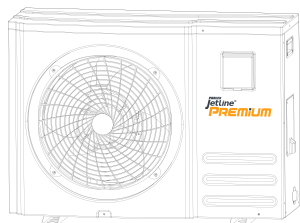




INSTALLATION AND USER MANUAL

for your heat pump

POOLEX



POOLEX
Jetline®
PREMIUM

Models: 40 / 50 / 70 / 90 / 110 / 130 / 160 / 160 Tri / 180 Tri / 220 Tri

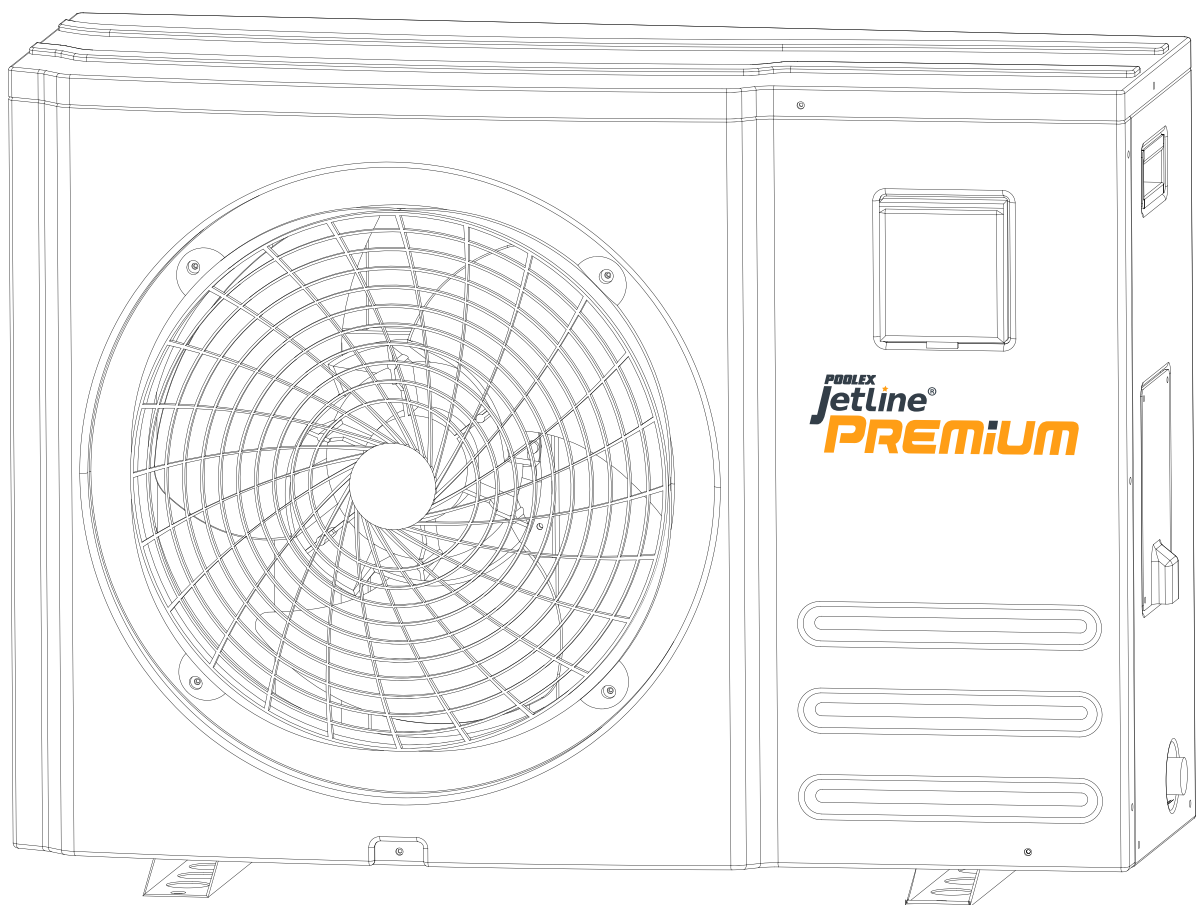
Thank you

Dear Customer,

Thank you for your purchase and for your confidence in our products.

These are the result of many years of research in the field of design and production of heat pumps for swimming pools. Our aim is to provide you with an exceptional high performance quality product.

We have produced this manual with the utmost care so that you get maximum benefit from your Poolex heat pump.





PLEASE READ CAREFULLY.



**These installation instructions are an integral part of the product.
They must be given to the installer and retained by the user.
If the manual is lost, please consult the website:**

www.poolex.co.uk

The instructions and recommendations contained in this manual should be read carefully and understood since they provide valuable information concerning the heat pump's safe handling and operation. **Keep this manual in an accessible place for easy future reference.**

Installation must be carried out by a qualified professional person in accordance with current regulations and the manufacturer's instructions. An installation error may cause physical injury to persons or animals as well as mechanical damage for which the manufacturer can under no circumstances be held responsible.

After unpacking the heat pump, please check the contents in order to report any damage. Please also check that the pressure indicated on the gauge is higher than 80 psi. If not, this could mean a leak of refrigerant.

Prior to connecting the heat pump, ensure that the information provided in this manual is compatible with the actual installation conditions and does not exceed the maximum limits authorised for this particular product.

In the event of a defect and/or malfunction of the heat pump, the electricity supply must be disconnected and no attempt made to repair the fault.

Repairs must be undertaken only by an authorised technical service organisation using original replacement parts. Failure to comply with the above-mentioned clauses may have an adverse effect on the heat pump's safe operation.

To guarantee the heat pump's efficiency and satisfactory operation, it is important to ensure its regular maintenance in accordance with the instructions provided.

If the heat pump is sold or transferred, always make sure that all technical documentation is transmitted with the equipment to the new owner.

This heat pump is designed solely for heating a swimming pool. Any other use must be considered as being inappropriate, incorrect or even hazardous.

Any contractual or non-contractual liability of the manufacturer/distributor shall be deemed null and void for damage caused by installation or operational errors, or due to non-compliance with the instructions provided in this manual or with current installation norms applicable to the equipment covered by this document.

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1. General

1.1 General Terms of Delivery

All equipment, even if shipped 'free of carriage and packing', is dispatched at the consignee's own risk

The person responsible for receiving the equipment must carry out a visual inspection to identify any damage to the heat pump during transport (refrigerant system, body panels, electrical control box, frame). He/she must note down on the carrier's delivery note any remarks concerning damage caused during transport and confirm them to the carrier by registered letter within 48 hours.

The equipment must always be stored and transported vertically on a pallet and in its original packaging. If



it is stored or transported horizontally, wait at least 24 hours before switching it on.

1.2 Safety instructions



WARNING: Please read carefully the safety instructions before using the equipment. The following instructions are essential for safety so please strictly comply with them.

During installation and servicing

Only a qualified person may undertake installation, start-up, servicing and repairs, in compliance with current standards.

Before operating or undertaking any work on the equipment (installation, commissioning, usage, servicing), the person responsible must be aware of all the instructions in the heat pump's installation manual as well as the technical specifications.

Under no circumstances install the equipment close to a source of heat, combustible materials or a building's air intake.

If installation is not in a location with restricted access, a heat pump protective grille must be fitted.

To avoid severe burns, do not walk on pipework during installation, repairs or maintenance.

To avoid severe burns, prior to any work on the refrigerant system, turn off the heat pump and wait several minutes before placing temperature and pressure sensors.

Check the refrigerant level when servicing the heat pump.

Check that the high and low pressure switches are correctly connected to the refrigerant system and that they turn off the electrical circuit if tripped during the equipment's annual leakage inspection.

Check that there is no trace of corrosion or oil stains around the refrigerant components.

1. General

During use

To avoid serious injuries, never touch the fan when it is operating.

Keep the heat pump out of the reach of children to avoid serious injuries caused by the heat exchanger's blades.

Never start the equipment if there is no water in the pool or if the circulating pump is stopped.

Check the water flow rate every month and clean the filter if necessary.

During cleaning

Switch off the equipment's electricity supply.

Close the water inlet and outlet valves.

Do not insert anything into the air or water intakes or outlets.

Do not rinse the equipment with water.

During repairs

Carry out work on the refrigerant system in accordance with current safety regulations.

Brazing should be performed by a qualified welder.

When replacing a defective refrigerant component, use only parts certified by our technical department.

When replacing pipework, only copper pipes conforming to Standard NF EN12735-1 may be used for repairs.

When pressure-testing to detect leaks:

To avoid the risks of fire or explosion, never use oxygen or dry air.

Use dehydrated nitrogen or a mixture of nitrogen and refrigerant.

The low and high side test pressure must not exceed 42 bar.

1.3 Water treatment

Poolex heat pumps for swimming pools can be used with all types of water treatment systems.

Nevertheless, it is essential that the treatment system (chlorine, pH, bromine and/or salt chlorinator metering pumps) is installed after the heat pump in the hydraulic circuit.

To avoid any deterioration to the heat pump, the water's pH must be maintained between 6.9 and 8.0.

2. Description

2.1 Package contents

- ✓ Poolex Jetline Premium heat pump
- ✓ 2 hydraulic inlet/outlet connectors (50mm diameter)
- ✓ Extension cable for remote control panel
- ✓ This installation and user manual
- ✓ Condensation draining kit
- ✓ **Aluminium isothermal winter storage cover**
- ✓ **4 anti-vibration pads** (fastenings not supplied)

2.2 General characteristics

A Poolex heat pump has the following features:

- ▶ CE certification and complies with the RoHS European directive.
- ▶ High performance with up to 80% energy savings compared to a conventional heating system.
- ▶ Clean, efficient and environmentally friendly R410A refrigerant.
- ▶ Reliable high output leading brand compressor.
- ▶ Wide hydrophilic aluminium evaporator for use at low temperatures
- ▶ User-friendly intuitive remote control.
- ▶ Heavy duty ABS shell, anti-UV treated and easy to maintain.
- ▶ Designed to be silent.
- ▶ Dual antifreeze system to avoid frost damage:

Revolutionary exchanger with patented antifreeze system.

A smart monitoring system to preserve the pipework and liner without emptying the pool in winter.

2. Description

2.3 Technical specifications

		Jetline Premium									
Test conditions		40	50	70	90	110	130	160	160 Tri	180 Tri	220 Tri
Air ⁽¹⁾ 15°C Water ⁽²⁾ 26°C	Heating power (W)	4010	5060	7100	9110	11040	13010	16060	16080	18010	22010
	Consumption (W)	804	1020	1417	1790	2186	2597	3264	3250	3594	4382
	COP (Coeff. of performance)	4.99	4.96	5.01	5.09	5.05	5.01	4.92	4.95	5.01	5.02
Air ⁽¹⁾ 20°C Water ⁽²⁾ 24°C	Heating power (W)	4530	5720	8050	10250	12300	14480	17620	17680	20450	25080
	Consumption (W)	800	1018	1415	1743	2117	2536	3135	3130	3602	4405
	COP (Coeff. of performance)	5.66	5.62	5.69	5.88	5.81	5.71	5.62	5.65	5.68	5.69
Air ⁽¹⁾ 35°C Water ⁽²⁾ 27°C	Cooling capacity (W)	3250	4140	6880	7980	9310	10600	12950	13110	15780	19360
	Consumption (W)	1042	1340	1977	2204	2804	3333	4302	4305	4904	5992
	EER (Energy Efficiency Ratio)	3.12	3.09	3.48	3.62	3.32	3.18	3.01	3.05	3.22	3.23
Maximum current (A)		6.3	8.4	10.6	12.5	15.4	18.1	27.4	9.1	10.4	12.8
Electricity supply		230V single-phase~50Hz							380-415V/3N three-phase~50Hz		
Heating temperature range		15°C~40°C									
Cooling temperature range		8°C~28°C									
Operating range		-5°C~43°C									
Unit dimensions L x W x H (mm)		895x370.5x610		923x410x661			1215x485x713			1215x505x866	
Unit weight (kg)		40	45	51	58	63	72	95	95	107	112
Sound pressure level at 1 m (dBA) ⁽³⁾		<47	<48	<48	<49	<49	<50	<50	<50	<51	<51
Sound pressure level at 4 m (dBA) ⁽³⁾		<37	<38	<38	<39	<39	<40	<40	<40	<41	<41
Sound pressure level at 10 m (dBA) ⁽³⁾		<29	<29	<29	<30	<30	<31	<31	<31	<32	<32
Hydraulic connection (mm)		PVC 50mm									
Heat exchanger		PVC tank and titanium heating coil									
Min. water flow rate (m³/h)		1.9	2.5	3.4	4.2	5.0	6.0	7.3	7.3	8.3	10.5
Make of compressor		Toshiba						Daikin			
Compressor type		Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Scroll	Scroll	Scroll	Scroll
Refrigerant		R410A									
Refrigerant content (kg)		0.65	0.75	1.00	1.40	1.50	1.90	2.10	2.10	np ⁽⁵⁾	np ⁽⁵⁾
GWP		2088	2088	2088	2088	2088	2088	2088	2088	2088	2088
CO2 equivalent		1,36	1,57	2,09	2,92	3,13	3,97	4,38	4,38	np ⁽⁵⁾	np ⁽⁵⁾
Load loss (mCE)		0,8	0,9	1	1.1	1.2	1.3	1.3	1.3	1.3	1.3
Max. pool volume (m³) ⁽⁴⁾		≤ 23	≤ 35	≤ 45	≤ 65	≤ 80	≤ 95	≤ 120	≤ 120	≤ 140	≤ 160
Remote control		Wired backlit LCD monitor screen									
Mode		Heating/Cooling/Auto									

The technical specifications of our heat pumps are provided for information purposes only. We reserve the right to make changes without prior notice.

¹ Ambient air temperature

² Initial water temperature

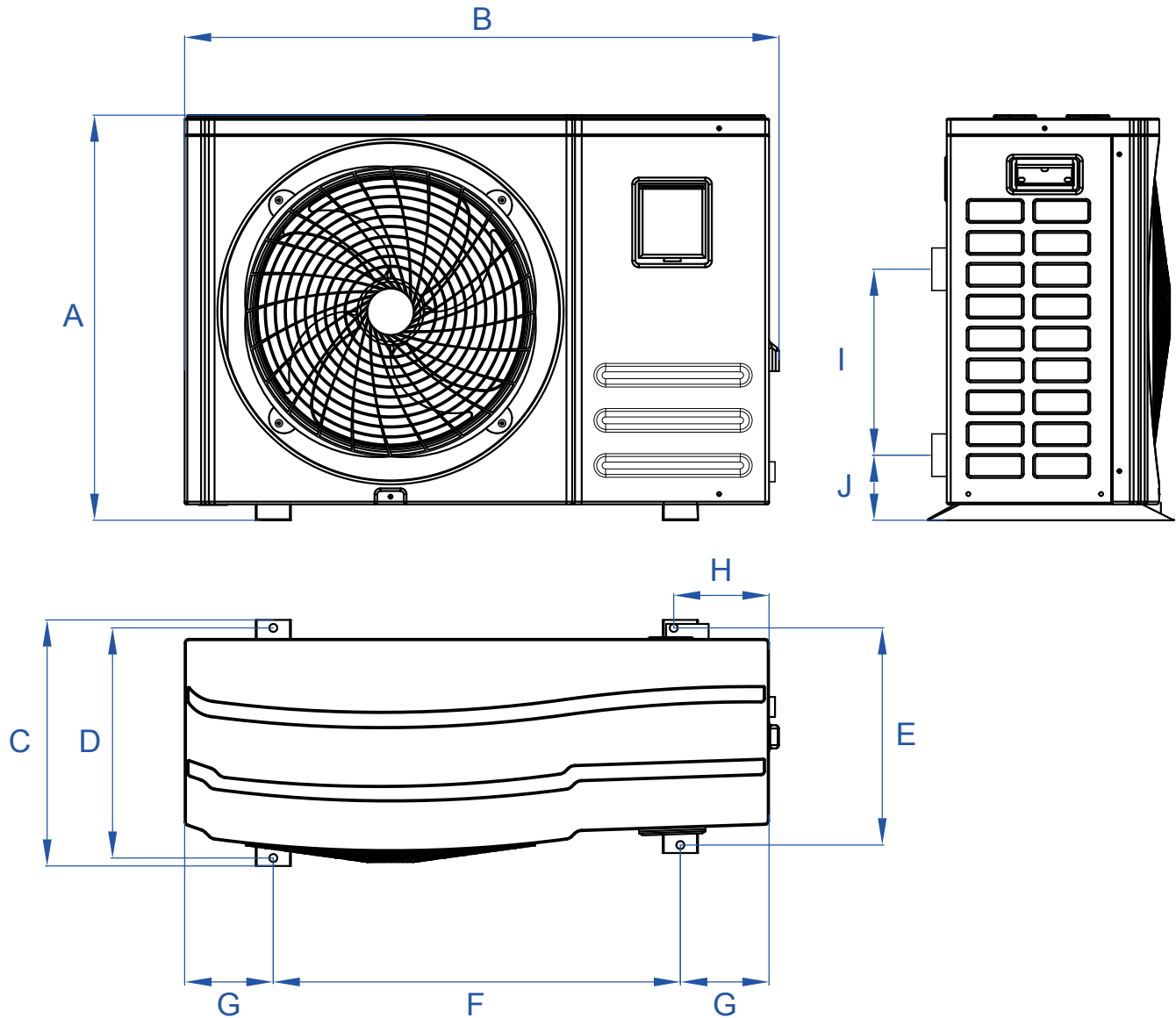
³ Noise at 1 m, at 4 m and at 10 m in accordance with Directives EN ISO 3741 and EN ISO 354

⁴ Calculated for an in-ground private swimming pool covered with a bubble cover.

⁵ Value indicated on the unit's nameplate.

2. Description

2.4 Unit dimensions

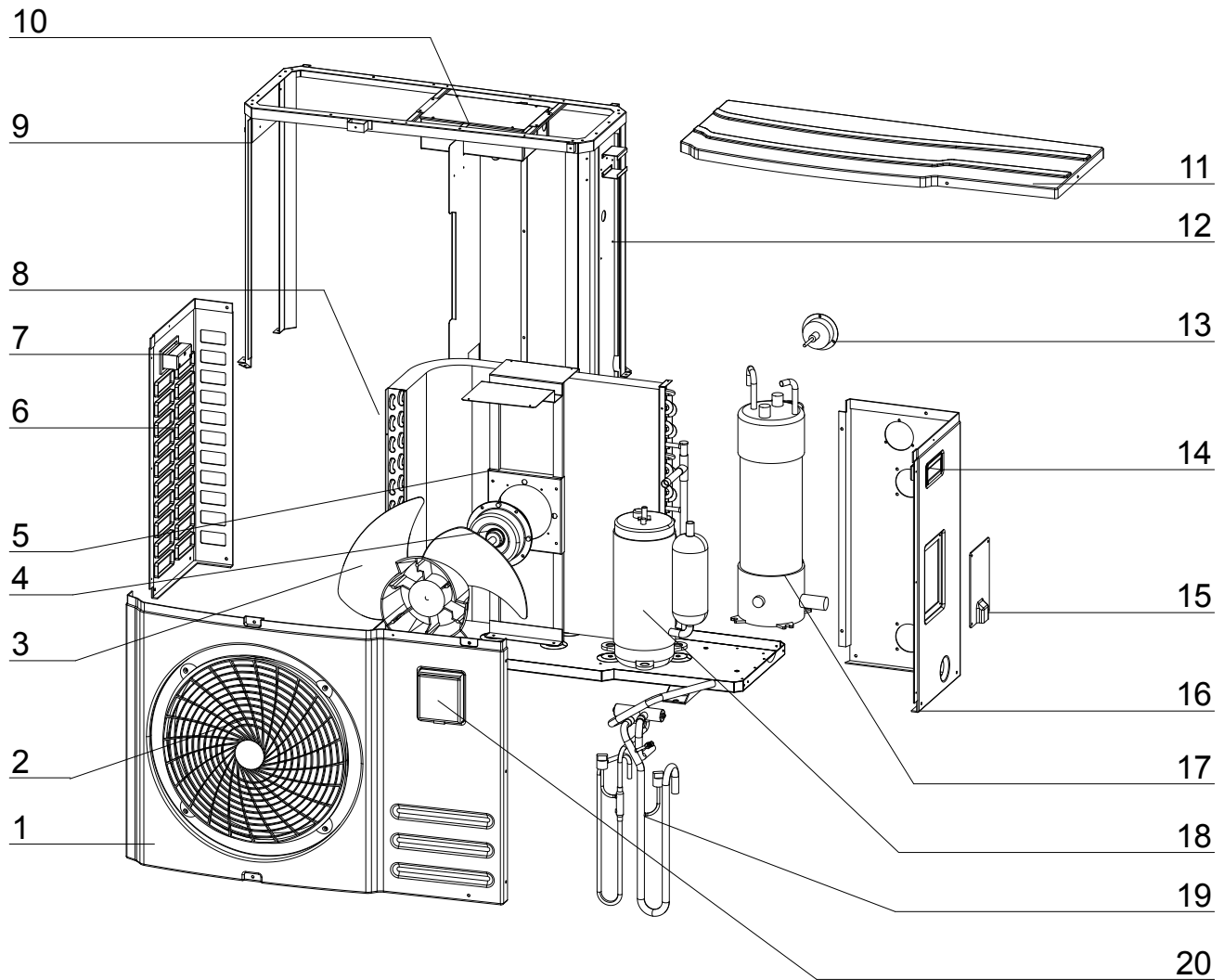


dimensions in mm

Model	Jetline Premium 40 / 50	Jetline Premium 70 / 90 / 110	Jetline Premium 130 / 160 / 160 Tri	Jetline Premium 180 Tri / 220 Tri
A	610	661	713	865
B	895	923	1215	1215
C	370.5	410	485	505
D	346.5	386	461	481
E	327	346	424.5	444.5
F	613	613	721.5	721.5
G	133.5	147.5	240 / 238.5	240 / 238.5
H	143.5	157.5	238.5	238.5
I	280	370	330	460
J	98	98	108	108

2. Description

2.5 Exploded view



1. Front panel
2. Fan protective grille
3. Fan blade
4. Fan motor
5. Fan support
6. Left side panel
7. Left hand grip
8. Evaporator
9. Assembly frame/Chassis
10. Electrical control box

11. Top panel
12. Electrical terminal block
13. Pressure gauge
14. Right hand grip
15. Electrical box cover
16. Right side panel
17. Heat exchanger
18. Compressor
19. 4-way valve
20. Sealed enclosure for remote control

3. Installation



WARNING: Installation must be carried out by a qualified engineer.

This section is provided for information purposes only and must be checked and adapted if necessary according to the actual installation conditions.

3.1 Pre-requirements

Equipment necessary for the installation of your heat pump:

Power supply cable suitable for the unit's power requirements.

A By-Pass *kit* and an assembly of PVC tubing suitable for your installation as well as stripper, PVC adhesive and sandpaper.

A set of wall plugs and expansion screws suitable to attach the unit to your support.

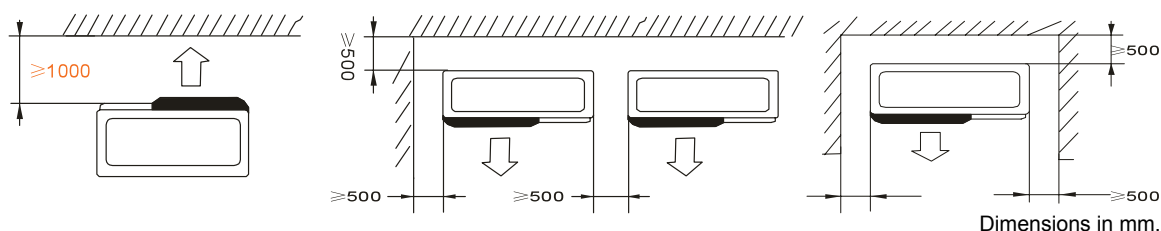
We recommend that you connect the unit to your installation by means of flexible PVC pipes in order to reduce the transmission of vibrations.

Suitable fastening studs may be used to raise the unit.

3.2 Location

Please comply with the following rules concerning the choice of heat pump location.

1. The unit's future location must be easily accessible for convenient operation and maintenance.
2. It must be installed on the ground, fixed ideally on a level concrete floor. Ensure that the floor is sufficiently stable and can support the weight of the unit.
3. A water drainage device must be provided close to the unit in order to protect the area where it is installed.
4. If necessary, the unit may be raised by using suitable mounting pads designed to support its weight.
5. Check that the unit is properly ventilated, that the air outlet is not facing the windows of neighbouring buildings and that the exhaust air cannot return. In addition, provide sufficient space around the unit for servicing and maintenance operations.
6. The unit must not be installed in an area exposed to oil, flammable gases, corrosive products, sulphurous compounds or close to high frequency equipment.
7. To prevent mud splashes, do not install the unit near a road or track.
8. To avoid causing nuisance to neighbours, make sure the unit is installed so that it is positioned towards the area that is least sensitive to noise.
9. Keep the unit as much as possible out of the reach of children.

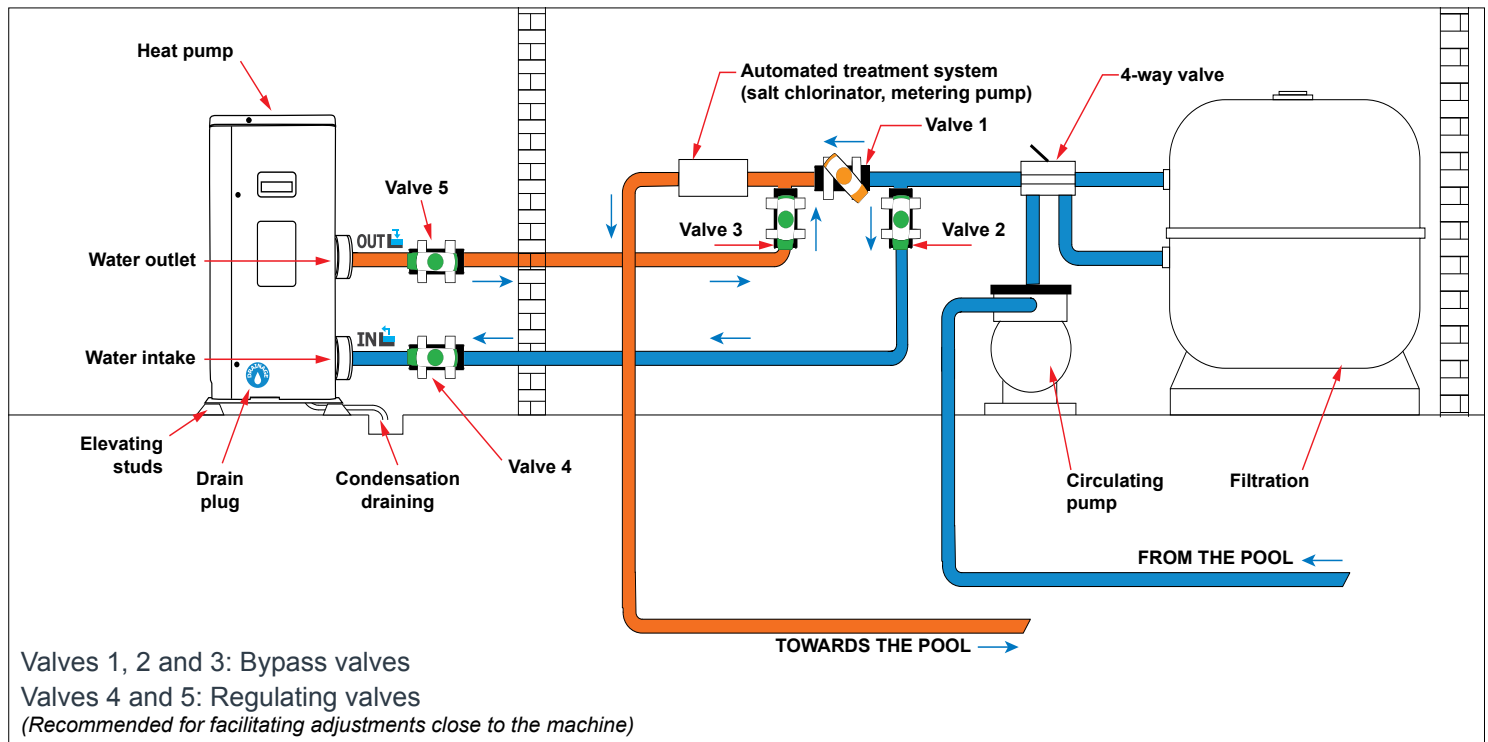


Place nothing less than one metre in front of the heat pump.
Leave 50 cm of empty space around the sides and rear of the heat pump.

Do not leave any obstacle above or in front of the unit!

3. Installation

3.3 Installation layout



Key



Half-open valve



Open valve

3.4 Connecting the condensation draining kit

While operating, the heat pump is subject to condensation. This will result in a more or less large run-off of water, depending on the degree of humidity. To channel this flow, we recommend that you install the condensation drainage kit.

How do you install the condensation drainage kit?

Install the heat pump, raising it at least 10 cm with solid water-resistant pads, then connect the drainage pipe to the opening located under the pump.

3.5 Installing the unit on noise-damping supports

In order to minimise the noise pollution associated with heat pump vibrations, it can be positioned on vibration absorbing pads.

To do this, you simply have to position a pad between each of the unit's feet and its support, and then fix the heat pump to the support with suitable screws.

3. Installation



WARNING: Installation must be carried out by a qualified engineer.

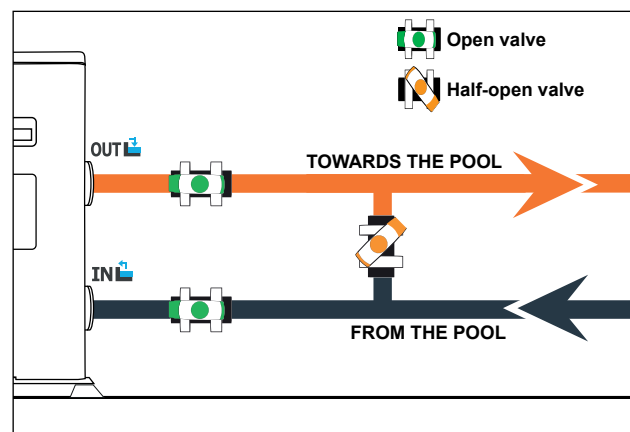
This section is provided for information purposes only and must be checked and adapted if necessary according to the actual installation conditions.

3.6 Hydraulic connection

By-Pass assembly

The heat pump must be connected to the pool by means of a By-Pass assembly.

A By-Pass is an assembly consisting of 3 valves that regulate the flow circulating in the heat pump. During maintenance operations, the By-Pass permits the heat pump to be isolated from the system without interrupting your installation.



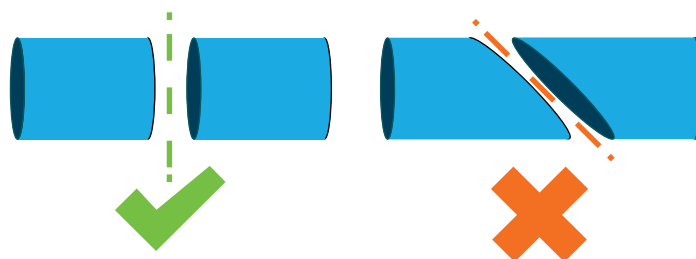
Making a hydraulic connection with the By-Pass kit



WARNING: Do not run water through the hydraulic circuit for 2 hours after applying the adhesive.

Step 1: Take the necessary steps to cut your pipes.

Step 2: Make a straight perpendicular cut through the PVC pipes with a saw.



Step 3: Assemble your hydraulic circuit without connecting it in order to check that it perfectly fits your installation, then dismantle the pipes to be connected.

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

Step 5: Apply stripper to the ends of the pipes to be connected.

Step 6: Apply the adhesive in the same place.

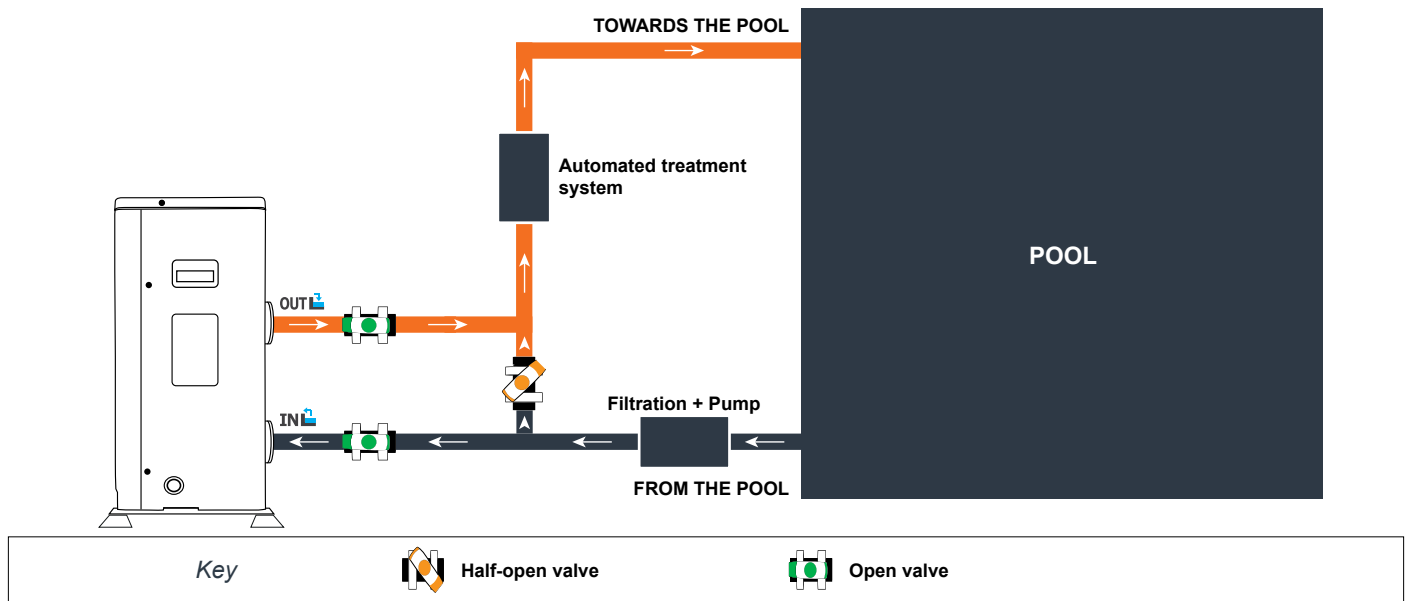
Step 7: Assemble the pipes.

Step 7: Clean off any adhesive remaining on the PVC.

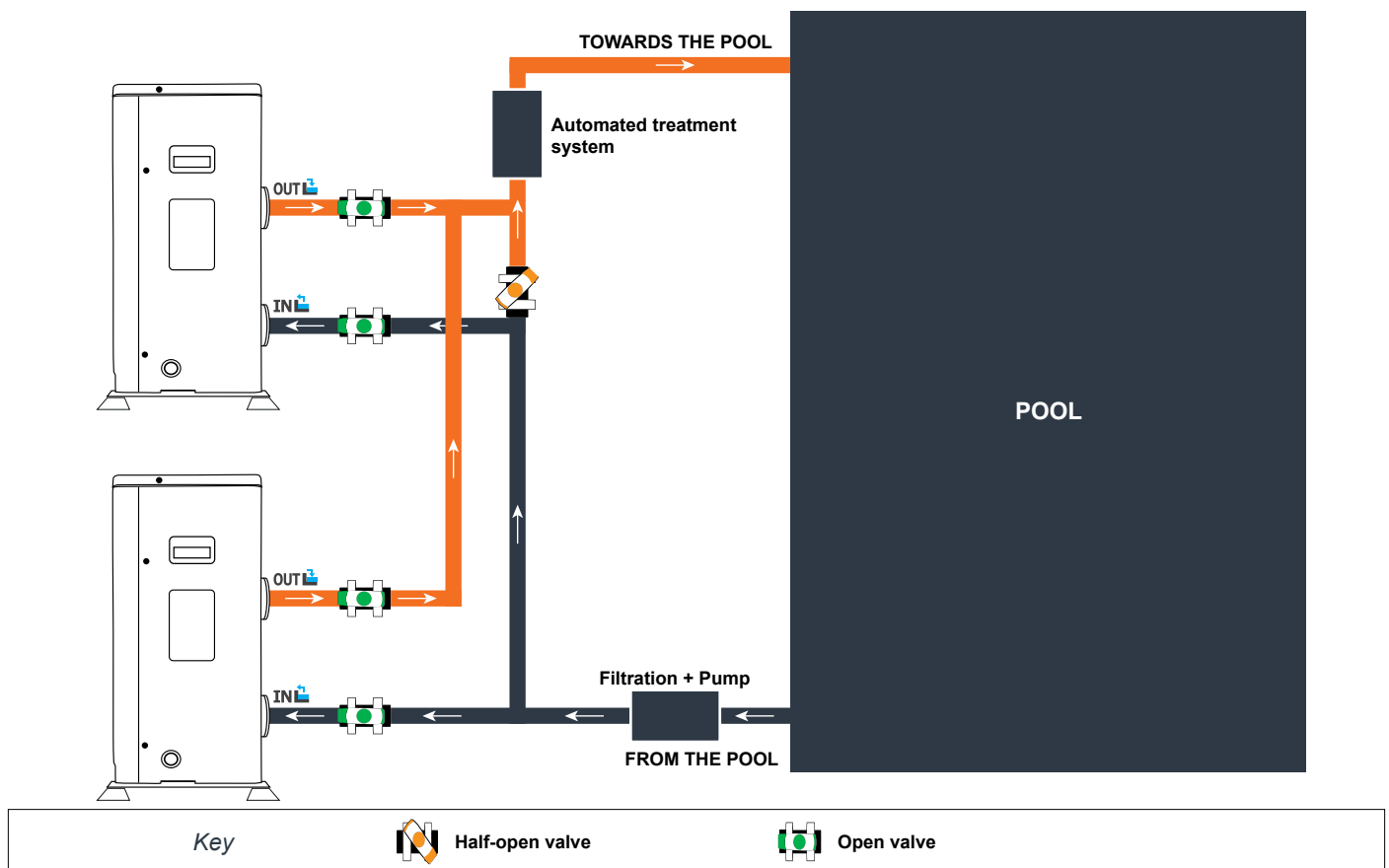
Step 8: Leave to dry for at least 2 hours before putting the hydraulic circuit into water.

3. Installation

By-Pass assembly for one heat pump



By-Pass assembly for more than one heat pump



The filter located upstream of the heat pump must be regularly cleared so that the water in the system is clean, thus avoiding the operational problems associated with dirt or clogging in the filter.

3. Installation



WARNING: Installation must be carried out by a qualified engineer.

This section is provided for information purposes only and must be checked and adapted if necessary according to the actual installation conditions.

3.7 Electrical installation

To function safely and maintain the integrity of your electrical system, the unit must be connected to a general electricity supply in accordance with the following regulations:

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

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

The electricity supply cable must be adapted to match the unit's rated power and the length of wiring required by the installation (see table below).. The cable must be suitable for outdoor use.

For a three-phase system, it is essential to connect the phases in the correct sequence. If the phases are inverted, the heat pump's compressor will not work.

In places open to the public, it is mandatory to install an emergency stop button close to the heat pump.

Models	Electricity supply	Max. current	Cable diameter	Protection Thermal-magnetic (D curve) protection
Jetline Premium 40	Single phase 230V~50Hz	6.3	RO2V 3x2.5 mm ²	10A
Jetline Premium 50		8.4	RO2V 3x2.5 mm ²	10A
Jetline Premium 70		10.6	RO2V 3x4 mm ²	16A
Jetline Premium 90		12.5	RO2V 3x4 mm ²	16A
Jetline Premium 110		15.4	RO2V 3x6 mm ²	20A
Jetline Premium 130		18.1	RO2V 3x6 mm ²	20A
Jetline Premium 160		27.4	RO2V 3x10 mm ²	32A
Jetline Premium 160 Tri	3-phase 380-415V/3N~50Hz	9.1	RO2V 5x2.5 mm ²	16A
Jetline Premium 180 Tri		10.4	RO2V 5x2.5 mm ²	16A
Jetline Premium 220 Tri		12.8	RO2V 5x2.5 mm ²	16A

¹ Cable cross-section suitable for max. length 10 metres. For longer than 10 metres, consult an electrician.

3. Installation

3.8 Electrical connection



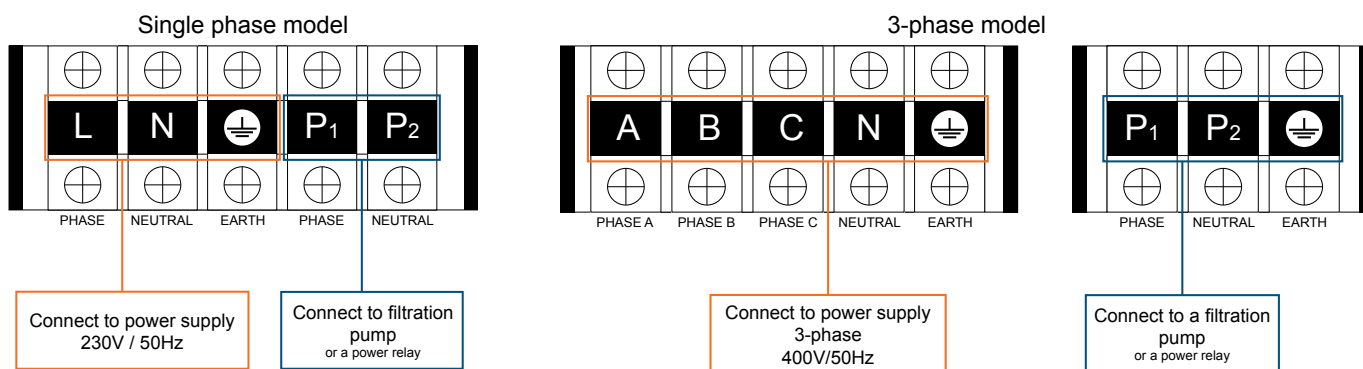
WARNING: The heat pump's power supply MUST be disconnected before any operation.

Please comply with the following instructions to electrically connect the heat pump.

Step 1: Detach the electrical side panel with a screwdriver to access the electrical terminal block.

Step 2: Insert the cable into the heat pump unit by passing it through the opening provided for that purpose.

Step 3: Connect the power supply cable to the terminal block in accordance with the diagram below.



Step 4: Carefully close the heat pump panel.

Servo-control of circulating pump

Depending on the type of installation, you can also connect a circulating pump to terminals P₁ and P₂ so that this operates in tandem with the heat pump.



WARNING: Servo-control of a pump whose power exceeds 5A (1000W) requires the use of a power relay.

3. Installation

3.9 Wall-mounting the remote control

Step 1: Detach the remote control from the machine. Pay WARNING to the communication wire connected to the printed circuit board and separate them carefully.

Step 2: Use a screwdriver to open the casing and separate the remote control.

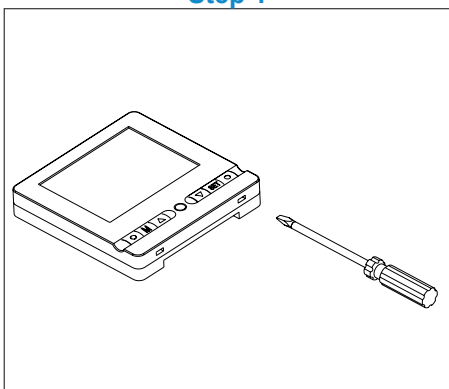
Step 3: Drill two parallel holes at eye level: 60 mm centre-to-centre.

Step 4: Attach the remote control's rear cover to the wall.

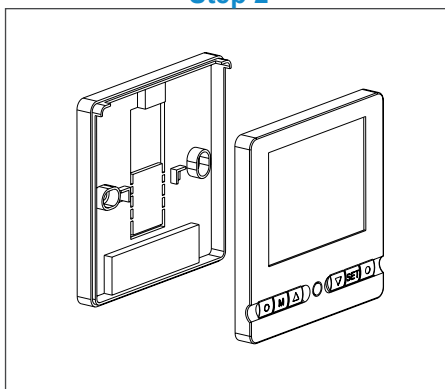
Step 5: Align the front and rear covers exactly, ensuring that the box is fixed firmly to the wall.

Step 6: Carefully connect the communication wire.

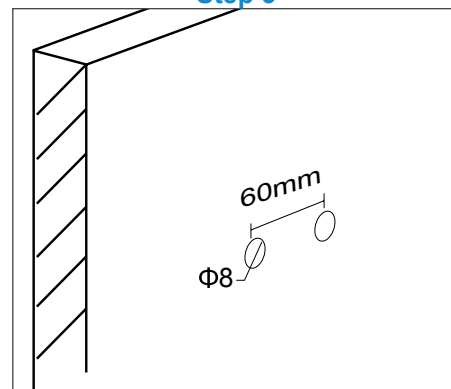
Step 1



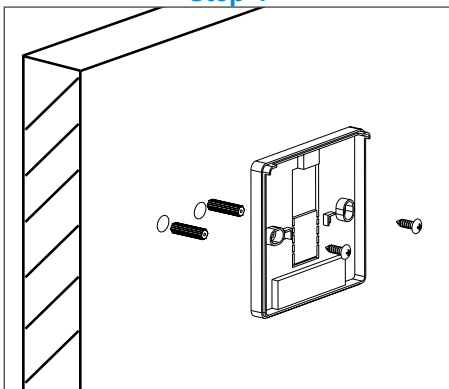
Step 2



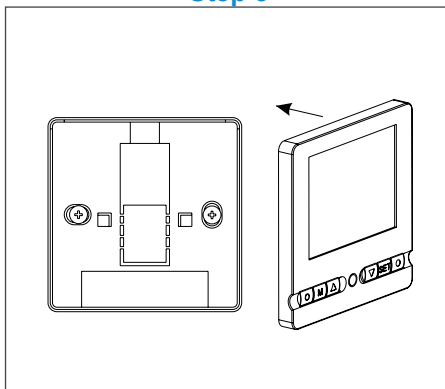
Step 3



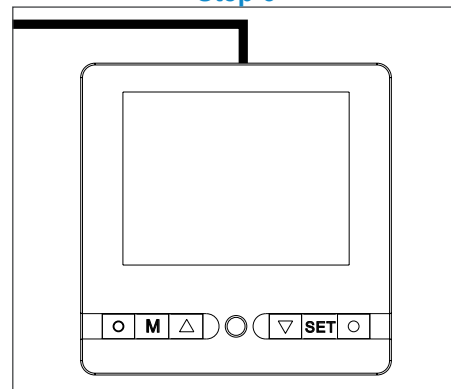
Step 4



Step 5



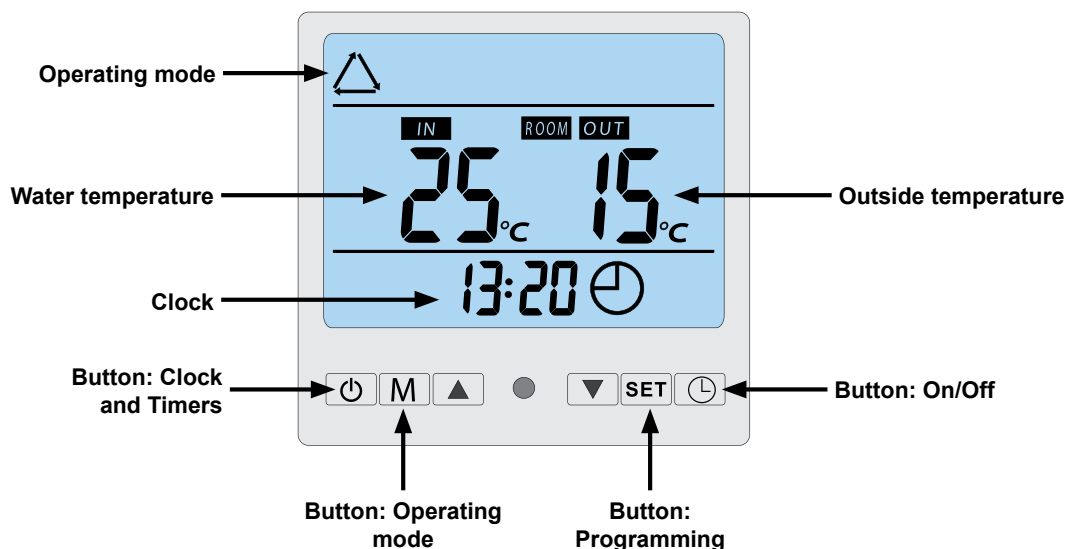
Step 6



WARNING: Do not use sharp objects to touch the remote control's front face and buttons as you may damage it. When the remote control is fixed to the wall, do not pull the communication wire in case this causes a loose contact.

4. Use

4.1 Wired remote control

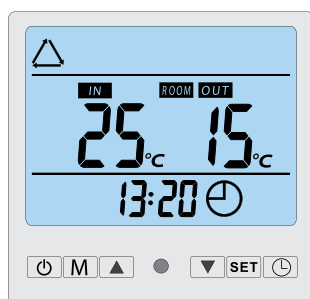


4.2 Operating mode selector




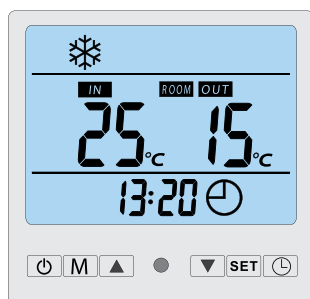
Before starting, ensure that the filtration pump is working and that water is circulating through the heat pump.

Prior to setting your required temperature, you must first select an operating mode for your remote control:



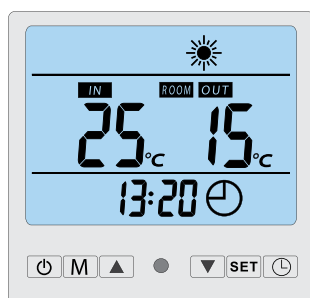
Automatic Mode (warm, cold)

Select the Automatic  mode for the heat pump to switch automatically to Heating or Cooling (depending on the actual pool temperature) in order to reach the desired temperature.



Cooling Mode

Select the cooling mode  for the heat pump to cool the water in your pool.



Heating Mode


Select the heating mode  for the heat pump to heat the water in your pool.


4. Use

4.3 Automatic Mode



WARNING: Before starting, ensure that the filtration pump is in working order.

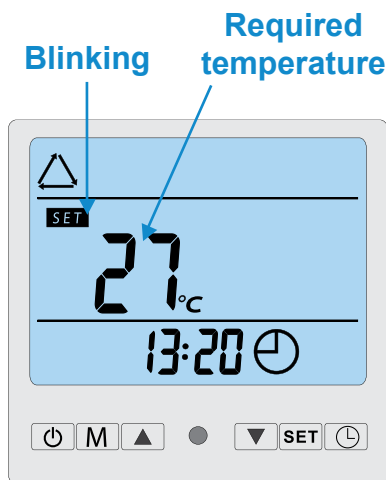
Step 1: Press  once to switch on your pump.

Step 2: Press  to switch from one mode to another until Automatic mode is displayed.

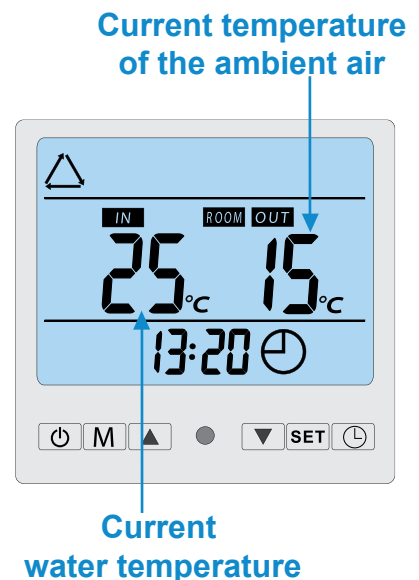
Step 3: Use the arrows  and  select the desired temperature (8-40°C).

EXAMPLE:

If you have selected 27°C, your screen will display:



Once the symbol **SET** stops blinking, the required temperature will be validated and replaced by the water's current temperature (25° in our example). Your screen will display:



Useful information about how the automatic mode operates

Automatic cooling:

When the incoming water temperature is greater than or equal to the required temperature (setpoint temperature) + (X+2)°C, the compressor will switch to cooling mode. The compressor will stop when the temperature of the incoming water equals the required temperature (setpoint temperature).

Automatic heating:

When the water temperature is less than or equal to the required temperature (setpoint temperature) - X°C, the compressor will switch to heating mode and stop when the incoming water temperature is equal to the required temperature (setpoint temperature).



WARNING: After selection of the cooling or heating mode, the ongoing programme cannot be altered for 10 minutes.

Indicators for adjustment range X and Y

X : adjustable parameter from 2° to 10°C, default setting is 3°C


Y : adjustable parameter from 0° to 6°C, default setting is 0°C

4. Use

4.4 Cooling mode



WARNING: Before starting, ensure that the filtration pump is in working order.

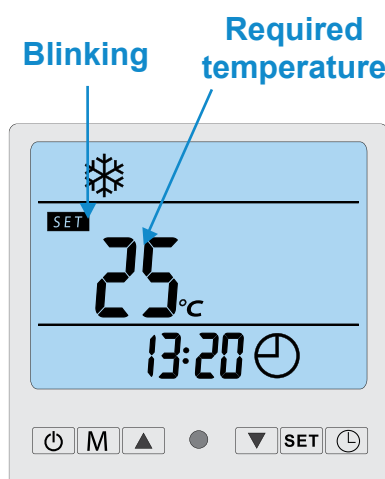
Step 1: Press  once to switch on your pump.

Step 2: Press  to switch from one mode to another until the cooling mode is displayed. **Step 3:**

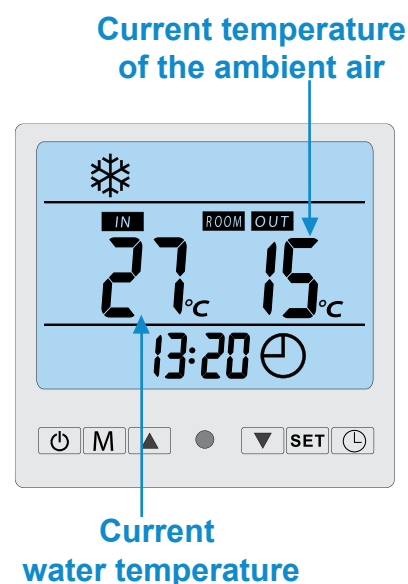
Use the arrows  and  select the desired temperature (8-28°C).

EXAMPLE:

If you have selected 25°C, for example, your screen will display:



Once the symbol **SET** stops blinking, the required temperature will be validated and replaced by the water's current temperature (27° in our example). Your screen will display:



Useful information about how the cooling mode operates

When the incoming water temperature is greater than or equal to the required temperature (setpoint temperature) + X°C, the compressor will switch to cooling mode. The compressor will stop when the temperature of the incoming water is less than or equal to the required temperature (setpoint temperature).

Indicators for adjustment range X and Y

X : adjustable parameter from 2° to 10°C, default setting is 3°C


Y : adjustable parameter from 0° to 6°C, default setting is 0°C


4. Use


4.5 Heating mode



WARNING: Before starting, ensure that the filtration pump is in working order.

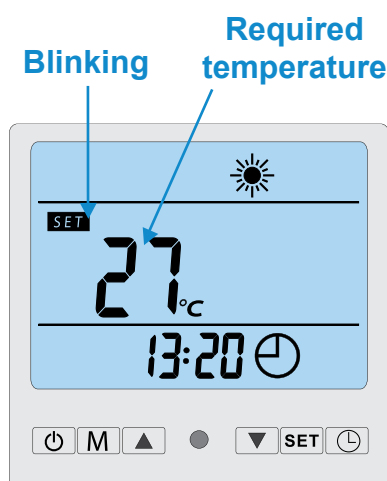
Step 1: Press  once to switch on your pump.

Step 2: Press  to switch from one mode to another until the heating mode is displayed. **Step 3:**

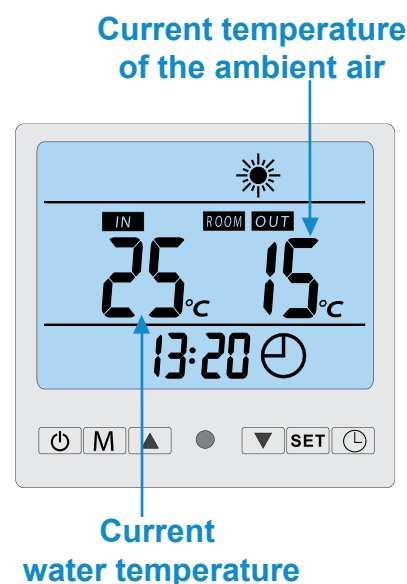
Use the arrows  and  select the desired temperature (15-40°C).

EXAMPLE:

If you have selected 27°C, your screen will display:



Once the symbol **SET** stops blinking, the required temperature will be validated and replaced by the water's current temperature (25° in our example). Your screen will display:



Useful information about how the heating mode operates

When the incoming water temperature is less than or equal to the required temperature (setpoint temperature) -X°C, the compressor will switch to heating mode. The compressor will stop when the temperature of the incoming water is greater than or equal to the required temperature (setpoint temperature) +Y°C.

Indicators for adjustment range X and Y


X : adjustable parameter from 2° to 10°C, default setting is 3°C

Y : adjustable parameter from 0° to 6°C, default setting is 0°C



4. Use

4.6 Setting the time


Set the system clock to local time, as follows:


Step 1: With the heat pump switched off, press  to set the time.

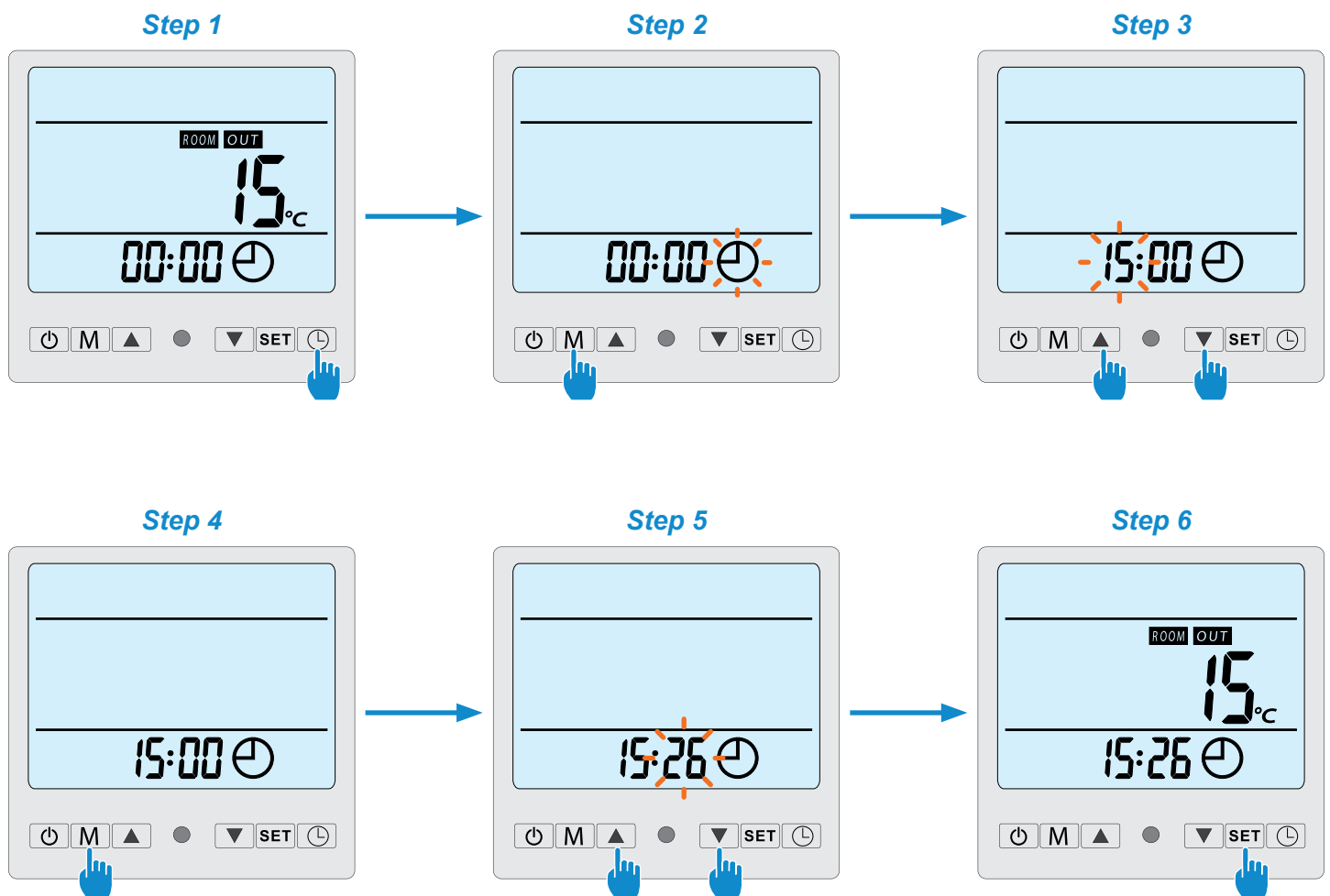
Step 2: When the symbol  blinks, press  to select the hour.

Step 3: Adjust the hours with the buttons  and .

Step 4: Press  to select the minutes.

Step 5: Adjust the minutes with the buttons  and .

Step 6: Press  to validate and return to the main screen.






4. Use

4.7 Programming Start/Stop



This function is for programming the Start/Stop timing. You can programme up to 3 different Start/Stop timings. Setting is as follows:

Step 1: Select the programme to be configured,

- Press twice  to select programme 1.
- Press 4 times  to select programme 2.
- Press 6 times  to select programme 3.

NB: The remote control returns automatically to the main screen after 10 seconds.


Step 2: Press  to programme the start time.


Step 3: Adjust the hours with the buttons  and .

Step 4: Press  to switch to minutes.

Step 5: Adjust the minutes with the buttons  and .


Step 6: Press  to set the start time.


Step 7: Press  to programme the stop time.

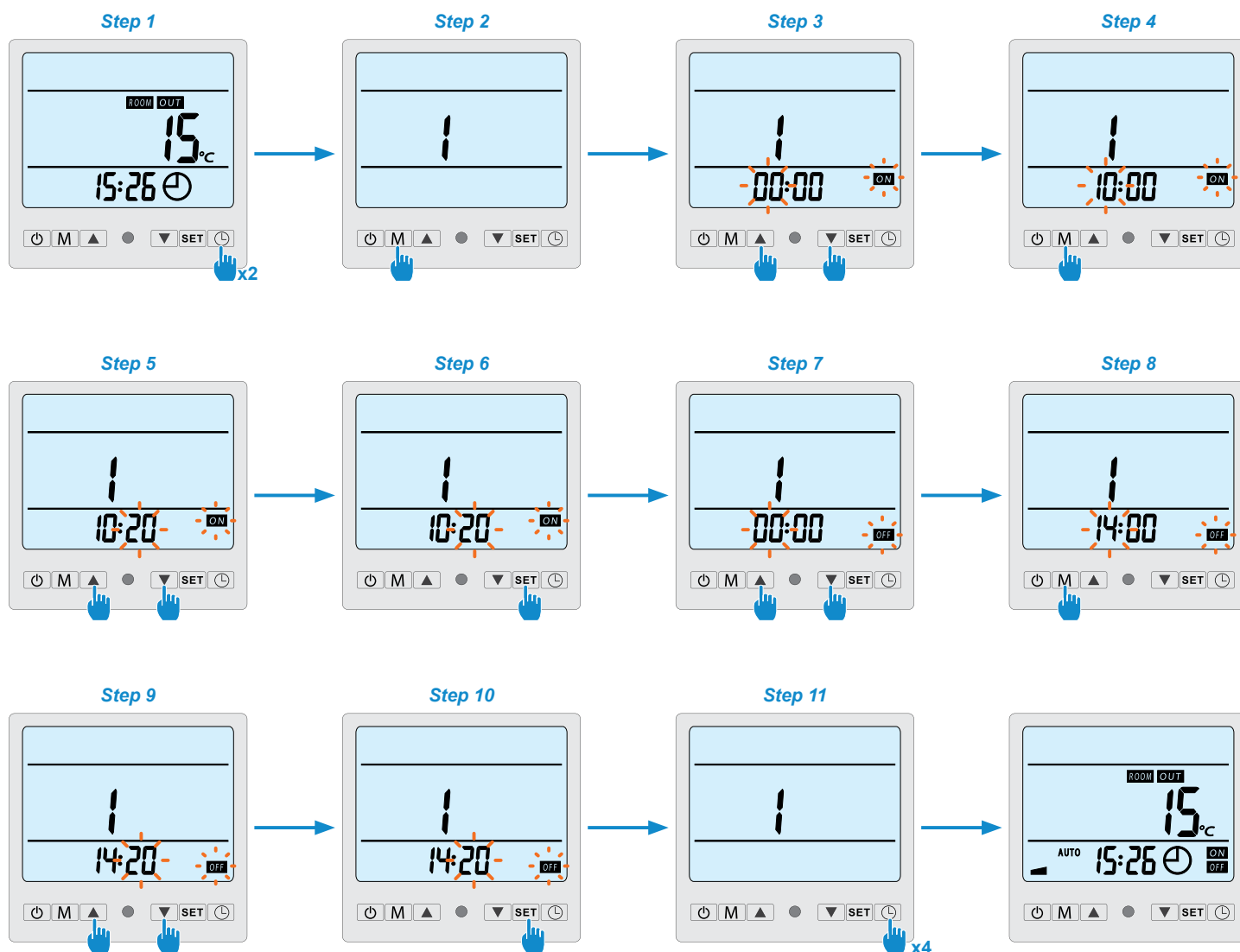
Step 8: Adjust the hours with the buttons  and .

Step 9: Press  to switch to minutes.

Step 10: Adjust the minutes with the buttons  and .

Step 11: Press  to validate the programme.

Step 12: Press  until you get back to the main screen.







4. Use


4.8 Cancelling a programme


Please use the following example to cancel a programme:

Step 1: Select the programme to be cancelled,


- Press twice  to select programme 1.
- Press 4 times  to select programme 2.
- Press 6 times  to select programme 3.


Step 2: Press  to cause the hour to blink.


Step 3: Press  again and the minutes will start blinking.

Step 4: Press  again to cancel the programme.


Step 5: Press  once to confirm cancellation of the start time.

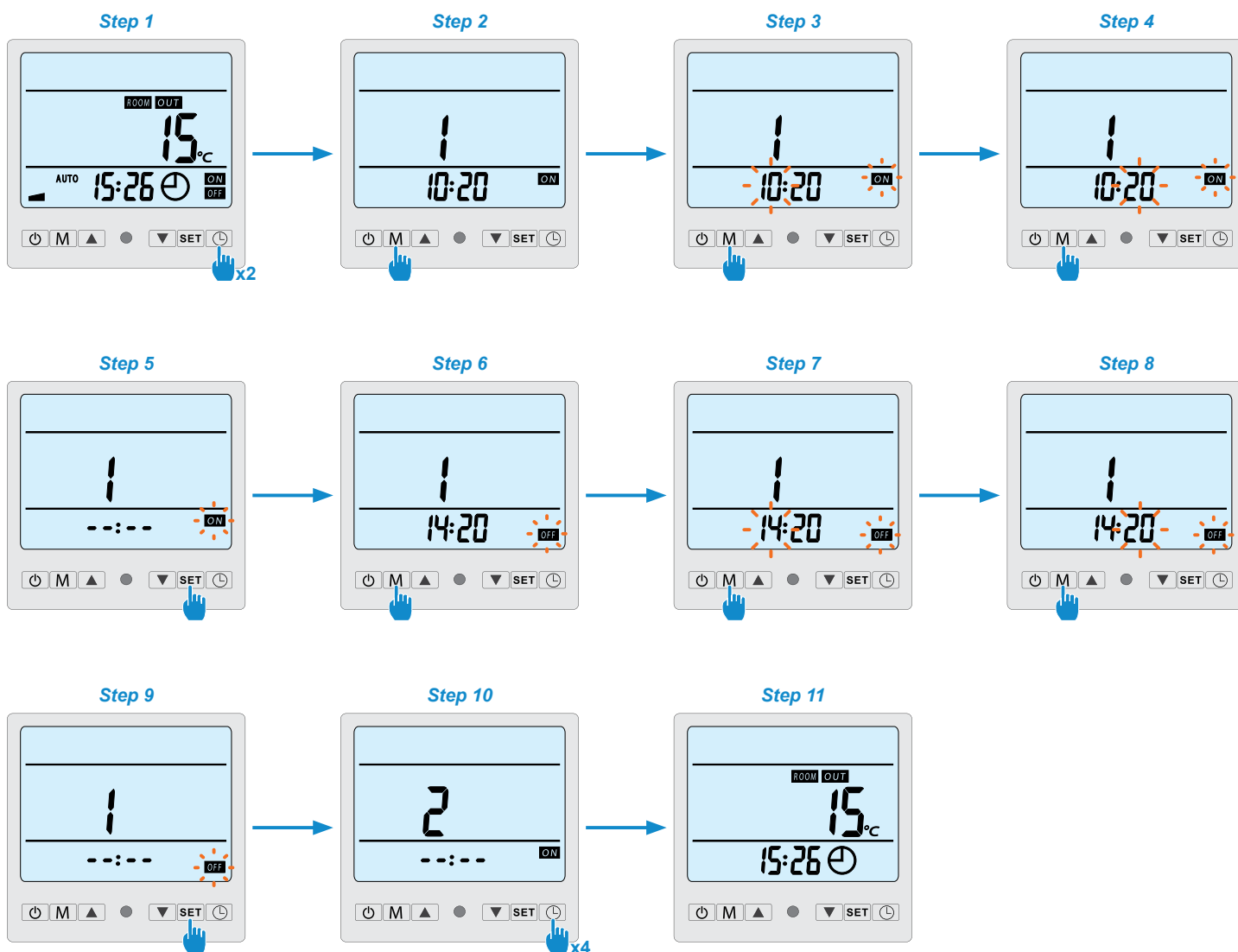
Step 6: Press  once to cause the hour to blink.

Step 7: Press  again and the minutes will start blinking.

Step 8: Press  again to cancel the programme.

Step 9: Press  once to confirm cancellation of the stop time.

Step 10: Press  until you get back to the main screen.



4. Use

4.9 Status values and advanced settings




WARNING: This operation is used to assist servicing and future repairs.
The default settings should only be modified by an experienced professional person.

The system's settings can be checked and adjusted via the remote control by following these steps

Step 1: Press **SET** for 6 seconds to enter the settings verification mode

Step 2: Press several times **SET** to reach the setting to be adjusted

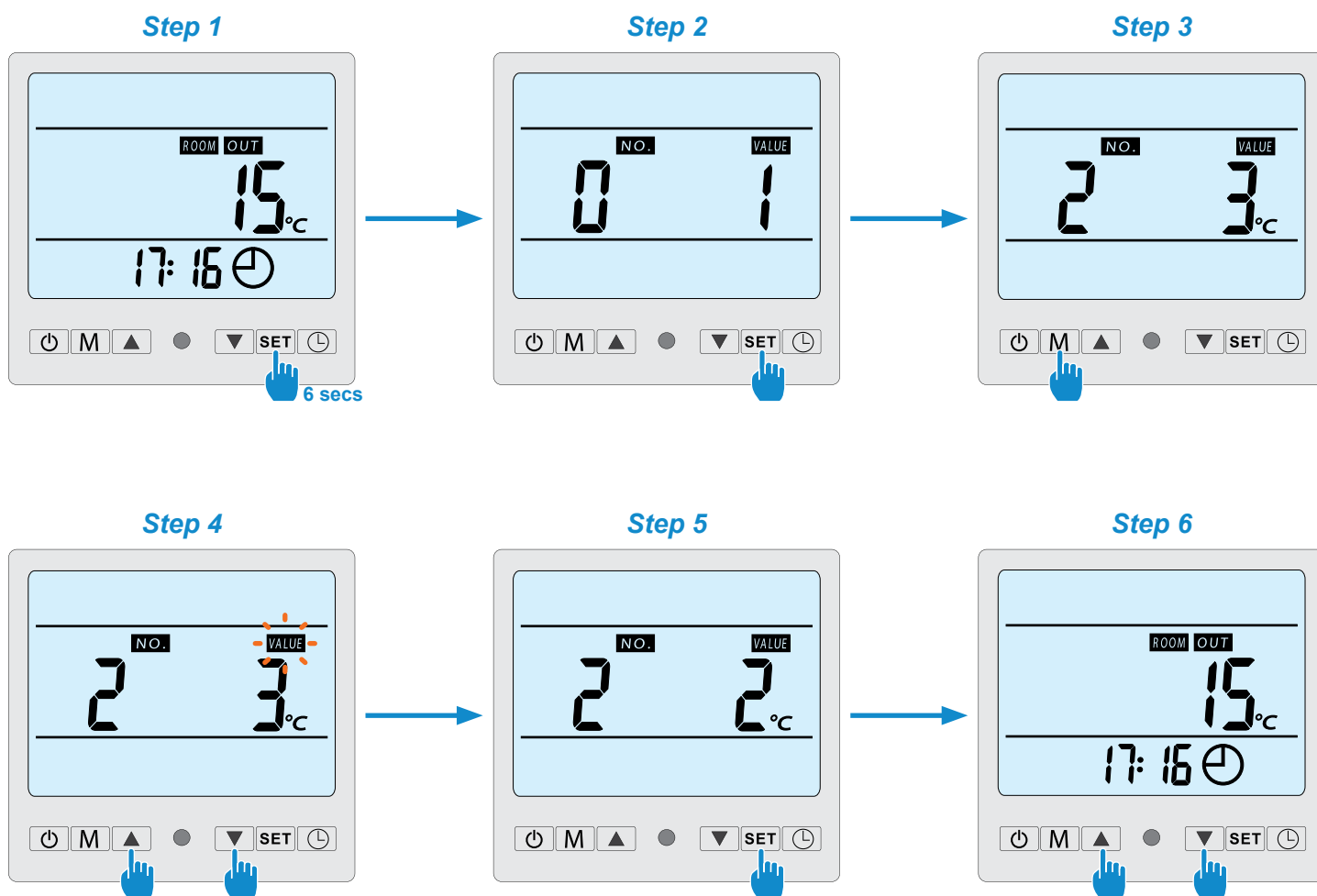
If you press , the scroll direction will be reversed (+ towards – or – towards +)

Step 3: Press **M** to start settings configuration, the setting will blink

Step 4: Press  and  to adjust the value

Step 5: Press once **SET** to confirm the value

Step 6: Press  and  to return to the normal readout



4. Use

Parameters table

N°	Description	Adjustment range	Factory setting	Remarks
0	Automatic restart	0 = Off 1 = On	1	Adjustable
1	START/STOP times programming	0 = start only 1 = daily	1	Adjustable
2*	Adjustment of temperature difference for restart	Adjustable from 2 to 10°C	3°C	Adjustable
3**	Adjustment of compressor shutdown margin	Adjustable from 0 to 3°C	0°C	Adjustable
4	Auto-activation time before de-icing commences	Adjustable from 30 to 90 mins	40 mins	Adjustable
5	De-icing activation temperature	Adjustable from 0 to -30°C	-7°C	Adjustable
6	De-icing deactivation temperature	Adjustable from 2 to 30°C	20°C	Adjustable
7	Maximum de-icing duration	Adjustable from 0 to 15 mins	8 mins	Adjustable
8	Compressor thermal protection	Adjustable from 95 to 120°C Displayed values 95 → 9b → 97 → 98 → 99 → A0 → A1 → A2 → A3 → A4 → A5 → Ab → A7 → AB → A9 → b0 → b1 → b2 → b3 → b4 → b5 → bb → b7 → b8 → b9 → C0	118°C Displayed value b8	Adjustable
9	Maximum temperature	40~65°C	40°C	Adjustable
10	Filtration pump servo-control mode	0 = Normal 1 = Special	1	Adjustable (see Section 5.2)
11	Pump stopping time when temperature reached (if setting 10 = 1)	Adjustable from 3 to 20 mins	15 mins	Adjustable
12	Reserved - Do not modify	0 / 1	1	Adjustable
13	Setting for selecting pump operating mode	0 =cooling only 1 = cooling and heating 2 = heating only	1	Adjustable
14	Water intake temperature	-9~99°C		Actual data
15	Water outlet temperature	-9~99°C		Actual data
16	Coil temperature	-9~99°C		Actual data
17	Air outlet temperature	-9~99°C		Actual data
18	Ambient air temperature	-9~99°C		Actual data

* **Setting 2 is for modifying the interval of degrees lost in relation to the required temperature, for the heat pump to restart.**
Example: If the value of setting 2 is 3°C, after reaching the required temperature (e.g. 27°C), the heat pump will restart when the pool temperature goes down to 24°C (27 - 3).

** **Setting 3 is for modifying the degree of accuracy for heat pump shutdown.**
Example: By configuring the compressor shutdown at 2°C and the required temperature at 27°C, the heat pump will cease working when it reaches a pool temperature of 29°C (27+2).

5. Operation

5.1 Operation

Conditions of use


For the heat pump to operate normally, the ambient air temperature must be between -5°C and 43°C.

Recommendations prior to start-up

Before activating the heat pump, please:

- ✓ Check that the unit is firmly secured and stable.
- ✓ Check that the gauge indicates a pressure greater than 80 psi.
- ✓ Check that the electrical wiring is properly connected to the terminals.
- ✓ Check the earthing.
- ✓ Check that the hydraulic connections are tight and that there is no leakage of water.
- ✓ Check that the water is circulating correctly in the heat pump and that the flow rate is adequate.
- ✓ Remove any unnecessary object or tool from around the unit.

Operation

1. Activate the unit's power supply protection (differential switch and circuit-breaker).
2. Activate the circulating pump if it is not servo-controlled.
3. Check the By-Pass opening and the control valves.
4. Activate the heat pump by pressing once on 
5. Adjust the remote control clock (Section 4.6)
6. Select the required temperature by using one of the remote control's modes (Section 4.2)
7. The heat pump's compressor will start up after a few moments.

All you have to do now is wait until the required temperature is reached.



WARNING: Under normal conditions, a suitable heat pump can heat the water in a swimming pool by 1°C to 2°C per day. It is therefore quite normal to not feel any temperature difference in the system when the heat pump is working.
A heated pool must be covered to avoid any loss of heat.

5. Operation

5.2 Servo-controlling a circulating pump

If you have connected a circulating pump to terminals P1 and P2, it is automatically electrically powered when the heat pump operates.

When the heat pump is on standby, the circulating pump is powered intermittently in order to monitor the water temperature in the pool.

Servo-control mode for circulating pump (Setting 10)

When you activate your heat pump, the circulating pump starts up, followed 1 minute later by the heat pump compressor. When the heat pump stops working, its compressor and fan shut down, and the circulating pump stops after 30 seconds. During a de-icing cycle, the circulating pump will continue to operate irrespective of the selected mode.

Mode 0: By selecting this mode, the heat pump will automatically put the circulating pump into continuous operation. Once the circulating pump is operating, the heat pump will start up 1 minute later. Next, when the required temperature is reached, the heat pump will stop working but will not stop the circulating pump, so as to ensure a constant circulation of water in your heat pump.

Mode 1 (default): This mode has been designed to maintain filtration in your pool without using the timetable programmer. When the required temperature is reached, the heat pump will go on standby, then 30 seconds later the circulating pump will shut down.

The circulating pump will then be reactivated in special mode: 2 minutes operation, 15 minutes shut down (Setting 11 = 15 by default, adjustable from 3 to 20 minutes), thus maintaining regular filtering of your pool. With a temperature sensor in the heat exchanger compartment, this mode allows your heat pump to update your pool's actual temperature every 15 minutes. We therefore recommend this mode.

It is only when the pool temperature goes down by 3°C in relation to the required temperature that the filtration pump and the heat pump resume their normal operating mode.

5.3 Using the pressure gauge

The gauge is for monitoring the pressure of the refrigerant contained in the heat pump.

The values it indicates can vary considerably, depending on the climate, temperature and atmospheric pressure.

When the heat pump is in operation:

The gauge's needle indicates the refrigerant pressure.

Mean operating range between 250 and 400 PSI, depending on the ambient temperature and atmospheric pressure.

When the heat pump is shut down:

The needle indicates the same value as the ambient temperature (within a few degrees) and the corresponding atmospheric pressure (between 150 and 350 PSI maximum).

If left unused for a long period of time :

Check the pressure gauge before starting up the heat pump. It must indicate at least 80 PSI.

If the pressure goes down too much, the heat pump will display an error message and automatically go into 'safe' mode.

This means that there has been a leakage of refrigerant and that you must call a qualified technician to replace it.

5. Operation

5.4 Antifreeze protection



WARNING: For the antifreeze system to work, the heat pump must be powered and the circulating pump activated. If the circulating pump is servo-controlled by the heat pump, it will be automatically activated.

When the heat pump is on standby, the system monitors the ambient temperature and the water temperature in order to activate the antifreeze programme if required.

The antifreeze programme is automatically activated when the ambient temperature or the temperature of the water is less than 2°C and when the heat pump has been shut down for more than 120 minutes.

When the antifreeze programme is running, the heat pump activates its compressor and the circulating pump so as to reheat the water until the water temperature exceeds 2°C.

The heat pump automatically leaves the antifreeze mode when the ambient temperature is greater than or equal to 2°C or when the heat pump is activated by the user.

6. Maintenance and servicing

6.1 Maintenance and servicing



WARNING: Before undertaking maintenance work on the unit, ensure that you have disconnected the electrical power supply.

Cleaning

The heat pump's casing must be cleaned with a damp cloth. The use of detergents or other household products could damage the surface of the casing and affect its properties.

The evaporator at the rear of the heat pump must be carefully cleaned with a vacuum cleaner and soft brush attachment.

Annual maintenance

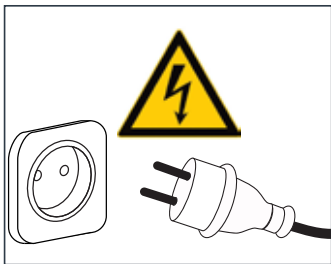
The following operations must be undertaken by a qualified person at least once a year.

- ✓ Carry out safety checks.
- ✓ Check the integrity of the electrical wiring.
- ✓ Check the earthing connections.
- ✓ Monitor the state of the pressure gauge and the presence of refrigerant.

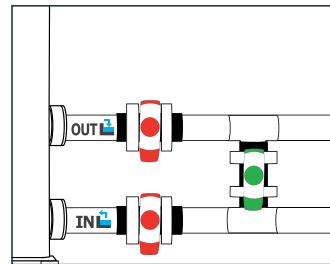
6.2 Winter storage

In the winter months when the ambient temperature is lower than 3°C, a shut-down heat pump must be winterised to avoid any frost damage.

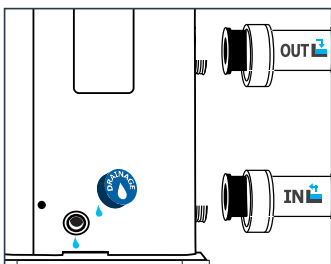
Winterising in 4 steps



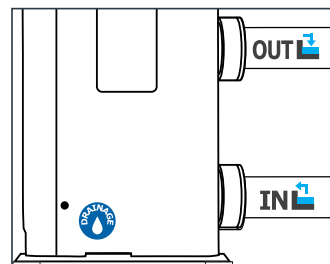
Step 1
WARNING:
Disconnect the heat pump from the power supply.



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



Step 3
Unscrew the drain plug and water pipes in order to drain any water from the heat pump.



Step 4
Screw back the drain plug and pipes or block them with rags so as to prevent any foreign bodies from getting into the circuit. Finally, protect the pump with its winter storage cover.



If a circulating pump is servo-controlled by the heat pump, drain this also.

7. Repairs




WARNING: Under normal conditions, a suitable heat pump can heat the water in a swimming pool by 1°C to 2°C per day. It is therefore quite normal to not feel any temperature difference in the system when the heat pump is working.
A heated pool must be covered to avoid any loss of heat.

7.1 Breakdowns and faults

When the heat pump stores a technical problem in its memory, it displays the symbol 

To view the fault code, please follow these steps:

Step 1: Press  to display the fault code

Pressing once more will allow you to display a second fault code if there are several errors.

Step 2: Press  and  to return to the normal readout.

In the event of a problem, the heat pump's screen displays a fault code instead of temperature indications. Please consult the table opposite to find the possible causes of a fault and the actions to be taken.

Note:

- ▶ If the screen displays only the code ER E-, this means that the heat pump has not detected any fault and that everything is working perfectly.

7. Repairs

7.2 List of faults

Code	Fault	Possible causes	Action
P3	Water intake temperature sensor malfunction	1) Sensor badly connected	1) Reconnect sensor
		2) Sensor defective	2) Replace sensor
		3) PCB defective	3) Replace PCB
P4	Water outlet temperature sensor malfunction	Same causes as P3	Same actions as P3
P1	De-icing temperature sensor malfunction		
P7	External temperature sensor malfunction		
P2	Air venting sensor malfunction		
PB	Water temperature at outlet too low for cooling mode	1) Water flow rate too low	1) Check water filter and hydraulic circuit
		2) Water temperature at intake too low	2) Adjust temperature
		3) Defective PCB	3) Replace PCB
PC	Antifreeze protection	Protection activated when the ambient temperature is too low and the unit is on standby	No intervention is necessary
E4	High pressure protection	1) Insufficient water flow	1) Check water pump operation and openings of By-Pass inlet/outlet valves
		2) Defective 4-way valve or excess refrigerant	2) Readjust the quantity of refrigerant
		3) Water temperature setting too high	3) Set the required temperature to 5°C above the current temperature then proceed in increments of 5°.
		4) Pressure switch disconnected or defective	4) Reconnect or replace pressure switch
		5) Defective PCB	5) Replace PCB
P9	Low pressure protection	1) Insufficient refrigerant	1) Readjust the quantity of refrigerant
		2) Defective 4-way valve	2) Replace valve
		3) Pressure switch disconnected or defective	3) Reconnect or replace pressure switch
		4) Defective PCB	4) Replace PCB
PL	Flow sensor malfunction	1) Insufficient water in heat exchanger	1) Check your water circuit operation and the opening of the By-Pass valves
		2) Defective water flow sensor	2) Replace water flow contactor
		3) Defective PCB	3) Replace PCB
Pb	Excessive difference between water inlet temperature and water outlet temperature	1) Water flow rate too low	1) Check water pump and hydraulic system operation, and the opening of the By-Pass inlet/outlet valves
		2) Defective PCB	2) Replace PCB
E3	Vented air temperature too high	1) Insufficient refrigerant gas	1) Readjust the quantity of refrigerant
		2) Same causes as fault E4	2) Same actions as fault E4
Eb	Thermal protection	1) Water flow too low or water intake temperature too high	1) Check water flow or adjust water temperature
		2) Defective thermal protection	2) Replace protection
		3) Bad connection	3) Check connections
		4) Defective PCB	4) Replace PCB
EB	Problem with connection between PCB and wired remote control	1) Bad connection	1) Check wiring connections between remote control and PCB
		2) Defective wired remote control	2) Replace remote control
		3) Defective PCB	3) Replace PCB

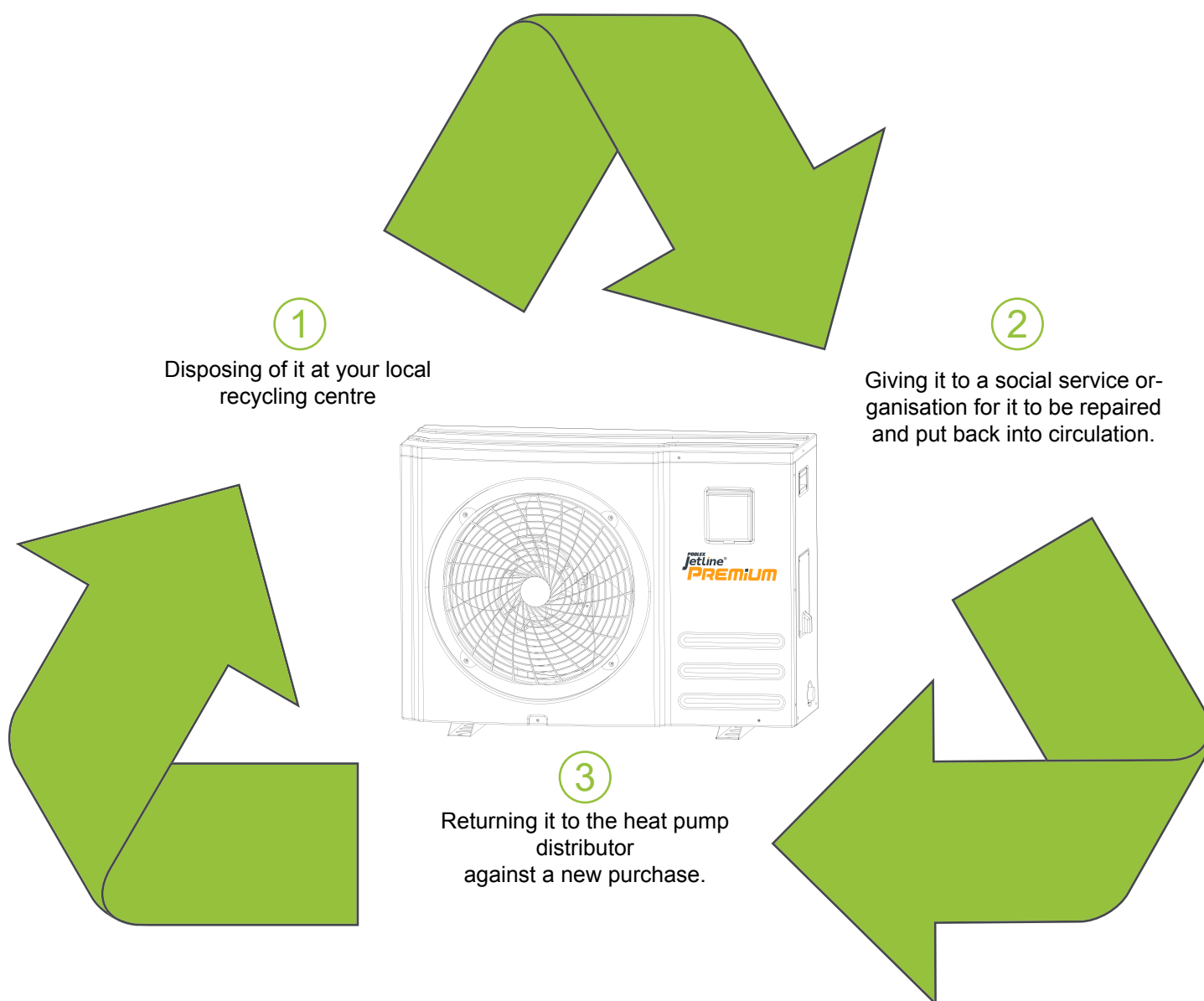
8. Recycling

8.1 Recycling the heat pump

Your heat pump has reached the end of its life and you wish to dispose of it or to replace it. Do not throw it in the rubbish bin.

A heat pump must be disposed of separately with a view to its reuse, recycling or upgrading. It contains substances that are potentially hazardous to the environment but which will be eliminated or neutralised by recycling.

YOU HAVE THREE SOLUTIONS:



9. Warranty

9.1 General warranty conditions

The Poolstar Company guarantees the original owner against defective materials and faults in the manufacture of the Poolex Jetline Premium heat pump for a period of three (3) years.

The compressor is guaranteed for a period of five (5) years.

The titanium tube heat exchanger has a lifetime guarantee against chemical corrosion, except for frost damage.

The condenser's other components are guaranteed for three (3) years.

The warranty becomes effective on the date of the first invoice.

The warranty does not apply in the following cases:

- Malfunction or damage arising from an installation, usage or repair that is not in compliance with the safety instructions.
- Malfunction or damage arising from a chemical agent that is unsuitable for the pool.
- Malfunction or damage arising from conditions that are unsuitable for the equipment's purposes of use.
- Damage arising from negligence, accident or force majeure.
- Malfunction or damage arising from the use of unauthorised accessories.

Repairs undertaken during the warranty period must be approved prior to being carried out by an authorised technician. The warranty shall be null and void if the repair to the equipment is carried out by a person who is not authorised by the Poolstar company.

The guaranteed parts shall be replaced or repaired at Poolstar's discretion. Defective parts must be returned to our workshops to be covered during the warranty period. The warranty does not cover labour costs or unauthorised replacements. The return of the defective part is not covered by the warranty.

Dear Sir/Madam,

**Please spend a few minutes filling in the warranty registration card
that you will find on our website:**

<http://support.poolex.co.uk/>

We thank you for your trust in our products.
Enjoy your swimming!

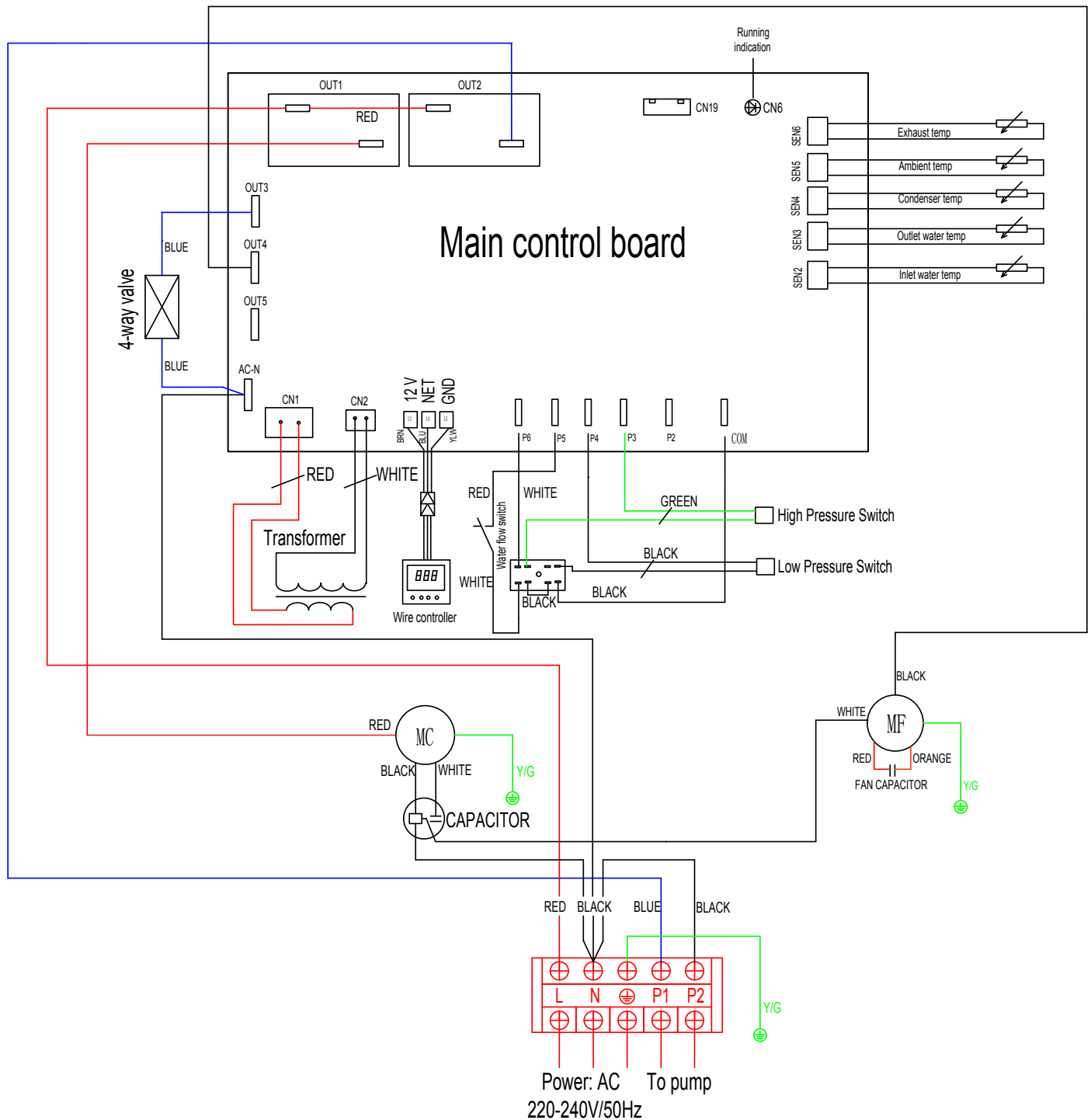
Your details may be treated in accordance with the Data Protection Act
of 6 January 1978 and will not be divulged to any third party.

WARNING:

**The contractual warranty cannot be validated with the installer or Poolstar
unless your product has been registered on our website.**

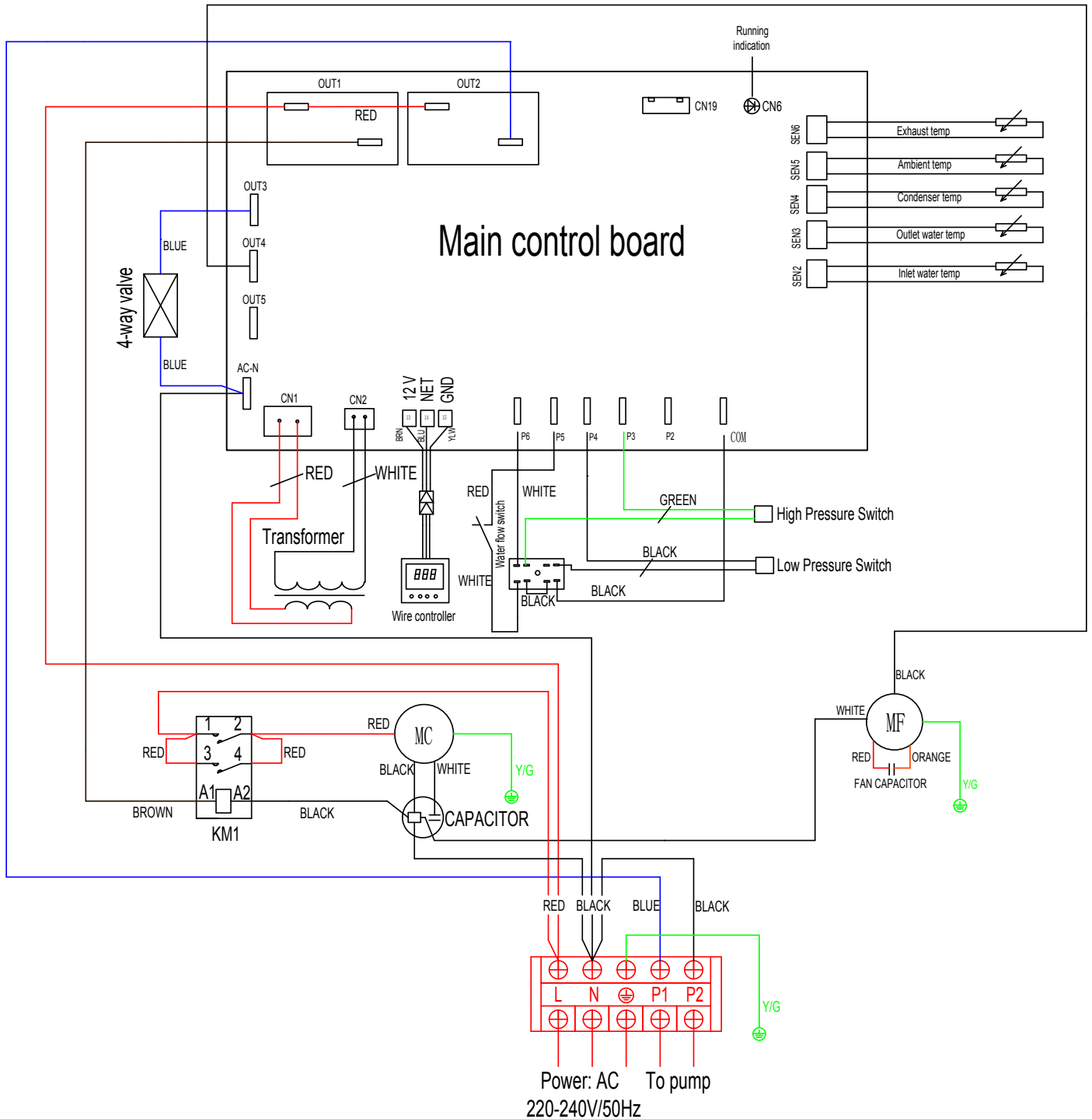
10. Appendices

10.1 Wiring diagrams



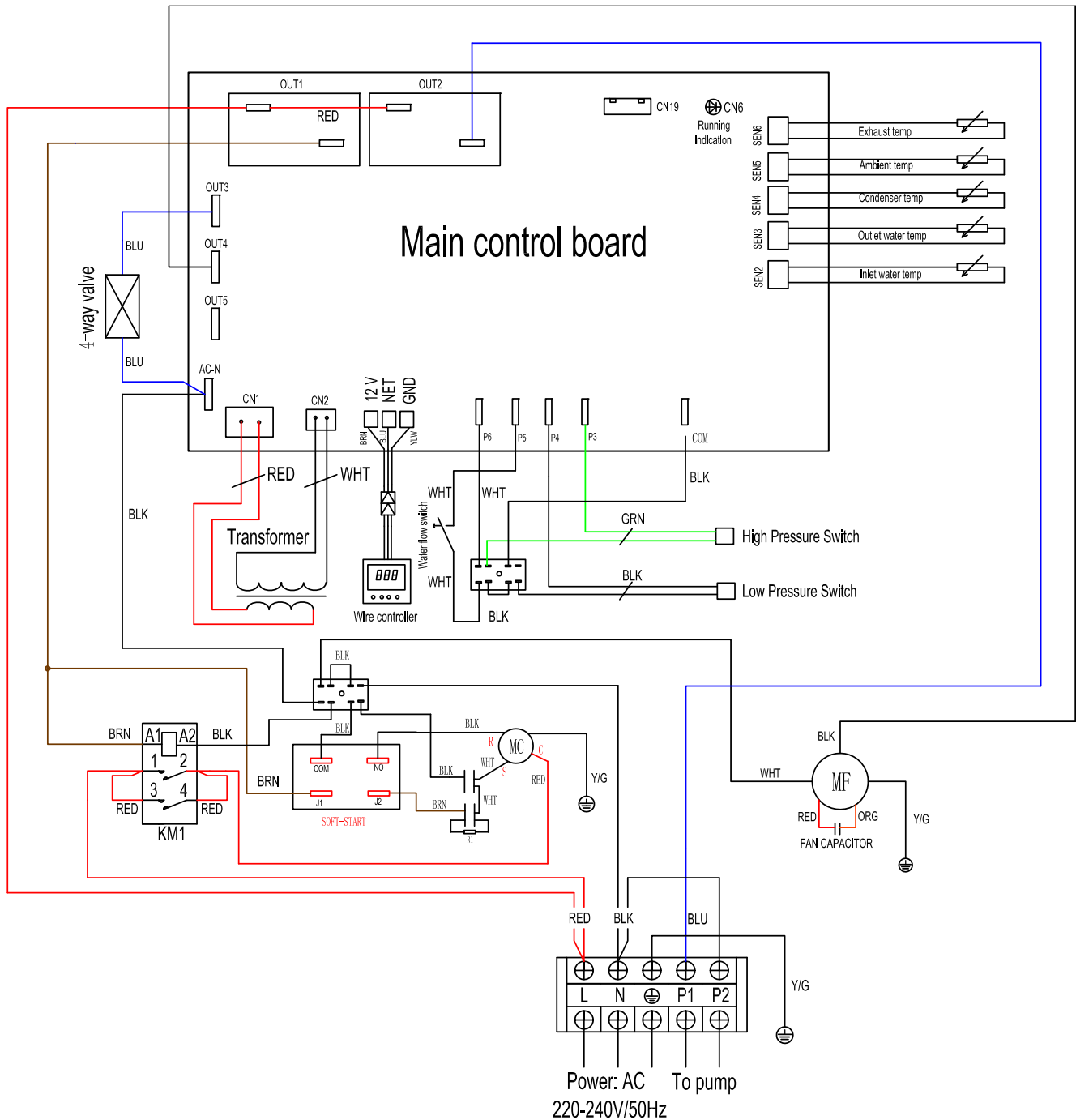
Model Poolex Jetline Premium 40, 50 & 70

10. Appendices



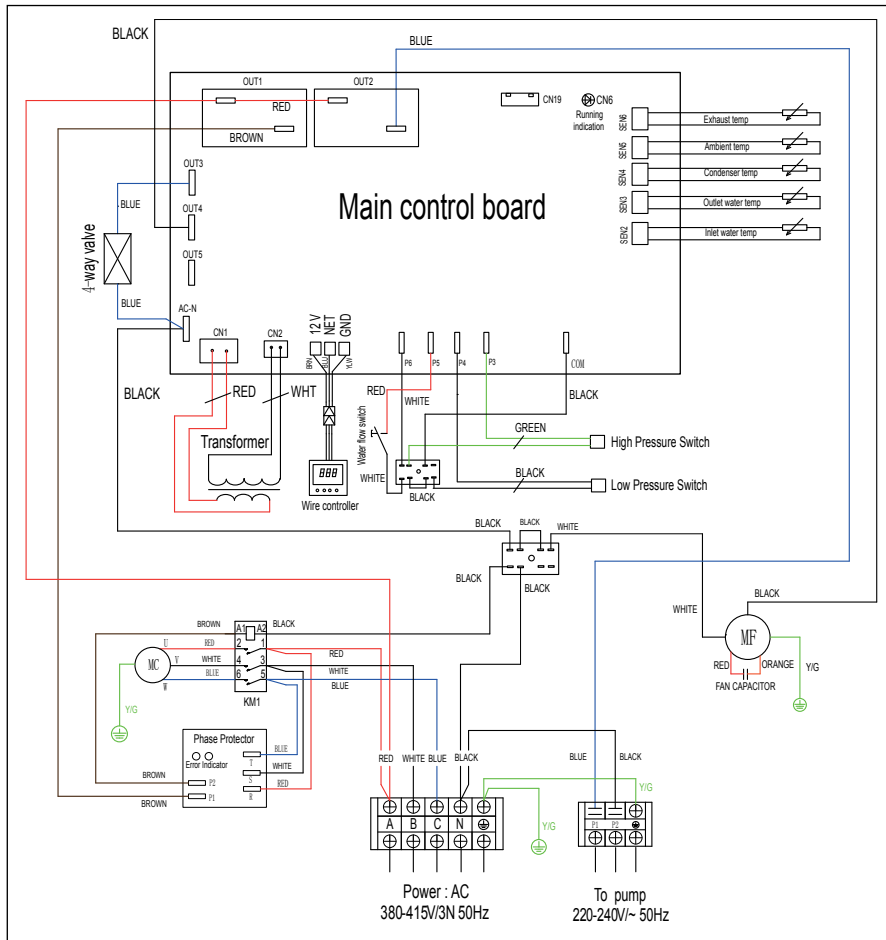
Model Poolex Jetline Premium 90, 110 & 130

10. Appendices



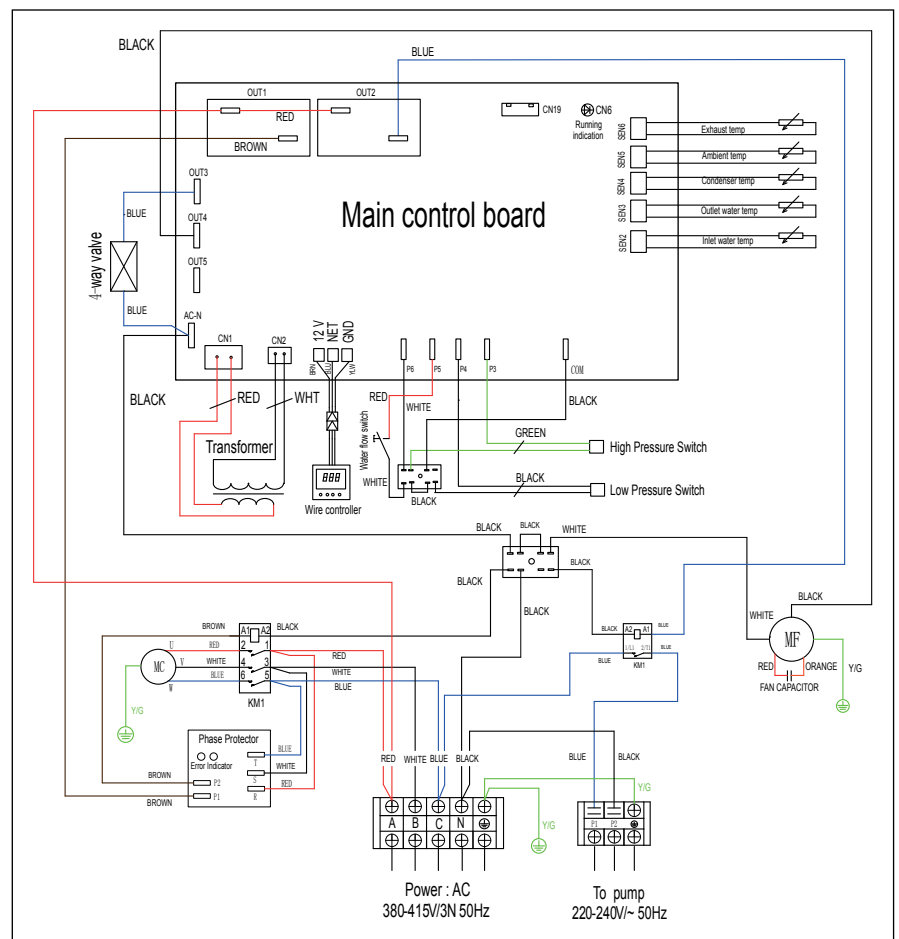
Model Poolex Jetline Premium 160

10. Appendices



Model Pooler Jetline Premium 160 Tri

Model Pooler Jetline Premium 180 Tri / 220 Tri



POOLEX **Jetline®** **PREMIUM**



OZONE FRIENDLY



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