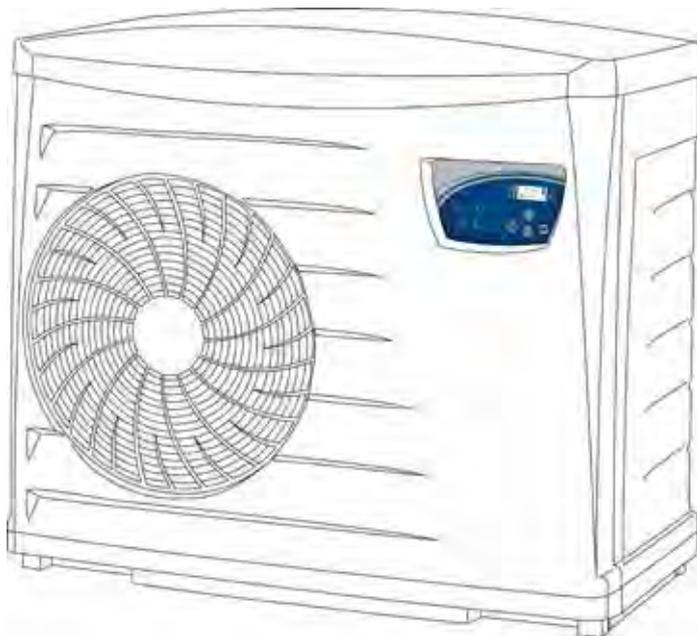


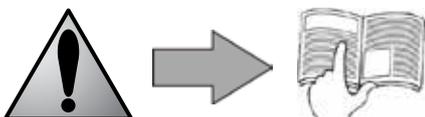
# Z300



Instructions for installation and use  
English

EN

More documents on:  
[www.zodiac-poolcare.com](http://www.zodiac-poolcare.com)



- Read this notice carefully before installing, maintaining or repairing this appliance!
- The symbol  indicates important information that you must take into account to avoid the risk of damage to persons or the appliance.
- The symbol  indicates useful information as an indication.



## Warning



- As part of a continuous improvement process our products may be modified without prior notice.
- Exclusive use: the heating of pool water (must not be used for any other purpose),
- The appliance must be installed by a qualified technician, in compliance with the manufacturer's instructions and in compliance with current local standards. The installer is responsible for the installation of the appliance and compliance with local regulations in matters of installation. Under no circumstances can the manufacturer be held liable in the event that local installation standards are not respected.
- It is important that this appliance be handled by skilled and apt persons (physically and mentally) having received the instructions for use beforehand (by reading these instructions). All persons not meeting these criteria must not approach the appliance in order to avoid exposure to dangerous elements.
- If the appliance suffers a malfunction: do not try to repair the appliance yourself, contact your reseller,
- Before any intervention on the appliance, make sure it has been powered off and locked out, and that heating priority has been deactivated.
- Before reconnecting any component, check that the voltage indicated on the device corresponds to the mains voltage.
- Eliminating or shunting any safety devices automatically voids the warranty, as does the replacement of parts using parts not originating from our warehouses.
- Do not release R410A coolant liquid into the atmosphere. This is a fluoride greenhouse effect gas covered by the Kyoto agreement with a global warming potential (GWP) = 1975 - (see the European Community regulations on fluoride greenhouse effect gases Directive EC 842/2006).
- Incorrect installation may cause damage to property or serious injuries (possibly causing death).
- Keep the appliance out of the reach of children.
- This heat pump is compatible with all types of water treatment.

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Are available in the appendices at the end of these instructions:

- Electric Diagram
- Size
- Description
- EC Declaration of compliance

# 1. Information before installing

## 1.1 General delivery terms and conditions

All equipment, even postage and packing paid, travels at the risks and perils of the recipient. The latter must make written reserves on the transporter's delivery documents if damage during transport is discovered (confirmed by registered letter to the transporter within 48 hours).

**The device must be transported and stored upright on its pallet in its original packaging.**

If the appliance has been tipped over, make written reserves to the transporter.

## 1.2 Content

				
Z300	Wintering cover	Wintering Cap	In a bag in the technical compartment	
			Fitting Ø50	Cable gland
x1	x1	x2	x2	x1

## 1.3 Technical specifications

Z300	Voltage	Input power*	Rated input intensity*
M4	230V-50Hz	1.7 kW	7.9 A
M5	230V-50Hz	2.2 kW	10.3 A
T5	400V-50Hz	2.2 kW	4.25 A
M7	230V-50Hz	2.88 kW	13 A
MD5	230V-50Hz	2.2 kW	10 A
TD5	400V-50Hz	2.2 kW	4.4 A
MD8	230V-50Hz	3.6 kW	16 A
TD8	400V-50Hz	3.6 kW	7.4 A

\* with ambient air at +15 °C, pool water at 26 °C, and relative humidity of 70% (according to French standard NF-414)

- class: I,
- degree of pollution: 2,
- overvoltage category: II

Operating range:

- air temperature of between 5 °C and 38 °C for standard models,
- air temperature of between -8 °C and 38 °C for D models,
- water temperature of between 10 °C and 32 °C,

 Maximum temperature of 32°C to protect the pool liner.  
The D version also features a de-icing function by using forced ventilation or reversed cycle.

## 2. Installation

 Do not take grip on the outer casing to pick up the device, hold the base.

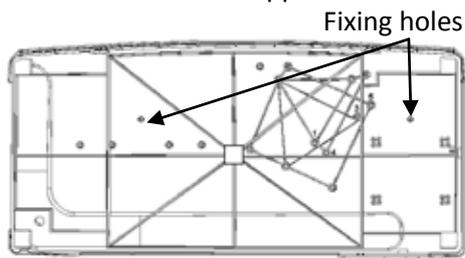
### 2.1 Selecting an installation site

 The device must be installed outdoors and there must be adequate open space surrounding it (see §2.3).

- **The heat pump must be installed** at a minimum distance from the edge of the pool in order to avoid any projections of spray onto the appliance. This distance is determined by the electric standards applicable locally (for France: 3.5 meters).
- **The heat pump must not be installed:**
  - close to a heat source or to a source of inflammable gas,
  - close to a road with a risk of water or mud being sprayed,
  - facing strong winds,
  - with the blower facing a permanent or temporary obstruction (window, wall, hedge, etc.) less than 4 metres away.

## 2.2 Installing the appliance

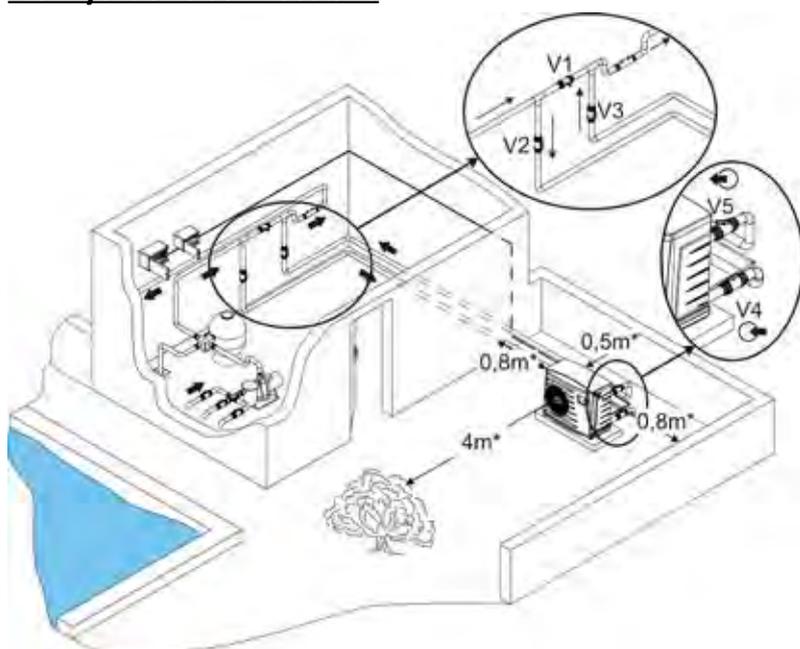
- Install on a stable, solid surface (concrete slab for example) which is level,
- Protect from risks of flooding due to condensates from the appliance when it is running (see §2.3).



Fixing holes

- i** The anti-vibration blocs are fitted under the base of the heat pump.  
 The heat pump can be fixed to the ground using the brackets at the base of the unit (attachments not included).  
 A diagram for drilling is featured on the back of the packing box.

## 2.3 Hydraulic connections



V1-2-3 : by-pass valves  
 V4 : water intake valve  
 V5 : water output valve  
 \* minimum distance

Z300		M4	M5 T5 MD5 TD5	M7	MD8 TD8
Test pressure	bar	3			
Service pressure	bar	1,5			
Load loss	mCE	1,4	1,5	1,5	1,1
Mean water flowrate	m <sup>3</sup> /h	4	5	6	6,5



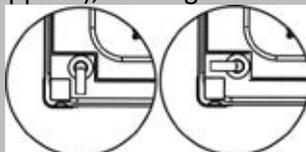
**Follow the hydraulic connection direction (see § «Dimensions» in the appendix).**

- The connection include a  $\varnothing 50$  PVC rigid pipe, from a by-pass, on the swimming pool filtration circuit, after the filter and before any water treatment unit.
- Installing a by-pass is mandatory and facilitates operations on the appliance.
- Adjust the water flow using valve V1, and leave valves V4 and V5 open.
- Make sure the hydraulic fittings are correctly tightened and that there are no leaks.

Disposing of condensation:

Warning: your device can produce several litres of water per day. It is strongly recommended to guide the flow to drains.

- i** • Connect a  $\varnothing 18$  interior pipe (not supplied), to the grooved end-piece mounted on the base of the appliance,



- Outlet: to the back or on the side :

## 2.4 Electrical connections

### 2.4.1 Voltage and protection

- The electrical supply to the heat pump must include a protection and circuit-breaker device (not supplied) complying with the standards and regulations in force in the country,
- Additional protection may be required during installation to protect against overvoltage category II,
- The device is designed for connection to a general power grid with TT and TN.S grounding systems,
- Electrical protection: circuit-breaker (curve D) or fuse (Am) (see § 2.4.3 for ratings), and with a 30 mA dedicated differential trip switch (circuit-breaker or switch).

- Electrical conduits must be secured,
- Tolerance for voltage variation:  $\pm 6\%$  (during operation),
- Use cable suitable for outdoor use, type RO2V or equivalent in countries outside of the European community, with an outer diameter between 9 and 18 mm,
- Use the cable gland to run the supply cable into the device.

### 2.4.2 Connections

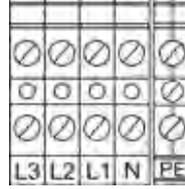
- The electrical supply cable must not be exposed to elements that are sharp, hot or at risk of being crushed,
- Check that all cables are secure and all terminal connections are correct.

Single-phase :



phase (L) + neutral (N) + Earth (PE)

Three-phase :



phases (L1 + L2 + L3) + neutral (N) + Earth (PE)



- Loose terminals can cause the terminal block to heat and lead to the warranty being voided.
- It is imperative to connect the appliance to an earth rod.
- Risk of electric shocks inside the appliance.
- Only a qualified and experienced technician is authorised to wire inside the appliance.
- If the power supply cable is damaged it should be replaced by a qualified technician.

### 2.4.3 Cable size

Power supply cable size: for a maximum length of 20 metres (calculation on the basis of:  $5A/mm^2$ ), must be checked and suitable for the installation conditions.

Z300	Voltage	I Maximum absorbed	Cable cross section		Electric protection
		A	mm <sup>2</sup>		A
M4	230V-50Hz	10	3 x 2.5	3G2.5	16
M5-MD5	230V-50Hz	14.5	3 x 2.5	3G2.5	16
T5-TD5	400V-50Hz	5	5 x 2.5	5G2.5	10
M7	230V-50Hz	16.1	3 x 4	3G4	20
MD8	230V-50Hz	22	3 x 6	3G6	25
TD8	400V-50Hz	9.4	5 x 2.5	5G2.5	10

### 2.4.4 Connecting options

Use cables with a cross-section: of  $2 \times 0.75 \text{ mm}^2$  or larger, of type RO2V or equivalent in countries outside of the European Community, with an outer diameter of between 8 and 13 mm.

- Remove the lid (just above the cable gland) and fit the supplied cable glands to run the cables into the device. The cables used for the optional features and the power supply must be held together using a collar inside the device, just after the cable gland.

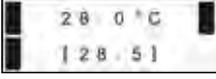
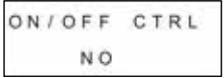
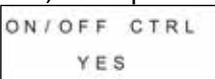


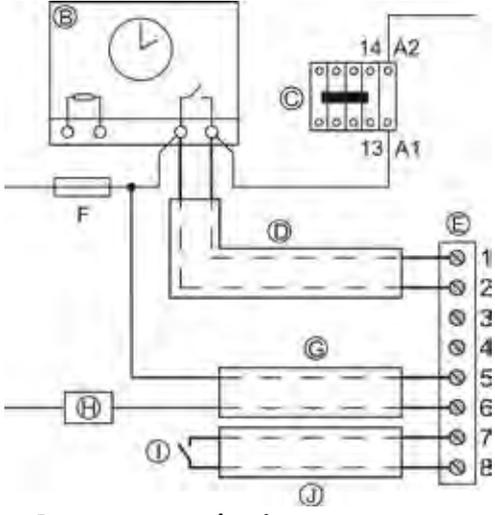
- Any incorrect connection to terminals 1 to 8 could damage the regulator and void the warranty. Never supply the motor of the filter pump directly using terminals 1-2. If orange terminals 1 to 8 are serviced, back current may exist.

- «Heating priority»
  - Function: servo function to control the filtration pump operation (by a minimum 5-minute cycle every hour, with filtration maintained if the pool temperature is below the required temperature),
  - Thanks to a dry contact (without max. I polarity = 8 A)
  - Between terminals 1-2.
- Alarm
  - Function: connect a relay to the alarm terminal,
  - Thanks to a dry contact (without max. I polarity = 2 A)
  - Between terminals 5-6.

• **Remote on/off control**

- Function: connect a remote «on/off» button
- Thanks to a zero-potential free contact, without 230 V - 50 Hz polarity, connect the cable to the busbar between terminals 7-8,

- Activate the command by pressing **SET** for 5 seconds when regulation is not on standby:  then , then press 3 seconds on **SET** : , select «Yes» using key , then validate by pressing **SET** : , press  to exit.



- A1-A2 : supply to the power contactor coil of the filter pump
- B : filter timer
- C : power contactor (3-pole or 2-pole), supplying the filter pump
- D : independent connecting cable for the «heating priority» function
- E : terminal
- F : fuse
- G : independent connecting cable for alarm contact relay
- H : alarm contact relay
- I : remote on/off switch
- J : independent connecting cable for remote on/off control

• **Remote control unit**

- Function: control the heat pump remotely.
- Refer to the instructions for the remote control unit for connections.

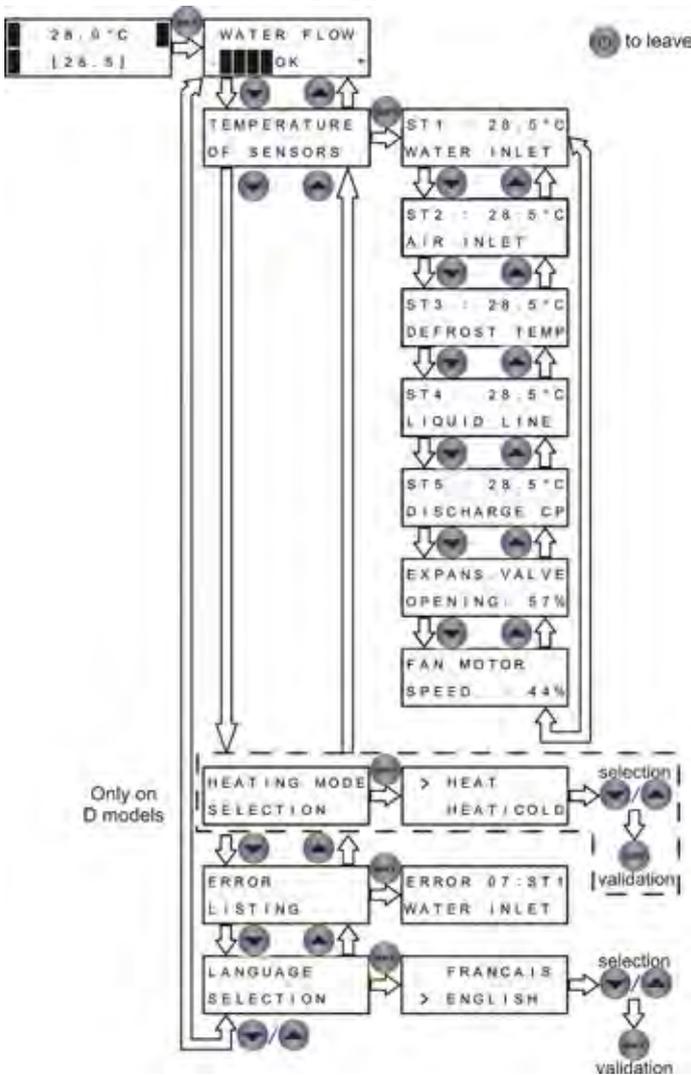
**3. Use**

**3.1 Presentation of the regulation**



Symbol	Designation	steady	flashing
	Water flow	Water flow-rate ok	Water flow too weak, high or absent
	Ambient air temperature	Adequate	Inadequate
	Operation indicator	During heating or air conditioning	On standby until operating command received
	Defrost indicator	Defrost in progress	/
	On/off button		
<b>SET</b>	button to set and confirm parameters		
	value setting buttons		

### 3.1.1 Reading and changing parameters



### 3.1.2 Locking and releasing the key pad

Press and for 3 seconds: 

KEYBOARD LOCKED
--------------------

 or 

KEYBOARD UNLOCKED
----------------------

### 3.2 Starting up the appliance

- Check that no tools or other objects have been left inside the device.
- The access door for technical components must be fitted.
- Set the by-pass and setting valves (see § 2.3) as follows:
  - valve 1 completely open,
  - valves 2-3-4 & 5 closed.

**An incorrect setting of the by-pass valve may lead to device malfunction.**

- Switch on the filter system.
- Progressively close valve 1 in order to increase the filter pressure to 150 g (0.150 bar).
- Open valves 2, 3 and 4 completely, then half open valve 5 (see §2.3) (the air accumulated in the heat pump condenser and in the filter circuit is then bled).

If valves 4 and 5 are not fitted, open valve 1 completely, and half close valve 3.

- Power-up the heat pump,
- If the heat pump is on stand-by: 

---
---

, press on for 3 seconds, 

████████████████████
████████████████████

 will appear for 2 seconds, and 

SOFTWARE
M09D09 MAP02

 (different soft number according to model) for 3 seconds, and the water and set-point temperatures will be displayed: 

28.0°C
[28.5]

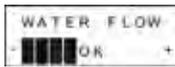
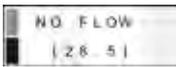
, a 2-minute delay will start.

- Set the required water temperature:
  - press  to increase temperature,
  - press  to decrease temperature,



When the pool reaches the required temperature, the heat pump will automatically stop.

- Set the water flow-rate using the menu , when the indicator  is steady: press  to display the water flow-rate status:

Status	Water flow-rate ok	No water flow	Water flow-rate too weak	Water flow-rate too strong
Display				
				

- Set the flow-rate using valve 5 (or 3 if no valve 5 is fitted), and, to quit the menu, press .



During this adjustment phase, wait for a few minutes after each change in valve position to allow the device to balance.

### 3.3 Checks to perform after start-up

The heat pump must stop when:

- The set-point temperature is lowered using the digital control panel,
- Filtering is stopped or valve 2 or 3 is closed,
- The digital control panel is turned off by pressing .

### 3.4 Wintering



Wintering is imperative, failure to do so exposes the condenser to a risk of freezing, this situation is not covered by the warranty. To avoid condensation damaging the appliance, do not cover it hermetically.

- Switch the digital control panel to «stand-by» mode by pressing  for 3 seconds, and cut the power supply,
- Open valve 1,
- Close valves 2 and 3, and open valves 4 and 5 (if fitted),
- Ensure that no water is flowing through the heat pump,
- Drain the water condenser by unscrewing the two pool water inlet and outlet connections at the back of the heat pump,
- In the case of full winter storage conditions for the pool: re-connect the inlet and outlet connections to avoid foreign bodies entering into the condenser,
- In the case of winter storage for the heat pump alone: do not reconnect the inlet and outlet connectors, instead place two plugs (supplied) on the condenser water inlet and outlet.
- Cover the heat pump with the overwintering cover.

## 4. Maintenance

### 4.1 Maintenance instructions



It is recommended to carry out general servicing of the appliance on wintering and recommissioning, in order to check it is in good working order and maintain its performances, as well as to prevent certain possible defects. These actions are the user's responsibility and must be carried out by a technician. Do not use high pressure cleaners.

- Ensure no foreign bodies obstruct the fan grid.
- Clean the evaporator with a soft brush and a fresh water jet (disconnect the power cable), do not twist or bend the metal blades, then to clean the discharge pipe of the condensates in order to evacuate the impurities which could block it.
- Clean the outside of the unit with a solvent-free product. A specific PAC NET cleaning kit is available as an optional extra (see §4.3).
- Check that the water condensation flows out properly during the operation of the device.
- Check the proper operation of the regulator.
- Check electrical components.
- Check that all metal elements are grounded.
- Check the tightening and connections of electric cables and the cleanliness of the electrical compartment.

## 4.2 Additional recommendations

Relative to pressurised appliances (PED-97/23/EC)

### 4.2.1 Installation and maintenance

- It is prohibited to install the appliance close to combustible materials or close to the air intake on an adjacent building.
- For some appliances it is imperative to use the protection grate accessory if the installation is located in an unregulated access area.
- During installation, repair, or maintenance operations it is prohibited to use piping as a step ladder: under stress the piping could rupture and the coolant could cause serious burns.
- During maintenance of the appliance the composition and condition of the heat transporting fluid will be checked as will the absence of traces of coolant.
- During the annual appliance seal inspection in compliance with applicable regulations, check that the high and low pressure switches are correctly connected to the refrigeration circuit and that they cut the electric circuit when triggered.
- During the maintenance phase make sure there are no traces of corrosion or oil stains around the refrigerating components.
- Before any operations on the refrigerating circuit it is imperative to shut down the appliance and to wait a few minutes before fitting temperature or pressure sensors. Some equipment such as the compressor and piping can reach temperatures in excess of 100°C and high pressures which can cause serious burns.

### 4.2.2 Repairs

- All welding operations are to be carried out by qualified welders
- Piping can only be replaced using copper tube in compliance with NF EN 12735-1 standard.
- Leak detection, pressure test:
  - never use oxygen or dry air, there is a risk of fire and explosion,
  - use dehydrated nitrogen or a mixture of nitrogen and the coolant indicated on the identification plate,
  - the test pressure on the low and high pressure sides must not exceed 42 bar.
- For the high pressure circuit piping using copper pipes of a diameter = or > than 1"5/8, a §2.1 certificate under standard NF EN 10204 is to be requested from the supplier and kept with the installation technical documents.
- The technical information relative to the safety requirements for the different applicable directives is indicated on the identification plate. All this information must be recorded on the appliance installation manual which must be part of the installation technical file: model, code, serial number, maximum and minimum service voltage and service pressure, year of manufacture, CE marking, manufacturer's address, coolant type and weight, electric parameters, thermodynamic and acoustic performances.

## 4.3 Available accessories

Name	PAC NET	Remote control	Technical room kit
Representation			

## 4.4 Recycling



This symbol means that your appliance must not be disposed of as household waste. It will be subject to selective waste sorting with a view to its reuse, recycling or sale. If it contains substances that are potentially harmful to the environment, they will be eliminated or neutralised.

Ask your reseller for information about recycling.

## 5. Troubleshooting

### 5.1 Displays

Display	Designation	Cause	Solution	Reset
ERROR 01 : FREEZE - UP	Protection of heat exchanger in cold mode	Temperature of ST4 sensor too low	Wait for the surrounding temperature to become warmer	Automatic
ERROR 02 : T* OVERHEATING	High temperature defect for the evaporator in «cooling» mode	Temperature probe ST3 above 60°C or evaporator scaled up	Clean the evaporator, if the defect persists, contact an approved technician	Automatic if temperature probe ST3 is below 45°C

Display	Designation	Cause	Solution	Reset
ERROR 03 : COMP SECURIT	Phase order defect (only on three-phased models)	<ul style="list-style-type: none"> <li>Wiring incorrect on the supply terminal board of the device,</li> <li>Modification of phase order by electrical supplier,</li> <li>Temporary failure of one or several phases</li> </ul>	<ul style="list-style-type: none"> <li>Reverse the phases on the supply terminal board (without power to the device)</li> <li>Contact your electricity provider to find out if modifications have been made to your equipment.</li> </ul>	Switch the power supply off or press 
ERROR 04 : LP LOW PRESS	Refrigerant circuit low pressure defect	Low pressure circuit pressure defect (if the defect remains after reset)	Contact an approved technician	Automatic reset (for less than 4 defects per hour) or press 
ERROR 05 : HP HIGH PRESS	Refrigerant circuit high pressure defect	<ul style="list-style-type: none"> <li>Water and air mixture passing in the appliance,</li> <li>Unsatisfactory water flow,</li> <li>Blocked flow controller</li> <li>Clogged or blocked heat exchanger</li> </ul>	<ul style="list-style-type: none"> <li>Check the pool hydraulic circuit</li> <li>Increase the flow-rate using the by-pass, check that the pool filter is not clogged)</li> <li>Check the flow-rate controller</li> <li>Clean the exchanger</li> <li>If the defect persists, contact an approved technician</li> </ul>	Automatic reset (for less than 4 defects per hour) or press 
ERROR 06 : COMPRES TEMP	Compressor discharge temperature defect	Compressor discharge temperature too high	Contact an approved technician	Press  for 3 seconds
ERROR 07 : ST1 WATER INLET	Control sensor defect (ST1)	Sensor out-of-order or disconnected (connector J2 red on plate A1)	Replace or reconnect the sensor	Switch the power supply off or press 
ERROR 08 : ST4 LIQUID LINE	Water flow-rate sensor defect (ST4)	Sensor out-of-order or disconnected (connector J8 white on plate A1)	Replace or reconnect the sensor	Switch the power supply off or automatic reset if the defect disappears
ERROR 09 : ST3 DEFROST TEMP	Defrost sensor defect (ST3)	Sensor out-of-order or disconnected (terminals 1-2 of connector J3 white on plate A2)	Replace or reconnect the sensor	Switch the power supply off or press 
ERROR 10 : ST2 AIR INLET	Anti-freeze sensor defect (ST2)	Sensor out-of-order or disconnected (terminals 3-4 of connector J3 white on plate A2)	Replace or reconnect the sensor	Switch the power supply off or press 
ERROR 11 : ST5 DISCHARGE CP	Compressor discharge sensor defect (ST5)	Sensor out-of-order or disconnected (connector J7 black on plate A1)	Replace or reconnect the sensor	Switch the power supply off or automatic reset if the defect disappears
ERROR 12 : COMMUNICATION	Communications' defect between the main card A1 and the display card A2	<ul style="list-style-type: none"> <li>Incorrect connection between plates A1 and A2</li> <li>Card supply defect</li> <li>Cards out of order</li> </ul>	<ul style="list-style-type: none"> <li>Check connections (connectors J8 and J9 yellow, and J7 and J4-J5 black)</li> <li>If the defect persists, contact an approved technician</li> </ul>	Switch the power supply off or automatic reset if the defect disappears

## 5.2 Appliance malfunctions

Malfunction	Possible causes	Solutions
<b>The device is not operational</b>	<ul style="list-style-type: none"> <li>No display</li> <li>The pool temperature is above the set-point temperature</li> <li>A message is displayed on the screen</li> <li>Absent or inadequate water flow-rate</li> <li>The parameter «on/off ctrl» is on «yes»</li> </ul>	<ul style="list-style-type: none"> <li>Check the supply voltage and the fuse F1</li> <li>Increase the set-point temperature</li> <li>Check the meaning of message §5.1</li> <li>Check the water flow-rate (by-pass, filtration)</li> <li>Shunt the bornes7-8 and modify the parameter on «No» (see §2.4.4 «Remote on/off control»)</li> </ul>
<b>The device is operational, but water temperature fails to rise</b>	<ul style="list-style-type: none"> <li>Inadequate filtering time</li> <li>Non-compliant period of use</li> <li>The heat pump is under-dimensioned</li> <li>The automatic pool water filler is blocked in the open position</li> <li>The heat insulating cover is not used</li> <li>The evaporator is clogged</li> <li>The device is incorrectly installed</li> <li>A message is displayed on the screen</li> </ul>	<ul style="list-style-type: none"> <li>Set the filtering system to manual 24- hour operation for temperature control</li> <li>Check that outdoor temperature is within the operating range (see §1.3)</li> <li>Check the characteristics of the heat pump according to the pool</li> <li>Check the correct operation of the automatic filler</li> <li>Fit the heat insulating cover</li> <li>Clean the evaporator (see §4.1)</li> <li>The device must be installed outdoors.</li> <li>Check that there is no obstacle less than 4 metres from where the blower is facing, and 0.50 metres behind the heat pump (see§2).</li> <li>Check the meaning of message §5.1</li> </ul>
<b>The fan is turning, but the compressor stops from time to time without an error message appearing</b>	<ul style="list-style-type: none"> <li>The heat pump does defrost cycles from time to time</li> <li>The evaporator is clogged</li> </ul>	<ul style="list-style-type: none"> <li>This is normal if the outdoor temperature is below 10 °C</li> <li>Clean the evaporator</li> </ul>
<b>The heat pump makes trip the circuit breaker</b>	<ul style="list-style-type: none"> <li>The circuit breaker rating is too low or inappropriate</li> <li>The cable cross-section is too small</li> <li>The supply voltage is too low</li> <li>Voltage drops when the compressor is powered on</li> <li>Varistor(s) VA1 and/or VA2 is/are out of order</li> </ul>	<ul style="list-style-type: none"> <li>Check the circuit breaker (see § 2.4.3).</li> <li>Check the cable cross-section (see § 2.4.3)</li> <li>Call your electricity provider</li> <li>Add a soft starter for models M5, MD5 and M7</li> <li>Replace the varistor(s)</li> </ul>

## 5.3 FAQ

<b>Is it possible to improve temperature performance?</b>	In order to improve the efficiency of your heat pump it is recommended that you:	<ul style="list-style-type: none"> <li>Protect the pool with a cover (floating cover, roller cover, etc.), to avoid heat loss</li> <li>Choose periods when the outside temperature is warm (on average &gt; 10°C) in order to facilitate the temperature increase (this may take several days. The actual time will vary according to weather conditions and the power of the heat pump)</li> <li>The higher the ambient air temperature, the more efficient the heat pump will be</li> <li>Keep the evaporator clean</li> </ul>
	Check that filtration time is sufficient	<ul style="list-style-type: none"> <li>During the heating phase, water flow must be continuous (24/24)</li> <li>To maintain the temperature throughout the season, allow for “automatic” flow of at least 12 hours/day (the longer automatic flow is used, the more time the heat pump will have to function and to heat the water)</li> </ul>
	Setting the set-point to maximum will not heat the water any faster.	
<b>Why is my heat pump not heating?</b>	<ul style="list-style-type: none"> <li>On start-up the device remains on «pause» for 3 minutes before actually starting up: check that this period has passed</li> <li>Once the pool has reached the set-point temperature, the heat pump switches off: check that the water temperature is lower than the requested temperature (see §3.2)</li> <li>If the water flow-rate is zero or inadequate, the heat pump will stop: check that water is flowing correctly through the heat pump, and check the hydraulic connections</li> <li>When the outdoor air temperature drops below 5 or -8 °C, the heat pump will stop: check the outdoor temperature</li> <li>The heat pump may have detected a malfunction: check if an error code is displayed on the screen, if so refer to §5.1</li> <li>If the problem persists after you have checked all of the above points: contact your installer</li> </ul>	

Where should my water treatment system be positioned with respect to the heating system?	<ul style="list-style-type: none"> <li>The water treatment system (chlorinator, salt chlorinator, etc.) must be installed preferably downstream from the heat pump (see installation §2.4), and must be compatible with the latter (check with the manufacturer)</li> </ul>
The heat pump is giving off water: is this normal?	<ul style="list-style-type: none"> <li>Your heat pump will give off water in the form of condensation. This water is the humidity contained in the air, which condenses on contact with certain cold components inside the heat pump.</li> <li>Note: your device can produce several litres of water per day.</li> </ul>

## 6. Registering the product

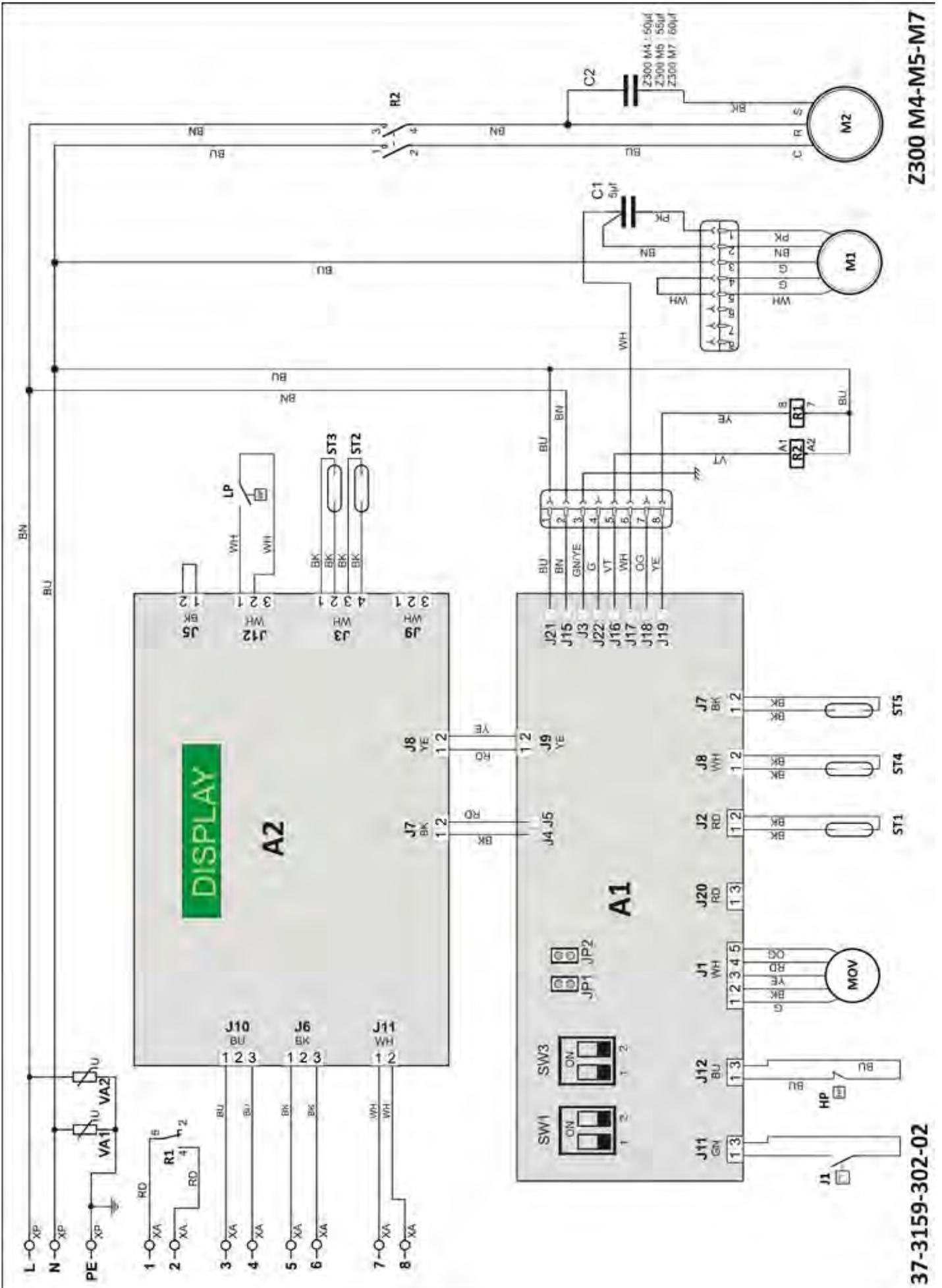
Register your product on our website:

- be the first to be informed of new Zodiac® products and special offers,
- help us to constantly improve our product quality.

Europe & Rest of the World	<a href="http://www.zodiac-poolcare.com">www.zodiac-poolcare.com</a>	
America	<a href="http://www.zodiacpoolsystems.com">www.zodiacpoolsystems.com</a>	
Australia – Pacific	<a href="http://www.zodiac.com.au">www.zodiac.com.au</a>	

# Electric diagram

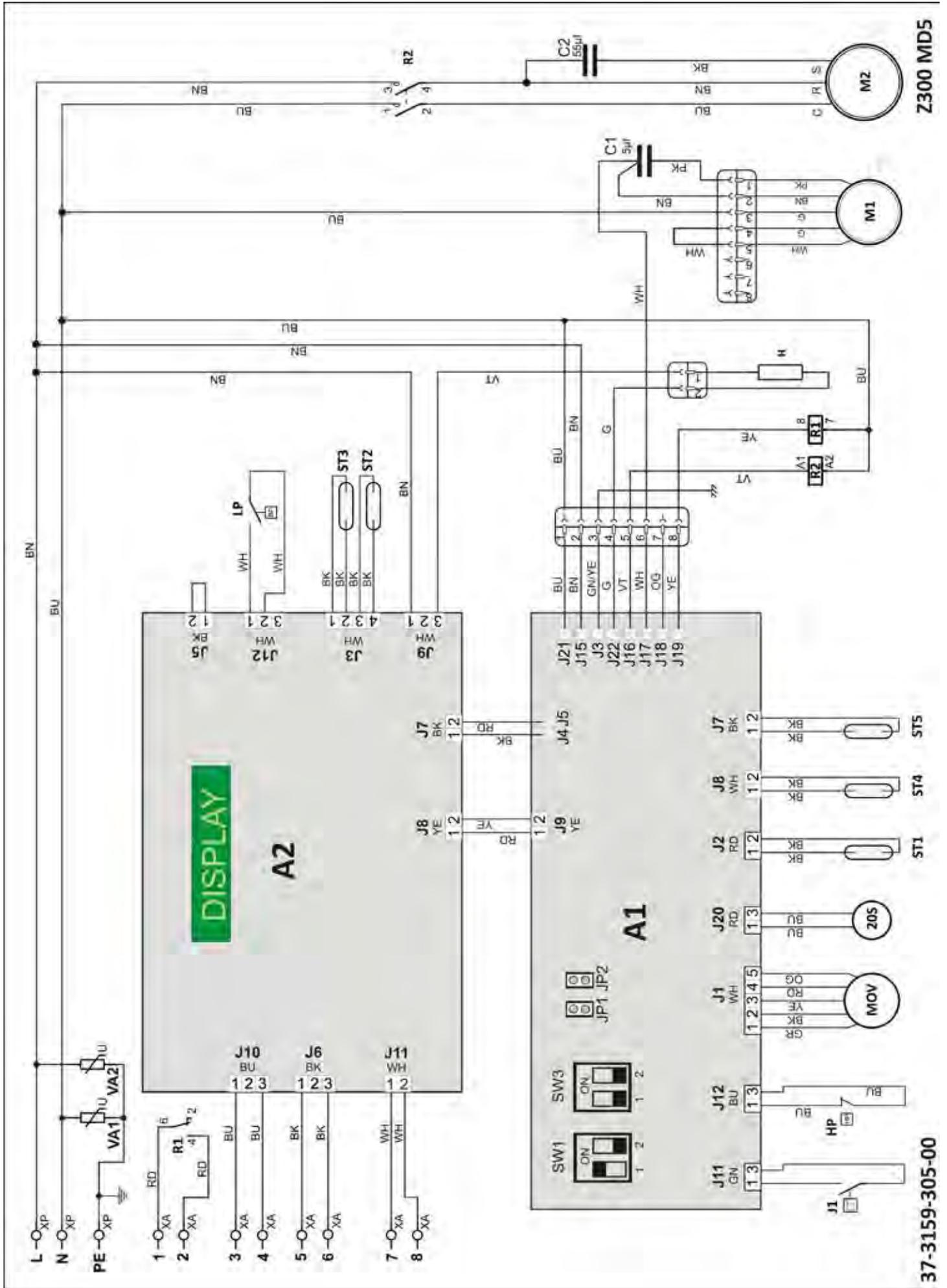
## Z300 M4-M5-M7



Z300 M4-M5-M7

37-3159-302-02

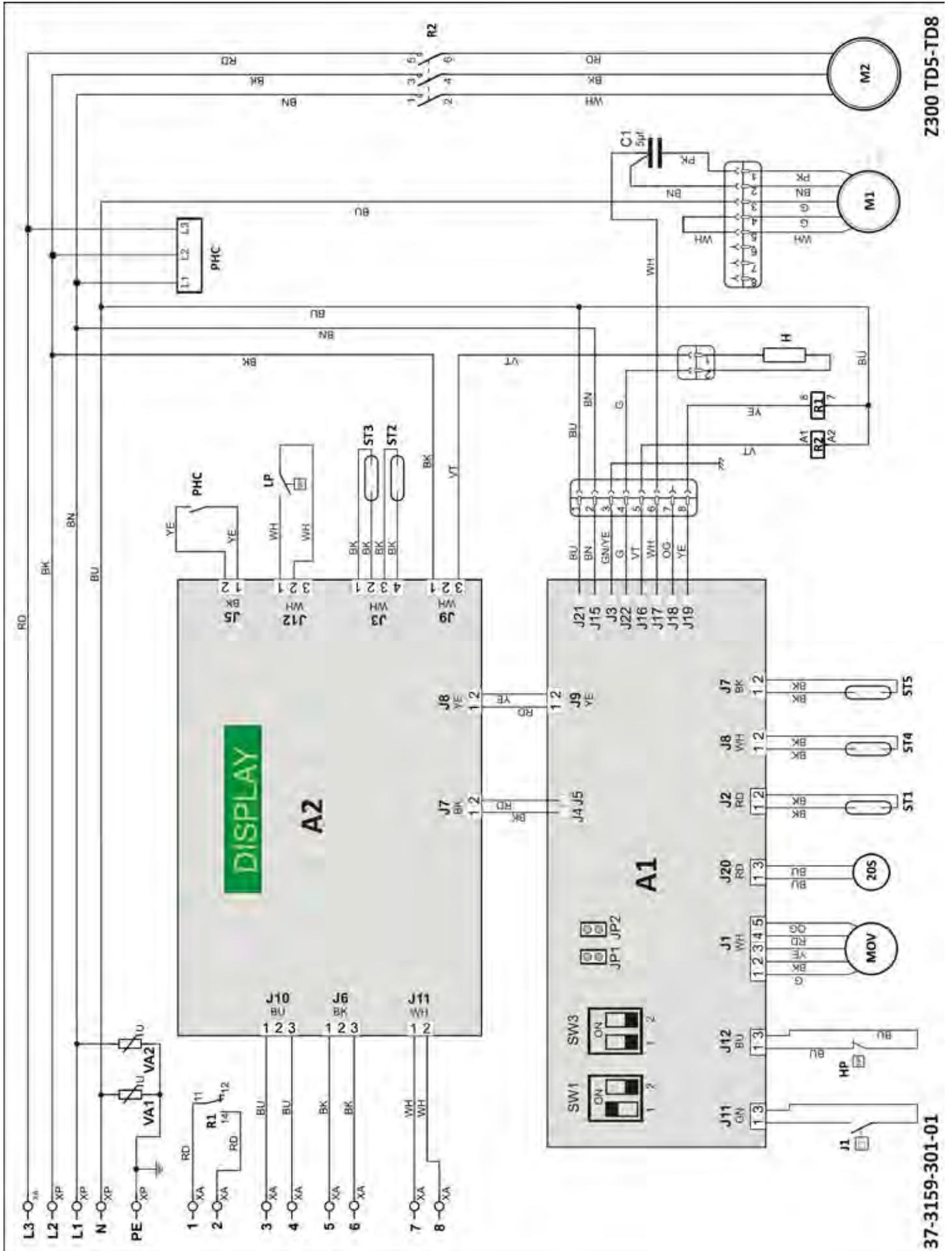




Z300 MD5

37-3159-305-00



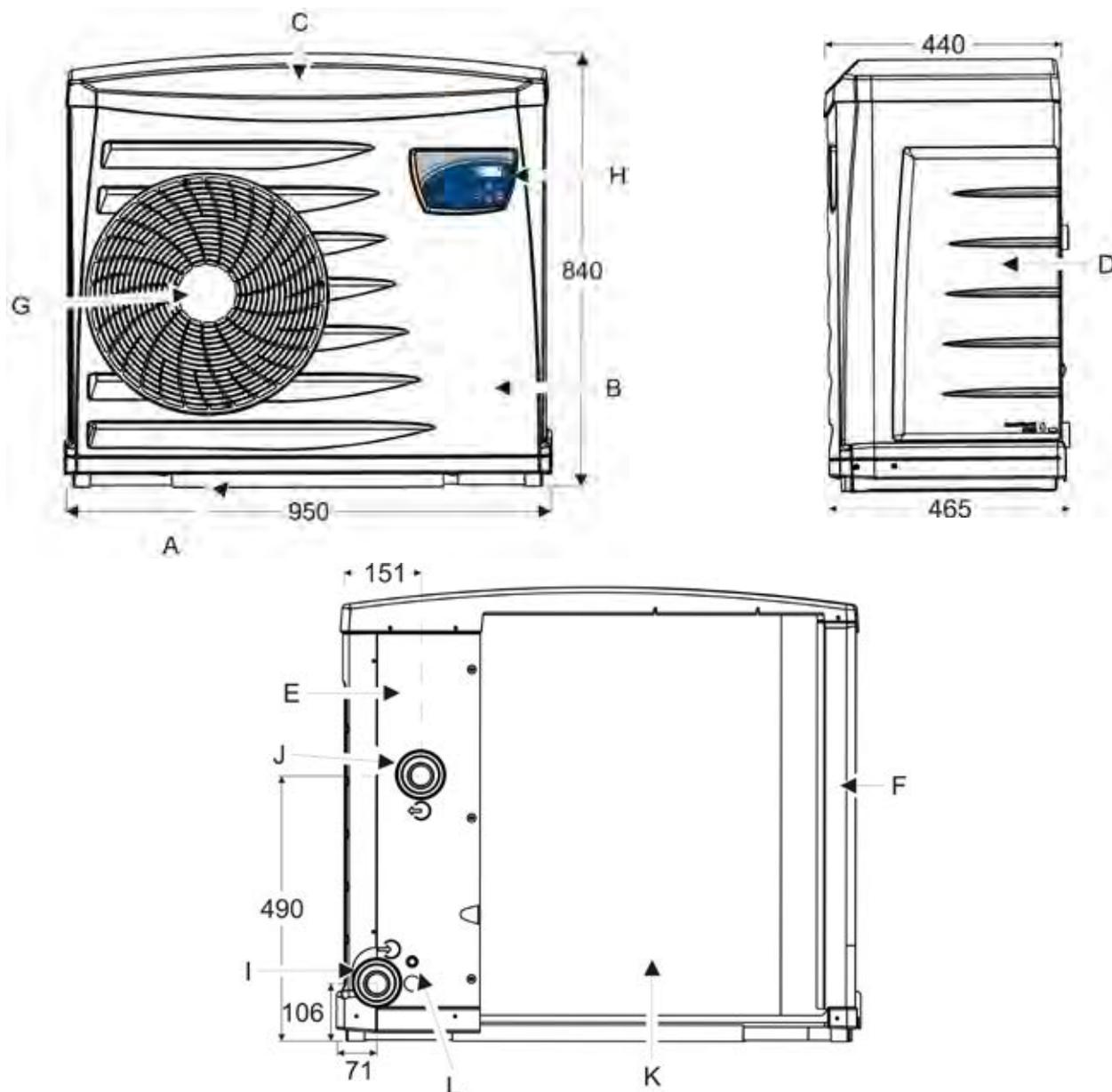


Z300 TD5-TD8

37-3159-301-01

L-N-PE	Power supply (230V/1N/50 Hz)
L1-L2-L3-N-PE	Power supply (400V/3N/50 Hz)
PE(  )	Earth
1-2	Pump control (max. 8A contact)
3-4	Electrical heating control (max. 2A contact)
5-6	Alarm control(max. 2A contact)
7-8	Remote control
20S	4-way valve coil
A1	Electronic board for regulation
A2	Electronic board for display
C1	Fan capacitor
C2	Compressor capacitor
C3	Filter
D1	Progressive starter
H	Defrost resistance
HP	High-pressure switch
LP	Low-pressure switch
J1	Flow rate switch
M1	Fan motor
M2	Compressor motor
MOV	Expansion valve
PHC	Phase order controller
R1-R2	Contactors
ST1	Regulator sensor
ST2	Anti-freeze sensor
ST3	Defrost sensor
ST4	Liquid line sensor
ST5	Compressor discharge sensor
VA1-VA2	varistor
BK	Black
BN	Brown
BU	Blue
G	Grey
GN/YE	Green/yellow
PK	Pink
OG	Orange
RD	Red
VT	Violet
WH	White
YE	Yellow

## Dimensions et description



<b>A</b>	Base
<b>B</b>	Front pannel
<b>C</b>	cowl
<b>D</b>	Technical door
<b>E</b>	Back pannel
<b>F</b>	Post
<b>G</b>	Grid
<b>H</b>	Regulator
<b>I</b>	Ø1" ½ water pool inlet
<b>J</b>	Ø1" ½ water pool outlet
<b>K</b>	Evaporator
<b>L</b>	Stuffing box

<b>Z300</b>	<b>Weight (Kg)</b>
M4	52
M5 - T5 - MD5 - TD5	63
M7	68
MD8 - TD8	81

## DECLARATION DE CONFORMITE CE

déclare que les produits ou gammes ci-dessous :

*declares that the herewith products or ranges*

**POMPES A CHALEUR DE PISCINES**

*HEAT PUMPS FOR POOLS*

**Z300**

**M4 – M5 – M7 – MD5 – MD8 – T5 – TD5 – TD8**

**Sont conformes aux dispositions :**

*Are in conformity with the provisions*

- De la directive COMPATIBILITE ELECTROMAGNETIQUE 2004/108/CE.
- Of the ELECTROMAGNETIC COMPATIBILITY directive 2004/108/EC

**Les normes suivantes ont été appliquées :**

*The standards have been applied*

**EN 55014-1 :2006 + A1 :2009**

**EN55014-2 :1997 + A1 :2001 + A2 :2008**

**EN61000-3-11 :2000**

**EN61000-3-12 :2005**

- De la directive BASSE TENSION 2006/95/CE.
- Of the LOW VOLTAGE directive 2006/195/EC

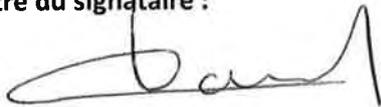
**Les normes suivantes ont été appliquées :**

*The standards have been applied*

**EN 60335-2-40 :2003 + A11 :2004 + A12 : 2009 + A1 :2006**

**EN 60335-1 :2002 + A11 :2004 + A12 :2006 + A13 :2008 + A14 :2009**

Nom et titre du signataire :



**Christian BOURRET**

Directeur Qualité

Fait à BELBERAUD, le 22 Octobre 2013

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