

Operating Instructions



Operating instructions

for Winterhalter P50 Dishwasher
(Original operating instructions)

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1 About this manual

This manual contains information and instructions for the safe operation and maintenance of your dishwasher.



Please note carefully the safety notes listed here.

The following symbols are used in these instructions:

Symbol	Meaning
 Danger	Warning against potential serious or fatal injuries to persons if the described precautionary measures are not taken.
 Warning	Warning against potential minor injuries to persons or potential material damage if the described precautionary measures are not taken.
 Caution	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.
IMPORTANT	Important information is given here.
INFO	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

- The P50 dishwasher is a technical device for commercial use and is not intended for private use.
- Use the dishwasher only for the washing of dishes such as plates, cups, cutlery and trays or for washing glasses of a gastronomic and related type.
- Always use a wash rack that is suitable for the dishes. Do not wash without a wash rack.

Improper use

- Children must not play with the device.
- Do not use the dishwasher 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.
- Use a suitable detergent to wash parts made of aluminium such as jars, containers or plates in order to prevent black stains.
- Winterhalter Gastronom GmbH does not assume liability for any damage caused due to improper use of the device.

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 dishwasher 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 dishwasher.
- 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.
- Operate this machine only when it is in perfect condition.
- A damaged or leaking machine may 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 dishwasher 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

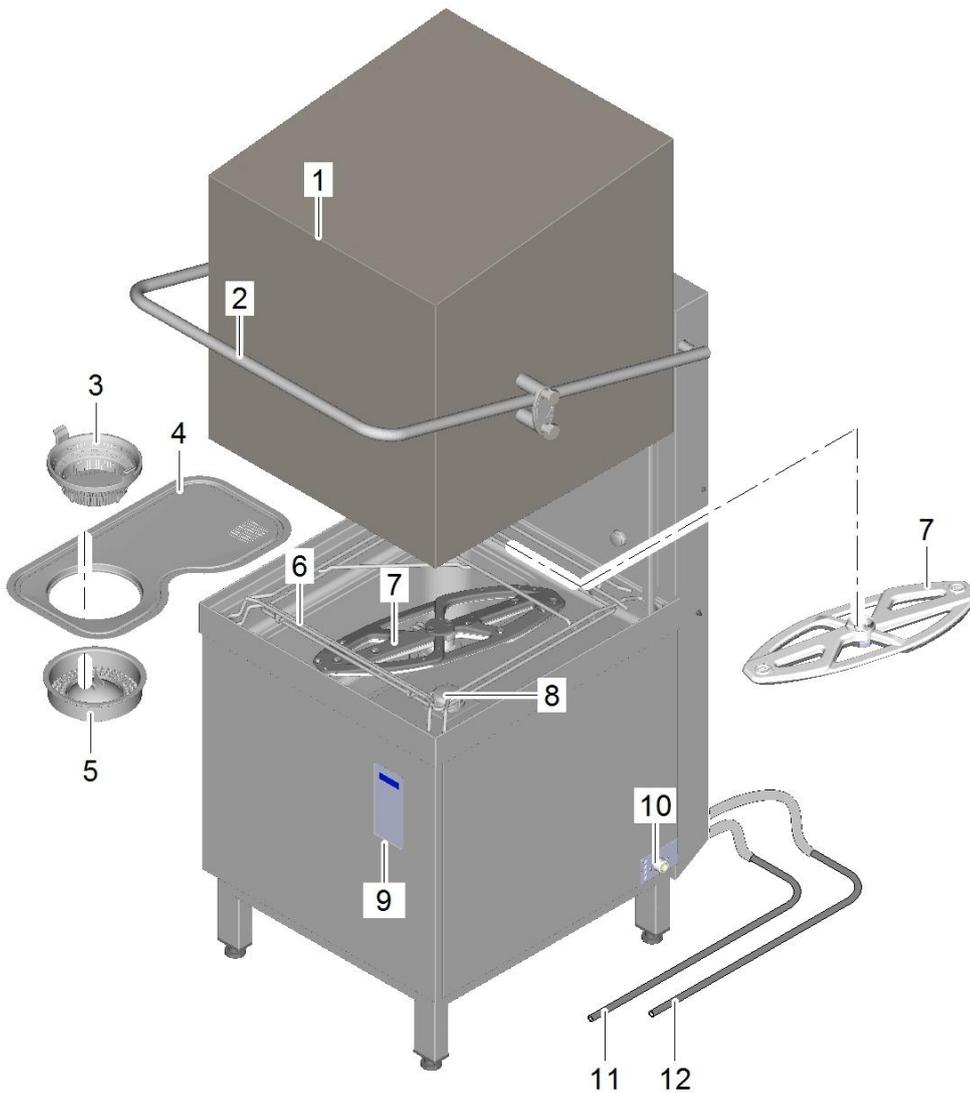
- Maintenance work and repairs may only be performed by authorised Winterhalter service technicians. Improper maintenance or repairs may cause significant danger for the user, for which Winterhalter is not liable.
- When performing maintenance and repair work, unplug the machine from the power network. 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 (► 14).
- Have the machine connected as per the locally applicable standards and the regulations by authorised mechanics (water, waste water, electrical system) (► 15 and 16).
- 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)	Hood
(2)	Handle
(3)	Filter basket
(4)	Strainer
(5)	Pump inlet filter
(6)	Rack guide
(7)	Rotating wash field

Pos.	Designation
(8)	Integral water softener (optional)
(9)	Operating panel
(10)	Connection for water supply hose and bushings for cables and hoses
(11)	Suction stick for rinse aid (blue dosing hose)
(12)	Suction stick for detergent (transparent dosing hose)

5.2 Operating panel and washing programmes



Pos.	Designation
(1)	Display
(2)	Standard programme (60 seconds)
(3)	Confirmation button (PIN menu only)
(4)	HighTemp programme (180 seconds)
(5)	On/Off button
(6)	Self-cleaning programme
(7)	Info button

INFO The HighTemp programme is pre-selected as soon as the machine is ready. In the display (1) the following symbol appears: . The standard programme can be selected by pressing the  button.

5.3 Mode of operation

After the machine is switched on, the boiler and tank fill up and warm up to the operating temperature. The display lights up in red during the warm-up phase. Detergent is dosed into the tank. When the desired temperatures are reached (tank: approx. 62 °C (HighTemp: 66 °C), boiler: approx. 85 °C), the machine is ready for use. The display is lit in green.

The machine has 2 different programmes. Irrespective of the programme, each wash cycle consists of the following steps: wash, rinse and drain. While a wash cycle in process, the display is lit in blue.

6 Rinse aid and detergent



Danger

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



Caution

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

IMPORTANT Replace the storage containers for rinse aid and detergent in time so that the cleaning result is not affected.

6.1 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 aids are automatically supplied from a storage container outside the machine into the boiler of the machine. The rinse aid dosing device is either an in-built or external component 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. When using an external dosing device, a transfer strip is available for connecting the dosing device (► 17).

6.2 Detergent



Caution

- Do not use acidic detergents.
- Do not mix different detergents in order to prevent efflorescence which could destroy the detergent dosing device (► 6.3).
- Do not use products that can create foam, e.g. hand soap, soft soap, hand wash liquid. Ensure that these do not enter the machine even during the pre-treatment of the dishes.

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.
- Automatically from an external container using a built-in or an external detergent dosing device.

INFO The detergent dosing device is not included in the scope of delivery of all machines. When using an external dosing device, a transfer strip is available for connecting the dosing device (► 17).

6.2.1 Manual dosing of detergent powder

Pre-dosing

- Switch on the machine and wait until the display is lit green.
- Adhere to the dosing instructions on the packaging of the detergent. The machine's tank capacity is approx. 28 litres.
- Place approx. 90 g of detergent powder in the machine. This corresponds to a dosing of approx. 3 g/l.
- Then start the wash cycle immediately to mix the detergent powder with the water.

Post-dosing

At each wash cycle fresh water enters the dishwasher. This water must be mixed with detergent powder as follows:

	Fresh water per wash cycle	Required detergent powder after 5 wash cycles
Standard	2.6 l	40 g
HighTemp	3.8 l	60 g

6.2.2 Automatic dosing of liquid detergent

The authorised service technician sets the dosing amount when commissioning the machine.

6.3 Changing the detergent product



Danger

- Mixing different detergents can lead to efflorescence that can lead to a failure of the detergent dosing device. This is applicable even if the new detergent is from the same manufacturer.
- The dosing hoses and the detergent dosing device must be thoroughly rinsed with water before the new detergent is used.

- A new detergent product usually requires a new setting of the detergent dosing device. Contact an authorised service technician to set the dosing amount.

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

Procedure:**Danger**

- Observe the safety precautions when handling chemicals and the dosage recommendations on the packaging.
- Wear protective clothing, protective gloves and protective goggles when handling chemicals.
- Do not mix different detergents.

- 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 (▶ 13). 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 (▶ 13), to replace the water in the dosing hose with detergent.

6.4 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 (▶ 13).

7 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.

7.1 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.

7.2 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.

8 Operation

8.1 Before switching on the machine



Warning

- For your safety, test the local residual current circuit breaker (FI) by pressing the test button.
- When handling chemicals, observe the safety notes and dosing recommendations printed on the packing.
- Wear protective clothing, protective gloves and protective goggles when handling chemicals.

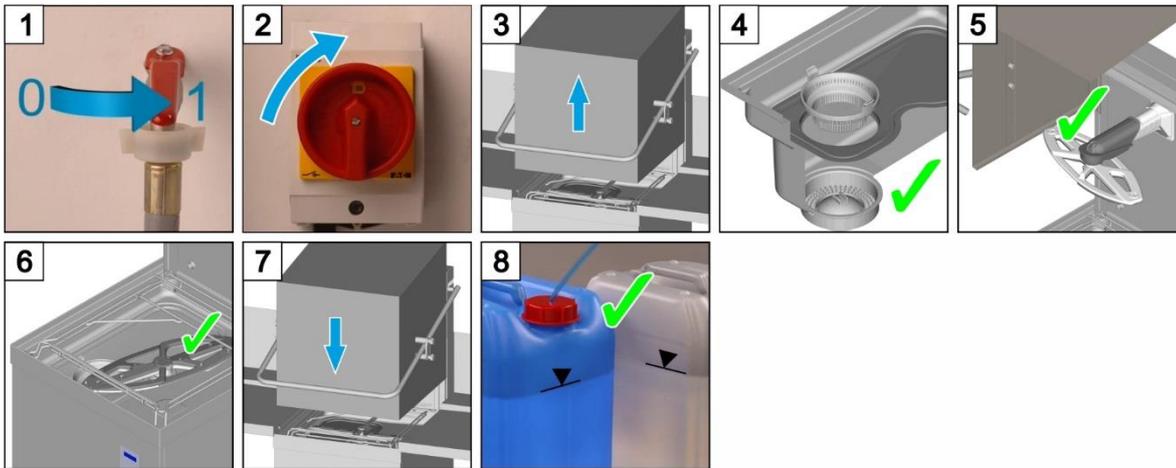


Caution

Possible risk of damage due to suction of items from within the machine e.g. pieces of cutlery

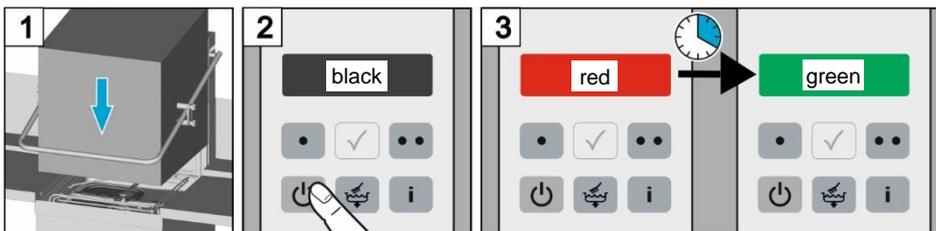
The pump inlet filter protects the circulating pump. Operate the machine only with the pump inlet filter fitted.

- Proceed in accordance with the following figures:
IMPORTANT Make sure the pump inlet filter is fitted (see figure 4: filter in bottom).



8.2 Switching on the machine and making it ready for operation

- Proceed in accordance with the following figures:



8.3 Washing



Caution

Possible risk of scalding from hot lye-mixed water

- Keep children away from the dishwasher. The lye-mixed water is at a temperature of approx. 62 °C (HighTemp: 66 °C).
- Do not open the hood while the machine is washing. There is a risk of hot lye-mixed water spilling out. Wait until the wash cycle is finished before doing so.

Possible risk of injury

- During operation the hood becomes hot. Therefore, only grasp the hood by the handle.
- Arrange sharp, pointed utensils so that they do not cause injury.

Risk of damage

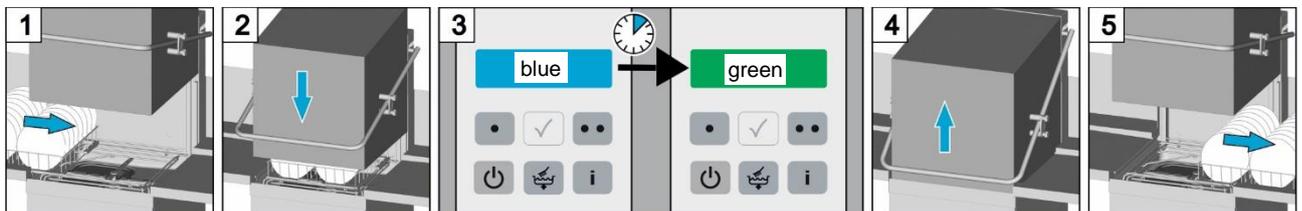
- Do not use the dishwasher to wash electrically heated devices or parts made of wood.
- Do not wash parts made of plastic if they are not heat and lye-resistant.
- Use a suitable detergent to wash parts made of aluminium such as jars, containers or plates in order to prevent black stains.

8.3.1 Preparing the dishes for washing

- Pre-rinse all dishes and pans with cold water.
- Remove food residues and pour out drink residue.
- Soak dried residues.
- Soak cutlery till it is rinsed.
- Light plastic parts may slip or turn when washing. Ensure such parts are weighted down.

8.3.2 Starting a wash cycle with the automatic hood start

- Choose a washing programme (► 5.2).
- INFO** The washing programme remains selected until a different washing programme is chosen.
- Proceed in accordance with the following figures:
- IMPORTANT** Make sure that the rotating wash fields can turn freely.



8.3.3 End of the programme

The display **flashes green**, as soon as the washing programme has ended and the hood remains unopened.

8.3.4 Changing the washing programme

- Select a new washing programme by pressing the  or  button.
 - ⇒ The symbol for the washing programme appears in the display.
- Close the hood.
 - ⇒ The washing programme is started.

8.3.5 Prematurely terminating a wash cycle

A wash cycle can be terminated prematurely by pressing the  or  button.

8.4 Switching off

Switch the machine off at the end of the working day using the self-cleaning programme so that it is cleaned and emptied every day (► 9.1.2).

INFO If you use the On/Off switch, 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.

9 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 detergent solution (filters, wash fields, ...).
- Do not use a scrubbing agent or an abrasive cleaner.

9.1 Daily cleaning

We recommend that you clean the machine daily to ensure optimum cleaning results.

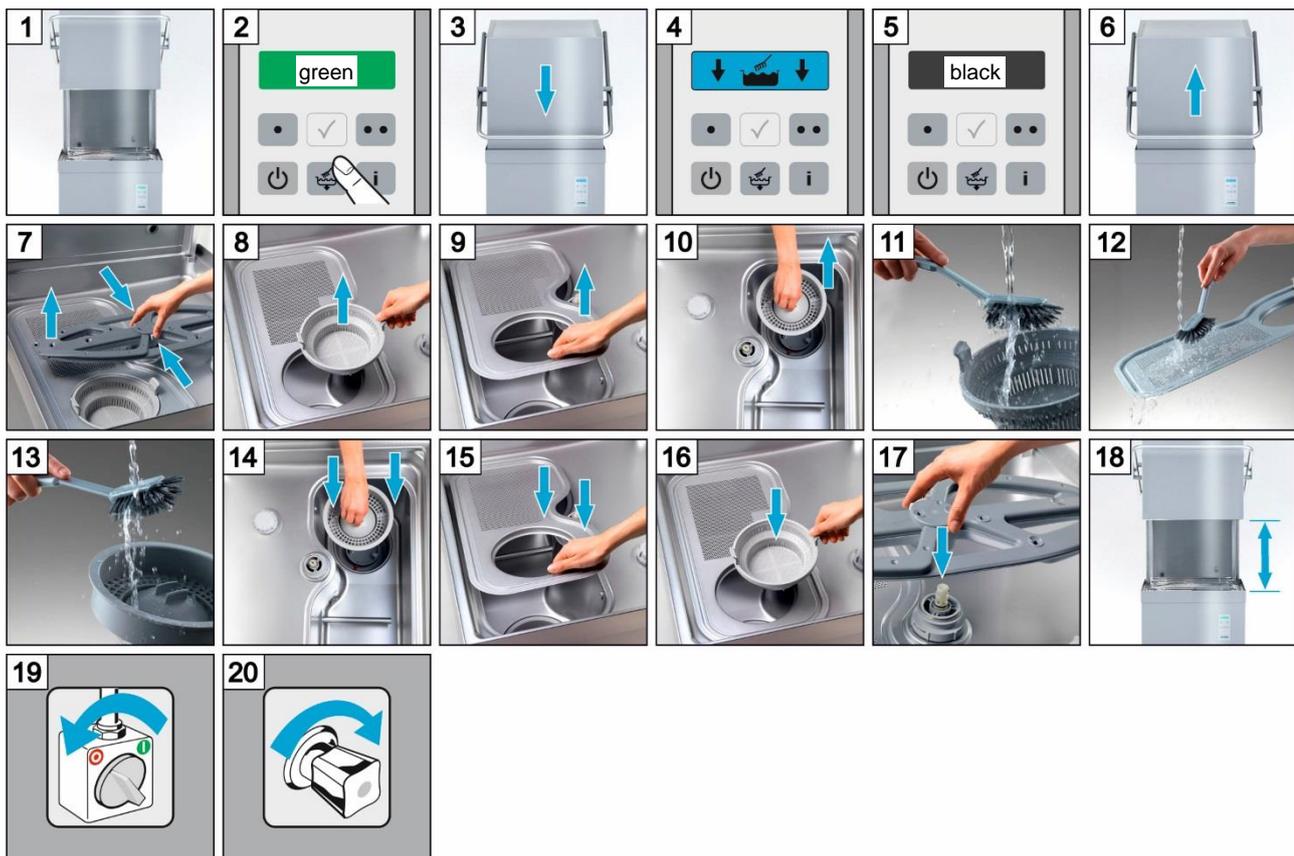
9.1.1 During operation

Remove the filter basket, clean if necessary and re-insert it.

9.1.2 Self-cleaning programme at the end of the working day

The machine is equipped with a self-cleaning programme that assists you in cleaning the interior of the machine.

➤ Proceed in accordance with the following figures:



Terminating the self-cleaning programme

- Press this button.
 - ⇒ The display is lit in red.
 - ⇒ The machine is filled again.



9.1.3 Manual cleaning of the machine interior



Caution

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

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

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

➤ Remove dirt with a brush or a cloth.

9.1.4 Cleaning the wash fields



9.1.5 Cleaning the exterior of the machine

- Clean the operating panel with a damp cloth.
- Clean the external surfaces using a stainless steel cleaner and stainless steel polish.
- Leave the hood open so that the interior can dry. This is important for long-term corrosion protection even in case of stainless steel.

9.2 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
- Pump hose in dosing device
- Water supply hose

10 Malfunctions

This chapter explains the remedies for malfunctions. The causes and remedies are specified in the tables. Contact the Winterhalter service technician if you cannot eliminate the error yourself.



Danger to life. Live components.

- Do not open any machine covers or machine parts if it requires tools. There is danger of shock.
- Only a Winterhalter service technician is to carry out work on the electrical system. The machine must first be disconnected from the mains.

Malfunctions are displayed in the display in the form of pictograms.

Pictogram	Meaning	Possible Cause	Remedy
	Hood is open	Attempted start of programme while hood is open	Close the hood.
	Lack of water	Water stop cock closed	Open the water stop cock.
		Dirt filter in the dirt trap is blocked	Have the dirt trap cleaned by a service technician or have a new dirt trap installed.
		Solenoid valve defective or blocked	Contact an authorised service technician for the repair.
	Lack of salt	Lack of salt	Refill salt (► 7.2).
	Strainer clogged	Very dirty strainer	Remove the filter basket and strainer, clean as necessary and re-insert them.
	Malfunction with error code	Various	Display the error code (► 12) and assign the repair to an authorised service technician.

10.1 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.

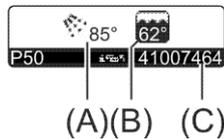
	Possible Cause	Remedy
The dishes do not get clean	No or low detergent dosing	Contact an authorised service technician to set the dosing amount.
		Check dosing hose (for kinks, breakage, ...) Replace the storage container if empty.
	Dishes incorrectly sorted	Do not stack dishes one over the other.
	Jets of the wash fields blocked	Remove the wash fields and clean the jets.
	Temperatures are too low	Check temperatures (► 11)
There is formation of layers on the dishes	In case of limescale deposits: The water is too hard	Check external water treatment.
	In case of starch residues: Excessively high temperatures during manual pre-cleaning (hand shower)	The temperature of the manual pre-wash should be a maximum of 30 °C
The dishes do not dry on their own	No or low rinse aid dosing	Contact an authorised service technician to set the dosing amount.
		Check dosing hose (for kinks, breakage, ...) Replace the storage container if empty.
	Rinse temperature is too low	Contact an authorised service technician to set the temperature.

11 Info level

In the info level you can retrieve the serial number and the current temperatures in the boiler and tank.

Accessing the info level

- Press the  button.
- ⇒ The following information is shown in the display:



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

Leaving the info level

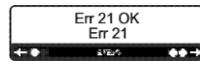
- Press the  button three times.

12 Error memory

All errors with an error code are saved in the error memory. The error that occurred last is displayed first.

Accessing the error memory

- Press the  button.
- ⇒ The temperatures are displayed.
- Press the  button again.
- ⇒ The error memory will be displayed.



Display	Explanation
ERR xx	Malfunction
ERR xx OK	Malfunction resolved
ON ↑	Entry is generated by turning on the machine

Navigating in the error memory

- Press the  button several times.
- ⇒ Older errors are displayed.
- Press the  button several times.
- ⇒ Newer errors are displayed.

Leaving the error memory

- Press the  button twice.

13 PIN Menu

In the PIN menu you can prime the dosing devices and programme the transfer strip for the connection of an external dosing device (► 17.3).

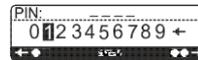
Explanation of the buttons



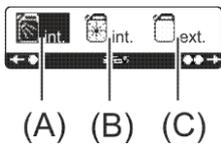
(1)	Cursor left or reduce value
(2)	Confirm
(3)	Cursor right or increase value
(4)	Back

Accessing the PIN Menu

- Press the button three times.
⇒ The PIN input mask is displayed.



- Enter PIN 1575. To do this, select the individual figures with the or button and confirm each figure with the button.
⇒ The following selection is shown in the display:



(A)	Priming the integral detergent dosing device
(B)	Priming the integral rinse aid dosing device
(C)	Setting for external dosing devices (► 17.3)

Leaving the PIN Menu

- Press the button.

(A) Priming the integral detergent dosing device



= Output screen

- Confirm with the button.
⇒ The next screen is displayed.
- Keep the button pressed.
⇒ The dosing device is primed.
- Go back with the button.
⇒ The output screen is displayed.

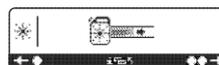


(B) Priming the integral rinse aid dosing device



= Output screen

- Press the button.
- Confirm with the button.
⇒ The next screen is displayed.
- Keep the button pressed.
⇒ The dosing device is primed.
- Go back with the button.
⇒ The output screen is displayed.



14 Installing the machine and tables

Notes for the service technician or dealer authorised by Winterhalter:

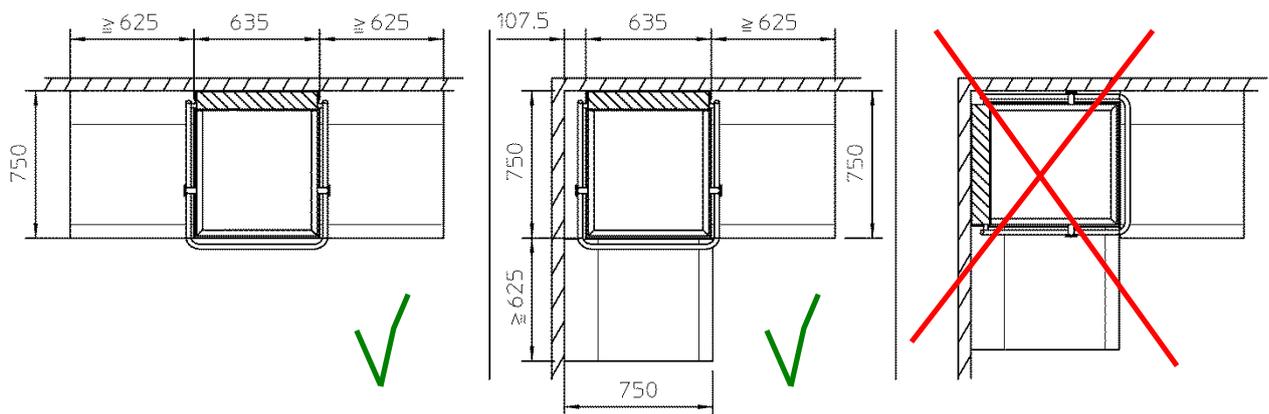
- Observe the connection diagram for **detailed** information.
- The installation site must be frost-resistant so that the water systems do not freeze.

14.1 Installing the machine

INFO No gap is required between the wall and rear of machine.

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

Installation variants

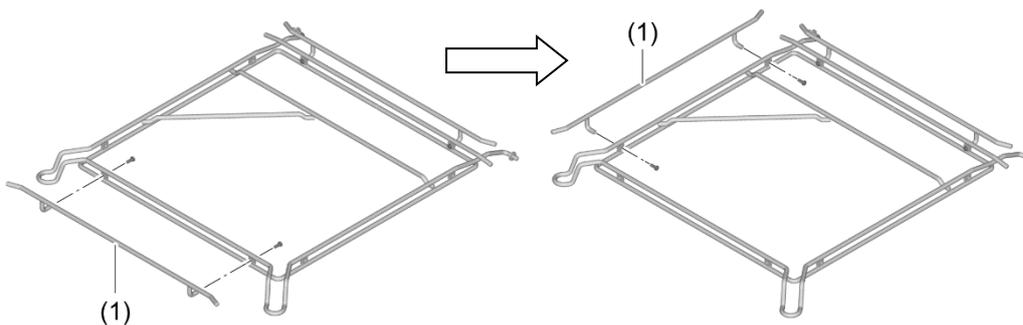


14.2 Attaching tables

- Refer to the table connection drawing (on request).

14.3 Rack guide conversion

INFO If the machine is installed in a corner, the rack guide must be converted.



- Unscrew the front guide bar (1) and attach to the left side of the rack guide.

With separately available guide bars, the rack guide can be converted to the following rack sizes and wall distances:

Rack size	Distance between the wall and rear of the rack guide
500 x 500 mm	170 mm
530 x 530 mm	155 mm
500 x 500 mm	140 – 150 mm

15 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.

15.1 Requirements for the on-site inlet water connection

Water quality	The inlet water must in microbiological aspects have the quality of drinking water
Water inlet temperature	max. 60 °C
Water hardness	≤ 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

15.2 Requirements for the on-site water stop cock

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

15.3 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.



Right 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.

15.4 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 650 mm.



Back view

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

16 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.

16.1 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

16.2 Establishing an earth connection

- Connect the machine into the equipotential bonding system.

INFO The terminal screw is located behind the right rear leg of the machine. It is identified with the  symbol.

17 External dosing devices

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

17.1 Terminals



Danger

Danger to life. Live components.

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



1	Detergent dosing nipple
2	Transfer strip for the connection of external dosing devices
3	Rinse aid dosing nipple
4	Circuit diagram

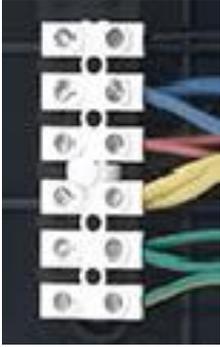
INFO On the right side of the machine, there are bushings for cables and hoses.

17.2 Electrical connection

IMPORTANT maximum current drain at the transfer strip: 0.5 A.

- Connect the external dosing device to the 6-pin terminal.

Terminals

	Cable colour	Terminal	Setting	Voltage is	Restriction
	Black	L1		continuous voltage	
	Blue	N			
	Red	RINSE	 ext. = 0	while the rinse pump is running	a), c), d)
			 ext. = 1	parallel to solenoid valve	c)
			 ext. = 2	only for integral Winterhalter dosing devices	
	Yellow	WASH		while the circulating pump is running	a)
	Green	FILL	 ext. = 0	while the machine is filling	a), b)
			 ext. = 1	parallel to solenoid valve	c)
			 ext. = 2	only for integral Winterhalter dosing devices	
	Green-yellow	PE			

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

- Set the dosing amount at the dosing device.

17.3 Settings

Checking and changing the settings

- Chose the required settings for detergent and rinse aid in the table above.
- Check the settings and change if necessary by pressing the following buttons in turn:

3x  ⇒ Enter "1575".
 (select the individual figures with the  or  button and confirm each figure with the  button) ⇒  ⇒ 

⇒ The setting (detergent) is displayed (number flashes).



➤ If necessary, change with the  button.

➤ Confirm with the  button.

⇒ The input is confirmed.



⇒ The setting (rinse aid) is displayed (number flashes).



➤ If necessary, change with the  button.

➤ Confirm with the  button.

⇒ The input is confirmed.



⇒ The new setting (rinse aid) is displayed (number flashes).



➤ Press the  button three times to leave the PIN Menu.

18 Decommissioning 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 (► 9.1.2).
- Clean the machine (► 9.1.3 and 9.1.4).
- Leave the hood open.
- 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.
 - The engineer must drain the boiler, pump, solenoid valve and any chemical dosing system attached to the machine.

19 Recommissioning 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:

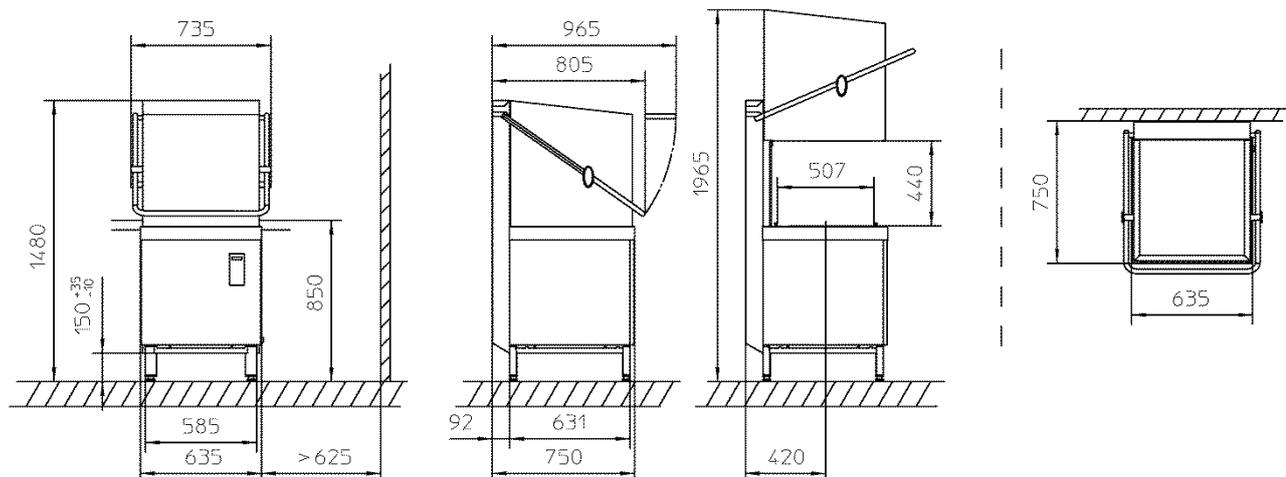
After extended periods of disuse, the machine must be completely climatized (at least 24 hours at 25 °C). If this requirement is met:

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

20 Technical data

Voltage	see rating plate
Total connected load	
Fuse	
Minimum flow pressure	► 15.1
Maximum inlet pressure	
Water inlet temperature	

Dimensions



21 Emissions

Noise

Workplace-related emission sound pressure level $L_{eq} < 63$ 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.

