

## **E500D LPR**



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**Original operation manual**

## Dimensions / supply lines (mm)

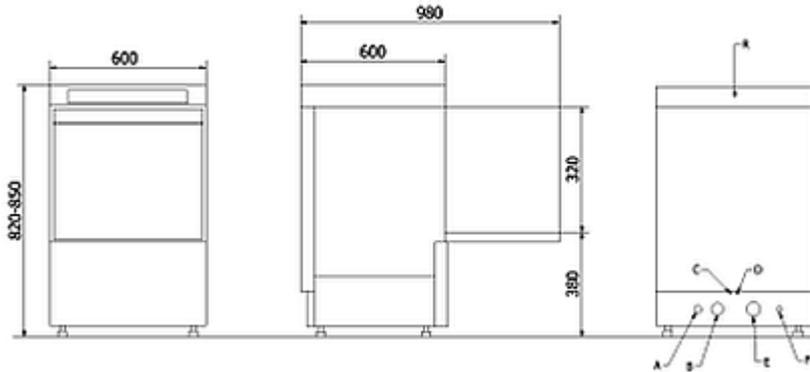


Fig. 1

A	B	C	D	E	F	R
Current	Water	Rinsing agent	Cleaning agent	Drain	Potential equalization	Connection strip

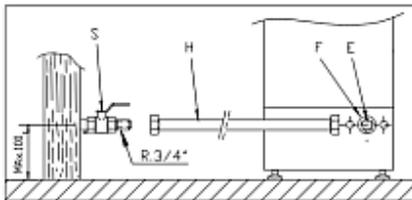


Fig. 2

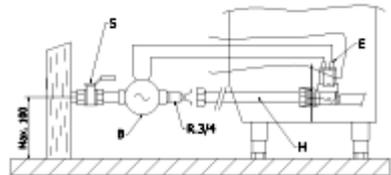


Fig. 3

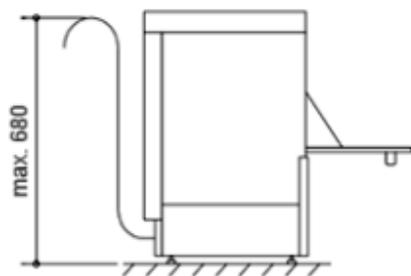


Fig. 4

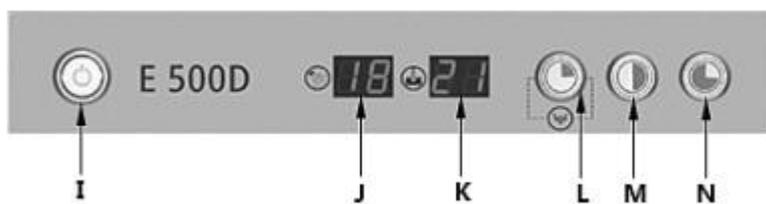


Fig. 5

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**Read this instruction manual before using and keep it available at all times!**

This instruction manual contains information about installation, operation and maintenance of the appliance and constitutes an important source of information and reference guide. The knowledge of all operational and safety instructions included in this manual is a prerequisite for safe and proper handling of the appliance. Additionally, accident prevention, occupational health and safety, and legal regulations in force in the area the appliance is used apply.

Before you start using the appliance, especially before turning it on, read this instruction manual in order to avoid personal injuries and property damages. Improper use may cause damage.

This instruction manual forms an integral part of the product and must be stored in an immediate vicinity of the appliance and be available at all times. The instruction manual should be transferred together with the appliance.

## 1 Safety

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This appliance has been manufactured in accordance with technical standards currently in force. However, the appliance may be a source of hazards if used improperly or contrary to its intended purpose. All persons using the appliance must consider information included in this instruction manual and observe safety instructions.

### 1.1 Explanation of signal words

Important safety instructions and warning information are indicated in this instruction manual with appropriate signal words. You must strictly follow the instructions, to prevent accidents, personal injuries and property damages.



**DANGER!**

The signal word **DANGER** warns against hazards that lead to severe injuries or death if the hazards are not avoided.



### **WARNING!**

The signal word **WARNING** warns against hazards that may lead to moderate or severe injuries or death if the hazards are not avoided.



### **CAUTION!**

The signal word **CAUTION** warns against hazards that may lead to light or moderate injuries if the hazards are not avoided.

### **IMPORTANT!**

The signal word **IMPORTANT** indicates possible property damages, which may occur if safety instructions are not observed.

### **NOTE!**

The symbol **NOTE** indicates subsequent information and guidelines for the user on usage of the appliance.

## 1.2 Safety instructions

### Electrical current

- Too high a mains voltage or incorrect installation may cause electric shock.
- The appliance may be connected only if data on the rating plate correspond with the mains voltage.
- To avoid short-circuit, the appliance should be kept dry.
- If there are malfunctions during operation, disconnect the appliance from the power supply.
- Do not touch the appliance's plug with wet hands.
- Never take hold of the appliance if it has fallen into water. Immediately disconnect the appliance from the power supply.
- Any repairs or housing opening may be carried out by professionals and relevant workshops only.
- Do not transport the appliance, holding it by the power cord.
- Do not allow the power cord to come into contact with heat sources or sharp edges.
- Do not bend, pinch nor knot the power cord.

- Always completely unwind the power cord.
- Never place the appliance or other objects on the power cord.
- Always take hold of the plug to disconnect the appliance from the power supply.

## Operating Personnel

- The appliance may only be operated by a qualified personnel and trained specialist personnel.

## Improper Use

- Unintended or prohibited use may cause damage to the appliance.
- The appliance may only be used when its technical condition is flawless and allows for safe operation.
- The appliance may only be used when all connections are executed according to rules of law in force.
- The appliance may only be used when it is clean.
- Use only original spare parts. Never attempt to repair the appliance on your own.
- Do not introduce any changes in the appliance nor modify it.

### 1.3 Intended use

As described below, every use of the appliance for a purpose differing and/or diverging from its intended standard use, is prohibited and considered to be an unintended use.

The following is an intended use:

- Washing dishes, glasses, pots, pans, etc.

**The appliance is intended for professional use only.**

### 1.4 Unintended Use

An unintended use may lead to personal injuries or property damages caused by hazardous voltage, fire or high temperature. The appliance may only be used to perform tasks described in this instruction manual.

The following is an unintended use:

- Washing other unsuitable objects.

## 2 General information

### 2.1 Liability and warranty

All information and instructions in this instruction manual account for legal regulations in force, current level of technical engineering knowledge as well as our expertise and experience, developed over the years. If special models or additional options are ordered, or state-of-the-art technical solutions were implemented, the actual scope of delivery of the appliance may, in some circumstances, differ from descriptions and numerous drawings in this instruction manual.

The manufacturer is not liable for any damages nor faults stemming from:

- failure to observe instructions,
- unintended use,
- technical alterations introduced by the user,
- usage of unapproved spare parts.

We reserve the right to introduce technical modifications to the product, intended for improvement of the appliance and its performance.

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### 2.2 Copyright protection

This instruction manual, and texts, drawings and images included in it, as well as its other components are copyright protected. It is prohibited to reproduce this instruction manual (including its excerpts), in any form and by any means, and to use and/or transfer its content to third parties without manufacturer's written permission. Violation of the above results in obligation to pay compensation. We reserve the right to claim further damages.

### 2.3 Declaration of conformity

The appliance meets the currently applicable standards and guidelines of the European Union. We confirm the above in the EC Declaration of Conformity. We may provide relevant Declaration of Conformity upon request.

## 3 Transport, packaging and storage

### 3.1 Delivery Check

Immediately upon reception, check the delivery for completeness and possible shipping damage. In the case of visible transport damage refuse to accept the appliance or accept it conditionally. Mark and note the scope of damage in shipping documents/consignment list of the shipping company and lodge a complaint. Concealed damage must be reported immediately upon its discovery, as compensation claims may only be filed within applicable time limits.

If you find that parts or accessories missing, please contact our Customer Service Department.

### 3.2 Packaging

Do not dispose of the appliance cardboard box. It may be used to store the appliance when relocating or when shipping the appliance to our service point in the case of any damages.

The packaging and its elements are made of recyclable materials. Particularly, these are: plastic films and bags, cardboard box.

When disposing of the packaging, observe applicable domestic regulations. Recyclable packaging materials should be recycled.

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### 3.3 Storage

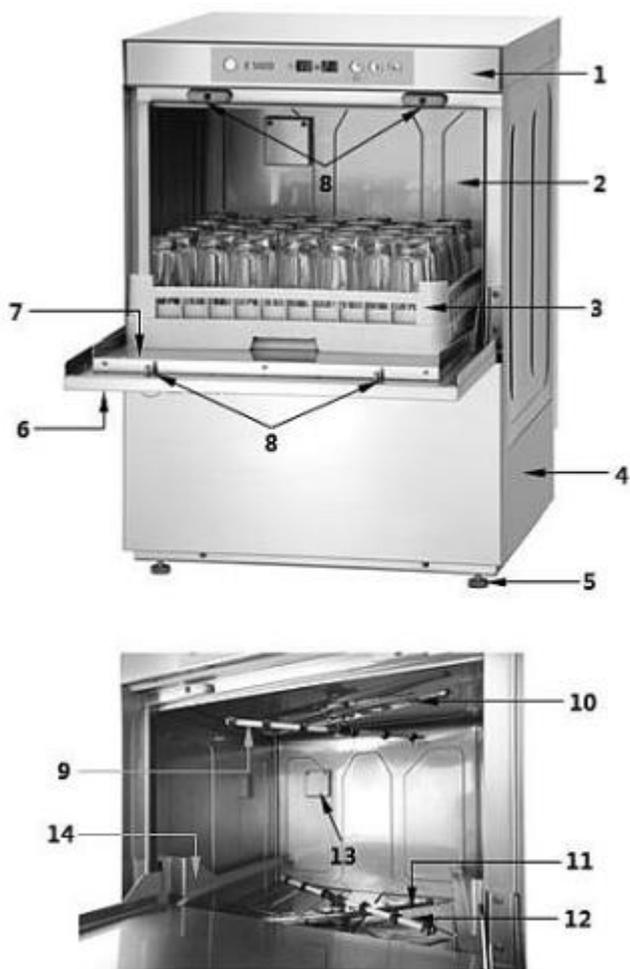
Leave the packaging closed until installation of the appliance; observe external indications concerning method of placing and storage. Store the packaging in the following conditions only:

- in closed rooms;
- in dry and dust-free surrounding;
- away from aggressive agents;
- in a location protected against sunlight;
- in a location protected against mechanical shocks.

In the case of extended storage (over three months), make sure you check the condition of the packaging and the parts regularly. If needed, replace the packaging with a new one.

## 4 Technical data

### 4.1 List of components of the appliance



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Fig. 6

## Technical data

Description for Fig. 6

- |                                    |                             |
|------------------------------------|-----------------------------|
| 1. Control panel                   | 2. Wash-tank                |
| 3. Dishwasher basket               | 4. Housing                  |
| 5. Height-adjustable feet (4 pcs.) | 6. Handle                   |
| 7. Appliance door                  | 8. Appliance door lock      |
| 9. Upper rinse arm                 | 10. Upper wash arm          |
| 11. Lower rinse arm                | 12. Lower wash arm          |
| 13. Valve                          | 14. Wash baskets guide rail |

## 4.2 Technical specifications

<b>Name:</b>	<b>Dishwasher E500D LPR</b>
Art. No.:	<b>110512</b>
Material:	Stainless steel
Basket dimensions (W x D x H), in mm:	500 x 500
Max. glass height, in mm:	280
Run time, in seconds:	60 / 90 / 180
Max. output / hour, baskets:	60
Number of wash programs:	3
Tank volume, in litres:	25
Water consumption at 2 bars, in litres:	2,7
Water pressure, in bar:	2 - 4
Water supply:	G 3/4
Water outlet, Ø in mm:	20
Tank heating, in kW:	2,8
Boiler heating, in kW:	2,8
Power supply:	3.4 kW / 230 V / 250 Hz
Dimensions (W x D x H) in mm:	735 x 655 x 1000
Weight in kg:	71

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We reserve the right to implement technical modifications!

## Version / Characteristics

- Discharge pump
- Cleaning agent dosing pump
- Rinsing agent dosing pump
- Booster pump
- Double-walled door
- Safety thermostat
- Door contact switch
- Appliance connection: ready to plug in
- ON/OFF switch
- Indicator light: ON/OFF, heating
- TERMOSTOP electronic system
- Boiler and tank temperature indicator
- Max. water intake temperature: 60°C
- Check valve
- The set includes: 1 glasses basket, 1 cutlery basket, 1 water supply hose

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## 4.3 Functions of the appliance

The dishwasher is intended for washing suitable dishes, kitchen pots, pans, cutlery, etc.

The TERMOSTOP electronic system provides for perfect temperature of additional rinsing.

### 5 Installation Instructions



#### CAUTION!

**Incorrect installation, positioning, operation, maintenance or misuse of the appliance may lead to personal injury or property damage.**

Positioning and installation, as well as repairs or fitting may be performed by authorised technical service only and in compliance with the applicable national law.

#### 5.1 Unpacking

- The appliance may be moved with the use of a fork lift or similar equipment only to avoid damaging the appliance's structure. First, deliver the appliance to the final installation location and unpack it there.
- Unpack the appliance, remove all external and internal packaging elements and shipment safeguards.



#### CAUTION!

##### **Choking hazard!**

Prevent children from accessing packaging materials, for instance: plastic bags and EPS.

- If the appliance is covered with a protective film, remove it. Remove the film slowly, so no glue residues are left. Remove any glue residues with the use of a suitable solvent.
- Be careful not to damage the rating plate and warning labels affixed to the appliance.

### 5.2 Positioning

#### **ATTENTION!**

**Before the appliance's installation, carefully check the conditions of the location in which the appliance is to be set to exclude any subsequent damages which may appear during operation.**

- **Never** place the appliance in humid or wet environment.
- Place the appliance in a way making the connections easily accessible, so that they may be quickly disconnected if such a need arises.
- The appliance should be placed on surfaces that are:
  - even, with sufficient bearing capacity, resistant to water, dry and resistant to high temperatures;
  - sufficiently large, and thus enabling usage of the appliance with no problems;
  - easily accessible;
  - well ventilated.
- The appliance should be installed only in a room, in which ambient temperature falls in the range of 5°C – 40°C.

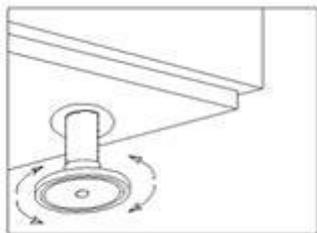


Fig. 7

- The appliance is equipped with height-adjustable feet.
- To level the appliance, screw the feet out to the required height.
- Correct levelling is necessary to ensure optimum performance of the appliance.

### 5.3 Electrical Connection

- Verify if the technical specification of the appliance (see the rating plate) correspond to the local electricity grid.
- Connect the appliance to a single, properly grounded mains socket with protective contact. Do not connect the appliance to a multi-socket.
- The power cord should be laid in a way preventing anyone from threading on it or tripping against it.
- The appliance is ready for installation and equipped with a power cord of 1.3 m in length with a plug.

## Installation Instructions

- A multipolar switch with at least 3 mm opening should be connected near the device, and should be easily accessible. This device is designed for switching the appliance off in the case of installation, repair, cleaning or maintenance work conducted on the appliance. This switch must be equipped with fuses adjusted for the rated voltage of the appliance. A properly selected magnetic thermal switch may be an alternative to the above mentioned switch.
- The appliance must be properly connected to the equipotent bonding circuit; see F, Fig. 1.

**The manufacturer accepts no liability for any possible bodily injuries nor property damages relating to the appliance that stem from non-compliance with instructions and incorrect installation.**

### 5.4 Water Connection

Use only hoses supplied with the appliance (never use second-hand hoses).

Before connecting the appliance to the water supply system, the analysis of water quality should be performed. Manufacturer recommends the following parameters of water quality:

<b>Water temperature (T):</b>	max. 60 °C	<b>Total water hardness</b>	5 °fH (French hardness degree scale)
<b>pH value:</b>	6.5–7.5		7 °eH (English hardness degree scale)
<b>Physical contamination:</b>	∅ < 0.08 mm		9 °dH (German hardness degree scale)
<b>Chlorides:</b>	max. 150 mg/l	<b>Conductivity:</b>	400 µS/cm
<b>Cl:</b>	0.2–0.5 mg/l		

If the water hardness exceeds 9 °dH (German hardness degree scale), the use of water softener is required.

Furthermore, when checking the water quality, the pressure of water supply system must be taken into account. This parameter determines the correct operation of the appliance.

Water pressure should correspond to the following values:

Water pressure	MIN.				MAX.			
	bar	kPa	kg/cm <sup>2</sup>	psi	bar	kPa	kg/cm <sup>2</sup>	psi
	2	200	2.03	29	4	400	4.07	58.01

If the water pressure is above the recommended value, it is required to install the reducing valve between the water supply system and the water connection of the appliance (**Fig. 2 at the beginning of the operation manual**).

**Fig. 2.** Direct connection of the hose to the water supply installation.

If the water pressure is below the recommended value, it is required to install a booster pump between the water supply system and the water connection of the appliance (**Fig. 3**).

**Fig. 3** Connection of the booster pump

The appliance is equipped with the booster pump.

<b>S</b>	Shut-off valve	<b>H</b>	Water hose
<b>E</b>	Solenoid valve	<b>B</b>	Booster pump
<b>F</b>	Filter		

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To properly install the appliance, please follow the instructions below:

- water connection must be equipped with a shut-off valve to block the water supply;
- pressure in the water supply system must be within the range of recommended values;
- to optimise operation, the recommended water intake temperature should fall within the range of values given in table below:

Cold water	Hot water
5°C – 25°C / 41°F – 95°F	40°C – 60°C / 122°F – 140°F

- when using warm water, the water temperature may not exceed the values of 60°C / 140°F;
- the appliance must be equipped with a threaded connection (¾").

### 5.5 Discharge Pump

The appliance is equipped with the discharge pump that, when properly set, provides for discharging water after washing.

In such a case, the height of 680 mm cannot be exceeded (**Fig. 1, Fig. 4**).

**Fig. 4** Setting of the drain height through the drain pump.

### 5.6 Cleaning Agent Dosing Pump

The appliance is equipped with the cleaning agent dosing pump. Thanks to this dosing device the appropriate quantity of cleaning agent is added to the wash-tank each time.

Located at the rear of the appliance, the hose with marking for cleaning agent (**D, Fig. 1**) should be introduced to the tank with cleaning agent.

**Operation:** the cleaning agent dosing pump is activated when the appliance collects water during washing or filling process.

**Setting:** the quantity of cleaning agent should be set during the installation at the cleaning agent dosing pump, so that the user may use all washing features in an optimum way from the very beginning.

The hose in the cleaning agent dosing pump must be replaced annually.

#### **ATTENTION!**

**Use ONLY liquid leaning agent, designed for professional use, which is suitable for using in high temperatures and shows little foaming properties.**

### 5.7 Rinsing Agent Dosing Pump

The appliance is equipped with the rinsing agent dosing pump. Thanks to this dosing device, the appropriate quantity of rinsing agent is added to the wash-tank each time.

Located at the rear of the appliance, the hose with marking for rinsing agent (**C, Fig. 1**) should be introduced to the tank with rinsing agent.

The hoses are transparent, thus the introduced chemical compounds are always visible.

**Operation:** Thanks to this dosing device, the liquid rinsing agent is supplied whenever a drop in pressure is detected during rinsing. This happens when the filling valve is closed. As an outcome, underpressure is generated, which causes the liquid to be sucked by the rinsing agent dosing device.

**Setting:** this dosing device should be set up during the installation, because only this way the user may use all washing features in an optimum way from the very

beginning. The setting must be properly adjusted depending on the selected rinsing agent and hardness of the available water.

**NOTE:**

**A selection of the rinsing agent and setting of the rinsing agent dosing pump should be ordered with a qualified technician who has experience with chemical products, to achieve the most efficient washing effects.**

## 6 Operation and Maintenance Instructions



### CAUTION!

**Incorrect installation, positioning, operation, maintenance or misuse of the appliance may lead to personal injury or property damage.**

Positioning and installation, as well as repairs or fitting may be performed by authorised technical service only and in compliance with the applicable national law.

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### 6.1 Operation

#### Preparing the Appliance

1. Before use, clean the appliance, observing instructions in section 6 “**Cleaning**”.
2. Dry the appliance thoroughly.

**Functions of Operating Elements / Indicators (Fig. 5)**

<b>I</b>	ON/OFF button	<b>L</b>	Washing cycle 1 (60 s) / draining button
<b>J</b>	Boiler temperature indicator	<b>M</b>	Washing cycle 2 (90 s) button
<b>K</b>	Tank temperature indicator	<b>N</b>	Washing cycle 3 (180 s) button

**Starting the Appliance**

Before switching the appliance on make sure that the following conditions are met:

- the main switch is off;
- water shut-off valve is open;
- water supply is ensured;
- all filters are installed in their respective locations;
- overflow is in the right location;
- device door is closed;
- ON/OFF button must be pressed for 1.5 sec.

**Filling and Heating Process**

Filling process begins after starting the appliance. First the rinsing boiler is filled in, and then the wash-tank. Filling process may take up to a few minutes. As soon as the wash-tank is filled in, the heating process of boiler starts. When the boiler is heated up, the heating process of wash-tank starts.

Although it would be now possible to start the washing process, the manufacturer does not recommend this, because the water inside the appliance has not reached the optimum temperature yet. When the appliance reaches temperature ideal for proper washing of dishes, it will be displayed in respective digital displays (J + K).

The appliance must reach proper temperatures: 82°C – 90°C in boiler, and 57°C – 62°C in tank, respectively.

It is recommended that the water in the appliance should be changed every 40/50 washing cycles or twice a day.

**NOTE: To start the filling process, the appliance door must be fully closed. Due to safety reasons, the appliance cannot be filled in with door is open.**

The device is equipped with a **safety thermostat** inside the boiler and **another safety thermostat** inside the wash-tank. In the case of failure of any of the main thermostats, the heating process is stopped.

### Preparation of Dishes

1. Dishes to be washed must be prepared in the following way:
  - Before placing the dishes in the basket, remove larger food left-overs from the dishes.
  - Wash glasses first.
  - Always place glasses face down.
  - Put the plates in plate holders in the dishwasher basket.
  - Put the cutlery in the cutlery basket with handles facing down. Cutlery of various sized should be mixed.
  - Insert the cutlery baskets to basic dishwasher baskets.
2. When filling the dishwasher baskets pay attention to the following:  
Max. glass height: 280 mm, max. plate height: 320 mm

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### Washing Process Selection

1. Before starting the washing process, slide the appropriate basket with dishes into the appliance.
  2. Close the appliance door.
  3. Select the required washing program, pressing the right button (J, K or L).
- Washing cycle will start automatically.

### TERMOSTOP Function

The appliance is equipped with TERMOSTOP electronic system. This function provides for constant rinsing at 85°C. This means that the dishwasher rinses until the boiler reaches ideal temperature. Only then does the washing cycle start.

**NOTE: If the water temperature in water supply system is below 50°C, there may be a drop in rated values, provided the appliance is equipped with this device.**

### Interrupting and Finishing the Washing Process

The washing process may be interrupted in one of the following two ways:

- the appliance is switched off → The washing process is completely interrupted.
- the appliance door is opened → Then the door is closed again during the cycle.

After finishing the washing process, the basket with dishes may be removed. Dishes are dried by evaporation. Remove dishes from the basket only with clean hands. Make sure not to scald your hands, because the dishes are still hot.

### Draining the Appliance with the Discharge Pump

With this method, the discharge hose must always be connected to a drain trap to prevent foul scents.

Proceed in the following way:

- Remove the overflow valve.
- Open the appliance door.
- Press the J button for 3 seconds.

Draining cycle will start automatically.

- When the draining cycle is finished, switch the appliance off with the ON/OFF button.

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### Switching the Appliance Off

To switch the dishwasher off, press the ON/OFF button and hold it for 1.5 sec.

The manufacturer does not recommend to switch the appliance off during the washing process, because the dishes inside the dishwasher will not be washed properly.

### 6.2 Cleaning and Maintenance

- Before cleaning, disconnect the appliance from the power supply.
- Do not use any sharp or pointed, nor metal implements (knife, fork, etc.). Sharp or pointed implements may damage the appliance, and when in contact with live parts, they may cause electric shock.
- For cleaning, do not use any scouring agents that contain solvents nor corrosive cleaning agents. They may damage the surface.

#### Daily Cleaning and Maintenance

At the end of the working day, thoroughly clean filters, wash arms, rinse arms, as well as other accessories. Thorough cleaning is the most important condition for maintaining long service life of the appliance. Proper cleaning and disinfection of the appliance is the prerequisite for effective washing of dishes.

**NOTE: To ensure that the draining process proceeds correctly with the use of a discharge pump, the drain hose must be located at the appropriate height (not higher than 680 mm).**

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The following should be performed regularly:

- At the end of the working day, remove all food left-overs from the appliance.
- Never use abrasive, corrosive or caustic cleaning agents, or solvents and cleaning agents based on chlorine or petrol derivatives.
- Do not use pressurized water for washing the appliance.
- Check the wash/rinse arms to make sure they rotate correctly.
- Before starting the washing process, always check the salt, rinsing agent and cleaning agent levels.

### Technical Service Maintenance

Twice a year, a technical service should carry out the following inspections:

- water filters cleaning;
- descaling of heating resistors;
- checking the condition of gaskets;
- checking the condition of all other components;
- setting of dosing devices;
- checking of electrical connectors;
- checking of power cord.

#### **ATTENTION!**

**To prevent hazards, a defective power cord may be replaced only by the qualified electrician while observing all safety measures.**

### Descaling

To take advantage of all the features offered by the dishwasher, carefully read the following indications and tips on descaling and follow them.

- add appropriate quantity of the descaling agent to the wash-tank (per 25 litres of water) and run 1–2 washing cycles;
- drain the device (section 6.1);
- refill the wash-tank with water, and then run 2–3 washing cycles without any dishes;
- finally, pump out all the water to remove all residues of the descaling agent.

### 6.3 Indications and Tips

#### Dishwasher Cleaning Agent and Rinsing Agent

##### **ATTENTION!**

**Usage of incorrect dishwasher cleaning agent and rinsing agent may damage the appliance.**

Use only special cleaning agents designed for dishwashers intended for professional use.

Do not use any foaming dishwasher cleaning agents.

Do not use any dishwasher washing agents, which are indented for household use only.

We recommend Bartscher F12kg dishwasher washing agent (art. No. 173070) or F12kgXTRA dishwasher washing agent (art. No. 173071) and Bartscher F10kg rinsing agent (art. No. 173072).

When the type of rinsing or washing agent it is necessary to introduce new settings. The settings may only be introduced by qualified technical personnel.

##### **CAUTION!**

**When in contact with chemical substances, follow suitable safety instructions.**

**When in contact with chemical substances always wear safety clothing, safety gloves and safety glasses.**

**Do not mix cleaning agents with one another.**

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#### Hygiene Regulations

- Do not touch clean dishes with dirty or greasy hands to avoid soiling dishes.
- For final drying of dishes use clean, sterile towels.
- We recommend using the appliance always after reaching the optimum temperature to ensure that washing also produces optimum results.
- Drain the wash-tank at least twice a day or every 40/50 washing cycles.

## Possible Malfunctions

### Optimum Results

To obtain optimum results during washing dishes, we recommend to proceed the following way:

- Wash dishes only when the appliance is ready for work.
- Dosing devices must always be properly set.
- Always keep the dishwasher properly clean.

### Periods of Non-Operation

If the appliance is not used for a longer period (holidays, interruptions at work etc.), follow the instructions below:

- Fully drain the appliance, including the boiler.
- Thoroughly clean the appliance.
- Leave the dishwasher door open.
- Close the water supply valve.
- Switch the main power switch off.
- If there is a risk of frost, order the protection of the appliance against frost to proper technical service.

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## 7 Possible Malfunctions

The table below contains descriptions of possible causes and solutions to malfunctions or errors during operation of the appliance. When malfunction cannot be removed, contact the technical service.

Malfunction	Possible Cause	Solution
The appliance cannot be switched on.	No voltage in the mains.	Check the thermal magnetic switch for disconnection.
	Melted fuses.	Contact technical service to determine the cause.
	The appliance is not switched on through the main switch.	Close the main switch.

Malfunction	Possible Cause	Solution
The appliance does not collect water.	Water supply valve closed.	Open the water supply valve.
	Rinse arm nozzles clogged.	Clean the nozzles and check the rinse arms for limestone.
	Solenoid valve filter clogged.	Contact technical service to order cleaning.
	Rinse pump failure.	Contact technical service to order replacement.
	Pressure switch error.	Contact technical service to order replacement.
	Incorrectly closed appliance door.	Close the appliance door correctly.
Washing results are not satisfactory.	Wash arms are clogged.	Thoroughly clean the wash arms.
	Not enough washing agent added.	Contact technical service to request setting of the rinsing agent dosing pump.
	Filters are dirty.	Thoroughly clean the filters.
	Foaming.	Inappropriate cleaning agent. Contact technical service to select correct cleaning agent.
Too much rinsing agent. Contact technical service to request change of setting of the rinsing agent dosing pump.		

## Possible Malfunctions

Malfunction	Possible Cause	Solution
Washing results are not satisfactory.	Temperature in the wash-tank is below 50°C/122°F.	Thermostat failure or thermostat is not set correctly. Contact technical service to order repair.
	Washing cycle is too short for the heavily soiled dishes.	Select a longer washing cycle.
	Washing water is very dirty.	Drain the wash-tank and fill in with clean water.
Dishes, pots, pans, etc. are not properly dried.	No rinsing agent.	Add the liquid rinsing agent to the tank.
	Not enough liquid rinsing agent.	Contact technical service to order new setting of dosing devices.
Dishes, pots, pans, etc. are not properly dried.	Dishes remained too long in the dishwasher.	Remove the dishes right after the cleaning cycle and remain to dry in open air.
	Temperature of the rinsing agent is below 80°C/176°F.	Contact technical service to fix the problem.
Streaks and spots on dishes.	Too much rinsing agent.	Contact technical service to repair the rinsing agent dosing pump.
	Water too hard.	Check water hardness degree.

Malfunction	Possible Cause	Solution
Streaks and spots on dishes.	Salt container is almost empty.	Fill up the salt container (if it is installed).
	Salt left-overs remain in the wash-tank.	Be careful when filling the salt container, not to spill salt in the wash-tank.
The appliance stops during the washing and starts refilling water.	Clogged pressure switch.	Drain and thoroughly clean the wash-tank.
	Pressure switch malfunction.	Drain and thoroughly clean the wash-tank.
	Overflow incorrectly installed.	Install the overflow correctly.
The washing cycle does not start.	Incorrectly closed appliance door.	Close the appliance door correctly. If the appliance door cannot be closed, contact technical service to order setting of tensioning devices.
	Door micro switch malfunction.	Contact technical service to order replacement.
Draining process is not successfully completed.	The appliance is not set correctly.	Set the appliance correctly.
	Pressure switch malfunction.	Contact technical service to order replacement.

**Error Codes**

<b>Error</b>	<b>Message</b>	<b>Description</b>
<b>E1</b>	The LED indicator light of the ON/OFF button lights up for 0.5 sec., and then goes off for 2 seconds. The entire process is repeated numerous times.	Device door is open.
<b>E2</b>	The LED indicator light of the ON/OFF button lights up twice for 0.5 sec., and then goes off for 2 seconds. The entire process is repeated numerous times.	The water level is wrong. Time-out of the estimated filling time.
<b>E3</b>	The LED indicator light of the ON/OFF button lights up thrice for 0.5 sec., and then goes off for 2 seconds. The entire process is repeated numerous times.	The appliance was drained incorrectly. Time-out of the estimated draining time.
<b>E4</b>	The LED indicator light of the ON/OFF button lights up four times for 0.5 sec., and then goes off for 2 seconds. The entire process is repeated numerous times.	The temperature in the boiler is not OK. Time-out of the estimated boiler heating time.
<b>E5</b>	The LED indicator light of the ON/OFF button lights up five times for 0.5 sec., and then goes off for 2 seconds. The entire process is repeated numerous times.	The temperature in the tank is not OK. Time-out of the estimated tank heating time.

### 8 Disposal

#### Electrical appliance



Electric appliances are marked with this symbol. Electrical appliances must be disposed of and recycled in a correct and environmentally friendly manner. You must not dispose of electric appliances with household waste. Disconnect the appliance from the power supply and remove power cord from the appliance.

Electrical appliances should be returned to designated collection points.