

# PT 2 SERIES

Instructions for use and maintenance





Via Ugo Foscolo, 1 21040 Venegono Superiore Varese (Italy) DICHIARAZIONE DI CONFORMITÀ CE DECLARATION OF CONFORMITY CE () () () ()

Machines manufactured for: Bracton Industries (NSW) Pty Ltd. <u>www.bracton.com</u> sales@bracton.com

Noi dichiariamo sotto la nostra esclusiva responsabilità che il prodotto: The undersigned hereby declares under full responsability that the following product:

#### **DISHWASHING MACHINE**

PT 2 Series ...,

al quale questa dichiarazione si riferisce, è conforme alle seguenti norme: for which this declaration refers to in accordance to the following standards:

#### EN 60335-1, EN 60335-2-58, EN 61000-3-2, EN 61000-3-3, EN 55014-1, EN 55014-2

in base a quanto previsto dalle Direttive CEE: on the basis of what is foreseen by the Directives CEE:

#### 2006/95/CE (LVD) - 2004/108/CE (EMC)

Decliniamo ogni responsabilità per sinistri a persone o a cose derivanti da manomissione da parte di terzi o da carenza di manutenzione o riparazione.

We decline any responsability for injuries or damage derived from machine misuse, abuse by others or improper machine maintenance or repairs.

\_\_\_\_07/07/2011\_\_\_\_ (Data emissione) (Date of issue)



(Nome e firma o timbratura equivalente della persona autorizzata) (Name signature or equivalent of authorized representative)

## Dishwashing machine

## **PT 2 SERIES**

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The illustrations concerning these instructions are on the inside of the back cover

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#### ENG

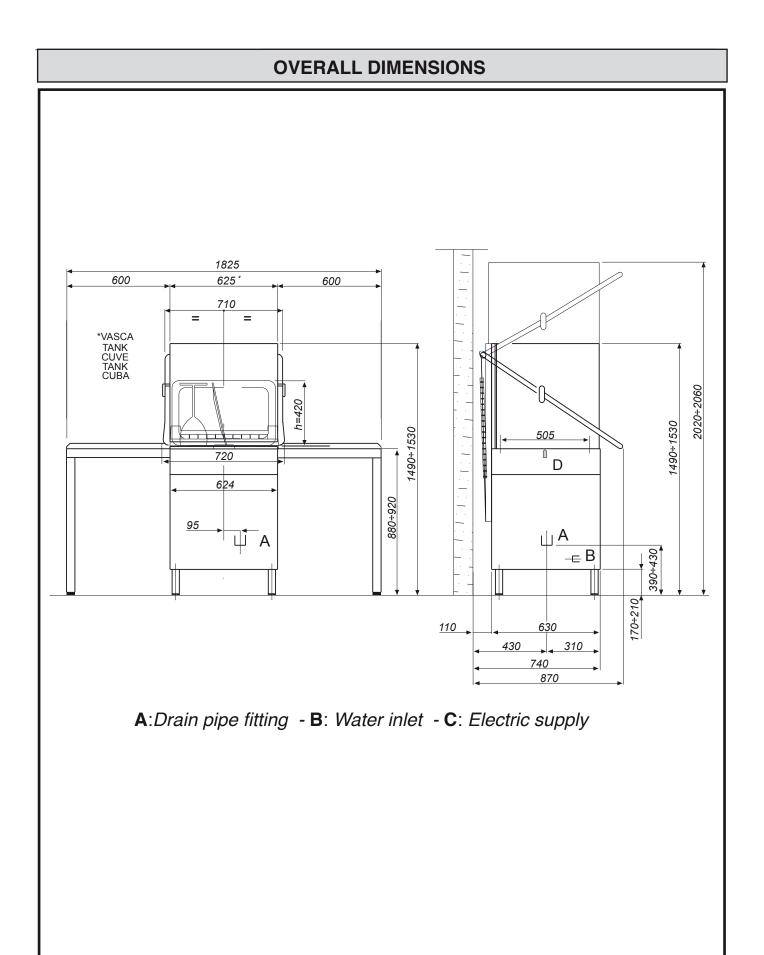
#### IMPORTANT

Become thoroughly familiar with the contents of this manual before installing, setting up, adjusting and servicing dishwasher machine.

Only contact a Bracton authorised technical center or Bracton on (02) 9938 1800 in the event of breakdowns or faulty machine operation.

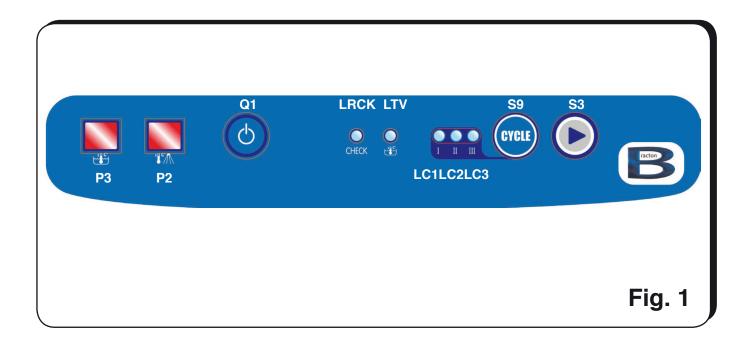
The manufacturer reserves the right to modify the products whenever necessary, without affecting their main features.

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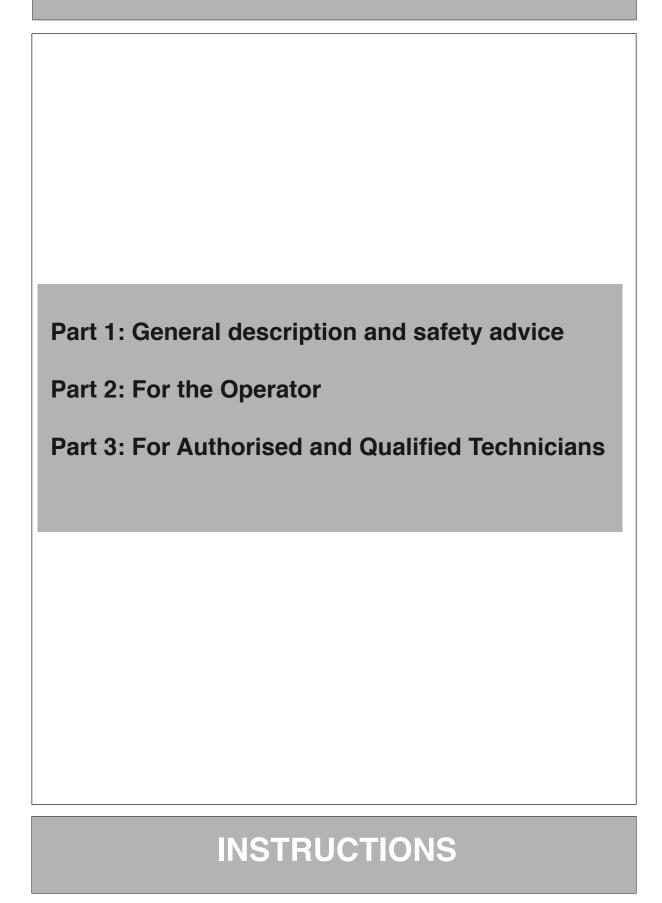


PT 2 Series	82° C	<70 dB (	(A)			
	Rinse temperature	Noise level				
PT 2 Series	Ø 1" G	99 kg	120 kg	5° ÷ 40° C	20 ÷ 90 %	50° ÷ 60° C
	Drain pipe fitting	Net weight	Gross weight	Environmetal temperature min/max.	Environmetal humidity min/max	Wash temperature
PT 2 Series	48 I	8,2 I	2÷ 4 bar. Ø 3/4"G	. 3,5 I	60/120/180 s	500 x 500 mn
	Tank capacity	Boiler capacity	Mains supply of water	Water consumption cycle	Cycle length	Basket dimensions
PT 2 Series	60/30/20	400V3 N~50 H	z 6750 W	6000 W	4000 W	750 W
	Baskets output p/h	Electric supply	Total power	Boiler heating element	Tank heating element	Wash pump

### CONTROL PANEL



LEGEND	
Q1)	Line button ON/OFF
LRCK)	CHECK led light
LTV)	Tank temperature led light
LC1)	SHORT cycle led light
LC2)	MEDIUM cycle led light
LC3)	LONG cycle led light
S9)	CYCLE selection button
S3)	START CYCLE button
P2)	Boiler temperature (display)
P3)	Tank temperature (display)



#### PARTICULAR RECOMMENDATIONS FOR THE OPERATOR

- Do not operate the machine without having become fully familiar with the contents of this manual and without having acquired a comprehensive knowledge of the specific techniques and machine controls.
- Check that the area in which the machine is to be installed is compatible with the dimensions of the machine itself before installing this latter.
- Only use lifting and handling means that are suited to the weight of the machine when this must be installed or removed either completely or in part.
- Never allow unauthorised or unqualified personnel to start, adjust, operate or repair the machine. Always refer to this manual for correct operation.
- Always ensure that the main switch has been set to the "OFF" position before cleaning and/or servicing the machine. -This will disconnect the power source during the operator's intervention.
- The electrical powering system must be equipped with an automatic release system prior to the main machine switch and with a suitable grounding system that complies with all the requisites established by industrial provisions for the prevention of accidents.
- Always disconnect the power source if work must be carried out on the main switch or in its vicinity.
- All inspections and maintenance operations requiring removal of the safety guards are carried out under the complete responsibility of the users.
   These operations should therefore only be carried out by specialised and authorised technical personnel.
- Make sure that none of the accident preventing safety devices (barriers, guards, casings, microswitches, etc.) have been tampered with and that they are all perfectly functional before operating. These devices should be repaired if this is not the case.
- Never remove the safety devices.
- To prevent personal risks, only use power tools that are correctly connected to the grounding tap and that conform to the national safety regulations.
- Never ever tamper with the electrical system or with any other mechanism.
- Never ever use the hands or unsuitable instruments to locate leaks from pipes. Air, fluids under pressure or irritants could cause serious damage to both persons and/or property.
- Never use the hands instead of adequate tools when operating the machine.
- Never use the hands or other objects to stop moving parts.

#### PAY THE UTMOST ATTENTION TO THE DATA PLATES AFFIXED TO THE MACHINE WHENEVER WORKING ON THIS OR IN THEIR NEAR VICINITY.

The user is obliged to keep all the data plates and stickers in a legible condition.

Never climb on to the door or on to the top of the machine.

It is essential for the user to replace all data plates and stickers that may have deteriorated for any reason or that are not clearly visible, ordering new ones from the Spares Service.

Contact the person in charge of maintenance in the event of malfunctions or damage to the machine components without proceeding with further repairs.

It is absolutely forbidden for anyone to use the machine for purposes other than those explicitly established and documented. The machine must always be used in the ways, times and places dictated by common sense and the laws in force in each country, even when there are no specific provisions to govern the sector in the particular country of use.

The manufacturer and distributor declines all responsibility for accidents or damage to either persons or property as may arise following failure to comply with either the relative safety provisions or the instructions herein.

These instructions, together with the provisions governing machine installation and electrical connections form an integral part of the Accident Preventing Industrial regulations in force in each individual country.

THESE SAFETY PROVISIONS INTEGRATE AND DO NOT SUBSTITUTE THE SAFETY PROVISIONS LOCALLY IN FORCE.

NEVER ever make hurried or inaccurate repairs that could jeopardise the correct operation of the machine.

ALWAYS ASK FOR HELP FROM SPECIALISED PERSON-NEL IN CASE OF DOUBT.

ANY TAMPERING BY THE USER RELIEVES THE MA-NUFACTURER FROM ALL LIABILITY, THE USER BEING IN THIS CASE SOLELY RESPONSIBLE TOWARDS THE COMPETENT ACCIDENT PREVENTION AUTHORITIES.

The machine must not be used by people (chidren included) with reduced physical, sensory or mental abilities, with lack of experience or acquaintance, unless they could have a supervision or instruction concerning the use of the machine, through the intermediation of a person responsible for their safety.

It is forbidden to clean the machine with water jets.

#### 1.1 PT 2 Series - GENERAL DESCRIPTION

Passthrough dishwasher hood type for linear or angle setup made entirely in AISI 304 stainless steel, with adjustable feet.

The hood is easily raised thanks to the large handle and system of balancing springs that minimise the effort required from the operator. Stainless steel wash arms designed to exert maximum pressure, optimising the wash for all types of dishes, plates etc.

The dishwasher can be supplied with various tabling solutions to suit customer's requirements.

#### 1.2 TYPE OF USE AND IMPROPER USE

These machines have been designed and built to wash crockery placed in special baskets and using detergent and rinsing agent.

- Permitted crockery: glasses, teacups, trays, coffee cups, saucers, cutlery made of materials suitable for dishwashers and of a size able to fit into the basket and machine.
- Use of specific detergents and rinsing agents for industrial purposes normally available in the shops is permitted.



Any improper use of the machine relieves the manufacturer from all and every responsibility for accidents or damage to persons and property, also voiding all conditions of guarantee.

#### 1.3 TRANSPORT, SHIPMENT AND STORAGE (Fig. 2)

- The machine is normally shipped in a cardboard box parts. closed by straps.
- When transporting the packed machine, use a lift truck **1.7** or transpallet, positioning the box on the relative forks.



The machine must be sheltered from the weather when shipped and stored.

#### 1.4 INSPECTIONS ON ARRIVAL

When the machine arrives, check that the packaging is in a perfect condition and that there is no visible damage. If everything is in order, remove the packaging (unless other instructions have been received from the manufacturer) and check that the machine is free from damage caused by transport.

Now check whether there has been any damage to the structure, crushing or breakages.

If damage or imperfections are discovered:

 Immediately notify the haulage contractor both by phone and in writing by registered letter with return receipt attached;

2 - Inform the manufacturer by registered letter (with return receipt attached).

#### 

Notification of damage or faults must be immediate, in any case **within 3 days** from the date on which the machine is received.

#### 1.5 UNPACKING (Figs 2-3)

Proceed in the following way in order to remove the packing:

- 1. Cut the straps (10) that hold the cardboard in place.
- **2.** Remove the box (11) by lifting it upwards.
- **3.** Remove the protective film from the machine.
- **4.** Remove the machine from the base by lifting it from the lower part of the casing.
- 5. All packing must be collected and not left within children's reach since it could become a source of danger. The packing can be disposed of in the same way as solid urban waste.

Lift the machine by raising the lower part of the casing using a lift truck or transpallet.

#### 1.6 MACHINE IDENTIFICATION (Fig. 4)

- The serial number and machine data are stamped on the data plate (12) affixed to the rear part of the machine itself.



Always state the model and serial number of the machine when requesting technical assistance or ordering spare parts.

#### .7 DESCRIPTION OF THE SAFETY DEVICES

- Models PT 2 Series are equipped with a safety microswitch that blocks the washing pump if the tub access door is accidentally opened, and of other electronic safety devices.
- The electrical parts are enclosed by panels locked by screws.
- The machine is fitted with an equipotential ground conductor.
- Safety overflow to prevent water from spilling.

#### **1.8 REFERENCE STANDARD**

- The machine and its safety devices has been built in compliance with the following standards:
- Essential safety requisites established by Directive 2006/95/CE (LVD) and 2006/108/CE (EMC).
- Essential requisites established by Directive 2002/95/ EEC (RoHS).

#### WASHING PHASES PT 2 Series 2.1 2.1.a Switching on and Preparing the machine

To switch on the machine, press the power switch (Q1) into the **ON** position.

The LED indicating the last cycle selected will become CONSTANTLY LIT (LC1, LC2 or LC3), as will the CHECK (LRCK) LED and the tank temperature LED (**LTV**).



#### IS IMPORTANT

On first switching on, LED LC2 will light up.

The boiler, and then the tank, will start to fill automatically. Once the water level has been reached, the heating elements will switch in, first in the boiler, then in the tank. Once the water in the tank reaches the correct temperature, the tank temperature LED (LTV) will go ON.

#### 

Open the door and pour the detergent directly into the tank, in the quantities recommended by the manufacturer; this operation should not be carried out if the machine is equipped with a dosing pump (optional).

The thermometers P3 and P2 reflect the tank and boiler values of temperature.

#### WASHING OPERATION

If not equipped with an automatic dosing system, pour into the tank a quantity of powdered detergent suitable for the volume and hardness of the water.

For quantities, refer to the specific instructions for the detergent in use.

## ATTENTION

When items to be washed are encrusted with burnt on matter, or a long time has passed between use and washing, it is essential to carry out a pre-wash soak using a suitable softening agent. The use of hand-washing products is to be avoided as they could produce foam inside the machine.

Place the basket of items to be washed inside the machine, es; having first removed any solid waste.

#### 2.1.b Selecting a Cycle

The duration of the washing cycle can be chosen from three different lengths of time (SHORT, MEDIUM, LONG), so as to prevent the water in the tank from cooling. to be selected using the "CYCLE (S9)" button.

Each time the "CYCLE (S9)" button is pressed, the blue LEDs (LC1, LC2 or LC3), will light up or go out in sequence as shown in the following table:

LC 1:	SHORT CYCLE = 60 sec.
LC 2:	MEDIUM CYCLE = 120 sec.
LC 3:	LONG CYCLE = 180 sec.

#### 2.1.c AUTOMATIC and MANUAL STARTING WASHING CYCLE

To washing cycle starting can be performed in two different ways:AUTOMATICALLY (by closing the door) or manually (by pressing START (S3) button.

The change the modality press and hold "CYCLE" button for 10 sec.

When CYCLE LED flashes slowly, the cycle starts AU-TOMATICALLY; when CYCLE LED is lit fixed, the cycle starts MANUALLY.

#### 2.1.d STARTING the WASHING CYCLE

To start the washing cycle, close the hood (or press and hold the START (S3) button for a few seconds, then release).

Throughout the washing cycle the LED(s) for the selected cycle (LC1, LC2 or LC3) will FLASH.



We recommend that you top up the detergent used up by washing grease or dispersed during rinsing every 4-5 complete cycles.

The use of the machine ensures rinsing at the ideal temperature for hygienic purposes every time; Indeed, if the temperature is not sufficient the wash will be automatically prolonged so as to ensure the necessary conditions of optimum rinsing at 82°C. The waiting time required to attain optimum temperature can extend to a maximum of 8 minutes. While this is taking place, the CHECK LED will FLASH RAPIDLY until the end of the cycle. To reset the flashing, switch the machine off and back on using the power switch (Q1).

Add a spoonful of detergent to the tank every 5/6 wash

Dosages given are by way of indication only, and should be adjusted according to the hardness of the water and the type of detergent used.

#### **IMPORTANT**

Between cycles it is advisable to keep the door closed

#### 2.1.e Interrupting the cycle

1) It is possible to interrupt the washing cycle momentarily by opening the door, this is an EMERGENCY measure:

the cycle LEDs (LC1, LC2 or LC3) will start to FLASH, alternating with the CHECK LED.

On closing the door, operations will resume from the point in which they stopped.

#### Part 2: For the operator

## INSTRUCTIONS

2) The cycle can also be interrupted by SWITCHING the machine's power switch (Q1) to the **OFF** position.

3) On switching the machine back on, the LED indicating the last cycle selected will light up.

At the end of the washing cycle, remove the washing basket and allow items to dry. Remove them from the basket with clean hands.

#### 2.1.f Manual Draining

It is possible to drain the water from the tank at any time during the day, according to the waste accumulated. To carry out this operation, proceed as follows:

- SWITCH the machine's power switch (Q1) to the OFF position and release the overflow, allowing all the water to drain from the tank;

- Remove the tank filters (25) and clean;

#### Manual draining for machines with drainage pump

For machines fitted with a drainage pump it is possible to empty the tank by carrying out the manual draining cycle, during which only the drainage pump remains active.

#### IMPORTANT

This cycle can only be carried out by leaving the machine SWITCHED ON with the tank full of water and the door OPEN.

Having released the overflow, press and hold the **START** (S3) button until the LED LC2 and CHECK together) begins to FLASH, and then release the **START** (S3) button;

The DRAINAGE CYCLE will begin.

#### IMPORTANT

By pressing the START (ST) button or switching the power switch (Q1) to OFF, you can interrupt the drainage cycle before the preset time is up; to restart the interrupted cycle, press START (S3) again.

When the **LC2** LED lights up CONSTANTLY, the drainage cycle is finished.

At the end of the cycle, restore the filters (25) and the overflow (26) to their respective positions.

#### 2.1.g Switching off at the end of the day

At the end of the working day SWITCH OFF the machine by pressing the power switch (Q1) into the OFF position.

Switch off the mains switch feeding the machine and close the water supply taps.

For any repairs, contact only assistance centres authorised by the manufacturer.

#### 2.1.h Warnings during the operation

1) Ensure that the washing temperature remains at approx. 55-60°C;

2) Avoid immersing bare hands in the detergentfilled water; if this should happen, rinse immediately and thoroughly with running water;3) Use only anti-foaming detergents specific for use in industrial machines;

4) Deactivate the machine in case of breakdown or malfunction.

For any repairs, contact only assistance centres authorised by the manufacturer, and insist on the use of original parts.

Failure to follow the above warnings may compromise the safety of the washing machine.

#### 2.1.i Useful advice for better washibg results

Any unsatisfactory results from washing can be seen when traces of dirt are left on dishes or other items;

any water marks may be caused by insufficient rinsing.

In this case, ensure that the rinsing nozzles (31) are clean and that there is pressure in the water system.

If there are traces of waste, ensure that:

- The filters (25) are clean;
- the water temperature is around 60°C;
- items are correctly positioned in the basket;
- the washing/rinsing nozzles are clean;
- the arms (28/29) rotate freely.

#### 2.2. CLEANING (Fig. 7) 2.2.a General information

Strict compliance with the maintenance instructions in this section will keep your machine in a good working condition and will notably reduce the need for repairs.

### 

If any machine component becomes faulty, FIRSTCHECK that all the instructions given in the previous paragraphs have been complied with during use.

Repairs must be carried out immediately, as soon as the fault occurs. This will prevent the trouble from becoming worse and damaging other parts.

### 

It is forbidden to clean the machine with water jets.

#### 2.2.b Daily cleaning (Fig. 7)

## 

Daily operations to carry out when work has ended, with the machine off, the main circuit-breaker disconnected, the water cocks off and the washing tub empty.

- 1. Lift the overflow pipe (26) to completely drain the water from the tub.
- 2. Remove the filters (25) on top of the tank.
- 3. Thoroughly clean the inside parts of the machine.
- 4. Remove the pump safety filter.
- 5. Wash the filter under running water and fit them correctly back in their housings.

## 

Never ever clean the outside parts of the machine with jets of water.

Never use corrosive or acid cleaning products, wire wool or steel brushes since these could damage the machine.

## 2.3. PREVENTION MAINTENANCE (Fig. 7)

The preventive maintenance operations must be carried out with the machine off, the main circuit-breaker disconnected, the water delivery cocks off and the washing tub empty.

## 2.3.a Checking and cleaning the spray arms and nozzles (Fig. 7)

Periodically check to make sure that the spray arm (28), the rinsing arm (29) and the relative nozzles are not clogged.

#### Cleaning the unit:

- 1. Unscrew the ring nut (27/30) and lift the spray and rinsing arms (28/29).
- Wash the washing and rinsing spray arms. Clean the nozzles if they are clogged and then fit the parts exactly back in their original positions.
- **3.** Remount all parts by complying with the above instructions in reverse.

#### 2.4. DESCALING

Where hard water is present lime scale deposits will form in the machine and on dishes, which must, for reasons of hygiene, be removed by descaling. Advice on operation procedures and frequency for this treatment are generally given by the detergent supplier, who can provide suitable products.

In order to avoid damaging the machine, do not exceed recommended doses, follow the detergent producer's directions scrupulously and, having finished operations, rinse thoroughly

#### 2.5. TEMPORARY STOPPAGE

If the machine is to be left inactive for a period of some weeks, it is advisable beforehand to load the tank and run a few empty cycles with clean water then drain, so as to avoid the formation of unpleasant odours. If necessary, repeat the process several times until the water is still clean after washing.

If the stoppage is to be very long, it is advisable to drain the water from the boiler and from the electric pump.

#### 2.6. DEMOLITION and DISPOSAL.



When the machine is to be scrapped, drain the water from the tank and from the boiler, as indicated in the points above, and disconnect the machine from the water and electricity supply networks, then dispose of the components according to current regulations, respecting national and local ecological and environmental legislation, and taking care to separate the parts as follows:

- metallic parts: body work, surfaces, panels, filters;
- electrical parts: motors, remote switches, microswitches, cabling;
- plastic parts: connectors, baskets;
- rubber parts: tubes, couplings

The producer declines all responsibility for any printing errors contained in this booklet.

The instructions, drawings, tables and everything else in this manual are of a confidential technical nature. For this reason, none of the information may be either completely or partially duplicated or disclosed to third parties without prior written authorisation from HOONVED which is the sole proprietor and which reserves the right to make any modifications as may be considered necessary without advance warning.

## SUMMARY TABLE of CYCLE LED CHECK SIGNALS (LRCK)

MACHINE STATUS	CYCLE LED CHECK
Machine OFF	OFF
Machine on line but STAND/BY	ON CONSTANT
CYCLE: washing, pause, rinsing	ON CONSTANT
ALARM: lack of heating	RAPID flashing
ALARM: door open	RAPID flashing
Manual drain	RAPID flashing

### SUMMARY TABLE of START BUTTON (S3)

MACHINE STATUS	START BUTTO	N (S3)
Machine OFF	OFF	
Preparing the machine	RED (light up)	
Machine on line but STAND/BY	GREEN (light up)	
CYCLE	DARK BLUE (light up)	

1

#### 

	TROUBLESHOO	TING
PROBLEMS	CAUSES	SOLUTIONS
The machine fails to turn on.	Main switch disconnected.	Turn on the switch.
The machine does not fill with water.	Water cock shut. Dirty fill pipe filter.	Turn on the cock. Detach the fill pipe (15 Fig. 6) and clean the filter (17).
	Rinsing nozzle clogged.	Unscrew and clean the nozzles (31 Fig. 7) under running water.
	Overflow pipe not well con- nected.	Check the right connection of the overflow pipe (26 Fig. 7)
Insufficient washing.	Wrong pump rotation direc- tion.	Call the technician to reverse 2 of the 3 wires on the main switch.
	Clogged washing nozzles. Dirty washing filter. Clogged washing blade.	Clean the washing blade (28 Fig. 7). Clean the filter ( 25 Fig. 7). Remove and clean the blade (28 Fig. 7)
Insufficient rinse.	Insufficient washing condi- tions.	Check the correct washing phase.
	Clogged rinsing nozzles.	Unscrew and clean the nozzles (31 Fig. 7) under running water.
	Clogged boiler by limestone. Low mains pressure (less than 2 bar 200 Kpa).	Call after-sales service. Wait for pressure recovery or purchase a new pressure pump.
	Insufficient temperature. Bad location of the nozzles or damaged nozzles.	Call after-sales service. Check the right location of the nozzles and replace damaged ones.
<b>`</b>		

If the electrical cord is damaged, it must be replaced by the manufacturer or by its technical service or by a person with similar qualifications.

#### 3.1 INSTALLATION (Fig. 5)

- After having removed the packing, check that the machine is in a perfect condition and that all the parts have been included.
- Position the machine in the required setting and level it by means of the feet (13).

#### 3.1.a Drain pipe connection (Fig. 5)

- Connect one end of the drain pipe to the overflow (26) and the other to an already prepared drain trap.

#### IMPORTANT

To preview a pavement download with sifoide and to join to the machine with the flexible tube to I equip making so that the same one or in slope towards the download.

To make sure moreover that along the same one not there are throttlings.

To assess that the outlet pipe to wall resists to a temperature of 70°C.

#### 3.1.b Connection to the water main (Figs. 5-6)

Connect one end of the supplied inlet pipe (15) to the solenoid valve and the other end (15) to a 3/4" hot water supply (50°C), ensure operating water pressure is between 200-400 kpa (2-4 bar).



It is essential to connect the water delivery pipe to a throttle cock in order to separate the water main from the machine itself. Also check that there are no sharp bends.

## 

It is compulsory to replace the gaskets of the inlet tube for water supplying, every time it is demounted and mounted.



If there is sand in the water main, it will be necessary to install a filter between it and the machine.

The exercise pressure will not have to be inferior to the 2 advanced bars and to the 4 bars (200-400 kPa).

If the pressure is inferior, increase is advised to the installation of a pump pressure; if the pressure is advanced, the application of a pressure reducer.

For having a good result he is advisable to have the water of entrance with a not advanced hardness to the **10°F**.

For advanced hardnesses to use cars with built-in water softner or water softners to ion exchange or inverse osmosis.

To respect eventual enforced National or Regional norms rigorously.

The manufacturer declines all responsibility for damage to the machines caused by failure to comply with the above listed provisions.

3.1.c Electrical connection (Fig. 5-6)



- Before connecting to the electricity main, always check that the data pertaining to the power source correspond to those indicated on the identification plate (pos. 12 Fig. 4) and that the main electric power switch installed prior to the machine is disconnected "0" OFF.
- An appropriately sized omnipolar circuit-breaker with a minimum 3 mm gap between its contacts must be installed between the power supply main and the machine.
- Connect the electrical power cable (18) to the main switch installed prior to the machine.
- Connect the equipotential ground conductor to the terminal (19).

The manufacturer declines all responsibility for acc dents or damage to persons or property caused by failure to comply with the above listed provisions.

#### DYSPLAY ALARMS P3 and P2

The alarm and active function codes shown on the display when the machine is in operation are:

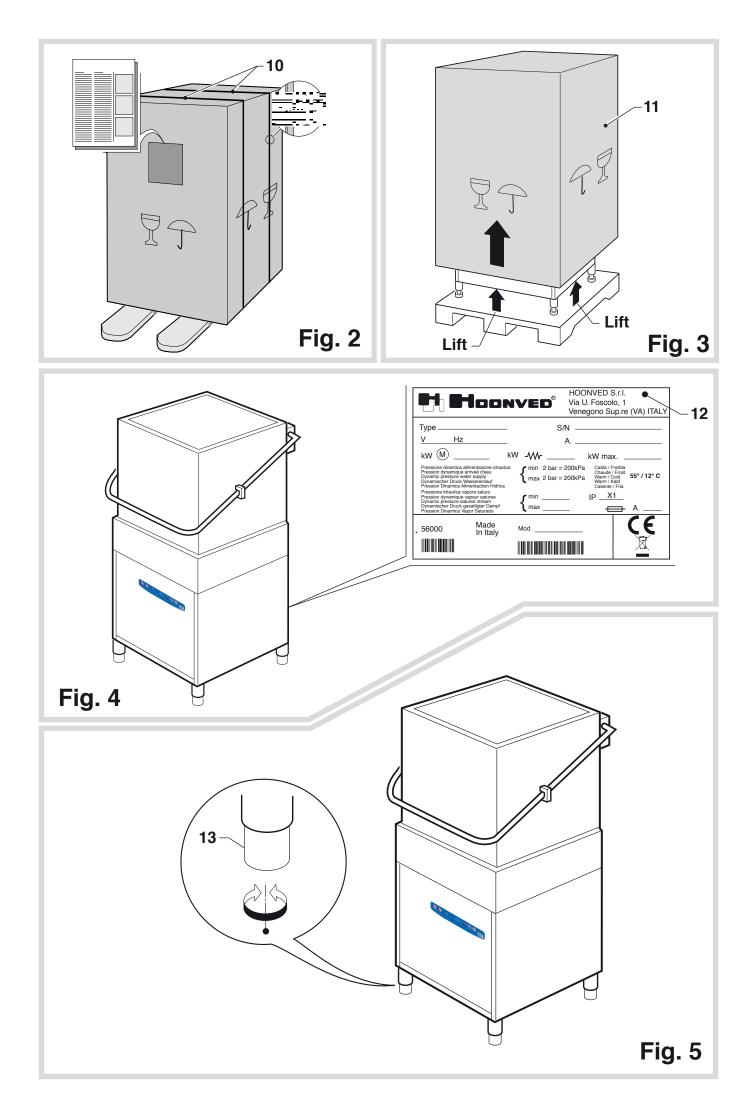
- A 4: TEMPERATURE PROBE DISCONNECTED This alarm message appears if either or both of the probe contacts are disconnected (or if the probe is interrupted);

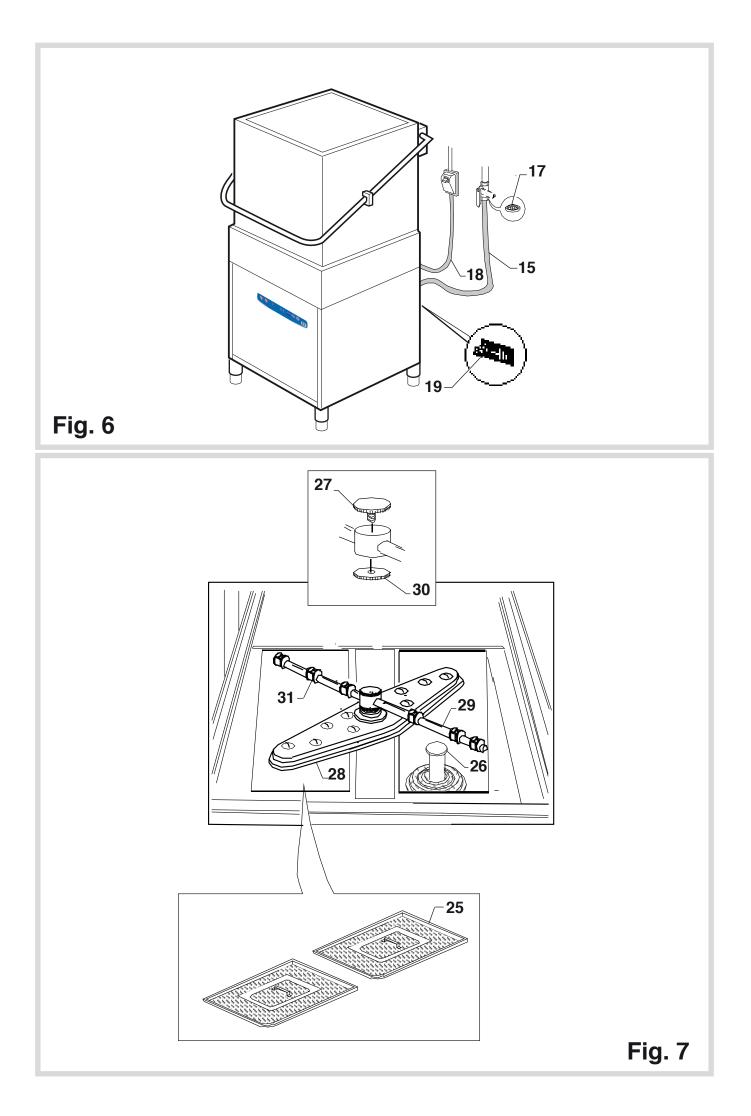


 A5 : BOILER OVERHEATING This alarm message appears when the temperature in the boiler exceeds 99°C o circuit short;

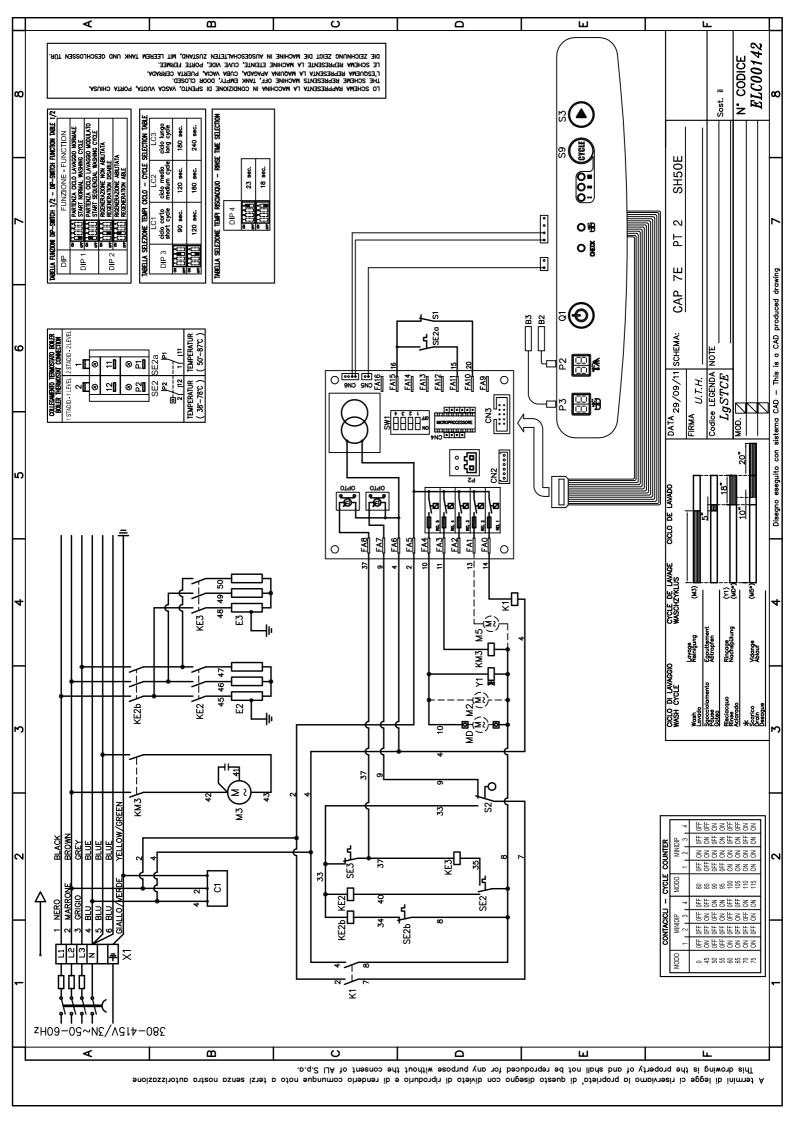


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## ELECTRIC DIAGRAM



LEGENDA SCHEMI MACCHINE A CICLO
COMPONENT LEGEND FOR UNDERCOUNTER MACHINES
LEGENDA SCHEMA MACHINES A CYCLE
LEGENDE SCHEMA FÜR PROGRAMM-AUTOMATEN
LEGENDA ESQUEMAS MAQUINAS A CICLO

- A3 TIMER ELETTRONICO ELECTRONIC TIMER TIMER ELECTRONICO
- B2 SONDA TEMPERATURA BOILER DRILL FOR BOILER TEMPERATURE SONDA TEMPERATURA BOILER
- **B3** SONDA TEMPERATURA VASCA DRILL FOR TANK TEMPERATURE SONDA TEMPERATURA CUBA
- B3a SONDA LIVELLO VASCA DRILL FOR TANK LEVEL SONDA NIVEL CUBA
- B3b SONDA LIVELLO MASSIMO VASCA DRILL FOR MAX TANK LEVEL SONDA NIVEL MAXIMO CUBA
- C1 FILTRO ANTIDISTURBI NOISE FILTER FILTRE ANTIPARASITOS
- C2 CONDENSATORE POMPA RISCIACQUO RINSE PUMP CONDENSER CONDENSADOR BOMBA ACLARADO
- C3 CONDENSATORE POMPA LAVAGGIO WASH PUMP CONDENSER CONDENSADOR BOMBA LAVADO
- E2 RESISTENZA BOILER BOILER HEATER RESISTENCIA BOILER
- E3 RESISTENZA VASCA TANK HEATER RESISTENCIA CUBA
- F FUSIBILE DI LINEAF1 MAIN FUSEFUSIBLE DE LINEA
- FA FUSIBILE SCHEDA ELETTRONICA PRINTED CIRCUIT FUSE FUSIBLE DE FICHA
- H1 LAMPADA SPIA MACCHINA ACCESA MACHINE ON INDICATOR LAMP LUZ PILOTO MAQUINA CONECTADA
- H2 LAMPADA SPIA MACCHINA PRONTA MACHINE READY INDICATOR LAMP LUZ PILOTO MAQUINA PREPARADA
- H3 LAMPADA SPIA MACCHINA IN FUNZIONE MACHINE RUNNING INDICATOR LAMP LUZ PILOTO MAQUINA FUNCIONANDO
- K1 RELE' GENERALE MAIN RELAY RELE' GENERAL
- K2 RELE' AUSILIARIO AUXILIARY RELAY RELE' AUXLIAR

PROGRAMMATEUR ELETTRONIQUE ELEKTRONISCHER PROGRAMMSCHALTER

SONDE TEMPERATURE SURCHAUFFEUR FÜLER FÜR BOILERTEMPERATUR

SONDE TEMPERATURE CUVE FÜLER FÜR TANKTEMPERATUR

SONDE NIVEL CUVE FÜLER FÜR TANKNIVEAU

SONDE NIVEL MAX CUVE FÜLER FÜR MAX. TANKNIVEAU

FILTRE ANTI-DERANGEMENT ENTSTÖRTFILTER

CONDENSEUR POMPE RINÇAGE KONDENSATOR FÜR NACHSPÜLPUMPE

CONDENSEUR POMPE LAVAGE KONDENSATOR FÜR WASCHPUMPE

RESISTANCE SURCHAUFFEUR BOILERHEIZKÖRPER

RESISTANCE CUVE TANKHEIZKÖRPER

FUSIBLE DE LIGNE HAUPT SCHMELTZSICHERUNG

FUSIBLE DE FICHE SCHMELTZSICHERUNG FÜR E-TAFEL

LAMPE TEMOIN MACHINE SOUS TENSION KONTROLLAMPE MACHINE AN

LAMPE TEMOIN MACHINE PRETE KONTROLLAMPE MACHINE BEREIT

LAMPE TEMOIN MACHINE EN FONCTIONNEMENT KONTROLLAMPE MACHINE IN BETRIEB

RELAIS GENERAL HAUPTRELAIS

RELE' AUXILIAIRE HILFSKRAFTRELAIS

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		LEGENDE	NDA SCHEM SCHEMA FÜI	R UNDERCOU A MACHINES R PROGRAM AS MAQUINA	A CYCLE M-AUTOMAT		LgSTCE		
KE2	TELERUTTORE/RELE' RESIST BOILER HEATER CONTACTO CONTACTOR/RELE' RESISTE	R/RELAY					ANCE SURCHAUFFEUR BOILERHEIZUNG		
KE2t	DTELERUTTORE SICUREZZA R BOILER HEATER SAFETY CO CONTACTOR SEGURIDAD RE	NTACTOR					ISTANCE SURCHAUFFEUR R BOILERHEIZUNG		
KE3	TELERUTTORE/RELE' RESIS TANK HEATER CONTACTOR/I CONTACTOR/RELE' RESISTE	RELAY			CTEUR/RELA SCHUTZ/RE		ANCE CUVE ANKHEIZUNG		
M2	POMPA RISCIACQUO RINSE BOOSTER PUMP BOMBA ACLARADO				rinçage Pülpumpe				
-	POMPA LAVAGGIO WASH PUMP BOMBA LAVADO			POMPE WASCH	DE LAVAGE PUMPE				
М5	POMPA DI SCARICO DRAIN PUMP BOMBA DESAGUE			-	VIDANGE PUMPE				
MD	DOSATORE DETERSIVO DETERGENT DISPENSER DOSIFICADOR DETERGENTE				R DETERGEN TTELDOSIEF				
P2	TERMOMETRO DIGITALE BOI BOILER DIGITAL THERMOME TERMOMETRO DIGITAL BOIL	TER			OMETRE DIG THERMOME		HAUFFEUR GITALER ANZEIGE		
P3	TERMOMETRO DIGITALE VAS TANK DIGITAL THERMOMETR TERMOMETRO DIGITAL CUBA	ĒR			OMETRE DIG IERMOMETE		TALER ANZEIGE		
Q1	INTERRUTTORE GENERALE MAIN SWITCH INTERRUPTOR GENERAL				UPTEUR GE SCHALTER	NERAL			
S1 S1a	MICROINTERRUTTORE PORT DOOR MICROSWITCH MICROINTERRUPTOR PUERT				NTERRUPTE KROSCHALT				
	MICROINTERRUTTORE DI SIC SAFETY DOOR MICROSWITC MICROINTERRUPTOR DE SEC	Н			NTERRUPTE CHEREITSCH		CURITE' PORTE		
S2	PRESSOSTATO VASCA TANK PRESSURE SWITCH INTERRUPTOR DE NIVEL CUE	3A			OSTAT CUVE REGLER FÜI				
S3	PULSANTE AVVIO CICLO START PUSH BUTTON PULSADOR INICIO CICLO			BOUTON DEMARRAGE STARTTASTE					
S4	PULSANTE RIGENERAZIONE REGERATION PUSH BUTTON PULSADOR REGENERACION			BOUTON REGENERATION REGENERIERUNGSTASTE					
S5	PULSANTE POMPA DI SCARIO DRAIN PUMP PUSH BUTTON PULSADOR BOMBA DESAGUI			BOUTON POMPE VIDANGE DRUCKTASTE FÜR ABLAUFPUMPE					
S9	PULSANTE SELEZIONE CICLO CYCLE SELECT PUSH BUTTO PULSADOR SELECTIVO CICLO	N			N SELECTEU SWÄHLER	IR CYCLE			
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LEGENDA SCHEMI MACCHINE A CICLO

BREAK TAN FLOTADOR S11a PRESSOST BREAK TAN INTERRUP S11abPRESSOS BREAK TAN INTERRUP S22 TERMOSTA S22a BOILER HE TERMOSTA S22b TERMOSTA S23b TERMOSTA S25b TE	NK MINIMUM LEVER A REED NIVEL MI TATO LIVELLO MAS NK MAXIMUM LEVE TOR DE NIVEL MA TATO SICUREZZA NK MAXIMUM LEVE TOR DE NIVEL MA ATO RESISTENZA E TOR DE NIVEL MA ATO RESISTENZA E TOR RESISTENZA E ATO SICUREZZA RI ATO SICUREZZA	NIMO BREAK TANK SIMO BREAK TANK L PRESSURE SWITCH (IMO BREAK TANK L SAFETY PRESSURE SWITCH (IMO DE SEGURIDAD BREAK TANK BOILER AT BOILER ESISTENZA BOILER ERMOSTAT ESISTENCIA BOILER (ASCA CUBA ESISTENZA VASCA	PRESSOSTAT LEVEL MAXIMUM NIVEAUREGLER FÜR HÖCHSTV PRESSOSTAT SECURITE' LEVE SICHEREITSNIVEAUREGLER FÜ	R FÜR MINDESTWASSERSTAND E MBREAK TANK WASSERSTAND B.T. EL MAXIMUM BREAK TANK ÜR HÖCHSTWASSERSTAND B.T. JRCHAUFFEUR STAT ISTANCE SURCHAUFFEUR BOILERHEIZKÖRPER JVE AT
BREAK TAN INTERRUP S11abPRESSOS BREAK TAN INTERRUP SE2 TERMOSTA SE2a BOILER HE TERMOSTA SE2b TERMOSTA SE2b TERMOSTA SE3a TERMOSTA SE3a TANK HEAT TERMOSTA SE3b TERMOSTA SE3b TERMOSTA SE3abTANK HEAT TERMOSTA SE3abTANK HEAT TERMOSTA SE3abTANK HEAT TERMOSTA SE3abTANK HEAT TERMOSTA SE3b TERMOSTA SE3b	NK MAXIMUM LEVE TOR DE NIVEL MAX TATO SICUREZZA NK MAXIMUM LEVE TOR DE NIVEL MAX ATO RESISTENZA E ATO RESISTENZA E SATER THERMOSTA ATO SICUREZZA RI ATO SEGURIDAD R ATO RESISTENZA N TER THERMOSTAT ATO SEGURIDAD R ATO SICUREZZA RI ATO SICUREZZA RI ATO SICUREZZA RI ATO SEGURIDAD R ERA DI LINEA BLOCK DE CONEXION ALVOLA ALIMENTA	L PRESSURE SWITCH KIMO BREAK TANK LIVELLO MASSIMO BREAK TANK L SAFETY PRESSURE SWITCH KIMO DE SEGURIDAD BREAK TANK BOILER AT BOILER ESISTENZA BOILER ERMOSTAT ESISTENCIA BOILER (ASCA CUBA ESISTENZA VASCA RMOSTAT	NIVEAUREGLER FÜR HÖCHSTV PRESSOSTAT SECURITE' LEVE SICHEREITSNIVEAUREGLER FÜ THERMOSTAT RESISTANCE SL BOILERHEIZKÖRPERTHERMOS THERMOSTAT SECURITE' RESI SICHEREITTHERMOSTAT FÜR I THERMOSTAT RESISTANCE CL TANKHEIZKÖRPERTHERMOSTAT THERMOSTAT SECURITE' RESI SICHEREITTHERMOSTAT FÜR T	WASSERSTAND B.T. EL MAXIMUM BREAK TANK ÜR HÖCHSTWASSERSTAND B.T. JRCHAUFFEUR STAT ISTANCE SURCHAUFFEUR BOILERHEIZKÖRPER JVE AT
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<ul> <li>SE2a BOILER HE TERMOSTA</li> <li>SE2b TERMOSTA</li> <li>SE2abBOILER HI TERMOSTA</li> <li>SE3 TERMOSTA</li> <li>SE3a TANK HEAT TERMOSTA</li> <li>SE3b TERMOSTA</li> <li>SE3b TERMOSTA</li> <li>SE3abTANK HEA TERMOSTA</li> <li>SE3b TERMOSTA</li> <l< td=""><td>ATO SICUREZZA RI EATER SAFETY TH ATO SEGURIDAD R ATO RESISTENZA N TO RESISTENZA N TO RESISTENZA N TO RESISTENZA N ATO RESISTENCIA ATO SICUREZZA RI ATO SICUREZZA RI ATO SEGURIDAD R ERA DI LINEA BLOCK DE CONEXION ALVOLA ALIMENT/</td><td>AT BOILER ESISTENZA BOILER ERMOSTAT ESISTENCIA BOILER VASCA CUBA ESISTENZA VASCA RMOSTAT</td><td>BOILERHEIZKÖRPERTHERMOS THERMOSTAT SECURITE' RESI SICHEREITTHERMOSTAT FÜR I THERMOSTAT RESISTANCE CU TANKHEIZKÖRPERTHERMOSTAT THERMOSTAT SECURITE' RESI SICHEREITTHERMOSTAT FÜR</td><td>STAT ISTANCE SURCHAUFFEUR BOILERHEIZKÖRPER JVE AT ISTANCE CUVE</td></l<></ul>	ATO SICUREZZA RI EATER SAFETY TH ATO SEGURIDAD R ATO RESISTENZA N TO RESISTENZA N TO RESISTENZA N TO RESISTENZA N ATO RESISTENCIA ATO SICUREZZA RI ATO SICUREZZA RI ATO SEGURIDAD R ERA DI LINEA BLOCK DE CONEXION ALVOLA ALIMENT/	AT BOILER ESISTENZA BOILER ERMOSTAT ESISTENCIA BOILER VASCA CUBA ESISTENZA VASCA RMOSTAT	BOILERHEIZKÖRPERTHERMOS THERMOSTAT SECURITE' RESI SICHEREITTHERMOSTAT FÜR I THERMOSTAT RESISTANCE CU TANKHEIZKÖRPERTHERMOSTAT THERMOSTAT SECURITE' RESI SICHEREITTHERMOSTAT FÜR	STAT ISTANCE SURCHAUFFEUR BOILERHEIZKÖRPER JVE AT ISTANCE CUVE
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<ul> <li>X2 TERMINAL</li> <li>X3 REGLETA I</li> <li>Y1 ELETTROV</li> <li>Y1a WATER INL</li> <li>ELECTROV</li> <li>Y4 ELETTROV</li> <li>REGERATION</li> </ul>	BLOCK DE CONEXION ALVOLA ALIMENTA			
Y1a WATER INL ELECTROV Y4 ELETTROV REGERATION				
REGERATI	ALVULA ALIMENTA		ELECTROVANNE ARRIVEE EAU MAGNETVENTIL FÜR WASSER2	J/RINÇAGE ZULAUF/NACHSPÜLUNG
ELECTROV	ALVOLA RIGENER. ON SOLENOID VAL ALVULA REGENE	VE	ELECTROVANNE REGENERATI MAGNETVENTIL FÜR REGENEF	
DRAIN SOL	ALVOLA SCARICO ENOID VALVE ALVULA DESAGU	≣	ELECTROVANNE VIDANGE MAGNETVENTIL FÜR ABLAUF	
SUPPLEME	NTARY RINSE SOL	UO SUPPLEMENTARE ENOID VALVE O SUPLEMENTARIO	ELECTROVANNE RINÇAGE SUF MAGNETVENTIL FÜR ZUSÄTZLI	
BREAK TAN	ALVOLA BREAK TANK SOLENOID VAL AK SOLENOID VAL	/E	ELECTROVANNE BREAK TANK MAGNETVENTIL FÜR BREAK TA	

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