



**INSTRUCTION MANUAL  
FOR INSTALLATION,  
MAINTENANCE  
AND USE**

**ELECTRIC KETTLES  
INDIRECT  
SERIE 900**

**9PEN1 / 9PEN1A  
9PEN2 / 9PEN2A**

**296910  
296911**

**01.08.01 – GB**

# **INDEX**

## **Part 1: General reminders and notes**

<b>1.1.</b>	<b>General reminders</b>	<b>13</b>
<b>1.2.</b>	<b>Technical data</b>	<b>13</b>
<b>1.3.</b>	<b>Construction</b>	<b>14</b>
<b>1.3.1.</b>	<b>Details only for pressure kettles</b>	<b>14</b>
<b>1.4.</b>	<b>Laws, technical prescriptions and directives</b>	<b>14</b>
<b>1.5.</b>	<b>Special requirements for the installation site</b>	<b>15</b>

## **Part 2: Positioning, installation and maintenance**

<b>2.1.</b>	<b>Positioning</b>	<b>15</b>
<b>2.2.</b>	<b>Installation</b>	<b>15</b>
<b>2.2.1.</b>	<b>Electrical connections and equipotential bonding</b>	<b>16</b>
<b>2.2.2.</b>	<b>Connection to waterworks</b>	<b>16</b>
<b>2.3.</b>	<b>Commissioning and testing</b>	<b>16</b>
<b>2.4.</b>	<b>Maintenance of the appliance</b>	<b>17</b>
<b>2.4.1.</b>	<b>Possible failures and their elimination</b>	<b>17</b>

## **Part 3: Use and cleaning**

<b>3.1.</b>	<b>Warnings and hints for user</b>	<b>17</b>
<b>3.2.</b>	<b>Instructions for use</b>	<b>18</b>
<b>3.2.1.</b>	<b>Filling the jacket</b>	<b>18</b>
<b>3.2.2.</b>	<b>Details regarding the operation of the pressure kettles</b>	<b>18</b>
<b>3.2.3.</b>	<b>Switch on, start of cooking and switch off</b>	<b>19</b>
<b>3.3.</b>	<b>Cleaning and care of the appliance</b>	<b>19</b>
<b>3.3.1.</b>	<b>Daily cleaning</b>	<b>19</b>
<b>3.4.</b>	<b>Special procedures in case of long inactivity</b>	<b>20</b>
<b>3.5.</b>	<b>Special procedures in case of failures</b>	<b>20</b>
<b>3.6.</b>	<b>How to proceed, if ...</b>	<b>20</b>

## **Part 4: Figures and details**

<b>4.1.</b>	<b>Wiring diagram Mod. 100-150 lt. 3N/PE AC 400V</b>	<b>52</b>
<b>4.1.1.</b>	<b>Wiring diagram Mod. 100-150 lt. 3/PE AC 230V</b>	<b>54</b>
<b>4.1.2.</b>	<b>Wiring diagram Mod. 100-150 lt. 3/PE AC440V</b>	<b>55</b>
<b>4.1.3.</b>	<b>Wiring diagram Mod. 100-150 lt. 3/PE AC480V</b>	<b>56</b>
<b>4.2.</b>	<b>View of appliance</b>	<b>57</b>
<b>4.3.</b>	<b>Controls</b>	<b>58</b>

### **1.1. GENERAL REMINDERS**

- Read the warnings contained in this manual carefully as they provide important information concerning safety during the installation, use and maintenance of the appliance.
- Keep these instructions carefully!
- Only personnel trained for its specific use should use the equipment.
- Keep the appliance under control during use.
- The appliance should be used only for the purpose for which it has been specifically designed; other uses are improper and hence dangerous.
- During operation surfaces can become hot and require special operation.
- Unplug the appliance in case of failures or improper operation.
- Apply exclusively to a service centre for repairs or maintenance.
- Any important information about the appliance required for technical service is contained in the technical data plate (see figure “View of appliance”).
- If technical assistance is required, the trouble must be described in as much detail as possible, so that a service technician will be able to understand the nature of the problem.
- Gloves should be worn to protect the hands during installation and maintenance operations.

**Warning! : Follow the fire prevention regulations very carefully.**

### **1.2. TECHNICAL DATA**

Description	Unit of measurement	9PEN1 9PEN1A	9PEN2 9PEN2A
Width (A)	mm	800	800
Depth (B)	mm		900
Height (C)	mm		900
Vat diameter	mm		600
Vat height	mm	415	540
Total volume	l	110	145
Usable volume	l	100	135
Voltage/Input		<b>3 N AC 400V / 50 Hz</b>	
Power	kW	16	18
Power cable	mm <sup>2</sup>		
Hot water connection	mm		10
Cold water connection	mm		10
Water pressure	kPa	<b>50 – 300</b>	
Jacket volume	l	<b>32</b>	
Jacket pressure	bar	<b>0,5</b>	

### **1.3. CONSTRUCTION**

- Main structure in AISI 430 with 4 adjustable height feet.
- Panels in stainless steel AISI 304, thickness 10-12/10.
- Cooking vat in stainless steel AISI 316, thickness 20/10.
- Chrome-plated brass drainage tap.
- Lid in stainless steel, hinged and spring balanced in all opening positions.
- Jacket and lining in stainless steel AISI 304, thickness 15-20/10.
- Heating system comprising shielded heating elements made from "Incoloy-800" alloy with boiler and steam circulation.
- Jacket pressure is controlled by a safety valve set at 0.5 bar; the appliance is equipped with an analogue pressure gauge.
- The cold water connection is 10 mm.
- The hot water connection is 10 mm.
- Safety thermostat to interrupt operation automatically in case of failures.
- The appliance is equipped with a three-position selector with three heating functions:
  - position "**0**" Heating not activated
  - position "**1**" Reduced power 50%
  - position "**2**" Full power 100%
- Operating thermostat for temperature adjustment inside the cooking vat.

#### **1.3.1. DETAILS ONLY FOR PRESSURE KETTLES**

- Stainless steel lid with heat-resistant silicone gasket.
- Hermetic closing of lid ensured by 4 screw clamps.
- The relief valve for the pressure that develops inside the cooking vat is set at 0,05 bar.
- On request, the appliance can be equipped with a pressure gauge indicating the pressure inside the cooking vat.

### **1.4. LAWS, TECHNICAL PRESCRIPTIONS AND DIRECTIVES**

- When installing the appliance it is necessary to follow and comply with the following regulations:
- current regulations on the matter;
- any hygienic-sanitary regulations concerning cooking environments;
- municipal and/or territorial building regulations and fire prevention prescriptions;
- current accident prevention guidelines;
- electricity board regulations concerning safety;
- the regulations of the electrical power supply company or agency;
- any other local prescriptions.

## **1.5. SPECIAL REQUIREMENTS FOR THE INSTALLATION SITE**

- The room in which the appliance is to operate must be well ventilated.
- In addition, it is good policy to locate the appliance under an extractor hood so that cooking vapours can be removed rapidly and continuously.
- Current regulations require the installation of a multiple pole switch between the appliance and the electrical power supply; the switch must have a contact gap of least 3 mm on each pole.
- This appliance requires two water connections: one for hot and one for cold water. Each line must be fitted with an on-off valve.

**Warning! : The electrical isolating switch and the water shutoff valves must both be located near to the appliance, within easy reach for the user.**

### **2.1. POSITIONING**

- Remove all the packaging and check that the appliance is in perfect conditions. In case of visible damage, do not connect the appliance and notify the sales point immediately.
- Remove the PVC protection from the panels.
- Dispose of packaging according to regulations. Generally material is divided according to composition and should be delivered to the waste disposal service.
- There are no special instructions regarding distances from other appliances or walls, however it is advisable to maintain a sufficient distance to allow any servicing operations to be performed. In the event the appliance should be installed in direct contact with inflammable walls, it is advisable to fit suitable heat insulation.
- The appliance must stand level. Small differences in level can be eliminated by screwing or unscrewing the adjustable feet: A significantly uneven or sloping stance can affect the operation of the appliance adversely.

### **2.2. INSTALLATION**

**Warning! : Only qualified technicians must perform the installation, maintenance and test of the appliance.**

**Warning! : Before connecting any parts of the appliance to supplies, make sure that the latter is equivalent the requirements stated in the technical data plate, if the appliance has been designed for these supplies.**

## **2.2.1. ELECTRICAL CONNECTIONS AND EQUIPOTENTIAL BONDING**

**Warning! : The appliance is supplied to operate according to the power supply indicated on the data plate.**

- As mentioned, the appliance must be connected to the power supply by way of a multiple pole main isolating switch and protection device that must be proportioned to the power of the appliance (1 mA per kW of rated power).
- The earthing system must be efficient.
- As this appliance is type X equipment (delivery without power cable and plug), the cable and other hardware needed to make the connection to the electrical power supply must be provided by the installer.
- The power cable shall be of the kind described in the paragraph "*Technical data*" and shall be resistant to oil.
- The power terminal board can be reached by removing the lower front panel (unloose the screws). The cable fastener is on the lower right-hand side.
- The cable must be fed in from beneath the clamp. The individual wires are then fastened to the corresponding terminals of the terminal board. The earth wire must be longer than the other wires, so that in the event of the cable being jerked or the clamp broken, the live wires will disconnect first. Lock the cord fastener.
- The appliance must incorporate an equipotential system.
- Connect the terminal on the lower right-hand side marked with the international symbol a connector with a nominal cross section <10 mm<sup>2</sup>. All the appliances installed and the earth system of the building shall be connected like this.

## **2.2.2. CONNECTION TO WATERWORKS**

- Water inlet pressure must be between 50 and 300 kPa, otherwise install a pressure regulator on the line before the appliance.
- Install a cut-off valve for each supply on the line before the appliance.
- Water connections to 10 mm are fitted in the lower part on the right-hand side of the appliance.
- Make connections according to regulations currently in force.

## **2.3. COMMISSIONING AND TESTING**

- Once all the connections have been made, the appliance and the overall installation must be checked following the directions given in this manual.
- Check in particular:
  - that the protective film has been removed from the external surfaces;
  - that the lower front panel removed for the electrical connection of the appliance has been fitted back into position;
  - that connections have been made in accordance with the requirements and directions indicated in this manual;
  - that all safety requirements in current standards, statutory regulations and directives have been met;
  - that the water connections are leak-free;
  - that the electrical connection has been performed according to standards.
- In addition, check that once the appliance has been installed, the power cord is neither subject to stretch nor in contact with nor surfaces.
- Now proceed to light the appliance as directed in the instructions for use.
- While the appliance is in use, voltage should not differ from the nominal voltage more than +/- 10%.
- The test report must be completed in full and submitted to the customer who should then sign in acceptance. With effect from this moment, the appliance is covered by the manufacturer's warranty.

## 2.4. MAINTENANCE OF THE APPLIANCE

**Warning! : All maintenance operations shall only be performed by a technically qualified service centre!**

- To ensure correct and safe operation, the appliance must be inspected and serviced at least once a year only. Maintenance includes also controlling the components and tear of pipes, feeding pipes, electrical components etc.
- It is advisable to replace worn components during maintenance operations to avoid the need for other maintenance calls and unexpected failures.
- It is also advisable to apply for a maintenance contract with the customer.

### 2.4.1. POSSIBLE FAILURES AND THEIR ELIMINATION

**Warning! : Only technically qualified service centres can perform the operations described below!**

**Warning! : Before resetting the safety thermostat, it is always necessary to eliminate the problem causing its activation!**

Problem and possible cause	Access to components and operation
<b>The content of the vat does not heat up:</b> <ul style="list-style-type: none"><li>- the safety thermostat has been activated;</li><li>- the heating elements have a failure;</li><li>- selector/switch failure.</li></ul>	<b>Safety thermostat</b> The safety thermostat can be reached once the lower front panel has been removed.  <b>Heating elements</b> The heating elements can be reached once the lower front panel has been removed.  <b>Selector switch-Operating thermostat</b> To reach remove the upper front panel.

## 3.1. WARNINGS AND HINTS FOR USER

- This manual contains all the instructions required for a proper and safe use of our appliances.  
**Keep the manual in a safe place for future consultation!**
- This appliance is for catering use, hence they must be used only by trained kitchen staff.
- The appliance must always be kept under control during use.

**Warning! : The manufacturer shall not be held responsible for injuries or damage due to the non-compliance with safety rules or an improper use of the appliance by the operator.**

- Some improper operating conditions may even be caused by an improper use of the appliance, therefore it is important to train personnel properly.
- **All the installation and maintenance operations must be performed by fitters who are members of an official register.**
- Respect the periods required for maintenance. With this in mind, customers are recommended to sign a service agreement.
- In case of failures concerning the appliance, all outputs (electrical power supply and water) must be cut off instantly.
- In case of recurrent failures, contact a service technician.

### **3.2. INSTRUCTIONS FOR USE**

- Before cooking with the appliance for the first time, wash the interior of the cooking vat thoroughly.

**Warning! : Fill the cooking vat up to a maximum of 40 mm under the overflow border, according to the maximum level mark, including the food to be cooked.**

**Warning! : Before filling the vat, always check that the drainage tap is closed.**

#### **3.2.1. FILLING THE JACKET**

**Warning! : The water level in the jacket must be checked each time before lighting.**

**Warning! : It is advisable to use softened water to fill the jacket!**

- Unscrew the filling cap on the safety valve unit. The latter is on the right of the appliance surface (see figure "*Size of appliance and position of connections*").
- Fill with softened water (the capacity of the jacket is stated in the paragraph "*Technical data*").
- Check the water level by looking through the hole on the left of the front panel of the appliance.
- Screw back on the cap of the safety device.

#### **3.2.2. DETAILS REGARDING OPERATION WITH PRESSURE KETTLE**

- Before turning the appliance on, close the lid firmly and lock the 4 screw clamps.
- Check that the valve is in a resting position.
- Start cooking at full power. When steam starts to come out of the valve, reduce heating power. The steam coming out of the valve must be constant and light.
- The pressure inside the cooking vat can reach a maximum of 0.05 bar. On request, the appliance can be equipped with a pressure gauge that shows the pressure inside the cooking vat.
- Turn off the appliance after cooking.
- Before opening the lid, release all the pressure from the cooking vat by lifting the relief valve lever (see figure "*Controls*").
- Check that the valve lever is still "On" and unscrew the screw clamps.

### **3.2.3. SWITCHING ON, START COOKING AND SWITCHING OFF**

- Fill the vat with hot or cold water, according to need, using the tap that the appliance is equipped with.
- The appliance has a three-position selector to start cooking functions (see figure "Controls").
- Here is a list of the procedures for a safe and correct use of the appliance.

#### **Energising the unit:**

- Connect the appliance by turning on the main switch installed before it.

#### **Start of cooking:**

- Turn the selector from position "**0**" to one of the heating positions according to cooking requirements.
- The green light turns on automatically.
- Generally cooking is started with the selector in position "**2**"; once the vat has reached cooking temperature, turn the selector to "**1**" to maintain it.
- Set the operating thermostat knob on the desired temperature between 40 and 100°C.
- Heating will start and the orange light will turn on automatically.
- The orange light will turn off as soon as the set temperature has been reached.
- To make water boil quickly, turn the knob over the temperature of 100°C.
- Heating elements operate continuously.
- By turning the selector from position "**2**" to "**1**", it is possible to keep the water boiling and use less power.

## **3.3. CLEANING AND CARE OF THE APPLIANCE**

- Do not use aggressive substances or abrasive detergents when cleaning the stainless steel components.
- Avoid using metal pads of the steel parts as they may cause rust. For the same reason, avoid contact with materials containing iron.
- Do not use sandpaper or abrasive paper for cleaning; in special cases use a powder pumice stone.
- In case of particularly resistant dirt, it is advisable to use abrasive sponges (e.g. Scotch-Brite).
- It is advisable to clean the appliance only once it has cooled down.

### **3.3.1. DAILY CLEANING**

**Warning! :**      **When cleaning the appliance never use direct jets of water to prevent infiltration of the liquid and damage to components.**

- Clean the cooking vat with water and a detergent, rinse thoroughly and dry well with a soft cloth.
- External surfaces should be washed down using a sponge, and hot water with a suitable proprietary cleaner addend.
- Rinse always thoroughly and dry with a soft cloth.

#### **Notes regarding the pressure kettles:**

- Do not use detergents containing high percentages of ammonia and sodium to clean the lid gasket, as it could be damaged and its tightness quickly affected.

### **3.4. SPECIAL PROCEDURES IN CASE OF PROLONGED INACTIVITY**

- If the appliance is to stand idle for any length of time (e.g. holidays or seasonal closing), it must be cleaned thoroughly, leaving no traces of food or dirt.
- Leave the lid open so that air can circulate inside the vat.
- For added care after cleaning, the external surfaces can be protected by applying a proprietary metal polish.
- Be absolutely sure to shut off all utilities (electrical power supply and water).
- Air the room appropriately.

### **3.5. SPECIAL PROCEDURES IN CASE OF FAILURES**

- If the appliance should not work properly during use, turn it off immediately and close or cut off all supplies (electrical power supply and water).
- Apply to a service centre for help.

**The manufacturer shall not be held responsible nor has any warranty commitments for damage caused by non-compliance with prescriptions or by installation not in conformity with instructions.**

**The same applies in case of improper use or different application by the operator.**

### **3.6. HOW TO PROCEED, IF ...**

**Warning! :** Problems and failures may occur even when the appliance is used properly. Here is a list of the most probable situations and controls that the operator should perform to avoid applying to a service centre unnecessarily.

If the problem is not solved after the necessary controls, turn off the appliance immediately, unplug it, cut off any supplies and apply to a service centre.

<b>... the vat contents do not heat up:</b>	<ul style="list-style-type: none"><li>- check that the power ON/OFF switch is installed before the appliance is on;</li><li>- otherwise <b>turn off the appliance</b> and apply to a service centre, as the safety thermostat may have been activated due to an excess of temperature in the cooking vat. This occurs especially when the appliance is turned on and the vat and/or the jacket is/are empty.</li></ul>
---	--

#### 4.1. SCHEMA ELETTRICO MOD.100-150 LT. 3N/PE AC 400V

LEGENDA:			
mA	Morsettiera arrivo linea	S1	Elettrovalvola carico intercapedine (OPTIONAL)
F1	Fusibile 3,15 A-T	TS	Termostato di sicurezza
SE	Selettori riscaldamento min-max	TL	Termostato di lavoro
L1	Lampada spia verde presenza tensione	C1	Teleruttore minimo
L2	Lampada spia arancione riscaldamento	C2	Teleruttore massimo
LR	Lampada led spia arancione riserva acqua	C3	Teleruttore sicurezza
LA	Lampada led spia rossa mancanza acqua	R1	Resistenza trifase (230V)
SL	Centralina controllo livello	B	Bulbo termostato di sicurezza

#### 4.1. WIRING DIAGRAM MOD. 100-1550 LT. 3N/PE AC 400V

LEGEND:			
mA	End line terminal board	S1	Jacket filling solenoid valve (OPTIONAL)
F1	Fuse 3,15 A-T	TS	Safety thermostat
SE	Selector	TL	Operating thermostat
L1	Green warning light	C1	Electromagnetic switch min.
L2	Heating on signal-lamp	C2	Electromagnetic switch max
LR	Orange lamp warning light failing water in the jacket	C3	Electromagnetic switch security
LA	Red lamp warning light in the jacket	R1	Heating element (230V)
SL	Level control device	B	Sensor for safety thermostat

#### 4.1. SCHEMA ELECTRIQUE MOD. 100-150 LT. 3N/PE AC 400V

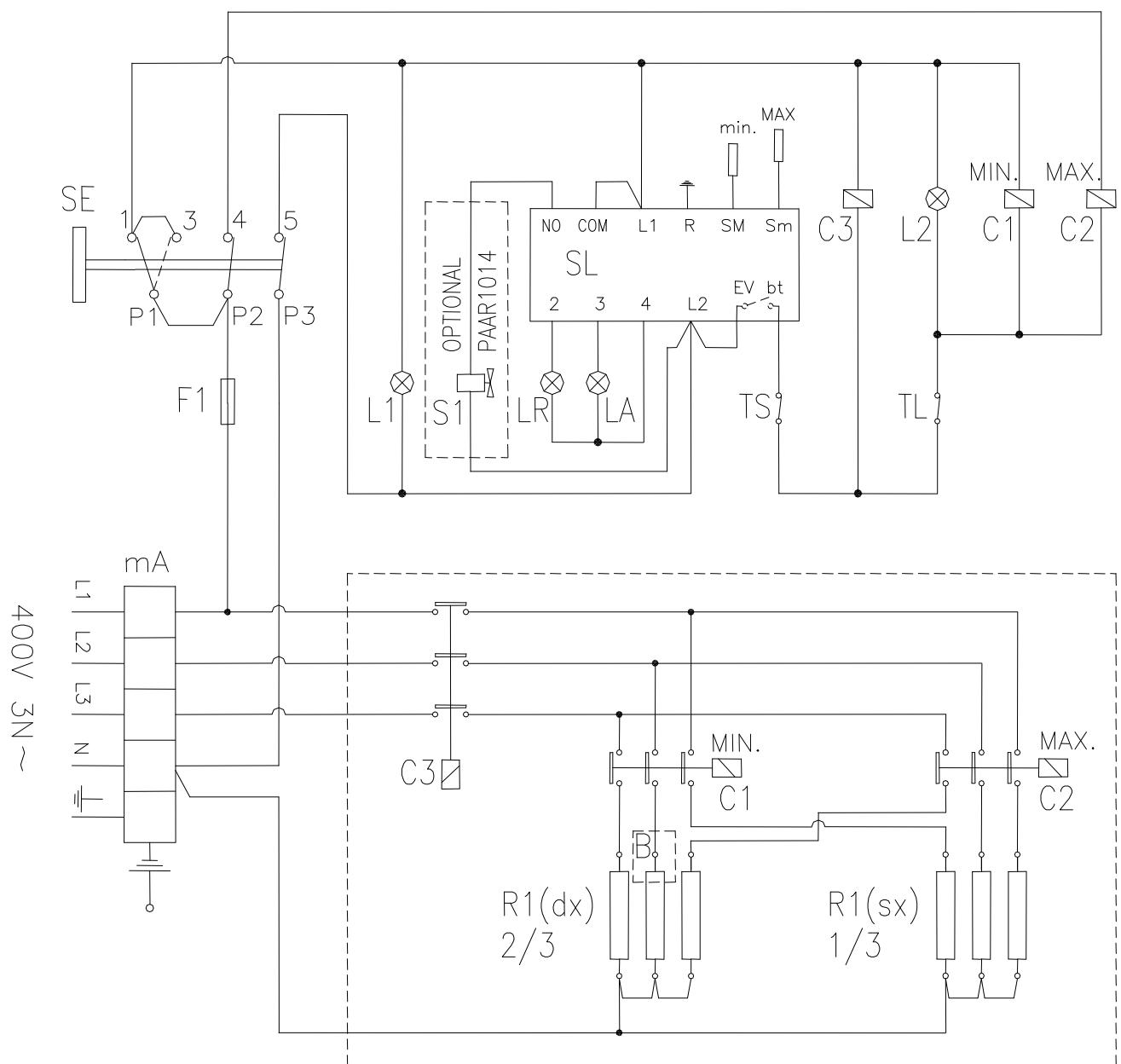
LEGENDE:			
mA	Bornier arrivée ligne	S1	Electrovanne chargement double paroi (OPTIONAL)
F1	Fusible 3,15 A-T	TS	Thermostat de sécurité
SE	Sélecteur	TL	Thermostat de travail
L1	Lampe témoin verte de tension	C1	Télérupteur minimum
L2	Témoin lumineux chauffage	C2	Télérupteur maximum
LR	Lampe témoin orange réserve H2O double paroi	C3	Télérupteur de sécurité
LA	Lampe témoin rouge alarme manque H2O double paroi	R1	Résistance (230V)
SL	Fiche niveau	B	Bulbe pour thermostat sécurité

#### 4.1. ELEKTRISCHER SCHALTPLAN MOD. 100-150 LT. 3N/PE AC 400V

LEGENDE:			
mA	Netzanschlußklemme	S1	Magnetventil Zwischenraums (OPTIONAL)
F1	Schmelzsicherung 3,15 A-T	TS	Sicherheitstemperaturbegrenzer
SE	Stellen	TL	Thermostat
L1	Grüne Signalleuchte der Spannung	C1	Schaltschütz min.
L2	Signalleuchte Heizung in Betrieb	C2	Schaltschütz max.
LR	Wasser-reserve Orange Signalleuchte	C3	Schaltschütz
LA	Rot Signalleuchte Alarm Mangel H20 im Zwischenraum	R1	Heizelement (230V)
SL	Platine für Niveaukontrolle	B	Sensor fur sicherheitstemp.

#### 4.1. ESQUEMA ELÉCTRICO MOD. 100-150 LT. 3N/PE AC 400V

LEYENDA:			
mA	Tablero de bornes	S1	Elettrov.carga autom.intercambiador (OPTIONAL)
F1	Fusible 3,15 A-T	TS	Termostato de seguridad
SE	Selector	TL	Termostato de funcionamiento
L1	Luz testigo verde de tension	C1	Telerruptor min.
L2	Luz testigo calentamiento	C2	Telerruptor max.
LR	Luz testigo anaranjada reserva H2O doble pared	C3	Telerruptor de seguridad
LA	Luz testigo roja alarma falta H2O doble pared	R1	Resistencia (230V)
SL	Tarjeta control nivel	B	Bulbo x termostato de seguridad



#### 4.1.1. SCHEMA ELETTRICO MOD. 100/150 LT. 3/PE AC 230V

LEGENDA:			
mA	Morsettiera arrivo linea	C3	Teleruttore sicurezza
F1	Fusibile 3,15 A-T	R1	Resistenza trifase (230V)
C1	Teleruttore minimo	B	Bulbo termostato di sicurezza
C2	Teleruttore massimo		

#### 4.1.1. WIRING DIAGRAM MOD. 100/150 LT. 3/PE AC 230V

LEGEND:			
mA	End line terminal board	C3	Electromagnetic switch security
F1	Fuse 3,15 A-T	R1	Heating element (230V)
C1	Electromagnetic switch min.	B	Sensor for safety thermostat
C2	Electromagnetic switch max		

#### 4.1.1. SCHEMA ELECTRIQUE MOD. 100/150 LT. 3/PE AC 230V

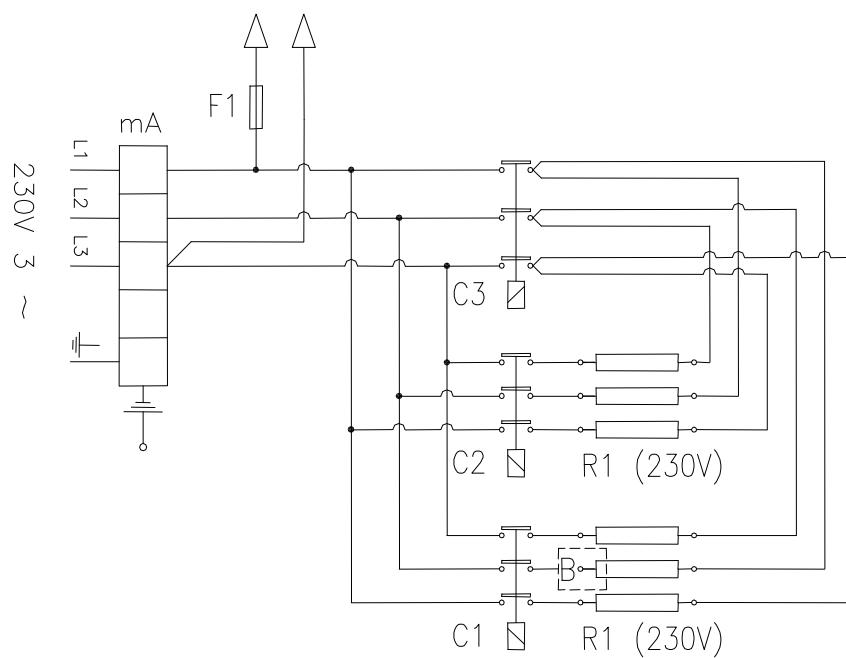
LEGENDE:			
mA	Bornier arrivée ligne	C3	Télérupteur de sécurité
F1	Fusible 3,15 A-T	R1	Résistance (230V)
C1	Télérupteur minimum	B	Bulbe pour thermostat securite'
C2	Télérupteur maximum		

#### 4.1.1. ELEKTRISCHER SCHALTPLAN MOD. 100/150 LT. 3/PE AC 230V

LEGENDE:			
mA	Netzanschlußklemme	C3	Schaltschütz
F1	Schmelzsicherung 3,15 A-T	R1	Heizelement (230V)
C1	Schaltschütz min.	B	Sensor fur sicherheitstemp.
C2	Schaltschütz max.		

#### 4.1.1. ESQUEMA ELÉCTRICO MOD. 100/150 LT. 3/PE AC 230V

LEYENDA:			
mA	Tablero de bornes	C3	Telerruptor de seguridad
F1	Fusible 3,15 A-T	R1	Resistencia (230V)
C1	Telerruptor min.	B	Bulbo x termostato de seguridad
C2	Telerruptor max.		



#### 4.1.2. SCHEMA ELETTRICO MOD. 100/150 LT. 3/PE AC 440V

LEGENDA:			
mA	Morsettiera arrivo linea	C2	Teleruttore massimo
F1	Fusibile 3,15 A-T	C3	Teleruttore sicurezza
TR	Trasformatore 440-480/230V	R1	Resistenza trifase (254V)
C1	Teleruttore minimo	B	Bulbo termostato di sicurezza

#### 4.1.2. WIRING DIAGRAM MOD. 100/150 LT. 3/PE AC 440V

LEGEND:			
mA	End line terminal board	C2	Electromagnetic switch max
F1	Fuse 3,15 A-T	C3	Electromagnetic switch security
TR	Transformer 440-480/230V	R1	Heating element (254V)
C1	Electromagnetic switch min.	B	Sensor for safety thermostat

#### 4.1.2. SCHEMA ELECTRIQUE MOD. 100/150 LT. 3/PE AC 440V

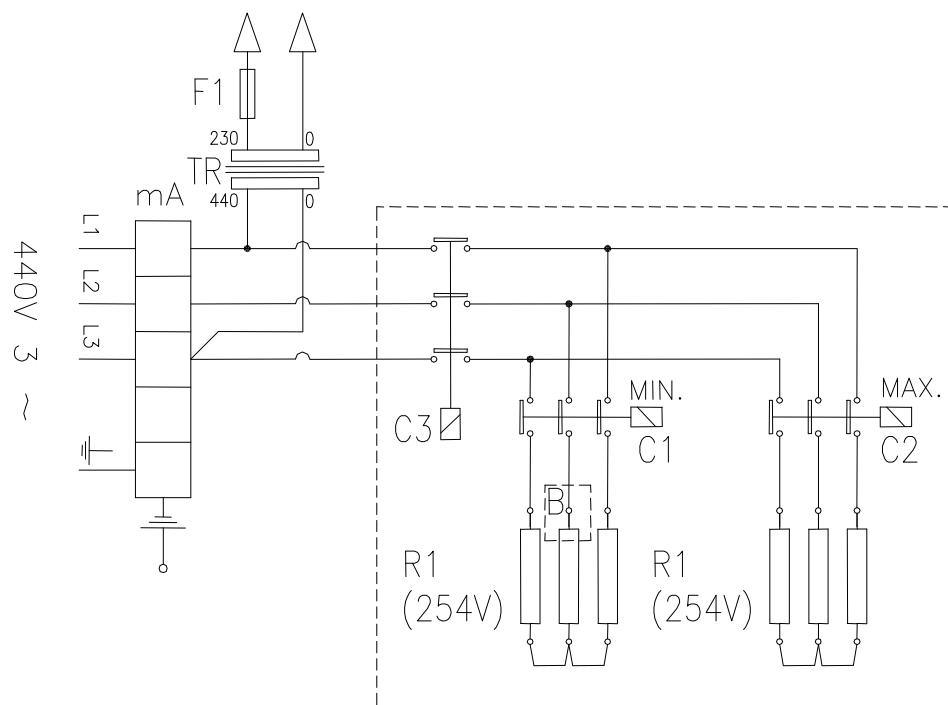
LEGENDE:			
mA	Bornier arrivée ligne	C2	Télérupteur maximum
F1	Fusible 3,15 A-T	C3	Télérupteur de sécurité
TR	Transformateur 440-480/230V	R1	Résistance (254V)
C1	Télérupteur minimum	B	Bulbe pour thermostat securite'

#### 4.1.2. ELEKTRISCHER SCHALTPLAN MOD. 100/150 LT. 3/PE AC 440V

LEGENDE:			
mA	Netzanschlußklemme	C2	Schaltschütz max.
F1	Schmelzsicherung 3,15 A-T	C3	Schaltschütz
TR	Transformator 440-480/230v	R1	Heizelement (254V)
C1	Schaltschütz min.	B	Sensor fur sicherheitstemp.

#### 4.1.2. ESQUEMA ELÉCTRICO MOD. 100/150 LT. 3/PE AC 440V

LEYENDA:			
mA	Tablero de bornes	C2	Telerruptor max.
F1	Fusible 3,15 A-T	C3	Telerruptor de seguridad
TR	Trasformador 440-480/230V	R1	Resistencia (254V)
C1	Telerruptor min.	B	Bulbo x termostato de seguridad



#### 4.1.3. SCHEMA ELETTRICO MOD. 100/150 LT. 3/PE AC 480V

LEGENDA:			
mA	Morsettiera arrivo linea	C2	Teleruttore massimo
F1	Fusibile 3,15 A-T	C3	Teleruttore sicurezza
TR	Trasformatore 440-480/230V	R1	Resistenza trifase (277V)
C1	Teleruttore minimo	B	Bulbo termostato di sicurezza

#### 4.1.3. WIRING DIAGRAM MOD. 100/150 LT. 3/PE AC 480V

LEGEND:			
mA	End line terminal board	C2	Electromagnetic switch max
F1	Fuse 3,15 A-T	C3	Electromagnetic switch security
TR	Transformer 440-480/230V	R1	Heating element (277V)
C1	Electromagnetic switch min.	B	Sensor for safety thermostat

#### 4.1.3. SCHEMA ELECTRIQUE MOD. 100/150 LT. 3/PE AC 480V

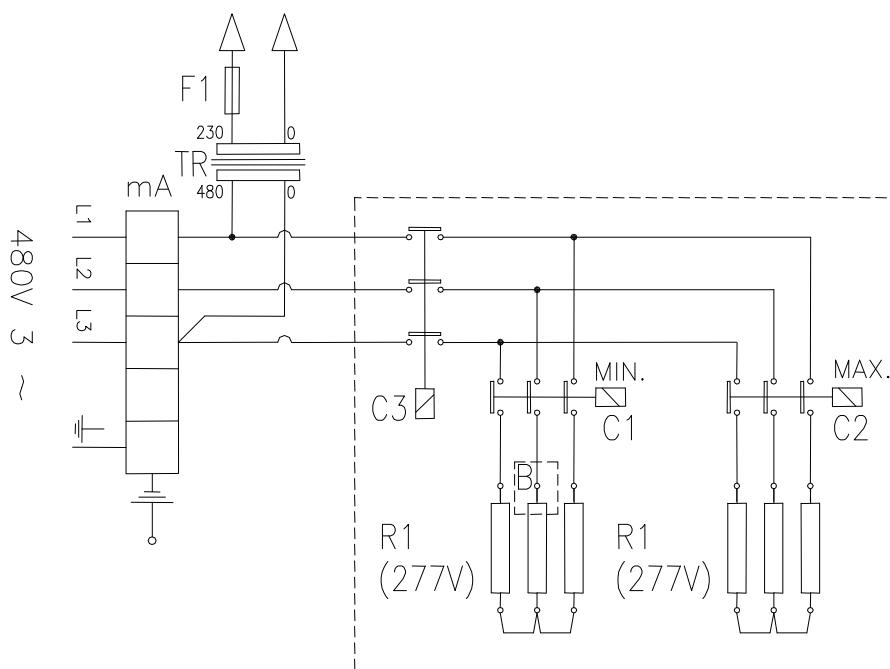
LEGENDE:			
mA	Bornier arrivée ligne	C2	Télérupteur maximum
F1	Fusible 3,15 A-T	C3	Télérupteur de sécurité
TR	Transformateur 440-480/230V	R1	Résistance (277V)
C1	Télérupteur minimum	B	Bulbe pour thermostat securite'

#### 4.1.3. ELEKTRISCHER SCHALTPLAN MOD. 100/150 LT. 3/PE AC 480V

LEGENDE:			
mA	Netzanschlußklemme	C2	Schaltschütz max.
F1	Schmelzsicherung 3,15 A-T	C3	Schaltschütz
TR	Transformator 440-480/230v	R1	Heizelement (277V)
C1	Schaltschütz min.	B	Sensor fur sicherheitstemp.

#### 4.1.3. ESQUEMA ELÉCTRICO MOD. 100/150 LT. 3/PE AC 480V

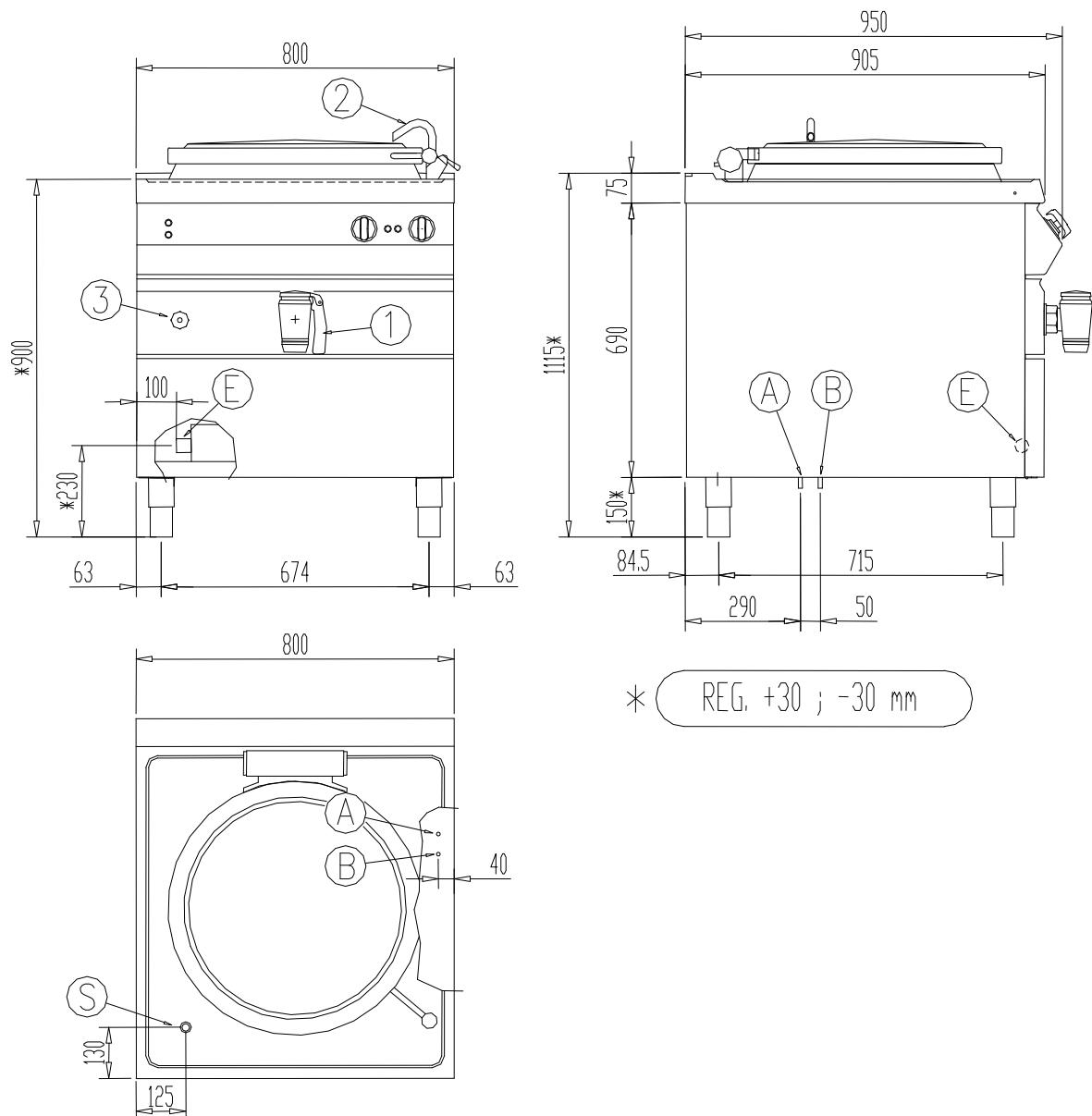
LEYENDA:			
mA	Tablero de bornes	C2	Telerruptor max.
F1	Fusible 3,15 A-T	C3	Telerruptor de seguridad
TR	Trasformador 440-480/230V	R1	Resistencia (277V)
C1	Telerruptor min.	B	Bulbo x termostato de seguridad



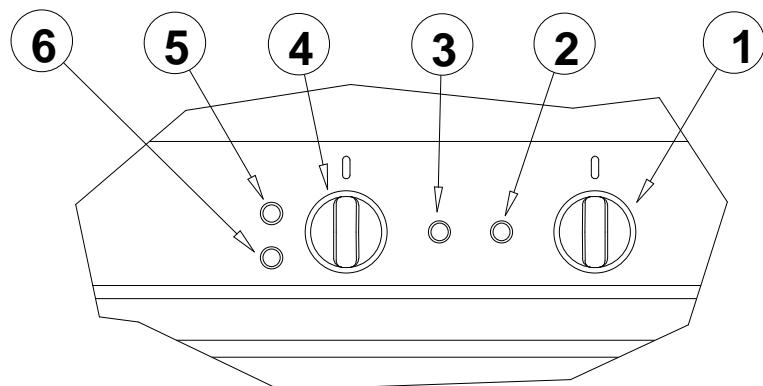
**4.2. VISTA DELL'APPARECCHIATURA – VUE DE HAUT DE L'APPAREIL – ANSICHT DES GERÄTS -  
VIEW OF APPLIANCE - VISTA DEL APARATO**

**LEGENDA – LEGENDE - LEGEND - LEYENDA:**

<b>E</b> - Allacciamento elettrico-Electrical connection – Raccordement électrique-Elektrischer Anschluß -Conexión eléctrica	<b>1</b> - Rubinetto di scarico vasca di cottura-Cooking vat drainage tap – Robinet de vidange eau de cuisson-Kochgutablaßhahn - Grifo de descarga de la cuba de cocción
<b>A</b> - Attacco acqua calda-Hot water connection –Raccord eau chaude-Warmwasseranschluß -Empalme agua caliente	<b>2</b> - Rubinetteria carico acqua in vasca -Vat water feed tap – Robinet de charge eau en cuve-Wasserzulaufhahn Kesselfüllung -Grifo de carga del agua en la cuba
<b>B</b> - Attacco acqua fredda-Cold water connection –Raccord eau froide-Kaltwasseranschluß -Empalme agua fría	<b>3</b> - Livello acqua intercapedine-Jacket level tap – Robinet de niveau pour boyler-Probierhahn Zwischenraum -Grifo de nivel para el calentador de agua
<b>S</b> - Scarico invaso piano pentola- Overflow - Vidange capacité du plan de la marmite –Überlauf - Descarga encimera marmita	



#### 4.3. COMANDI – CONTROLS – TABLEAU DES COMMANDES – SCHALTELEMENTE – MANDOS

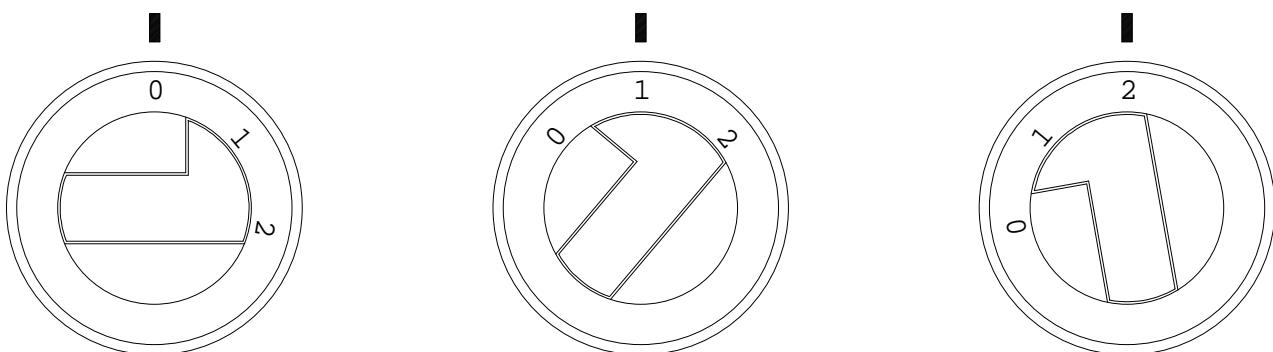


##### LEGENDA-LEGEND-LEGENDE- LEGENDE-LEYENDA:

1- Selettore - Selector – Sélecteur– Wahlschalter - Selector	2- Lampada spia verde di tensione– Green warning light – Lampe témoin verte de tension – Grüne Signalleuchte der Spannung - Luz testigo verde de tension
3- Lampada spia arancione di funzionamento– Orange warning light – Lampe témoin orange de fonctionnement– Orange Signalleuchte vom Betriebsgang - Luz testigo anaranjada de funcionamiento	4- Termostato di lavoro -Operating thermostat – Thermostat de travail – Thermostat –Termostato de funcionamiento
5- Lampada spia arancione riserva H2O intercapedine - Orange lamp warning light failing water in the jacket - Lampe témoin orange riserve H2O double paroi -Wasser riserve Orange Signalleuchte -Luz testigo anaranjada reserva H2O doble pared	6- Lampada spia rossa allarme mancanza H2O intercapedine – Red lamp warning light in the jacket –Lampe témoin rouge alarme manque H2O double paroi– Rot Signalleuchte Alarm Mangel H2O im Zwischenraum - Luz testigo roja alarma falta H2O doble pared

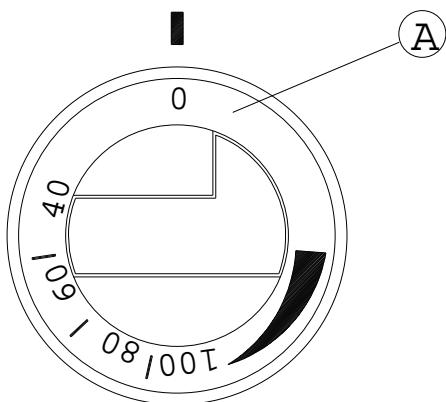
##### SELETTORE - SELECTOR – SÉLECTEUR – WAHLSCHALTER - SELECTOR

Posizione "0" = Spento Position "0" = Off Position "0" = Eteint Position "0" = Aus Posición "0" = Apagado	Posizione "I" = 50 % della potenza Position "I" = 50 % power Position "I" = 50 % de la puissance Position "I" = 50 % -ige Posición "I" = 50 % de la potencia	Posizione "II" = 100 % della potenza Position "II" = 100 % power Position "II" = 100 % de la puissance Position "II" = 100 % -ige Posición "II" = 100 % de la potencia
---	--	--

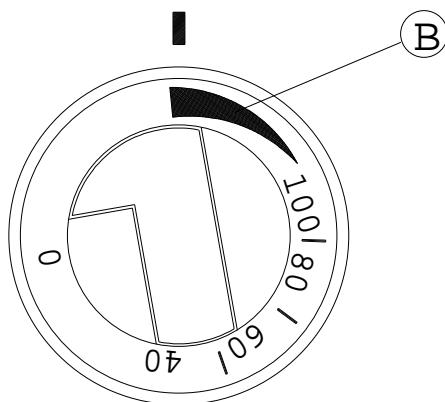


**MANOPOLA TERMOSTATO DI LAVORO – OPERATING THERMOSTAT – POIGNEE THERMOSTAT DE TRAVAIL – KNOPF DES THERMOSTAT - TERMOSTATO DE FUNCIONAMIENTO**

**A - OFF**



**B - MAX**



**Solo per modelli autoclave – Only for pressure kettles – Seulement pour modèles autoclaves –**

**Nur für Druckkessel - Sólo para modelos autoclave:**

Posizioni della leva della valvola di sfiato – Valve and position of relief valve – Position du levier de la soupape de soupirail – Gebrauchsventil und Stellung des Ventilhebels - Válvula y posiciones de la palanca de la válvula de desfogue:

**Valvola aperta - Open valve -**

**Soupape ouverte - Ventil in**

**Betriebsposition - Válvula abierta**

**Valvola chiusa – Closed valve -**

**Soupape ferme - Ventil in Offenstellung –**

**Válvula cerrada**

