



ZODIAC

Edenpac

1-2-3-4-5-6-7-8



GB Heat pump Instructions for installation and use

IMPORTANT

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

The warnings and indications contained in the present handbook must be carefully read and understood as they provide important information relative to handling and operating safety. This handbook must therefore always be kept available for later consultation.

Installation must be carried out in compliance with valid regulations and the manufacturer's instructions by a qualified professional.

The term «qualified professional» refers to a person possessing the technical knowledge associated with P.S.A. components and heating installations.

An installation error could result in physical injury to persons or animals as well as mechanical damage for which the manufacturer may under no circumstances be held responsible.

After having unpacked the heat pump, the content should be checked for possible damage.

Before connecting the heat pump, ensure that the data provided by P.S.A. is compatible with the true installation conditions and does not exceed the maximum authorised limits for the product in question.

Before beginning any installation, handling or repair work on the heat pump, always isolate the electrical power supply to the unit.

In the case of a fault and/or operating error on the heat pump, the electrical power supply must be isolated and no attempt should be made to repair the fault.

Repair work may only be carried out by **an authorised technical assistance service** using **original spare parts only**. Non-respect of the aforementioned clauses may have a negative influence on the operating safety of the heat pump.

To guarantee the efficiency and correct operation of the heat pump, it is important to ensure it is regularly maintained in compliance with the instructions provided by P.S.A.

In the case where a heat pump is sold or transferred to another user, always ensure that all technical documentation is sent with the equipment to be used by the new user or installer.

This heat pump may only be used for the purpose for which it was designed: to heat a swimming pool; all other uses must be considered inappropriate, incorrect or even dangerous.

All contractual or extra-contractual responsibilities of P.S.A. will be considered nil and void for any damage caused by installation or operating errors, or due to non-respect of the instructions provided by P.S.A. or valid installation standards for the equipment object of the present document.

CONTENTS

1 General.....	2
1.1 General terms of delivery	2
1.2 Voltage.....	2
1.3 Water treatment.....	2
2 Description.....	2
2.1 Presentation.....	2
2.1.1 Edenpac 1, 2, 3, 4 and 5	
2.1.2 Edenpac 6	
2.1.3 Edenpac 7 and 8	
2.2 Dimensional characteristics.....	6
2.2.1 Edenpac 1, 2, 3, 4 and 5	
2.2.2 Edenpac 6, 7 and 8	
3 Installation	8
4 Connections	10
4.1 Access to the electrical card	10
4.1.1 Edenpac with single fan	
4.1.2 Edenpac with double fan	
4.2 Hydraulic connections	11
4.3 Electric connections.....	12
5 Regulator operation	13
5.1 Presentation	13
5.2 Setting the target temperature.....	14
6 Starting up	14
6.1 Check.....	15
6.2 Start up the heat pump	15
6.3 Checking.....	16
6.4 Troubleshooting.....	16
6.5 Winter storage	17
7 Maintenance instructions	17
8 Recycling the product	17
9 Electrical diagrams	18
9.1 Electrical diagram of connection	
Interface card.....	18
9.2 Electrical diagram EdenPAC single-phase	19
9.3 Electrical diagrams EdenPAC three-phase	21

1. GENERAL

1.1 General terms of delivery

Any equipment, even CARRIAGE and PACKING FREE, travel at the consignee's risk. The consignee shall make reserves in writing on the CARRIER'S delivery bill if he notes damage caused during transport. (Confirmation to be sent to the CARRIER within 48 hours by registered mail with acknowledgement of receipt).

Reminder: *The unit must be shipped and stored in the upright position on a pallet and in the original packaging.* In the contrary case, place the unit in the vertical position on the pallet and check its global state (in case of doubt regarding the unit's good state of operation establish reserves in writing with the carrier).

- Under no circumstances may the heat pump be operated immediately if it was placed horizontally.
Wait at least 12 hours before operating the pump -

1.2 Voltage

Prior to any operation, check that the voltage on the name plate of the appliance corresponds to the mains voltage provided on site.

1.3 Water treatment

In order to use our appliances under the best conditions, the following parameters must be respected: free chlorine: max. 2.5 mg/l, total bromine: max. 5.5 mg/l, pH between 6.9 and 8.0. If chemical or electrophysical disinfection systems are used, the installer and user must contact the supplier to ensure they are compatible with our materials. These systems must be installed after the heating system.

2. DESCRIPTION

2.1 Presentation

Contents after unpacking:

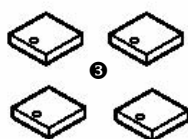
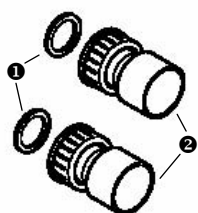
The unit with its instructions, warranty card



Note: inside the appliance you will find a sachet of accessories. To extract it, see paragraph 4.1 of these instructions.

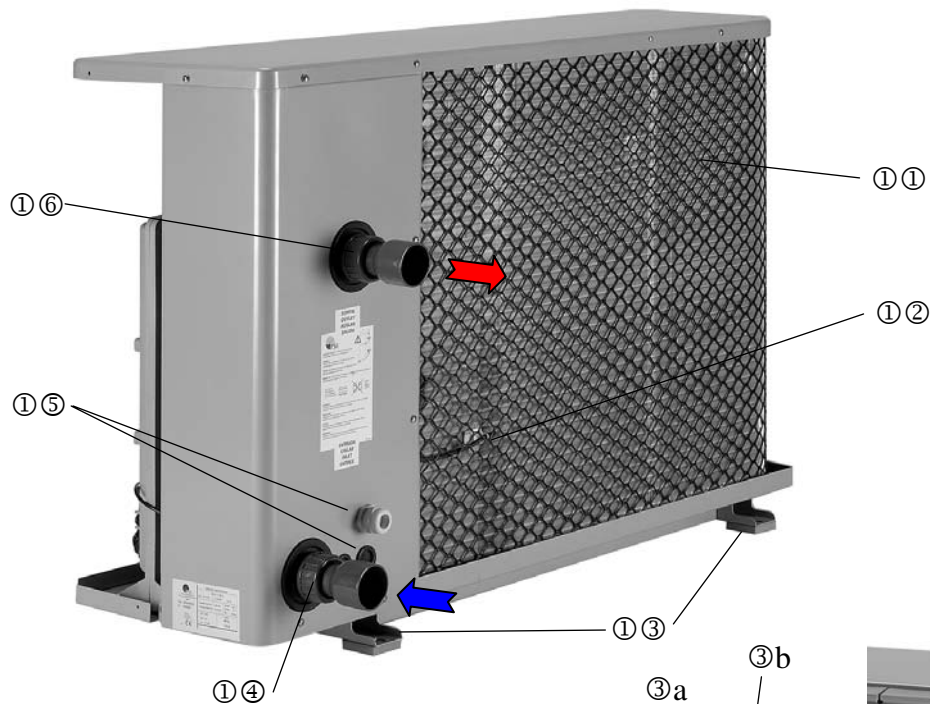
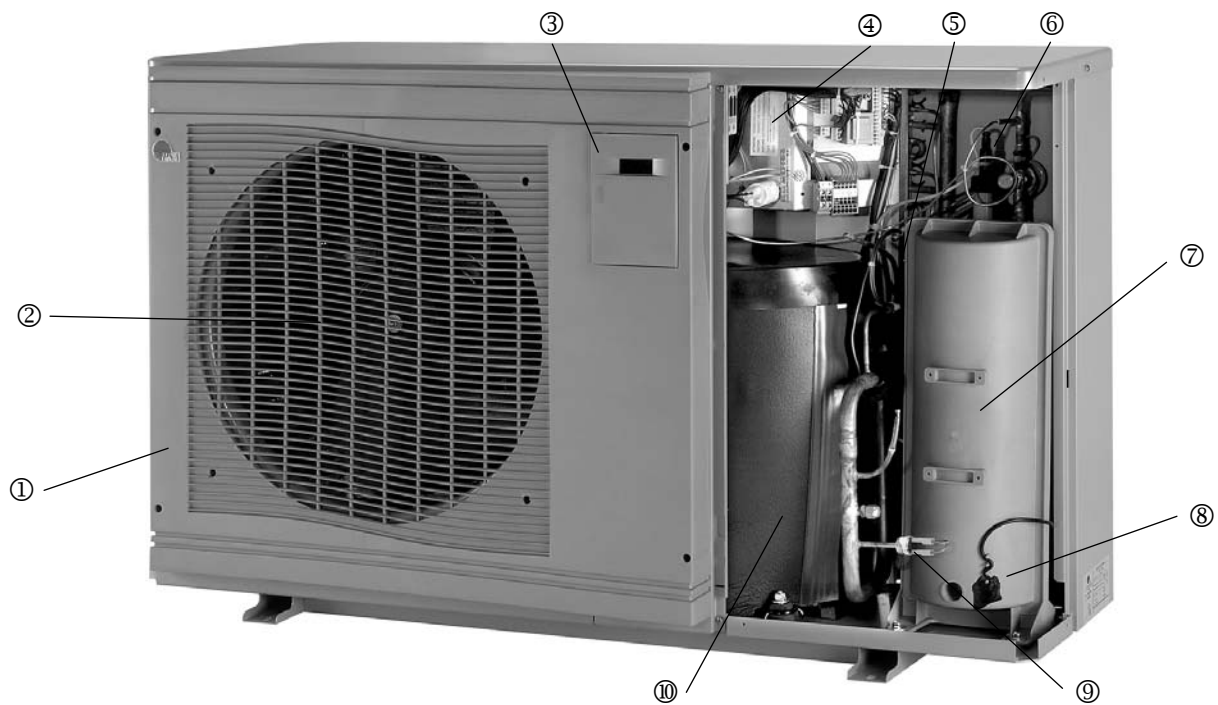
Content of sachet:

two half-union connectors Ø50 with strap **2** + two sealing rings **1** - four silent blocks **3**
a grooved elbow union **5** - a plastic cap **4** - four anchor bolts and dowels **6** (only supplied with double fan unit).



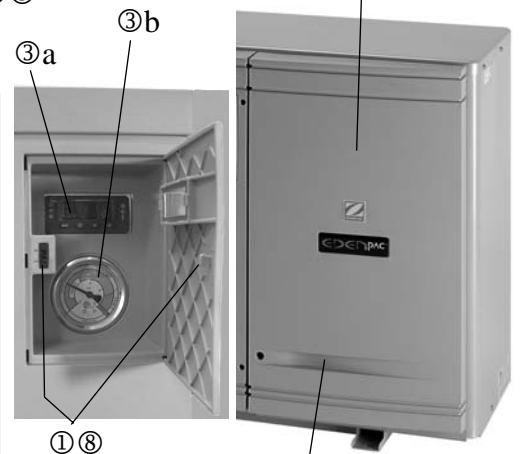
**Must be installed
with a double fan
machine**

2.1.1 Edenpac 1, 2, 3, 4 and 5



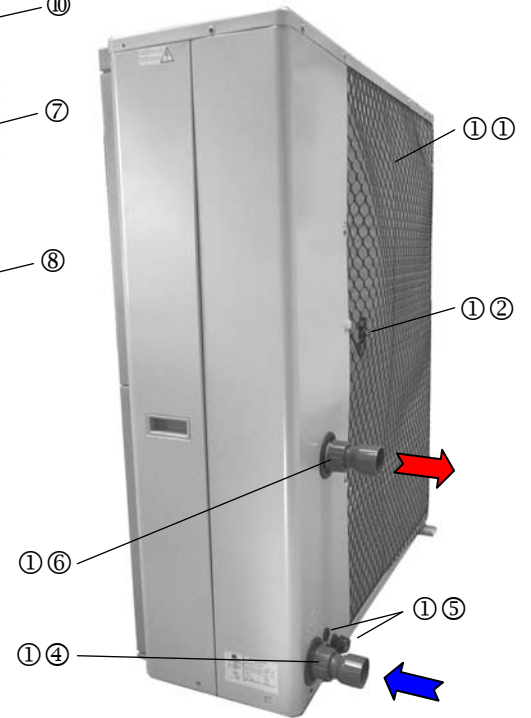
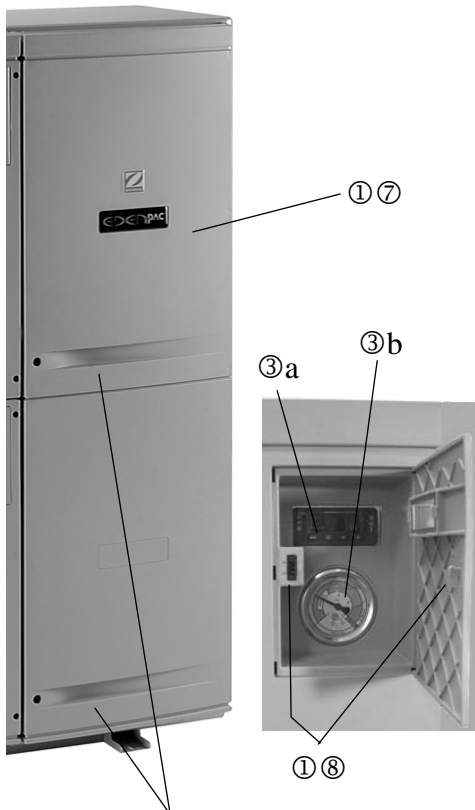
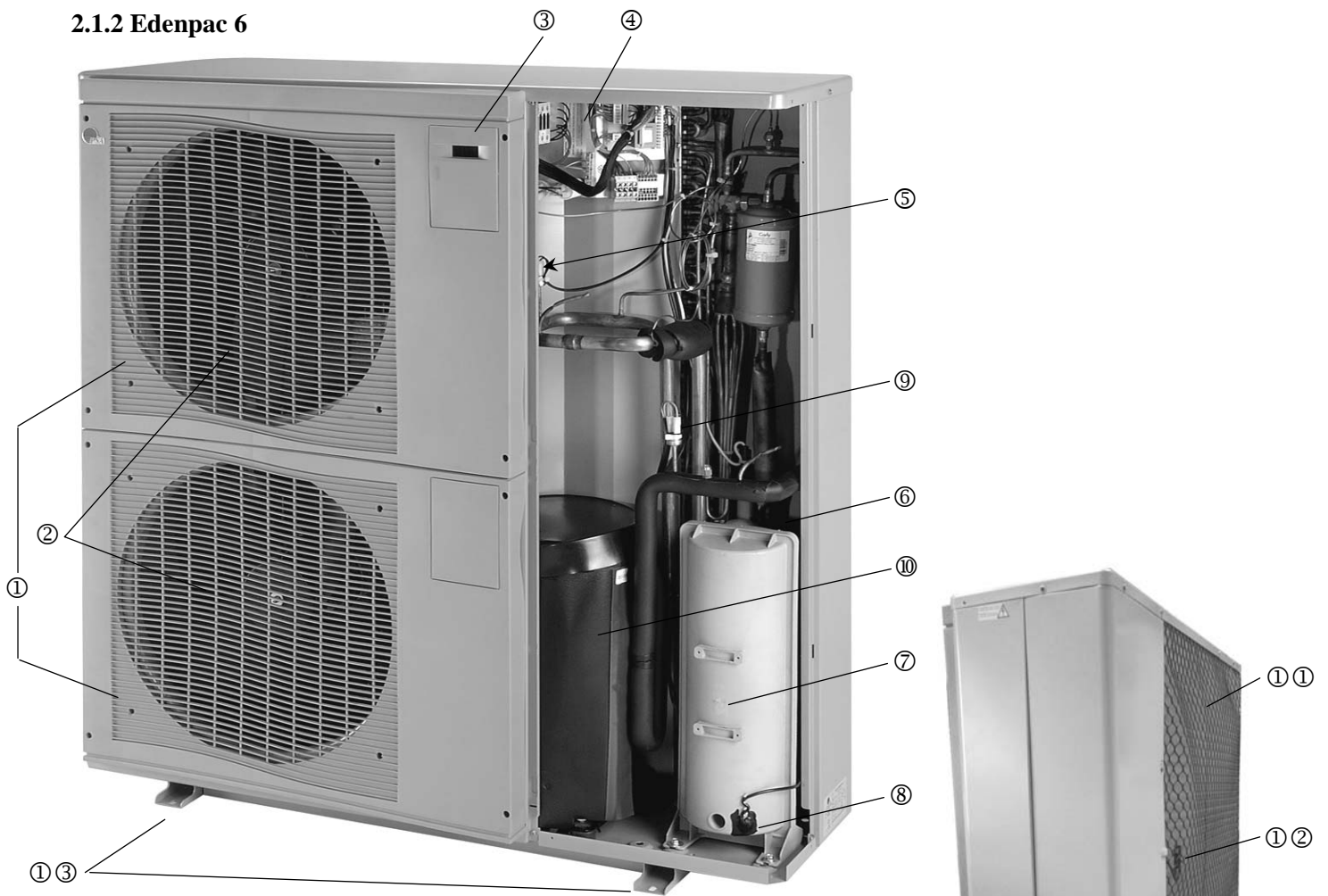
- ① Front panel with polypropylene grid.
- ② Motor fan unit.
- ③ Access flap to digital regulator ③a (Euro α FK) & and pressure gauge "water flow" ③b (measures the refrigerant pressure in the HP circuit and is used to regulate the water flow-rate).
- ④ Electric board.
- ⑤ HP pressure switch.
- ⑥ Flow switch.
- ⑦ TITANIUM condenser .
- ⑧ Control sensor.
- ⑨ LP pressure switch.
- ⑩ Cased SCROLL compressor

- ①① Arched "plate fin" evaporator.
- ①② Anti-frost sensor.
- ①③ Fastening plates (with silent blocks).
- ①④ Pool inlet water connection (40/49 male screw fastening).
- ①⑤ Packing gland (and/or cable inlet).
- ①⑥ Pool outlet water connection (40/49 male screw fastening).
- ①⑦ Removable polypropylene panel to access the technical compartment.
- ①⑧ Closing snap clips.



Attention! never use the panel reinforcement as a load-bearing support .

2.1.2 Edenpac 6



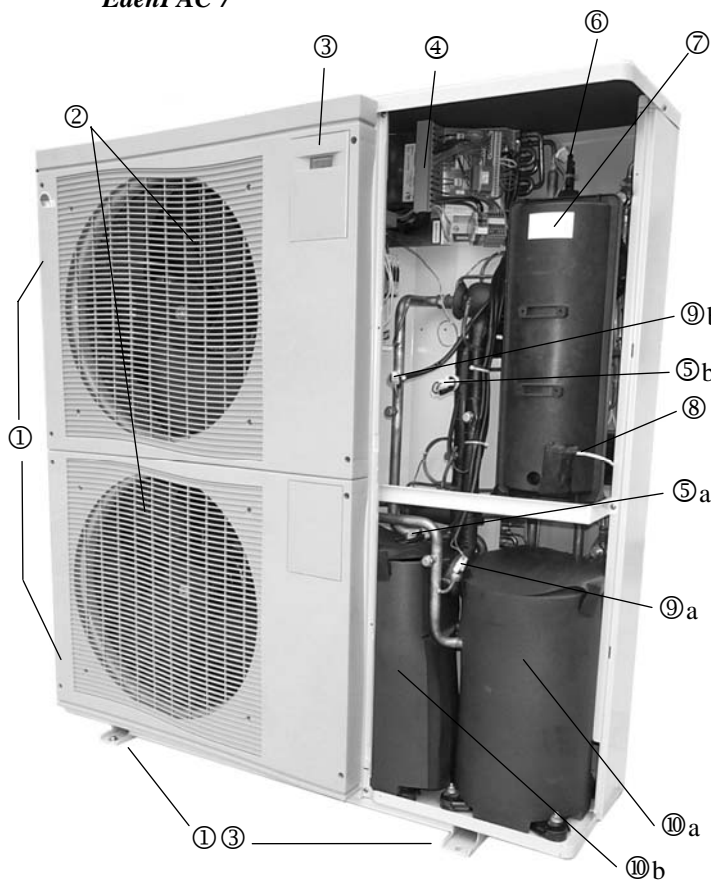
Attention! never use the panel reinforcement as a load-bearing support .

- ① Top and bottom panels with polypropylene grid.
- ② Motor fan unit.
- ③ Access flap to digital regulator ③a (Euro α FK) & and pressure gauge "water flow" ③b (measures the refrigerant pressure in the HP circuit and is used to regulate the water flow-rate).
- ④ Electric board.
- ⑤ HP pressure switch.
- ⑥ Flow switch.
- ⑦ TITANIUM condenser.
- ⑧ Control sensor.
- ⑨ LP pressure switch.
- ⑩ Cased SCROLL compressor

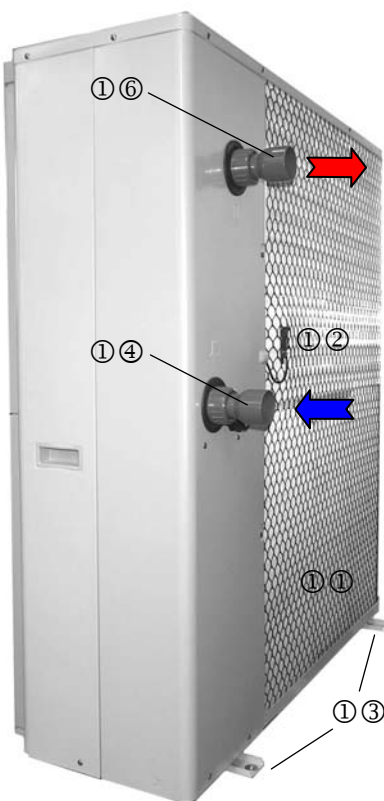
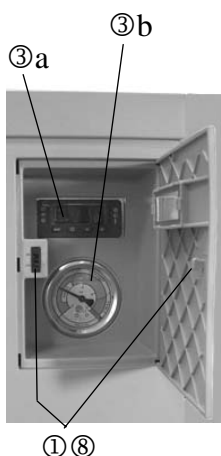
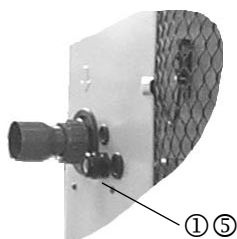
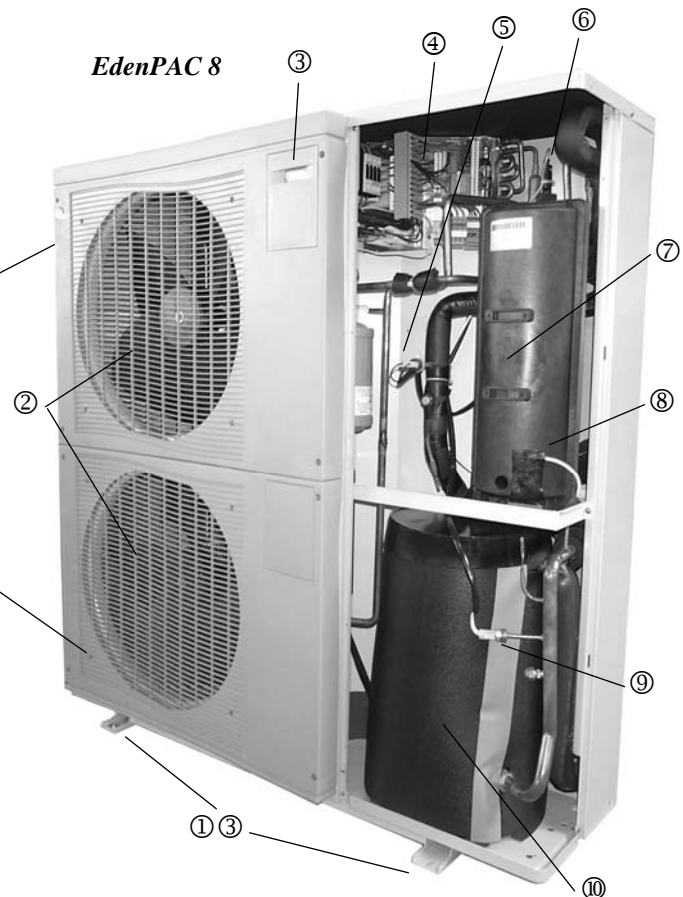
- ①① Arched "plate fin" evaporator.
- ①② Anti-frost sensor.
- ①③ Fastening plates.
- ①④ Pool inlet water connection (40/49 male screw fastening).
- ①⑤ Packing gland (and/or cable inlet).
- ①⑥ Pool outlet water connection (40/49 male screw fastening).
- ①⑦ Removable polypropylene panel to access the technical compartment.
- ①⑧ Closing snap clips.

2.1.3 Edenpac 7 and 8

EdenPAC 7



EdenPAC 8

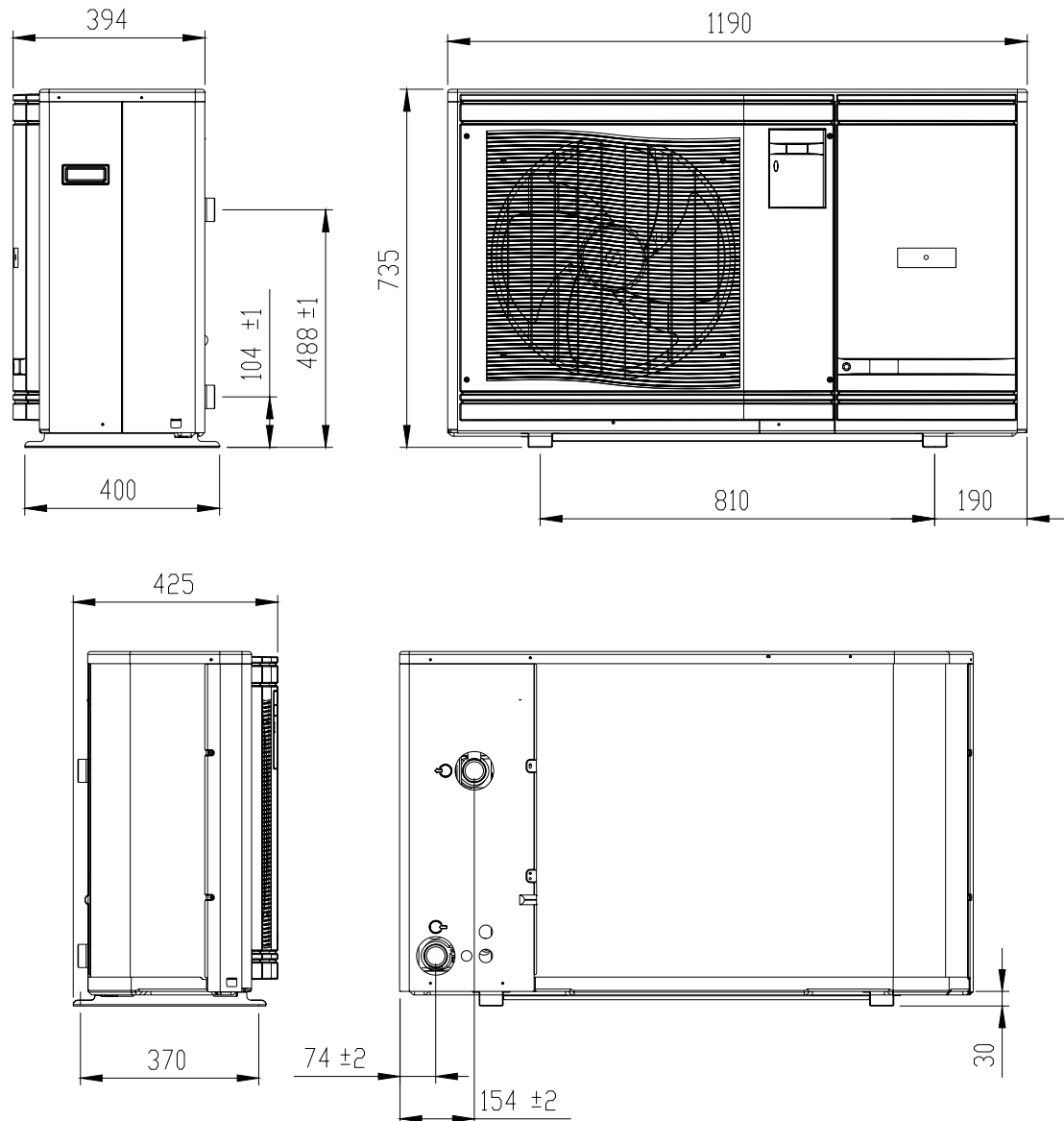


Attention! never use the panel reinforcement as a load-bearing support .

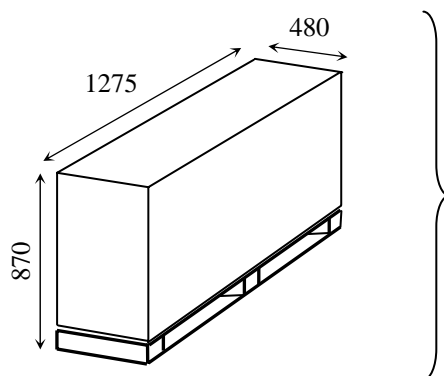
- ① Top and bottom panels with polypropylene grid.
- ② Motor fan unit.
- ③ Access flap to digital regulator ③a (Euro α FK) & and pressure gauge "water flow" ③b (measures the refrigerant pressure in the HP circuit and is used to regulate the water flow-rate).
- ④ Electric board.
- ⑤ HP pressure switch.
- ⑤a HP pressure switch (with compressor N°1).
- ⑤b HP pressure switch (with compressor N°2).
- ⑥ Flow switch.
- ⑦ TITANIUM condenser.
- ⑧ Control sensor.
- ⑨ LP pressure switch.
- ⑨a LP pressure switch (with compressor N°1).
- ⑨b LP pressure switch (with compressor N°2).
- ⑩ Cased SCROLL compressor
- ⑩a Cased SCROLL compressor N°1.
- ⑩b Cased SCROLL compressor N°2.
- ①① Arched "plate fin" evaporator.
- ①② Anti-frost sensor.
- ①③ Fastening plates.
- ①④ Pool inlet water connection (40/49 male screw fastening).
- ①⑤ Packing gland (and/or cable inlet).
- ①⑥ Pool outlet water connection (40/49 male screw fastening).
- ①⑦ Removable polypropylene panel to access the technical compartment.
- ①⑧ Closing snap clips.

2.2 Dimensional characteristics

2.2.1 Edenpac 1, 2, 3, 4 and 5



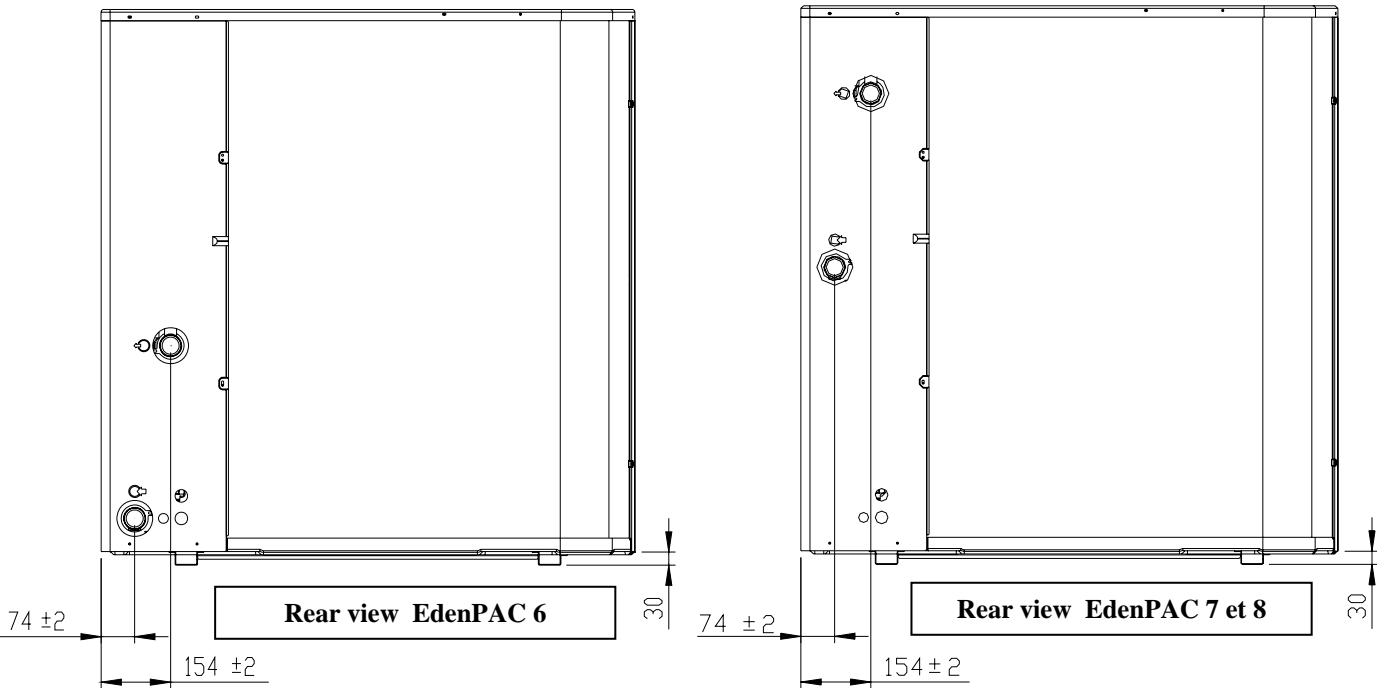
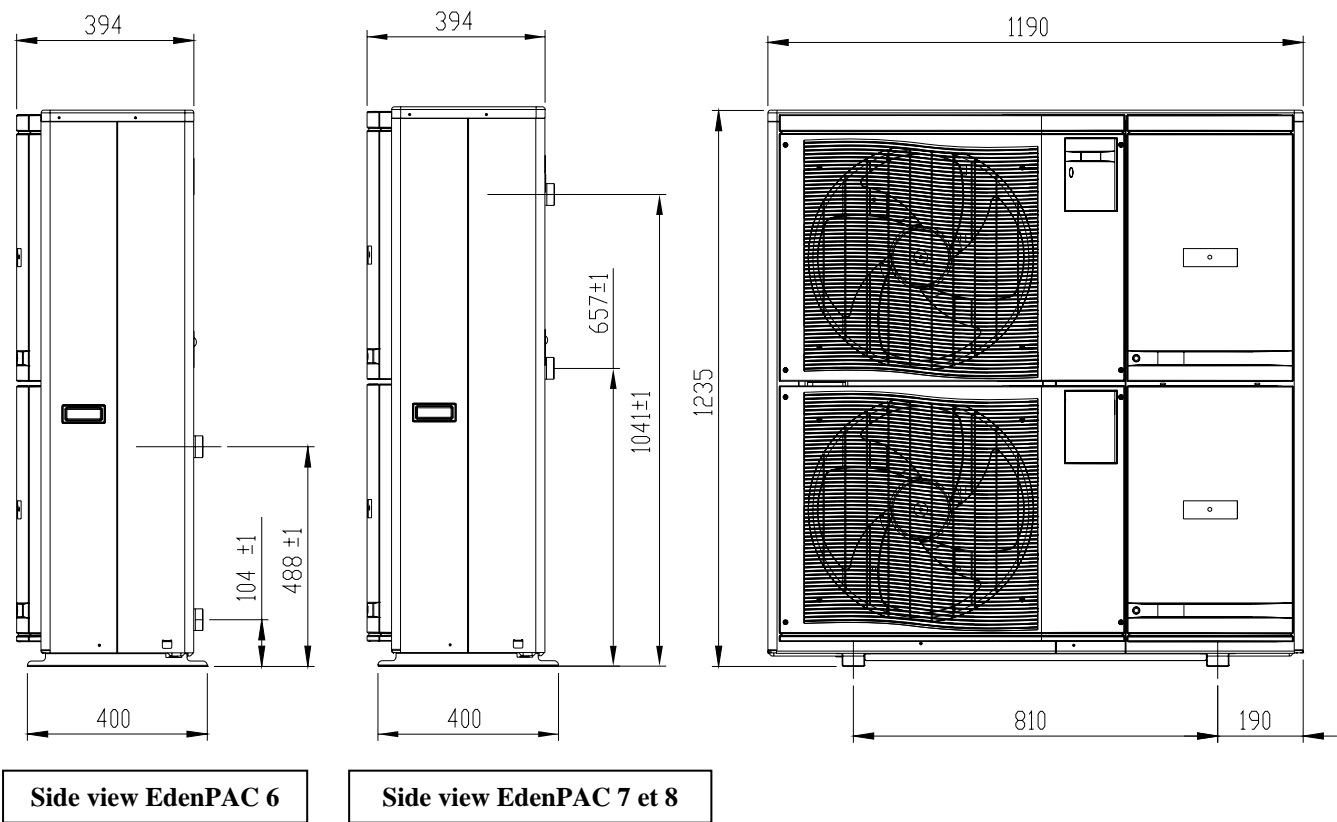
Dimensions of the appliance with packaging (in mm) :



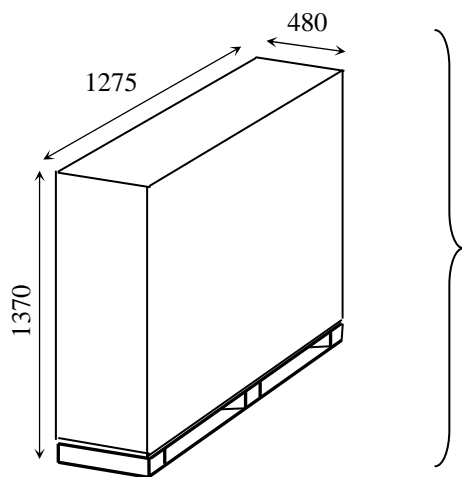
To be transported upright in its original packaging close to the installation site.

Weight of Edenpac 1 with packaging : $\cong 96$ kg
Weight of Edenpac 2 with packaging : $\cong 98$ kg
Weight of Edenpac 3 with packaging : $\cong 101$ kg
Weight of Edenpac 4 - 5 with packaging : $\cong 110$ kg

2.2.2 Edenpac 6, 7 and 8



Dimensions of the appliance with packaging (in mm) :



To be transported upright in its original packaging close to the installation site.

Weight of Edenpac 6 with packaging: \cong 145 kg
Weight of Edenpac 7 with packaging: \cong 175 kg
Weight of Edenpac 8 with packaging: \cong 170 kg

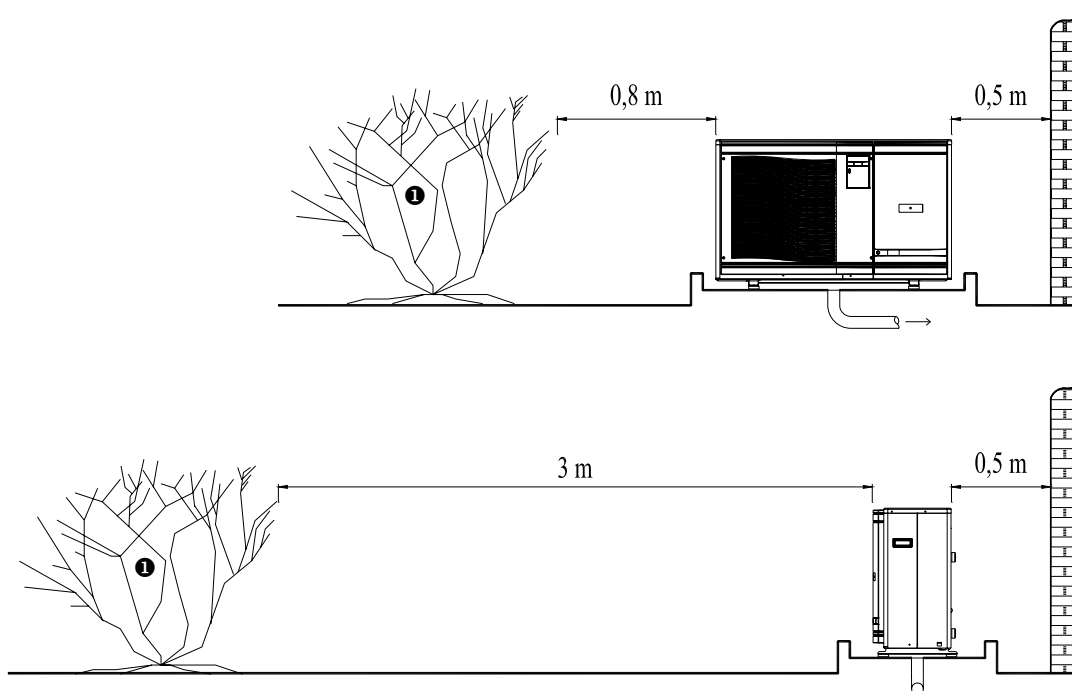
3. INSTALLATION

Tools required for installation :

- 1 set of flat head screwdrivers
- 1 set of crosshead screwdrivers
- 1 cutter
- 1 wire stripper
- 1 pipe or round head spanner 13
- 1 ratchet spanner
- 1 pliers
- 2 straps (for handling)

Choose the appliance installation site according to the following criteria:

- **the appliance must be installed outdoors**
- the clearance around the appliance must be respected
(see minimum dimensions on the drawings below) to avoid recycling of cold air produced.



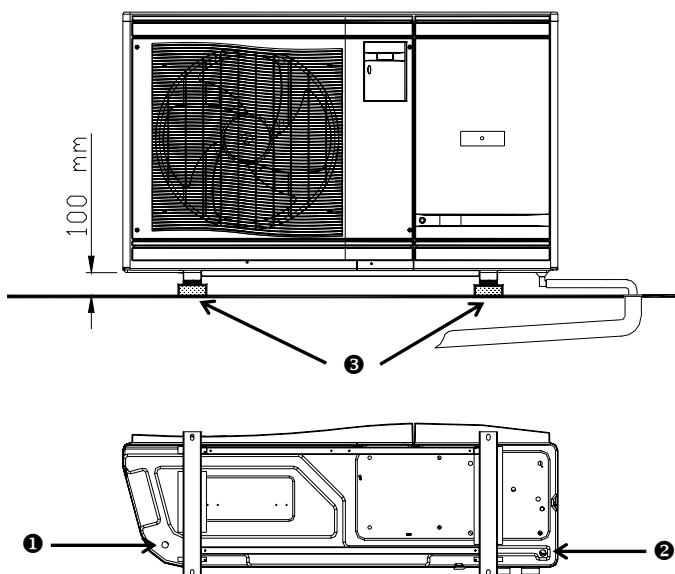
❶ Dense obstacle (hedge, wall, fencing).

- the installation must be simple and allow for easy maintenance interventions.
- the appliance must be installed on a solid base (fastening centre distance 810 x 370) and protected against flooding (using a « concrete » base with drain facility for condensation or installation of an additional condensation evacuation kit placed at your disposal in the accessories sachet). The silent blocks supplied must be used, paying attention not to compress them too much when tightening the fastening screws .

To use the additional condensation evacuation kit:

- Use the grooved elbow union and cap.
- The tank is equipped with two evacuation holes, one for the cap ❶ and the other for the grooved elbow union ❷ (their position is interchangeable).

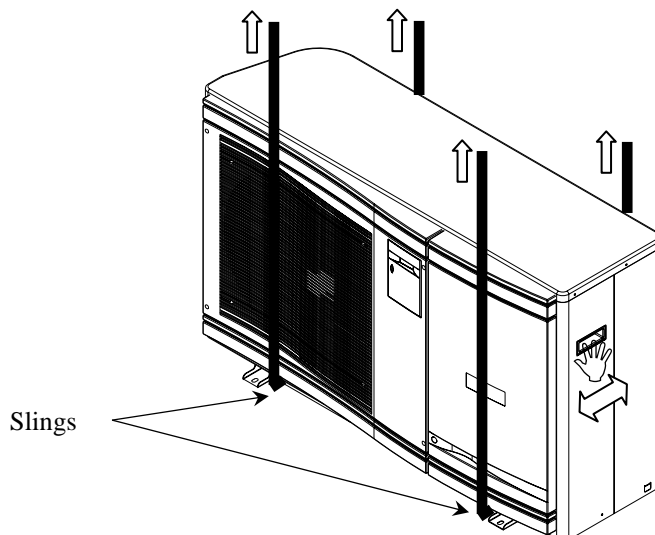
Note: To facilitate installation raise the unit 100 mm above the ground with the additional blocks ❸ made of a hard, water-resistant material (not supplied).



- the appliance must be level to allow for the gravitational evacuation of possible condensation produced during operation.
- the blower must not be directed towards surrounding windows.
- vibrations and noise must not be transmitted to a building close by.
- the heat pump must be installed at a minimum distance from the end of the pool, as defined by the applicable national electrical standards. In France, standard NF C 15 100 (section 702) specifies that the appliance must not be installed less than 2 metres from the pool or water reserve, but may be installed between 2 and 3.50 metres if there are not water jets. In the contrary case, respect a minimum distance of 3.5 metres.

Attention ! :

- Do not lift the appliance by picking it up at the front and/or the water inlet/outlet points. Use 2 lifting slings (not supplied) placed on either side of the appliance (see drawing below). The handle on the right side may be used only to help with the final positioning of the appliance.



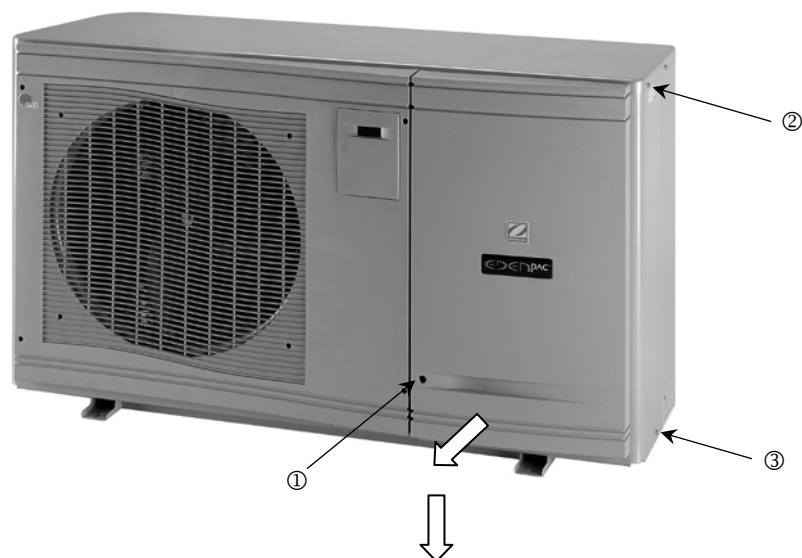
- Do not install the heat pump close to an inflammable gas source.
- Do not install the heat pump close to a road or path to protect the appliance against mud splashing.
- Avoid places that are subject to strong winds, in particular if the wind blows against the appliance's air outlet.
- The installation as well as electric and hydraulic connections must be carried out in compliance with applicable standards, in particular standard NF C 15 100 for France (equivalent to CE I 364) .
- Keep the appliance out of reach of children.

4. CONNECTIONS

4.1 Access to the electric card

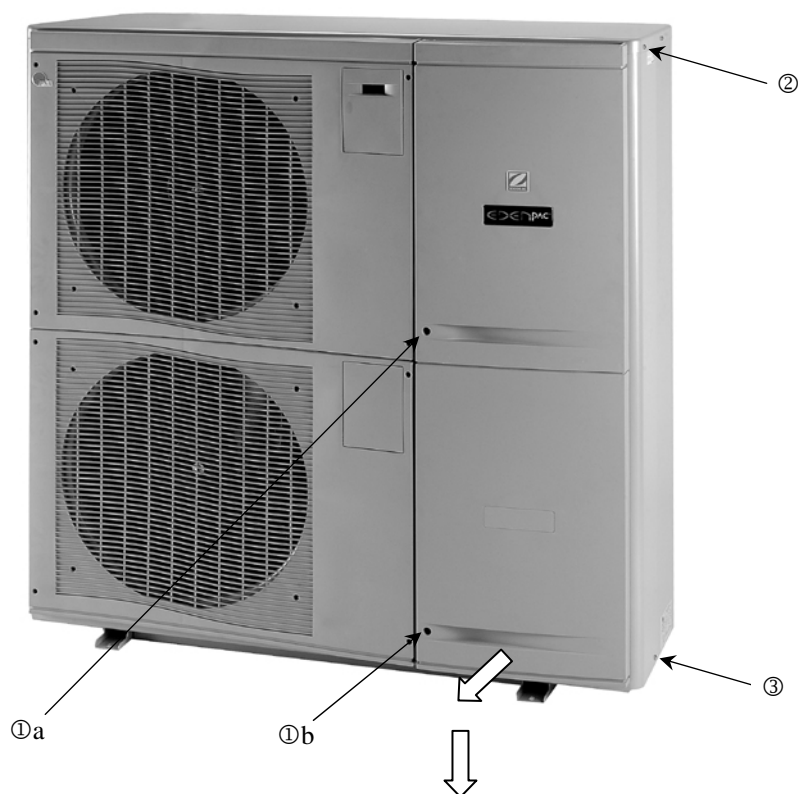
4.1.1 Edenpac with single fan

- Turn the clips ① ¼ turn clockwise on the front panel using a flat head screwdriver.
- Unscrew the 2 screws ② and ③ on the right side using a cross head screwdriver.
- Slide the entire front panel forward and then down.





4.1.2 Edenpac with double fan

- Turn the 2 clips ①a and ①b in the front ¼ turn clockwise using a flat head screwdriver.
- Unscrew the 2 screws ② and ③ on the right side using a cross head screwdriver.
- Slide the entire front panel forward and then down.



4.2 Hydraulic connections

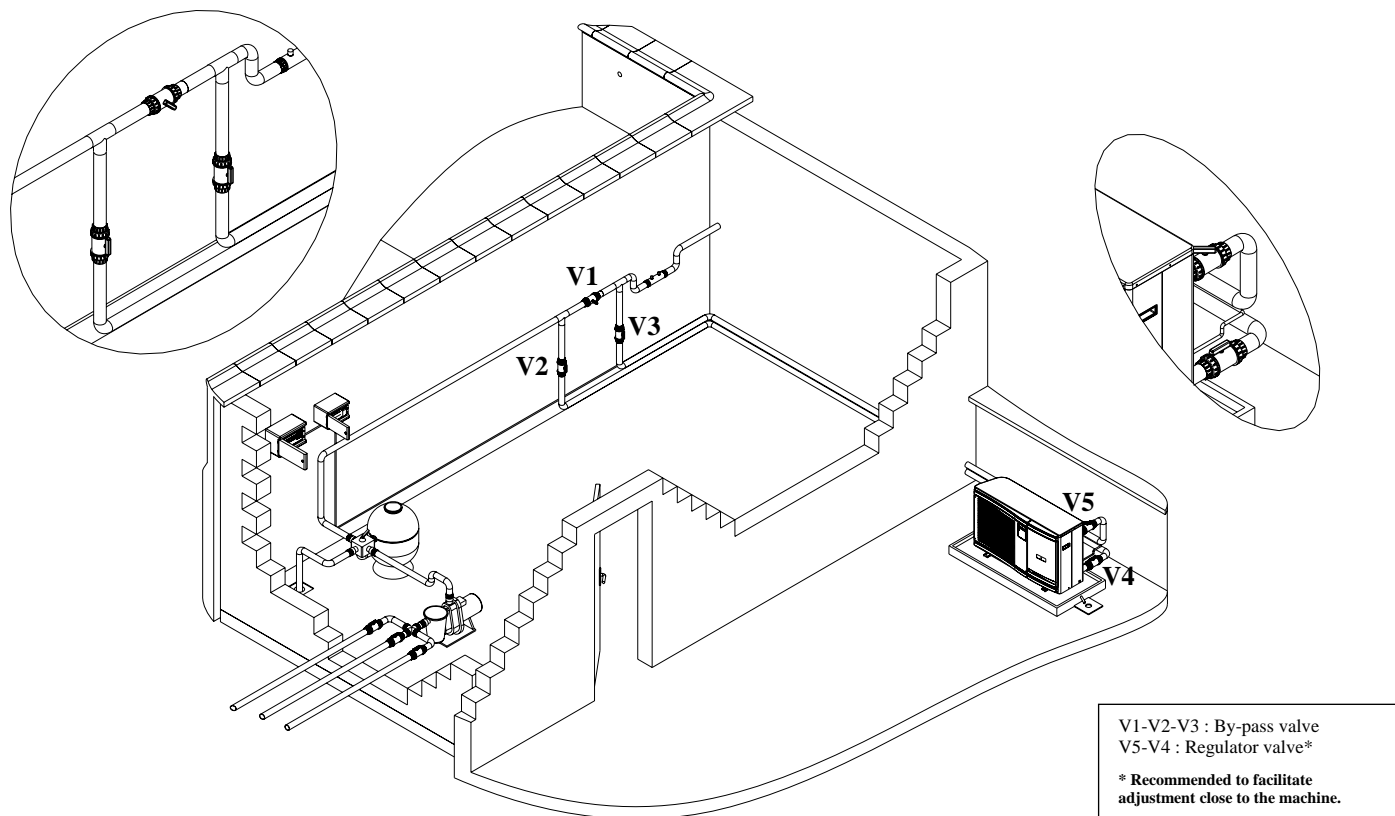
Connect the appliance's PVC Ø 50 hose water inlet and outlet (according to symbols) to the removable fittings provided with the heat pump. See symbols :  for **inlet** and  for **outlet**.

Connection is established with a by-pass on the pool filtration circuit after the filter and before the water treatment device (see diagrams below).

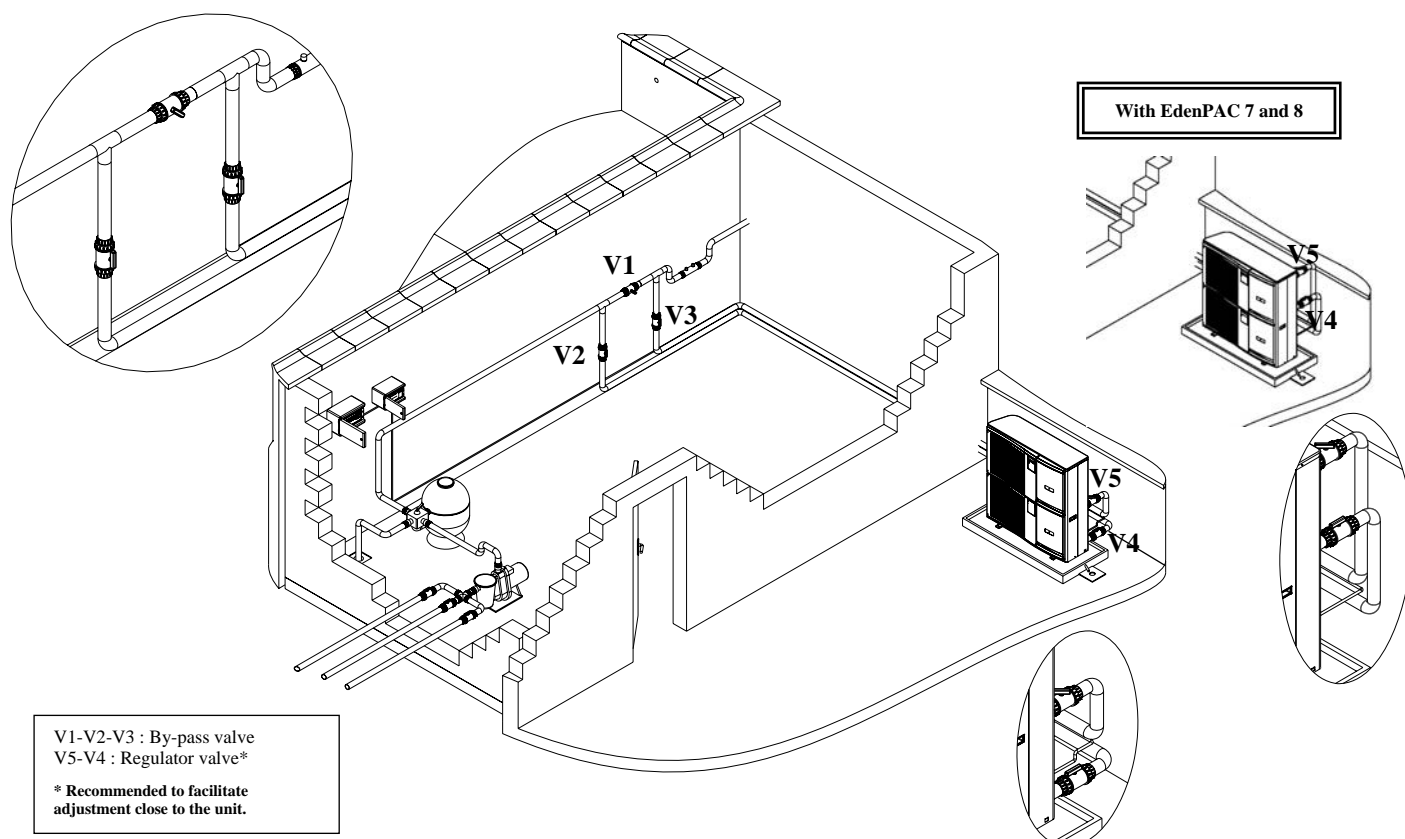
- Hydraulic circuit test pressure: 3 bars

- Hydraulic circuit operating pressure: 1.5 bar

Edenpac 1,2,3,4 and 5 : - Average water flow 3.8 to 6.5 m³/h- pressure drop 1.3 to 1.7 mCE (0.13 to 0.17 bar) –



Edenpac 6, 7 and 8 : - Average water flow 7.5 to 10 m³/h- pressure drop 1.1 to 1.3 mCE (0.11 to 0.13 bar) –



4.3 Electric connections

- The power supply of the heat pump must pass via a protection facility and circuit-breaker (not supplied) in compliance with applicable standards and regulations.

- The appliance is foreseen for connection to the mains circuit with TT and TN.S neutral connection (according to NF C 15-100 or national standards in force).

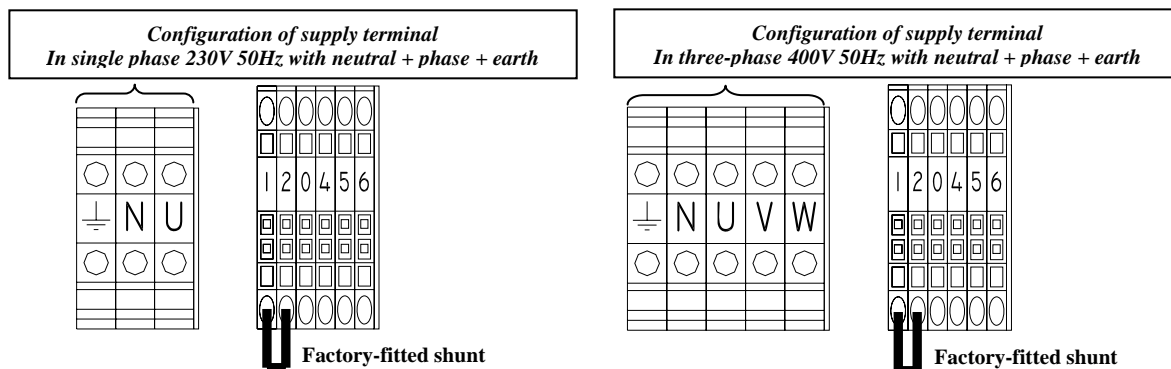
- Supply cable section :

** protection:

- Edenpac 8:	5 x 4 mm ² * (three-phase 400V/3N/50Hz)	⇔	25 A
- Edenpac 6:	5 x 2.5 mm ² * (three-phase 400V/3N/50Hz)	⇔	16 A
- Edenpac 5:	5 x 2.5 mm ² * (three-phase 400V/3N/50Hz)	⇔	12 A
- Edenpac 3:	5 x 2.5 mm ² * (three-phase 400V/3N/50Hz)	⇔	10 A
- Edenpac 7:	3 x 10 mm ² * (single-phase 230V/1/50Hz)	⇔	50 A
- Edenpac 4:	3 x 6 mm ² * (single-phase 230V/1/50Hz)	⇔	25 A
- Edenpac 3 :	3 x 4 mm ² * (single-phase 230V/1/50Hz)	⇔	20 A
- Edenpac 2 :	3 x 2.5 mm ² * (single-phase 230V/1/50Hz)	⇔	16 A
- Edenpac 1 :	3 x 2.5 mm ² * (single-phase 230V/1/50Hz)	⇔	16 A

* *This section is indicative and must be checked and adapted, if necessary, according to installation conditions .*

- Electrical protection: circuit breaker (curve D) or fuse (Am) delayed designed for motors adapted to the type of unit (see ** below) with a protection system by 30 mA differential on the incoming supply side (circuit breaker or switch).



Note:

- The acceptable voltage variation during operation is $\pm 10\%$
- The cable ways and ducts must be fastened.
- Only use **cable suitable for outdoor use**.
- Use the packing glands and cable inlets to feed the cables into the unit.

Optional remote control functions:

Remote On/Off start up

The terminals 1 and 2 of the Edenpac heat pump enable a remote start up by means of a switch or any other device. The heat pump is supplied with a jumper between these terminals. If this function is used, the jumper shall be removed. Otherwise it shall be kept.

Remote failure light

In order to indicate in a technical facility that the heat pump is failing, terminals 0 and 4 provide a signal that can be connected to a light or an alarm (230 V).

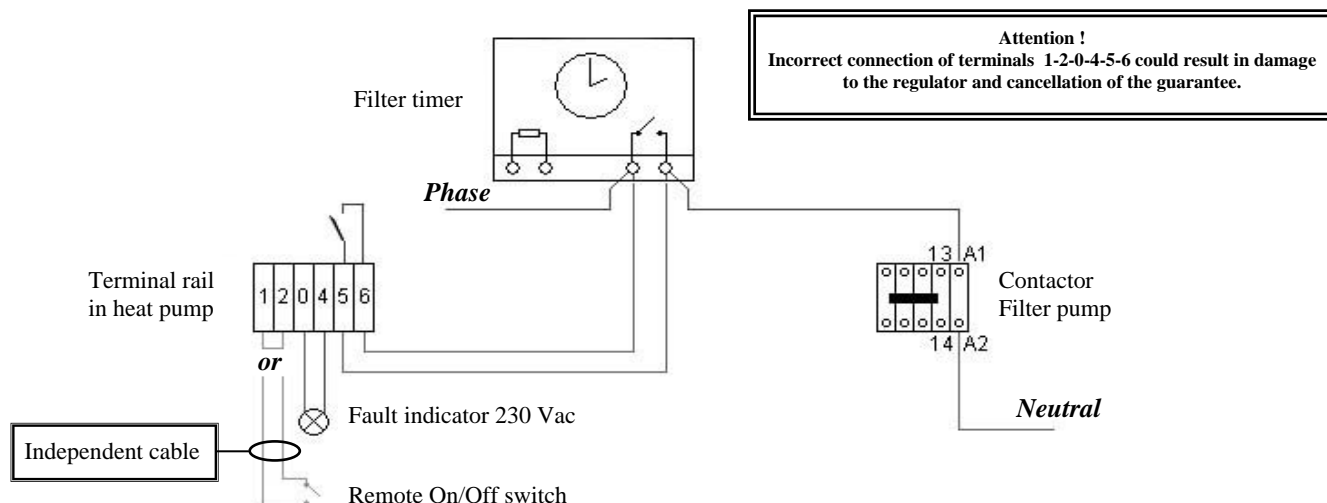
Priority to heating

A heating device, whatever it is, is designed to heat the water of the pool only when the water circulates. Most of the time, a pool is filtered between 6 and 8 hours a day. But such a time can't be sufficient sometimes to maintain the water at the desired temperature, depending on the seasons. This is the reason why the Edenpac, like all models of PSA's range, is equipped with the "priority to heating" function that will manage the temperature of the pool, taking itself the time to do it without caring of the scheduled time of operation of the filtration.

Terminals 5 and 6 shall be connected to the terminals of the filtration timer (see attached diagram). Every hour, the contact between 5 and 6 is going to be closed, starting up the filtration for 5 minutes. If after 5 minutes, the temperature of the water is over the required temperature, the filtration shuts off for one more hour. Otherwise, the

filtration and the heat pump are going to keep on operating until the desired temperature is reached. By this mean, the user is sure the water is always ready for bath, at day or at night.

If this option is not used, the heat pump will operate only while the filtration runs.



- It is possible to connect a remote control module ⁽¹⁾ (with display) . To do this use terminals : 34-35 (signals Tx-Rx) and 36-37 for 12 Vac supply of the interface A1 card.

Important :

To connect the remote On/Off⁽²⁾ functions, fault and warning functions for filter start up, use cables with a section of at least 1mm². Packing glands and cable inlets are available for passage of these cables into the unit.

To connect the remote module⁽¹⁾ (max. distance = 50 m) use a shielded cable of 4x0.75 mm² minimum (connected to the earth harness in the heat pump).


⁽¹⁾ module available as an **optional extra**.

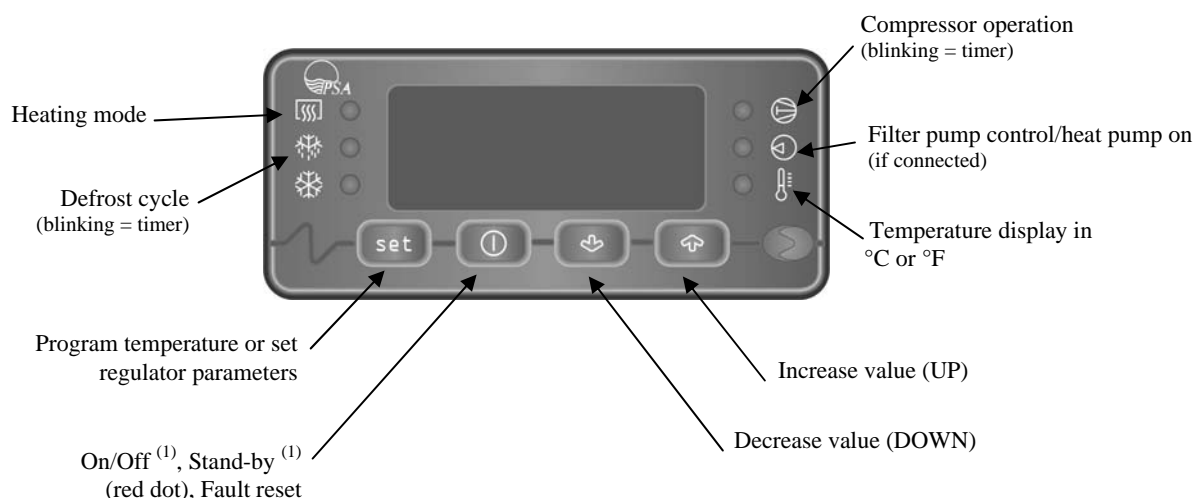
⁽²⁾ it is essential to use an independent cable for connection of this function (terminals 1 and 2).

5. REGULATOR OPERATION

5.1 Presentation

The **Euro α FK** setting thermostat with digital display is supplied fitted in the appliance, electrically connected and pre-set in the factory for swimming pool heating.






Setting principle: a control sensor placed at the water inlet side of the heat pump measures the temperature in the pool and compares it to the target temperature. If the water temperature becomes or is lower than the target temperature, the regulator unit authorises heating after a set time of 180 seconds, the Led  blinks and then remains on.






⁽¹⁾ Stop operation in Heating mode.

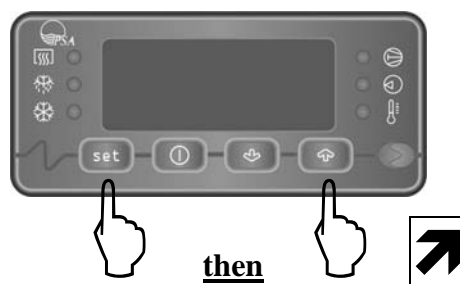
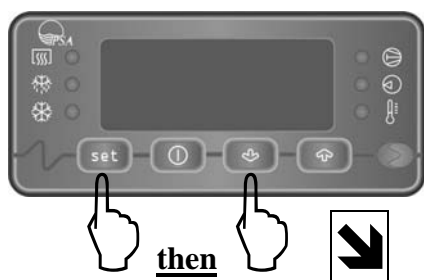
Remarks :

- when a defrost cycle is in progress, it ends with maintaining ventilation except if the ambient temperature drops below +5°C or if filtration is stopped (J1 open).

- in the case where the unit requests heating (Leds  and  on or  on and  blinking) led  remains on (contact 5-6 closed) for 120 s then switches off (contact 5-6 open).

5.2 Setting the target temperature

Press and hold the  key to display the target temperature, press the key  to increase or  to decrease the temperature. Then release both keys to return to the display of the water temperature.



Note:

The maximum target temperature is limited to **32°C** in order to protect the swimming pool liner. This high target may, however, be modified by the installer, but at his own responsibility.

6. STARTING UP

* Technical characteristics:

Appliance	Power consumption*	Power restored*	Rated current consumption*	Max. current consumed	Coolant R410A	Acoustic power	Acoustic power at 10 m	Net weight
EDENPAC 1 Single phase	1,8 kW	8,5 kW	7,8 A	13,5 A	650 g	65,5 dBA	37,5 dBA	86 kg
EDENPAC 2 Single phase	2,04 kW	10 kW	9,8 A	15 A	850 g	66,5 dBA	38,5 dBA	87 kg
EDENPAC 3 Single phase	2,42 kW	12 kW	13 A	16 A	1100 g	66,5 dBA	38,5 dBA	90 kg
EDENPAC 3 Three phase	2,46 kW	12 kW	5,8 A	7 A	1100 g	66,5 dBA	38,5 dBA	90 kg
EDENPAC 4 Single phase	3,15 kW	15 kW	15,2 A	19 A	1600 g	67,4 dBA	39,4 dBA	94 kg
EDENPAC 5 Three phase	3,22 kW	16 kW	6 A	9 A	1500 g	70 dBA	42 dBA	99 kg
EDENPAC 6 Three phase	4,02 kW	21 kW	7 A	11 A	3000 g	71,5 dBA	43,5 dBA	130 kg
EDENPAC 7 Single phase	4,8 kW	24 kW	26 A	45 A	2 x 1200 g	70 dBA	42 dBA	165 kg
EDENPAC 8 Three phase	5,5 kW	28,5 kW	10 A	18 A	3800 g	71,6 dBA	43,6 dBA	160 kg

* With ambient air at + 15°C and pool water at 24°C

- Appliance protection index: **IP 24**.
- Refrigerant gas type: **R410A**.

* Heat pump operating conditions:

- The outside temperature must be higher than +5°C (automatic shut-off by anti-frost sensor SD2) and below +38°C.
- A sufficient water flow must pass into the heat pump.

Note: The heat pump stops heating the pool when it starts a defrost cycle that can occur when surrounding air temperature is between 5 and 12°C. The operation of the compressor is interrupted but the fan keeps running, according to the information provided by the defrost sensor SD3 which is factory-set to -10 °C in the refrigeration circuit. As soon as this temperature increases to 3 °C, the fan switches off and a 120 to 300 second time period starts (depending on the compressor stoppage time) before the fan and compressor restart simultaneously.

Possible **traces of humidity** at the base of the unit are due to normal condensation of the water vapour in the air or due to the defrost cycle in progress (phenomenon visible if **the additional condensation evacuation kit** is not used).

6.1 Check







- that the hydraulic connections are correctly tightened.
- that there is no water leak.
- that the appliance is stable (with a level gauge and spirit level).
- that the cables are correctly connected to their terminals. *Incorrectly tightened cables may cause overheating of terminals.*
- that the cables cannot be damaged by sharp metal sheets or elements.
- the earth connection.
- that no tools or other objects have been left inside the appliance.

6.2 Start up the heat pump

- Switch on the heat pump power supply protection device located inside the filter control cabinet.
- Start filtration.
- Set the by-pass and setting valves* as follows:
 - Valve V1 slightly closed to increase the filter pressure from 150 to 200g (0.15 to 0.20 bar).
 - Valve V2 fully open.
 - Valve V3 fully open.
 - Valve V4 fully open.
 - Valve V5 half closed.

* see paragraph 4.2.

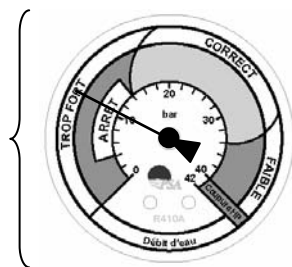
If the valves (V4 & V5) are not present, set valve V2 to fully open and valve V3 to half closed.

- Check that the swimming pool water hydraulic circuit has been vented.
- Start the heat pump if it is in stand-by mode (red dot) by pressing , ON appears on the display for a period of 5 s before displaying the water temperature.
- Set the target temperature ( +  or  + ) => if the pool should be heated: Led  blinks and then remains on after approx. 2 to 3 minutes max. and the heat pump starts.

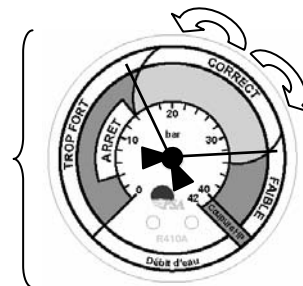
Note : with an EdenPAC 7 single-phase unit, the compressors start up one after the other (the N°1 then N°2) in 36 second intervals.

5 min. after re-start of the heat pump (fan + compressor), check the water flow pressure gauge display and set valve V3 or V5 in order to bring the needle into the green zone (beginning of season { cold water } : position at the start of the green zone).

Normal position of the pressure gauge needle when the appliance is off (compressor and fan(s) OFF). Attention ! this position may vary slightly in the « ARRET » zone depending on water and ambient air temperatures.



Normal position of the pressure gauge needle when the appliance is in operation (compressor and fan(s) ON). The position range in the « CORRECT » zone may vary depending on water and ambient air temperatures, or even attain the « LOW » zone when the water flow going into the unit is too low.





Reminder: If, when setting the by-pass and setting valves, the flow rate is less than 1.5 m³/h the heat pump will not function (the flow switch remains open and the regulator displays the message AId alternating with the water temperature). Adjust the setting valves : -V5- (if present) or -V3- and -V1-.

When the heat pump is running :

-If the flow rate switch switches on or off for a period longer than or equal to 3 s, a timer of 130 seconds* min. is activated before the unit starts again.

* *For information* this time period may increase during a defrost cycle or if the compressor stop time is less than 180 s.

-In case of a power failure, a timer of 125 seconds starts when the power supply is restored before the unit starts again.

Observation: When the water attains the target temperature (Leds  and  off) the heat pump switches off automatically.

Reminder:

The 3-phase heat pump is equipped with a phase order control system (**KA1**) used to check that the phase order is correct at start up (and during operation) and to signal a phase order fault (regulator indicates dCP fault and the orange led **KA1** inside the unit is off. The green led remains on as long as phases L2 and L3 are present). In that event, **switch off and isolate the unit** and it is sufficient to invert two phase wires directly on the main supply terminal.

ATTENTION ! this operation must be carried out by a qualified and authorised professional


6.3 Checking


















Check that the heat pump stops heating when:

- the target temperature on the digital display thermostat is decreased.
- filtration is switched off or valve V2 or V4 closed.

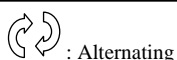
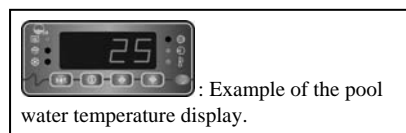
6.4 Troubleshooting


Faults :

Info: led  remains on for 120s after a fault is indicated (except in the case of a dC indication when the heat pump remains operational).

Message	Designation	Cause	Remedy	Reset	Alarm
	Control sensor fault	Sensor defective or disconnected	Replace or reconnect the sensor	Cut power supply or press button  if dSr starts blinking	YES (terminals 0-4)
	Anti-frost sensor fault	Sensor defective or disconnected	Replace or reconnect the sensor	Cut power supply or press button  if dSA starts blinking	YES (terminals 0-4)
	Defrost sensor fault	Sensor defective or disconnected	Replace or reconnect the sensor	Cut power supply or press button  if dSd starts blinking	YES (terminals 0-4)
	Low pressure fault in refrigerating circuit	Insufficient refrigerant	Consult a PSA-approved technician to look for leaks and refill refrigerant	Automatic (if less than 4 faults within an hour) or by pressing the button  if dbP starts blinking	YES - if more than 4 faults within one hour - (terminals 0-4)
	High pressure fault in refrigerating circuit	1- Water and air mixture passing in the appliance 2- Refrigerant overload	1- Purge hydraulic circuit 2- Consult a PSA-approved technician to check the refrigerant level	Automatic (if less than 4 faults within an hour) or by pressing the button  if dHP starts blinking	YES - if more than 4 faults within one hour - (terminals 0-4)
	Phase order fault (only on three-phase heat pumps)	1- Incorrect wiring at unit supply terminals 2- Modification of phase order by electrical supplier 3- Temporary failure of one or several phases	1- Check wiring at unit supply terminals 2- Contact your local electricity supplier to ensure no modifications have been made to your supply	Cut power supply or press the button  if dCP starts blinking	YES (terminals 0-4)
	Defrost cycle Time Out	Incorrect signal from the defrost sensor or defrost cycle too long (> one hour)	Consult a PSA-approved technician to check the sensor and operation of the defrost cycle.	Cut power supply or press the button  if dtd starts blinking (after stand by 'Ofir5 => .' and switch the regulator on again by pressing )	YES (terminals 0-4)
	EEPROM fault	Incorrect parameter data in the regulator EEPROM	Consult a PSA-approved technician to replace the regulator	Cut off power	YES (terminals 0-4)
	Connection fault	Remote control module (optional) incorrectly connected or declared present for the regulator but in reality absent	Consult a PSA-approved technician and refer to the installation instructions of the remote control module	Automatic	NO

The states :



Info: led  remains on for 120s after the status signal (except in the case of a defrost cycle with the remote On/Off function (Cad) and SD3 < 3°C).

Message	Designation	Cause	Remedy	Reset	Alarm
	Flow switch open for more than 3 s.	1- Filter pump is off (filter timer is outside the operating time limit) 2- Insufficient water flowing through the unit 3- Flow controller damaged or disconnected	1- Wait for the programmed filter time period * Test possible in mode : filtration « manual » 2- Adjust the BY-PASS * Filtration on 3- Change or reconnect the flow controller	Automatic after timer	NO
	Remote control ON/OFF.	Remote control on OFF (Contact open)	1- Switch the remote control to ON (Contact closed) 2- Contact a PSA-approved technician to check the cable linking the remote control box to the unit	Automatic	NO
	Anti-frost safety triggered	Outside temperature too low (< +5°C)	Wait for natural rise of outside temperature	Automatic	NO
	Anti-frost protection heater is on	Outside temperature too low (< +3°C) with compressor OFF	Wait for natural rise of outside temperature	Automatic	NO

6.5 Winter storage

- Press the button to switch the regulation to «stand-by», is displayed for 5 s before a small red dot appears.
- Close the valves V2 and V3 of the BY-PASS.
- Open valves V4 and V5 next to the unit (if present).
- Drain the water condenser (**RISK OF FROST**) by unscrewing the two pool water inlet and outlet unions on the side of the heat pump.
- Lightly retighten the two unions to avoid any risk of foreign bodies entering the condenser.
- Do not hermetically seal the unit (risk of condensation). A special-purpose ventilated cover is available (optional accessory provided by PSA).

Incorrect winter storage automatically cancels the GUARANTEE.

7. MAINTENANCE INSTRUCTIONS

Tasks to be carried out by a qualified and authorised person:

The following operations must be carried out at least once a year:

- Clean the evaporator at the back of the heat pump (with a soft brush and gentle water spray).
- Never use a high-pressure cleaner for this operation -
- Check the settings.
- Check safety devices.
- Check the presence of refrigerant (check the pressure gauge needle with the compressor switched off).
- Check sealing of the cooling circuit on the EdenPAC 6 & 8.
- Check electrical connections and terminals (tighten the supply cable terminals).
- Check earth connections.
- Do not use solvents to clean the outside of your unit, PSA NET offers an optional specific cleaning kit.

IMPORTANT

Before working on the appliance, ensure that the power supply is disconnected and secured. All interventions must be carried out by persons who are qualified and authorised to work on this type of equipment .

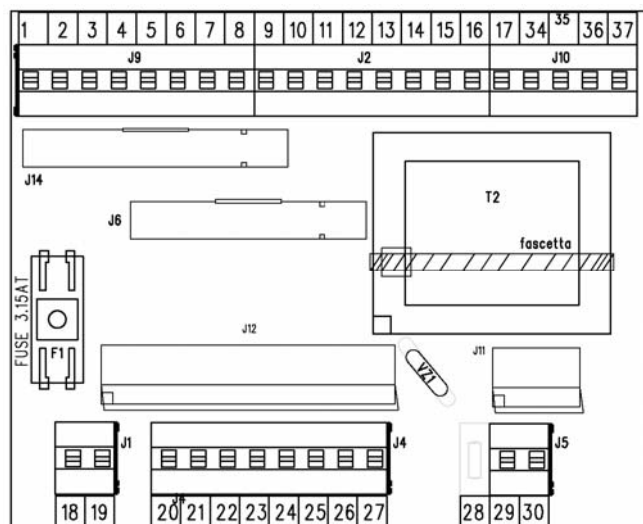
8. RECYCLING THE PRODUCT

Please refer to the paragraph with the



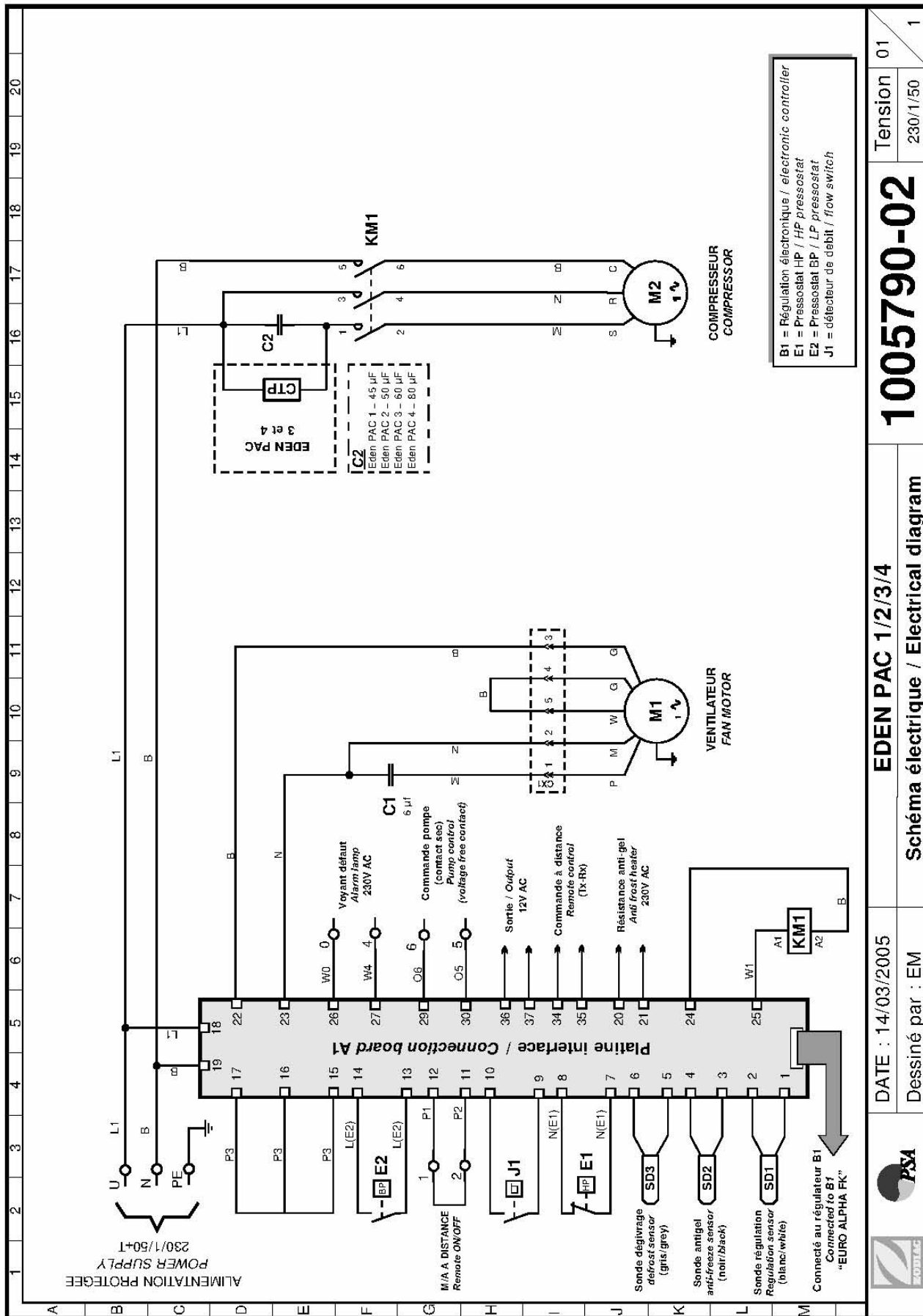
symbol at the end of the instructions.

9.1 Electrical diagram of connection interface card.



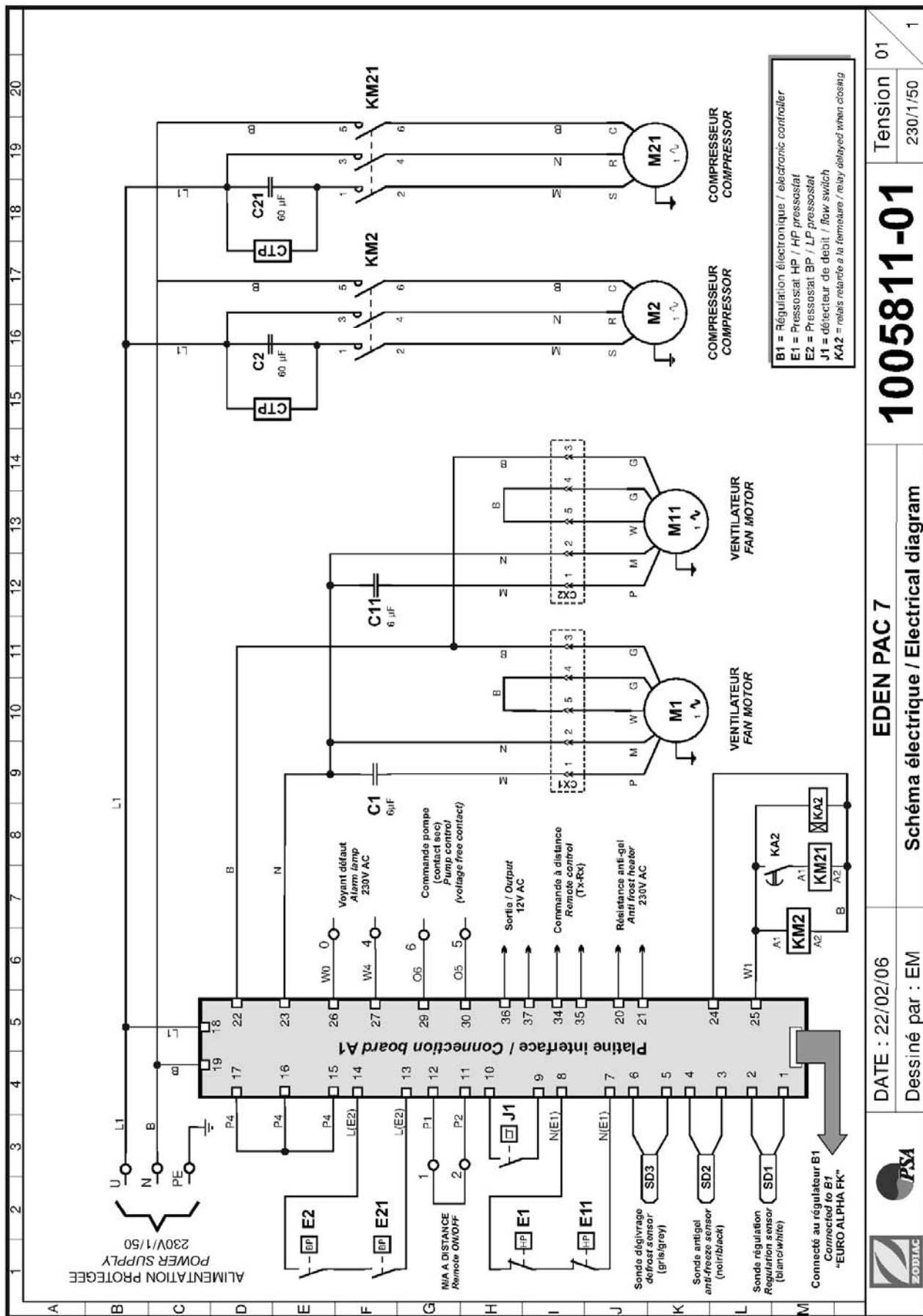
To J11 and J12

9.2 Electrical diagram EdenPAC single-phase.



IMPORTANT

Elimination or shunting of one of the safety or remote control devices automatically cancels the GUARANTEE.



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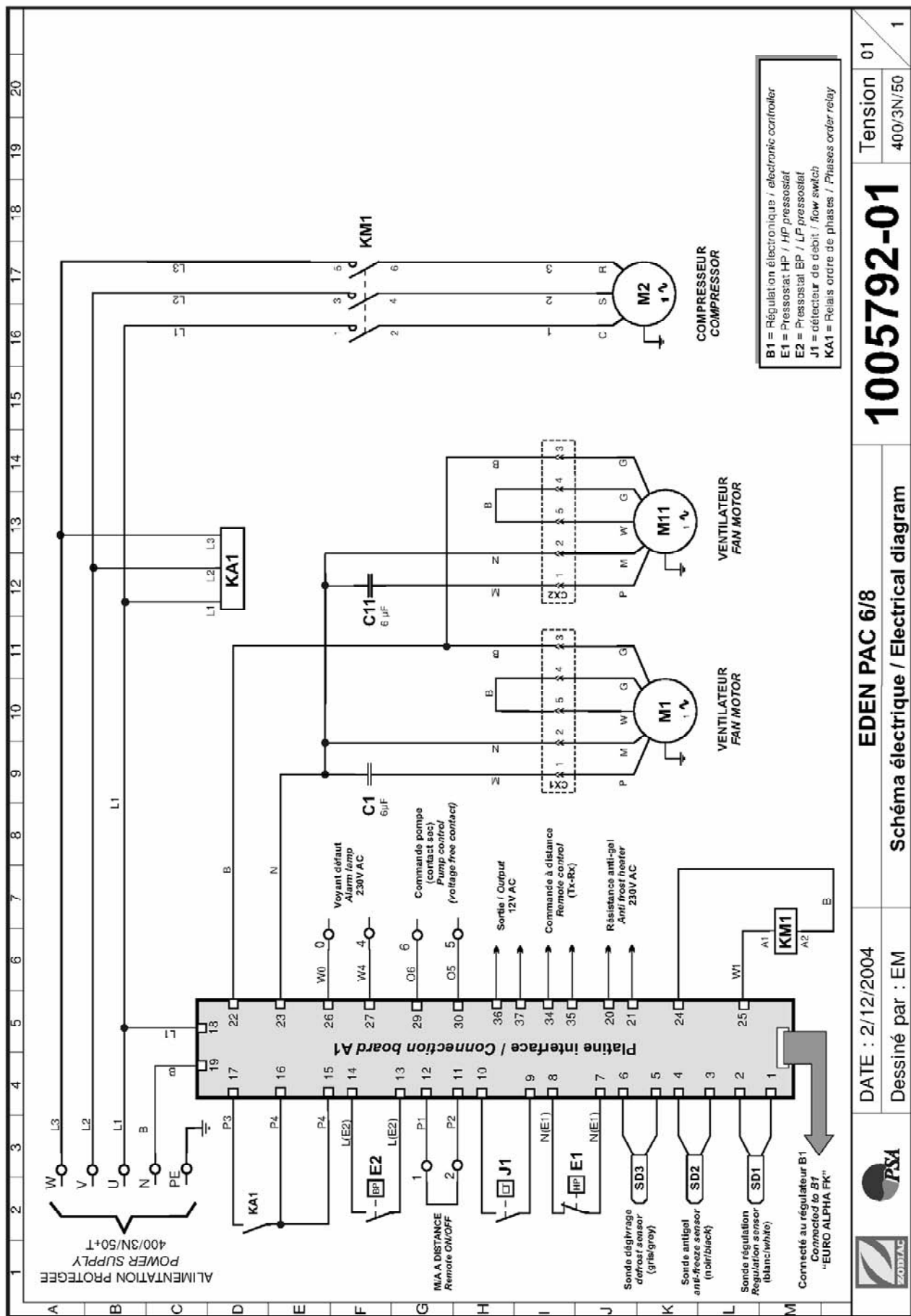
IMPORTANT

Elimination or shunting of one of the safety or remote control devices automatically cancels the GUARANTEE.

IMPORTANT

Elimination or shunting of one of the safety or remote control devices automatically cancels the GUARANTEE.





IMPORTANT

Elimination or shunting of one of the safety or remote control devices automatically cancels the GUARANTEE.

With an aim to improving its products, PSA reserves the right to modify the characteristics without prior notice

- Edition 04/07 -



Your appliance is reaching the end of its working life. You would like to get rid of it or replace it.
Please do not throw it into the dustbin or into your local council's selective sorting containers.

When this symbol appears on a new appliance, it means that the equipment must not be thrown away and that it will be collected selectively so that it can be reused, recycled or recovered. Any substances it may contain which are potentially dangerous to the environment will be eliminated or neutralised.

You can give it to a community association who will be able to repair it and put it back into circulation.

If you buy a new one, you can take the old one to the store or ask the delivery man to take it back.

This is known as a **"One-for-One"** exchange.

Otherwise please take it to a waste collection centre, if your local council has set up a selective collection system for these products.



Handwriting practice lines consisting of 20 horizontal dashed lines.

Handwriting practice lines consisting of multiple horizontal dashed lines on a white background.

Handwriting practice lines consisting of multiple horizontal dashed lines on a white background.

ADDITIONAL RECOMMENDATIONS
In relation with the Pressurised Equipment Directive (PED-97/23/CE)

I. Installation and maintenance

- Before beginning any installation, commissioning, operation or maintenance work, the persons responsible for these tasks must have read and understood all instructions and recommendations contained in the unit installation instructions as well as in the project technical file.
- The person responsible for final acceptance of the unit must carry out a visual inspection to detect any damage the unit may have suffered during transport: refrigeration circuit, electrical enclosure, frame and casing.
- The unit may not be installed close to:
 - a heat source
 - combustible materials
 - the air duct outlet of an adjacent building.
- For certain appliances, it is essential to fit protection grids if the unit is installed in an area which is unprotected and easily accessible.
- The appliance may only be installed, commissioned, serviced and repaired by properly qualified persons in accordance with directives, laws, valid regulations and acceptable professional practice.
- During installation, repair and maintenance work, it is strictly prohibited to step on pipes and hoses as these could break and the escaping refrigerant could cause serious scalding.
- When servicing the appliance, the composition and state of heat carrying fluid must be checked, as well as the absence of any refrigerant.
- During the annual unit sealing test in accordance with valid legislation, the high and low pressure switches must be checked to ensure they are securely fastened to the refrigeration circuit and that they shut-off the electrical circuit when tripped.
- During maintenance work, ensure there are no traces of corrosion or oil around refrigeration components.
- Before beginning work on the refrigeration circuit, isolate the appliance and wait several minutes before removing the temperature or pressure sensors. Certain elements such as the compressor and associated piping may attain temperatures in excess of 100°C and high pressures with the consequent risk of severe scalding.

II. Repair

- All work on the refrigeration circuit must be carried out with total respect of valid safety regulations and acceptable professional practice: recuperation of refrigerant, nitrogen brazing, etc...
- All brazing work must be carried out by a qualified brazer/welder.
- In the case of units filled with R410A, refer to the specific indications in the installation instructions.
- This unit contains pressurized components, some of which may be manufactured by PSA, this is the case of piping elements. Only use the original spare parts indicated in the spare parts list to replace a defective refrigeration component.
- Replacement pipes must always be made of copper in compliance with standard NF EN 12735-1.
- Leak detection, pressure test:
 - never use oxygen or dry air, risk of fire or explosion
 - use dry nitrogen or the mixture of nitrogen and refrigerant indicated on the name plate
 - The test pressure for both the high and low pressure circuits must not exceed 42 bar.
- The high pressure circuit pipes are made of copper and have a diameter equal to or greater than 1"5/8. A certificate as indicated in §2.1 in compliance with standard NF EN 10204 will be requested from the supplier and filed in the installation technical documentation.
- The use of non-original spare parts, modifications to the refrigeration circuit, replacement of the refrigerant with a refrigerant type other than that indicated on the name plate, use of the appliance under conditions outside the application limits indicated in the associated documentation will result in a cancellation of the EC label and PED conformity and the person who carried out these modifications will be sole responsible for the consequences.
- The technical data relative to the safety requirements of the various applicable directives must be indicated on the name plate. **This data must be recorded in the unit installation instructions which are included in the installation technical file:**
 - Model – code – serial number
 - Max. and min. OT
 - OP
 - Year of manufacture
 - EC label
 - Manufacturer's address
 - Refrigerant and weight
 - Electrical parameters
 - Thermo-dynamic and acoustic performance.

CONFORMITY CERTIFICATE
EDENPAC SWIMMING POOL HEAT PUMPS



- Are fully compliant with:**
- **ELECTROMAGNETIC COMPATIBILITY directive 89/336/CEE**
 - **LOW VOLTAGE directive 73/23/CEE**

The following harmonised standards have been applied:

NF EN 60335.1
NF EN 60335.2.40

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Mondialement reconnu pour la qualité et la fiabilité de ses produits dans les secteurs de l'aéronautique et du nautisme, Zodiac engage son nom dans l'univers de la piscine pour vous offrir toute une gamme de piscines, nettoyeurs automatiques, systèmes de traitement d'eau, systèmes de chauffage et de déshumidification de piscines. En s'appuyant sur le savoir-faire technologique et l'expérience de PSA, Zodiac vous apporte la garantie d'appareils de très haut niveau tant dans leur conception que dans leurs performances.

Un véritable gage d'efficacité et de tranquillité !

Zodiac, mastering the elements.

Renowned worldwide for the quality and reliability of its products in the aeronautical and marine sectors, Zodiac has now brought its expertise to swimming pools, to bring you a full range of pools, automatic pool cleaners, water treatment systems, heating and dehumidification units.

Backed by PSA technology, expertise and experience, Zodiac brings you the reassurance of top quality equipment in terms of both design and performance.

A real guarantee of efficiency and peace of mind !



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Madame, Monsieur,

Nous vous remercions de votre confiance et vous souhaitons une excellente baignade à 28 °C ...

Merci de consacrer quelques minutes à remplir ce bon de garantie avec votre installateur ou/et la station service agréée PSA.

Vos coordonnées pourront être traitées conformément à la Loi Informatique et Libertés du 6 janvier 1978. Vous disposez d'un droit d'accès, de rectification ou de radiation des informations vous concernant qui pourra être exercé auprès de PSA- Groupe ZODIAC – Bd de la Romanerie – B.P. 90023 – 49180 St Barthélemy d'Anjou Cedex – France.

Dear costumer,

Thank you for trusting us and enjoy your bath at 28 °C ...

Please take a little time to fill in this guarantee form with your pool adviser.

Your details may be treated according to the law Informatique et civil rights dated 6th January 1978. You got rights to access, modification and cancellation of them that should be applied to PSA- Groupe ZODIAC – Bd de la Romanerie – B.P. 90023 – 49180 St Barthélemy d'Anjou Cedex – France.

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Coupon à conserver par l'utilisateur / copy to be kept by owner



BON DE GARANTIE / GUARANTY FORM

(A nous retourner impérativement, dûment rempli et signé, pour la prise sous garantie du matériel) (To be filled, signed and sent back to valid guaranty)



Type de matériel et n° de série / Type and serial number

--

Garantie / guaranty

Date de livraison / Delivery date : / / Date de mise en route / Date of start UP : / /

Négociation d'un contrat d'entretien / Maintenance contract : ☐ NON/NO ☐ OUI/YES
(Nbre d'années/Number of years :)

Utilisateur/Owner

Installateur/installer

Station service agréée PSA
/ Technical support

Nom :
/ Name
Prénom :
/First Name
Adresse :
Address
Tél. / Phone :
Fax :
Email :
Dimensions de votre piscine : m² - m³

Signature

Nom :
/ Name
Adresse :
Address
Tél. / Phone :
Fax :
Email :

Signature

Nom :
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Signature

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