manual step expansion valve
P24	Cooling Overheat	Overheating (cooling mode)
P27	Cooling EEV Mode	operating mode of the expansion valve (cooling mode)
	Lamp Panel Display	Backlight

## 6. Maintenance and Upkeep



### 6.1 Maintenance and upkeep



**ATTENTION : Before carrying out any maintenance work on the device, make sure you have cut off the power supply.**

#### Cleaning:

The heat pump housing should be cleaned with a damp cloth. The use of detergents or other household products could degrade the surface of the case and alter its properties.

The evaporator at the back of the heat pump can be carefully cleaned using a soft brush vacuum cleaner or a suitable cleaner (CleanPac type ).

#### Annual maintenance

The following operations must be carried out by a qualified person at least once per year.

- ☒ Carry out safety check.
- ☒ Check that the electric cables are securely held.
- ☒ Check the connection of the masses to the earth.
- ☒ Check the condition of the pressure gauge and the presence of refrigerant.
- ☒ Cleaning the evaporators with a suitable product (CleanPac)

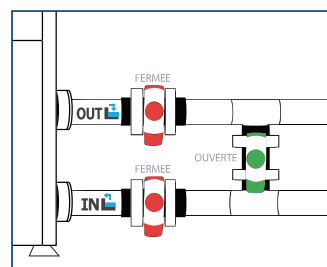
### 6.2 Wintering

In low season, when the ambient temperature is lower than 3 ° C, a stopped heat pump must be wintered to avoid any damage caused by frost.

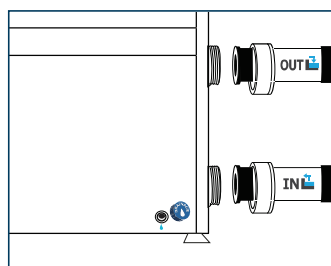
#### Wintering in 4 steps



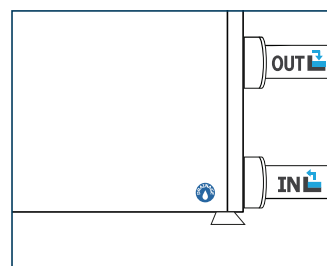
**Step 1**  
Turn off the power to the heat pump.



**Step 2**  
Open the By-Pass valve. Close the inlet and outlet valves.



**Step 3**  
Unscrew the drain plug and the water pipes in order to drain all the water contained in the heat pump.



**Step 4**  
Screw the drain plug and pipes back on or block them with rags to prevent foreign objects from entering the pipes.



**If a circulation pump is slaved to the heat pump, please also drain the water in it.**

## 7. Troubleshooting



### ATTENTION :

Under normal conditions, a suitable heat pump can heat the pool water from 1 ° C to 2 ° C per day. It is therefore quite normal not to feel a temperature difference at the circuit outlet when the heat pump is working.

A heated pool must be covered to prevent heat loss.

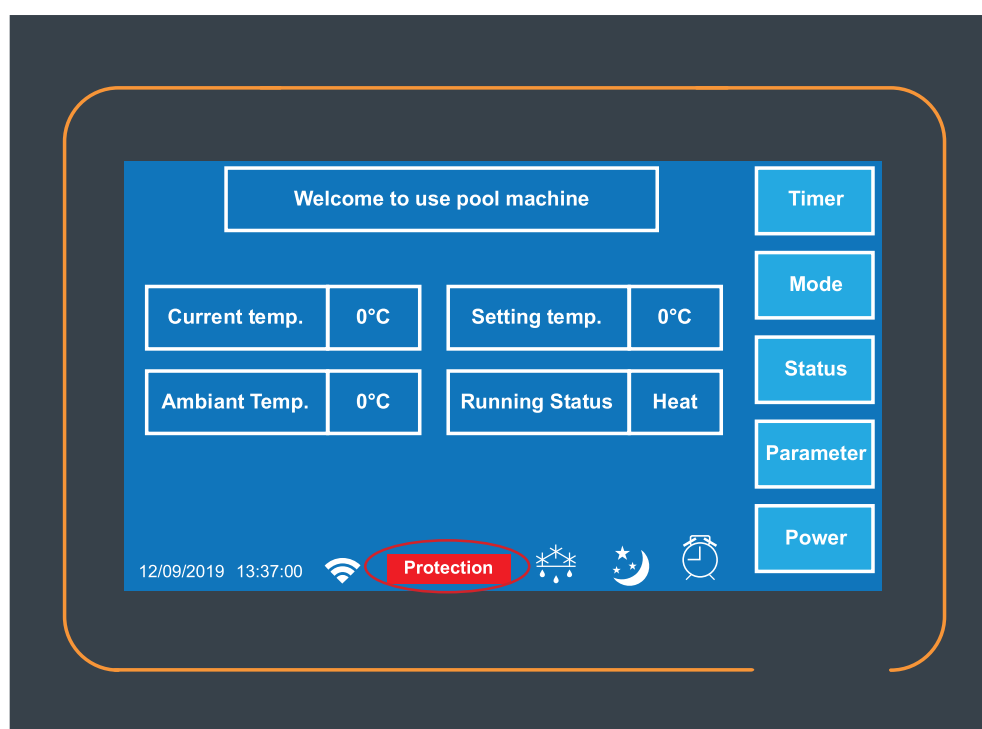


### 7.1 Faults and Anomalies

In the event of a problem, the heat pump screen displays the "Protection" symbol. Press the symbol to identify the problem.

To view the history of anomalies encountered, press "Status" then "Fault Query".

Examples of error codes:



# 7. Troubleshooting



## 7.2 Codes erreurs

Error	Error		
Flow failure	Flow sensor failure	1) The sensor is not properly connected	1) Reconnect the sensor
		2) The sensor is defective	2) Replace the sensor
		3) The electronic board is defective	3) Replace the electronic board
Level 1 anti-freeze protection	Level 1 frost protection	The ambient temperature is too low	No action required
Level 2 anti-freeze protection	Level 2 frost protection	The ambient temperature is too low	No action required
High pressure 1 protection High pressure 2 protection	Compressor 1 or 2 High Pressure Protection	1) Insufficient water flow	1) Check the operation of the water pump and the opening of the inlet / outlet valves of the By Pass
		2) 4-way valve defective or refrigerant overload	2) Readjust the refrigerant charge
		3) The setting water temperature too high	3) Set the target temperature 5 ° C above the current temperature then proceed in 5 ° C steps
		4) Pressure switch disconnected or defective	4) Reconnect or replace the pressure switch
Low pressure 1 protection Low pressure 2 protection	Compressor 1 or 2 Low Pressure Protection	1) Not enough refrigerant	1) Readjust the refrigerant charge
		2) 4-way valve defective	2) Replace the valve
		3) Pressure switch disconnected or defective	3) Reconnect or replace the pressure switch
		4) Defective electronic board	4) Replace the electronic board
Connection failure between control main Program board and controller	Connection problem between the electronic board and controller	1) Bad connection between the controller and the electronic board	1) Check the connection cables between the remote controller and the electronic board
		2) Wired remote controller defective	2) Replace the remote controller
		3) Defective electronic board	3) Replace the electronic board
Exhaust temperature 1 over Exhaust temperature 2 over	Compressor 1 or 2 outlet temperature too high	The heat pump does not work	Check that the filtration pump is working and the water flow is sufficient (bypass adjustment)
Water inlet sensor failure	Failure of the water inlet temperature sensor	1) The sensor is not properly connected	1) Reconnect the sensor
		2) The sensor is defective	2) Replace the sensor
		3) The electronic board is defective	3) Replace the electronic board
Outside coil sensor 1 failure	Evaporator 1 or 2 sensor failure	1) The sensor is not properly connected	1) Reconnect the sensor
Outside coil sensor 2 failure		2) The sensor is defective	2) Replace the sensor
Exhaust sensor 1 failure	Compressor 1 or 2 output sensor failure	3) The electronic board is defective	3) Replace the electronic board
Exhaust sensor 2 failure			
Ambient temperature sensor failure	Ambient temperature sensor failure		
Water outlet sensor failure	Water outlet temperature sensor failure		
Suction pipe sensor 1 failure	Return air temperature sensor 1 failure		

# 7. Troubleshooting

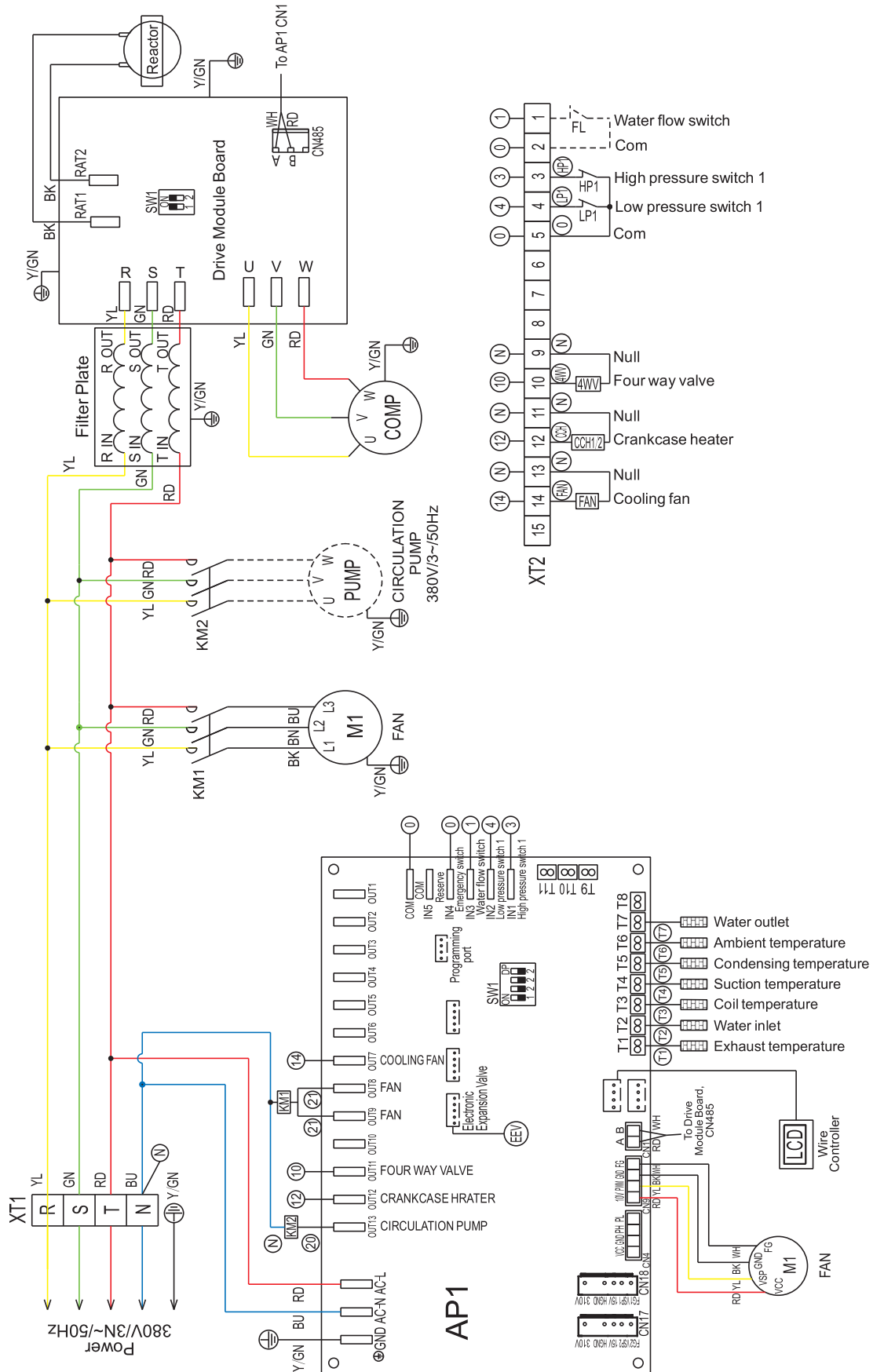


Suction pipe sensor 2 failure	Return air temperature sensor 2 failure	1) The sensor is not properly connected	1) Reconnect the sensor
		2) The sensor is defective	2) Replace the sensor
		3) The electronic board is defective	3) Remplace the electronic board
Outside coil temperature 1 over in Cooling Mode Outside coil temperature 2 over in Cooling Mode	Temperature of evaporator 1 or 2 too high (> 60 ° C) for the cooling mode	The heat pump does not work	Check that the filtration pump is working and that the sensor is properly connected
Inside coil sensor 1 failure Inside coil sensor 2 failure	Evaporator 1 or 2 sensor failure	1) The sensor is not properly connected	1) Reconnect the sensor
		2) The sensor is defective	2) Replace the sensor
		3) The electronic card is defective	3) Remplace the electronic board
Water outlet temperature lower in Cooling Mode	Water temperature too low at the exchanger outlet in the cooling mode	The heat pump does not work	Check that the filtration pump is working and that the water flow is sufficient (bypass adjustment)
Water outlet temperature over in Heat Mode	Water temperature too high at the exchanger outlet in the heating mode		
Fan 1 fault Fan 2 fault EC Fan 1 fault	Fan 1 or 2 fault EC fan failure	Bad connection	Reconnect the fan
		The fan motor is defective	Replace motor
Connection failure between driver 1 and main Program board Connection failure between driver 2 and main Program board	Inverter module 1 or 2 communication failure (alarm when the communication between the external card and the driver card is disconnected)	Module disconnected or defective	Reconnect or replace the Module
		Defective module	Replace the module
Failure of frequency conversion module 1 Failure of frequency conversion module 2	Frequency converter 1 or 2 failure	Module disconnected or defective	Reconnect or replace the Module
		Defective module	Replace the module

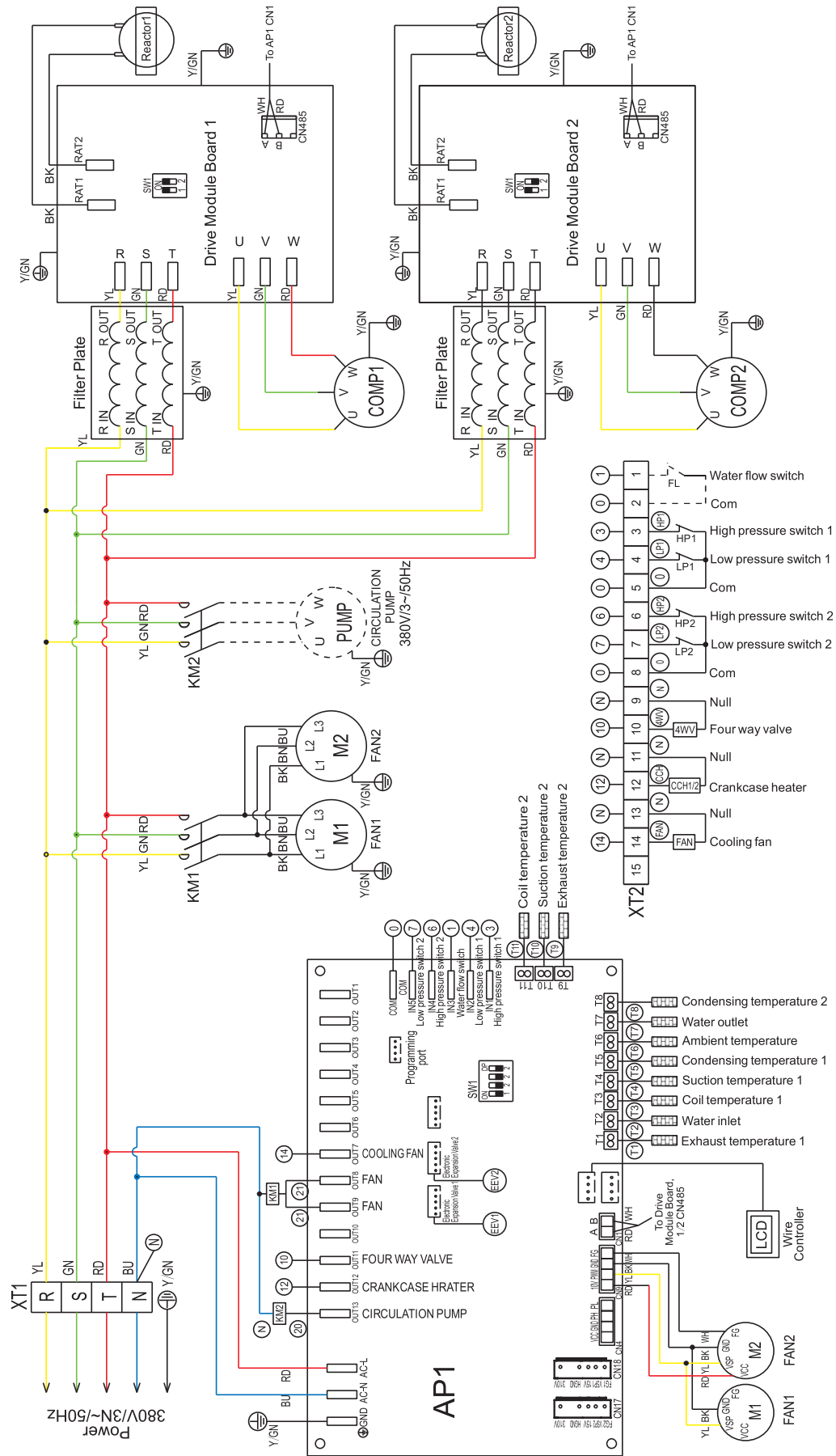
# 8. Appendice



## 8.1 Wiring diagrams



# 8. Appendice



AMHP100-AMHP130