

CAP 10 E/BT

CAP 12 E/BT

SO 100 E/BT

SO 120 E/BT

Istruzioni per l'uso e la manutenzione
Instructions for use and maintenance
Mode d'emploi et entretien
Gebrauchs - und Wartungsanweisungen
Instrucciones para el uso y el mantenimiento





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DICHIARAZIONE DI CONFORMITÀ CE
DECLARATION OF CONFORMITY CE
CE DECLARACION DE CONFORMIDAD
DECLARATION DE CONFORMITÉ CE
KONFORMITÄTSERKLÄRUNG CE
CE CONFORMITEITSVERKLARING
CE KONFORMITETSERKLÆRING



Noi dichiariamo sotto la nostra esclusiva responsabilità che il prodotto:
The undersigned hereby declares under full responsibility that the following product:
Declaramos bajo nuestra responsabilidad que el producto:
Nous soussignées attestons sous notre entière responsabilité que le produit suivant:
Die unterzeichnete Fa. erklärt unter eigener Verantwortung, dass folgende Produkte:
Ondergetekende firma verklaart dat de:
Hermed erklæres at følgende produkter:

**LAVASTOVIGLIE - DISHWASHER - LAVAVAJILLAS - LAVE-VASSEILLE - GESCHIRRSPÜLER -
VAATWASMACHINE - TALLERKENOPVASKEMASKINE -UNDERBANKDISKMASKIN**

**CAP 10 E..., CAP 12 E..., SO 100 E..., SO 120 E...,
CAP 10 E BT..., CAP 12 E BT..., SO 100 E BT..., SO 120 E BT...,**

al quale questa dichiarazione si riferisce, è conforme alle seguenti norme:
for which this declaration refers to in accordance to the following standards:
al que se refiere esta declaración de conformidad a las siguientes normas:
auquel se réfère cette déclaration, est conforme aux normes suivantes:
auf welche sich diese Erklärung bezieht, folgendem Standard entsprechen:
waarop deze verklaring betrekking heeft, volgens de standaard:
som er omfattet af denne erklæring, overholder følgende standarder:

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:
en base a lo previsto en la directiva CEE:
selon ce qui est prévu par les Directives CEE:
aufgrund der vorgesehenen Richtlinien:
gebaseerd op de CE-richtlijnen:
iht. EU-direktiv:

2006/95/CE-89/336, 92/31, 93/68CEE

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 responsibility for injuries or damage derived from machine misuse, abuse by others or improper machine maintenance or repairs.

Declinamos toda responsabilidad por siniestros a personas por la incorrecta manipulación por parte de tercero e la carencia de mantenimiento o reparación.

Nous déclinons toute responsabilité pour sinistres à personnes ou à objet qui dérivent de l'intervention de la part de tiers non spécialistes ou de carences de maintenance ou réparation.

Wir lehnen jegliche Verantwortung für Schäden an Personen oder Dingen ab, die auf fehlerhaftes Eingreifen Dritter oder auf mangelhafte Wartung oder Reparatur zurückzuführen sind.

Wij zijn op geen enkele manier verantwoordelijk voor schade aan personen of materialen welke voortvloeien uit onoordeelkundig gebruik, reparatie dan onderhoud aan de machines door derden.

Vi frasiger os ethvert ansvar for skader opstået som følge af fejlagtig anvendelse af maskinen, misbrug, eller utilstrækkeligt vedligehold eller reparation.

05/03/2009

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Giuseppe RIENZI

DELEGATO ALLA SICUREZZA DEL PRODOTTO

(Nome e firma o timbratura equivalente della persona autorizzata)

(Name signature or equivalent of authorized representative)

(Nombre y firma o equivalente de la persona autorizada)

(Nom et signature ou cachet de la personne autorisée)

(Name und Stempel der rechtskräftigen Person)

(Naam handtekening of equivalent van de rechtsgeldige vertegenwoordiging)

(Underskrift)

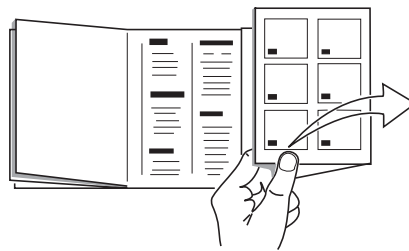
LAVASTOVIGLIE
DISHWASHING MACHINE
LAVE-VAISSELLE
GESCHIRRSPÜLER
LAVAVAJILLAS

CAP 10 E/BT

CAP 12 E/BT

SO 100 E/BT

SO 120 E/BT



Le figure relative alle istruzioni sono riportate sulle ultime pagine.

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

Les figures concernant les notices d'utilisation sont groupées sur les dernières pages.

Die Bilder zur Gebrauchsanweisung sind auf den letzten Seiten des Umschlages.

Las figuras correspondientes a las instrucciones se encuentran en las últimas paginas.

ITA INFORMAZIONE AGLI UTENTI

Ai sensi dell'art. 13 del Decreto Legislativo 25 Luglio 2005, n.151 "Attuazione delle Direttive 2002/95/CE, 2002/96/CE e 2003/108/CE, relative alla riduzione dell'uso di sostanze pericolose nelle apparecchiature elettriche ed elettroniche, non ché allo smaltimento dei rifiuti"

Il simbolo del cassonetto barrato riportato sulla targhetta matricola della lavastoviglie indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti.

La raccolta differenziata della lavastoviglie giunta a fine vita è organizzata e gestita dal produttore.

L'utente che vorrà disfarsi della presente apparecchiatura dovrà quindi contattare il produttore e seguire il sistema che questo ha adottato per consentire la raccolta separata dell'apparecchiatura giunta a fine vita.

L'adeguata raccolta differenziata per l'avvio successivo della lavastoviglie dimessa al riciclaggio, al trattamento e allo smaltimento compatibile a livello ambientale, contribuisce ad evitare possibili effetti negativi sull'ambiente e sulla salute e favorisce il reimpiego e/o riciclo dei materiali di cui è composta l'apparecchiatura.

Lo smaltimento abusivo del prodotto da parte del detentore comporta l'applicazione delle sanzioni amministrative previste dalla normativa vigente.

ENG INFORMATION FOR USERS

In accordance with the Directives 2002/95/EC, 2002/96/EC and 2003/108/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment, and waste electrical and electronic equipment"

The "crossed out wheeled bin" symbol on the dishwasher serial number plate indicates that at the end of its useful life the product must be collected separately from other waste.

Separate collection of dishwashers that have come to the end of their useful life is organised and managed by the distributor.

Therefore, any user wanting to dispose of this equipment must contact the distributor and use the system adopted by the latter to allow separate collection of equipment which has reached the end of its useful life.

Suitable separate collection, followed by decommissioned dishwasher recycling, treatment and environmentally-sound disposal, helps to avoid possible negative effects on health and the environment and promotes re-use and/or recycling of the materials of which the equipment is made.

Owners who dispose of the product illegally will be liable to the administrative penalties envisaged by the regulations in force.

FRA INFORMATIONS DESTINÉES AUX UTILISATEURS

Conformément à les Directives 2002/95/CE, 2002/96/CE et 2003/108/CE, sur la réduction de l'utilisation de substances dangereuses dans les appareils électriques et électroniques ainsi que sur l'élimination des déchets."

Le symbole de la poubelle barrée reporté sur la plaque du lave-vaisselle indique que le ramassage du produit à la fin de sa vie s'effectue séparément par rapport aux autres déchets.

Le tri différencié d'un lave-vaisselle arrivé à la fin de sa vie est organisé et géré par le distributeur. L'utilisateur souhaitant se défaire de son appareil doit donc contacter le distributeur et se conformer au système que celui-ci aura adopté pour permettre un ramassage séparé de l'appareil.

Le tri différencié permettant d'entreprendre le recyclage du lave-vaisselle à éliminer, ainsi qu'un traitement et une élimination compatible du point de vue environnemental contribuent à éviter les effets négatifs possibles sur l'environnement et sur la santé et favorisent le réemploi et/ou le recyclage des matériaux constituant l'appareil.

Une élimination frauduleuse du produit par son propriétaire comporte l'application des sanctions administrative prévue par la norme en vigueur.

TED AUSKUNFT ZU DEN BENUTZERN

Gemäß der Richtlinien 2002/95/EG, 2002/96/EG und 2003/108/EG, zur Beschränkung der Verwendung gefährlicher Stoffe in Elektro- und Elektronikgeräten, sowie über Elektro- und Elektronik-Altgeräte"

Das Symbol, das eine durchgestrichene Abfalltonne auf Rädern darstellt, befindet sich auf dem Datenschild der Spülmaschine und bedeutet, dass das Altgerät im Zuge der Entsorgung getrennt gesammelt werden muss.

Die getrennte Sammlung der Spülmaschine als Elektro-Altgerät wird vom Vertreiber organisiert und abgewickelt.

Der Nutzer, der das betreffende Gerät entsorgen will, muss daher den Vertreiber kontaktieren und die Entsorgung gemäß dem System vornehmen, das der Vertreiber gewählt hat, um die getrennte Sammlung der Altgeräte zu gewährleisten.

Die getrennte Sammlung der Alt-Spülmaschine ist eine Voraussetzung für die spezifische Behandlung und das spezifische Recycling von Elektro- und Elektronik-Altgeräten und notwendig, um negative Auswirkungen auf Gesundheit und Umwelt zu vermeiden.

Ferner werden dadurch die Wiederverwendung und/oder das Recycling der Materialien, aus denen die Spülmaschine besteht, gefördert.

Die unsachgemäße Entsorgung des Geräts durch den Inhaber wird mit Verwaltungsstrafen gemäß dem geltenden Recht geahndet.

SPA INFORMACIÓN PARA LOS USUARIOS

Según las Directivas 2002/95/CE, 2002/96/CE y 2003/108/CE, sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos, y eliminación de residuos"

El símbolo del contenedor tachado reproducido en la placa del número de serie del lavavajillas indica que el producto debe ser recogido por separado y no pueden eliminarse con el resto de residuos domésticos.

La eliminación por separado del lavavajillas al final de su vida útil está organizada y gestionada por el distribuidor.

El usuario que desee desechar este aparato deberá ponerse en contacto con el distribuidor y respetar las modalidades que éste ha adoptado para consentir su eliminación por separado al final de su vida útil.

Una adecuada recogida selectiva del lavavajillas para su reciclaje, tratamiento y eliminación de manera respetuosa con el medio ambiente contribuye a evitar posibles efectos negativos para el medio ambiente y la salud, y fomenta la reutilización y/o el reciclaje de los materiales que lo componen.

La eliminación del producto de forma no autorizada dará lugar a la aplicación de las sanciones administrativas establecidas por las normas vigentes.

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ITA

AVVERTENZA

Prima di procedere all'installazione, alla messa in funzione, alla regolazione e alle operazioni di manutenzione della lavaoggetti Mod. CAP/SOE, leggere attentamente il presente manuale.

In caso di guasto o cattivo funzionamento della macchina rivolgersi esclusivamente ad un centro tecnico autorizzato o direttamente alla ditta HOONVED.

GBR

IMPORTANT

Become thoroughly familiar with the contents of thi manual before installing, setting up, adjusting and servicing utensil and pot washer Mod. CAP/SOE .

Only contact an authorized technical center or HOONVED in the event of breakdowns or faulty machine operation.

FRA

IMPORTANT

Lisez attentivement cette notice avant la mise en place, la mise en service, le réglage et les opérations d'entretien de la machine lave-batterie Mod. CAP/SOE.

En cas de panne franche ou de dysfonctionnement de la machine, adressez-vous exclusivement à un service technique agréé ou directement à la société HOONVED.

DEU

HINWEIS

Bevor man den Geschirrspüler Mod. CAP/SOE installiert, in Betrieb nimmt, einstellt oder Wartungsarbeiten daran vornimmt, ist dieses Handbuch aufmerksam durchzulesen.

Bei Störungen oder Fehlbetrieb der Gerätespülmaschinen wenden Sie sich bitte ausschließlich an einen autorisierte Servicestelle oder direkt an HOONVED.

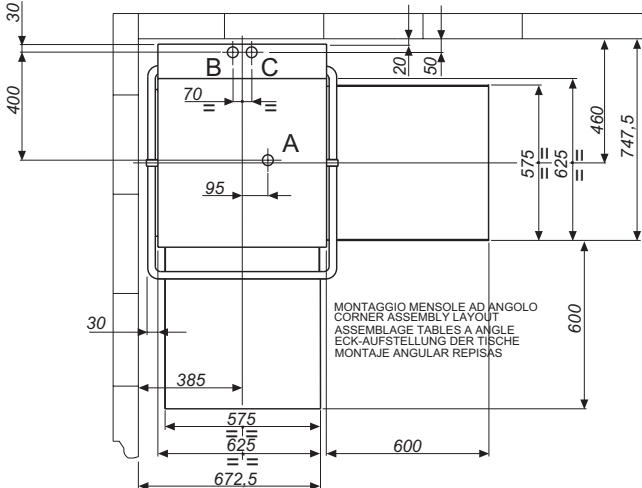
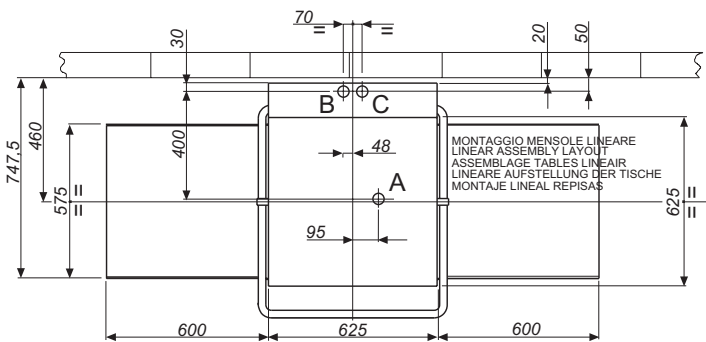
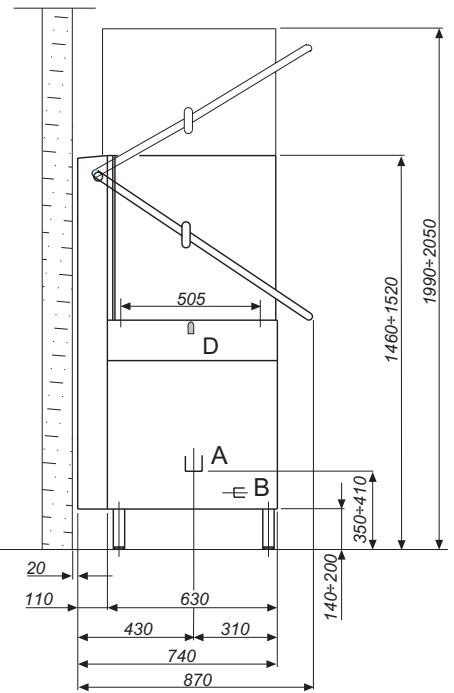
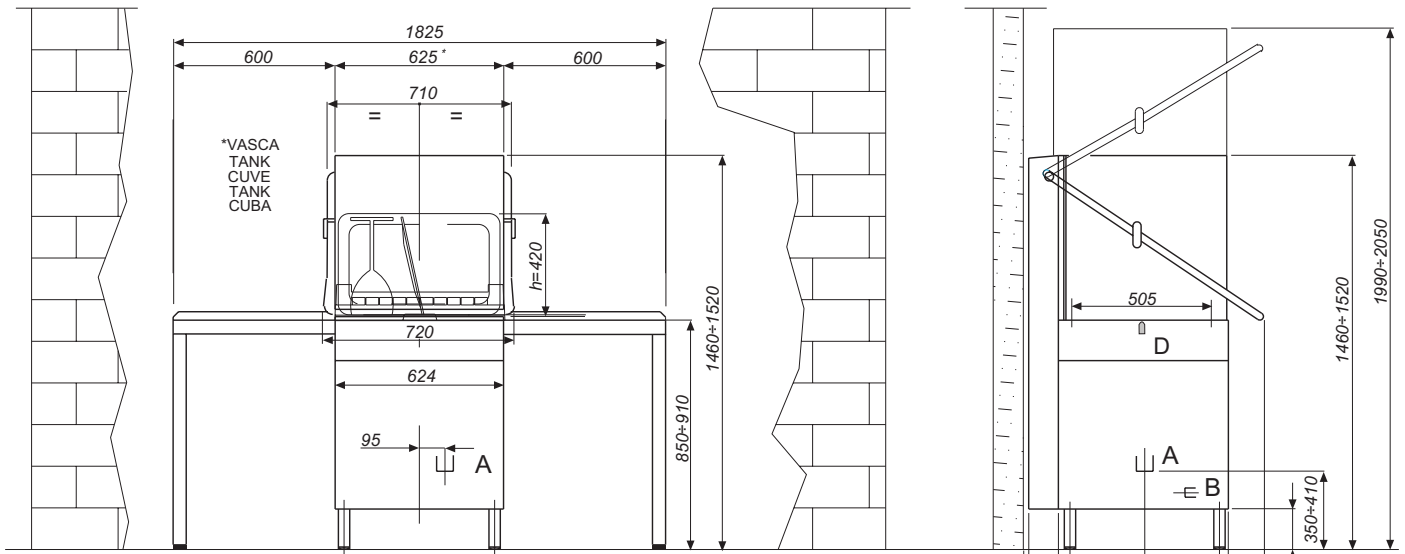
SPA

ATENCION

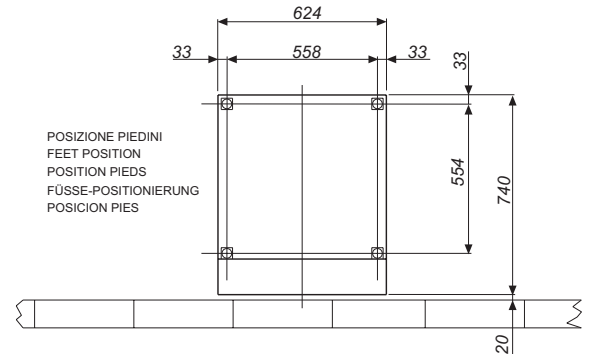
Antes de realizar la instalación, la puesta en marcha, los ajustes y las operaciones de mantenimiento de la máquina lavautensilios Mod. CAP/SOE, lea atentamente este manual.

En caso de avería o de mal funcionamiento se dirija exclusivamente a un centro técnico autorizado o directamente a la empresa HOONVED.

**DIMENSIONI DI INGOMBRO - OVERALL DIMENSIONS - DIMENSIONS D'ENCOMBREMENT
PLATZBEDARFSMASSE - DIMENSIONES**



LATO ANTERIORE MACCHINA
FRONT OF MACHINE
COTE ANTERIEUR MACHINE
VORDERSEITE
LADO ANTERIOR MAQUINA



| | |
|----------|--|
| A | Raccordo di scarico Drain pipe fitting Raccord de vidange Abwasseranschluß Enlace de descarga |
| B | Allacciamento idrico Water inlet Entrée de l'eau Wasseranschluß Alimentacion idrica |
| C | Allacciamento elettrico Electric supply Raccordement électrique Stromversorgung Alimentacion electrica |

DATI TECNICI - TECHNICAL DATA - DONNÉE TECHNIQUES - TECHNISCHE DATEN - DATOS TECNICOS

| | Produz. cest./ora Bas.output p/h Débit paniers/h Produk. korbe/st. Produc. can./hora | Allacciam. elett. Electric supply Raccor. électr. Stromversorgu. Aliment. electri. | Potenza totale Total power Puissance totale Gesamtleistung Enlace total | Resistenza boiler Boiler heat.emern. Résist. ch.-eau Boilerheizwiderst. Resistt. hervid. | Resist. vasca Tank heating el. Résistance cuve Wannenheizwid. Resistencia tina | Pompa lavaggio Wash pump Pompe de lavage Spülpumpe Bomba de lavado | |
|-----------------------|---|--|---|---|--|--|---|
| CAP10/SO 100E | 55/36/24 | 400V3 N~50/60Hz | 7100 W | 6000 W | 4000 W | 1100 W(1,5 Hp) | |
| | | 230V~50/60Hz | 7100 W | 6000 W | 4000 W | 1100 W(1,5 Hp) | |
| | | 230V3 ~50/60Hz | 7100 W | 6000 W | 4000 W | 1100 W(1,5 Hp) | |
| CAP 10 EBT | | 400V3 N~50Hz | 10100 W | 9000 W | 4000 W | 1100 W(1,5 Hp) | |
| CAP 10 EBT | | 230V~50Hz | 7100 W | 6000 W | 4000 W | 1100 W(1,5 Hp) | |
| CAP 12/SO 120E | 65/42/30 | 400V3N~50/60Hz | 11620 W | 10000 W | 4000 W | 1620 W(2,2 Hp) | |
| | | 230V~50/60Hz | 7620 W | 6000 W | 4000 W | 1620 W(2,2 Hp) | |
| CAP 12 EBT | | 400V3 N~50Hz | 11620 W | 10000 W | 4000 W | 1620 W(2,2 Hp) | |
| | Capacità vasca Tank capacity Capacité de la cuve Wannenkapazität Capacidad tina | Capacità boiler Boiler capacity Cap. du chauffe-eau Boilerkapazität Capacidad hervidor | | Durata ciclo Cycle lenght Durée du cycle Zyklusdauer Duracion del ciclo | | | |
| CAP 10/SO 100E | 42 l | 8,2 l | Ciclo Breve-Short-Court-Kurzer-Corto | | | = 65 sec. | |
| CAP 10 EBT | | | Ciclo Medio-Medium-Moyen-Mittlerer-Medio | | | = 100 sec. | |
| | | | Ciclo Lungo-Long-Long-Langer-Largo | | | = 150 sec. | |
| | | | Ciclo Intensivo-Intensive-Intensif-Intensiver-Intensivo | | | = 8 min. | |
| CAP 12/SO 120E | 42 l | 8,2 l | Ciclo Breve-Short-Court-Kurzer-Corto | | | = 55 sec. | |
| CAP 12 EBT | | | Ciclo Medio-Medium-Moyen-Mittlerer-Medio | | | = 85 sec. | |
| | | | Ciclo Lungo-Long-Long-Langer-Largo | | | = 120 sec. | |
| | | | Ciclo Intensivo-Intensive-Intensif-Intensiver-Intensivo | | | = 8 min. | |
| | Pompa risciacquo Rinse booster pump Pompe de rinçage Nachspülpumpe Bomba de aclarado | Peso netto Net weight Poids net Reingewicht Peso netto | Peso macch. imball. Gross weight Poids de la mach. emb. Gewicht der verp.Ma. Peso de la maq.embal. | Alimentazione idrica Mains supply of w. Alimentation en eau Wasseranschluß Alimentacion idrica | Cons. acqua per ciclo Water cons. cycle Cons. d'eau par cycle Wass-pro Zyklus Cons. agua por ciclo | Dimensioni cestello Basket dimensions Dimensions du panier Korbgröße Dimensiones cubeta | |
| CAP10/SO 100E | - | 113 kg | 139 kg | 2 ÷ 4 bar. Ø 3/4" G. | 3,5 l | 500 x 500 mm | |
| CAP10 EBT | 200 W | 113 kg | 139 kg | 2 ÷ 4 bar. Ø 3/4" G. | 3,5 l | 500 x 500 mm | |
| CAP12/SO 120E | - | 114 kg | 140 kg | 2 ÷ 4 bar. Ø 3/4" G. | 3,5 l | 500 x 500 mm | |
| CAP12 EBT | 200 W | 114 kg | 140 kg | 2 ÷ 4 bar. Ø 3/4" G. | 3,5 l | 500 x 500 mm | |
| | Raccordo di scatico Drain pipe fitting Raccord de vidange Abwasseranschluß Enlace de descarga | Temperatura risciacquo Rinse temperature Température de rinçage Klarspültemperatur Temperatura de aclarado | Temp. max entrata acqua Water inlet max. temper. Temper. max. entree eau. Max. Temperatur-Wasser. Temper.máxi. entr. agua | Livello pressione acustica Noise level Niveau de pression sonore Schalldruckpegel Nivel de presion acustica | Temp. di funz. e stocc. Envir. temper. min/max. Temp. de fonct. et stock. Betriebs- und Lageret. Temper. de funzionam. | Umidità relativa Environ. humid. min/max Humidité relative Relative Feuchte Humedad relativa | Temperatura lavaggio Wash temperature Température de lavage Spülpumpe Temperatura de lavado |
| CAP10/SO 100E | Ø 1" G | 80° ÷ 90° C | 50° C | < 70 dB (A) | 5° ÷ 40° C | 20 ÷ 90 % | 50° ÷ 60° C |
| CAP10 EBT | Ø 1" G | 80° ÷ 90° C | 50° C | < 70 dB (A) | 5° ÷ 40° C | 20 ÷ 90 % | 50° ÷ 60° C |
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| CAP10/SO 100E | 55/36/24 | 400V 3~50/60Hz 440V 3~60Hz | 7100 W 7100 W | 6000 W 6000 W | 4000 W 4000 W | 1100 W(1,5 Hp) 1100 W(1,5 Hp) |
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| CAP10/SO 100E | 80° ÷ 90° C | 50° C | < 70 dB (A) | 5° ÷ 40° C | 20 ÷ 90 % | 50° ÷ 60° C |

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 as are adequate to the weight of the machine when this must be installed or removed either completely or in part.
- Never allow unauthorized or unqualified personnel to start, adjust, operate or repair the machine. Always refer to this manual for the necessary operations.
- The mechanical parts and electrical/electronic components situated inside the machine are protected by entirely closed panels.
- **Always ensure that the main switch has been set to the "OFF" position** before cleaning and/or servicing the machine and before removing any guard. 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 specialized and authorized technical personnel.
- Check 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 ON THEIR NEAR VICINITY.**
- The user is obliged to keep all the data plates and stickers in a legible condition.
- It is essential for the user to replace all data plates and stickers as may have deteriorated for any reason or as are not clearly visible, ordering new ones from the Spares Service of **HOONVED.**
- 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 established by common sense, the laws in force in each nation, even when there are no specific provisions to govern the sector in the specific country of use.
- **HOONVED 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 as could jeopardize the correct operation of the machine.**
- **ALWAYS ASK FOR HELP FROM SPECIALIZED PERSONNEL IN CASE OF DOUBT.**
- **ANY TAMPERING BY THE USER RELIEVES THE MANUFACTURER FROM ALL LIABILITY, THE USER BEING IN THIS CASE SOLELY RESPONSIBLE TOWARDS THE COMPETENT ACCIDENT PREVENTION AUTHORITIES.**

1.1 GENERAL DESCRIPTION

The dishwashers of the **CAP/SOE** line give an excellent idea of the know-how achieved by Hoonved in the field of machines for catering sector.

They are true professional washing systems that can be integrated by the use of shelves, tables, etc.

The washing degree is unrivalled for plates, cutlery, glasses, cups, trays and crockery. Model CAP 10/SO 100 can wash up to 1000 plates per hour, while model CAP 12 /SO 120 can wash up to as many as 1200 plates in an hour.

The models feature different productive capacities.

The electronic controls, with touch-panel commands and a display giving machine temperature and status readings, make use easy. Compatible with the HACCP hygiene control system, this machine is in line with the most rigorous hygiene standards.

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 closed by straps.
- When transporting the packed machine, use a lift truck 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:

- 1 - 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).

IMPORTANT

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.

IMPORTANT

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

1.7 DESCRIPTION OF THE SAFETY DEVICES

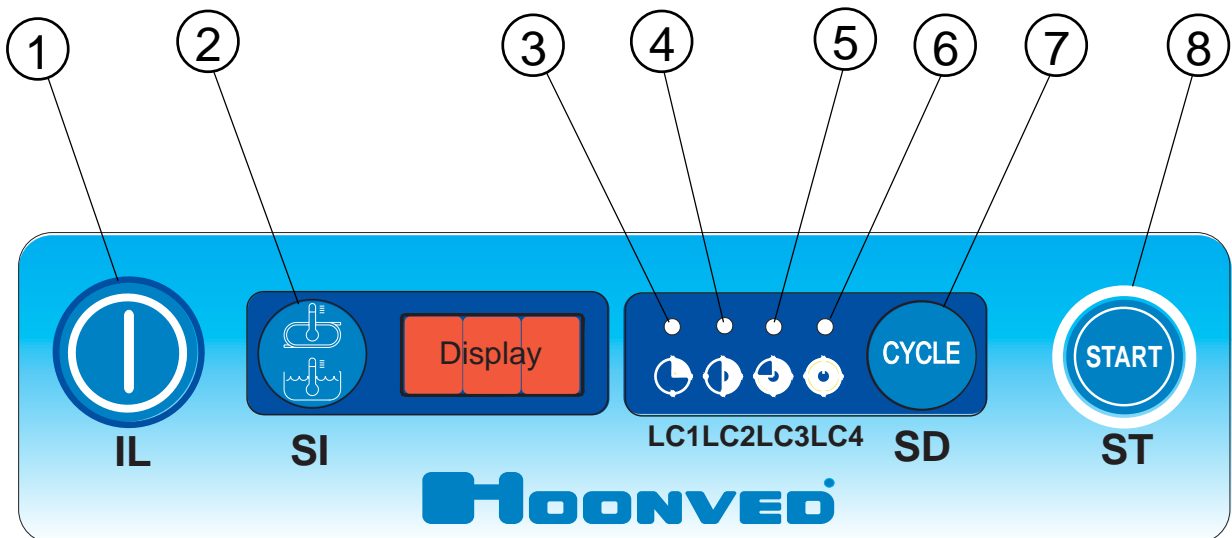
- Models **CAP/SOE** are equipped with a safety microswitch that blocks the washing pump if the tub access door is accidentally opened, and of other electronic safety devices.
- The electrical parts are enclosed by panels locked by screws.
- The machine is fitted with an equipotential ground conductor.
- 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 pursuant to Directive 73/23 EEC Annex 1 modified by Directive 93/68 EEC, Directive 89/336 CEE.
- Essential requisites established by Directive 2002/95/EEC (RoHS).

PART for the OPERATOR

CONTROL PANEL



① ON/OFF Switch

⑤ LONG CYCLE Light

② BOILER/TANK
Temperature Selection Button

⑥ INTENSIVE CYCLE Light

③ SHORT CYCLE Light

⑦ CYCLE Selection Button

④ MEDIUM CYCLE Light

⑧ START CYCLE Button

2.1 CAP/SO E WASHING PHASES

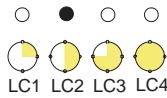
2.1.a Machine OFF

When the machine is switched OFF the display will read "OFF":



2.1.b Switching on and preparing the machine

To switch the machine on, press the "IL" button. The LED representing the last cycle selected remains CONSTANTLY LIT (LC1 - LC2 - LC3 - LC4).



ATTENTION

When switching on for the first time, the LC2 light remains CONSTANTLY LIT.

First the boiler then the tank will begin to fill automatically.

While the machine is filling up the display will read "F2".



Once filled, the water-heating elements will be activated, first in the boiler then in the tank. The display will give the tank temperature;



IMPORTANT

It is advisable, when first switching on, to wait until the display reads 55°C.

WASHING OPERATION

If not equipped with an automatic dosing system, pour into the tank a quantity of 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, having first removed any solid waste.

2.1.c Cycle selection

Press the "SD" or CYCLE button to select the washing cycle required from the 4 different cycles available (SHORT, MEDIUM, LONG, INTENSIVE) and specifically:

CAP 10E

- LC 1: SHORT CYCLE = 65 sec.
- LC 2: MEDIUM CYCLE = 100 sec.
- LC 3: LONG CYCLE = 150 sec.
- LC 4: INTENSIVE CYCLE = 8 min.

CAP 12E

- LC 1: SHORT CYCLE = 55 sec.
- LC 2: MEDIUM CYCLE = 85 sec.
- LC 3: LONG CYCLE = 120 sec.
- LC 4: INTENSIVE CYCLE = 8 min.

During the INTENSIVE cycle it is in any case possible to stop the cycle before the end of the programmed time for LC4 by pressing the START "ST" button again.

The minimum time for the INTENSIVE cycle will always and in all cases be 120 sec.

2.1.d STARTING UP THE WASHING CYCLE

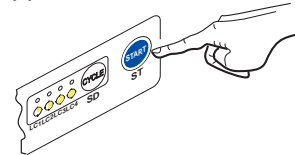


IMPORTANT

The selection of MANUAL or AUTOMATIC start to be made with machine in stand-by mode

2.1.d.1 STARTING UP THE WASHING CYCLE MANUALLY

To start up the cycle MANUALLY, press and hold the START "ST" button for approx. 2 sec.



The LEDs of the display will light on in sequence and the message shown on the display will blink (indicating that the cycle is underway) at the LED for the selected cycle will FLASH (e.g., LC2);

LED for pre-selected cycle



Display cycle underway LED

2.1.d.2 STARTING UP THE WASHING CYCLE AUTOMATICALLY

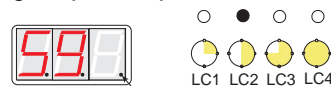
To start up the cycle AUTOMATICALLY (by opening and closing the door), you will need to change the cycle start-up mode. Press and hold the START "ST" button until the pre-selected cycle LED remains CONSTANTLY LIT (approx. 5 sec.) and the washing cycle will then start up AUTOMATICALLY when the door is closed.

The functioning of the led (CONTINUOUS or BLINKING) depends on the chosen type of functioning (MAN. or AUT)

2.1.e Instructions during the washing cycle

2.1.e.1 Display information

1) During washing, the tank temperature is indicated and the display LEDs light up in sequence.

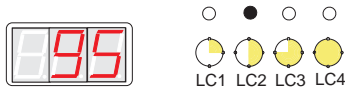


Display cycle underway LED

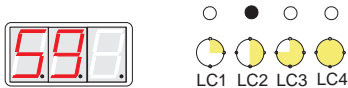
2) During drip-drying, only the display LEDs light up.



3) During rinsing, the boiler temperature is indicated and the display LEDs light up in sequence;



4) For the last 20 sec. of the cycle, when the drainage pump is in operation, the tank temperature is displayed once again.



By pressing the START "ST" button again, a new washing cycle will begin.



ATTENTION

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

This machine guarantees rinsing at temperatures ideal for hygienic purposes; indeed, if this is not sufficient, the washing cycle is automatically extended so as to provide the necessary conditions for optimum rinsing at **85°C**. The waiting time required to attain optimum temperature can extend to a maximum of **8 minutes**.

2.1.e.2 Interrupting the cycle

1) It is possible to pause the washing cycle in case of EMERGENCY, by opening the door; the message "F1" will appear on the display;



normal operations will resume on closing the door.

2) The cycle will also be interrupted by SWITCHING OFF the machine using the "IL" button.

3) On switching the machine back on, the LED indicating the last cycle selected will light up, and the alarm message "A1" will appear on the display;



this will disappear when a new cycle is begun.

At the end of the washing cycle, take out the basket and shake it gently so as to remove the last drops left on the washed items.

Allow items to dry and remove them from the basket with clean hands.

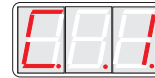
Store all items on hygienic and completely stable surfaces.

2.1.f Self-washing and Draining

When you have finished washing, SWITCH OFF the machine by pressing the "IL" button.

Having drained the machine and released the overflow, close the tank-access door and keep press the START "ST" button pressed for approx. 3 seconds and then release it.

The self-washing and draining cycle will begin, and the drainage pump will be activated (where fitted); the message "C1" will appear on the display for **2 min., 20 sec.**



2.1.g 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 OFF the machine and release the overflow allowing all the water to drain from the tank;
- Remove the tank filters(26) 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.

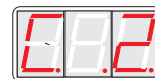


ATTENTION

This cycle can only be carried out by leaving the machine SWITCHED ON and the tank full of water, independently from the hood, which can be open or closed.

Having released the overflow, press the "SD" or CYCLE button for 5 sec.; the drainage cycle will begin.

The message "C2" will appear on the display for **4 min., 20 sec.**



ATTENTION

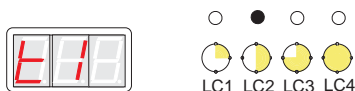
By pressing the "SD" or CYCLE button you can interrupt the drainage cycle before the preset time is up.

At the end of the cycle, restore the filters (26) (30) and the overflow (27) to their respective positions.

2.1.h Reading the TEMPERATURES

At any time, with the machine switched ON or OFF, by pressing the "SI" button you can read, in sequence, the REAL and PROGRAMMED temperatures for the water in the tank (t1) and in the boiler (t2).

- Pressing the "SI" button once, the message "t1" will be displayed



- Pressing the "SI" button a second time, the REAL temperature of the water in the tank will be displayed;



- Pressing the "SI" button a third time, the PROGRAMMED temperature of the water in the tank (for the selected cycle) will be displayed;



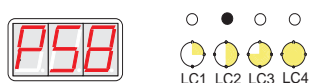
- Pressing the "SI" button a fourth time, the message "t2" will be displayed, indicating the boiler;



- Pressing the "SI" button a fifth time, the REAL temperature of the water in the boiler will be displayed;



- Pressing the "SI" button a sixth time, the PROGRAMMED temperature of the water in the boiler (for the selected cycle) will be displayed;



- Pressing the "SI" button a seventh time, the machine will return to its initial status.



ATTENZIONE

The operations listed above CANNOT BE CARRIED OUT DURING A CYCLE.

2.1.i Switching off the CAP/SO Ewasher at the end of the day

At the end of the working day SWITCH OFF the CAP/SO E washer by pressing the "IL" button.

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.

WARNINGS DURING OPERATION

- 1) Ensure that the washing temperature remains at approx. 55-60°C;
- 2) Avoid immersing bare hands in the detergent-filled water; if this should happen, rinse immediately and thoroughly with running water;
- 3) Use only anti-foaming detergents with chlorine-active agents, specific for use in industrial machines;
- 4) Deactivate the machine in case of break-down or malfunction.

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

- 5) In no case should you change the programmed temperatures (t1 and t2) without first consulting an authorised assistance centre;

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

Useful advice for better washing 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 (24) are clean and that there is pressure in the water system.

If there are traces of waste, ensure that:

- The filters (26) (30) are clean;
- the water temperature is around 60°C;
- items are correctly positioned in the basket;
- the washing nozzles are clean;
- the wash arms (23) (25) rotate freely.

2.2. CLEANING (Fig.8)

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, **FIRST CHECK** 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.

2.2.b Daily cleaning (Fig. 8)



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

1. Lift the overflow pipe (27) to completely drain the water from the tank.
2. Remove the filters (26) on top of the tank.
3. Thoroughly clean the inside parts of the machine.
4. Remove the pump safety filter (30).
5. Wash the filters under running water and fit them correctly back in their housings.



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

2.3 PREVENTION MAINTENANCE (Fig. 8)



The preventive maintenance operations must be carried out with the machine off, the main circuit-breaker disconnected, the water supply cocks off and the wash tank empty.

2.3.a Checking and cleaning the spray arms and nozzles (Fig. 8)

Periodically check to make sure that the wash arms (25), the rinse arms (23) and the relative nozzles are not clogged.

Cleaning the unit:

1. Unscrew the ring nut (28/29) and lift the spray arms (23) and (25).
2. Wash the washing and rinsing arms.
Clean the nozzles (24) 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, micro-switches, 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 authorization from HOONVED which is the sole proprietor and which reserves the right to make any modifications as may be considered necessary without advance warning.


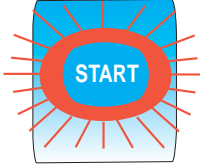

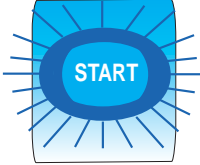
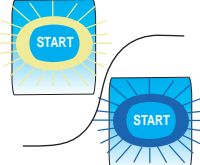

SUMMARY TABLE of ALARM MESSAGES DISPLAYED

| MESSAGE | DESCRIPTION |
|---------|---|
| A 1 | Failure to COMPLETE CYCLE |
| A 2 | BOILER WATER overheating |
| A 3 | BOILER and/or TANK TEMPERATURE PROBE broken or disconnected |
| A 4 | Lack of WATER in TANK |
| A 5 | BOILER failing to heat |
| H 1 | RINSING WATER insufficient temperature |
| H 2 | RINSING WATER insufficient quantity (mod. "BT") |
| H 3 | WASHING WATER insufficient temperature |

SUMMARY TABLE of OTHER MESSAGES DISPLAYED

| MESSAGE | DESCRIPTION |
|---------|---------------------------------------|
| F 1 | DOOR OPEN |
| F 2 | WATER FILLING in TANK |
| C 1 | SELF WASHING and DRAINING cycle |
| C 2 | MANUAL DRAINING cycle |
| OFF | Machine SWITCHED OFF |
| Pro | PROGRAMMING |
| PSt | RESET and RETURN to STANDARD PARAMET. |

SUMMARY TABLE of START BUTTON (S3)

| MACHINE STATUS | START BUTTON (S3) | |
|---|--|---|
| Machine OFF | OFF |  |
| Preparing the machine | RED (light up) |  |
| Machine on line but STAND/BY | GREEN (light up) |  |
| CYCLE | DARK BLUE (light up) |  |
| ALARM with Cycle in progress (only A2/A3) | PALE GREEN/BLUE (alternating flashing) |  |
| ALARM with NO CYCLE ON (only A2/A3) | PALE GREEN (flashing) |  |

TROUBLESHOOTING

| PROBLEMS | CAUSES | SOLUTIONS |
|---|---|--|
| <p>The machine fails to turn on. The machine does not fill with water.</p> | <p>Main switch disconnected. Water cock shut. Dirty fill pipe filter. Rinsing nozzle clogged.</p> <p>Overflow pipe not well connected.</p> <p>ALARM A4: Lack of water in tank MESSAGE F1: Door Open</p> | <p>Turn on the switch. Turn on the clock. Detach the fill pipe (14 Fig. 6) and clean the filter. Unscrew and clean the nozzles (24 Fig. 8) under running water. Check the right con. of the overflow pipe (27 Fig. 8) Check presence of water in system; Switch machine off and back on Check that the door is perfectly closed and/or the machine is properly levelled</p> |
| <p>Insufficient washing.</p> | <p>Wrong pump rotation direction.</p> <p>Clogged washing nozzles. Dirty washing filter. Clogged washing blade. No detergent.</p> <p>ALARM H3: Insufficient wash temperature ALARM A3: Probe disconnected or interrupted Insufficient washing conditions.</p> | <p>Call the technician to reverse 2 of the 3 wires on the main switch. Clean the washing blade (25 Fig. 8). Clean the filters (26 e 30 Fig. 8). Remove and clean the balde (25 Fig. 8) Add detergent and fill the dispenser.</p> <p>Wait for tank to reach correct temperature</p> <p>Contact Assistance Centre</p> <p>Check the correct washing phase.</p> |
| <p>Insufficient rinse.</p> | <p>Clogged rinsing nozzles.</p> <p>Clogged boiler by limestone. Low main pressure (less than 2 bar. - 200 Kpa). Insufficient temperature. Bad location of the nozzles or damaged nozzles.</p> <p>ALARM H1: Insufficient rinse temperature ALARM A3: Probe disconnected or interrupted ALARM A5: Boiler heating failure</p> | <p>Unscrew and clean the nozzles (24 Fig. 8) under running water. Call after-sales service. Wait pressure recovery or purchase a new pressure pump. Call after-sales service. Check the right location of the nozzles and replace damaged ones. Wait for boiler to reach correct temperature</p> <p>Contact Assistance Centre.</p> <p>Contact Assistance Centre.</p> |

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**PART for the
TECHNICIAN**

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

- Connect one end of the drain pipe to the overflow (27) and the other to an already prepared drain trap.



IMPORTANT

It is essential to ensure that the drain pipe runs along the floor and that it is not throttled in any part.

3.1.b Connection to the water main (Fig. 6)

- Connect one end of the supplied inlet pipe (14) to the solenoid valve and the other end (14) to a 3/4" G threaded cock, installing the filter in between.



ATTENTION



It is essential to connect the cold 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.

If there is sand in the water main, it will be necessary to install a filter between the water main and the machine. If the water main is without, it is advisable to install a decalcifier prior to the machine with a setting of min. 4 and max. 8 French degrees.

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. 4)



DANGER



- Before connecting to the electricity main, always check that the data pertaining to the power source correspond to those indicated on the identification plate (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.
- The manufacturer declines all responsibility for accidents or damage to persons or property caused by failure to comply with the above listed provisions.
- Connect the electrical power cable (16) to the main switch installed prior to the machine.
- Connect the equipotential ground conductor to the terminal .
- The electrical power cable(not supplied) must have the following characteristics: **Tipe H07RN-F 5G2,5.**

3.2 Viewing and Setting PARAMETERS (MACHINE PRESET)

There are three types of parameters that can be set:

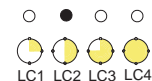
P function settings
(valid for all cycles)

T temperature settings
(for each single cycle)

L wash-cycle length settings
(for each single cycle)

To access the **SETTINGS** function with the machine **SWITCHED OFF**:

Press and hold the START "ST" button for 10 sec., until the message "Pro" appears on the display, and the selected LED begins to flash.



Using the "SD" or CYCLE button, select the cycle to be programmed (as indicated by FLASHING LED).



ATTENTION



From this position it is possible to access SETTINGS for PARAMETERS in SEQUENCE.

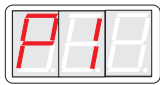


IMPORTANT

If you do not press any pushbutton within 10 sec., automatically you get out of the programming and the writing "OFF" appears on the display.

3.2.a Altering PARAMETERS "P"

From within "Pro" settings, press the START "ST" button; the message "P1" will be displayed



To confirm parameters in sequence "P" (P1 - P2 - P3 - P4) press the "ST" button.

Now press the "SD" or CYCLE button to decrease and/or the "SI" button to increase the parameter status (0-1). (See table STANDARD SETTINGS PARAMETERS "P")

To exit settings, simply refrain from pressing any buttons for at least 10 sec.

STANDARD SETTING PARAMETERS "P"

| PARAMETER | FUNCTION 0 | FUNCTION 1 | PRESET STATUS |
|-----------|--|--|---------------|
| P1 | Filling hot water (40-50°C) | Filling cold water | 0 |
| P2 | Normal washing | with Pre-rinse | 0 |
| * P3 | Alternating heating (first boiler than tank) | Simultaneous heating (tank & boiler) | 0 |
| P4 | 1 wash pump | Not used | 0 |
| P5 | Wait for boiler to heat NOT ACTIVE | Wait for boiler to heat ACTIVE | 1 |
| P6 | Cycle START tank temp. reached (preset) NOT ACTIVE | Cycle START tank temp. reached (preset) ACTIVE | 0 |
| P7 | Not used | | 0 |

IMPORTANT

With P1=1: filling and heating of water in the tank is carried out alternately, with pre-heated water from the boiler, until the water level in the tank is reached.

*With P3=1: check fuse value of the safety upstream of the machine (A).

3.2.b Altering PARAMETERS "T" and "L"

Press START "ST" to view programmed temperature. The message "t1" will appear on the display, indicating the temperature set for the water in the tank (for the selected cycle).



Now press the "SD" or CYCLE button to decrease and/or the "SI" button to increase the temperature/time settings.

(See table STANDARD SETTINGS PARAMETERS "T" and "L")

To confirm parameters and move on to the following settings (in sequence L1 - L2 - L3 - L4 - L5) press the "ST" button again.

To exit settings, simply refrain from pressing any buttons for at least 10 sec.

STANDARD SETTING PARAMETERS "T" and "L"

CAP 10-SO 100E

| PARAMETER | FUNCTION | SHORT CYCLE LC1 | MEDIUM CYCLE LC2 | LONG CYCLE LC3 | INTENSIVE CYCLE LC4 |
|-----------|------------------------|-----------------|------------------|----------------|---------------------|
| T1 | Tank temperature | 55°C | 55°C | 55°C | 55°C |
| T2 | Boiler entry temperat. | 85°C | 85°C | 85°C | 85°C |
| L1 | Wash time | 42 sec. | 77 sec. | 127 sec. | 457 sec. |
| L2 | Pause time | 5 sec. | 5 sec. | 5 sec. | 5 sec. |
| L3 | Rinse time | 18 sec. | 18 sec. | 18 sec. | 18 sec. |
| L4 | - | - | - | - | - |
| L5 | - | - | - | - | - |

CAP 12-SO 120E

| PARAMETER | FUNCTION | SHORT CYCLE LC1 | MEDIUM CYCLE LC2 | LONG CYCLE LC3 | INTENSIVE CYCLE LC4 |
|-----------|------------------------|-----------------|------------------|----------------|---------------------|
| T1 | Tank temperature | 55°C | 55°C | 55°C | 55°C |
| T2 | Boiler entry temperat. | 85°C | 85°C | 85°C | 85°C |
| L1 | Wash time | 42 sec. | 77 sec. | 127 sec. | 457 sec. |
| L2 | Pause time | 5 sec. | 5 sec. | 5 sec. | 5 sec. |
| L3 | Rinse time | 18 sec. | 18 sec. | 18 sec. | 18 sec. |
| L4 | - | - | - | - | - |
| L5 | - | - | - | - | - |

3.2.c STANDARD Parameter Settings

With the machine switched off, press the "SI" button for 10 sec.; all parameters (P-T-L) are automatically set as in the tables.

The message "PSi" will appear on the display, confirming that the settings have been programmed.



DYSPLAY ALARMS and SIGNALS : SELF-DIAGNOSIS

when more than one alarm is detected simultaneously, the relative codes will appear on the display in the following order of priority:

1. H1-H2-H3
2. A1-A2-A3-A4-A5
3. F1-F2

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

- A1: FAILURE TO COMPLETE CYCLE

This alarm message appears when the machine is switched back on after being switched off using "IL".



- A2 : BOILER OVERHEATING

This alarm message appears when the temperature in the boiler exceeds 105°C; (the cycle underway will be completed).



- **A 3: TEMPERATURE PROBE DISCONNECTED**

This alarm message appears if either or both of the probe contacts are disconnected (or if the probe is interrupted);(the cycle underway will be completed).



- **A 4: LACK OF WATER IN TANK**

This alarm message appears if a lack of water is detected in the tank or if tank level is not reached within 30 min.; In this case, switch the machine OFF and ON again.



- **A 5: BOILER FAILING TO HEAT**

This alarm message appears if the boiler fails to heat within 30 minutes.



- **H 1: RINSING WATER TEMPERATURE**

This alarm message appears if, during the wash cycle, the rinsing phase takes place with a boiler temperature at least 15°C below the level set.



- **H2: QUANTITY AT BOILER of WASHING WATER NOT ENOUGH (mod. BT)**

This alarm occurs when the rinse time does not work. Check electric contact (PRB) opening.



- **H3 : WASHING WATER TEMPERATURE (TANK)**

This alarm message appears if, during the wash cycle, the washing phase takes place with a tank temperature at least 10°C below the level set;(the cycle underway will be completed).



- **F1 : DOOR OPEN**

This alarm message appears if the door is open.



- **F2 : INITIAL FILL-UP**

This alarm message appears when the machine is filling up with water.



- **C1 : SELF WASHING and DRAINING CYCLE**



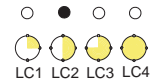
- **C2 : MANUAL DRAINING CYCLE (mod. PS)**



- **OFF: MACHINE SWITCHED OFF**



- **Pro : PROGRAMMING PARAMETERS**



- **PSt : "PRESET" PARAMETERS**



3.3 DETERGENT DISPENSER (Optional)

The machine is equipped with an automatic detergent dispenser.

- Insert the supply tube into the cannister.



ATTENTION

Always wash the hands under running water if they come into contact with detergent, or comply with the specific indications pertaining to the utilized type of detergent.

- The detergent inlet is automatic at every water fill-in in the tank.

To adjust the dispenser, refer to the relative enclosed manual and to the utilized type of detergent.

To connect the detergent pump, use the specific terminals inserted in the electrical system, marked "DD".

3.4 FILLING THE RINSING AGENT DISPENSER

- Insert the tube into the cannister containing rinsing agent.(Refer to the specific instructions given with the rinsing agent itself).
- Start the machine as described in paragraph 2.1. The dispenser will suck about 3 cm of liquid from the cannister.
- Fill during the cycle by opening (slightly) and closing the door until the tube has completely filled.

3.4.a Adjusting the dose

- Start the machine as described in paragraph 2.1 and hold a glass up to the light at the end of the cycle.
- The drops of water on the glass will indicate insufficient dosage while, the streaking or spotting will indicate, instead, an excessive dosage.
- Regulate by means of the plug, turning clockwise to decrease the quantity or anticlockwise to increase it.



IMPORTANT

These data are indicative and not binding since they may vary according to the hardness of the water or the utilized type of detergent and rinsing agent.

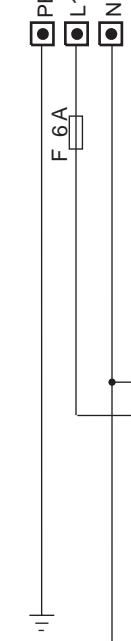


ATTENTION

If the utilized product (detergent or rinsing agent) is changed, it is advisable to flush out the dosing system with water and to then proceed by filling the dispensers.

**SCHEMI ELETTRICI
ELECTRIC DIAGRAM
SCHEMA ELECTRIQUE
ELEKTRISCHE SCHEMA
DIAGRAMA ELECTRICO**

230 V ~ 50 Hz



BLU/DARK BLUE

ROSA/PINK

AZZURRO/BLUE

VIOLA/VIOLET

BIANCO-NERO/WHITE-BLACK

ROSA/PINK

TS

PT 1

NERO/BLACK

AZZURRO/BLUE

BIANCO-NERO/WHITE-BLACK

VIOLA/VIOLET

BIANCO-NERO/WHITE-BLACK

DP

F 0,5A

F 2A

DP

(MD)

(PP)

(PS)

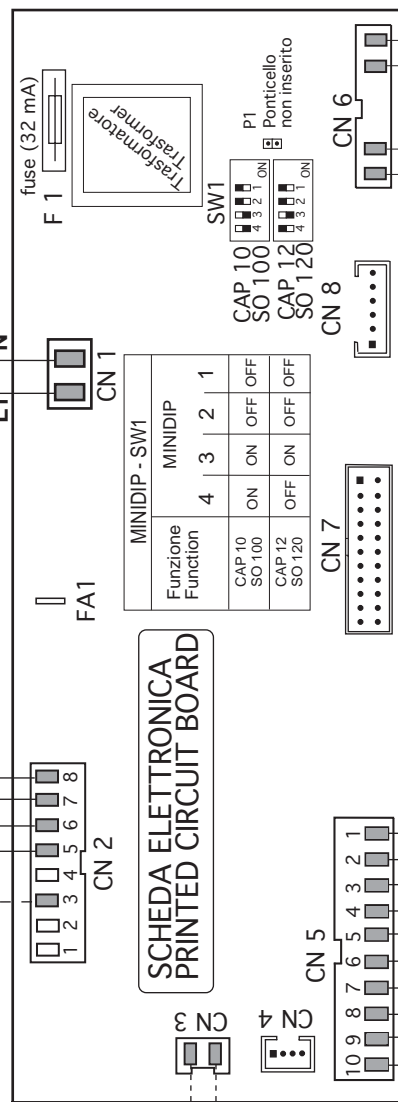
EVIS

C2

C4

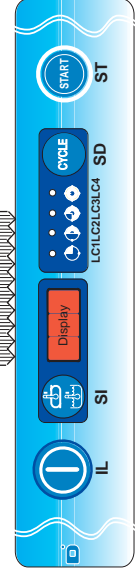
C3

C1



SCHEDA ELETTRONICA
PRINTED CIRCUIT BOARD

| MINIDIP - SW1 | | MINIDIP | |
|---------------|----------|---------|---------|
| Funzione | Function | 4 | 3 2 1 |
| CAP 10 SO 100 | ON | ON | OFF OFF |
| CAP 12 SO 120 | OFF | ON | OFF OFF |



CAVO di COLLEGAMENTO PULSANTIERA

SCHEMA ELETTRICO
ELECTRIC DIAGRAM

CAP 10-12 E- SO 100-120 E

400V3N - 50/60HZ 230V3 - 50/60HZ

Ed.03/2009

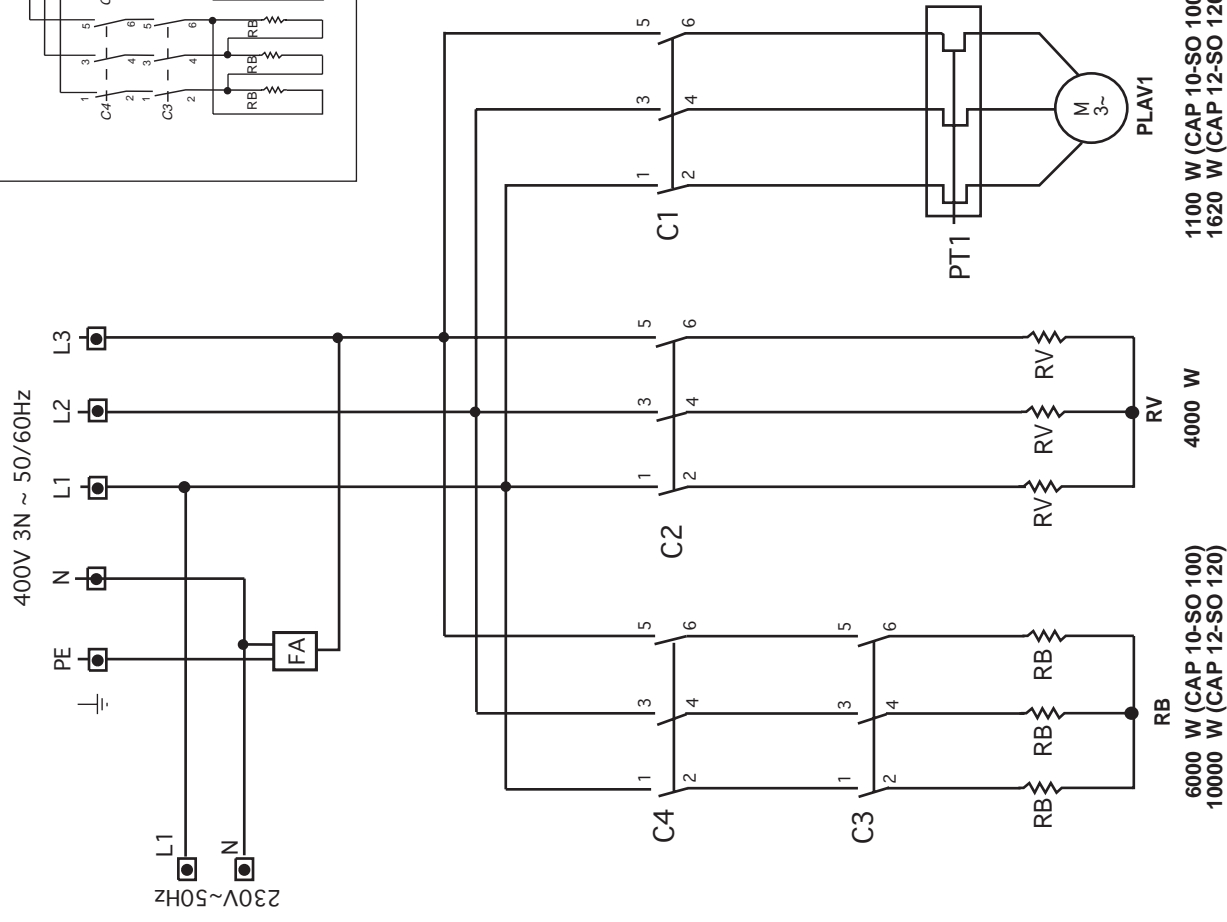
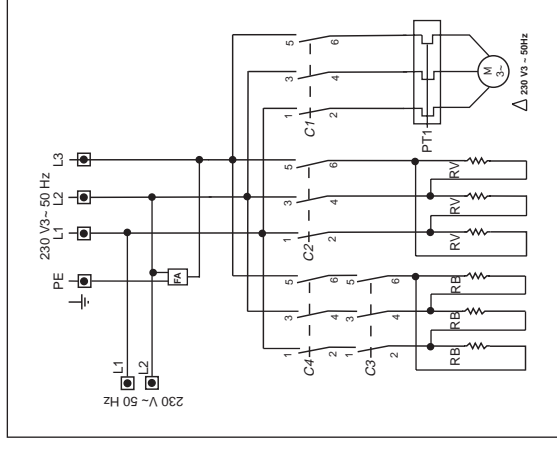
SCHEMA DI POTENZA / DIAGRAM POWER

CAP 10 - CAP 12 E 400V3N ~ 50/60HZ
SO 100 - SO 120 E 230V3 ~ 50/60HZ

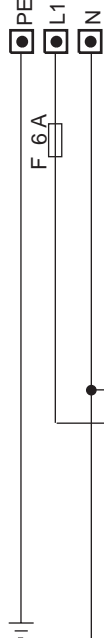
Ed.03/2009

LEGENDA - LEGEND

- FA** = Filtro Antidisturbo - Electromagnetic Field Filter
- C1** = Teleruttore pompa lavaggio - Remote Switch for wash pump
- C2** = Teleruttore resistenza vasca - Remote Control Switch for tank heating element
- C3** = Teleruttore resistenza Boiler - Safety Remote Control Switch for boiler heating element
- C4** = Teleruttore sicurezza - Safety Remote Switch
- PT1** = Termica elettropompa - Electropumpe thermal protection
- PLAV1** = Motore Pompa Lavaggio - Wash Pump
- RB** = Resistenza Boiler - Boiler heating element
- RV** = Resistenza vasca - Tank heating element
- PP** = Pompa Pressione (optional) - Pump Pression (optional)
- PS** = Pompa Scarico (optional) - Drain Pump (optional)
- DP** = Morsetto per collegamento Dosatore Detersivo /Pomp pressione
Electrical terminal connection for Detergent/Pression Pump
- MD** = Motore pompa detersivo (optional) - Detergent pump motor (optional)
- MP1** = Microinterruttore porta - Door microswitch
- MP2** = Predisposizione doppio microinterruttore porta
Predisposition double door microswitch
- TS** = Termostato sicurezza boiler - Boiler Safety thermostat
- F, F1, FA1** = Fusibile - Fuse
- IL** = Interruttore generale macchina - Line selector
- ST** = Pulsante Avvio Ciclo - START button
- SD** = Pulsante selezione Temperatura Boiler/Vasca (decrementa)
Boiler/Tank temperature selection button (decrease)
- SI** = Pulsante selezione Ciclo/Avviamento Automatico-Manuale (incrementa)
Cycle/Automatic or Manual Start (increase)
- LC1** = Lampada Ciclo Corto - Short cycle light
- LC2** = Lampada Ciclo Medio - Medium cycle light
- LC3** = Lampada Ciclo Lungo - Long cycle light
- LC4** = Lampada Ciclo Intensivo - Intensive cycle light
- EVRIS** = Elettrovalvola risciacquo e carico acqua - Rinse and water inlet electrovalve
- STB** = Sonda temperatura boiler - Boiler temperature probe
- STV** = Sonda temperatura vasca - Tank temperature probe
- PRV** = Pressostato vasca - Tank pressostat



230 V ~ 50 Hz



BLEUR/BLAU/AZUL OSCURO

ROSE/ROSE/ROSATO

BLEUR CLAIR/LICHTBLAU/AZUL

VIOLET/VIOLETT/VIOLA

BLANC-NOIR/WEISS-SCHWARZ/BLANCO-NEGRO

BLANC-NOIR/WEISS-SCHWARZ/BLANCO-NEGRO

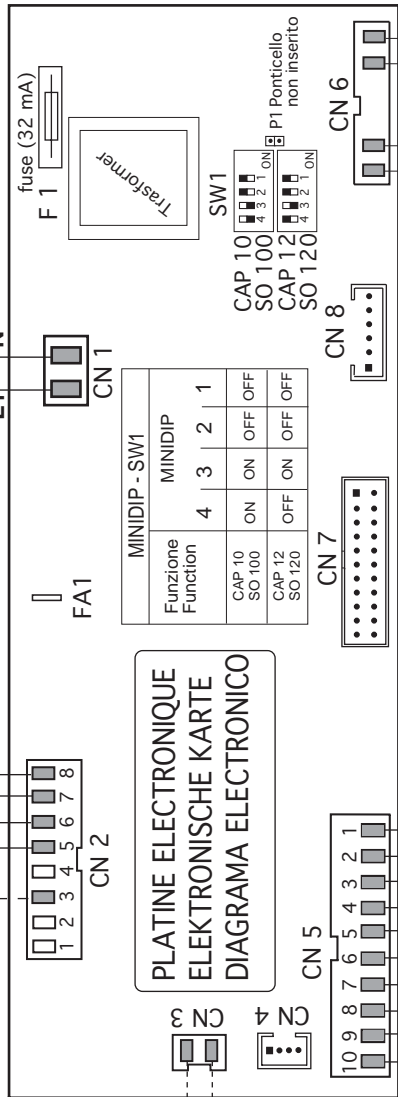
VIOLET/VIOLETT/VIOLA

BLANC-NOIR/WEISS-SCHWARZ/BLANCO-NEGRO

BLEUR CLAIR/LICHTBLAU/AZUL

ROSE/ROSE/ROSATO

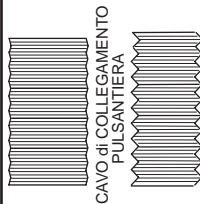
BLEUR/BLAU/AZUL OSCURO



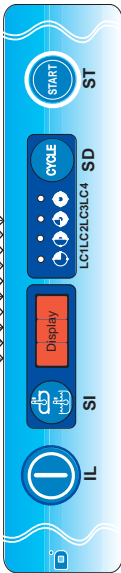
PLATINE ELECTRONIQUE
ELEKTRONISCHE KARTE
DIAGRAMA ELECTRONICO

| MINIDIP - SW1 | | 1 | | 2 | | 3 | | 4 | |
|---------------|----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Funzione | Function | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| CAP 10 | SO 100 | ON | OFF | OFF | OFF | ON | ON | ON | ON |
| CAP 12 | SO 120 | OFF | ON | ON | ON | OFF | OFF | OFF | OFF |

P1 Ponticello non inserito



CAVO di COLLEGAMENTO PULSANTIERA



BLANC-NOIR/WEISS-SCHWARZ

ROUGE-NOIR/ROT-WEISS

STB

STV

ROUGE/ROT/ROJO
GRIS/GRAU/GRIS
NOIR-SCHWARZ-NEGRO

MP1

PRV

PT 1

TS

MP2

DP

F 0,5A

F 1,2A

PP

MD

PS

SCHEMA ELECTRIQUE - ELEKTRISCHE SCHEMA
DIAGRAMA ELECTRICO

400V3N - 50/60HZ 230V3 - 50/60HZ

CAP 10 - CAP 12 E
SO 100 - SO 120 E

Ed.03/2009

C1

C3

C4

C2

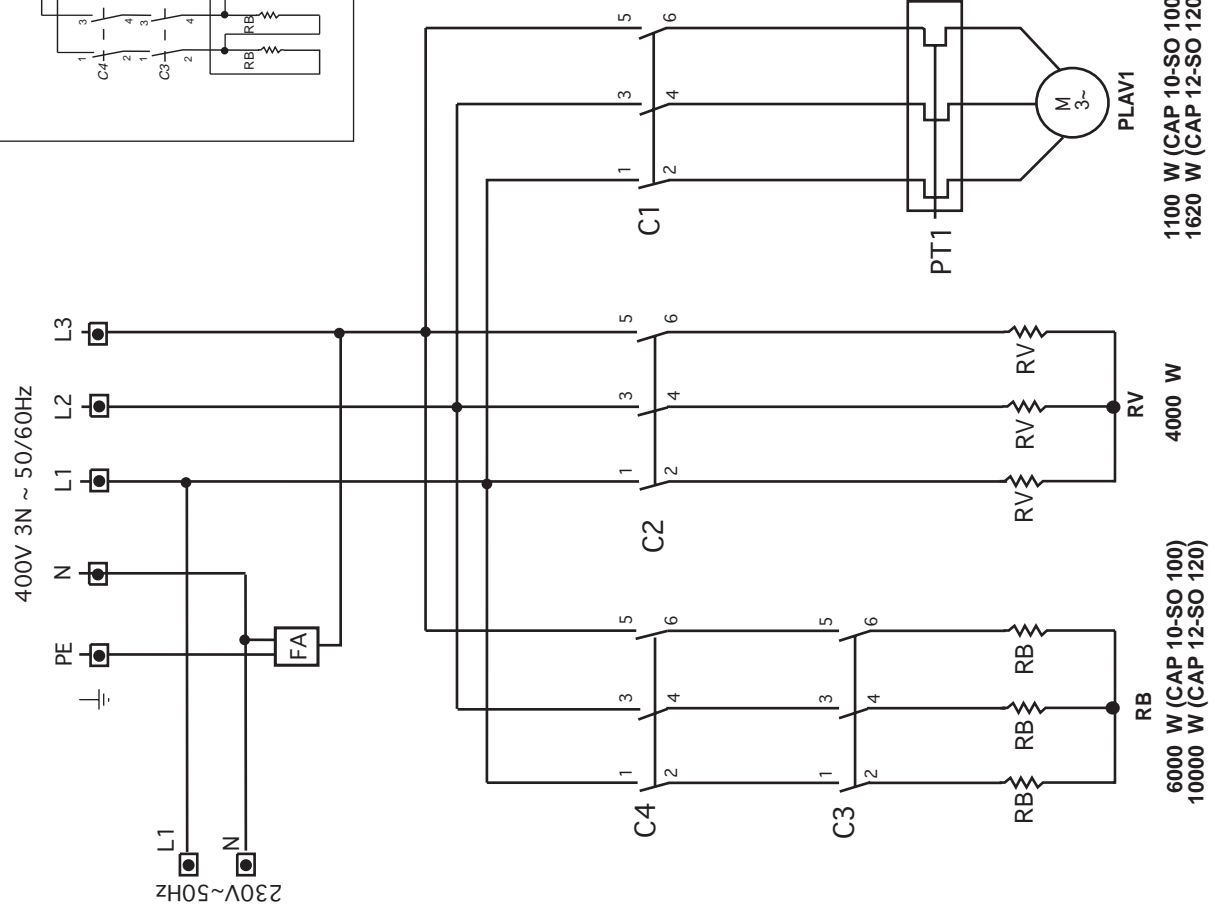
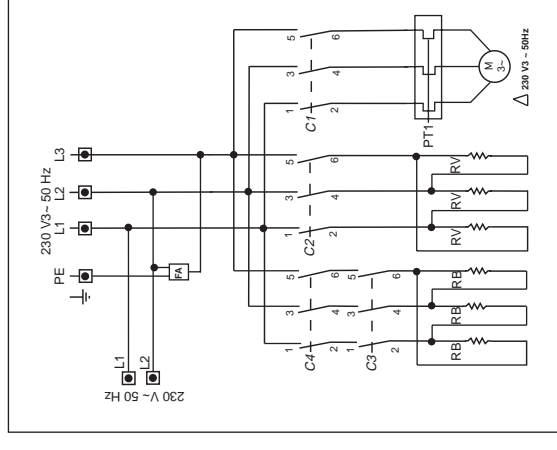
EVTRIS

DP

CARTE DE PUISSANCE - LEISTUNGSKARTE - DIAGRAMA DE POTENCIA

LEGENDA - BEZEICHUNG - NOTA

- FA** = Filtre anti-bruit - Störschutzfilter - Filtre ante-ruído
- C1** = Télérupteur pompe de lavage - Fernschalter der Waschp. - Teiler.bomba de lavado
- C2** = Télérupteur résistance cuve - Fernschalter der Tanksheizung - Teiler. resistencia cuba
- C3** = Télérupteur résistance boiler - Fernschalter der Boilerheizung - Teiler. resistencia calderin
- C4** = Télérupteur sûreté boiler - Fernschalter der Boilersicherung - Teiler. seguridad calderin
- PT1** = Thermistance electropompe - Schutzschalter Elektropumpe - Termica electrobomba
- PLAV1** = Moteur pompe de lavage - Spülpumpe Motor - Motor bomba de lavado
- RB** = Resistance du boiler - Boilerheizung - Resistencia calderin
- RV** = Resistance de la cuve - Tanksheizung - Resistencia cuba
- PP** = Moteur pompe de rinçage (en option) - Nachspülpumpe Motor (optional)
Motor bomba de aclarado (optional)
- PS** = Pompe de vidange (en option) - Ablaufpumpe (optional) - Bomba de descarga (optional)
- DP** = Borne puor connect. au doseur déterg./pompe rinçage
Klemmleiste für anschluss spülmittelpumpe und Nachspülpumpe
Borne para connexión bomba detergente y aclarado
- MD** = Moteur pompe produit de lavage - Spülmittelpumpemotor - Motor bomba detergente
- MP1** = Microinterrupteur porte - Tür-Microschalter - Mikrointerruptor puerta
- MP2** = Pred. double microint. porte - Vorb. für Tür-Microschalter - Pred. doble mikro-int. puerta
- TS** = Thermostat sûreté - Sicherheitsthermostat - Termostato seguridad
- F, F1, FA1** = Fusible - Schmelzsicherung - Fusible
- IL** = Poussoir ligne - Druckschalter - Tecla linea
- ST** = Start cycle - Start Zyklus - Start ciclo
- SD** = Poussoir selection temperature chauffeure /cuve (décrementer)
Wahlste Temperature Boiler/Tank (Verringerung)
Interruptor selection temperature calderin /cuba (decrementar)
- SI** = Poussoir selection cycle START AUTOMATIQUE MANUEL (incrémentar)
Wahlste Zyklus/Automatischer oder Manueller Betrieb (Steigerung)
Interruptor selection ciclo START AUTOMATICO MANUALE (incrementar)
- LC1** = Lampe cycle court - KurzerZykluslampe - Lampada ciclo corto
- LC2** = Lampe cycle moyen - MittlererZykluslampe - Lampada ciclo medio
- LC3** = Lampe cycle long - LangerZykluslampe - Lampada ciclo largo
- LC4** = Lampe cycle intensif - IntensiverZykluslampe - Lampada ciclo intensivo
- EVRIS** = Electrovalve rinçage et eau chaude - Nachspül- und Warmwasser Elektroventile
Electrovalvula de acarado y de agua caliente
- STB** = Sonde temperature boiler - Sonde der Boilerstemperature - Sonda temperatura calderin
- STV** = Sonde temperature cuve - Sonde der Tankstemperature - Sonda temperatura cuba
- PRV** = Pressostat de la cuve - Tankpressostat - Presostato de cuba



CAP 10 - CAP 12 E 400V3N ~ 50/60HZ
SO 100 - SO 120 E 230V3 ~ 50/60HZ
 Ed. 03/2009

1100 W (CAP 10-SO 100)
 1620 W (CAP 12-SO 120)

4000 W

6000 W (CAP 10-SO 100)
 10000 W (CAP 12-SO 120)

230 V~50/60 Hz



BLU/DARK BLUE

ROSA/PINK

AZZURRO/BLUE

VIOLA/VIOLET

BIANCO-NERO/WHITE-BLACK

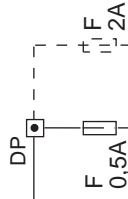
ROSA/PINK

AZZURRO/BLUE

BIANCO-NERO/WHITE-BLACK

VIOLA/VIOLET

BIANCO-NERO/WHITE-BLACK



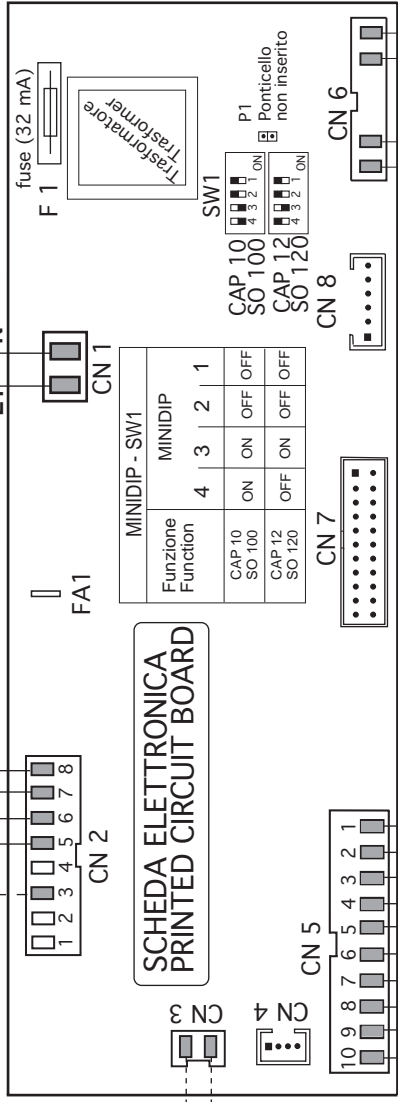
EVRI5

C2

C4

C3

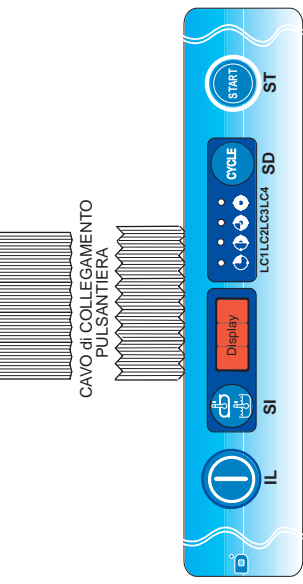
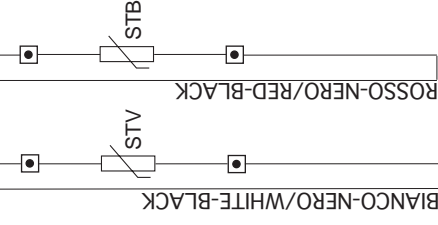
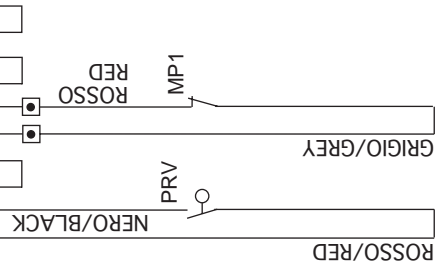
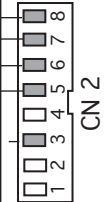
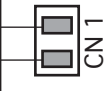
C1



**SCHEDA ELETTRONICA
PRINTED CIRCUIT BOARD**

| MINIDIP - SW1 | | MINIDIP | |
|----------------------|-----|---------|-----|
| Funzione Function | 4 | 3 | 2 |
| CAP 10 SO 100 | ON | ON | OFF |
| CAP 12 SO 120 | OFF | ON | OFF |

SW1
CAP 10 SO 100
CAP 12 SO 120
P1 Ponticello, non inserito



ROSSO/RED

GRIGIO/GREY

NERO/BLACK

PRV

ROSSO/RED

BIANCO-NERO/WHITE-BLACK

ROSSO-NERO/RED-BLACK

**SCHEMA ELETTRICO
ELECTRIC DIAGRAM**

CAP 10 - SO 100 E

230V - 50/60HZ

Ed.03/2009

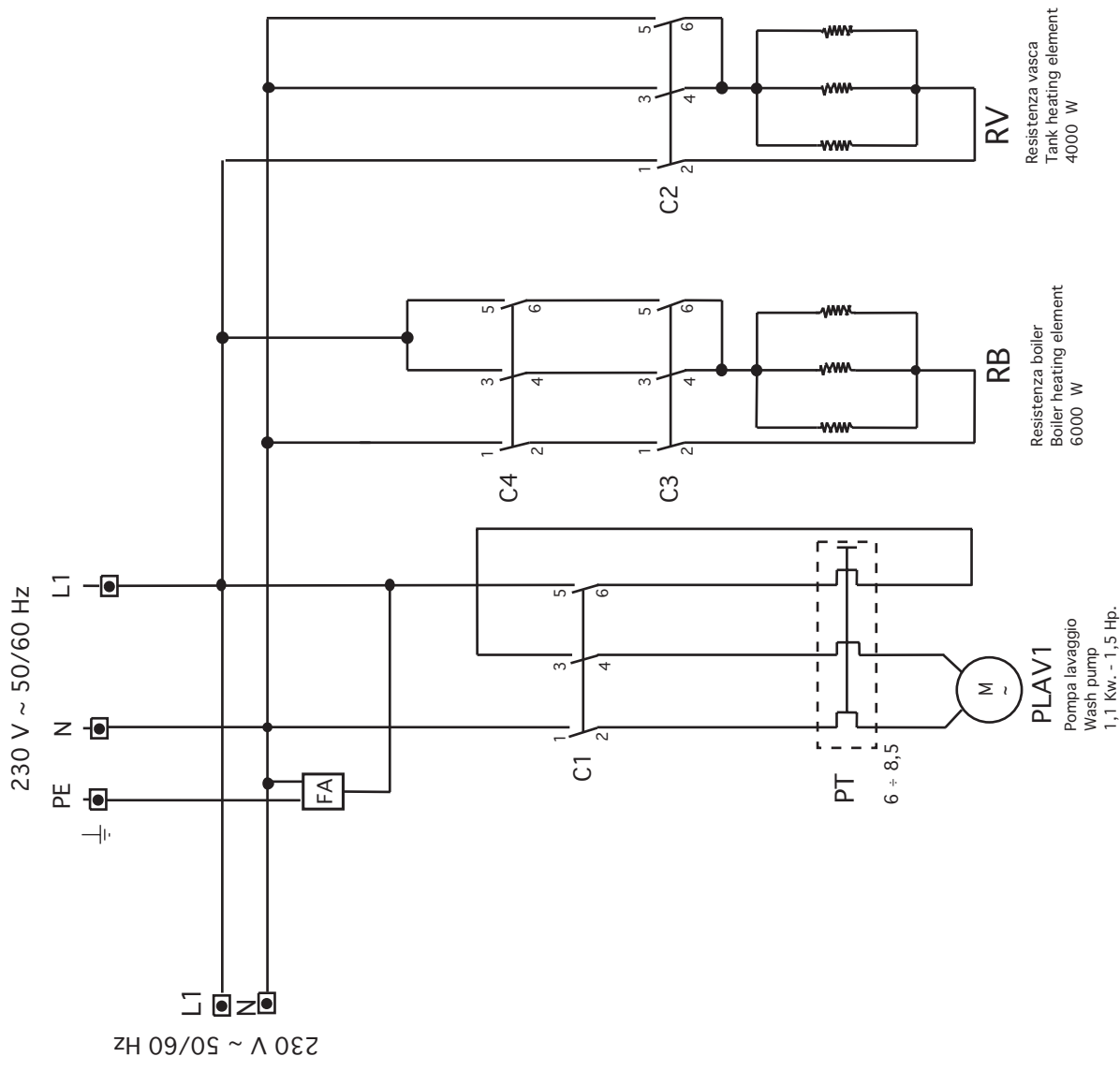
SCHEMA DI POTENZA / DIAGRAM POWER

CAP 10 - SO 100 E

230V ~ 50/60HZ

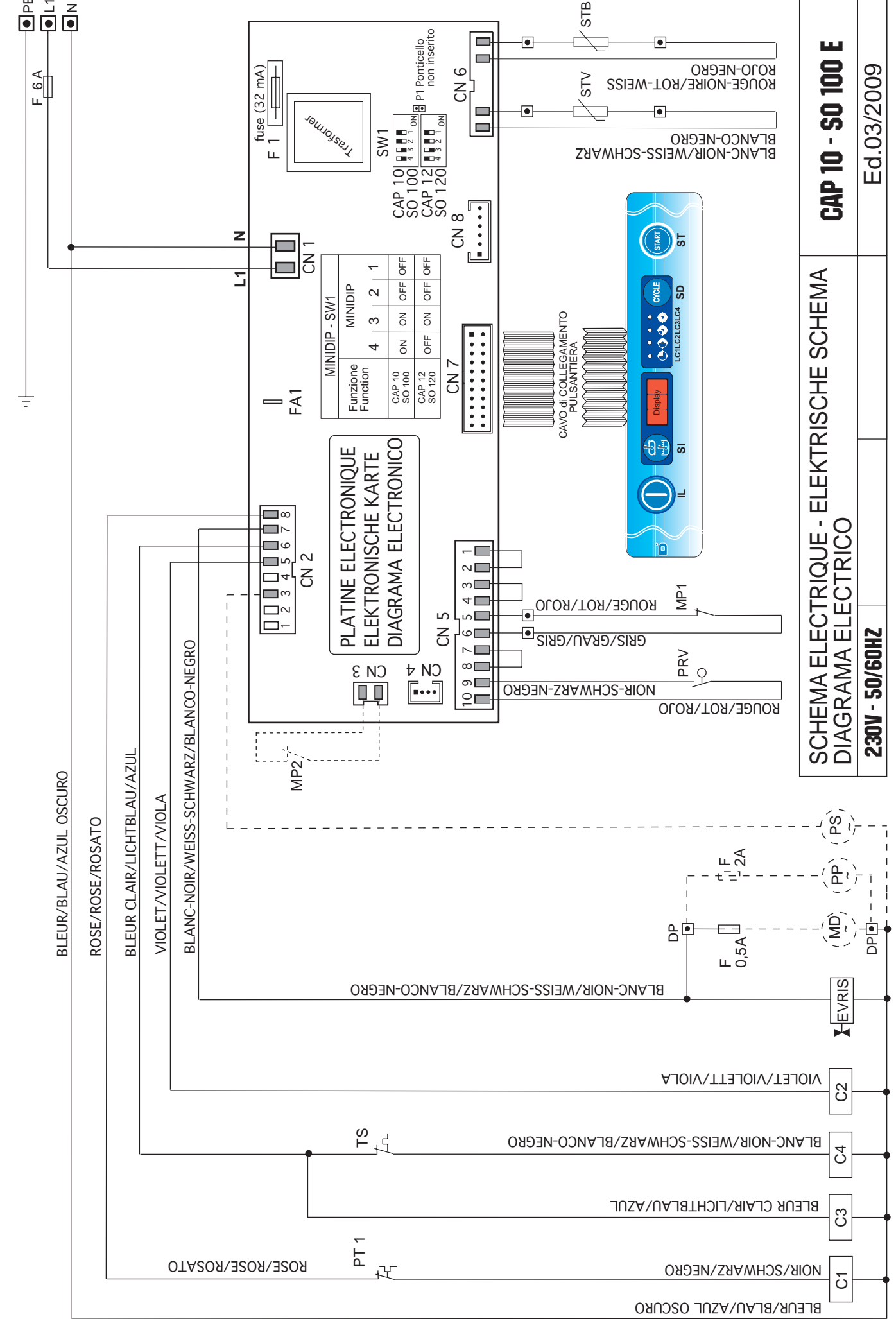
LEGENDA - LEGEND

- FA** = Filtro Antidisturbo - Electromagnetic Field Filter
- C1** = Teleruttore pompa lavaggio - Remote Switch for wash pump
- C2** = Teleruttore resistenza vasca - Remote Control Switch for tank heating element
- C3** = Teleruttore resistenza Boiler - Remote Control Switch for boiler heating element
- C4** = Teleruttore sicurezza Boiler - Safety Remote Control Switch for boiler heating element
- PT** = Termica elettropompa - Electropumpe thermal protection
- PLAV1** = Motore Pompa Lavaggio - Wash Pump
- RB** = Resistenza Boiler - Boiler heating element
- RV** = Resistenza vasca - Tank heating element
- PP** = Pompa Pressione (optional) - Pump Pression (optional)
- PS** = Pompa Scarico (optional) - Drain Pump (optional)
- DP** = Morsetto per collegamento Dosatore Detersivo /Pomp pressione
Electrical terminal connection for Detergent/Pression Pump
- MD** = Motore pompa detersivo (optional) - Detergent pump motor (optional)
- MP1** = Microinterruttore porta - Door microswitch
- MP2** = Predisposizione doppio microinterruttore porta
Predisposition double door microswitch
- TS** = Termostato sicurezza boiler - Boiler Safety thermostat
- F, F1, FA1** = Fusibile - Fuse
- IL** = Interruttore generale macchina - Line selector
- ST** = Pulsante Avvio Ciclo - START button
- SD** = Pulsante selezione Temperatura Boiler/Vasca (decrementa)
Boiler/Tank temperature selection button (decrease)
- SI** = Pulsante selezione Ciclo/Avviamento Automatico-Manuale (incrementa)
Cycle/Automatic or Manual Start (increase)
- LC1** = Lampada Ciclo Corto - Short cycle light
- LC2** = Lampada Ciclo Medio - Medium cycle light
- LC3** = Lampada Ciclo Lungo - Long cycle light
- LC4** = Lampada Ciclo Intensivo - Intensive cycle light
- EVRI5** = Elettrovalvola risciacquo e carico acqua - Rinse and water inlet electrovalve
- STB** = Sonda temperatura boiler - Boiler temperature probe
- STV** = Sonda temperatura vasca - Tank temperature probe
- PRV** = Pressostato vasca - Tank pressostat



Ed.03/2009

230 V ~ 50/60 Hz



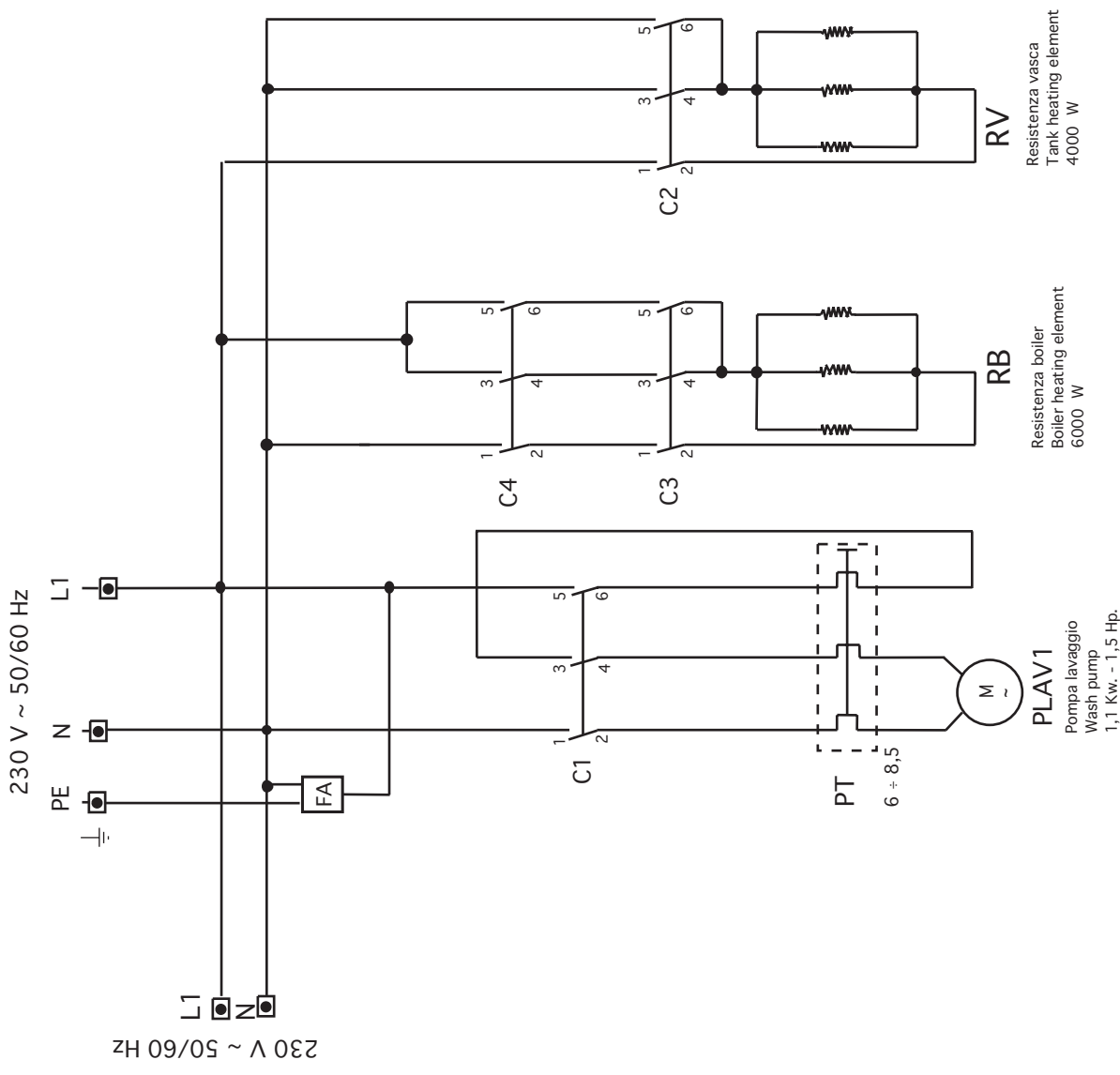
**SCHEMA ELECTRIQUE - ELEKTRISCHE SCHEMA
DIAGRAMMA ELECTRICO**

CAP 10 - SO 100 E

Ed.03/2009

230V - 50/60HZ

- FA** = Filtre anti-bruit - Störschutzfilter - Filtre ante-ruído
- C1** = Télérupteur pompe de lavage - Fernschalter der Waschp. - Teiler.bomba de lavado
- C2** = Télérupteur résistance cuve - Fernschalter der Tanksheizung - Teiler. resistencia cuba
- C3** = Télérupteur résistance boiler - Fernschalter der Boilerheizung - Teiler. resistencia calderin
- C4** = Télérupteur sûreté boiler - Fernschalter der Boilersicherung - Teiler. seguridad calderin
- PT** = Thermistance electropompe - Schutzschalter Elektropumpe - Termica electrobomba
- PLAV1** = Moteur pompe de lavage - Spülpumpe Motor - Motor bomba de lavado
- RB** = Resistance du boiler - Boilerheizung - Resistencia calderin
- RV** = Resistance de la cuve - Tanksheizung - Resistencia cuba
- PP** = Moteur pompe de rinçage (en option) - Nachspülpumpe Motor (optional)
Motor bomba de aclarado (optional)
- PS** = Pompe de vidange (en option) - Ablaufpumpe (optional) - Bomba de descarga (optional)
- DP** = Borne puor connect. au doseur déterg./pompe rinçage
Klemmleiste für anschluss spülmittelpumpe und Nachspülpumpe
Borne para connexion bomba detergente y aclarado
- MD** = Moteur pompe produit de lavage - Spülmittelpumpemotor - Motor bomba detergente
- MP1** = Microinterrupteur porte - Tür-Microschalter - Mikrointerruptor puerta
- MP2** = Pred. double microint. porte - Vorb. für Tür-Microschalter - Pred. doble mikro-int. puerta
- TS** = Thermostat sûreté - Sicherheitsthermostat - Termostato seguridad
- F,F1,FA1** = Fusible - Schmelzsicherung - Fusible
- IL** = Poussoir ligne - Druckschalter - Tecla linea
- ST** = Start cycle - Start Zyklus - Start ciclo
- SD** = Poussoir selection temperature chauffe/cuve (décrementer)
Wahltaaste Temperature Boiler/Tank (Verringerung)
Interruptor selection temperature calderin /cuba (decrementar)
- SI** = Poussoir selection cycle START AUTOMATIQUE MANUEL (incrémentar)
Wahltaaste Zyklus/Automatischer oder Manueller Betrieb (Steigerung)
Interruptor selection ciclo START AUTOMATICO MANUALE (incrementar)
- LC1** = Lampe cycle court - KurzerZykluslampe - Lampada ciclo corto
- LC2** = Lampe cycle moyen - MittlererZykluslampe - Lampada ciclo medio
- LC3** = Lampe cycle long - LangerZykluslampe - Lampada ciclo largo
- LC4** = Lampe cycle intensif - IntensiverZykluslampe - Lampada ciclo intensivo
- EVRS** = Electrovalve rinçage et eau chaude - Nachspül- und Warmwasser Elektroventile
Electrovalvula de acarado y de agua caliente
- STB** = Sonde temperature boiler - Sonde der Boilersterntemperature - Sonda temperatura calderin
- STV** = Sonde temperature cuve - Sonde der Tanksterntemperature - Sonda temperatura cuba
- PRV** = Pressostat de la cuve - Tankpressostat - Presostato de cuba



RV
Resistenza vasca
Tank heating element
4000 W

RB
Resistenza boiler
Boiler heating element
6000 W

PLAV1
Pompa lavaggio
Wash pump
1,1 Kw. - 1,5 Hp.

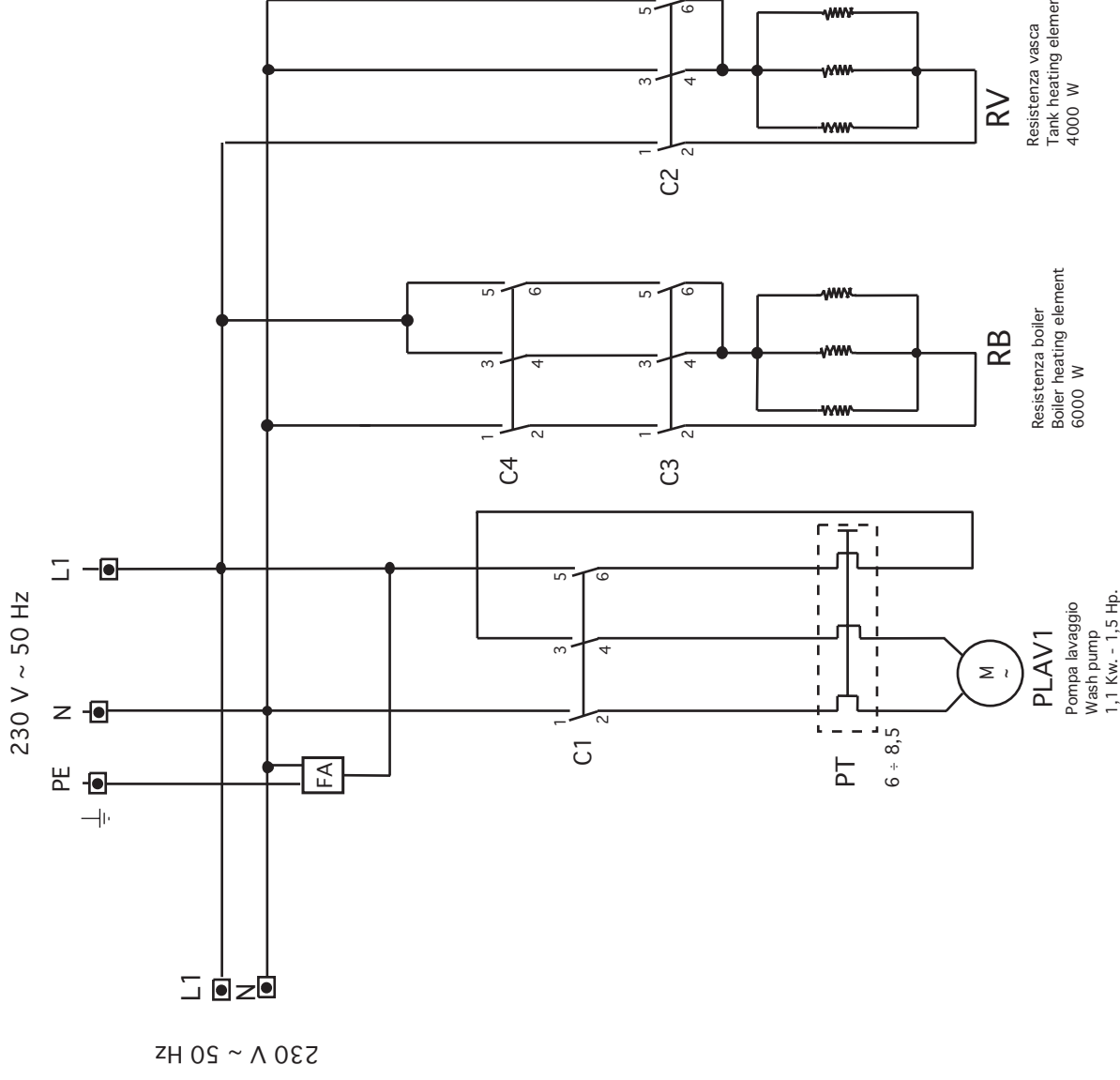
SCHEMA DI POTENZA / DIAGRAM POWER

CAP 10 E BT

230V ~ 50/60HZ

LEGENDA - LEGEND

- FA** = Filtro Antidisturbo - Electromagnetic Field Filter
- C1** = Teleruttore pompa lavaggio - Remote Switch for wash pump
- C2** = Teleruttore resistenza vasca - Remote Control Switch for tank heating element
- C3** = Teleruttore resistenza Boiler - Remote Control Switch for boiler heating element
- C4** = Teleruttore sicurezza - Safety Remote Switch
- PT1** = Termica elettropompa - Electropumpe thermal protection
- PLAV1** = Motore Pompa Lavaggio - Wash Pump
- RB** = Resistenza Boiler - Boiler heating element
- RV** = Resistenza vasca - Tank heating element
- PR** = Pompa Pressione - Pump Pression
- PS** = Pompa Scarico (optional) - Drain Pump (optional)
- DD** = Dosatore Detersivo - Detergent Pump
- MD** = Motore pompa detersivo (optional) - Detergent pump motor (optional)
- MP1** = Microinterruttore porta - Door microswitch
- MP2** = Predisposizione doppio microinterruttore porta - Predisposition double door microswitch
- TS** = Termostato sicurezza boiler - Boiler Safety thermostat
- F, F1, FA1** = Fusibile - Fuse
- IL** = Interruttore generale macchina - Line selector
- ST** = Pulsante Avvio Ciclo - START button
- SD** = Pulsante selezione Temperatura Boiler/Vasca (decrementa) Boiler/Tank temperature selection button (decrease)
- SI** = Pulsante selezione Ciclo/Avviamento Automatico-Manuale (incrementa) Cycle/Automatic or Manual Start (increase)
- LC1** = Lampada Ciclo Corto - Short cycle light
- LC2** = Lampada Ciclo Medio - Medium cycle light
- LC3** = Lampada Ciclo Lungo - Long cycle light
- LC4** = Lampada Ciclo Intensivo - Intensive cycle light
- EVRI5** = Elettrovalvola risciacquo e carico acqua - Rinse and water inlet electrovalve
- STB** = Sonda temperatura boiler - Boiler temperature probe
- STV** = Sonda temperatura vasca - Tank temperature probe
- PRV** = Pressostato vasca - Tank pressostat
- PRB** = Pressostato boiler - Boiler pressostat



SCHEMA DI POTENZA / DIAGRAM POWER

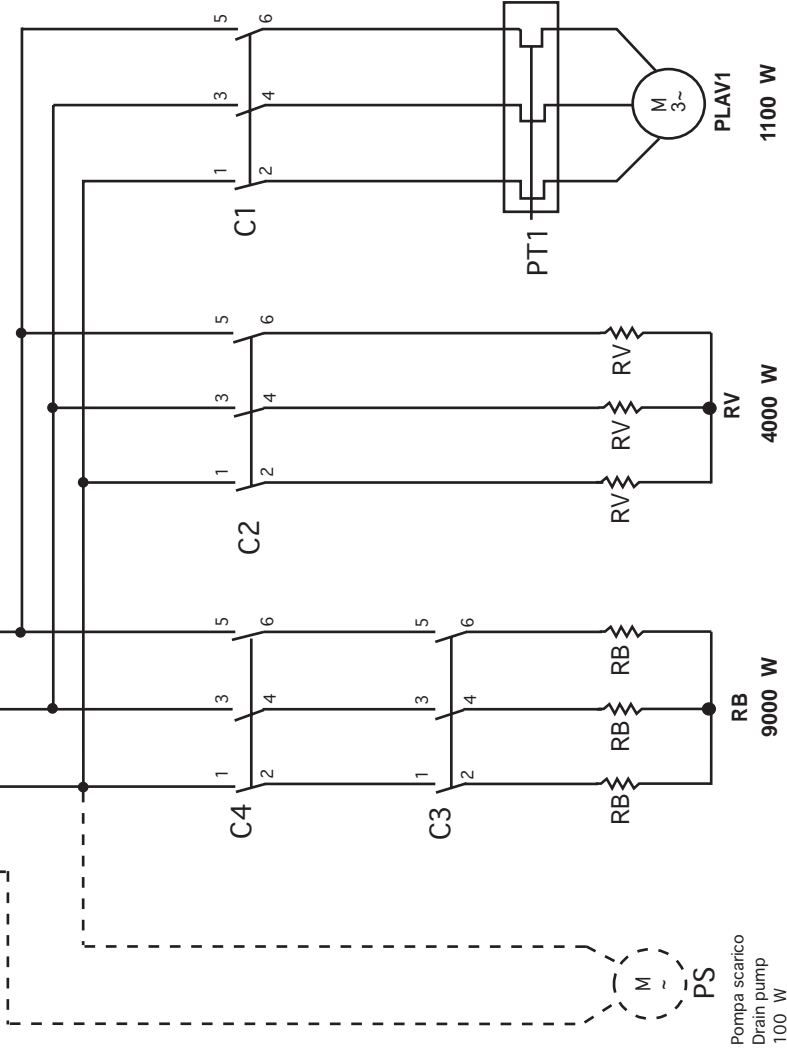
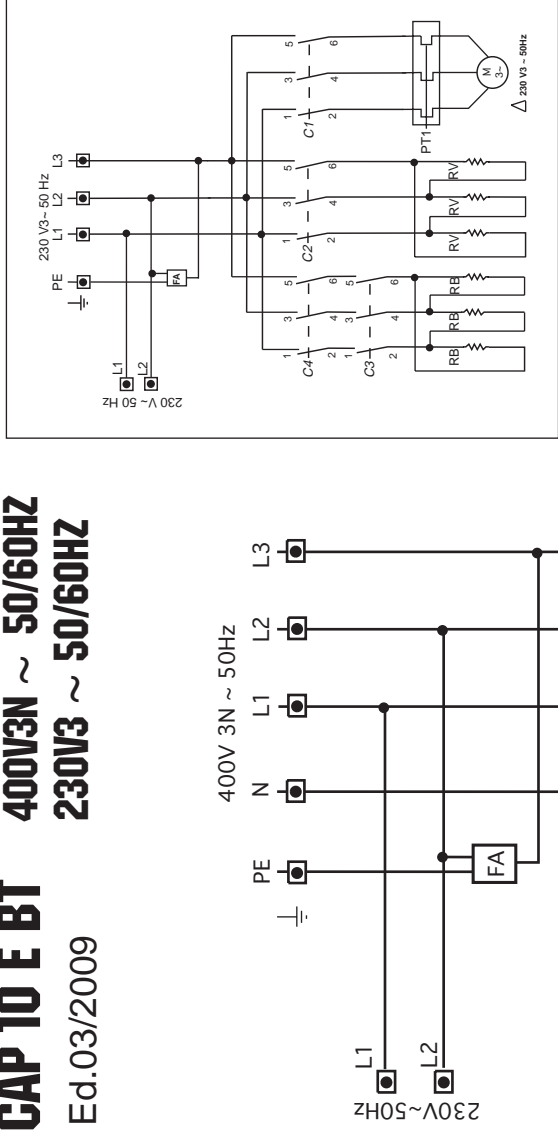
CAP 10 E BT

400V3N ~ 50/60HZ
230V3 ~ 50/60HZ

Ed.03/2009

LEGENDA - LEGEND

- FA** = Filtro Antidisturbo - Electromagnetic Field Filter
- C1** = Teleruttore pompa lavaggio - Remote Switch for wash pump
- C2** = Teleruttore resistenza vasca - Remote Control Switch for tank heating element
- C3** = Teleruttore resistenza Boiler - Safety Remote Control Switch for boiler heating element
- C4** = Teleruttore sicurezza - Safety Remote Switch
- PT1** = Termica elettropompa - Electropumpe thermal protection
- PLAV1** = Motore Pompa Lavaggio - Wash Pump
- RB** = Resistenza Boiler - Boiler heating element
- RV** = Resistenza vasca - Tank heating element
- PR** = Pompa Pressione - Pump Pression
- PS** = Pompa Scarico (optional) - Drain Pump (optional)
- DD** = Dosatore Detersivo - Detergent Pump
- MD** = Motore pompa detersivo (optional) - Detergent pump motor (optional)
- MP1** = Microinterruttore porta - Door microswitch
- MP2** = Predisposizione doppio microinterruttore porta - Predisposition double door microswitch
- TS** = Termostato sicurezza boiler - Boiler Safety thermostat
- F,F1,FA1** = Fusibile - Fuse
- IL** = Interruttore generale macchina - Line selector
- ST** = Pulsante Avvio Ciclo - START button
- SD** = Pulsante selezione Temperatura Boiler/Vasca (decrementa) Boiler/Tank temperature selection button (decrease)
- SI** = Pulsante selezione Ciclo/Avviamento Automatico-Manuale (incrementa) Cycle/Automatic or Manual Start (increase)
- LC1** = Lampada Ciclo Corto - Short cycle light
- LC2** = Lampada Ciclo Medio - Medium cycle light
- LC3** = Lampada Ciclo Lungo - Long cycle light
- LC4** = Lampada Ciclo Intensivo - Intensive cycle light
- EVRIS** = Elettrovalvola risciacquo e carico acqua - Rinse and water inlet electrovalve
- STB** = Sonda temperatura boiler - Boiler temperature probe
- STV** = Sonda temperatura vasca - Tank temperature probe
- PRV** = Pressostato vasca - Tank pressostat
- PRB** = Pressostato boiler - Boiler pressostat



SCHEMA DI POTENZA / DIAGRAM POWER

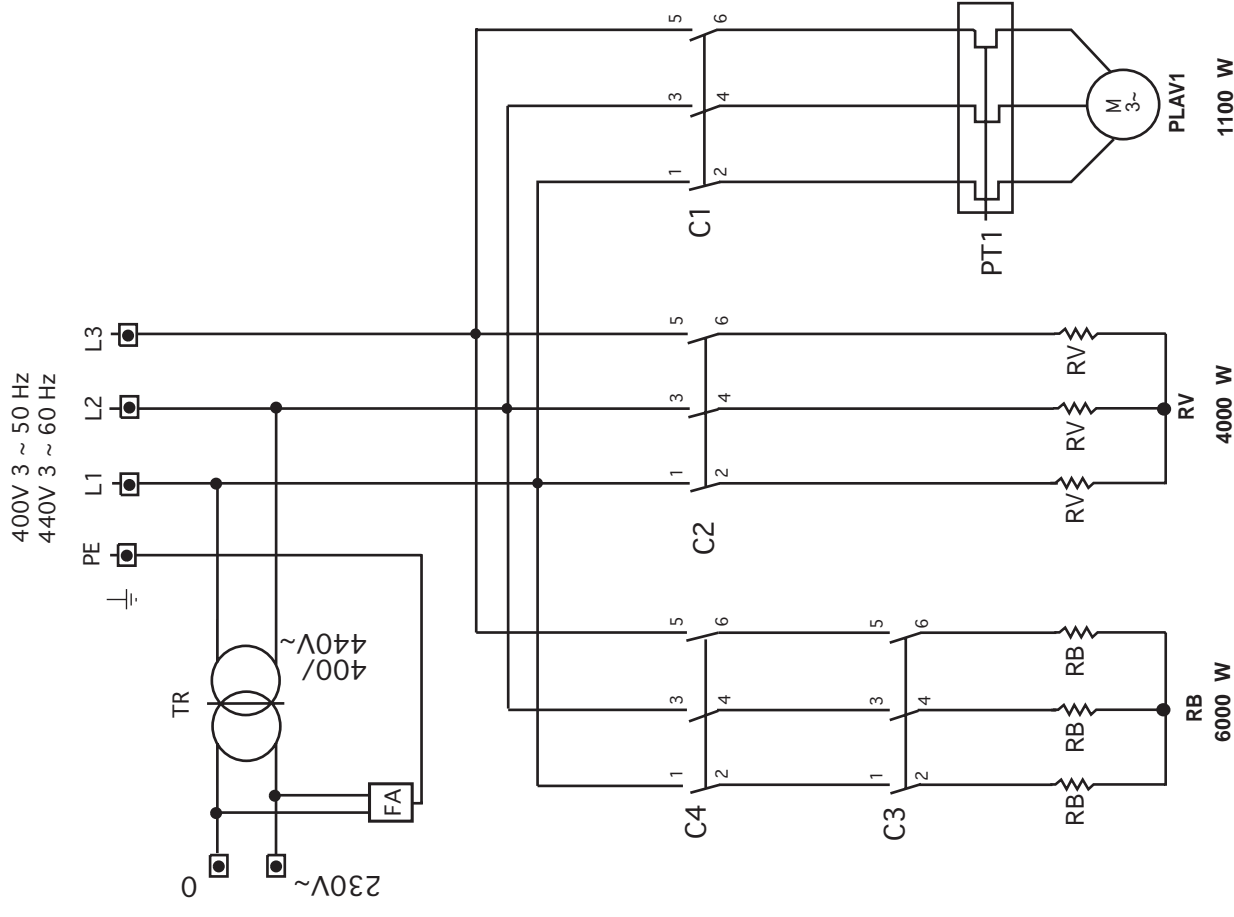
SO 100 E MARINE

400V3 - 50HZ
440V3 - 60HZ

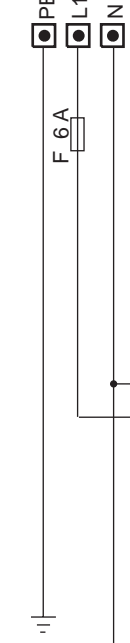
Ed.03/2009

LEGENDA - LEGEND

| |
|--|
| FA = Filtro Antidisturbo - Electromagnetic Field Filter |
| C1 = Teleruttore pompa lavaggio - Remote Switch for wash pump |
| C2 = Teleruttore resistenza vasca - Remote Control Switch for tank heating element |
| C3 = Teleruttore resistenza Boiler - Safety Remote Control Switch for boiler heating element |
| C4 = Teleruttore sicurezza - Safety Remote Switch |
| PT1 = Termica elettropompa - Electropumpe thermal protection |
| PLAV1 = Motore Pompa Lavaggio - Wash Pump |
| RB = Resistenza Boiler - Boiler heating element |
| RV = Resistenza vasca - Tank heating element |
| PP = Pompa Pressione (optional) - Pump Pression (optional) |
| PS = Pompa Scarico (optional) - Drain Pump (optional) |
| DP = Morsetto per collegamento Dosatore Detersivo /Pomp pressione Electrical terminal connection for Detergent/Pression Pump |
| MD = Motore pompa detersivo (optional) - Detergent pump motor (optional) |
| MP1 = Microinterruttore porta - Door microswitch |
| MP2 = Predisposizione doppio microinterruttore porta Predisposition double door microswitch |
| TS = Termostato sicurezza boiler - Boiler Safety thermostat |
| F,F1,FA1 = Fusibile - Fuse |
| IL = Interruttore generale macchina - Line selector |
| ST = Pulsante Avvio Ciclo - START button |
| SD = Pulsante selezione Temperatura Boiler/Vasca (decrementa) Boiler/Tank temperature selection button (decrease) |
| SI = Pulsante selezione Ciclo/Avviamento Automatico-Manuale (incrementa) Cycle/Automatic or Manual Start (increase) |
| LC1 = Lampada Ciclo Corto - Short cycle light |
| LC2 = Lampada Ciclo Medio - Medium cycle light |
| LC3 = Lampada Ciclo Lungo - Long cycle light |
| LC4 = Lampada Ciclo Intensivo - Intensive cycle light |
| EVRIS = Elettrovalvola risciacquo e carico acqua - Rinse and water inlet electrovalve |
| STB = Sonda temperatura boiler - Boiler temperature probe |
| STV = Sonda temperatura vasca - Tank temperature probe |
| PRV = Pressostato vasca - Tank pressostat |
| TR = Trasformatore - Trasformer |



230 V~50 Hz



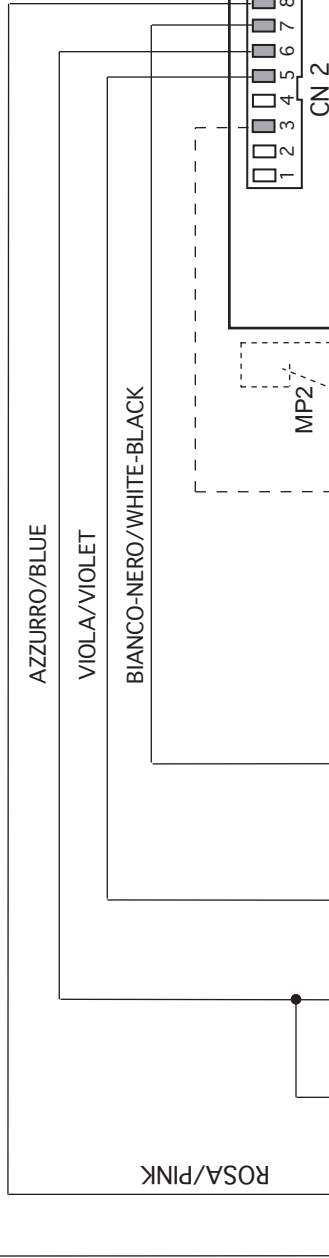
BLU/DARK BLUE

ROSA/PINK

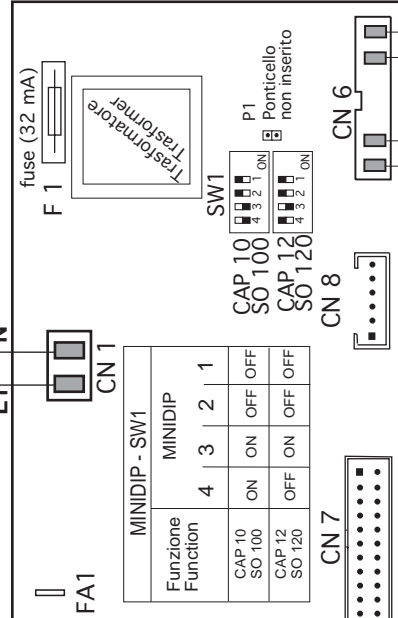
AZZURRO/BLUE

VIOLA/VIOLET

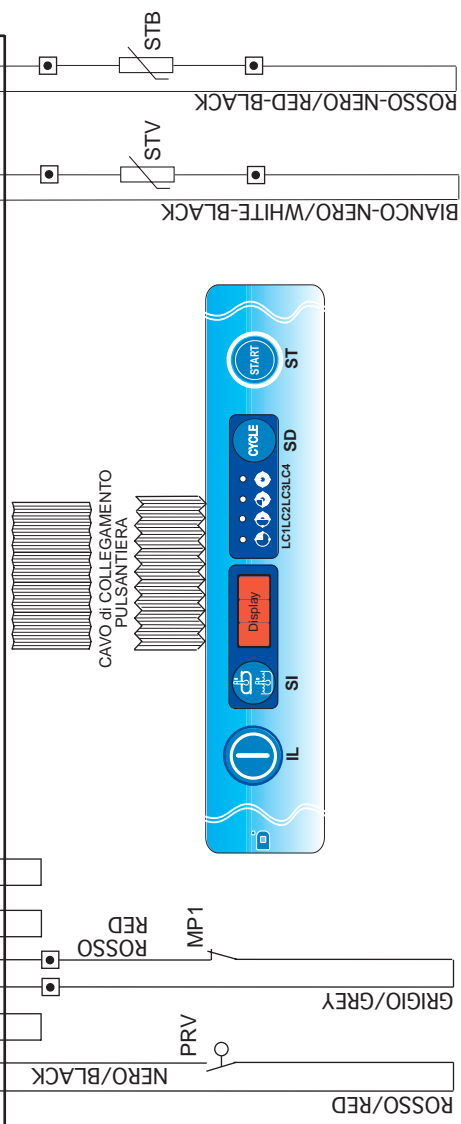
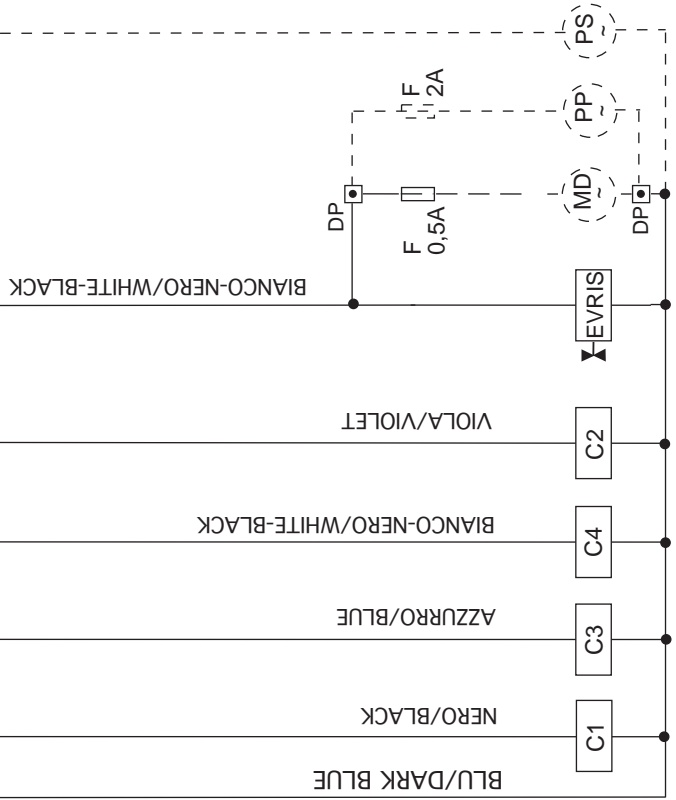
BIANCO-NERO/WHITE-BLACK



**SCHEDA ELETTRONICA
PRINTED CIRCUIT BOARD**



| MINIDIP - SW1 | | MINIDIP | |
|----------------------|-----|---------|-----|
| Funzione Function | 4 | 3 | 2 1 |
| CAP 10 SO 100 | ON | ON | OFF |
| CAP 12 SO 120 | OFF | ON | OFF |



**SCHEMA ELETTRICO
ELECTRIC DIAGRAM**

CAP 10-12 E - SO 100-120 E

400V3 - 50/60HZ

Ed.03/2009



SCHEMA DI POTENZA / DIAGRAM POWER

**CAP 10 - CAP 12 E
SO 100 - SO 120 E**

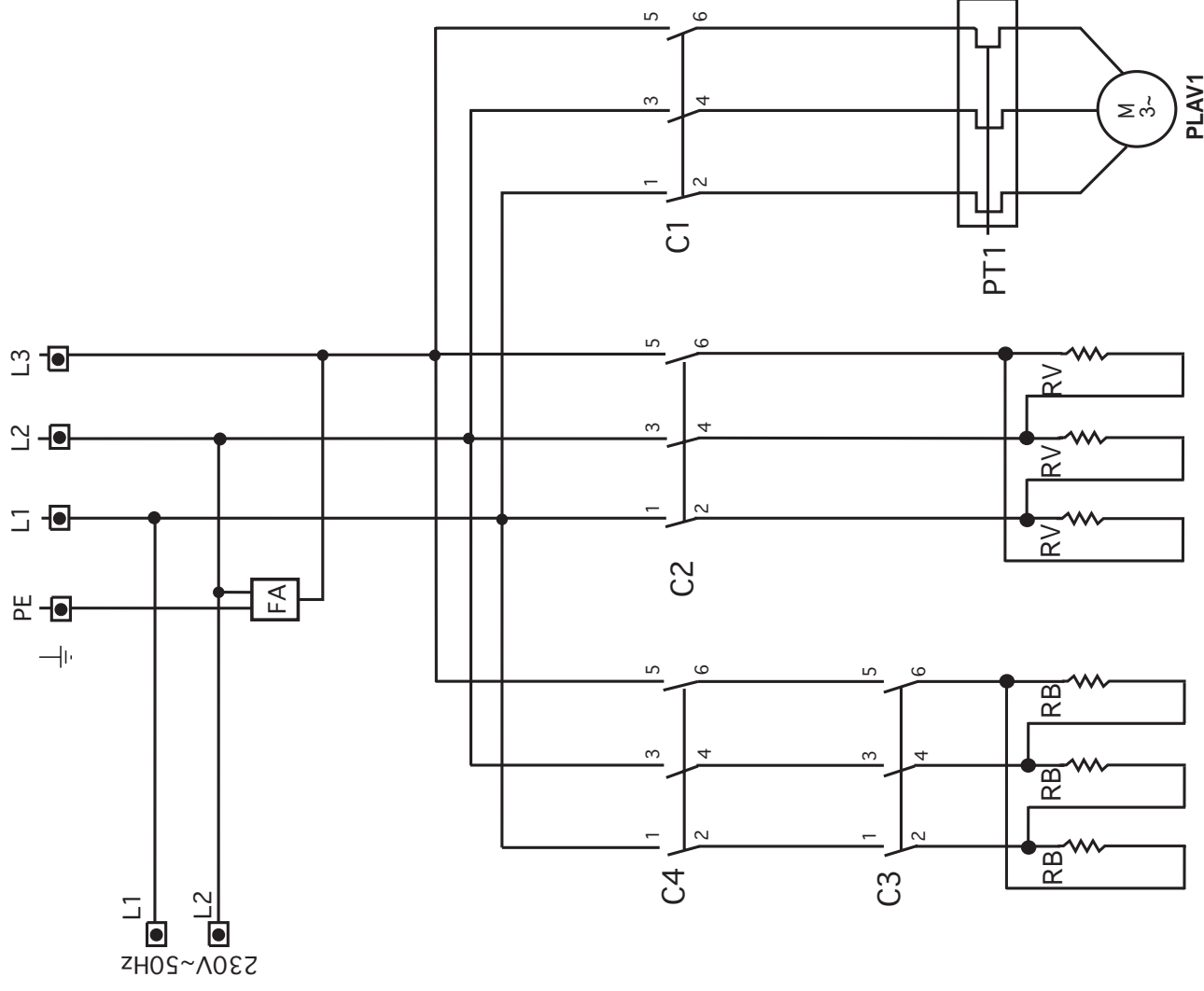
400V3 ~ 50/60HZ

LEGENDA - LEGEND

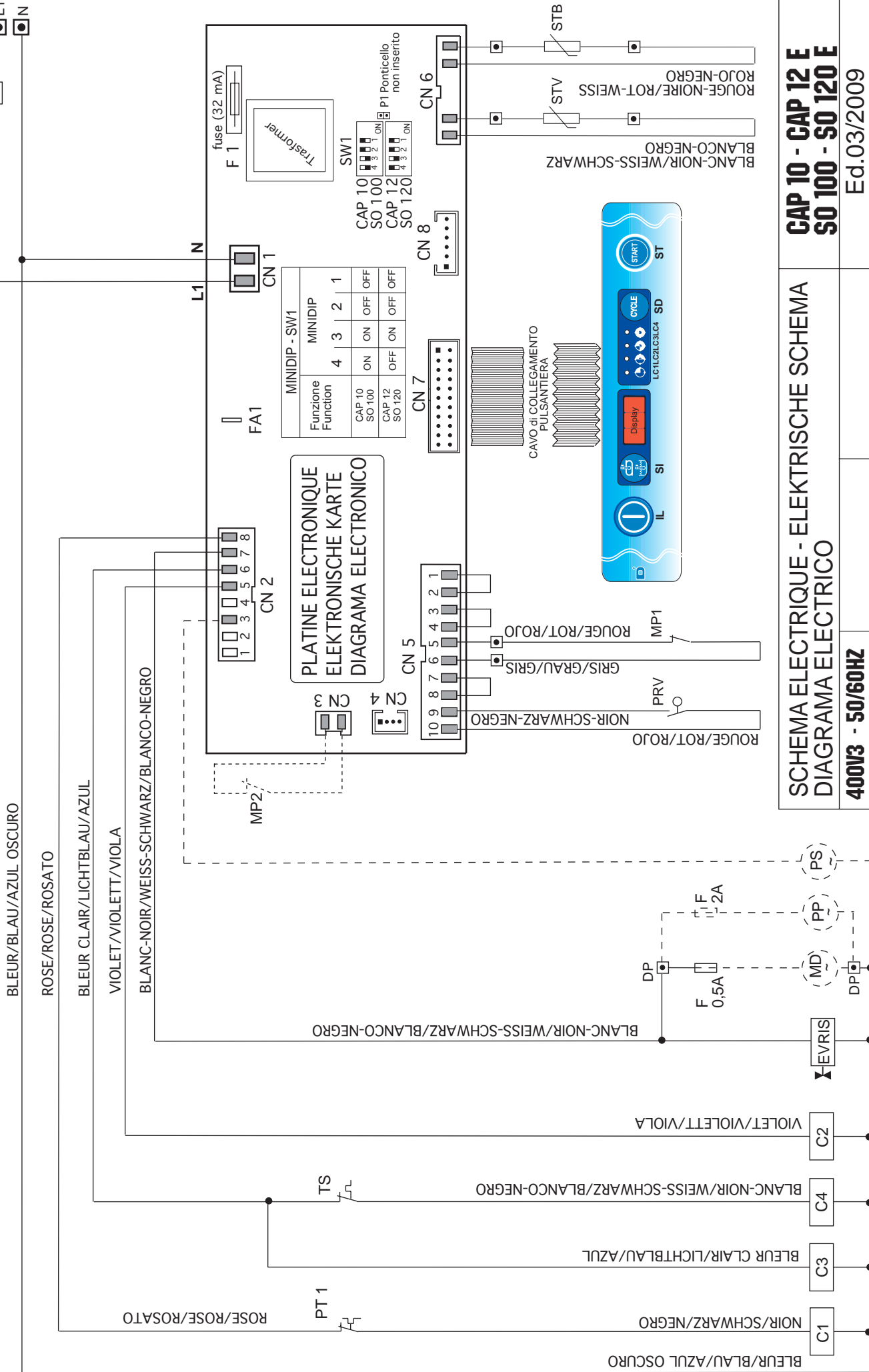
- FA** = Filtro Antidisturbo - Electromagnetic Field Filter
- C1** = Teleruttore pompa lavaggio - Remote Switch for wash pump
- C2** = Teleruttore resistenza vasca - Remote Control Switch for tank heating element
- C3** = Teleruttore resistenza Boiler - Safety Remote Control Switch for boiler heating element
- C4** = Teleruttore sicurezza - Safety Remote Switch
- PT1** = Termica elettropompa - Electropumpe thermal protection
- PLAV1** = Motore Pompa Lavaggio - Wash Pump
- RB** = Resistenza Boiler - Boiler heating element
- RV** = Resistenza vasca - Tank heating element
- PP** = Pompa Pressione (optional) - Pump Pression (optional)
- PS** = Pompa Scarico (optional) - Drain Pump (optional)
- DP** = Morsetto per collegamento Dosatore Detergente /Pomp pressione
Electrical terminal connection for Detergent/Pression Pump
- MD** = Motore pompa detersivo (optional) - Detergent pump motor (optional)
- MP1** = Microinterruttore porta - Door microswitch
- MP2** = Predisposizione doppio microinterruttore porta
Predisposition double door microswitch
- TS** = Termostato sicurezza boiler - Boiler Safety thermostat
- F,F1,FA1** = Fusibile - Fuse
- IL** = Interruttore generale macchina - Line selector
- ST** = Pulsante Avvio Ciclo - START button
- SD** = Pulsante selezione Temperatura Boiler/Vasca (decrementa)
Boiler/Tank temperature selection button (decrease)
- SI** = Pulsante selezione Ciclo/Avviamento Automatico-Manuale (incrementa)
Cycle/Automatic or Manual Start (increase)
- LC1** = Lampada Ciclo Corto - Short cycle light
- LC2** = Lampada Ciclo Medio - Medium cycle light
- LC3** = Lampada Ciclo Lungo - Long cycle light
- LC4** = Lampada Ciclo Intensivo - Intensive cycle light
- EVRS** = Elettrovalvola risciacquo e carico acqua - Rinse and water inlet electrovalve
- STB** = Sonda temperatura boiler - Boiler temperature probe
- STV** = Sonda temperatura vasca - Tank temperature probe
- PRV** = Pressostato vasca - Tank pressostat

400V 3 ~ 50/60HZ

Ed.03/2009



230 V ~ 50 Hz



PE L1 N

F 6 A

fuse (32 mA)

Trasformer

CAP 10
SO 100
CAP 12
SO 120

P1 Ponticello
non inserito

L1 N

CN 1

FA1

CN 2

PLATINE ELECTRONIQUE
ELEKTRONISCHE KARTE
DIAGRAMA ELECTRONICO

MP2

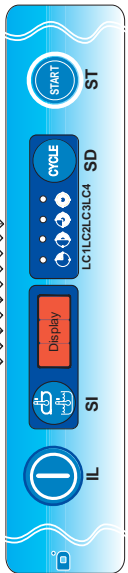
CN 5

CN 7

CN 8

CN 6

CAVO di COLLEGAMENTO
PULSANTIERA



STB

STV

BLANC-NOIR/WEISS-SCHWARZ

ROUGE-NOIR/ROT-WEISS

BLEUR/BLAU/AZUL OSCURO

ROSE/ROSE/ROSATO

BLEUR CLAIR/LICHTBLAU/AZUL

VIOLET/VIOLETT/VIOLA

BLANC-NOIR/WEISS-SCHWARZ/BLANCO-NEGRO

BLANC-NOIR/WEISS-SCHWARZ/BLANCO-NEGRO

VIOLET/VIOLETT/VIOLA

BLANC-NOIR/WEISS-SCHWARZ/BLANCO-NEGRO

BLEUR CLAIR/LICHTBLAU/AZUL

ROSE/ROSE/ROSATO

NOIR/SCHWARZ/NEGRO

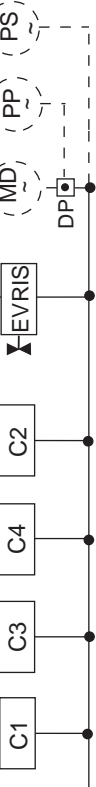
BLEUR/BLAU/AZUL OSCURO

**SCHEMA ELECTRIQUE - ELEKTRISCHE SCHEMA
DIAGRAMA ELECTRICO**

**CAP 10 - CAP 12 E
SO 100 - SO 120 E**

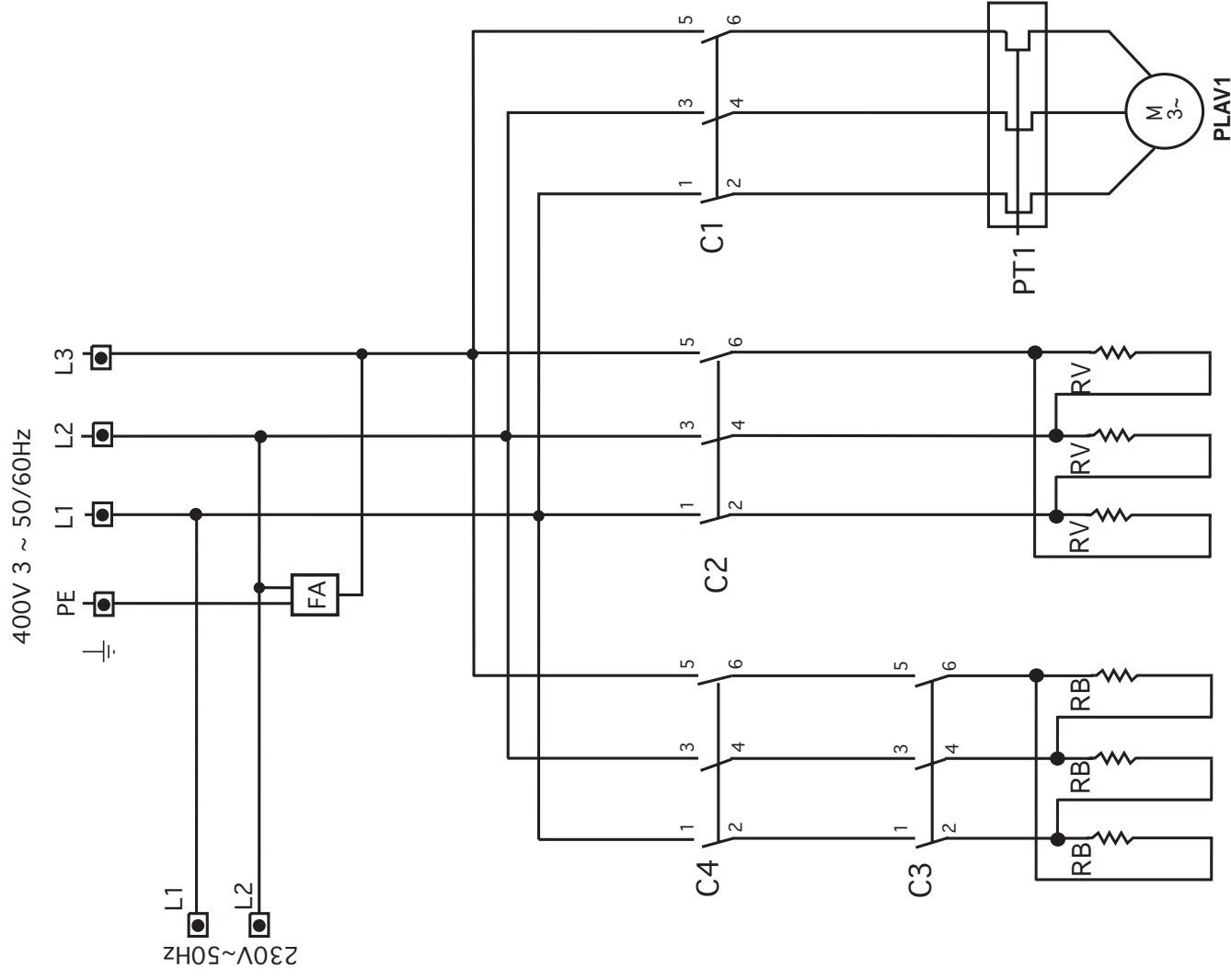
400V3 - 50/60HZ

Ed.03/2009



LEGENDA - BEZEICHUNG - NOTA

- FA** = Filtre anti-bruit - Störschutzfilter - Filtre ante-ruído
- C1** = Télérupteur pompe de lavage - Fernschalter der Waschp. - Teiler.bomba de lavado
- C2** = Télérupteur résistance cuve - Fernschalter der Tanksheizung - Teiler. resistencia cuba
- C3** = Télérupteur résistance boiler - Fernschalter der Boilerheizung - Teiler. resistencia calderín
- C4** = Télérupteur sûreté boiler - Fernschalter der Boilersicherung - Teiler. seguridad calderín
- PT1** = Thermistance electropompe - Schutzschalter Elektropumpe - Termica electrobomba
- PLAV1** = Moteur pompe de lavage - Spülpumpe Motor - Motor bomba de lavado
- RB** = Resistance du boiler - Boilerheizung - Resistencia calderín
- RV** = Resistance de la cuve - Tanksheizung - Resistencia cuba
- PP** = Moteur pompe de rinçage (en option) - Nachspülpumpe Motor (optional)
Motor bomba de aclarado (optional)
- PS** = Pompe de vidange (en option) - Ablaufpumpe (optional) - Bomba de descarga (optional)
- DP** = Borne puor connect. au doseur déterg./pompe rinçage
Klemmleiste für anschluss spülmittelpumpe und Nachspülpumpe
Borne para conexión bomba detergente y aclarado
- MD** = Moteur pompe produit de lavage - Spülmittelpumpemotor - Motor bomba detergente
- MP1** = Microinterrupteur porte - Tür-Microschalter - Mikrointerruptor puerta
- MP2** = Pred. double microint. porte - Vorb. für Tür-Microschalter - Pred. doble mikro-int. puerta
- TS** = Thermostat sûreté - Sicherheitsthermostat - Termostato seguridad
- F,F1,FA1** = Fusible - Schmelzsicherung - Fusible
- IL** = Poussoir ligne - Druckschalter - Tecla linea
- ST** = Start cycle - Start Zyklus - Start ciclo
- SD** = Poussoir selection temperature chauffeure /cuve (décrementer)
Wahltaaste Temperature Boiler/Tank (Verringerung)
Interruptor selection temperature calderín /cuba (decrementar)
- SI** = Poussoir selection cycle START AUTOMATIQUE MANUEL (incrémentar)
Wahltaaste Zyklus/Automatischer oder Manueller Betrieb (Steigerung)
Interruptor selection ciclo START AUTOMATICO MANUALE (incrementar)
- LC1** = Lampe cycle court - KurzeZykluslampe - Lampada ciclo corto
- LC2** = Lampe cycle moyen - MittlererZykluslampe - Lampada ciclo medio
- LC3** = Lampe cycle long - LangerZykluslampe - Lampada ciclo largo
- LC4** = Lampe cycle intensif - IntensiverZykluslampe - Lampada ciclo intensivo
- EVRS** = Electrovalve rinçage et eau chaude - Nachspül- und Warmwasser Elektroventile
Electrovalvula de aclarado y de agua caliente
- STB** = Sonde temperature boiler - Sonde der Boilerstemperature - Sonda temperatura calderín
- STV** = Sonde temperature cuve - Sonde der Tankstemperature - Sonda temperatura cuba
- PRV** = Pressostat de la cuve - Tankpressostat - Presostato de cuba



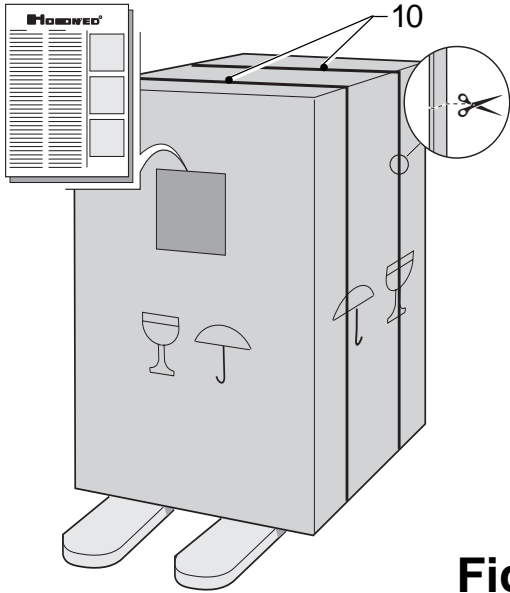


Fig. 2

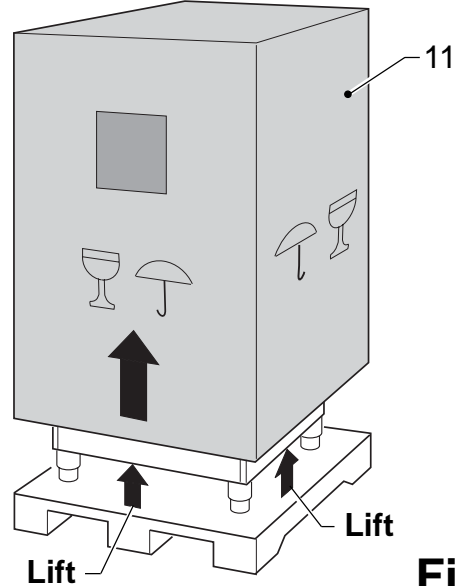
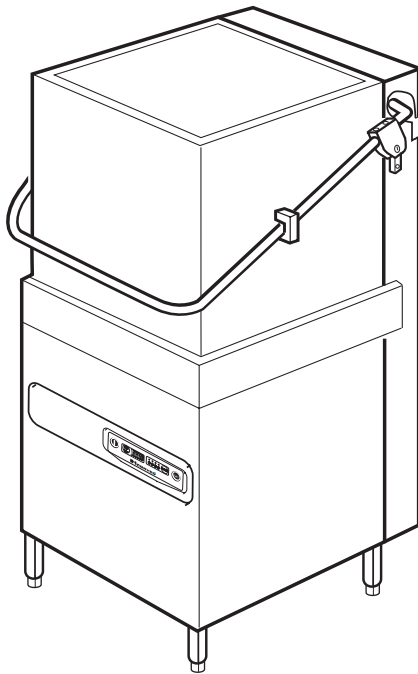


Fig. 3



| | | | |
|--|--|--|-------------|
| Hoonved | | HOONVED S.r.l. Via U. Foscolo, 1 Venegono Sup.re (VA) ITALY | |
| Type _____ | S/N _____ | | |
| V _____ Hz _____ | A. _____ | | |
| kW (M) _____ | kW _____ | kW max. _____ | |
| Pressione dinamica alimentazione idraulica Pression dynamique arrivée d'eau Dynamic pressure water supply Dynamischer Druck Wassereingang Pression Dinamica Alimentación Hidrica | { min 2 bar = 200kPa max 2 bar = 200kPa | Calda / Fredda Chaud / Froid Warm / Cold Warm / Kalt Caliente / Fria | 55° / 12° C |
| Pressione idraulica vapore saturo Pression dynamique vapeur saturée Dynamic pressure saturated steam Dynamischer Druck gesättigter Dampf Pression Dinamica Vapor Saturado | { min _____ max _____ | IP _____ | A. _____ |
| 56000 | Made In Italy | Mod. _____ | |
| | | | |

Fig. 4

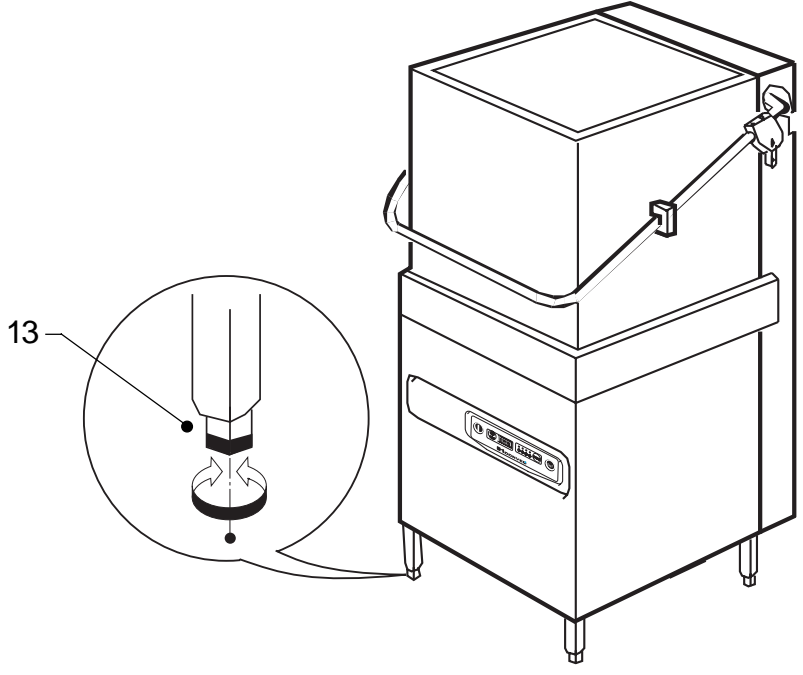


Fig. 5

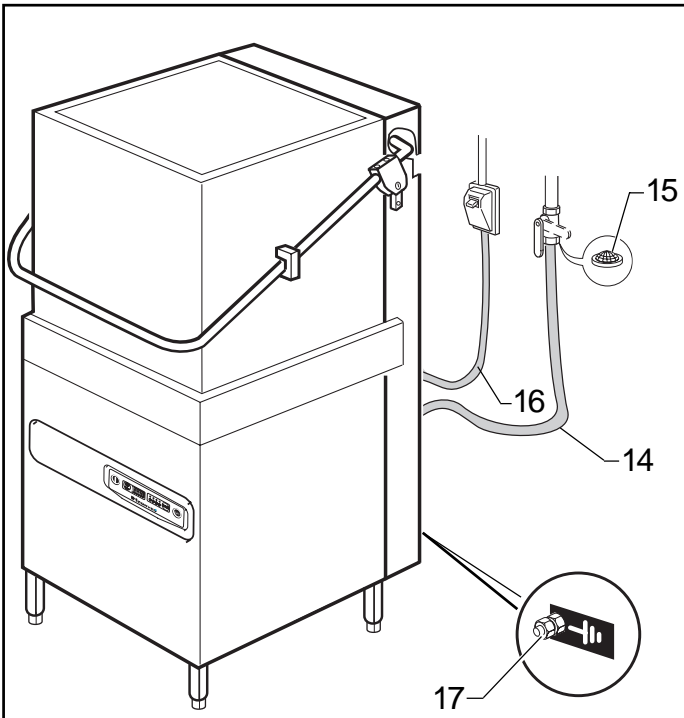


Fig. 6

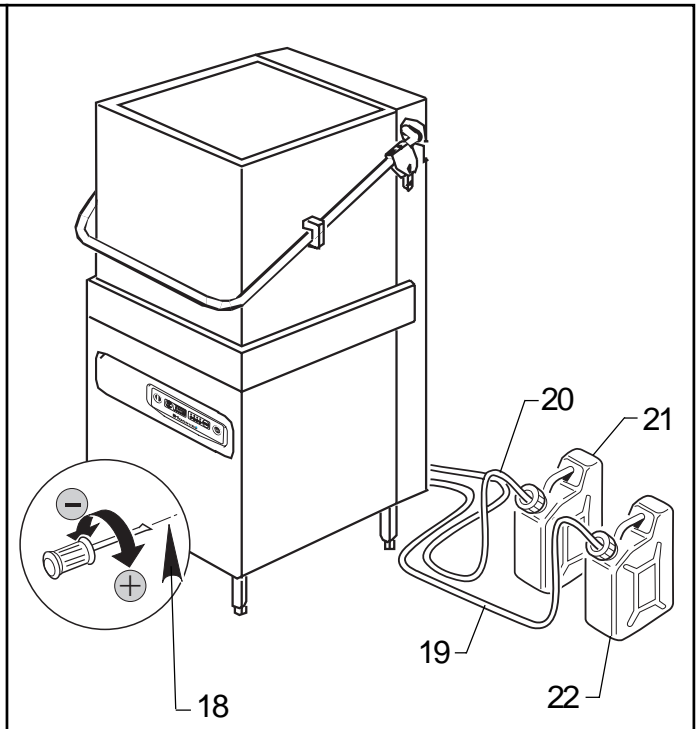


Fig. 7

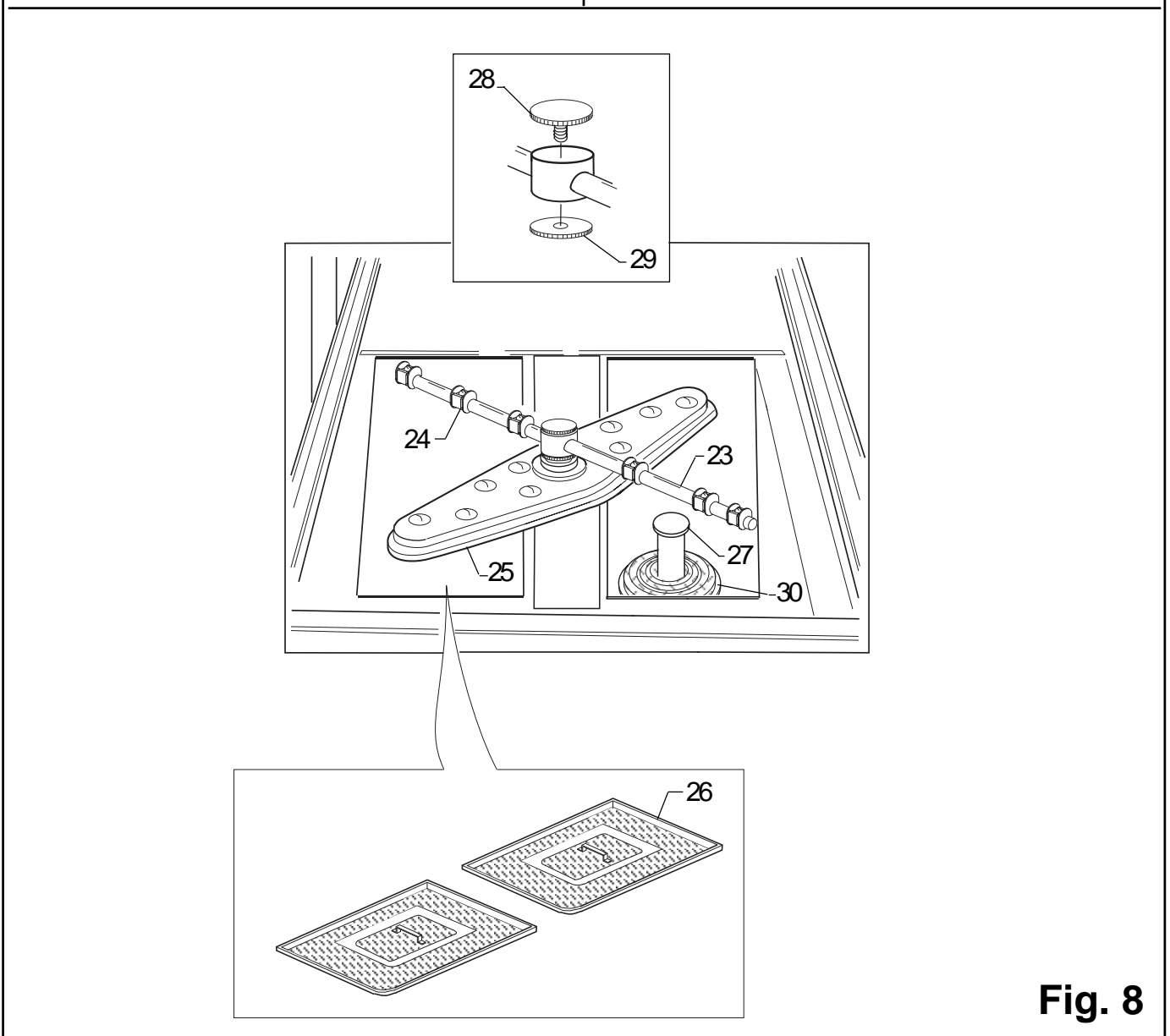


Fig. 8

HOONVED s.r.l.

Via U. Foscolo, 21040 - Venegono S. (VA) - ITALY

Tel. 0331 - 856111 - Fax. 0331 - 865223

www.hoonved.com