# LAVABICCHIERI PROFESSIONALI PROFESSIONAL GLASSWASHERS LAVE-VERRES PROFESSIONNELS PROFESSIONELLER GLÄSERSPÜLER LAVAVASOS PROFESIONAL MÁQUINAS DE LAVAR COPOS PROFISSIONAL

CW350B CW350BS CW350BSD CW350 CW350S CW350SD CW400B CW400BS CW400BSD CW400R CW400RS CW400RSD





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Thank you for having chosen this product.

We recommend that you read all of the instructions contained in the manual attentively in order to become familiar with the most suitable conditions for the correct use of the dishwasher.

#### **TECHNICAL INSTRUCTIONS:**



Are intended for qualified personnel who will perform the installation, the setup, the testing and eventual assistance operations.

#### **USER INSTRUCTIONS:**



Indicate the recommended usage, the command descriptions and the proper cleaning and maintenance operations for the dishwasher.

### 1 Safety and usage instructions



THIS MANUAL CONSTITUTES AN INTEGRAL PART OF THE DISHWASHER; IT MUST NECESSARILY BE STORED INTEGRAL AND TOGETHER WITH THE APPARATUS.



THE POSITIONING, CONNECTIONS, SETUP AND TROUBLESHOOTING, AND THE SUBSTITUTION OF THE POWER CABLE MUST **BE PERFORMED BY QUALIFIED PERSONNEL.** 

THE DISHWASHER IS INTENDED EXCLUSIVELY FOR PROFESSIONAL USE AND MUST BE USED BY COMPETENT PERSONNEL. IT IS DESIGNED TO WASH DISHES (PLATES, CUPS, BOWLS, BAKING PANS, SILVERWARE) AND SIMILAR ITEMS FROM THE GASTRONOMY AND THE COLLECTIVE RESTAURANT INDUSTRIES. IT CONFORMS TO THE INTERNATIONAL ELECTRIC AND MECHANICAL SAFETY NORMS (CEI-EN-IEC 60335-2-58/61770) AND ELECTROMAGNETIC COMPATIBILITY NORMS (CEI-IEC-EN 55014-1/-2, 61000-3;4, 50366).

THE MANUFACTURER DECLINES ANY RESPONSABILITY FOR DAMAGE TO PERSONS OR THINGS CAUSED BY NON-OBSERVANCE OF THE INSTRUCTIONS PRESENT IN THE MANUAL, BY INCORRECT USE, BY TAMPERING EVEN WITH A SINGLE PART OF THE APPARATUS AND BY USE OF NON-ORIGINAL REPLACEMENT PARTS.



THE **ELECTRICAL GROUNDING** OF THE APPARATUS ACCORDING TO THE METHODS PRESCRIBED BY THE ELECTRICAL SYSTEM'S SAFETY NORMS **IS OBBLIGATORY**.

THIS APPARATUS IS MARKED IN CONFORMITY TO THE EUROPEAN DIRECTIVE **2002/96/EC**, WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEE).

BY ENSURING THAT THIS PRODUCT BE DISPOSED OF IN A CORRECT MANNER, THE USER CONTRIBUTES TO THE PREVENTION OF POTENTIALLY NEGATIVE ENVIRONMENTAL AND HEALTH CONSEQUENCES.

THE SYMBOL ON THE PRODUCT, OR UPON ITS ACCOMPANYING DOCUMENTATION, INDICATES THAT THIS PRODUCT MUST NOT BE TREATED AS DOMESTIC WASTE, BUT MUST BE TAKEN TO A SUITABLE COLLECTION DEPOT FOR THE RECYCLING OF ELECTRIC AND ELECTRONIC APPARATUS. DISPOSE OF THE APPARATUS ACCORDING TO THE LOCAL WASTE DISPOSAL NORMS. FOR MORE INFORMATION ON THE TREATMENT, RECOVERY AND RECYCLING OF THIS PRODUCT, CONTACT YOUR COMPETENT LOCAL AUTHORITY, YOUR DOMESTIC WASTE DISPOSAL SERVICE OR THE STORE IN WHICH THE PRODUCT WAS PURCHASED.



DO NOT INSERT SOLVENTS SUCH AS ALCOHOL OR TURPENTINE WHICH COULD PROVOKE EXPLOSIONS. DO NOT INSERT DISHES WITH RESIDUES OF ASH, WAX OR VARNISH.



NEVER USE THE DISHWASHER OR ITS PARTS AS A STEP-LADDER, SUPPORT OR BRACE FOR PERSONS, THINGS OR ANIMALS.

LEANING OR SITTING UPON THE DISHWASHER'S OPEN DOOR COULD CAUSE IT TO TIP, WITH CONSEQUENT PERSONAL DANGER.

DO NOT LEAVE THE DISHWASHER'S DOOR OPEN IN ORDER TO AVOID TRIPPING UPON IT.



DO NOT DRINK THE RESIDUAL WATER EVENTUALLY PRESENT IN THE DISHES OR IN THE DISHWASHER AFTER A WASH CYCLE.



THE APPARATUS IS NOT ADAPTED FOR USE BY MINORS AND PEOPLE WITH REDUCED PHYSICAL, SENSORIAL OR MENTAL CAPABILITIES WITHOUT EXPERIENCE OR FAMILIARITY WITH THE DEVICE. THE USE OF THE APPARATUS IS PERMITTED TO THESE PEOPLE ONLY UNDER THE SUPERVISION OF A PERSON IN CHARGE OF THEIR SAFETY.

#### 2 Technical characteristics

TECHNICAL CHARACTERISTICS					
		CW350B CW350BS CW350BSD	CW350 CW350S CW350SD	CW400B CW400BS CW400BSD	CW400R CW400RS CW400RSD
Input voltage power	V	230V/1	230V/1	230V/1	400V 3N ~
Frequency	Hz	50	50	50	50
Max. absorbed power	kW	2,9	2,9	2,9	4,8
Boiler resistance power	kW	2,6	2,6	2,6	4,5
Tank resistance power	kW	1,6	1,6	1,6	1,6
Wash pump power	kW	0,3	0,3	0,3	0,3
Water supply pressure	kPa (bar)	200-400 (2 ÷ 4)	200-400 (2 ÷ 4)	200-400 (2 ÷ 4)	200-400 (2 ÷ 4)
Water supply temperature	°C	50°C – 60°C	50°C – 60°C	50°C – 60°C	50°C – 60°C
"S" versions Water supply temperature (incorporated water- softener)	°C	15°C – 30°C	15°C – 30°C	15°C – 30°C	15°C – 30°C
Water supply hardness	°dF	7°dF-12°dF	7°dF-12°dF	7°dF-12°dF	7°dF-12°dF
Rinse cycle water consumption	1	2,4	2,4	2,4	3,5
Boiler capacity	1	2,7	2,7	3,9	5,5
Tank capacity	1	10	10	14	35
Standard cycle duration with water supply at 50°C	S	120/180	120/180	120/180	60/120/180/C
Noise level	dB(A)	56	56	56	56
Protection rating	IPX	4	4	4	4
Net weight	kg	31	37	44	53
Power cable type	∢HAR►	H05VV-F	H05VV-F	H05VV-F	H07RN-F

NOTE: "D" = versions with integrated detergent metering unit – "S" versions with integrated water-softener

## 3 Installation and positioning

#### **INSTALLATION and POSITIONING**

Bring the dishwasher to its installation location, remove its packaging and verify the integrity of the apparatus and of the components. If damaged, written notification must be sent to the transporter.

The packaging elements (plastic bags, polystyrene foam, nails, etc) must not be left within reach of children and domestic animals as they are a potential source of danger.

All of the materials used for packaging are compatible with the environment. They may be safely preserved, or may be disposed of at an appropriate waste disposal facility.

The components in plastic material subject to eventual disposal through recycling are marked in the following manner:

PE polyethylene: external wrapping, instructions bag, protection bags.

PP polypropylene: bands.

PS polystyrene foam: protective corners, packaging cover.

The wood and cardboard components can be disposed of by respecting the norms in vigor.

When disposing of the product, avoid leaving it in the environment; its disposal must respect the norms in vigor. All of the metallic parts are in stainless steel and are detachable.

The plastic parts are marked with the symbol of the relative material.

#### **POSITIONING:**



<u>Warning:</u> the internal system and the locations in which communal apparatus are to be installed, must answer to the norms in vigor.

The manufacturer declines any responsibility for direct damages to persons of things deriving from lack of respect for the said norms.

Prior to installation verify that objects and materials which could be damaged by aqueous vapor or by spray from washing solutions are not in the vicinity, or are adequately protected.

Position the dishwasher in the desired position and remove the protective wrapping.

Level the dishwasher (with the help of a level) on its four feet, regulating them in such a way so as to guarantee stability; any alternate solution must be approved by the manufacturer.

# 4 INSTALLER – TECHNICAL ASSISTANT INSTRUCTIONS

#### Water and drain connection:

The water tubes and the electrical power cable stick out from the back of the machine. Connect the water supply tube to a 3/4" threaded **gas** outlet.

Use only new tubes for the connection to the water supply; old or used tubes must not be utilized.

The dynamic **supply pressure** must be between **2 and 4 bar**; if the pressure is higher, a pressure reducer must be installed.

It is indispensable to install a general faucet on the supply water input tubing; the faucet must be accessible after installation has been completed. Do not install the faucet behind the dishwasher.

The declared cycle durations refer to a 50° hot water supply.

Where a cold water supply is used, the duration of the cycle could increase in relation to the input water temperature since the dishwasher is equipped with a constant temperature and pressure rinse system.

#### Drain

Every dishwasher comes equipped with a drain connection tube; this is prescribed to be at floor level, with a trap drain.



<u>Caution:</u> make sure that the supply and drain tubes are not bent, restricted or crushed after installation.



#### 4.1 Electrical connection

The dishwasher's electrical connection and that of eventual supplementary apparatus is to be entrusted to authorized and qualified personnel, with respect to the norms in vigor; observe also the technical regulations for the connections.

The total power installed is given upon the apparatus' technical data label.

Other apparatus must not be protected along with the dishwasher.

The user must provide for the installation, according to the norms in vigor, of a main electrical power switch and of a differential switch compatible with the machine's characteristics.

These switches must be installed near the dishwasher, be easily accessible after installation and guarantee complete disconnection from the electrical supply in category III overvoltage conditions.



#### Caution!!!

The dishwasher is free of electrical current only when the main switch is off.

- Connect the apparatus to the usage equalizer. The lat clamp for the connection is located at the lower

- back of the machine.
- The protection conductor (PE) is yellow-green in color, the neutral conductor (N) is blue and the phase conductors (L1, L2, L3) are black, gray and brown.

#### 5 FIRST STARTUP

#### FIRST STARTUP

The electrical protection system must be subjected to a functional test before use. The installation must be performed and/or verified by the authorized reseller who will be responsible for the first startup and the instructions relative to the dishwasher's operation.

#### PREPARATION FOR USE

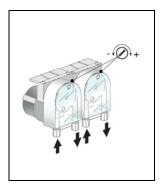
#### Important:

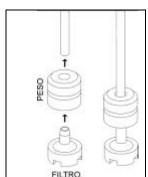
The rinse-aid metering unit comes equipped in all models while the detergent metering unit comes equipped in only some models.

**If both metering units are present** position the external detergent and rinse-aid containers and insert their respective suction tubes located at the back of the machine. Red tube: detergent

Transparent tube: rinse-aid

Before inserting the tubes in the containers apply the weight (necessary to keep the tube at the bottom of the container) and the filter as indicated in the diagram.





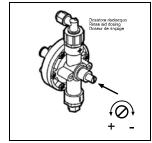
For adjustments, use the adjustment screws indicated in the diagram. It is recommended that adjustments be performed by personnel from the companies who have supplied the detergent products.

If the detergent metering unit did not come pre-installed it can be installed at a later time by ordering the relative KIT.

Alternatively, an external metering unit can be connected by means of an electrical connection with a  $2 \times 0.5$  mm type H05 RN-F cable. This cable must be inserted through the passage indicated in the TECHNICAL CHARACTERISTICS scheme and connected in accordance with the electrical scheme furnished with the dishwasher.

The metering unit must be of 230V/50Hz with a maximum absorbed power of **15W**.

Connect the detergent metering unit to the dishwasher through the red tube cited above.



## 6 SETTINGS (only models CW400RSD - CW400R - CWC500R)



#### **SETTINGS**

During the first startup, arrange for the setup or the adjustment of the functions/parameters indicated hereafter:

POWER SUPPLY: 200 - 250 VAC.

ABSORBED POWER: 4 VA

OPERATIONAL TEMPERATURE: 0 / 60 °C

OPERATIONAL HUMIDITY: max 90 % without condensation

NORMS: The control unit is designed and manufactured in observance of the

European norms in vigor regarding electrical safety and electromagnetic compatibility.

Particularly the following:

EN 61000-6-3: Emissions for residential and commercial environments

EN 61000-6-2: Immunity for industrial environments EN 61000-4-11: Immunity to supply micro-interruptions

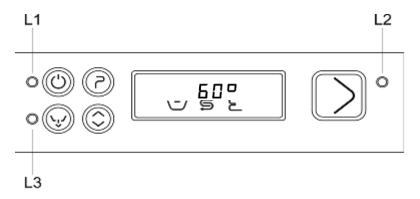
EN 60335-1 : Low voltage safety directive

ZERO CROSSING: The relay which powers the Tank's electrical resistance is equipped with the "zero crossing "function which synchronizes the switching of this relay, both in closing and in opening, with the voltage supply's passing to zero both for 50 Hz and 60 Hz frequencies. In this manner the relay's contacts usage is significantly reduced.

#### **CONNECTION SCHEME**

Clamp	Connection for model. CWC500R	Connection for models CW400RSD - CW400R	
1 – 2	CONTROL UNIT POWER SUPPLY, 230 VAC	CONTROL UNIT POWER SUPPLY, 230 VAC	
3 – 4	BOILER TEMPERATURE SENSOR	BOILER TEMPERATURE SENSOR	
5 – 6	TANK TEMPERATURE SENSOR	TANK TEMPERATURE SENSOR	
10	BREAK-TANK PRESSOSTAT	BREAK-TANK PRESSOSTAT	
11	Reserve input	SALT CONTAINER SENSOR	
12	MICRO HOOD	MICRO DOOR	
13	TANK PRESSOSTAT, closed over level	TANK PRESSOSTAT, closed over level	
14	COMMON INPUTS	COMMON INPUTS	
15	BOILER RESISTANCE REMOTE CONTROL SWITCH COIL	BOILER RESISTANCE REMOTE CONTROL SWITCH COIL	
16	TANK RESISTANCE, max. 10 Amp.	TANK RESISTANCE, max. 10 Amp.	
17	-	REGENERATION ELECTROVALVE	
18	-	COLD RINSE ELECTROVALVE	
18 B.TANK	RINSE PUMP (MACHINE TYPE 4)	RINSE PUMP (MACHINE TYPE 4)	
19	WASH PUMP ( max. 1 HP )	WASH PUMP ( max. 1 HP )	
20	RINSE ELECTROVALVE + PRESSURE INCREASE PUMP	RINSE ELECTROVALVE + PRESSURE INCREASE PUMP	
21	DRAIN PUMP ( max. 0.75 HP ) Optional	DRAIN PUMP ( max. 0.75 HP ) Optional	
22	OUTPUT POWER SUPPLIES, 230 VAC phase	OUTPUT POWER SUPPLIES, 230 VAC phase	

#### **KEYBOARD FUCNTIONALITY CW400RSD - CW400R**



#### MAIN FUNCTIONS WITH MACHINE POWERED

ITEM	Description	Function
L1 O	Machine powered led indicator	This led indicator turns on (green) when electrical current is present
L2 O	Tank emptying led indicator	This led indicator (green) indicates that the machine is emptying the Tank – the led flashes when the operation is in progress.
<b>©</b>	On/Off button	Pressing this button with led indicator 1 on activates the keyboard and renders the machine operational.  The last program used (wash cycles) will be shown on the 3 displays when turned on.
<b>\</b>	Tank emptying button	To empty the Tank first remove the Tank's overflow, then press the button for 3 seconds. This inhibits water from being loaded and, after a Pressostat Tank-empty signal verifies that the Tank has been emptied, will only allow a limited amount of boiler water to circulate in order to facilitate the cleaning of the Tank.  At the end of the function the machine goes into a stand-by phase which is indicated by the appearance of three dashes "" upon the displays. To render the machine operational again it is therefore necessary to insert the Tank's overflow and to press the button. If the machine is equipped with the drain pump option, the drain pump will also be activated.
<b>(5)</b>	Programs button	By repeatedly pressing this button the various wash cycles can be viewed (brief 60", medium 120", long 180", continuous)
©	OPTIONS button	<ul> <li>The use of this button does the following, in sequence:</li> <li>Enables the "crystal cycle" only with the medium cycle 120" ("C" on the display"); Sets the T of the boiler from 85°C to 70°C</li> <li>Enables regeneration (rig on the display) if decal is installed. (if a program has not been set, it will not be performed)</li> </ul>
	Tank led indicator	Indicates, when on, that the temperature shown during washing is that of the Tank.
S	Salt led indicator	Indicates insufficient salt quantity (if prescribed in the function) The led indicator turns on for the closing of a reed contact.
Ξ	Boiler led indicator	Boiler resistance in function symbol

೮೯೭	3 DISPLAY	Can indicate the program which will begin and the boiler/Tank temperature. In case of anomalies an error code will be indicated, for example "E 1" - Boiler temperature anomaly - Tank temperature anomaly - Tank loading anomaly - Tank draining anomaly - Boiler anomaly	
$\geq$	Start button	Initiates the program shown on the display	
L3 <b>О</b>	Bicolor led indictor	This led indicates the state of the machine      Green indicates the machine is ready for a new program     Red indicates the machine is busy with an operation     Yellow indicates a break after Tank draining	

#### MACHINE CONFIGURATION PARAMETERS (Intended for technical personnel, not the user)

Parameter	Description	Range	Preset
P0	Drain cycle time	1-5'	1
P1	Boiler temperature	60-95°C	82
P2	Tank temperature	40-65°C	55
P3	Rinse duration	10-40"	13
P4	BOILER STOP option	YES/NO	1 YES
P5	Brief wash time	60-90	60
P6	Drain with overflow option	YES/NO	1 YES
P7	Cold rinse option	YES/NO	0 NO
P8	Regeneration option	YES/NO	1 YES
P9	Maximum water load duration	1-10'	10
P10	H2O Hardness (to be set by the user based on water hardness)	35	15
P11	Machine type	4	4
P12	Wash number counter	YES	1 YES

#### PARAMETER FUNCTION WITH MACHINE ON

Upon first installation it is possible to perform a series of operations which allow for the personalization of the dishwasher based on the user's necessities, as well as a test cycle which quickly checks the functionality of all of the components. To perform these operations it is necessary to set the machine to "programming mode" as described hereafter

_	Shut the machine off by pressing
_	Simultaneously press and wuntil <b>P0</b> appears on the display
-	With the button (ahead) and the button (back) select the programs
-	Once the parameter to modify has been identified, keep the button pressed and modify the required
	setting with the "ahead" and "back" buttons
-	Once the setting has been correctly modified, release the button
	When finished with the settings turn the machine off and on again by pressing

Note: always turn on the DRAIN PUMP function in machines with Air Tank or Break Tank even if absent.

IN PARAMETERIZATION MODE, IF NO BUTTON IS PRESSED WITHIN 30 SECONDS THE KEYBOARD SHUTS DOWN AND RETURNS TO ITS OFF STATE.

#### Regeneration mode:

Once having reached the set number of cycles, at the end of the last cycle (ex. The 20<sup>th</sup> or the 35<sup>th</sup>, etc.) the message rig will appear flashing on the display for 10"; of it is desired to continue and the request is ignored, the message will appear for 10" at the end of every cycle.

The regeneration phase only begins after the Tank Pressostat has arrived at empty

- 1) EVR active for 20", 1' break repeat EV regenerate activation 4 times
- 2) 8' break
- 3) EV1 active for 25", 1' break repeat EV load activation 4 times, PS activation (drain pump) contextually to EV load + 5"

Afterwards, once the first samples are available, verify the correctness of the times/actual regeneration and proper resin washing.

At the end of the regeneration, the display goes back to showing the last program performed and the machine is once again ready for use.

Note: the regeneration cycle can be cancelled once initiated by keeping the button pressed for 10 seconds.

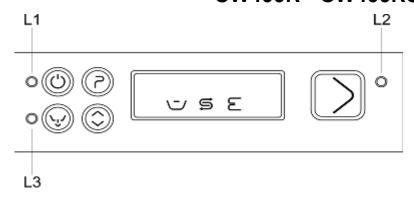
#### 7 SCREEN DISPLAYED ANOMALIES

After having turned the machine off and on again, if the problem persists communicate the type of error displayed on the screen to technical assistance:

E1	Boiler sensor malfunction
E2	Tank sensor malfunction
E3	Water loading timeout ( the water loading duration has exceeded the set time )
E6	Draining anomaly. At the end of the draining phase the CPU still detects water in the Tank. This may be due to: Drain pump malfunction (if present), drain tube blockage, Tank Pressostat malfunction, drain cycle time set too low, Tank overflow inserted
E7	30 minute Tank timeout
E8	15 minute boiler timeout

#### **8 USER INSTRUCTIONS FOR MODELS:**

#### **CW400R - CW400RSD**



(3)	On/Off button
?	Program selection button
$\geq$	Start button CONFIRM/PAUSE
<b></b>	Complete emptying button (Tank and boiler)
0	Additional functions selection button
0	L1 Power supply indicator light
0	L2 Cycle in function indicator light input/waiting (red/green)
0	L3 Draining in function indicator light
	Tank resistance in function symbol
Ø	Insufficient salt symbol (only if water-softener present)
7	Boiler resistance in function symbol

#### 8.1 Before washing

Use only detergents and rinse-aids for industrial dishwashers.

Do not use detergents intended for hand washing.

It is recommended to use products which were designed especially for this dishwasher.



During the loading of the tanks be careful not to switch products as this could provoke dishwasher malfunction and damage.

Do not mix different detergents together as this could damage the metering unit.

Detergents for industrial dishwashers can cause serious irritations. Take care to respect the instructions provided by the detergent manufacturer on the packaging.

Open the	Verify:		Turn off the main
water supply faucet (usage).	The levels of detergent and rinse-aid in the containers.	The correct positioning of the filters, the rotation of	switch (usage), "OFF" appears on the display.
	***************************************	the sprinklers, the absence of foreign objects within the dishwasher.	ON-OF-

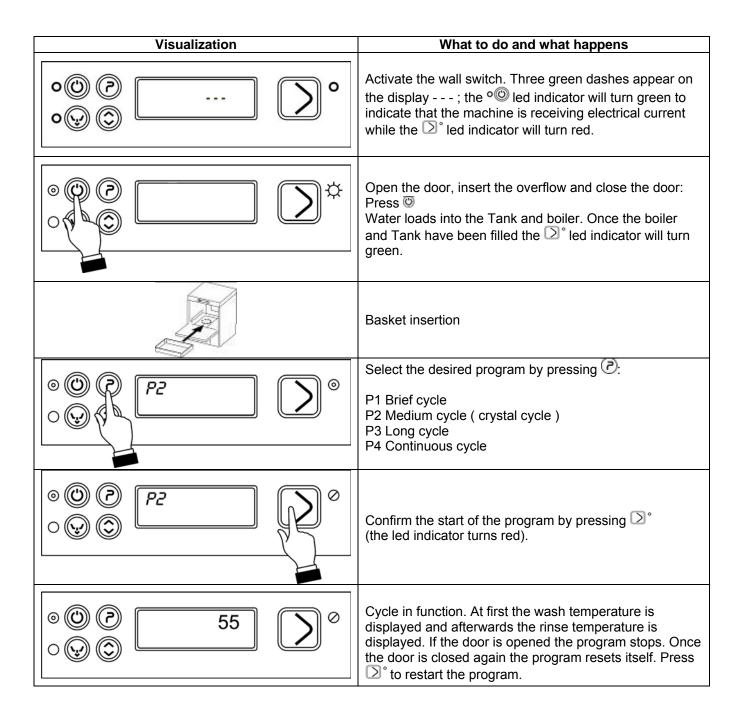
#### **LOADING GLASSES:**

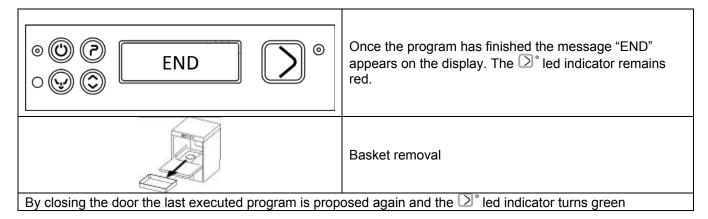
Remove eventual solid residues from the glasses (peels, cores, etc.). Position the glasses upside down.

#### **Silverware**

Use the appropriate basket. It is preferable to arrange large amounts of silverware with the handles facing down, taking care to avoid injury from fork prongs and knife blades.

#### 8.2 FIRST DAILY USE (Tank and boiler empty) Mod. CW400RSD - CW400R





#### Note:

While the water in the boiler and in the Tank is heating up, the display may show the Tank resistance and boiler resistance symbols.

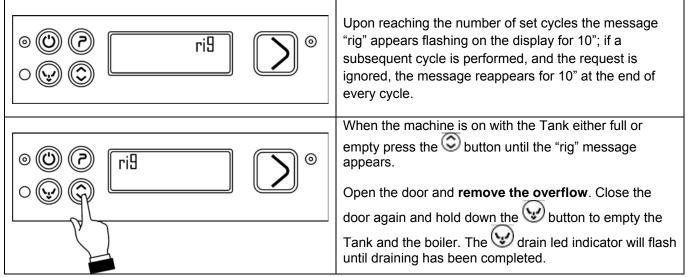
#### 8.3 PROGRAM SELECTION

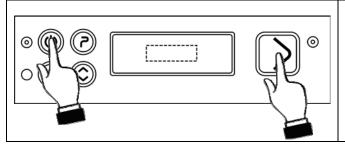
PROGRAM	DURATION(*)		
P1	Brief about 1'		
P2	Medium about 2' ( crystals cycle )		
P3	Long about 3'		
P4	Continuous from 0 to 10'		

(\*)The cycle durations indicated above are based upon a tri-phase connection with a 50°C hot water supply.

Where a cold water supply is used, the duration of the cycle could increase in relation to the input water temperature since the dishwasher is equipped with a <u>constant temperature and pressure rinse system.</u>

#### 8.4 RESIN CYCLE (for models equipped with water-softeners)





Once draining has been completed the machine goes into standby, indicated by the appearance of dashes "--- "upon the display. Turn the machine back on by pressing and afterwards press the "b" button. The regeneration cycle starts and moving dashes appear on the display; after 20 minutes the regeneration cycle ends and the machine goes into standby. Open the door, insert the overflow into the Tank and turn off the main wall switch.

During the execution of the regeneration cycle it will not be possible to perform any operations. It must always be done with the Tank empty.

#### Refilling the supply of regenerating salt (for models equipped with water softeners)

The refill is to be performed once the insufficient salt indicator appears on the display ( ). Perform the salt refill **when there is no water in the Tank** in order to keep wash water from entering the water softener device.

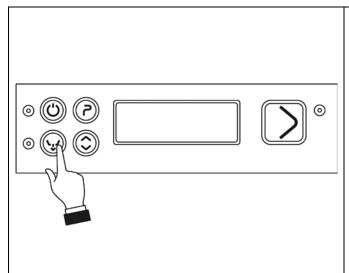
#### Caution: Use only specific salt. Do not use table salt.

The salt tank has a capacity of about 1 kg of granulated salt.

The tank is situated at the bottom of the Tank. After having extracted the basket, unscrew the cap and pour the salt through the provided funnel. Before screwing the cap back in place remove any eventual salt residues in proximity to the opening.

#### 8.5 Total drainage at the end of the day

The dishwasher is capable of performing an auto-clean cycle at the end of the day.



After having removed the overflow from the Tank, keep the button pressed for 3 seconds to initiate the emptying of the Tank and boiler. The boiler door must be closed while that of the Tank is to remain open. This will inhibit water from loading and, after the Pressostat's Tank empty signal is given, will only allow a limited amount of water from the boiler to circulate in order to facilitate the cleaning of the Tank.

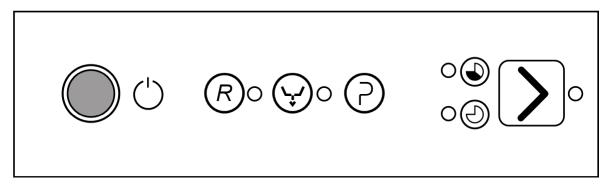
At the end of the function the machine goes into standby, indicated by the appearance of dashes "---" on the displays. To render the machine operative again it is therefore necessary to insert the overflow in the Tank and press the button. If the machine is equipped with the drain pump option, the drain pump will activate as well.



Do not turn off the washing machine while the Tank is full. Always drain it first.

#### 9 USER INSTRUCTIONS FOR MODELS:

#### CW350B-CW350BSD-CW350-CW350SD-CW400B-CW400BSD



(0)	On / Off button
( <del>,,</del> )	Basin emptying button (only in models with drain pump)
R	Regeneration cycle
(2)	Wash program selection button
$\supset$	Start cycle button
<b>③</b>	Brief cycle led indicator
<b>(2)</b>	Long cycle led indicator
0	Led indicator functions
	Led indictor portrayals: ○ off; ⊚ green; ⊘ red; ♀ flashing

#### 9.1 Before washing

Use only detergents and rinse-aids for industrial dishwashers.

Do not use detergents intended for hand washing.

It is recommended to use Smeg products which were designed especially for this dishwasher.



During the loading of the tanks be careful not to switch products as this could provoke dishwasher malfunction and damage.

Do not mix different detergents together as this could damage the metering unit.

Detergents for industrial dishwashers can cause serious irritations. Take care to respect the instructions provided by the detergent manufacturer on the packaging.

Open the		Verify:	Turn off the main
water supply faucet (usage).	The levels of detergent and rinse-aid in the containers.	The correct positioning of the filters, the rotation of the sprinklers, the absence of foreign objects within the dishwasher.	switch (usage), "OFF" appears on the display.
	***************************************		OHOFF

#### **LOADING GLASSES:**

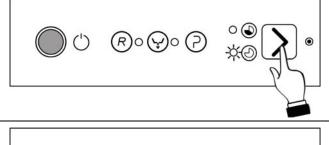
Remove eventual solid residues from the glasses (peels, cores, etc.). Position the glasses upside down.

#### **Silverware**

Use the appropriate basket. It is preferable to arrange large amounts of silverware with the handles facing down, taking care to avoid injury from fork prongs and knife blades.

## 9.2 FIRST DAILY USE (basin and boiler empty) CW350B-CW350BSD-CW350SD-CW400B-CW400BSD

CW400BSD				
Visualization	What to do and what happens			
	Activate the wall switch to provide electrical current to the machine.  Open the door, insert the overflow, close the door and press the button.			
(C) (R) (P) (P) (O) (P) (P) (P) (P) (P) (P) (P) (P) (P) (P	When water is loading into the boiler and into the basin, the and led indicators flash; when loading has been completed and flashes and the brief cycle selection led indicator turns on.			
	Insert the basket			
	Select the desired program by pressing (a):  for the 90 second brief cycle for the 120 second medium cycle  Note The wash cycle cannot be started if: The basin water level is not complete The door is open The machine is off The machine is in regeneration phase Manual draining is taking place Once electrical current is present the led indicator turns on			



Confirm the initiation of the program by pressing  $\square^{\circ}$ . While the cycle is running the selected program's led indicator will flash:



Once the selected program has finished its led indicator will stop flashing and will remain on. The \*\infty\* led indicator starts flashing.



Remove the basket

If the door is opened with the wash cycle running the program stops and resets itself. Once the door has been closed again press the  $\bigcirc$ ° button to restart the cycle.

## Total drainage at the end of the day (models equipped with drain pump)

After having removed the overflow from the basin, close the door and press the button to select the option.

The  $\bigcirc$  led indicator turns on and the  $\bigcirc$ \* LED indicator flashes.

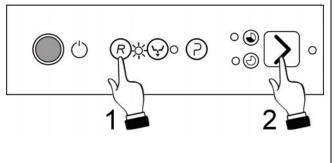
Press not 2 seconds to initiate the emptying of the basin and the boiler with the door closed. The drain led indicator starts flashing.

At the end of the function the machine goes into standby and the drain led indicator stops flashing and remains on.

To render the machine operational again it is therefore necessary to insert the overflow and to push the button.

## Total drainage at the end of the day (models not equipped with drain pump)

Shut off the machine , open the door, remove the overflow and wait until the basin has been drained. Insert the overflow and close the door again.



## Regeneration cycle (for models equipped with water softeners)

For models equipped with drain pumps, perform a drain cycle before executing the regeneration cycle.

For models not equipped with drain pumps, remove the overflow and close the door.

Press the  $\bigcirc$  button to select the option. The  $\bigcirc$  led indicator turns on and the  $\bigcirc$ \* led indicator flashes. Hold down the  $\bigcirc$ \* button for two seconds to initiate the regeneration cycle. During the regeneration cycle the  $\bigcirc$  and  $\bigcirc$  led indicators flash.

If the door is opened at any time the regeneration cycle stops along with any filling operations. When the door is closed again the cycle starts from where it left off. After 20 minutes the regeneration cycle finishes and the machine remains in standby with the  $\bigcirc$  and  $\bigcirc$  led indicators steadily on.

Open the door, **insert the overflow** into the basin and turn off the main wall switch.

During the execution of the regeneration cycle it will not be possible to perform any operations.

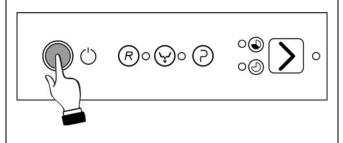
#### Refilling the supply of regenerating salt (for models equipped with water softeners)

Perform the salt refill **when there is no water in the basin** in order to keep wash water from entering the water softener device.

#### Caution: Use only specific salt. Do not use table salt.

The salt tank has a capacity of about 1 kg of granulated salt.

The tank is situated at the bottom of the basin. After having extracted the basket, unscrew the cap and pour the salt through the provided funnel. Before screwing the cap back in place remove any eventual salt residues in proximity to the opening.



Once having finished using the machine, and after having performed the final draining and eventual regeneration, shut off the machine by pressing the button and turn off the wall switch.

#### 10 MAINTENANCE AND CLEANING

Notwithstanding that special, programmed maintenance is not required, we recommend having the dishwasher checked by a specialized technician twice a year.

**Note:** intentional damage or that derived from carelessness, negligence, lack of respect for the regulations, instructions and norms or erred connections are not to be considered the responsibility of the manufacturer.

#### 10.1 Daily cleaning

The dishwasher has an **IPX4** protection rating, but the use of direct streams of water for its cleaning is **forbidden**.

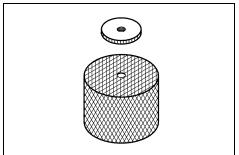
#### Cleaning of the filter during the day

In case of particularly heavy usage it is recommended to perform a cleaning of the filter every 30-40 wash cycles in order to maintain the machine in operative conditions; Use "partial Tank draining" in order to perform these cleanings.

Remove the filters (it is sufficient to lift them out of their lodgings as shown in the figure), making sure that greasy residues do not fall into the opening underneath the filters. Clean away the residues and rinse the filters abundantly before correctly reinserting them; <u>Do not utilize pointy or sharp objects</u> for cleaning.

Be sure to remove eventual hardened calcium deposits in order to avoid their accumulation:

 Clean the surfaces well and frequently with a damp rag; use neutral, non-abrasive detergents which do not contain chlorine-based substances. Corrosive products can damage stainless steel.

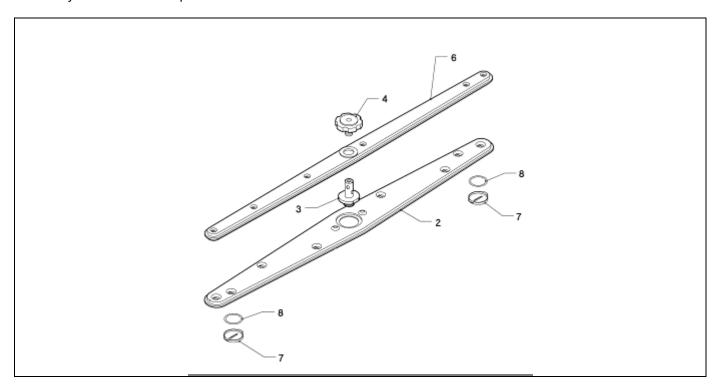


In order to avoid drops or vapors damaging the steel surfaces, do not even use the above-indicated products for the cleaning of the flooring beneath or around the dishwasher.

#### 10.2 Periodic checks

Disassemble the sprinklers (lower and upper 2-4) by removing the central screw (4); unscrew the caps at the two far ends of the rinsing sprinklers (7).

Clean the holes and the nozzles under a stream of clean water. <u>Do not use utensils which could cause damage.</u> Carefully reassemble the sprinklers.



Clean the outside of the machine with neutral soap and a damp cloth. Rinse and dry with care.

#### 10.3 Prolonged disuse

If the use of the dishwasher is not foreseen for a relatively long period of time it is necessary to drain the detergent and rinse-aid dispenser in order to avoid crystallization and pump damage: Remove the suction tubes from the detergent and rinse-aid containers and emerge them in a container filled with clean water. Perform a few wash cycles and drain the machine completely.

Finally, turn off the main switch and close the water supply faucet. The detergent and rinse-aid suction tubes will be placed back in the containers when the machine is ready to be put back in use, **taking care so as not to invert the tubes (red tube = detergent; transparent tube = rinse-aid).** 

Do not leave the device on, inactive and in disuse for long periods of time.



## 11 PROBLEMS AND ANOMALIES (USER)



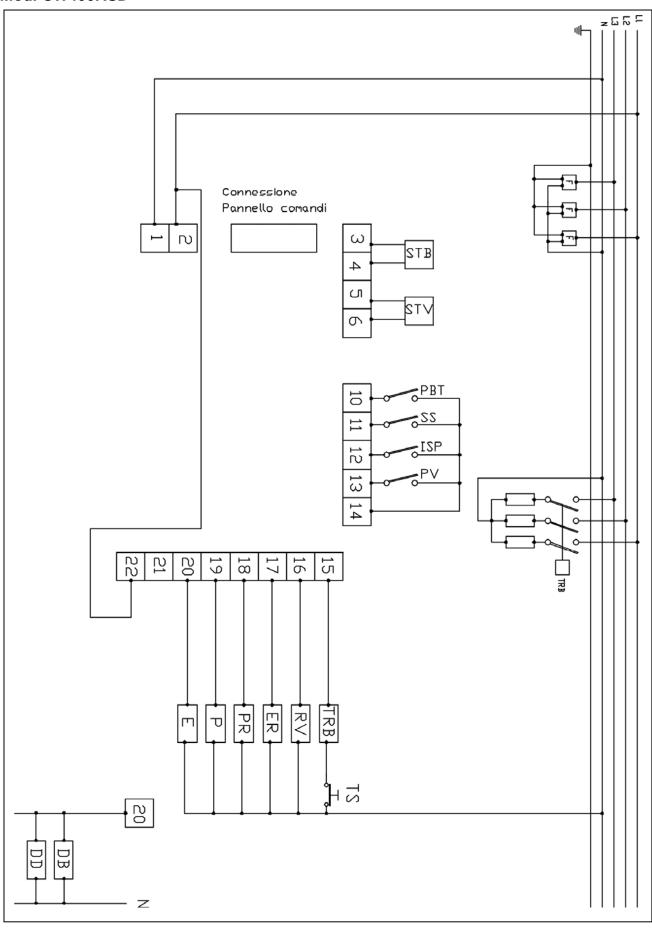
PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
THE <b>L1</b> LED INDICATOR DOES NOT TURN ON	There is no electrical current	Verify the electrical current connection.
THE WASH PROGRAM DOES NOT START	The dishwasher has not finished loading	Wait for the D° led indicator to turn red.
	Sprinkler wash holes are clogged or encrusted	Disassemble and clean the sprinklers (10.2 Periodic checks)
	Detergent or rinse-aid insufficient or not adequate	Verify detergent type and quantity.
POOR WASHING RESULTS	Plates / glasses poorly positioned	Arrange plates / glasses accordingly.
	Low wash temperature	Verify the temperature shown on the display, if below 50°C call Assistance.
	Inadequate cycle setting	Increase the duration of the wash cycle, particularly if dishes are very dirty or contain partially dried residues.
RINSE INSUFFICIENT	Sprinkler nozzles clogged Calcium encrustations in the boiler	Verify the cleanliness of the nozzles and the correct function of any installed water softeners.
GLASSES AND SILVERWARE ARE STAINED  Water is of a hardness level		Verify the rinse-aid container and ensure its adequacy for use with the water supply. If the problem persists contact assistance.
WATER IS PRESENT IN THE TANK AFTER DRAINING	Drainage tube is positioned poorly or is partially blocked	Verify that the dishwasher's tube and drain are not blocked and that the drain is not in too high of a position; see the connection diagram.

## 12 SCREEN DISPLAYED ANOMALIES (USER)

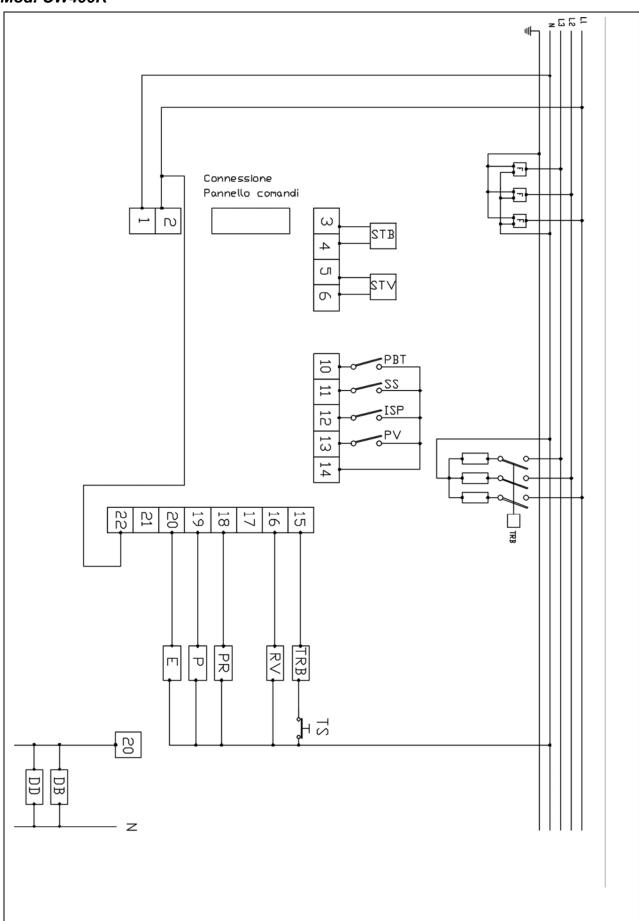
The machine is capable of signaling a series of malfunctions on the display. If the problem persists after having turned the machine off and then on again, act as indicated below:

E1	Boiler sensor malfunction	Consult with the Technical Assistance Service	
E2	Tank sensor malfunction	Consult with the Technical Assistance Service	
E3	Water loading timeout ( the water loading duration has exceeded the set time )	Verify that the water supply faucet is open, the dynamic pressure of the supply and the cleanliness of the water input filter. If the problem persists consult with the Technical Assistance Service.	
E6	Draining anomaly. At the end of the draining phase the CPU still detects water in the Tank. This may be due to: Drain pump malfunction (if present), drain tube blockage, Tank Pressostat malfunction, drain cycle time set too low, overflow inserted in the Tank	Verify the cleanliness of the filters and that the drain tube is not blocked, bent or crushed. Verify that the drain pump is not blocked by a foreign object: act as indicated in point "10.2 Periodic Checks". If the problem persists consult with the Technical Assistance Service.	
E7	30 minute Tank timeout	Consult with the Technical Assistance Service	
E8	15 minute boiler timeout	Consult with the recrimical Assistance Service	

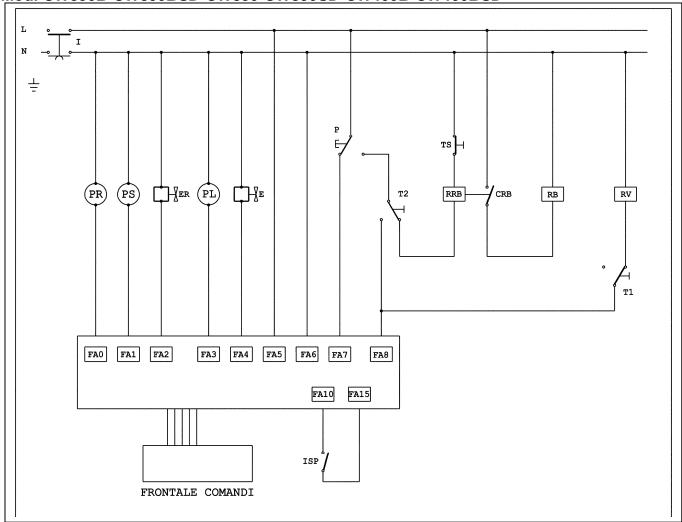
#### Mod. CW400RSD



#### Mod. CW400R



#### Mod. CW350B-CW350BSD-CW350-CW350SD-CW400B-CW400BSD

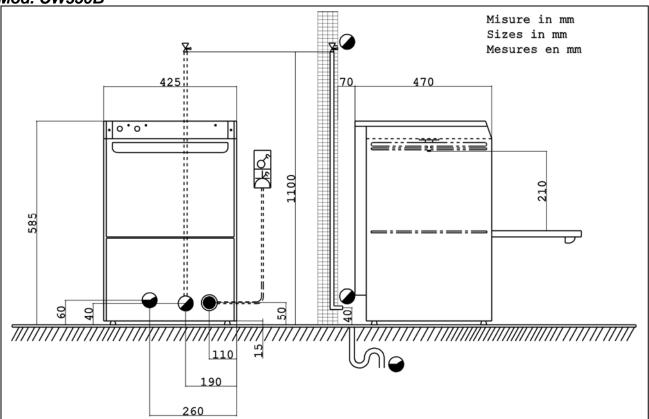


	Schaltplan – Legende	Schéma électrique – légende		
PV	Druckregler Tank	Pressostat cuve		
ISP	Sicherheitsschalter Tür	Interrupteur de sécurité Porte		
STV	Temperatursonde Tank	Sonde de température cuve		
STB	Temperatursonde Boiler	Sonde de température chauffe-eau		
TRB	Fernschalter Boiler-Heizkörper (Spule)	Télérupteur résistance chauffe-eau (bobine)		
TRV	Fernschalter Tank-Heizkörper (Spule)	Télérupteur résistance cuve (bobine)		
Е	Nachspül-Magnetventil	Electrovanne de rinçage		
DB	Klarspüler-Dosierer	Doseur liquide de rinçage		
Р	Waschpumpe	Pompe de lavage		
DD	Spülmittel-Dosierer	Doseur produit de lavage		
PBT	Druckregler Break Tank	Pressostat Break Tank		
PR	Nachspül-Pumpe	Pompe de rinçage		
TP	Fernschalter Waschpumpe (Spule)	Télérupteur pompe de lavage (bobine)		
TPL	Überlastschutz Spülpumpe	Relais thermique pompe de lavage		
TS	Sicherheitsthermostat	Thermostat de sécurité		
F	Funkentstörung	Filtres antiparasites		

	Schema elettrico – legenda	Electrical scheme – legend		
PV	Pressostato Vasca	Basin Manostat		
ISP	Interruttore Sicurezza Porta	Door Safety Switch		
STV	Sonda Temperatura Vasca	Basin Temperature Sensor		
STB	Sonda Temperatura Boiler	Boiler Temperature Sensor		
TRB	Teleruttore Resistenza Boiler (Bobina)	Boiler Resistance Remote Control Switch (Coil)		
TRV	Teleruttore Resistenza Vasca (Bobina)	Basin Resistance Remote Control Switch (Coil)		
E	Elettrovalvola Risciacquo	Rinse Electrovalve		
DB	Dosatore Brillantante	Rinse-aid Metering Unit		
Р	Pompa Lavaggio	Wash Pump		
DD	Dosatore Detergente	Detergent Metering Unit		
PBT	Pressostato Break Tank	Break Tank Manostat		
PR	Pompa Risciacquo	Rinse pump		
TP	Teleruttore Pompa Lavaggio (Bobina)	Wash Pump Remote Control Switch (Coil)		
TPL	Termica Pompa Lavaggio	Wash Pump Thermal		
TS	Termostato Sicurezza	Safety Thermostat		
F	Filtri Antidisturbo	Antistatic filters		

	Esquema eléctrico - legenda	Diagrama eléctrico - leyenda
PV	Pressostáto Tanque	Presostato tanque
ISP	Interruptor de Segurança da Porta	Interruptor de seguridad puerta
STV	Sonda da Temperatura do Tanque	Sonda Temperatura Tanque
STB	Sonda da Temperatura do Esquentador	Sonda Temperatura hervidor
TRB	Telerruptore Resistência Esquentador (Bobina)	Telerruptor Resistencia hervidor (bobina)
TRV	Telerruptore Resistência Tanque (Bobina)	Telerruptor Resistencia Tanque (bobina)
E	Electroválvula Enxaguamento	Electroválvula de enjuague
DB	Dosador de abrilhantador	Dosificador abrillantador
Р	Bomba Lavagem	Bomba de lavado
DD	Dosador Detergente	Dosificador detergente
PBT	Pressostáto Break Tank	Presostato Tanque de separación
PR	Bomba Enxaguamento	Bomba de enjuague
TP	Telerruptor Bomba Lavagem (Bobina)	Telerruptor bomba de lavado (Bobina)
TPL	Térmica Bomba Lavagem	Térmico bomba de lavado
TS	Termostáto de Segurança	Termostato de seguridad
F	Filtros Anti disturbo	Filtros antiparásito

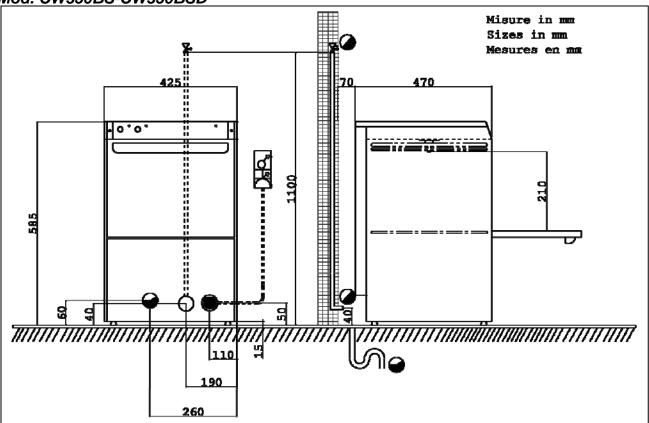
#### Mod. CW350B



MODELLO	MODEL	MODELE	kW
CW	7 350 в		2.9

Allacciamento elettrico - Electrical connection  Branchement èlectrique - ElektroanschluB		Morsetto equipotenziale - Equipotential termical Bome èquipotentiel - Potetentilaausgleichklemme		NON IN DOTAZIONE NOT INCLUDED PAS EN DOTATION NICHT DABEI
Morsettiera	v	Ingresso acqua carda   _	bar Ø	Rubinetto di intercettazione
Terminal board 3~AN•	Hz	Hot water inlet Entrèe eau chaude	3 L/h	⊠ Isolator valve Robinet de barrage
Klemmenbrett	A	Wamwassereintritt -	300	Abssperrhahn
Morsettiera	٧	ingresso acqua iredda	bar Ø	Interruttore magnetotermico differenziale
Terminal board 1~AN•	Hz	cold water inlet Entrèe eau froide	L/h	Differential magnetothermic switch Interrupteur magnètothermique diffèrentiel
Klemmenbrett	A	kaltwassereiintritt	12/11	Magnetothermischer differentialschalter
Cavo elettrico	V	_ Scarico acqua Vidange	eau	
Electrical cable Càble èlectrique	Hz 🗀		ø	
Elektrokabel	mm²	Water drain WasserAbflu	ıb	

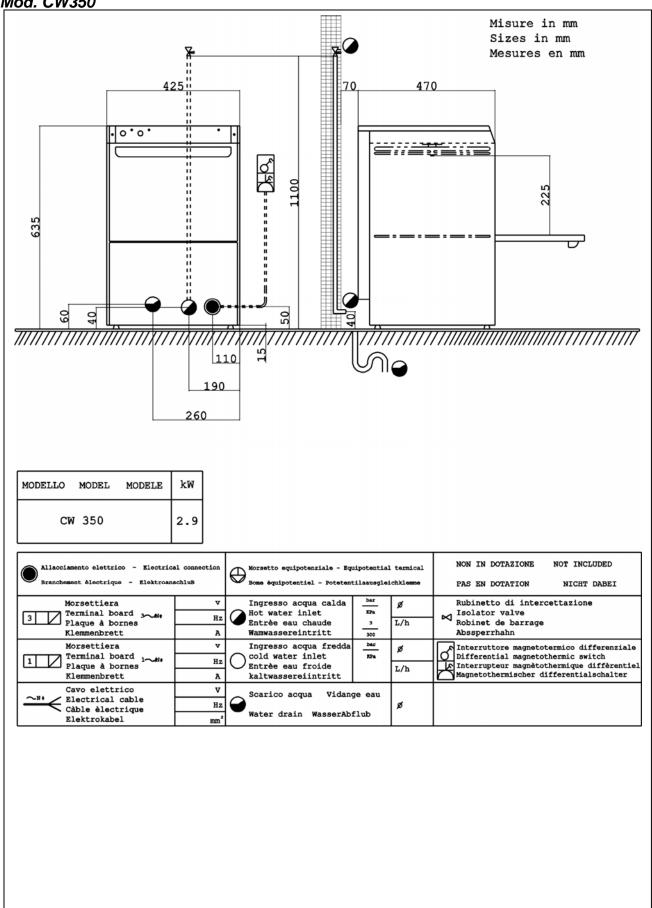
#### Mod. CW350BS-CW350BSD



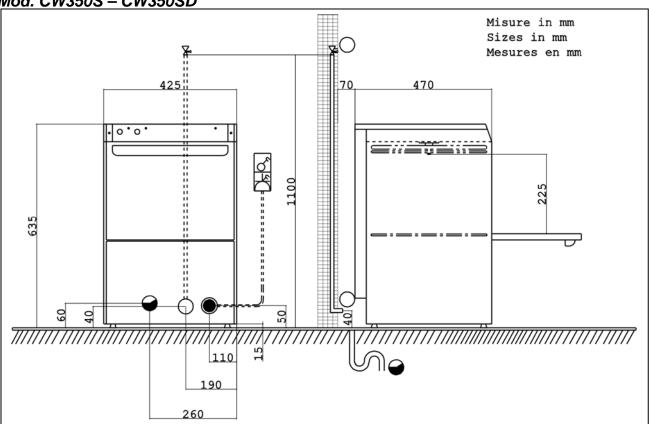
MODELLO	MODEL	MODELE	kW
CW	350E	ss	2.9

Allowskowsko obstalno - Elektromechiak — Nameta ngripatenziak - Epsignizatiak terminak — Nametan ngripatenziak - Epsignizatiak terminak — Nametan ngripatenziak - Epsignizatiak terminak		NOW IN DOTATION MICHT DANKI			
Morsettiera	¥	Ingresso acqua calda	Trees.	ø	Bubinetto di intercettazione
3 Terminal board 30.66	Ŀ	Bot water inlet Entrès sau chands	*	1./b	Isolator valve Robinet de barrage
Klennenbrett.	A	Wannessezeintritt 300		1	Shesperrhahn
Moraettiera	٧	Ingresso acqua fredda	bas	*	Interruttore magnetotermico differenziale
Terminal board	Bz.	Cold water inlet	<b>20</b> 0	- 0	O Differential magnetothermic switch  Interrupteur magnétothermique différential
Elemenbrett	A	kaltwasserelimtritt		L/h	Magnetothermischer differentialschalter
Cavo elettrico	¥	Scarico acqua Vidange cas			
Electrical cable	Bu			ø	
Elektrokabel		Water drain WasserAbfl	TED CEST		





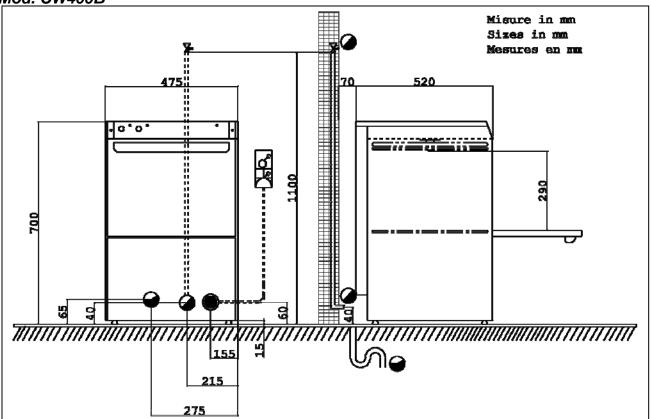
#### Mod. CW350S - CW350SD



MODELLO	MODEL	MODELE	kW
CW	350 S	D	2.9

Allacciamento elettrico - Electrical connection  Branchement èlectrique - ElektroanschluB		Morsetto equipotenziale - Equipotential termical Bome èquipotentiel - Potetentilaausgleichklemme		NON IN DOTAZIONE NOT INCLUDED PAS EN DOTATION NICHT DABEI	
Morsettiera	v	Ingresso acqua calda bar	ø	Rubinetto di intercettazione	
Terminal board 3~AN•	Hz	Hot water inlet Entrèe eau chaude  804	L/h	☐ Isolator valve  Robinet de barrage	
Klemmenbrett	A	Wamwassereintritt 300		Abssperrhahn	
Morsettiera	v	Ingresso acqua fredda bar	ø	Interruttore magnetotermico differenziale	
Terminal board 1~AN•	Hz	Cold water inlet Entrèe eau froide	L/h	Differential magnetothermic switch Interrupteur magnètothermique diffèrentie	
Klemmenbrett	A	kaltwassereiintritt	L/h	Magnetothermischer differentialschalter	
Cavo elettrico	v	_ Scarico acqua Vidange eau			
Càble èlectrique	Electrical cable Cable Alectrique Hz		ø		
Elektrokabel	mm²	Water drain WasserAbflub			

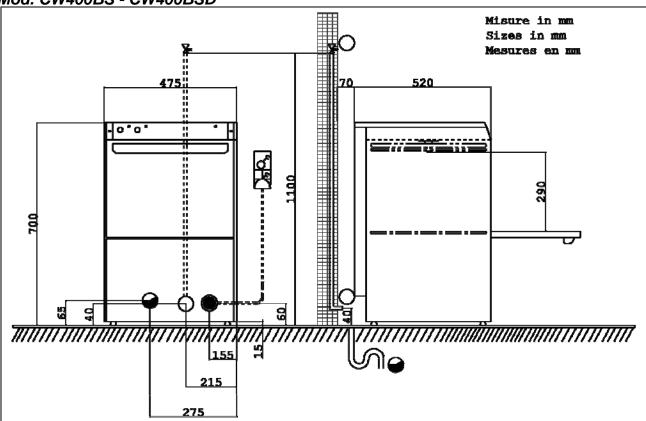
#### Mod. CW400B



MODELLEO	MODEL	MODELE	kW
CW	400B		2.9

Allacatamento elettrica - Alectrona Branchement blectrique - Elektrona	cl ennection	Beretto equipotentials - Symbotential termical  Term èquipotential - Retatentilacengleichèlesse		NON IN DOTATIONS NOT INCLUDED 1946 EM DOTATION HIGHT DARKE
Morsettiera	•	Ingresso acqua calda	<u>hex</u>   #	Rubinetto di interzettazione
3 Plague à botnes	Hz.	Entrès sau chands	3 L/h	Isolator valve   Robinst de barrage
Klemmenbrett	A	Warmeneezeintritt	386	Abseperzhaha.
Morsettlera	¥	Ingresso acqua fredda	<u>~</u>   #	Interruttore magnetotermico differenziale
Terminal board was	Hz	Oold water inlet Entrès can froide	I/b	Officertial magnetothermic switch  Risterrupteur magnétothermique différential
Elemenbrett	A	kaltmasaerelintritt	13/11	Magnetothermischer differentialschalter
Cavo elettrico	ν	Scarico acoma Vidange	- 5000	
Câble èlectrique	Hz		ø	
Elektrokabel	mini, <sup>th</sup>	Water drain Wasserabfl	ands .	

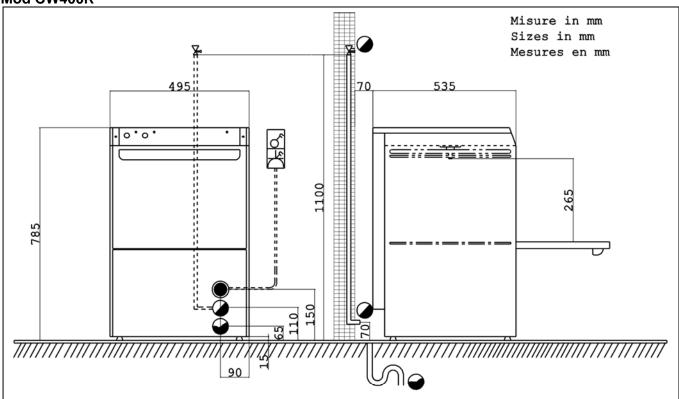
#### Mod. CW400BS - CW400BSD



NODETTO	HODEL	MODELE	kW
CW	400B	SD	2.9

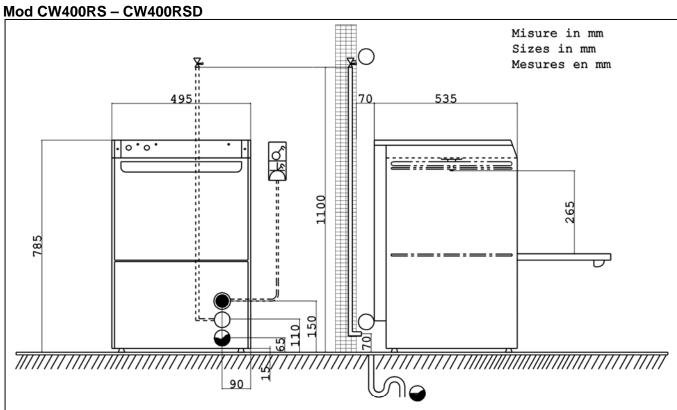
Allocelamento eletizion - Ricetzio Branchement Alectrique - Elektrone	il enesatien	Beneautto ogatgotomelale - Ngalgotomelal terminal Bene Agulgotomelal - Retetestilanonglaichklusse		NON IN DOTATIONS MOT INCLIDED  BAS EN DOTATION MICET DENEI		
Morsettiere	¥	Ingreseo acqua calda	hear pr		Robinetto di intercettazione	
3 Terminal board	Re	Bot water inlet Entrèe eau chande	3 E/I	ъ	Isolator valve Robinet de barrage	
Klemmenbrett.	A	Wanwassereintritt	307		Abaspezrhahn	
Morsettiera	¥	Ingresso acqua fredda	her g		Interruttore magnetotermico differenziale	
Terminal board 1~4b	Hz.				O Differential magnetothermic switch S Interrupteur magnétothermique différentie	
Klemenbrett	a	kaltmassereiintritt	1./1	h	Magnetothermischer differentialschalter	
Cavo elettrico	¥	_ Scarico acqua Vidano	9 987			
Càble électrique	Hz	<b>↩</b>	ø			
Elektroksbel	mm*	Water drain WasserAbf	Lub			

#### Mod CW400R



MODELLO	MODEL	MODELE	kW
CV	V 400 R		4.8

Allacciamento elettrico - Electrico  Branchement èlectrique - Elektroano		Morsetto equipotenziale - Equipotential  Bome èquipotentiel - Potetentilaausglei		NON IN DOTAZIONE NOT INCLUDED PAS EN DOTATION NICHT DABEI
Morsettiera Terminal board 3~N* Plaque à bornes Klemmenbrett	v Hz A	Ingresso acqua calda Hot water inlet Entrèe eau chaude Wamwassereintritt  Ingresso acqua calda  Rea  Bar  Bar  Bar  Bar  Bar  Bar  Bar  B	ø L/h	Rubinetto di intercettazione  Isolator valve Robinet de barrage Abssperrhahn
Morsettiera Terminal board Plaque à bornes Klemmenbrett	V Hz A	Ingresso acqua fredda cold water inlet Entrèe eau froide kaltwassereiintritt	ø L/h	Interruttore magnetotermico differenziale Differential magnetothermic switch Interrupteur magnètothermique diffèrential Magnetothermischer differentialschalter
Cavo elettrico Electrical cable Cable èlectrique Elektrokabel	V Hz mm²	Scarico acqua Vidange eau Water drain WasserAbflub	ø	



MODELLO	MODEL	MODELE	kW	
CW400	CW400RS - CW400RSD			

Allacciamento elettrico - Electrico  Branchement èlectrique - Elektroani		Morsetto equipotenziale - Equipo  Bome èquipotentiel - Potetentila		NON IN DOTAZIONE NOT INCLUDED PAS EN DOTATION NICHT DABEI	
Morsettiera	v	Ingresso acqua carda   _	bar Ø	Rubinetto di intercettazione Isolator valve	
3 Terminal board 3~N+ Plaque à bornes	Hz	Entrèe eau chaude	3 L/h	Robinet de barrage	
Klemmenbrett	A	Wamwassereintritt	300	Abssperrhahn	
Morsettiera	v	_ ingresso acqua iredua _	bar Ø	Interruttore magnetotermico differenziale	
Terminal board 1~AN	Hz	cold water inlet Entrèe eau froide	XPa	Differential magnetothermic switch Interrupteur magnètothermique diffèrentiel	
Klemmenbrett	A	kaltwassereiintritt	L/h	Magnetothermischer differentialschalter	
Cavo elettrico	V	Scarico acqua Vidange	eau		
Electrical cable Càble èlectrique	Hz				
Elektrokabel	mm²	Water drain WasserAbflu	ID .		