

Operating instructions

for Winterhalter Gastronom utensil washer GS 640, GS 650, GS 660

Contents

1	Intended use	1
2	Installation and commissioning	1
3	Safety instructions.....	2
4	Operating panel.....	3
5	Functions of the utensil washer	4
6	Wash programmes.....	4
7	Before washing	5
8	Washing	8
9	Changing from normal programme to special programmes	9
10	Changing the programme setting.....	11
11	After washing	12
12	Maintenance and care	14
13	Faults	16
14	Emission values	17

Operating instructions

for Winterhalter Gastronom utensil washers **GS 640, GS 650, GS 660**

These operating instructions must always be kept within easy reach of the utensil washer.



Failure to observe this sign can lead to danger to life.



Failure to observe this sign can lead to damage to the utensil washer.



This sign indicates that the use of high pressure cleaners or steam jet cleaners is prohibited.



This sign indicates recommendations or special features.

1 Intended use

The **Winterhalter Gastronom utensil washers GS 640, GS 650 and GS 660** may only be used for washing items and utensils from the catering industry and related trades (butcher shops, bakeries). Any change in design or use of the utensil washer carried out without the written permission of Winterhalter Gastronom GmbH leads to the guarantee and product liability becoming null and void. If damage is caused to the utensil washer due to failure to observe the instructions given in this manual, no claims under guarantee can be made to Winterhalter Gastronom GmbH.

2 Installation and commissioning

Installation of the utensil washer and connection to the customer's water inlet, waste water drainage and electricity connections are to be carried out in accordance with national and local criteria by qualified engineers in accordance with the "Installation instructions for Winterhalter Gastronom utensil washer". Main fuses and main switch to be provided by customer.

After proper connection to the customer's water and electricity connections, contact the Winterhalter works representative for your area.

Commissioning (so-called washing in) and instruction in operating the utensil washer is to be carried out by the Winterhalter customer service. For this purpose, use the „Commissioning regulation for Winterhalter Gastronom dishwashers GS 502/GS 515/GS 640/GS 650/GS 660“.

3 Safety instructions



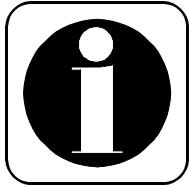
- The utensil washer only may be used after the operating instructions have been read and understood. Ensure that the operator has received instruction in the operation and functions from a Winterhalter customer service representative.
- Only operate the utensil washer in the manner described in these operating instructions.
- In the event of danger or faults, switch the dishwasher off immediately. Switch off customer's main switch. Only then is the utensil washer safe.
- Do not open any machine casings or machine parts if tools are necessary to do so.
- Work on the electrical equipment is only to be carried out by specialist personnel. First disconnect the utensil washer from the mains.
- The water in the utensil washer is not drinking water. Do not use it to prepare food or drink it.
- In the event of faults which are not due to the customer's water or electricity supply, contact the Winterhalter customer service department.
- In the event of a fault of which the cause is unknown, do not switch the utensil washer on again until the cause has been established. If necessary, contact the Winterhalter customer service department.



- Only use detergent and rinse additive which are suitable for industrial utensil washers.
We recommend the products developed by Winterhalter Gastronom. These are specially developed to suit Winterhalter Gastronom utensil washers. All quantities given refer to Winterhalter Gastronom products. Observe danger instructions printed on packaging.
- During daily cleaning, make sure that no rusting foreign bodies remain inside the utensil washer. This can cause the interior to rust. The rust particles may come from washed non-stainless items, cleaning aids, damaged wire baskets or from supply lines which have not been rust proofed.
- Leave the door open until the next time you put the machine into operation, so that the inside of the machine can dry out. This is important for long-lasting protection against corrosion, even with high grade stainless steel.
- Protect the utensil washer against frost. Systems carrying water can be damaged if they freeze.
- Do not use normal washing-up liquid. This leads to large amounts of foam building up in the utensil washer.



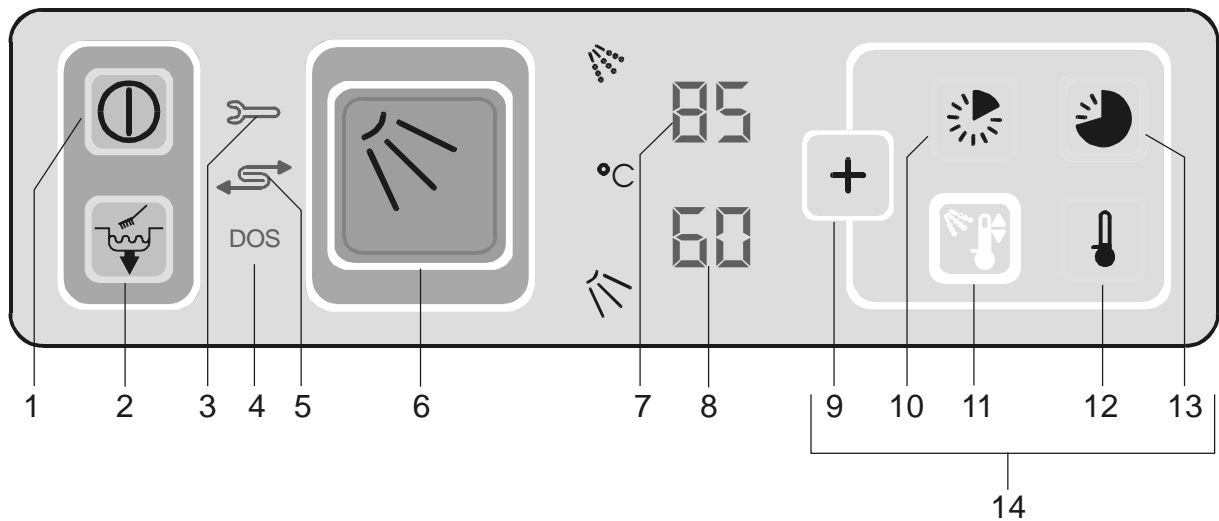
- The utensil washer is hoseproof (IP X5). However, do not spray the outside with a high pressure or steam jet cleaner.



- Check the customer's required FI-residual current operated device for faults regularly according to the regulations by pressing the test button.
- In addition to daily cleaning, we recommend that you have the utensil washer serviced at least twice a year by a Winterhalter customer service engineer.

4 Operating panel

The operating panel is situated on the bottom casing.



- 1 On/Off switch
- 2 Tank drainage / Self cleaning
- 3 Control lamp for fault
- 4 Control lamp for lack of detergent or rinse additive (optional)
- 5 Control lamp for connected water treatment (optional)
- 6 Programme button normal programme
- 7 Temperature display - Boiler
- 8 Temperature display - Tank
- 9 Activates special programmes (10-13)
- 10 Short programme
- 11 Not allocated
- 12 Reduced temperature rinse (optional)
- 13 Intensive programme
- 14 Button area for special programmes

5 Functions of the utensil washer

After the machine is switched on, the boiler and tank are filled and heated up to operating temperature. The programme button (6) is lit red during the heating up phase.

As soon as the pre-set target temperatures (tank: approx. 60°C, boiler : approx. 85°C) have been reached, the machine is ready for operation. The programme button (6) is now lit green.

The machine is operated with fully automatic programmes consisting of the program steps washing, dripping off and rinsing.

The rinse additive is dosed by a built-in dosing device. With GS 660, the container for the rinse additive can be stored inside of the machine. With the other machines it is stored separately.

Detergent must be added by hand (in the form of powder) or by means of a built-in or external dosing pump (in the case of liquid detergent), depending on the equipment of the machine. With GS 660 the container for the detergent can be stored inside of the machine. With the other machines, it is stored separately.

Washing: The circulating pump conveys the wash water out of the tank via the wash arms and nozzles onto the wash items. The wash arms move thereby side to side, thus guaranteeing powerful and efficient cleaning of the wash items. During circulation the wash water is continuously circulated through a filtering system and the patented Mediamat Cyclo (floating particle separator).

Dripping off: There is a short pause after washing to allow the wash water to drip off the washing items.

Rinsing: During the last programme step, the cleaned items are rinsed with fresh, hot water to remove residual water and to warm up the wash items for optimum drying outside of the machine. In addition, the rinse water refreshes the wash water.

6 Wash programmes

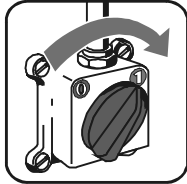
The utensil washer can be operated with various wash programmes. The respective wash programme is selected by means of the control panel.

Programme	Description
Normal programme (6)	Normally soiled items Medium drying time
Short programme (10)	Lightly soiled items Short/no drying time
Intensive programme (13)	Heavily soiled items Long drying time
Normal programme with cold water pre-rinse (optional) (12)	Items with protein-containing soiling Coagulation is prevented by rinsing with cold water.
Tank drainage / self-cleaning (2)	Automatic cleaning of the machine: The wash pump is activated for 30 sec. to clean the wash tank. The soiled wash water is pumped off and then the interior of the machine is rinsed with fresh water. When the cleaning programme is finished, the utensil washer switches off automatically.

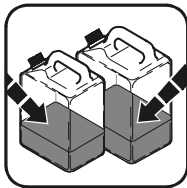
7 Before washing



Turn water stop valve to open position.



Switch on customer's main switch.

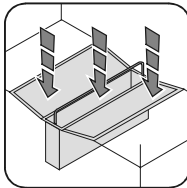


Check level in rinse additive container and detergent container (only with automatic detergent dosage).

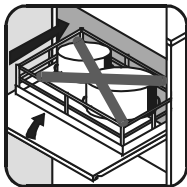
Replace or fill up empty containers.



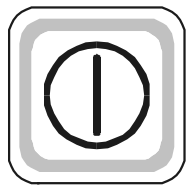
Observe safety instructions on packaging.




Check whether the flat filters, the basket filter and the filter in the floor of the tank (drainage filter) are installed.



Do not load wash items at this stage.
Close door.



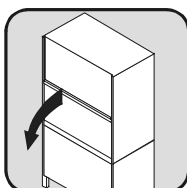
Press On/Off switch (1), heating up phase begins.

Programme button  is lit red: the tank is filled in stages over the boiler and heated up.

Programme button  is lit green: Filling and heating up phase completed.



Door must remain closed during filling / heating up.

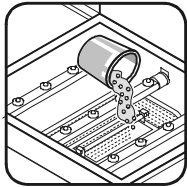


Open door.

● Detergent dosage

If the utensil washer is fitted with a built-in or external detergent dosing pump, there is no need for manual dosing. In this case, detergent dosing is carried out automatically by the utensil washer. With an external detergent dosing pump, please observe the operating instructions supplied with it.

Manual detergent pre-dosage:



Pour detergent powder into basket filter with cup.



We recommend Winterhalter Gastronom detergent powder. Observe the recommended dosage printed on the instruction label.



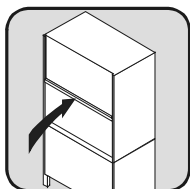
Observe safety instructions on the detergent packaging.

Pre-dosage table when using the Winterhalter Gastronom Detergent P 65:

	Tank volume	Dosage quantity (*)	Winterhalter measuring cup
GS 640, GS 650	85 l	255 g	1
GS 660	125 l	375 g	1 1/2

(*) The need for greater quantities of detergent must be accounted for in case of heavily soiled wash items or e.g. extreme water hardness.

Other detergents must be dosed according to the information stated on the detergent packaging.



Close door.



Start normal programme. For this, *press* button (6). Detergent powder is mixed with wash water.

The utensil washer is now ready for operation.

Manual addition of detergent:



Manual addition of the detergent powder must be repeated after approx. every 5 wash cycles. When manually adding detergent, add the quantity of detergent powder according to the table into the basket filter. Then start the wash programme.

Table for manual addition when using the Winterhalter Gastronom Detergent P 65:

	Fresh water rinsing	Dosage quantity (*)	Winterhalter measuring cup
GS 640, GS 650	approx. 5 l/basket	75 g	1/2
GS 660	approx. 7.5 l/basket	110 g	3/4

(*)The need for greater quantities of detergent must be accounted for in case of heavily soiled wash items or e.g. extreme water hardness.

Other detergents must be dosed according to the information stated on the detergent packaging.

● Changing the detergent type (liquid product)

If changing to a different **detergent type** (even one by the same manufacturer), the suction and pressure hoses must be rinsed with fresh water before connecting the new detergent container.

Otherwise, the mixing of different types of detergent will cause crystallisation, which may result in a breakdown of the dosing pump.

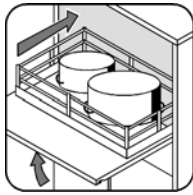
Failure to observe this rule will lead to the loss of guarantee and product liability claims vis-à-vis Winterhalter Gastronom GmbH.

Procedure:

- Remove the suction stick from the empty detergent container and place it in a container filled with fresh water.
- Trigger several wash programmes until fresh water is visibly pumped into the machine over the dosage pump. The suction and pressure hoses are rinsed thereby.
- Insert the suction stick in the new detergent container. Operate the machine as usual.

8 Washing

Before the washing items are loaded into the machine, they should be scraped clean of the largest leftovers and scraps: pour off leftover gravy, soak dried on leftovers. Do not use steel sponges to do this, because the machine could be contaminated with rust thereby.

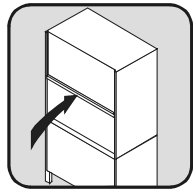


Wash items such as buckets, pots, cauldrons, ham roasting dishes etc. must be placed into the utensil rack with the opening facing downwards. The empty intermediate spaces can be filled with small utensils such as ladles etc. The wash items should however not be laid on top of each other because spray shadows may be created and thus possibly affect the washing result.

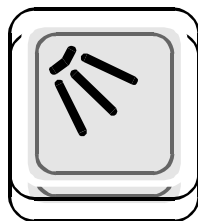
When washing baking sheets, put these into the insert with forward slant. Ensure that the soiled sides face downwards.

Use the plastic small parts basket to wash cutlery and other small parts. After it is filled it is mounted on the utensil basket. Sort knives and other sharp objects into the upright cutlery basket with the handles facing upward. Long, sharp utensils must be laid in the wash basket or be washed by hand.

Light parts made of e.g. plastic can easily slip or turn over during washing. Put a plastic basket on these light parts if necessary.

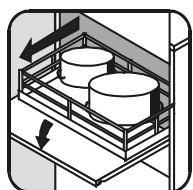


Close door.



Select wash programme:
Press programme button (6), wash programme starts.
Programme button (6) is lit blue.

Programme button (6) is lit green:
Wash programme completed



Open door.
Pull out wash basket.
Remove items and check for cleanliness and allow to air dry outside of the machine.




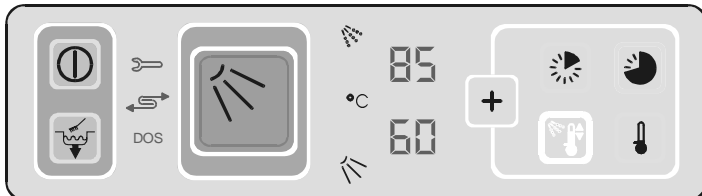
- Check basket filter for blockages from time to time and clean if necessary. The basket filter can be removed without having to drain the tank first.
- Check tank water for soiling. If necessary, drain and re-fill machine.
- During wash pauses the door should remain closed to avoid unnecessary losses of heat and restriction of the freedom of movement around the machine.

9 Changing from normal programme to special programmes

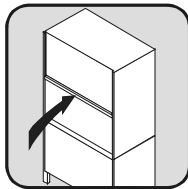


Before changing from normal programme to special programmes (short programme, intensive programme or normal programme with reduced rinse temperature), the button area with the special programmes must first be activated. This also displays the tank and boiler temperatures (however not during the programme).

To do this *press* function button .



The button area with the special programmes is activated. The tank and boiler temperatures are displayed.




Close door

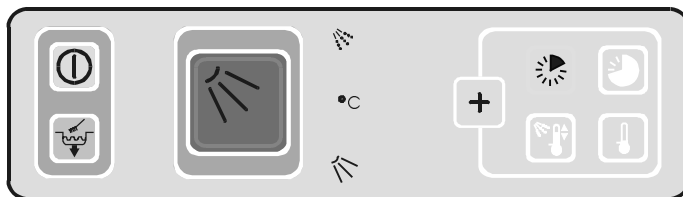
● Short programme or intensive programme

Depending on the level of soiling on the wash items, *select* one of the two special programmes:

Short prog.: Press  and then 

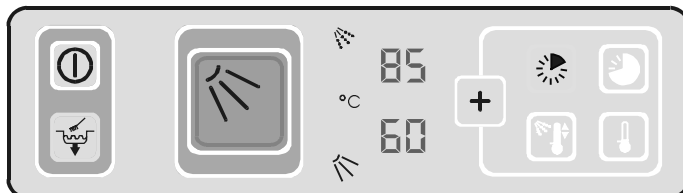
or

Intensive prog.: Press  and then 



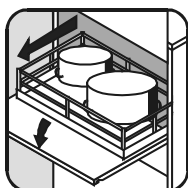
Example: Operating panel display during wash cycle with **short programme** selected.

Button  is lit blue.



Operating panel at end of programme

Button  is lit green.



Open door.
Pull out washing rack.
Remove wash items.
Close door or load in more wash items and clean.

Every further wash cycle is run with this setting until either another program or the plus button is pressed.

- **Normal programme with reduced temperature rinse (optionally available)**

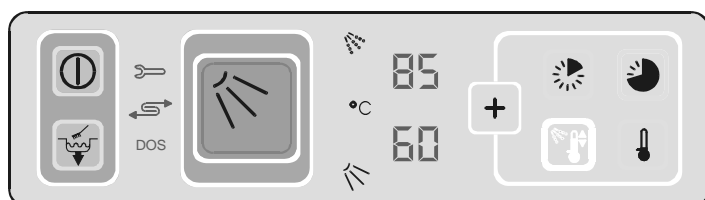


This device is used to rinse off **protein-containing soiling (remains of meat and blood)** from the wash items to prevent the protein from coagulating with the wash water during cleaning.


The machine can be equipped with **manual reduced temperature rinse**, then it is possible to select whether reduced temperature rinse is run or not; or with **automatic reduced temperature rinse** – then reduced temperature rinse is run before every wash cycle.

Manual reduced temperature rinse

Condition for continued operation: The button area with the special programmes has been activated (buttons 10, 12 and 13 are lit), the wash items are in the machine and the door is closed.




Press button: 

Select normal programme: 

At the start of the rinse program the wash items are rinsed with cold water. Rinsing is followed by the normal cleaning cycle with hot wash water and hot fresh water rinse.

Every further wash cycle is run from now on with this setting until either another programme (short or intensive) or the plus button is pressed.

Automatic reduced temperature rinse

At the start of the programme the wash items are always rinsed with reduced temperature. The function button  cannot be selected.

Note for manual addition of detergent:

Please note that the concentration of detergent in the wash water diminishes more rapidly when the reduced temperature rinse is used. Therefore add somewhat more detergent when this facility is continually in use.

Addition table when using Winterhalter Gastronom Detergent P 65:

	Fresh water rinse	Dosage quantity (*)	Winterhalter measuring cup
GS 640, GS 650	ca. 5 l/basket	110 g	$\frac{3}{4}$
GS 660	ca. 7,5 l/basket	165 g	1

(*)The need for greater quantities of detergent must be accounted for in case of heavily soiled wash items or e.g. extreme water hardness.

Other detergents must be dosed according to the information stated on the detergent packaging.

10 Changing the programme setting

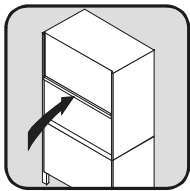


Changing the programme setting for the special programmes and for the normal programme can be carried out with the door open or closed.

● Changing between the special programmes



Select desired programme (press button). The previously selected programme is thus cancelled.

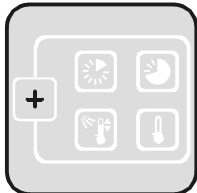



Close door.



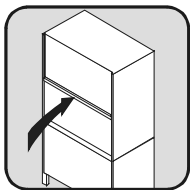
Press programme button.

● Changing from special programme to normal programme



Press function button. 

The button area with the special programmes is no longer lit.



Close door.

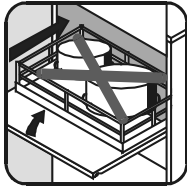


Press programme button.
Normal programme starts.

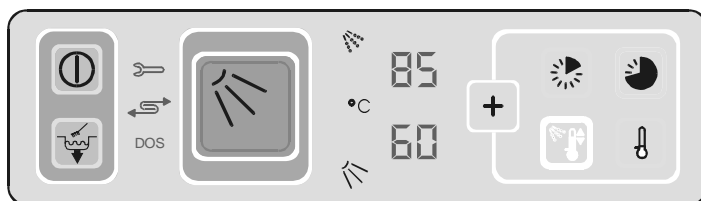
11 After washing


● Tank drainage / self-cleaning

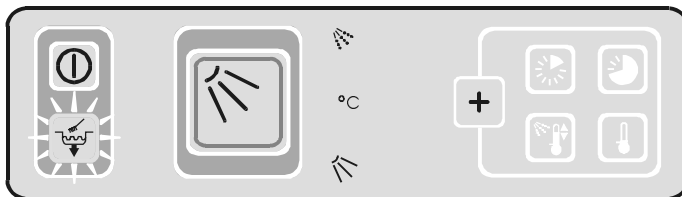
With the cleaning programme, the interior of the utensil washer is cleaned. The wash pump operates for 30 sec. The dirty wash water is pumped off. The utensil washer switches off automatically after the cleaning programme has finished.



Remove wash items, *push* wash basket into the machine, *close* door.

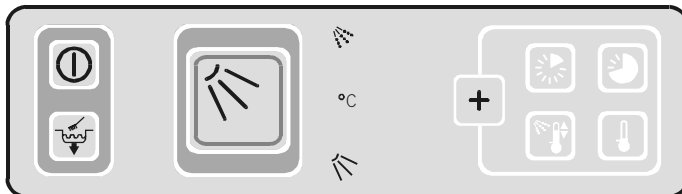


Hold down function button  for 2 seconds.

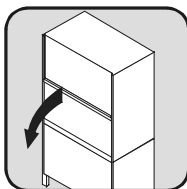


Operating panel display during the cleaning programme.

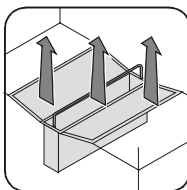
Button  flashes.



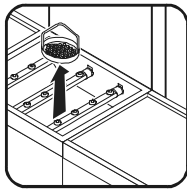
Operating panel display at end of programme.



Open door



Remove and *clean* basket filter and flat filter.



Remove and *clean* drainage filter.

Check the interior of the machine for cleanliness. Remove any remaining dirt with a brush if necessary. Do not use steel sponges to do this because otherwise the machine could be contaminated with rust.



Re-insert the parts removed after cleaning.



- Leave door open. In this way the interior can dry out.
- Clean the outer walls of the utensil washer with cleaning products for high grade stainless steel.
We recommend Winterhalter Gastronom high grade stainless steel cleaner and Winterhalter high grade stainless steel protection.

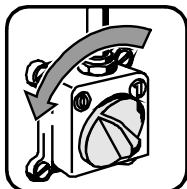
● Switching off



After the cleaning programme has finished, the control of the dishwasher is switched off. The machine is not yet safe, however.

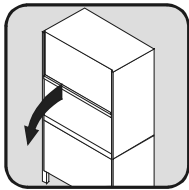


Turn water stop valve to closed position.

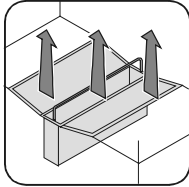


Switch off customer's main switch.
Now the machine is safe.

12 Maintenance and care



Open door.



Remove and *clean* basket filter and flat filter.

Remove wash arms and *check* jets for blockages, *clean* if necessary.

Remove drainage filter, *check* for blockages and *clean* if necessary

Free machine interior from remains e.g. with a brush

Insert filters and wash arms again.

Clean the supply filter after the water stop valve.



Clean the outer walls of the utensil washer with special cleaning products for high grade stainless steel. We recommend Winterhalter Gastronom high grade stainless steel cleaner and Winterhalter high grade stainless steel protection.

● Descaling

Drain machine.

Interrupt detergent supply: Remove suction pipe from the detergent canister.

Re-fill machine.

Addition of the descaling solution according to manufacturer's instructions.



Observe the printed safety instructions.

Trigger intensive programme once or twice (max. 10 minutes circulation). This loosens the coating of scale.

Drain machine.



Never leave the descaling solution in the machine for a period of several hours.

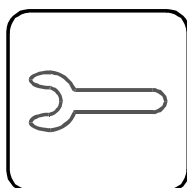
Put detergent supply into operation again.

Re-fill machine..

Operate machine twice more in the intensive programme.




Drain machine or use for the current wash programme.

13 Faults

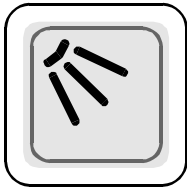


If the symbol for a fault lights up, the utensil washer must be switched off (press On/Off switch).

Following this, the **Err** sign lights up with the fault code.
For information on faults, see following table.

Display	Fault	Cause/Effect	Remedy
	Utensil washer does not start up	Customer's main switch is not switched on	Switch on customer's main switch
	Wash programme does not start	Door is not completely closed	Close door completely.
	Items are not clean	Too low dosage of detergent or detergent container empty Basket filter and/or flat filter blocked Wash jets in the wash arms blocked Functional fault in the water treatment	Fill up detergent container or add detergent powder Clean basket filter and flat filter Clean wash jets Call Winterhalter service engineer
	Numbers 1, 11 or 12	Utensil washer switches off completely Utensil washing cannot be switched on again	Call Winterhalter service engineer
	Numbers 5, 13, 15	Main water stop valve closed Utensil washer not completely ready for operation	Open main water stop valve Call Winterhalter service engineer
	Numbers 2, 3, 4, 6, 7, 8, 9, 10	Utensil washer not completely ready for operation	Call Winterhalter service engineer

● **Error alarm via programme key 6**



This key lights up or flashes in **red** whenever a temperature exceeds the set-point value:

- **Continuous light:** Temperature in boiler or tank is below the setpoint value (only during initial heating). As soon as the setpoint values are reached, the key lights up in green.
- **Flashing light:** The temperature in boiler or tank is greater than 95°C.



Danger of scalding: Switch off the machine immediately. The fault symbol (3) and error code **Err 2** or **Err 3** will then appear. Notify the Winterhalter customer service team immediately. Do not switch on the machine again.

● **Error alarms in machines with optional extras**

	<p>Peak load cut-off active</p>	<p>The utensil washer is not completely ready for operation</p>	<p>Wait until the peak load cut-off switches on the machine completely again. The display ECO goes out.</p>
	<p>Lack of detergent or rinse additive</p>	<p>The utensil washer is not completely ready for operation</p>	<p>Re-fill detergent or rinse additive</p>
	<p>Fault in the online water treatment plant</p>	<p>The utensil washer is not completely ready for operation</p>	<p>Read the relevant manual</p>

14 Emission values

Noise emission values

Workplace related emission value measured according to DIN EN ISO 11202: $L_{pAeq} < 70dB$