INSTRUCTIONS 1008-J00 e

Section	1008
Effective	August 2015
Replaces	April 2015

Original instructions

Electric reheating
P BA Serie

Complement in the 1008-C00 instructions

INSTALLATION

OPERATION

MAINTENANCE

This MOUVEX Instructions provides assistance for installation but it is not, in any circumstances, intended to replace the specific Instructions of the relevant equipment suppliers.
Those Instructions must be read before fitting the equipment.

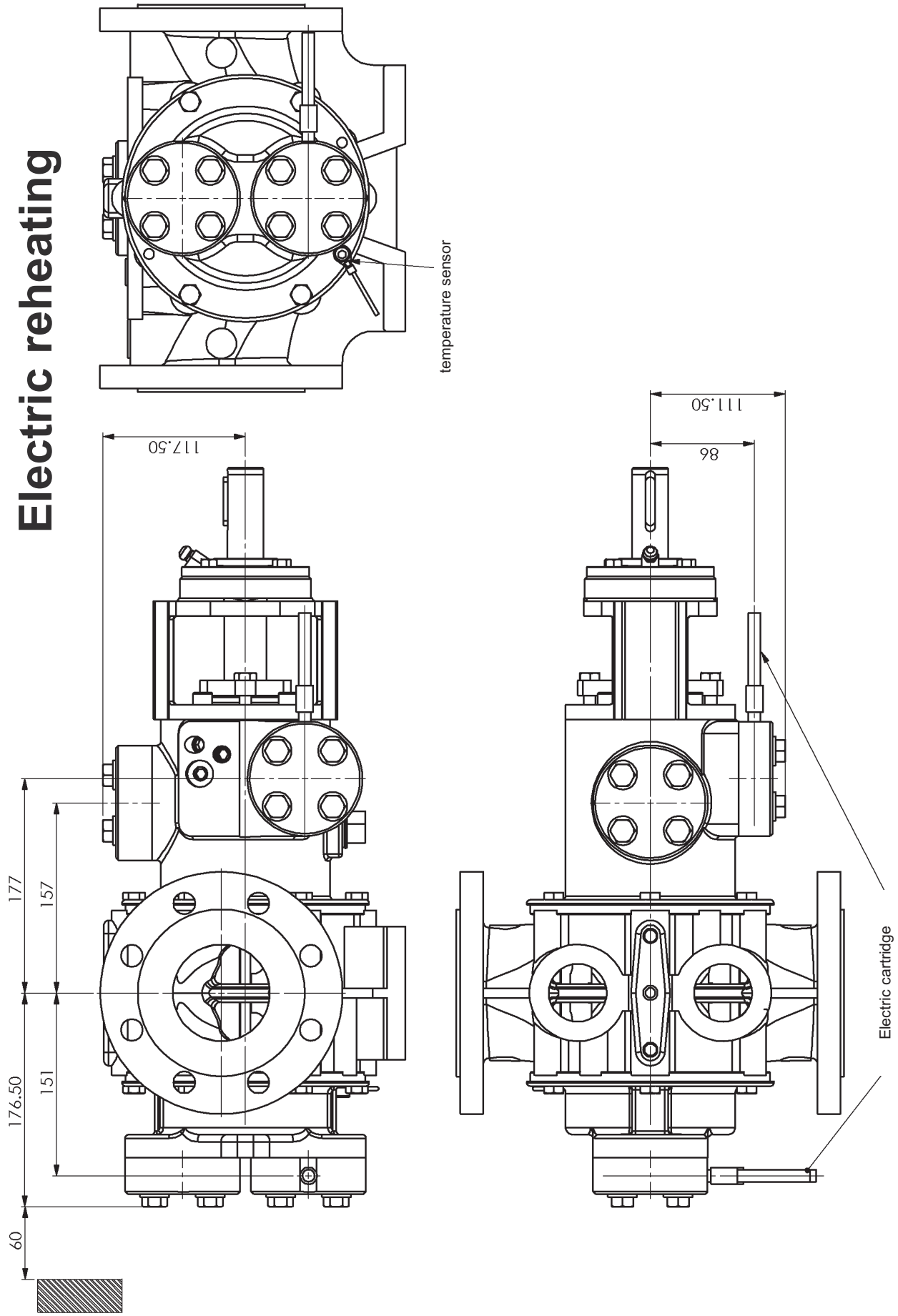
a DOVER company

Z.I. La Plaine des Isles - F 89000 AUXERRE - FRANCE
Tel. : +33 (0)3.86.49.86.30 - Fax : +33 (0)3.86.49.87.17
contact@mouvex.com - www.mouvex.com

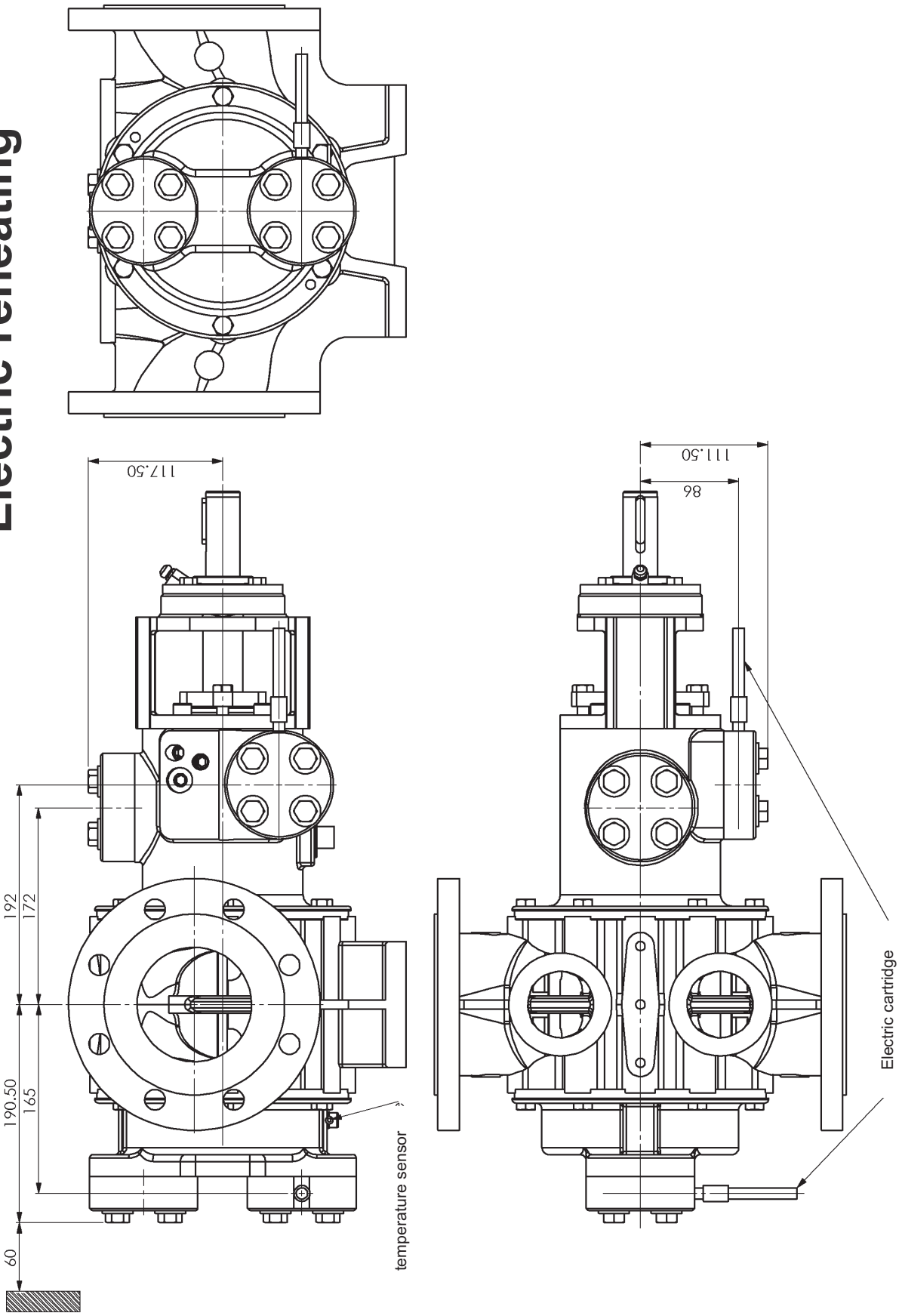
Your distributor :

1. OVERALL DIMENSIONS

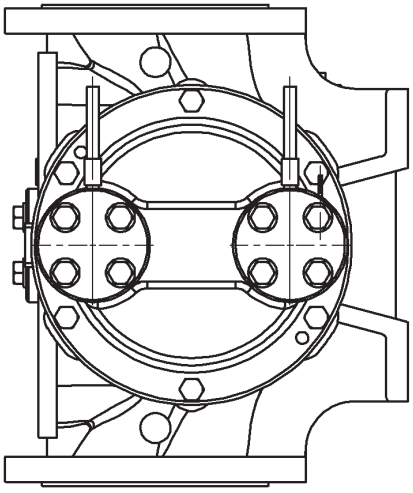
P40 BA
Electric reheating

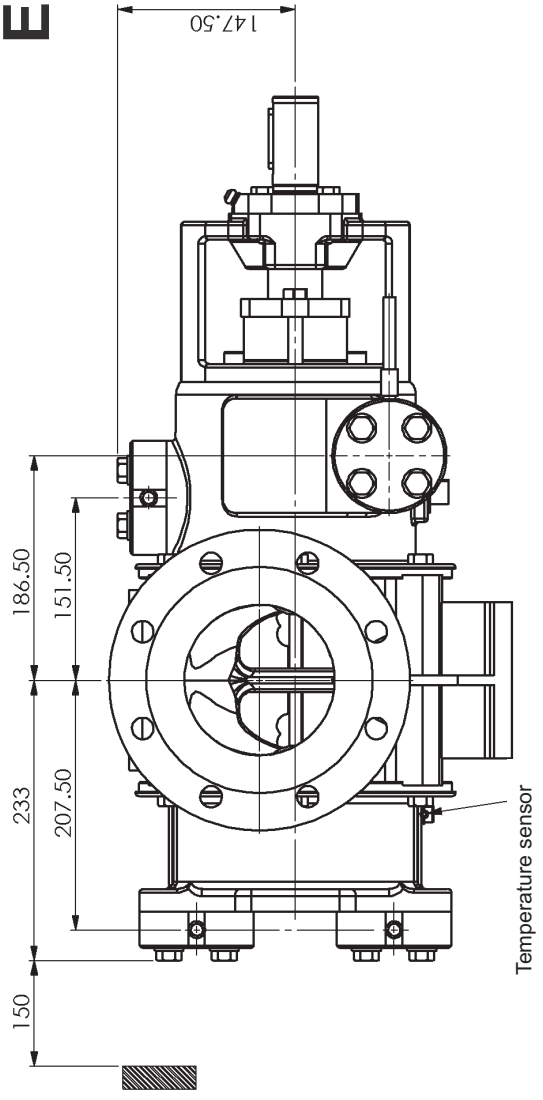


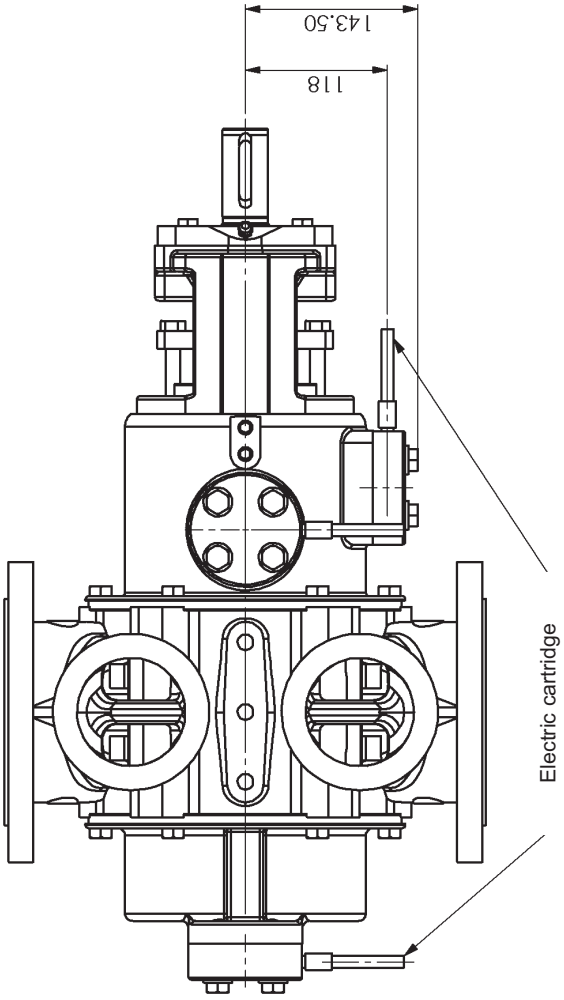
P60 BA
Electric reheating

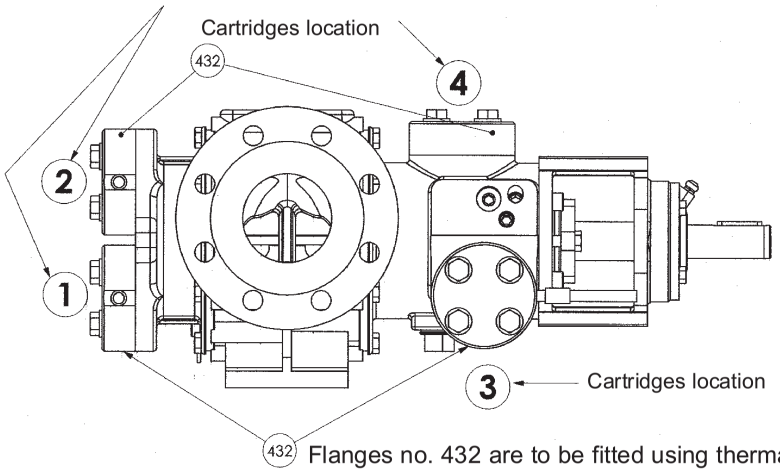


P100 BA
Electric reheating

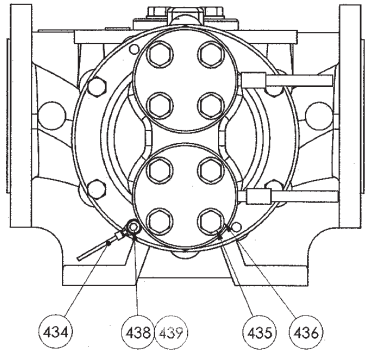




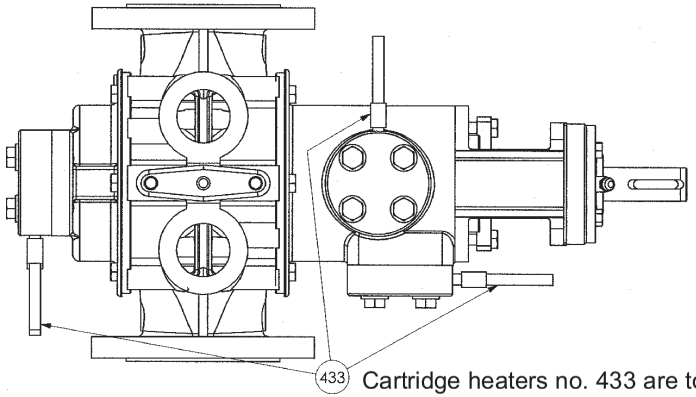




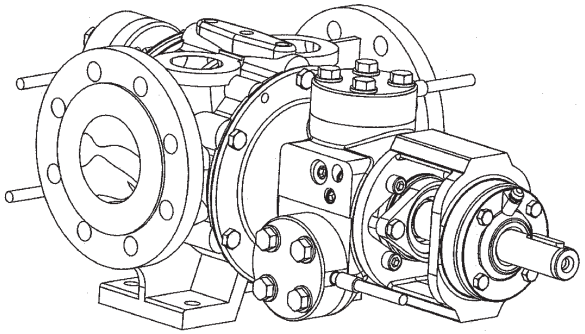
Flanges no. 432 are to be fitted using thermal paste.



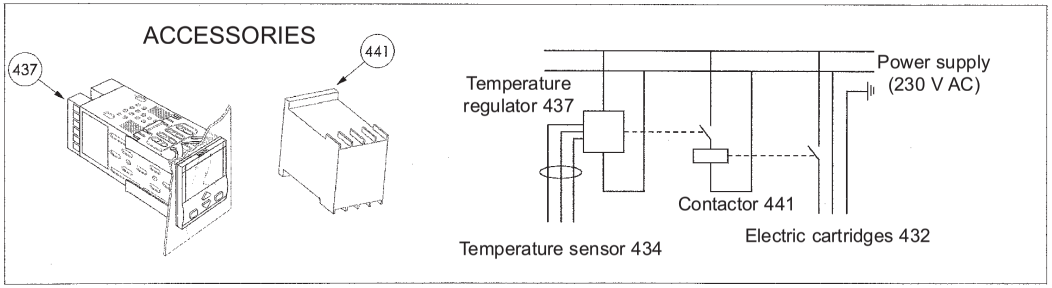
The sensor no. 434 shall be fitted using thermal paste.
The bottom surface in contact with the sensor shall be lined.



Cartridge heaters no. 433 are to be fitted using thermal paste.



NOTA :
Cartridges orientation shall be similar to the top view : wires on the left when looking the pump on the shaft side.



Cartridges location	Emulsion			Bitumen		
	P40 BA	P60 BA	P100 BA	P40 BA	P60 BA	P100 BA
1	300 W	300 W	300 W	300 W	300 W	400 W
2	- *	- *	300 W	300 W	300 W	400 W
3	300 W	300 W	300 W	300 W	300 W	400 W
4	-	-	300 W	-	300 W	400 W

* When the cartridge n°2 is not mounted, orientate flange 432 of the cartridge n°2 so that the port for a cartridge is facing down.

2. OVERALL DIMENSIONS - ASSEMBLIES (continued)

The heating flanges, heating elements and the temperature sensor shall be fitted using heat-conducting paste to ensure good heat dissipation.

In any event, the pump shall be correctly lagged R => 2.5 (m².K/W) so as to dissipate as little energy as possible. We recommend to programm the digital regulator on"hit or miss" mode with an hysteresis of ± 5% to extend the life cycle of the contactor (limited number of cycles).

CAUTION	
	**THE SURFACES OF THE PUMP CAN BE AT A TEMPERATURE LIABLE TO CAUSE INJURY OR SEVERE DAMAGE.**
Excessive temperature- can cause injury or severe damage.	

2.1 Electric heating for applying bituminous emulsion

- See drawing above for location and power of the electric cartridges.
- Power supply voltage 230 V.
- Heating speed : from 1 to 3 hours (depending on operating, temperature and lagging conditions).
- CAUTION : The regulator instruction shall not exceed 70°C (P40 - P100) or 75°C (P60) so that the pumped product is not damaged. This is to avoid having a significant hot spot that could damage the pumped product.
- The emulsion shall not exceed 95°C on pain of being broken (separation of water and bitumen).

2.2 Electric reheating for bitumen application

- See drawing above for location and power of the electric cartridges.
- Power supply voltage 230 V.
- Heating speed : from 1 to 3 hours (depending on operating, temperature and lagging conditions).
- CAUTION : The regulator instruction shall not exceed 160°C (P40 - P60) or 175°C (P100).

3. AVAILABLES KITS

Several kits are available in accordance with customers' requirements :

- Flange + cartridge kit including heating flanges, electric cartridges and necessary screws.
- Emulsion or bitumen kit including the flange + cartridge kit and electrical instruments used for controlling the eating.
- Regulator + contactor kit.
- Electric connection kit including the connection box and the connection equipment.

	Flange emulsion kit + cartridge	Flange bitumen kit + cartridge	Emulsion kit (with regulation)	Bitumen kit (with regulation)	Regulator + contactor kit	Connecting box kit
P40 BA	313665.01	313709.01	313653.01	313710.01	314148.00	314156.00
P60 BA	313665.01	313707.01	313653.01	313708.01		
P100 BA	313707.01	313667.01	313708.01	313656.01		

4. THE EQUIPMENT SUPPLIED (in accordance with the kit selected)

WARNING	
 Dangerous voltage. Can cause injury and death.	DISCONNECT THE ELECTRICITY SUPPLY BEFORE ANY MAINTENANCE OPERATION.

4.1 Proportional regulator

To be programmed preferably in digital mode.

4.2 Electric cartridge

The cartridges are fitted by sliding them into the heating flanges. Heat-conducting paste shall be applied to the cartridge at the time of assembly in order to improve thermal conductivity between the flange and the cartridge. The excess of paste must be evacuated through the breather hole opposite the bore to ensure that it is not clogged. This will prevent an accumulation of humidity.

4.3 The temperature sensor

The temperature sensor is secured to the bottom opposite the pump drive system.

4.4 Contactor

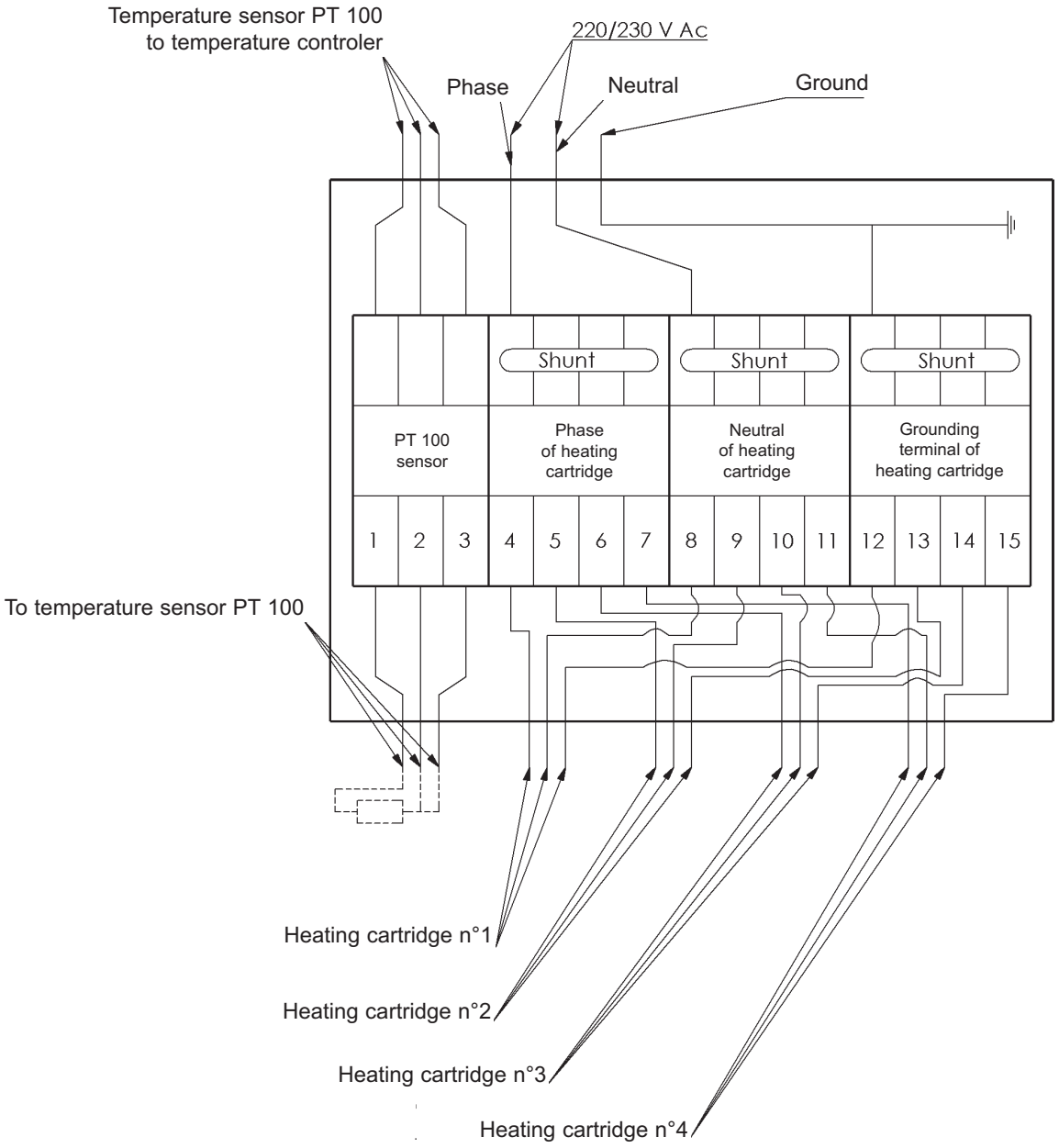
4.5 Connecting box

5. WIRING OF ELECTRIC EQUIPMENT

WARNING	
	**DISCONNECT THE ELECTRICITY SUPPLY BEFORE ANY MAINTENANCE OPERATION.**
Dangerous voltage. Can cause injury and death.	

The connection of the electrical equipment must be realized in accordance with good trade practices and by means of the user manuals of the supplied components.
Depending on the equipment installation area and the degree of protection to be given, the regulator and the contact switch shall be installed inside a box or a suitable cabinet with the same degree of protection.
It is important to understand that it is the responsibility of the installer to ensure the compliance with the regulations on safety requirements and EMC.

5.1 Wiring of the electric heating kit connecting box



5. WIRING OF ELECTRIC EQUIPMENT (continued)

5.2 Wiring diagram - Electric reheating