

## Operating Instructions



Only use the warewasher after you have read and understood the operating instructions and the safety notes.



# Operating instructions

for Winterhalter U50 warewasher  
(Original operating instructions)

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### 1 About this manual

These operating instructions will give you a quick overview of the main functions and safe operation of your warewasher. Keep the operating instructions accessible.



Please note carefully the safety notes (► 3) listed here.

The following symbols are used in these instructions:

Symbol	Meaning
 <b>Danger</b>	Warning against potential serious or fatal injuries to persons if the described precautionary measures are not taken.
 <b>Warning</b>	Warning against potential minor injuries to persons or potential material damage if the described precautionary measures are not taken.
 <b>Caution</b>	Warning against defects in or destruction of the product if the described precautionary measures are not taken.
	Carefully read through the safety notes and operating instructions in this manual before working with this machine.
<b>IMPORTANT</b>	Important information is given here.
<b>INFO</b>	Useful information is given here.
➤	This symbol indicates instructions.
⇒	This symbol indicates results of your actions.
–	This symbol indicates itemizations.
►	This symbol refers to a chapter with more detailed information.

### 2 Proper use

- This warewasher is a technical device for commercial use and is not intended for private use.
- Use the warewasher only for the washing of dishes such as plates, cups, cutlery and trays or for washing glasses of a gastronomic and related type.
- Always operate the machine as described in these operating instructions. Winterhalter Gastronom GmbH does not assume liability for any damage caused due to improper use of the machine.

#### 2.1 Improper use

- The water in the warewasher may not be used as drinking water.
- Children must not play with the machine.
- Do not wash without a wash rack.
- Do not make changes, additions or reconstructions in the warewasher without the approval of the manufacturer.

### 3 Safety notes

#### 3.1 General safety notes

- Read through the safety notes and operating instructions in this manual carefully. Retain the operating instructions for future reference. Winterhalter Gastronom GmbH does not assume liability or warranty in case of non-adherence to these safety and operating instructions.
- Use the warewasher only after you have read and understood the operating instructions. Allow the Winterhalter Customer Service Department to provide information about the operation and functioning of the warewasher.

- Train the operating personnel as regards handling the machine and inform them about the safety notes. Repeat the training sessions at regular intervals to prevent accidents.
- Do not climb or sit on the opened hinged door.
- Operate this machine only when it is in perfect condition.
- A damaged or leaking machine can endanger your safety. In case of defects, switch off the machine immediately. Do not switch the machine on until the defect has been rectified. Switch off the local mains disconnecter (main switch). Only then is the machine without power.
- Do not open any machine covers or machine parts if it requires tools. There is danger of shock.
- Contact your installer or electrician if the on-site water or electricity supply is the cause of the malfunction.
- Contact an authorised service technician or your retailer if any other fault has occurred.
- Do not make changes, additions or reconstructions in the warewasher without the approval of the manufacturer.
- For your safety, test the on-site residual current circuit breaker (FI) regularly by pressing the test button.
- Close the on-site water stop cock after the work is complete.
- Switch off the on-site mains disconnecter after the work is complete.

### 3.2 Electrical Safety

- The electrical safety of this machine is guaranteed only if it is connected to a correctly installed protective circuit and a residual current circuit breaker. It is crucial that this basic safety requirement is tested and, in case of doubt, that the house installation is checked by a qualified electrician.  
Winterhalter cannot be held responsible for damage caused by a missing or broken protective conductor (e.g. electrical shock).

### 3.3 Maintenance and repair work

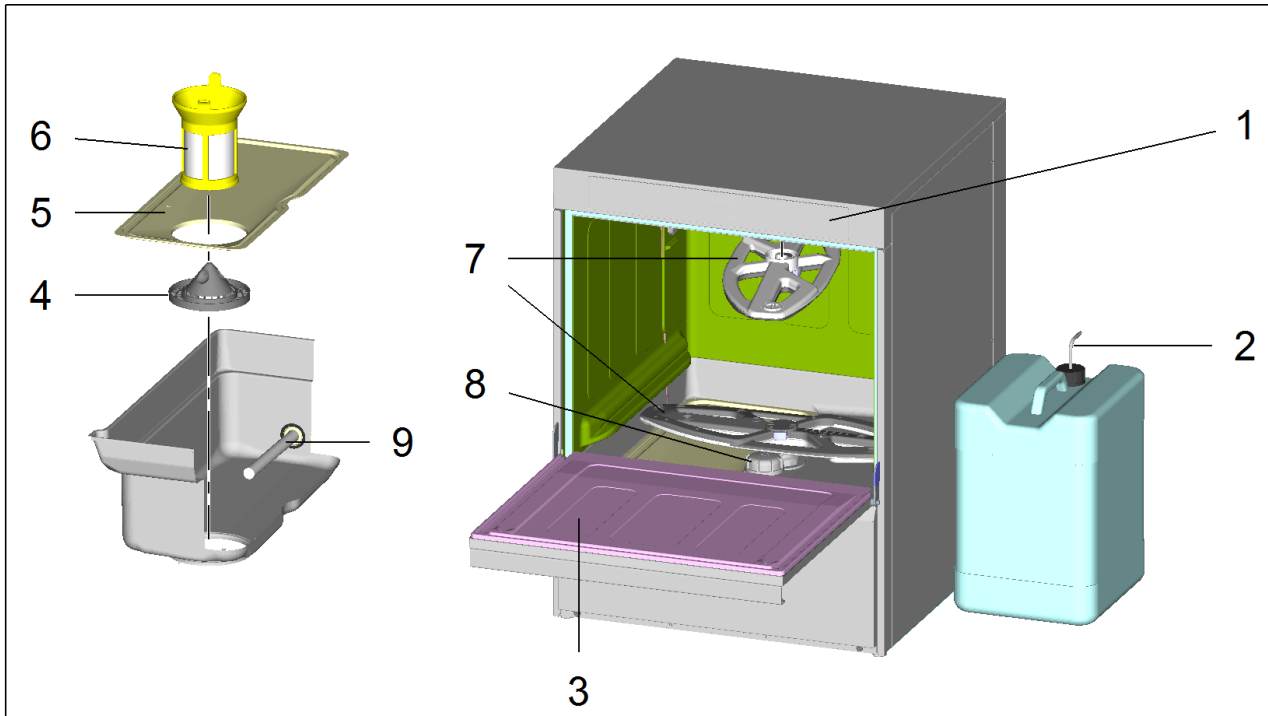
- Maintenance work and repairs may only be performed by authorised Winterhalter service technicians. Improper maintenance or repairs may cause significant danger for the user, for which Winterhalter is not liable.
- When performing maintenance and repair work, unplug the machine from the power network. Electricity consumers (heating element) are under voltage until the local mains disconnecter has been operated.
- Only original Winterhalter spare parts may be used for maintenance and repairs. If original spare parts are not used, the warranty is invalidated.
- If the mains cable of this machine is damaged, it must be replaced by the Winterhalter or its Customer Service or another qualified person in order to prevent hazards. The mains cable must be an H07 RN-F type or equivalent.

### 4 Before working with the machine

- Have the machine installed by an authorised service technician or your Winterhalter dealer (► 16).
- Have the machine connected as per the locally applicable standards and the regulations by authorised mechanics (water, waste water, electrical system) (► 17 and 18).
- After connecting the water and the power properly, contact the relevant Winterhalter dealer or your dealer for the commissioning of the machine and for providing training in its operation. Get yourself and your operating personnel trained in the operation of the machine.

### 5 Machine description

#### 5.1 Overview



Pos.	Designation
1	Operating panel and display
2	Suction stick
3	Door
4	Pump inlet filter
5	Strainer
6	Filter cylinder
7	Rotating wash field
8	Integral water softener (optional)
9	Tank heating element

## 5.2 Operating panel and display



Pos.	Designation
(1)	On/Off button
(2)	Self-cleaning programme
(3)	Info button
(4)	Display
(5)	Standard programme (120 seconds)
(6)	Confirmation button (PIN menu only)
(7)	HighTemp programme (180 seconds)
(8)	Start button

### Display colours

Colour	Meaning
red	Machine is filling and heating up
green	Machine is ready for use
flashing green	Washing programme has ended; door has not been opened yet
blue	Washing programme is running

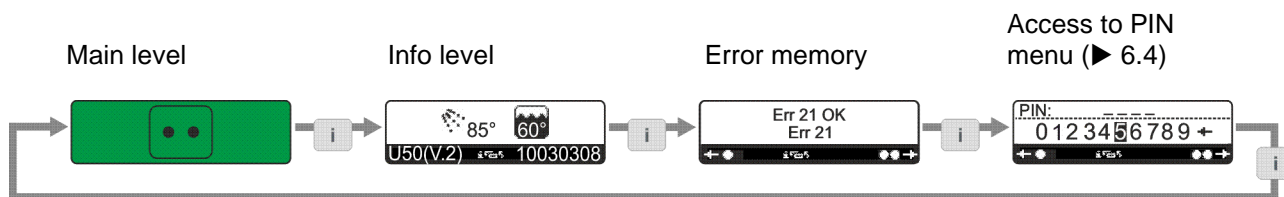
## 5.3 Mode of operation

The boiler and the tank are filled after the machine is switched on and warmed up to the operating temperature. When the required temperatures are reached, the machine is ready for use.

The machine is fully automatic with programmes consisting of three steps: Wash, Drain and Rinse.

## 6 Menu levels

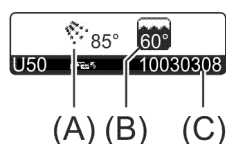
The following levels exist:



### 6.1 Main level

The preselected programme is shown on the display.

### 6.2 Info level



(A)	Temperature in the boiler
(B)	Temperature in the tank
(C)	Serial number

### 6.3 Error memory

All errors with an error code are saved in the error memory. The error that occurred last is displayed first. You can go through the list using the and buttons.



Display	Explanation
ERR xx	Malfunction
ERR xx OK	Malfunction resolved
ON ↑	Machine ON

**INFO** Keep the button pressed for 30 seconds to delete the list.

### 6.4 PIN Menu

In the PIN menu you can prime integral dosing devices, set the dosing amounts and programme the terminal strip for the connection of an external dosing device (▶ 19.3).

#### Accessing the PIN Menu

	<p>➤ Press the  button three times.</p> <p>⇒ The PIN input mask is displayed.</p>					
	<p>➤ Enter PIN 1575. To do this, select the individual figures with the  or  button and confirm each figure with the  button.</p> <p>⇒ The following selection is shown in the display:</p> <table border="1"> <tr> <td>(A)</td><td>Integral detergent dosing device (▶ 6.4.1)</td></tr> <tr> <td>(B)</td><td>Integral rinse aid dosing device (▶ 6.4.2)</td></tr> <tr> <td>(C)</td><td>Setting for external dosing devices (▶ 19.3)</td></tr> </table>	(A)	Integral detergent dosing device (▶ 6.4.1)	(B)	Integral rinse aid dosing device (▶ 6.4.2)	(C)
(A)	Integral detergent dosing device (▶ 6.4.1)					
(B)	Integral rinse aid dosing device (▶ 6.4.2)					
(C)	Setting for external dosing devices (▶ 19.3)					



## Explanation of the buttons



(1)	Back
(2)	Cursor left or reduce value
(3)	Confirm
(4)	Cursor right or increase value

## Leaving the PIN Menu

- Press the button.

## 6.4.1 Integral detergent dosing device

## Priming the dosing device

	= Start screen ➤ Confirm with the  button.
	➤ Confirm with the  button. ➤ Keep the  button pressed. ⇒ The dosing device is primed.

## Setting the dosing amount

	= Start screen ➤ Confirm with the  button.
	➤ Continue with the  or  button.
	➤ Select a programme with the  or  button. ➤ Confirm with the  button.
	⇒ The current dosing amount is displayed (number flashes). ➤ Change dosing amount with the  or  button.
	➤ Confirm with the  button. ⇒ The start screen is displayed.















## 6.4.2 Integral rinse aid dosing device

## Priming the dosing device

	= Start screen ➤ Confirm with the  button.
	➤ Confirm with the  button. ➤ Keep the  button pressed. ⇒ The dosing device is primed.

## Rinse aid and detergent

### Setting the dosing amount

	= Start screen ➤ Confirm with the  button.
	➤ Continue with the  or  button.
	➤ Select a programme with the  or  button. ➤ Confirm with the  button.
	⇒ The current dosing amount is displayed (number flashes). ➤ Change dosing amount with the  or  button.
	➤ Confirm with the  button. ⇒ The start screen is displayed.

## 7 Rinse aid and detergent



**Danger**

### Possible risk of chemical burn

- Wear protective clothing, protective gloves and protective goggles when handling chemicals.
- When handling chemicals, observe the safety notes and the recommended dosage on the packaging.



**Caution**

- Use only products that are suitable for commercial warewashers. Such products are appropriately marked. We recommend Winterhalter products. These are specially adapted to Winterhalter warewashers.
- Do not fill rinse aid in the storage container for detergent and vice versa.

### 7.1 Rinse aid

A rinse aid is necessary to ensure that water on the dishes drains off after washing and dries off after a short while. Rinse aid is automatically dispensed from a storage container outside the machine into the boiler of the machine. The authorised service technician sets the dosing amount when commissioning the machine.

**INFO** The rinse aid dosing device is not included in the scope of delivery of all machines. A transfer strip is available for connecting external dosing devices (► 19).

### 7.2 Detergent



**Caution**

- Do not use acidic detergents.
- Do not use products that can create foam (e.g. hand soap, soft soap, manual washing-up liquid). Ensure that these do not enter the machine even during the pre-treatment of the wash items.

A detergent is necessary to ensure that the leftovers and dirt on the dishes is cleaned. Detergents can be supplied as follows:

- Manually as detergent powder (► 7.2.1).
- Automatically as liquid detergent from an external container (► 7.2.2).

**INFO** The detergent dosing device is not included in the scope of delivery of all machines. A transfer strip is available for connecting external dosing devices (► 19).

### 7.2.1 Manual dosing of detergent powder

**IMPORTANT** Only deposit detergent powder when the machine is ready for operation.

- After each dosing (pre- and post-dosing), start the wash cycle immediately to mix the detergent powder with the water.
- Adhere to the dosing instructions on the packaging of the detergent.

	Standard	HighTemp
Tank capacity	15.3 l	
Pre-dosage ( $\triangleq$ dosing of 3 g/l)	approx. 50 g	
Rinse water volume per wash cycle	2.4 l	3.4 l
Post-dosing every 5 wash cycles	35 g	50 g

### 7.2.2 Automatic dosing of liquid detergent

Liquid detergent is automatically dispensed from a storage container outside the machine using a detergent dosing device. The authorised service technician sets the dosing amount when commissioning the machine.

### 7.2.3 Changing the detergent product (liquid detergent)



**Caution**

In order to prevent crystallisation, which might destroy the detergent dosing device, do not mix different detergents.

A new detergent product usually requires re-configuration of the dosing device.

- Assign the required work to an authorised service technician to attain good wash results.

If this is not done, the warranty and product liability of Winterhalter Gastronom GmbH expires.

#### Procedure



**Danger**

#### Possible risk of chemical burn

- Wear protective clothing, protective gloves and protective goggles when handling chemicals.
- When handling chemicals, observe the safety notes and the dosage recommendations on the packaging.

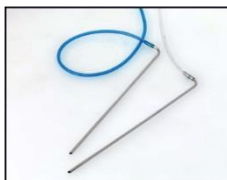
- Remove the suction stick from the container and place it in a water-filled container.
- Rinse the dosing hose and the detergent dosing device with water. To do this, use the "priming the dosing device" function several times (► 6.4.1). The frequency depends on the length of the hose.
- Place the suction stick in the new detergent container.
- Use the "priming the dosing device" function several times (► 6.4.1) to replace the water in the dosing hose with detergent.

## 7.3 Suction sticks



**Caution**

- Only use the suction stick with sufficiently stable containers. Narrow and tall containers can tip if the suction stick is pulled.
- Do not pull unnecessarily on the hose of the suction stick.
- Do not place the suction stick for the rinse aid in the detergent container or vice versa.



Hose colour	Container
Blue	Rinse aid
Transparent	Detergent

## 7.4 Priming the dosing devices

Dosing devices must be primed when air is reached in the dosing hoses because the containers were not exchanged in time (► 6.4).

## 8 Before switching on the machine



**Danger**

### Possible risk of chemical burn

- Wear protective clothing, protective gloves and protective goggles when handling chemicals.
- When handling chemicals, observe the safety notes and the dosage recommendations on the packaging.



**Caution**

### Possible risk of damage to the pumps by suction of e.g. cutlery items

The pump inlet filter protects the circulating pump. Operate the machine only with the pump inlet filter fitted.

- Proceed in accordance with the following figures:

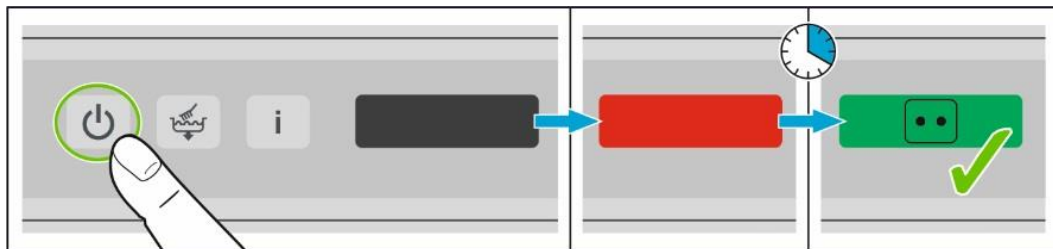
**IMPORTANT** Make sure the pump inlet filter is fitted (see figure 6: filter in bottom).



**IMPORTANT** Replace the storage containers for rinse aid and detergent in time to ensure an optimum wash result.

## 9 Switching on the machine

- Proceed in accordance with the following figures:



## 10 Washing



### Warning

#### Possible risk of scalding from hot wash water

- Keep children away from the warewasher. The lye-mixed water is at a temperature of approx. 62 °C (HighTemp: 66 °C).
- Do not open the door while the machine is washing. There is a risk of the hot wash water spilling out. Stop the washing programme before doing so (► 10.3).

#### Possible risk of injury

- Arrange sharp, pointed utensils so that they do not cause injury.



### Caution

#### Risk of damage

- Do not use the warewasher to wash electrically heated devices or parts made of wood.
- Do not wash parts made of plastic if they are not heat- and lye-resistant.
- Only wash parts made of aluminium such as pots, containers or trays with a specially suitable detergent, to avoid black discolourations.

### 10.1 Preparing the dishes for washing

- Pre-rinse all wash items with cold water.
- Remove food residues and pour out drink residue.
- Place cups, bowls and pots rim down.
- Soak dried residues.
- Soak cutlery till it is rinsed.
- Light plastic parts may slip or turn when washing. Ensure such parts are weighted down.

### 10.2 Starting the washing programme

- Slide the wash rack into the machine.
- IMPORTANT** Make sure that the rotating wash fields can turn freely.
- Close door.
- Select programme.
  - ⇒ The selected programme is shown on the display.
- Press start button.

### 10.3 Terminating the washing programme

A washing programme can be terminated in the following ways:

- Press the start button
- Tap on the button of the selected washing programme

### 10.4 Wash breaks

Do not switch the machine off during wash breaks.

- Close the door to prevent it cooling down.

### 10.5 Switching off the machine

Switch the machine off at the end of the working day using the self-cleaning programme (► 13.1) so that it is cleaned and emptied every day.

**INFO** If you use the On/Off button, the tank stays filled but will no longer be kept at temperature. If the tank temperature has dropped too much before the machine is switched on again, the tank will be emptied automatically and filled again.

### 11 Integral water softener (optional)

By softening the inlet water, limescale build-up in the machine and on the dishes is avoided. For the integral water softener to work correctly, the salt container must be filled with regeneration salt.

When commissioning the machine, the authorised service technician measures the water hardness and enters the respective value.

#### 11.1 Lack of salt display



On the display, a pictogram is shown when the salt container is empty and needs to be refilled. The pictogram disappears when the salt container has been refilled, as soon as approx. 3 wash cycles have been completed and part of the salt has been dissolved.

#### 11.2 Refilling salt



**Caution**

##### **Possible risk of damage to the water softener**

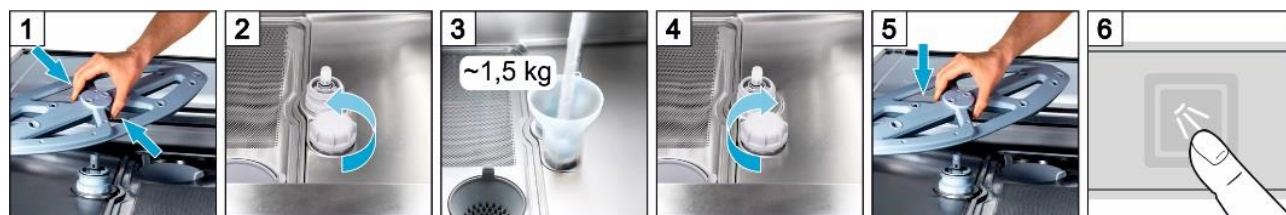
Chemicals such as detergent and rinse aid inevitably lead to damage to the water softener. Fill only with regeneration salt or pure evaporated salt.

##### **Possible malfunction of the water softener**

Do not fill with any other types of salt (e.g. table salt or de-icing salt). These may contain water-insoluble components. Only fill with fine-grained salt (max. 0.4-7 mm grain size).

**INFO** Due to their size, salt tablets are not suitable.

➤ Proceed in accordance with the following figures:



**Caution**






##### **Danger of rust formation in the filling area**

After filling the regeneration salt, start a wash cycle in order to wash away any salt residues that may be present.

## 12 Malfunctions

Malfunctions are shown in the display in the form of pictograms. If you are unable to rectify the malfunction yourself:

- Contact an authorised service technician.

Pictogram	Cause / Meaning	Remedy
	Lack of water or uncontrolled water supply	Open the water stop cock.
		Have the dirt trap cleaned by a service technician or have a new dirt trap installed.
		Contact an authorised service technician for the repair.
	Attempted start of programme while door is open	Close the door and start the programme.
	Lack of salt	Refill salt (► 11.2).
	Strainer clogged	Remove, clean and re-insert the filter cylinder and strainer.
	Malfunction with error code	Access the error memory (► 6.3) and assign the repair to an authorised service technician.

### 12.1 Poor cleaning result

**INFO** The water quality affects the washing and drying performance. We therefore recommend from a total hardness of more than 3° dH (0.53 mmol/l) that the machine is supplied with softened water.

	Possible Cause	Remedy
Wash items do not get clean	No or low detergent dosing	Set the dosing amount... (► 6.4.1) or contact an authorised service technician to set the dosing amount. Check dosing hose (for kinks, breakage, ...) Replace the storage container if empty.
	Wash items incorrectly sorted	Do not stack wash items over each other.
	Jets of the wash fields blocked	Remove the wash fields and clean the jets.
	Temperatures too low	Check temperatures (► 6).
There is formation of layers on the wash items	In case of limescale deposits: The water is too hard	Check external water treatment.
	In case of starch residues: Temperature of the manual pre-cleaning exceeds 30 °C	Lower the temperature of the manual pre-cleaning.
The wash items do not dry on their own	No or low rinse aid dosing	Set the dosing amount... (► 6.4.2) or contact an authorised service technician to set the dosing amount. Check dosing hose (for kinks, breakage, ...) Replace the storage container if empty.
	Rinse temperature too low	Contact an authorised service technician to set the temperature.



### 13 Servicing and maintenance



**Warning**

- Do not spray the machine and the surrounding area (panels, base) using a water hose, steam-jet air ejector or high-pressure cleaner.
- Ensure that the base of the machine is not flooded when cleaning the floor in order to prevent an uncontrolled inflow of water.



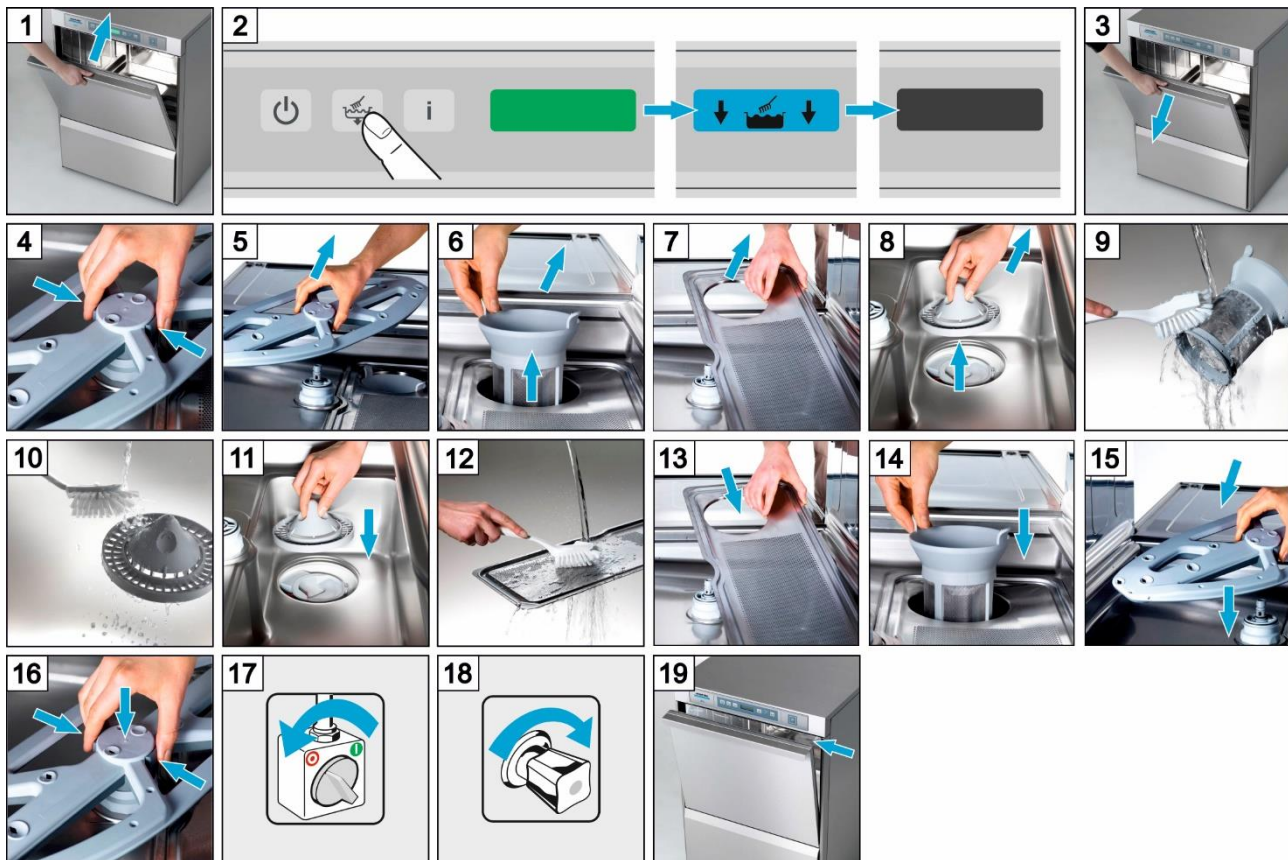
**Warning**

Wear protective clothing and protective gloves before touching parts in contact with wash water (filters, rotating wash fields, etc.)

#### 13.1 Self-cleaning programme

Switch off the machine daily using the self-cleaning programme.

➤ Proceed in accordance with the following figures:



#### Terminating the programme



➤ Press button.

#### 13.2 Cleaning the interior



**Caution**

Ensure that there are no rusty foreign objects in the machine that could even cause the "stainless steel rust-free" material to start rusting. Rust particles can come from non-rust-free wash items, cleaners, damaged wire racks, or non-rust-protected water lines.

The following materials must **not** be used for cleaning:

- Detergents containing chlorine or acid
- Cleaning sponge or wire brush containing metal
- Abrasives or abrasive cleaners

➤ Remove dirt with a brush or a cloth.



### 13.3 Cleaning the wash fields



### 13.4 Cleaning the exterior of the machine

- Clean the operating panel and the display with a damp cloth.
- Clean the external surfaces using a stainless steel cleaner and stainless steel polish.

### 13.5 Maintenance by the Customer Service

We recommend that you have a Winterhalter service technician carry out the maintenance of the machine at least once a year so that wear parts can be checked and replaced accordingly. Original spare parts must be used for repairs and the replacement of wear parts.

#### **Wear parts are, for example:**

- Dosing hoses
- Water supply hose

## 14 Decommissioning the machine for a period of disuse

If the machine needs to be out of operation for a long duration (holidays, seasonal business), proceed as follows:

- Empty the machine using the self-cleaning programme (► 13.1).
- Clean the machine (► 13.2 and 13.4).
- Leave the door open in detent position.
- Close the on-site water stop cock.
- Switch off the local mains disconnecter.
- Store detergent and rinse aid containers frost-free.

If the machine is in a place that is not frost-free:

- Instruct an authorised service technician to make the machine frost-resistant.

## 15 Recommissioning the machine after a period of disuse

After extended periods of disuse, proceed as follows:

- Open the on-site water stop cock.
- Reinstall detergent and rinse aid containers.
- Switch on the local mains disconnecter.
- Switch on the machine.

If the machine was in a place that was not frost-free:

After extended periods of disuse, the machine must be completely climatized (at least 24 hours at 25 °C). If this requirement is met:

- Contact an authorised service technician to put the machine back into service.

### 16 Installing the machine

The installation site must be frost-resistant so that the water supply systems do not freeze.

- Install the machine horizontally with the help of a spirit level.
- Adjust the base unevenness with the help of the height-adjustable machine feet.

### 17 Water connection



#### Warning

The machine and any other relevant additional devices must be connected by an authorised specialist company in relation to local standards and regulations.

**IMPORTANT** Observe the connection diagram for detailed information.

#### 17.1 Requirements for the on-site inlet water connection

Water quality	The inlet water must in microbiological aspects have the quality of drinking water.
Inlet water temperature	max. 60 °C
Water hardness	Standard machines: ≤ 3 °dH (3.8 °e / 5.34 °TH / 0.54 mmol/l ) (recommendation to prevent scaling of the machine)  Machines with softener: ≤ 31 °dH (38,8 °e / 55,2 °TH / 5,55 mmol/l)
Minimum flow pressure	100 kPa (1.0 bar)
Maximum inlet pressure	1000 kPa (10.0 bar)
Rate of flow	at least 4 l/min

#### 17.2 Requirements for the on-site water stop cock

- easily accessible
- not behind the machine
- 3/4" connector

#### 17.3 Connecting the supply hose

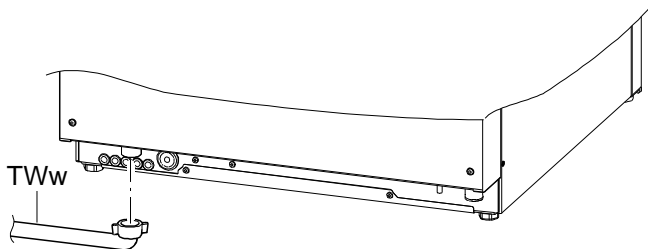


#### Caution

- The hose may not be shortened or damaged.
- Old existing hoses may not be re-used.
- Do not bend the hose when laying it.

The supply hose and dirt trap (special equipment) are located in the machine.

**INFO** The dirt trap prevents particles from the water supply line entering the machine thus preventing extraneous rust on the cutlery and in the machine.



Back view

- Connect the supply hose (TWw) to the machine.
- Connect the dirt trap to the on-site water stop cock.
- Connect the supply hose to the dirt trap.
- Open the water stop cock and test whether the connections are tight.

## 17.4 Connecting the drain hose

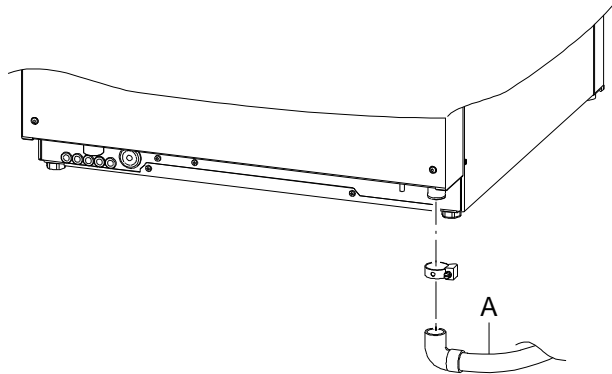


### Caution

- The hose may not be shortened or damaged.
- Do not bend the hose when laying it.

The drain hose is located in the machine.

**INFO** The machine is equipped with a drain pump. The on-site water drain must have a trap. The maximum height of the on-site water drain is 600 mm.



- Connect the drain hose (A) to the machine.
- Connect the drain hose to the on-site water drain.

Back view

## 18 Electrical connection



### Danger

#### Danger to life. Live components.

- The machine and the relevant additional devices must be connected by an electrical company authorised by the relevant electricity supplier as per the locally applicable standards and regulations.
- When performing installation and maintenance work, unplug the machine from the power network. Check that there is no voltage.

**IMPORTANT** Observe the connection diagram for detailed information.


- The electrical safety of this machine is guaranteed only if it is connected to a correctly installed protective circuit and a residual current circuit breaker. It is very important that this basic safety requirement is tested and in case of doubt the house installation is checked by a qualified electrician.
- The circuit diagram must be observed.
- The electrical connection of the machine must correspond with the data of the rating plate.
- A fixed connection must as a priority be installed for machines that are delivered without a plug.
- When the machine is connected permanently (without a plug), a mains disconnector with all-pole separation from the network must be installed. The mains disconnector switch must have a contact opening width of at least 3 mm, and must also be lockable in the neutral position. The installation site must be near the machine and easily accessible.
- The electrical connection must be secured as a separately fused circuit with slow fuses or circuit breakers. The protection depends on the total power consumption of the machine. The total connected load is specified on the rating plate of the machine.
- Install a residual current circuit breaker in the electrical supply line.

### 18.1 Requirements for the mains cable

- Cable type: Type H07 RN-F or equivalent
- The wires must be fitted with wire end ferrules.
- Cross section and number of cores: suitable for on-site power and protection for more information see the sticker in the front panel

### 18.2 Establishing an earth connection

- Connect the machine into the equipotential bonding system.

**INFO** The terminal screw is located at the rear of the machine. It is identified with the  symbol.

### 19 External dosing devices

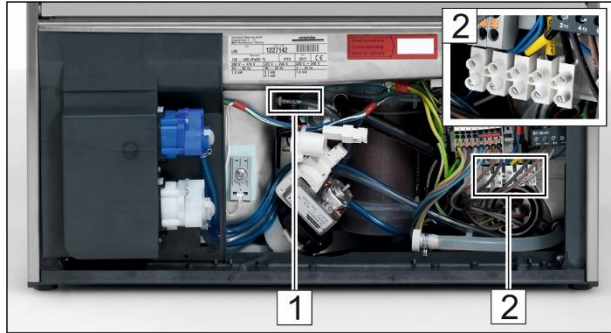
Instead of the integral dosing device, external dosing devices can also be used. Follow the instructions in this chapter.

#### 19.1 Terminals

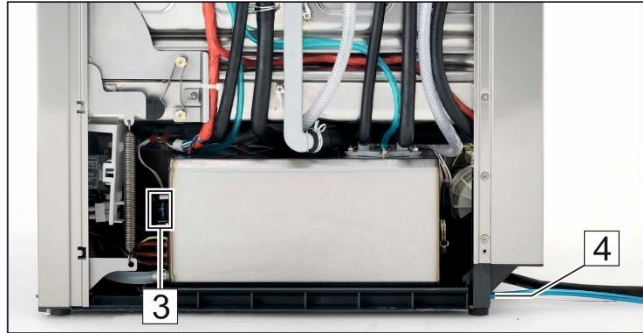


**Danger to life. Live components.**

Have the dosing device installed and commissioned by an authorised service technician.



Front view



Right view

1	Detergent dosing nipple
2	Terminal strip for the connection of external dosing devices
3	Rinse aid dosing nipple
4	Bushings for cables and hoses

**INFO** On the inside of the front cladding, you find the circuit diagram.

#### 19.2 Electrical connection



When connecting an external dosing device to the control board, there must be no short circuit. The control board can be destroyed by a short circuit. Only connect external dosing devices with their own fuse protection.

**IMPORTANT** maximum current drain at the terminal strip: 0.5 A.

- Connect the external dosing device to the 5-pin plug. Refer to the table below for the settings.
- Set the dosing amount at the dosing device.

##### Terminals (from left to right)























Terminal	Setting	Voltage is on	Condition	Restriction
L1		continuous voltage		
N				
Rinse	ext. = 0	parallel to rinse pump (O4)	a)	c), d)
	ext. = 1	parallel to solenoid valve (O8)	a)	c)
Detergent	ext. = 0	while the machine is filling	a), b)	
	ext. = 1	parallel to solenoid valve (O8)	a)	c)
Wash		while the circulating pump is running	a)	c), d)

- a) only with the door closed
- b) minimum water level in the tank
- c) not in the self-cleaning programme
- d) not while the machine is filling

## 19.3 Settings

### Checking and changing the settings

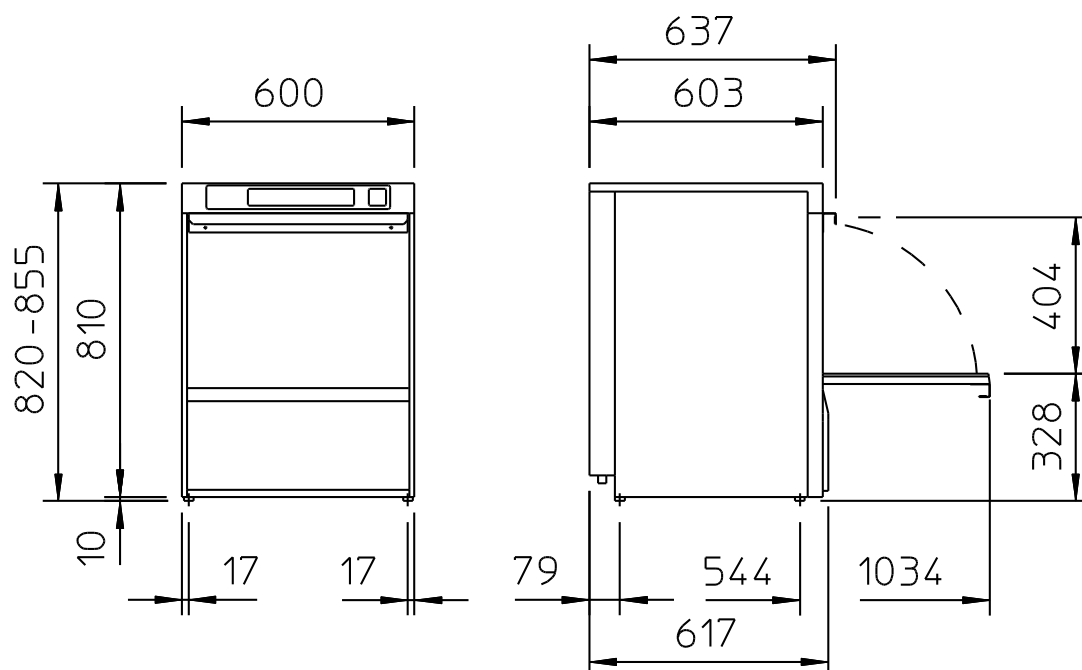
- Chose the required settings for detergent and rinse aid in the table in section 19.2.
- Access the PIN menu:

	➤ Press the  button three times.
	➤ Enter "1575". To do this, select the individual figures with the  or  button and confirm each figure with the  button.
	➤ Press the  button.
	➤ Confirm with the  button.
 	⇒ The current setting for detergent is displayed (number flashes). ➤ If necessary, change with the  or  button. ➤ Confirm with the  button. ⇒ The setting is saved.
 	⇒ The current setting for rinse aid is displayed (number flashes). ➤ If necessary, change with the  or  button. ➤ Confirm with the  button. ⇒ The setting is saved.
	➤ Press the  button to exit the menu.

## 20 Technical data

Voltage	see rating plate
Total connected load	
Fuse	
Minimum flow pressure	► 17.1
Maximum inlet pressure	
Water inlet temperature	

### Dimensions



## 21 Emissions

### Noise

Workplace-related emission sound pressure level  $L_{eq} < 59$  dB(A)

Measurement uncertainty: K(pA): 4 dB

## 22 Disposal



Incorrect or negligent disposal can cause considerable environmental pollution and/or damage.

- For hazardous substances, please observe the disposal regulations listed in the safety data sheets.
- Disposal according to national regulations.



## 23 EC Declaration of Conformity

EG-KONFORMITÄTSERKLÄRUNG  
EC-DECLARATION OF CONFORMITY

winterhalter®

Wir, We, Nous, Noi, Wij, Nosotros, Nós, My, Podjetje, Εμείς η, Mi a, Biz

Hersteller / Manufacturer: Winterhalter Gastronom GmbH  
Winterhalterstraße 2-12  
DE-88074 Meckenbeuren

erklären in alleiniger Verantwortung, dass das Produkt „Gewerbliche elektrische Spülmaschine“,  
declare under our sole responsibility that the product "Commercial electric dishwashing machines",  
déclarons sous notre seule responsabilité que le produit « Lave-vaisselle professionnelle électrique »,  
dichiariamo sotto la nostra piena responsabilità che il prodotto "Sistema di lavaggio elettronico industriale",  
verklaren als enig verantwoordelijke dat het product „professionele vaatwasmachine“,  
declaramos bajo nuestra absoluta responsabilidad que el producto „lavavajillas eléctrico industrial“,  
Declaramos sob nossa única responsabilidade, que o produto "Máquina de lavar loiça comercial eléctrica",  
oświadczamy na własną odpowiedzialność, że produkt „elektryczna zmywarka przemysłowa“,  
prohláňujeme na vlastnú zodpovednosť, že produkt „profesionální elektrická myčka“,  
na lastno odgovornostjo izjavljaj, da je izdelek „Profesionalni električni pomivalni stroj“,  
δηλώνουμε αποκλειστικά με δική μας ευθύνη, ότι το προϊόν „Επαγγελματικό ηλεκτρικό πλυντήριο πιάτων“,  
felelősségünk teljes tudatában kijelentjük, hogy a termék „Professzionális elektromos mosogatógép“,  
olarak yegane sorumlugumuz dahilinde beyan ederiz ki Sanayi bulasik Makinesi

Typenbezeichnung / Model: U50  
Warenzeichen / Trademark: Winterhalter

auf das sich diese Erklärung bezieht, mit den folgenden Normen übereinstimmt:  
to which this declaration relates is in conformity with the following standards:

auquel se réfère cette déclaration est conforme aux normes :  
al quale fa riferimento la presente dichiarazione, è conforme alle seguenti norme :  
waarop deze verklaring betrekking heeft, met de volgende normen in overeenstemming is:  
al que se refiere esta declaración, cumple las siguientes normas :  
ao qual esta declaração diz respeito, está em conformidade com as seguintes normas:  
do którego odnosi się to oświadczenie, jest zgodny z następującymi normami:  
na ktorou se vztahuje toto prohlášení, odpovídá níže uvedeným normám:  
na katerega se nanaša ta izjava, skladen z naslednjimi standardi:  
στο οποίο αναφέρεται αυτή η δήλωση, συμφωνεί με τα ακόλουθα πρότυπα:  
amhez kapcsolódóan ezen nyilatkozat megfelel a következő szabványoknak:  
aşadaki standartlara uygundur:

EN 60335-2-58:05 + A1:08 + A11:10 + A2:15 + A12:16  
EN 60335-1:12 + A11:14/AC:14  
EN 55014-1:06 + A1:09 + A2:11  
EN 55014-2:15  
EN 61000-3-2:14  
EN 61000-3-3:13  
EN 61000-3-11:00  
EN 61000-3-12:11  
EN 62233:08

gemäß den Bestimmungen folgender Richtlinien:

following the provisions of Directives:  
selon les conditions des directives suivantes :  
Ai sensi alle disposizioni previste dalle seguenti direttive :  
volgens de bepalingen van de volgende richtlijnen:  
conforme a las disposiciones de las siguientes directivas:  
de acordo com as disposições das seguintes directivas:

zgodnie z postanowieniami następujących dyrektyw:  
na základě ustanovení následujících směrnic:  
in je skladen z določili naslednjih direktiv :  
σύμφωνα με τους κανονισμούς των ακόλουθων Οδηγιών:  
enligt följande riktlinjers bestämmelser:  
a következő irányelvek rendelkezéseinek:  
aşadaki Direktif hükümlerine uygundur:

2006/42/EC/MD (Machinery Directive);  
2014/30/EC/EMC (Electromagnetic Compatibility)

Hinsichtlich der elektrischen Gefahren wurden gemäß Anhang I Nr. 1.5.1 der Maschinenrichtlinie 2006/42/EC die Schutzziele der Niederspannungsrichtlinie 2014/35/EC eingehalten.

With respect to potential electrical hazards as stated in appendix I No. 1.5.1 of the machine guide lines 2006/42/EC all safety protection goals are met according to the low voltage guide lines 2014/35/EC.  
Conformément à l'annexe I N° 1.5.1 de la Directive "Machines" (2006/42/EC) les objectifs de sécurité relatifs au matériel électrique de la Directive "Basse Tension" 2014/35/EC ont été respectés.

Con respecto al potencial peligro eléctrico como se indica en el apéndice I No. 1.5.1 del manual de la máquina 2006/42/EC, todos los medios de protección de seguridad se encuentran según la guía de bajo voltaje 2014/35/EC.  
Güvenlik hedefleri uyarınca Makine Direktifi 2006/42 / EC deki EK No. 1.5.1 ile ilgili olarak, Düşük voltaj Direktifi 2014/35 / EC uygundur

Name und Anschrift der Person, die bevollmächtigt ist, die technischen Unterlagen zusammenzustellen:

Name and address of the person authorised to compile the technical file:  
Nom et adresse de la personne autorisée à constituer le dossier technique :  
Nome e indirizzo della persona autorizzata a costituire il fascicolo tecnico:  
Naam en adres van degene die gemachtigd is het technisch dossier samen te stellen:  
Nombre y dirección de la persona facultada para elaborar el expediente técnico:  
Yetkili kişinin İsmi/Unvanı:

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Meckenbeuren, 05.10.2017

89014272-00

Bernhard Graeff  
Technical Manager

Anbringung der CE Kennzeichnung /  
CE Marking date:  
2017

