

# Wexiödisk<sup>W</sup>

## TRAY DISHWASHER WD-215T

(Translation of original documentation)

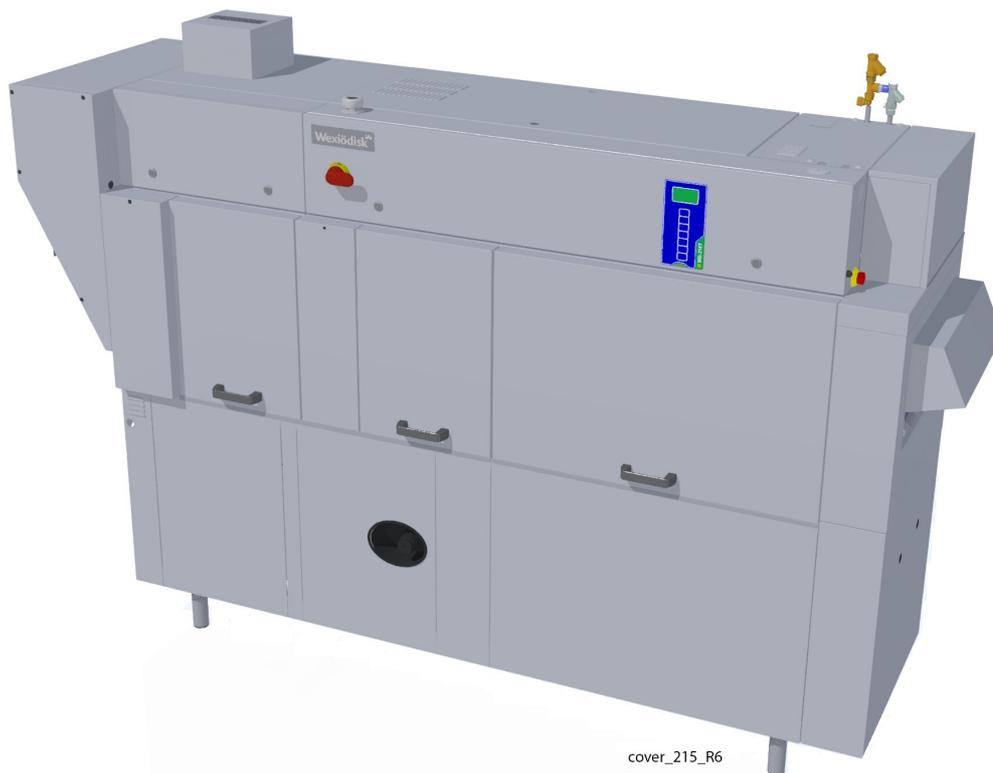


Read the manual before using the machine!

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## Installation and user manual

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# 1. General instructions

Read the instructions in this manual carefully as they contain important information regarding the correct, effective and safe installation, use and servicing of the machine. Service personnel should have access to all documentation for the machine.

Keep this manual in a safe place so that it can and should be used by other operators of the machine.



- The machine is intended to be used for washing trays found in the general catering and restaurant trade. Other uses are NOT recommended!
- The machine can be equipped with a number of different options. Certain options may be standard in a number of countries. Check what your machine is equipped with.
- The machine's display indicates what the machine is doing. The machine's various temperatures and any alarms are also shown.
- The capacity requirements of the machine can be found in the TECHNICAL DATA chapter.
- The electronics in the machine are RoHS compatible.

Before the machine is started up and used, the following points should be observed:



- The SAFETY INSTRUCTIONS chapter must be studied carefully before commissioning the machine.
- Installation of the machine must be performed in accordance with the requirements and instructions indicated in the INSTALLATION INSTRUCTIONS and TECHNICAL SPECIFICATIONS chapters.
- Any personnel who may at some point use the machine must be trained in its operation, use and care.
- The machine should not be used by anyone suffering from a physical or mental illness.
- A close eye should be kept on any children in the vicinity of the machine to ensure they do not tamper with it.
- All cover plates must be installed during use.



The machine and equipment requires an annual service. Contact one of our authorised and trained service companies for such a service.

## General instructions

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### 1.1 Symbols used



This symbol warns of situations where a safety risk may arise. The instructions given should be followed in order to prevent injury and dangerous situations.



This symbol on a machine part warns of electrical equipment. The machine must be entirely non-live during servicing, turn off the power at the power switch and if required, the switch should be locked to prevent unintentional operation. The component may only be removed by a qualified electrician.



This symbol warns that the machine's electronics are sensitive to electrostatic discharge (ESD), which is why a static electricity wristband must be used when handling the electronics at all times.



This symbol explains the right way to perform a task in order to prevent poor results and/or damage to the machine.



This symbol identifies recommendations and hints to help you get the best results when washing, to increase the machine's lifespan and reduce the risk of emergency shutdown.



This symbol explains the importance of careful and regular cleaning of the machine to meet hygiene requirements.



This symbol warns of the importance to read the manual before using the machine.



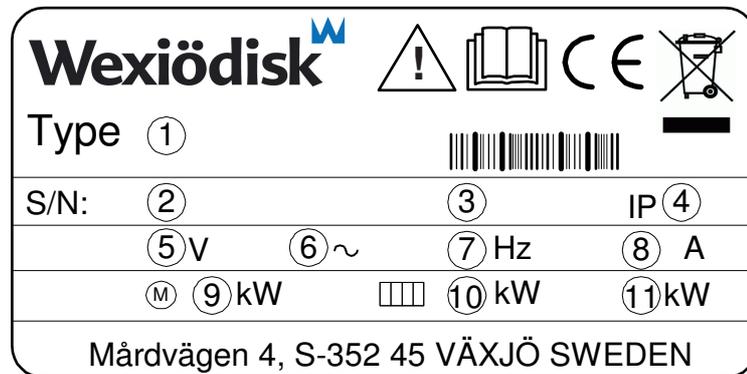
This symbol warns that local regulations must be followed for recycling of packaging etc. as well as the destruction of the machine.



This symbol shows where any earth cable for potential equalisation can be connected. The earth bolt is placed on the machine's stand.

## 1.2 Machine rating

The machine has two rating plates, one of which is placed at the bottom of one side of the machine and the other in the electrical cabinet. The technical information on the plates is also included on the machine's wiring diagram. The various rating fields show:



marks\_15

1. Machine type
2. Machine serial number
3. Year of manufacture
4. Enclosure protection class
5. Voltage
6. Number of phases with or without neutral
7. Frequency
8. Main fuse
9. Motor output
10. Electrical heating output
11. Max. output

## 1.3 Checking that the machine and manual correspond

Check that the type description on the rating plate corresponds with the type description on manual cover page. If manuals are missing, it is possible to order new ones from the manufacturer or the local distributor. When ordering new manuals, it is important to quote the machine number found on the rating plate.



## 2. Safety instructions



Read the chapter GENERAL INSTRUCTIONS carefully before starting work.

### 2.1 General information



The machine is CE marked, which means that it complies with the requirements of the EU Machinery Directive with regard to product safety. Product safety means that the design of the machine will prevent personal injury or damage to property. The CE mark is only valid for an unmodified machine. Any damage to the machine arising from failure to follow the instructions will invalidate the supplier's warranty and product liability.



Installation, repairs and servicing must be performed by an authorised engineer in accordance with local and national rules in effect for such work with water and drainage systems, electricity, ventilation and steam. We recommend that the work is performed by the manufacturer or one of the manufacturer's authorised service companies.

To further improve safety during installation, operation and servicing, the operator and the personnel responsible for installing and servicing the machine should read the safety instructions carefully.



The machine's electronics are sensitive to electrostatic discharge (ESD), which is why a static electricity wristband must be used when handling the electronics at all times.

Before the machine enters service, ensure that the personnel are given the necessary training in handling and looking after the machine.

In order to avoid dangerous situations, the following must be followed:



- Switch off the machine immediately in the event of failure or malfunction.
- Make sure the machine is non-live before removing the cover plate. Turn off the power using the power switch. If required, the switch must be locked to prevent unintentional operation.
- Shut off the tap for incoming water and drain the machine's tank(s) before starting work. Let the machine cool down as pipes for water, washing pumps, booster heaters and valves become very hot when the machine is in operation.
- The machine and equipment requires an annual service. The machine should be serviced by a person authorised or trained to do so by us. Use original spare parts.
- Warranty repairs must be performed by an authorised company. Contact an authorised service company to draw up a programme of preventive care

## Safety instructions

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and maintenance. For authorised service companies, please see [www.wexiodisk.com](http://www.wexiodisk.com) or contact Wexiödisk AB.

- The regular checks described in the manual must be carried out in accordance with the instructions.

## 2.2 Transport



Handle the machine with care during unloading and transport; there is a risk of it tipping over. Never lift or move the machine without using the wooden packaging to support the stand.

## 2.3 Installation



- The machine is designed for quick electrical installation.
- The machine must be connected to a lockable main switch.
- Make sure that the mains voltage is the same as that indicated on the machine's rating plate.



For increased safety, it is recommended to equip the installation with a ground fault circuit interrupter.

## 2.4 Detergent and drying agent



Be aware of the risks involved in handling detergents and drying agents. Protective gloves and safety glasses should be used when handling, and an eyebath should be within easy access. Read the warning text on the detergent and drying agent containers as well as the detergent supplier's instructions.

## 2.5 Operation



Be very careful around the machine when it is in operation.

### 2.5.1 High temperatures



- The temperature of the washing and rinsing water is 60 °C and 85 °C. Do not open the machine until the rinsing phase has finished. The steam that comes out of the machine after the wash has been completed is hot.
- Avoid touching hot pipes and booster heaters. The machine's outer jacket can also become hot during operation.

### 2.5.2 Risk of crushing



The machine, and any equipment, has moving parts before, during and after washing. Be careful therefore to avoid crushing injuries. In connection with service or repairs that require the hood to be open, it must be secured by means of a prop for example.

## Safety instructions

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### 2.5.3 Risk of slipping



The floor should be kept clean and dry to eliminate any risk of slipping. Mop up any water and leftover food that has been spilt.

### 2.5.4 Sounds



The machine is not silent during operation, see TECHNICAL SPECIFICATIONS. Hearing protection may therefore need to be used.

## 2.6 Cleaning the machine



The water in the tank has a temperature of approximately 60°C and contains detergent. Be careful when draining and cleaning the wash tank. Wear protective gloves and safety glasses and have an eyebath within easy access.

## 3. Installation instructions



Read the chapters GENERAL INSTRUCTIONS and SAFETY INSTRUCTIONS carefully before starting work.

### 3.1 General information



Read these instructions carefully, as they contain important information regarding the correct installation method.



- The instructions should be used together with the machine's wiring diagram and flow diagram for water and steam. These can be found in the machine's electrical cabinet.
- The machine can be equipped with a number of different options. Certain options may be standard in a number of countries. Check what your machine is equipped with.
- If holes need to be drilled in the machine, the holes must be fitted with an edge strip or similar protection.

### 3.2 Requirements for the installation site

#### 3.2.1 Lighting

In order to ensure the best possible working conditions during installation, operation, servicing and maintenance, make sure that the machine is installed in a well-lit room.

#### 3.2.2 Ventilation

The machine produces heat and steam when in operation. In order to ensure the best possible working conditions, a certain air renewal rate is required in the dishwashing room. The ventilation requirements for the dishwashing room are to be dimensioned on the basis of the applicable standards.

#### 3.2.3 Power supply

Power supply connections are made by qualified personnel in a way that complies with local and national regulations. The machine's capacity requirements are stipulated in TECHNICAL SPECIFICATIONS.

## Installation instructions

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### 3.2.4 Water

Water connections are made by qualified personnel in a way that complies with local and national regulations. The machine's capacity requirements are stipulated in TECHNICAL SPECIFICATIONS.

### 3.2.5 Drain/waste pipe

There must be a waste pipe with an effective trap for the machine's waste water and for water used for rinse cleaning. The machine's capacity requirements are stipulated in TECHNICAL SPECIFICATIONS.

### 3.2.6 Space for servicing

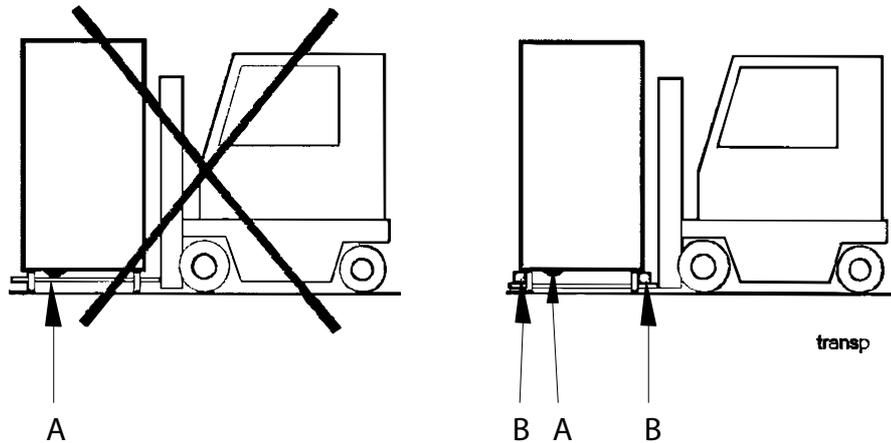
A 1-metre area should be left clear in front of the machine for servicing purposes. The area above the machine must not contain any equipment that may prevent the fitting, servicing and replacement of parts. Depending on if the machine has different accessories, there may also be such a requirement at the infeed and out-feed ends as well as above the machine.

### 3.3 Transport and storage

Always transport the machine in an upright position.



Take care during transport, as there is a risk of tipping. NB: The machine must not be transported without a pallet or other support. Some form of support beam must always be used along the sides of the machine during transport. Otherwise the machine may become damaged. When transporting the machine without a normal wooden pallet, always check that none of the components underneath the machine can be damaged.



*A=Pumps*  
*B=Spacers*



If the machine is not being installed immediately, it must be stored in a frost-free area where the air is dry.

#### 3.3.1 Unpacking

Check that all parts have been delivered by comparing them with the delivery note.

Remove the packing material. Inspect the machine for any transport damage.

#### 3.3.2 Recycling

Packaging must be sent for destruction or recycling in accordance with local regulations.



The machine is manufactured from stainless steel plate, among other things, and also contains electronic components. Recycling of the appliance when its economic lifetime has been reached must be carried out in accordance with current rules and regulations.

## Installation instructions

### 3.4 Installation

#### 3.4.1 Preparing for the installation

Check that there is sufficient room for the machine at the installation location.



- Check that correct connections are available for water, electricity, drainage and possibly steam at the installation location. See TECHNICAL SPECIFICATIONS.
- Check that the overheating protection device is reset.

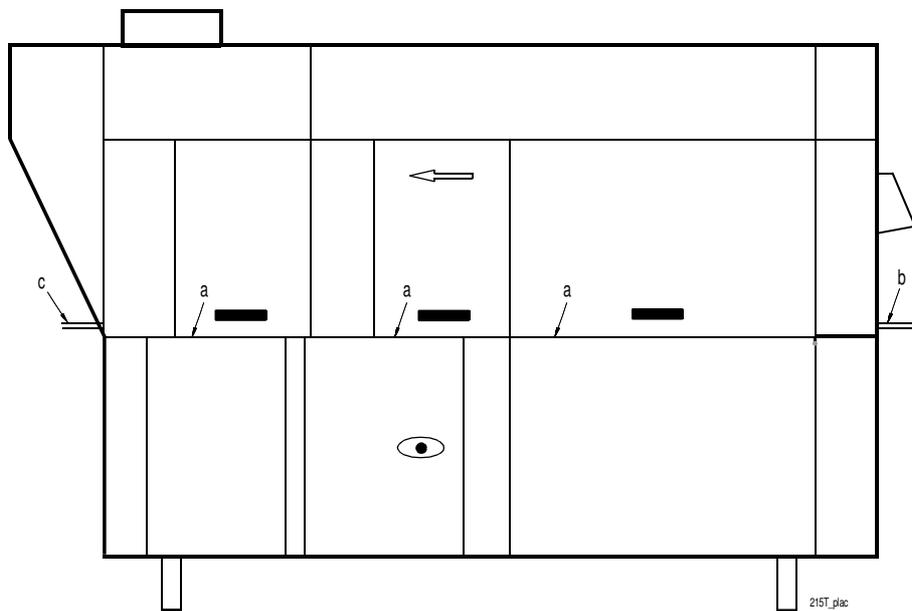
#### 3.4.2 Positioning the machine

Check the following points before the machine is placed in position:



- Check that the fuse for the machine at the site is off, blocked and that outgoing electrical circuits from the machine are non-live.
- Remove the protective plastic on the sides which are to be stood against a wall.
- The distance between the wall and machine should be at least 15-30mm.

Place the machine in position and check that it, and any accessories, are horizontally level. Adjust the height with the legs.



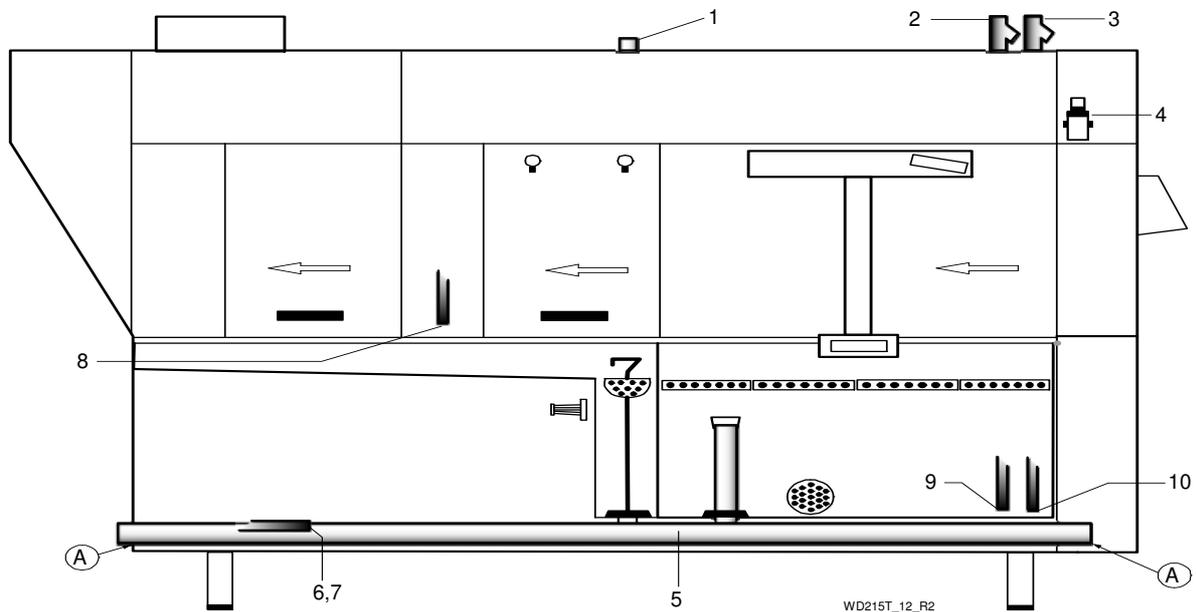
Check with a spirit level that the machine is standing level:

- On the cover edge of the front side (a) (tank body).
- On the cover of the infeed (b).
- On the cover of the outfeed (c).

. Once the machine has been filled with water, do another check to make sure the machine is standing level.

## Installation instructions

### 3.5 Connections



*Installation drawing*

*A = Perforation in the end plate for drain connection*

1. Electrical connection.
2. Cold water connection
3. Hot water connection
4. Reducing valve. The valve is used to adjust the final rinse flow.
5. Drain connection 50 mm.
6. Steam connection (steam-heated machines) (option)
7. Condensation water connection (option, steam-heated machines).
8. Alternative electrical connection from floor behind the front panel.
9. Alternative cold water connection from floor behind the machine.
10. Alternative hot water connection from floor behind the machine.

In the following chapter, figures are given in brackets to clarify what needs to be done. These numbers refer to image and list above.

## Installation instructions

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### 3.5.1 Power supply

Information about electrical connections is available on the machine's wiring diagram which is provided on delivery. Store the diagrams in the plastic pocket, located in the electrical cabinet, even after installation.



- The machine is designed for quick electrical installation.
- The machine has a built-in main switch. Connect the electric cable at (1). In special cases, certain dishwashers may have an electrical connection from the floor. The cable is then drawn behind the cover plate and through the channelling at (8).
- Check the direction of rotation of the pump motors during operation when the tanks are full of water. The direction of rotation must conform without exception to the direction of the arrow on the pump. Stop the dishwasher immediately if the direction of rotation is incorrect and change two of the incoming phases.

After completing the installation, switch on the main switch and all circuit breakers.

### 3.5.2 Water



- A shut-off cock must be installed on the incoming pipe.
- It is important that the water supply has sufficient pressure to ensure the correct flow of water to the machine. The required water flow and pressure can be found in the TECHNICAL SPECIFICATIONS. If the water pressure is too low, a booster pump must be fitted.

The water pipe is connected at (2, or alternatively 9) or at (3, or alternatively 10). If the machine is connected with a hose, this should be steel braided and have an internal diameter of at least 12 mm.

The hot water connection on the machine is fitted with a filter.

The cold water connection on the machine is fitted with a filter, non-return valve and vacuum valve.

As the machine is fitted with a "Break Tank", the connection is fitted with a filter.

### 3.5.3 Ventilation

The machine's heat load for the room is stipulated in TECHNICAL SPECIFICATIONS.

The machine has a condensing battery connected to an exhaust fan to reduce the amount of steam released. Extractor fans for extracting steam can be installed above the infeed and outfeed openings, as well as above the area of the machine where steam is emitted from the condensing fan.

If a hood is fitted over the machine, it must be positioned so that it covers the drying rack after the machine and preferably also the exhaust from the condensing fan.

## Installation instructions

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### 3.5.4 Steam (option, steam-heated machines)

Connect the pipe for steam inside the front cover plate (6). The connection is fitted with a filter. A shut-off valve for steam must be installed on the incoming pipe. The required steam pressure can be found in the TECHNICAL SPECIFICATIONS.

### 3.5.5 Condensation water (option, steam-heated machines)

Connect the pipe for condensation water inside the front cover plate (7). The pipe is connected to the system's steam boiler.

### 3.5.6 Drain/waste pipe

The waste water system connected to (5) should consist of a 50 mm metal pipe that will withstand mechanical impacts. Remove the perforated section of the end plate at (A) and pull the pipe through the hole. The drain must run to a floor drain, where its opening must be above the water level. Ensure that the drain connection is kept in place by using e.g. cable ties in the designated areas.

The requirement for the floor drain capacity can be found in the TECHNICAL SPECIFICATIONS.

### 3.5.7 Detergent and drying agent



Check what your machine is equipped with, which depends on the model, machine type and country.

- Use the same make and type of detergent and drying agent.
- With machines connected to cold water, the water pipe temperature may be too low for use of powder or paste type detergents.
- If liquid detergent is used together with Wexiödisk's detergent pump, the detergent must be placed under the machine's tank level.
- If equipment for a different type of detergent is used, it should preferably be put on the wall behind the machine to avoid holes being drilled unnecessarily in the machine

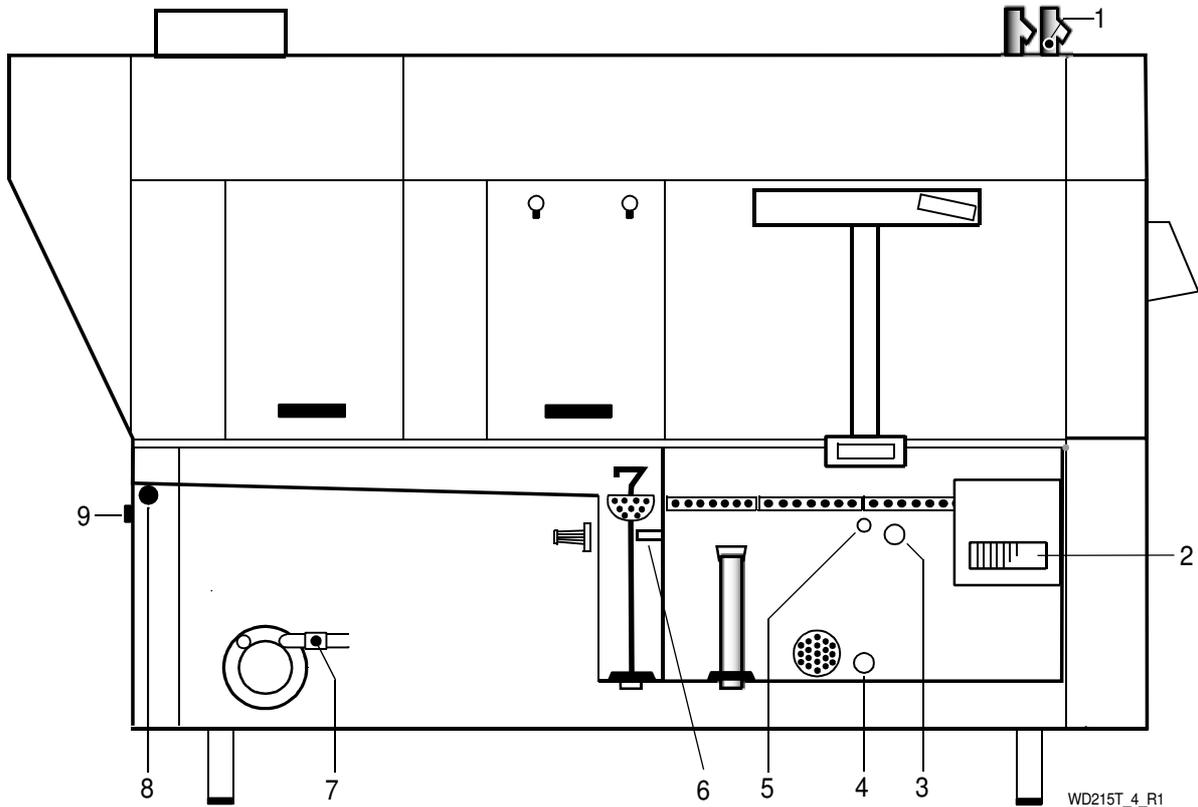
The process of setting the detergent and drying agent dispenser is described in the ADJUSTMENT INSTRUCTIONS.

For information about electrical connections, see the electrical diagram.

## Installation instructions

### Connection of the equipment

The machine is ready for fitting detergent and drying agent equipment, but this is not included in the delivery. To avoid making unnecessary holes in the machine, the equipment should be placed on the wall behind the machine.



*Connections for detergent and drying agent dosage.*

1. Water outlet for detergent dosage on the incoming hot water pipe
2. Terminal box with connections for control of detergent and drying agent.
3. Plugged hole in the cover plate on the back of the machine for alternative detergent connection. Drill a hole from the back of the chemical washing tank through the plugged hole.
4. Plugged hole  $\varnothing$  22 mm for measuring cell on the front of the chemical wash tank.
5. Plugged connection  $\varnothing$  11 mm for liquid detergent on the front of the chemical washing tank.
6. Plugged connection  $\varnothing$  18 mm for connecting hose for detergent in solid form.
7. Connection for drying agent dosage by the booster heater.
8. Hole  $\varnothing$  25 mm for hose intended for detergent in solid form.
9. Hole  $\varnothing$  19 mm for drying agent hose.

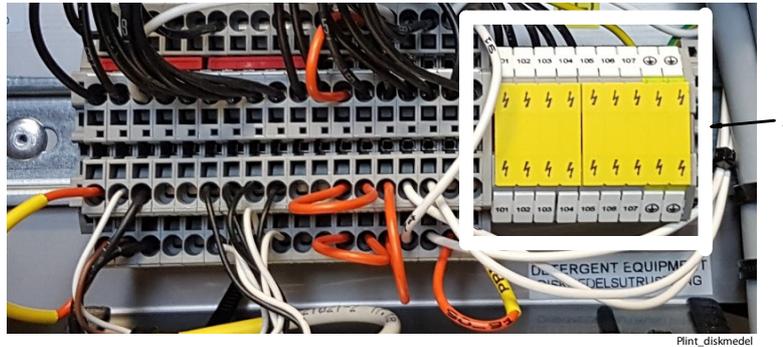
## Installation instructions

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### Electrical connection of the equipment

The machine comes ready for fitting detergent and drying agent equipment, but this is not included with the machine.

To avoid making unnecessary holes in the machine, the equipment should be placed on the wall behind the machine on the outfeed side.



*Connections for detergent and drying agent.*

## 3.6 Trial operation

Prepare the machine for trial operation by following the INSTRUCTIONS FOR USE. The instructions describe the measures that must be taken to prepare the machine for operation.

### 3.6.1 Start-up schedule

This should be completed and signed by the customer on start-up.

**Machine type:**

**Machine serial number:**

**Installation date:**

Read the installation and user manuals carefully. Then check the following points:

#### 1. Check:

- Water, steam and drain connections
- That the machine is evenly balanced
- That the closed doors are in line
- The adaptation of any tray dispensers
- Detergent and drying agent
- That the filters, level pipe and curtains are in position
- The mini-switches for all the heating elements must be in the OFF position.
- That the overheating protection device is reset

#### 2. Filling the machine:

- Switch on the main switch and press the 0/1 button
- Close the doors
- Fill the machine with water in accordance with the manual  
**Note:** The booster heaters fill automatically when the doors are closed. The machine has a filling check function for the booster heaters. When the function is activated, a check is carried out to ensure that the booster heaters are full of water, before the element is switched on.  
**NB!** If the filling is cancelled, the filling check will be restarted by the booster heater from zero.
- When the filling check has been completed and all the tanks are full, the mini-switches for the booster heaters switch on

#### 3. Check the setting of the reference values

- All the reference values have been set to the recommended values on delivery
- Check that the motor cut-off switch for the infeed and outfeed conveyors have been set correctly

## Installation instructions

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### 4. Start the machine:

- Check the direction of rotation of the pumps  
**NB!** If the direction of rotation is wrong, the phase must be inverted on the incoming feed
- Check the function of the overload switch for the feed

### 5. Run a number of washes complete with loads and check:

- There are no water leaks
- The door breaker works
- Steam discharge from the machine
- The tank and final rinse temperatures are maintained
- The final rinse flow has been set correctly (2.5 l/min. (factory setting))
- The washed items are clean
- The washed items are dried

### 6. Final check: Empty the machine and turn off the power using the main switch.

- Re-tighten all the connections on the relays and circuit breakers
- Check that all the mini-switches and the motor cut-off switch are in the on position.
- Display the maintenance instructions supplied with the machine

### 7. Train the dishwashing personnel

- Washing
- Care (daily, weekly and other frequencies)
- Recommendation for annual service

## 3.7 Documentation



For correct use and servicing, it is essential that the documentation accompanying the machine is made available to personnel who will be using the machine. The installation and user manual, which describes handling and care among other things, should be stored near the machine.

## 4. Instructions for use



Read the chapters GENERAL INSTRUCTIONS and SAFETY INSTRUCTIONS carefully before starting work.



This chapter describes what must be done with the machine:

- Before washing
- How washing should be performed
- After completed washing
- In the event of error messages and troubleshooting

The use of the machine is dependent on how the machine is equipped.

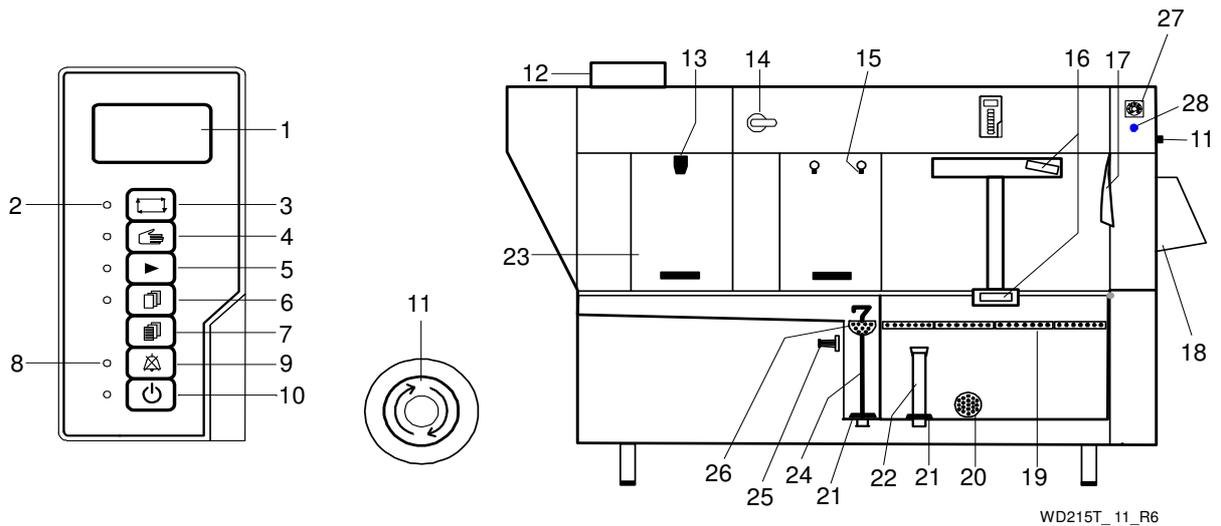


If the machine will not be used for a longer period, the power to the machine should be turned off using the power switch, the water supply turned off and machine should be left open.

## Instructions for use

### 4.1 Before washing

#### 4.1.1 Machine design



1. Display for messages.
2. LED which indicates that functions are enabled.
3. Button for starting the filling process and heating of the machine.
4. Button for manually unloading the trays.
5. Button to start/stop the feed.
6. Button for diagnostics function (only for service engineers).
7. Button for diagnostic messages (only for service engineers).
8. LED for indication of alarms. If the LED flashes, the alarm can be reset by pressing button (9).
9. Button for resetting alarm.
10. To/From
11. Emergency stop

## Instructions for use

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12. Grille for drying zone fan
13. Door lock
14. Main switch
15. Wash nozzle
16. Wash arm
17. Curtain
18. Door
19. Tank filters
20. Pump filter
21. Rubber sleeve
22. Level pipe
23. Door
24. Outlet seal
25. Filter
26. Filter for the final rinse
27. Timer for a timed start of the machine (option)
28. Button for activating the timer (option)

In the following chapter, figures are given in brackets to clarify what is being referred to.

These numbers refer to image and list above.

### 4.1.2 Preparations before filling

Check:



- That the machine and removable parts have been cleaned. If not – clean them!
- that the main switch (14) is in the ON position
- That the stopcock for the water to the machine is open
- That removable parts are correctly in place
- that no dirt is in the wash arms' (16) or in the rinse pipes' (15) nozzles
- Amount of detergent and drying agent (option)

Fit:

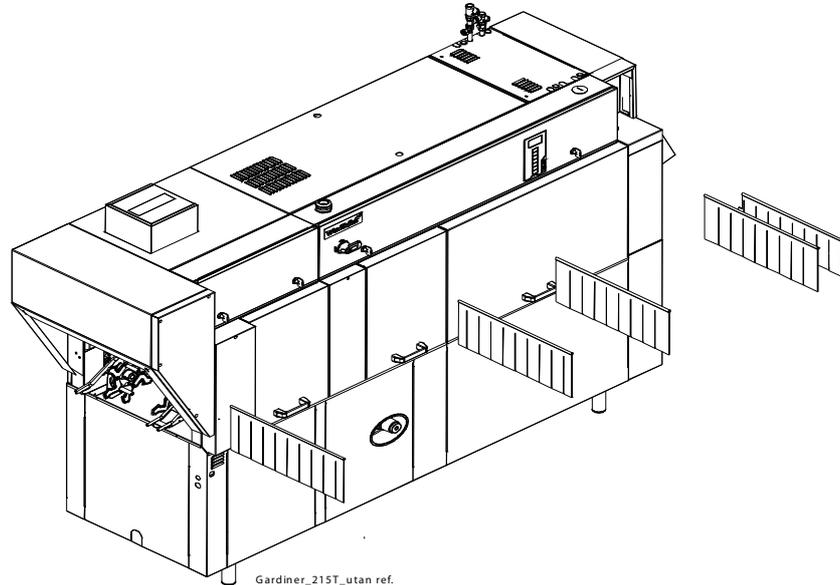
- Level pipe (22) and outlet seal (24). The rubber sleeves (21) must seal against the base plate. Check that they are not damaged.
- strainers (19, 26)
- curtains (17)

Close the doors.

## Curtain placement



There are 5 curtains and the shortest of these must be hung only in the direction of feed.



*The machine in the image has a Right - Left feed direction.*

## Detergent and drying agent



- Ordinary washing-up liquid must not be used in the machine or for soaking. Contact your detergent supplier regarding the choice of a suitable detergent. Washing-up liquid causes a build-up of foam, produces poor wash results and can damage the machine.
- Steel wool must not be used for pre-treating the dishware.
- Only detergent and drying agent intended for industrial machines may be used.
- If using liquid detergent and drying agent, the same make and type of detergent and drying agent should be used.
- If the machine is designed for glass washing and equipped with a condensing unit, detergent intended for aluminium should be used.
- If the machine is equipped with a condensing unit, dishware should be removed from the machine as soon as the condensation cycle is complete so that re-condensation does not occur.

## Instructions for use

### 4.1.3 Filling and heating

You can see what the machine is doing on the machine's panel.

- Turn the main switch (14) to the ON position.
- Close the doors
- Press button (10) to switch on the power supply.
- Press button (3). The machine will start to fill with water.
- When the tank is full heating of the water begins.
- Once the heating is finished, the machine will start and run for a short period to mix the detergent.
- When the detergent is mixed, the message on the display indicates that the feed should start. Activate the feed by pressing the button (5).
- The machine is now ready to wash.



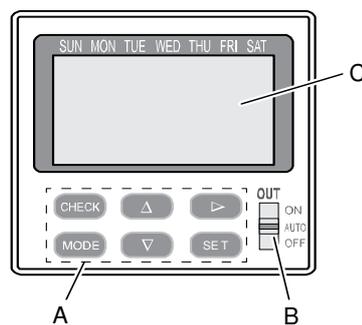
NB: The time needed to heat the water to the right wash temperature depends on the temperature of the incoming water.

### 4.1.4 Filing and heating the machine using TimerStart (optional)

Using the TimerStart function, the dishwasher can start filling and heating water in the washing tank automatically at a set time. The dishwasher is then ready for washing when the next wash cycle starts and you don't have to wait for the machine to fill the tanks and heat the tank water before washing can start, which takes approx. 30 minutes.

For machines equipped with the TimerStart function, the machine must be in stand-by mode in order to start automatically, i.e. the TO/FROM BUTTON (10) is pressed and the following message is shown on the machine's display (1):

TIMERSTART  
ACTIVATED



90-9-05-002-a

*Timer*

A=Buttons for setting and checking

B=Switch

C=Display

The switch (B) on the timer should be set to AUTO position.

If you want to bypass the TimerStart function and start manually, press the machine's TO/FROM button (10) once more when the message above is shown on the display. The filling and heating of the machine can then start as normal, i.e. by pressing button (3).



Once the wash and draining of the dishwasher has been completed, it must be switched off and set with the TO/FROM button (10) for the machine to enter stand-by mode. It is therefore not enough just to stop the wash cycle and/or to empty the washing tanks to put the machine into this mode.

### The display's appearance during operation (normal information)

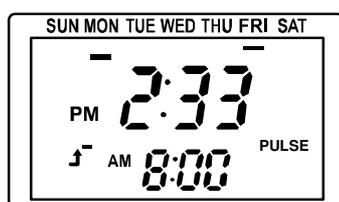
When the machine is in operation, the timer's display looks different depending on whether the start time is set or not. The display also depends on how the start time has been set.



90-9-05-003

*When the start time is not set, or when the start time is set for a specific date, the display appears as above.*

*The actual time (12-hour clock) is shown on the display. The present day of the week is shown as a thin line under the name of the day of the week. (If start time for date is set and this date has expired, the message YEAR is shown to the right of the time).*



90-9-05-004

*When the machine is set to start at a certain time on certain days of the week, the display appears as above.*

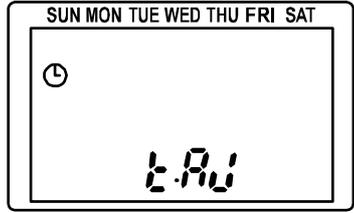
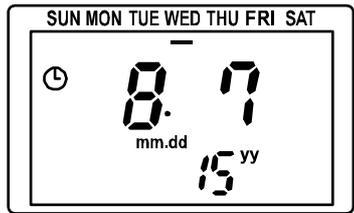
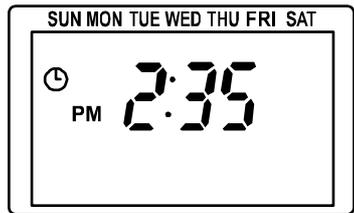
*The time and day of the week are shown here in the same way as above. The next upcoming start time is shown too. The time for the next start time appears under the actual time, and day of the week for the next start time is indicated with a thicker line under the name of the day of the week.*

In both cases, it is possible to see the current date by holding down the button ► for 3 seconds. The date is then shown for 3 seconds on the display before returning to its state as per the illustrations above.

## Instructions for use

### Setting the date and time

For the TimerStart function to work as expected, the date and timer clock must be set. This is normally done on delivery.

This is what you should do to set the time and date:	
Go into settings mode by holding down the MODE and SET buttons for 3 seconds.	
<ul style="list-style-type: none"> <li>Press the SET button.</li> </ul>	 <p>90-9-05-005</p> <p>The clock symbol in the upper left flashes</p>
Set the date.	
<ul style="list-style-type: none"> <li>The value that is currently set flashes. Increase or decrease the value with the buttons ▲ and ▼.</li> <li>In order to move on to the next value, press the button ►.</li> <li>When all the values in the image, (year (yy), month (mm) and day (dd)), are set - press the SET button.</li> </ul>	 <p>90-9-05-006</p>
Set the clock. The clock has a 12-hour display so AM (before midday) and PM (after midday) must be set.	
<ul style="list-style-type: none"> <li>The one that is currently set flashes. Increase or decrease the value with the buttons ▲ and ▼.</li> <li>In order to move on to the next value, press the button ►.</li> <li>Once the clock has been set - press the SET button.</li> </ul>	 <p>90-9-05-007</p>
Hold down the MODE button for 3 seconds in order to return to normal display information.	

## Instructions for use

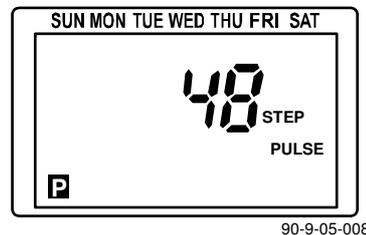
### Setting the start time, days of the week

With this setting, you can set a time when the dishwasher begins to fill and heat the water in the tank, and which days of the week this start time applies to. If you want the dishwasher to start at another (additional) time, you must set it for this time too. All weekly settings are active at the same time. For example: The machine should start filling with water and heating at 8.00 on Monday to Friday inclusive and at 8.45 on Saturday and Sunday. Therefore, it is set to 8.00 for Monday, Tuesday, Wednesday, Thursday and Friday, and is set to 8.45 for Saturday and Sunday.

This is what you should do to set the start time and which days of the week it should apply to:

Access the start time settings mode by pressing the MODE button for 3 seconds.

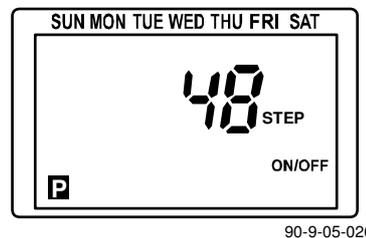
- Press the SET button.



*P down to the left flashes*

If there are no previously stored start time settings, the points below must be followed. If start time settings are stored, the timer moves on directly to the next step (set days of the week):

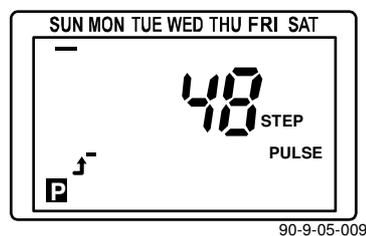
- Press on either of the buttons ▲ or ▼ so that the message ON/OFF changes to PULSE.
- Press the SET button.



*The message ON/OFF flashes*

Set which days of the week the start time should apply to.

- To activate the day of the week that the pointer (the thin line under the day of the week) indicates, press either of the buttons ▲ or ▼. When a thicker line under the thin flashing line is shown, this day is activated.
- By pressing the button ►, the pointer can be moved.
- Continue to move and activate with the buttons until all the days of the week which the start time should apply to have a thicker line visible under them.
- Once the setting is complete - press the SET button.



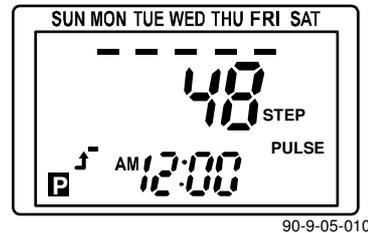
*The arrow symbol and the line under the day of the week flashes*

## Instructions for use

This is what you should do to set the start time and which days of the week it should apply to:

Set the start time. The value that is currently set flashes.

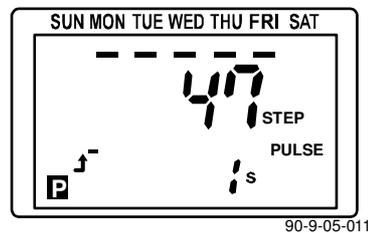
- Change the flashing value with the buttons ▲ and ▼.
- Move between the settings for the part of the day (AM / PM), hours and minutes with the button ►.
- Once the setting of all the values for the start time are complete - press SET.



*The arrow symbol and adjustable value flashes*

Set the pulse length.

- The pulse length should always be set to 1 second. Change the value if necessary with the buttons ▲ and ▼.
- Press SET when the setting is complete.



Press SET once more.

Hold down the MODE button for 3 seconds in order to return to normal display information.

## Instructions for use

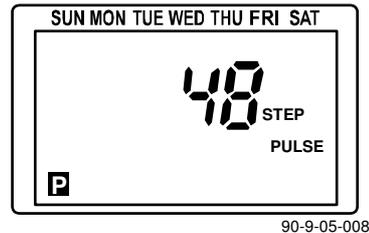
### Setting the start time, date

It is possible to set the start time for specific dates, either for an individual date or for a period between a start date and an end date. It is possible to set the timer for a date up to two years from the current date.

This is what you should do to set the start time and which dates it should apply to:

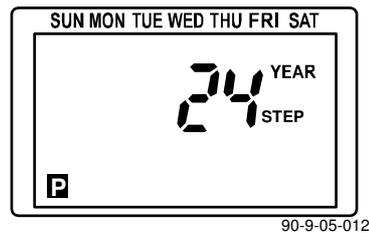
Hold down the MODE button for 3 seconds in order to enter settings mode.

- Press MODE again.



*P down to the left flashes*

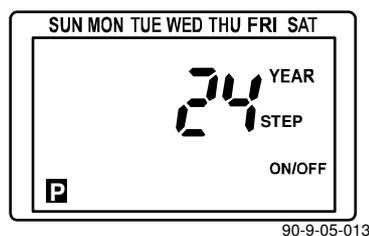
- Press the SET button.



*The message YEAR and P down to the left flashes*

If there are no previously stored start time settings, the points below must be followed. If start time settings are stored, the timer moves on directly to the next step (set start date):

- Change with the buttons ▲ and ▼ so that PULSE is indicated instead of ON/OFF.
- Press SET.



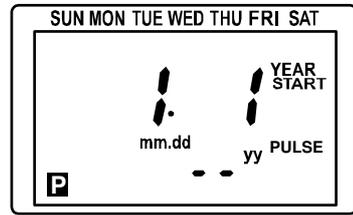
*The message ON/OFF flashes*

Set the start date (adjustable value flashes):

## Instructions for use

This is what you should do to set the start time and which dates it should apply to:

- Change the flashing value with the buttons ▲ and ▼.
- Scroll to the next value with the button ►.
- When all the values (year, month and day) are set, press SET.

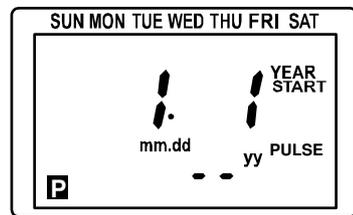


90-9-05-014

This is what you should do to set the start time and which dates it should apply to:

Set the stop date (adjustable value flashes):

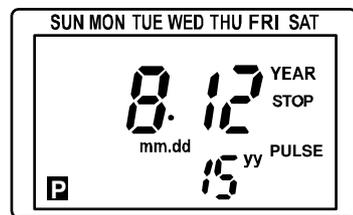
- Change the flashing value with the buttons ▲ and ▼.
- Scroll to the next value with the help of the button ►.
- When all the values (year, month and day) are set, press SET.



90-9-05-014

Set the start time (adjustable value flashes):

- Change the flashing value with the help of the buttons ▲ and ▼.
- Scroll to the next value with the help of the button ►.
- When all the values (before midday (AM)/after midday (PM), hours and minutes) are set, press SET.



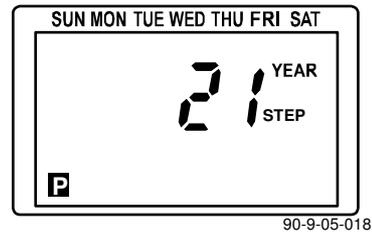
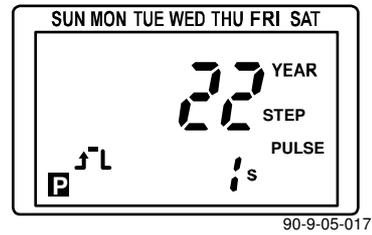
90-9-05-015

Set the pulse length:

## Instructions for use

This is what you should do to set the start time and which dates it should apply to:

- The pulse length should always be set to 1 second. Change with the help of the buttons ▲ and ▼ if necessary.
- Press SET.



Hold down the MODE button for 3 seconds in order to return to normal information mode.

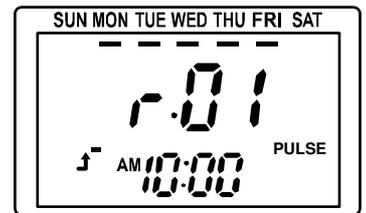
### Checking, changing and removal of set start time

If the buttons have not been pressed for at least 60 seconds while in check information mode, the display returns automatically to normal display mode.

#### Checking of set start times, days of the week:

Hold down the CHECK button for approx. 1 second until the display changes state.

- By pressing repeatedly on CHECK, you can scroll through every set start time.
- If several start time settings are stored, they are numbered as r01, r02 and so on.
- Once you have scrolled past the last stored start time, the display returns to its normal state.

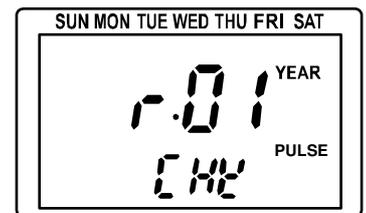


90-9-05-019

#### Checking of set start times, date:

Hold down the CHECK button for approx. 3 seconds.

- By pressing repeatedly on CHECK, you can scroll through every set start time.
- If several start time settings are stored, they are numbered as r01, r02 and so on.
- Once you have scrolled past the last stored start time, the display returns to its normal state.

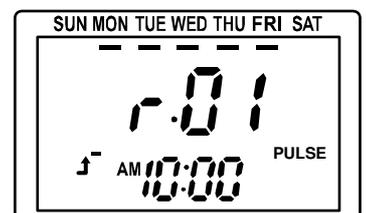


90-9-05-020

#### Changing set start times, days of the week:

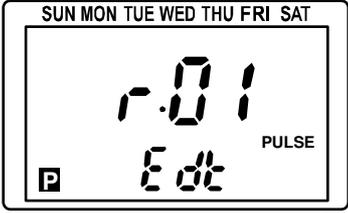
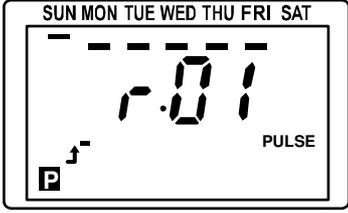
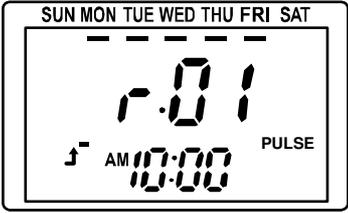
Hold down the CHECK button for approx. 1 second.

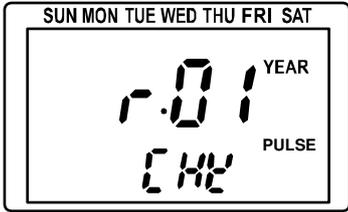
- Scroll forward to the start time setting to be changed by pressing CHECK.
- Hold down the SET button for approx. 3 seconds.



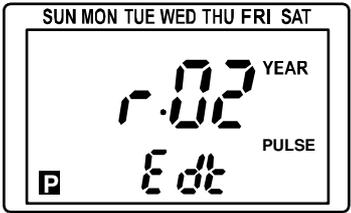
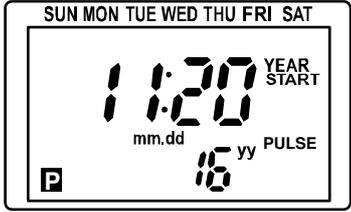
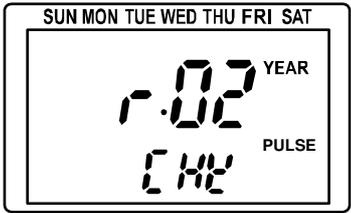
90-9-05-019

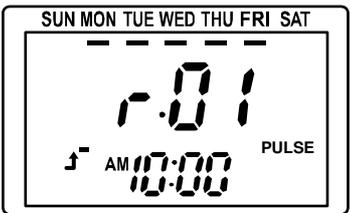
*The arrow symbol flashes*

Changing set start times, days of the week:	
<ul style="list-style-type: none"> <li>Press the SET button.</li> </ul>	 <p style="text-align: right; font-size: small;">90-9-05-021</p>
	<p><i>Edt flashes</i></p>
<ul style="list-style-type: none"> <li>Set days of the week, start time and pulse length in the same way as described above under “Setting the start time, days of the week”</li> <li>The display returns to check information mode when the SET button is pressed after the pulse length has been changed.</li> </ul>	 <p style="text-align: right; font-size: small;">90-9-05-022</p>
	<p><i>Arrow symbol and adjustable value flashes</i></p>
<ul style="list-style-type: none"> <li>You can choose here to scroll further to the next set start time by pressing the CHECK button or to exit the check information mode by holding down the MODE button for approx. 3 seconds (if the buttons have not been pressed for at least 60 seconds, the display returns automatically to normal display mode).</li> </ul>	 <p style="text-align: right; font-size: small;">90-9-05-019</p>

Changing the set start times, date:	
<p>Hold down the CHECK button for approx. 3 seconds.</p>	
<ul style="list-style-type: none"> <li>Scroll forward to the start time setting that should be changed by pressing CHECK repeatedly.</li> <li>Hold down the SET button for approx. 3 seconds.</li> </ul>	 <p style="text-align: right; font-size: small;">90-9-05-020</p>

Instructions for use

Changing the set start times, date:	
<ul style="list-style-type: none"> <li>Press the SET button.</li> </ul>	 <p>90-9-05-023</p> <p><i>Edt flashes</i></p>
<ul style="list-style-type: none"> <li>Set start date, stop date, start time and pulse length in the same way as described under “Setting the start time, date”</li> <li>The display returns to check information mode when the SET button is pressed after the pulse length has been changed.</li> </ul>	 <p>90-9-05-024</p> <p><i>START and adjustable value flashes</i></p>
<ul style="list-style-type: none"> <li>You can choose here to scroll further to the next set start time by pressing the CHECK button or to exit the check information mode by holding down the MODE button for approx. 3 seconds (if the buttons have not been pressed for at least 60 seconds, the display returns automatically to normal display mode).</li> </ul>	 <p>90-9-05-025</p> <p><i>r02 flashes</i></p>

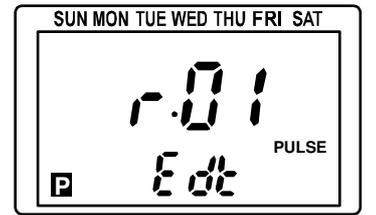
Removal of set start time:	
<p>Start time, day of the week: Enter check mode by holding down the CHECK button for approx. 1 second.</p>	
<p>Start time, date: Enter check mode by holding down the CHECK button for approx. 3 second.</p>	
<ul style="list-style-type: none"> <li>Scroll forward to the start time setting to be removed by pressing the CHECK button.</li> </ul>	 <p>90-9-05-019</p>
<p>Hold down the SET button for approx. 3 seconds.</p>	

**Instructions for use**

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**Removal of set start time:**

- Change with the help of either of the buttons ▲ or ▼ so that Clr is indicated under the start time setting number instead of Edt.



Press SET.

Hold down the SET button for 3 seconds in order to return to normal information mode.

## 4.2 Using the machine

### 4.2.1 Washing

Before trays are fed into the machine, they must be soaked to remove dried-on pieces of food.

Push in the trays on the long side first through the feed opening. The belt and the washing process will start.

For the movement of trays through the machine to continue, new trays must be fed in all the time. For each tray that is fed in, the belt moves just one short step and then stops. The next tray that is fed in will start the belt again. When no more trays are fed in to the machine, it will stop.



For longer periods between washes, the machine should be in the “normal” mode and closed. This ensures the temperature in the machine is maintained.

### 4.2.2 Checking the wash result



The dishware should be checked after each wash for:

PROBLEMS	CAUSES & MEASURES
Starch spots	<ul style="list-style-type: none"> <li>• <b>Scraping:</b> Important to remove as much food particles as possible before washing. This also means that the water in the machine does not need to be changed as often. Scrape better.</li> <li>• <b>Detergent and drying agent dosage:</b> If using liquid detergent and drying agent, the same make and type should be used. A service technician should be contacted to rinse the equipment with water when replacing the detergent and drying agent. The dosing affects both detergent and drying results of the dishware. The hardness level of the water affects the consumption of detergent. Contact the detergent supplier.</li> <li>• <b>Temperatures:</b> At incorrect temperatures the dishes will not be clean. Contact a service technician if you need to change the set values.</li> <li>• <b>Programme selection:</b> Programme with too short a washing time selected. Choose a programme with a longer washing time.</li> <li>• <b>Cleaning the machine:</b> Insufficient cleaning of the machine affects the results of the washing. Ensure better cleaning of the machine.</li> <li>• <b>Soaking:</b> Items with hard dried food. Soak the dishes in water. Do NOT use washing-up liquid.</li> </ul>
Misting	
Protein residues	
Detergent residues	

## Instructions for use

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### 4.2.3 Storage in the tray dispenser

If washed trays are stored in the tray dispenser connected to the machine's out-feed end, a message will appear on the display when the dispenser is full of trays. Change the dispenser. When an empty dispenser is put in place, the machine is ready to wash again.

The machine can also be connected to a tray exchanger for two dispensers. When one dispenser is full, the trays are automatically switched to the other dispenser and the machine does not stop until both dispensers are full.

### 4.2.4 Changing the water

For best wash results, it is important that the water in the tanks is changed if it becomes too dirty. The water should always be changed if foam begins to form in the chemical wash tank.

- Switch the machine off by pressing button (10).
- Remove the filters (19) and empty the machine by turning the level pipe (22) a quarter of a turn.
- When the tank is empty, close the level pipe and refit the filters.
- Refill the machine with water.

### 4.2.5 Emergency stop

The machine will go to an emergency stop if button (11) on the control panel is pressed. If an emergency stop occurs:

- The problem which caused the emergency stop must be rectified.
- Reset the emergency stop by turning it in the direction of the arrows (clockwise).
- Reset the alarm by pressing button (5).

### 4.2.6 Unloading trays manually

Manual unloading is used to empty the machine of trays. When the last trays need to be washed and the machine has stopped, use the manual unloading mode to take the remaining trays out of the machine.

Unload the trays by pressing the button (4).

## Instructions for use

### 4.3 After use



HACCP is a preventive inspection system to ensure hygiene requirements are met during the washing process and cleaning of the machine. As a result of its design, the machine meets strict hygiene requirements. Regular, thorough cleaning is also important from a hygiene perspective. A machine that is properly cleaned helps produce a good wash result, reduces the risk of dirt accumulating, increases the service life of the machine and reduces the risk of emergency shut-down.



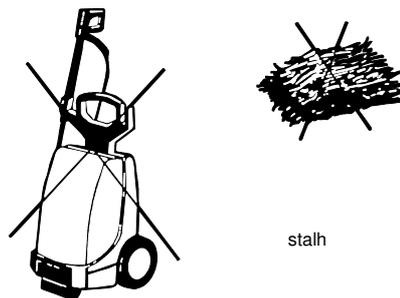
- Make sure the power supply to the machine is disconnected and that the incoming water is turned off during cleaning.
- All internal cleaning can and should take place from the front side of the machine to avoid the risk of crushing injuries beside the feed cradle.
- If any items become trapped in the feed cradle, these can be released using a 13mm double-ended spanner to turn the feed crank clockwise.

#### 4.3.1 Incorrect cleaning methods



NB: An incorrect cleaning method may damage the machine. The following points must be observed:

- Do NOT use steel wool as it will cause corrosion to form on the machine.
- If detergent is used, it must not contain abrasives. Detergents containing abrasives will damage the stainless steel panels.
- The exterior of the machine must not be hosed. Water can enter the machine and damage the control panel and electrical equipment. There is a risk of splashing even if the floor is hosed down.
- Pressure washers can damage the machine and must NOT be used for cleaning purposes. The supplier cannot be held liable for any faults caused by the use of pressure washers on the machine and any such use will invalidate the warranty. Never use a pressure washer to clean the floor within 1 metre of the machine.



*Steel wool and pressure washers must not be used for cleaning*

## 4.3.2 Daily cleaning

### Internally

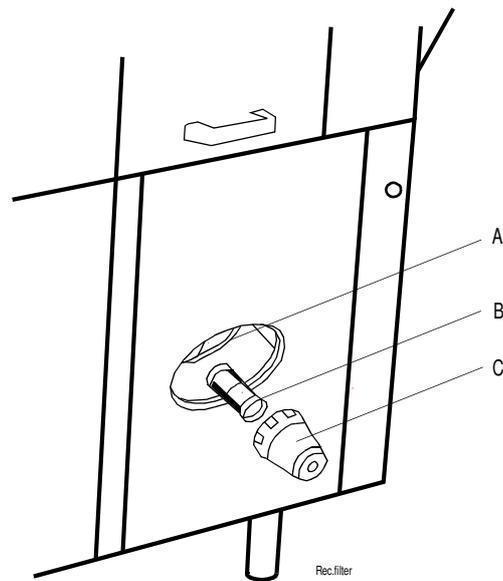
- Unhook the curtains (17) at the infeed end and wash them in a basket.
- Switch the machine off by pressing button (10).
- Empty the tank by turning the level pipe (22) a quarter of a turn.
- Clean the filters (19), the curtains (17), the level pipe (22), the outlet seals (24) and the rinse nozzles (15). Never leave the level pipe so that the rubber sleeve rests on a surface. The sleeve can become deformed leading to the risk of water leakage in the tank.
- Clean the washer arm nozzles (16).
- Clean the doors (23). Wipe the rubber strips on the doors which are fitted at the top of the back of the doors. Always leave the doors open after cleaning the machine.
- Rinse out all of the machine's inside surfaces and clean the tank.
- Finally, clean the filter (26).
- Empty the final rinse tank and clean the filter (25). The filter is placed behind the lower door at the outfeed end.
- Refit the components.
- Leave the doors open.

### Cleaning the filter



The final rinse tank must be empty when the filter (25) is cleaned otherwise water will leak into the dish-washing room when the filter is unscrewed. The tank must be emptied in connection with daily cleaning.

- Unscrew the cover (C) and remove the filter (B). Rinse the filter and cover.
- When refitting, it is important to fit the filter correctly to ensure that it is not damaged and that no leakage occurs.
- First fit the filter (B) in the filter housing (A) then ensure that it is sitting straight.
- Fit the cover (C), (does not need to be screwed tight).



#### *Removing/fitting the filter*

*A=Filter housing*

*B=Filter*

*C=Cover*

### **Externally**

Wipe the outside of the machine with a soft, damp cloth.

### **4.3.3 Cleaning and checking each week or as required**

Weekly cleaning should be more thorough than daily cleaning. In addition to the daily cleaning measures, clean the machine as per these instructions:

- Clean the washer arms (16). Undo the lock by the back edge of the washer arm and pull the washer arm out. Brush and rinse the inside of the washer arms and clean the nozzles.
- Clean the grille for the drying zone fan (12).
- Check and clean the rinse nozzles (15).
- Check that the overload switch for the feed is working by attempting to hold the belt still for a few seconds during operation. If the switch does not activate (the belt should stop), it must be adjusted immediately.
- Remove the doors (23). Open the door, depress the door lock (13) and lift the door vertically. Clean the doors.
- Decalcify the machine when necessary.
- Refit all cleaned components.

**Instructions for use**

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*Cleaning brush WD721.0301*



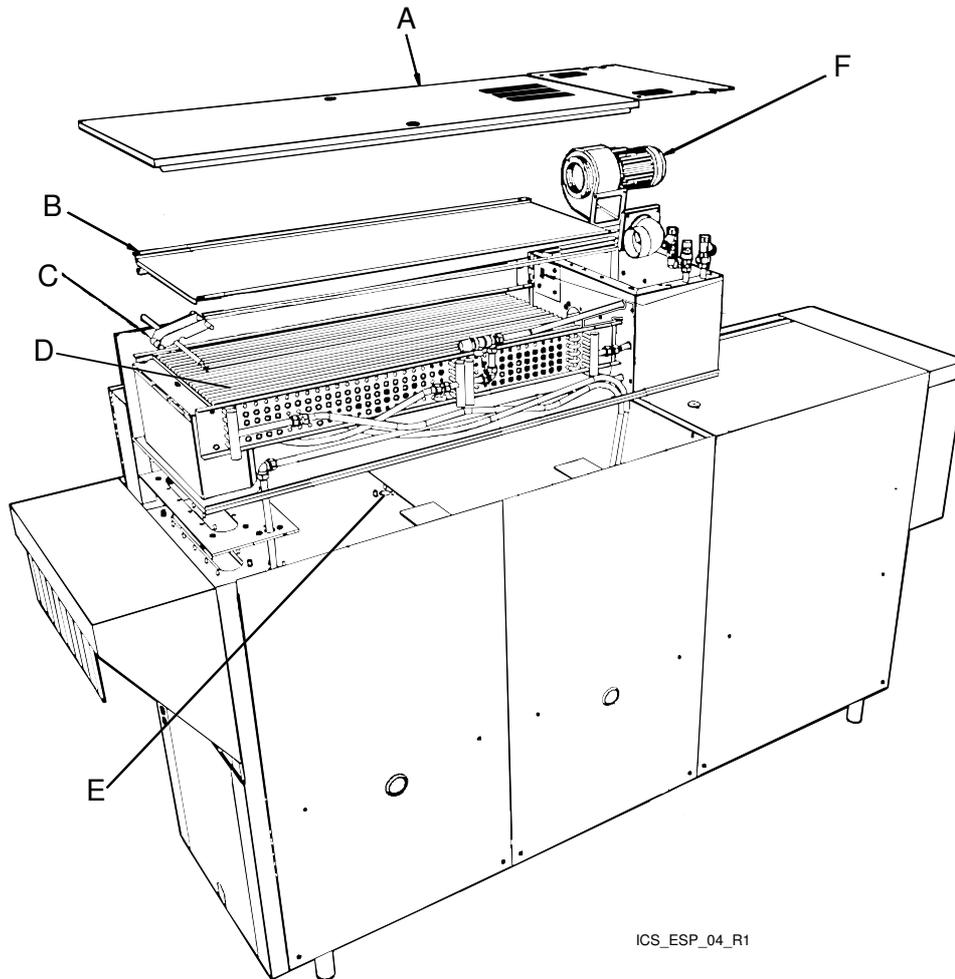
The door springs may be cleaned as required by rinsing these from the side using a hose. The springs must NOT be removed! The door in front of the spring being cleaned must be closed.



5\_3\_2

#### 4.3.4 Cleaning in the event of an alarm or 1 time / year

The machine's condensing battery (D) must be cleaned at least once a year or when an alarm with a message about cleaning the battery appears on the control panel display.



ICS\_ESP\_04\_R1

*A=Top panel*  
*B=Cover plate*  
*C=Lifting arm*  
*D=Condensing battery*  
*E=Drain*  
*F=Fan motor*



NB: When cleaning the condensing battery and the base of the battery box, do not use more water than the drain (E) under the battery can remove from the machine. The battery must be cleaned with hot water at normal pressure. Do not aim the water directly at the fan motor (F) on the end piece of the battery. The electric motor may be damaged if it is rinsed with high-pressure water.

- Remove the top panel (A) on the condensing battery box.

## Instructions for use

- Remove the cover plate (B) from the condensing battery by unscrewing the wing nuts which fasten it in place. Lift up the condensing battery using the lifting arm (C) to make it easier to remove.
- Check from inside the machine that the drain (E) under the battery is not blocked.
- With the condensing battery removed, begin by cleaning the bottom plate of the battery box. Then check that the drain (E) is not blocked.
- Next, clean the condensing battery (D). Rinse between the cooling fins from above. If the condensing battery is very dirty, a cleaning product with a neutral pH which will dissolve grease can be used. Check the drain.
- Finish by washing the base of the battery box again.
- Replace the condensing battery using the lifting arm (C), attach the cover plate securely (B) using the wing nuts, before fitting the top panel (A).

### 4.3.5 Operating problems



Check:

- Has the appliance been used according to the instructions?
- Are all the removable parts in their correct place?
- Is the main switch in the ON position?
- Are there any error messages on the display?
- Are the fuses in the electrical cabinet still intact? Ask service personnel to check the fuses.

### Error messages

Machine faults and user faults are indicated by messages on the display (1). The alarms indicated with a flashing LED (8) can be reset by pressing button (9) when the cause of the alarm has been rectified.

The following alarms can be addressed by the operator. For other alarms, or if an alarm reset with button (9) recurs, authorised service personnel must be contacted.

ALARM MESSAGE	ACTION
(0) PLATFORM ERROR	Restart the machine.
(63) POWER SUPPLY FAILURE CHECK THE EMERGENCY SWITCH	Reset the emergency stop by turning it in the direction of the arrows. Restart the machine.
(98) HARDWARE ERROR POWER ON FUNCTION DEFECT CALL SERVICE	Restart the machine. If the error recurs, contact an authorised service company.
(1) EMERGENCY STOP ACTIVATED	Reset the emergency stop by turning it in the direction of the arrows. Start the feed by pressing button (5).

**Instructions for use**

ALARM MESSAGE	ACTION
(100) NOMINAL VALUES RESTORED FROM UI	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(4) COMMUNICATION ERROR BETWEEN CPU AND I/O 1 CALL SERVICE	Restart the machine.
(5) COMMUNICATION ERROR BETWEEN CPU AND I/O 2 CALL SERVICE	Restart the machine.
(6) COMMUNICATION ERROR BETWEEN CPU AND EXTRA CARD CALL SERVICE	Restart the machine.
(7) COMMUNICATION ERROR BETWEEN CPU AND DISPLAY CARD CALL SERVICE	Restart the machine.
(14) WEAK SIGNAL FROM PHOTOCCELL START WASH CLEAN PHOTOCCELL	Clean the photocell. The alarm in the display will disappear after cleaning.
(47) HACCP ALARM PUMP FUNCTIONALITY DEFECT PRESS RESET	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(64) HACCP ALARM WRONG TEMPERATURE IN TANK PRESS RESET	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(67) HACCP ALARM WRONG TEMPERATURE IN BOILER PRESS RESET	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(72) HACCP ALARM WASHING DETERGENT FUNCTIONALITY DEFECT PRESS RESET	Check and fill with new detergent. Reset the alarm by pressing button (9).
(78) HACCP ALARM FINAL RINSE DEFECT PRESS RESET	Open the tap. Clean the nozzles. Reset the alarm by pressing button (9).
(29) EXTERNAL ALARM INPUT ACTIVATED	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(30) TIMEOUT FILLING OF TANKS PRESS RESET	Open the stopcocks. Close the level pipe and the outlet seals. Check the rubber sleeves. Reset the alarm by pressing button (9).

**Instructions for use**

ALARM MESSAGE	ACTION
(31) TIMEOUT HEATING TANKS AND BOILERS PRESS RESET	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(33) DOOR IS OPEN CLOSE DOOR	Close the door and start the feed by pressing button (5).
(41) LOW LEVEL IN TANK 2 (CHEM WASH TANK 1)	Close the level pipe or the outlet seal. Check the rubber sleeve.
(51) OVERLOAD FEEDING ACTIVATED REMOVE OBJECT RESTART FEEDING	Remove the item. Start the feed by pressing button (5).
(85) OVERLOAD FEEDING ACTIVATED PRESS RESET	Reset the alarm by pressing button (9).
(52) FEEDER LIMIT SWITCH ACTIVATED. REMOVE OBJECT FROM THE FEEDER LIMIT	Remove the basket. The feed will start automatically.
(54) TRAY DISPENSER OUT OF POSITION CHECK TRAY DISPENSER	Adjust the dispenser if it is in the wrong position or connect an empty dispenser to the machine or tray exchanger.
(61) LOW TEMPERATURE IN TANK 2 (CHEM WASH TANK 1)	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(62) LOW TEMPERATURE IN TANK 3 (CHEM WASH TANK 2)	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(81) LOW TEMPERATURE IN TANK 4 (CHEM WASH TANK 3)	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(66) LOW TEMPERATURE IN THE FINAL RINSE BOILER	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(71) WASHING DETER- GENT ALARM ACTIVE CHECK DETERGENT DEVICE	Check and fill with new detergent.
(77) FINAL RINSE ERROR SENSOR ERROR FLOW METER BV02	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(76) FINAL RINSE ERROR NO FLOW IN THE MACHINE	Check that the stopcocks on the incoming water supply are open. Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.

**Instructions for use**

ALARM MESSAGE	ACTION
(75) FINAL RINSE ERROR LOW FLOW IN THE MACHINE	Clean the nozzles. Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.
(90) ADJUSTED MACHINE CAPACITY OVERRIDDEN	Leave more time between feeding in trays.
(83) TIME FOR MAINTENANCE CONTACT:	Reset the alarm by pressing button (9). If the error recurs, contact an authorised service company.

**Troubleshooting**

In addition to the faults shown on the control panel other faults can occur. The table below shows some faults which can be rectified by the operator. If the problem persists, contact authorised service personnel.

Troubleshooting		
Problem	Cause	Action
No indication on the control panel display when the power is switched on.	The main switch is off.	Turn on the mains switch (14).
The machine does not fill with water.	The shut-off cock on the incoming water supply is closed.	Open the tap.
The machine does not stop filling.	Level pipe (22) is not in place.	Fit the level pipe.
	The level pipe's rubber sleeve is not sealing against the bottom plate.	Check that the level pipe is closed. Change the rubber sleeve if it is damaged.
Washing pump is noisy.	Low water level in the tank.	Check that the level pipe is closed. Change the rubber sleeve if it is damaged.
	Foam in the tank.	Change the water.
The machine is not cleaning properly.	The rinsing and washing nozzles are clogged with dirt.	Check and clean the nozzles.
	There is too little detergent.	Check the amount of detergent.
	Foam forming in the washing tank.	Check that the washing temperature is not too low and that the correct detergent is being used. Change the water if foam forms.
	Dirt has dried on the trays.	Soak the trays before washing.
	The water in the tank is too dirty.	Change the water.
The trays do not dry.	The rinsing nozzles (15) are blocked.	Check and clean the nozzles.
	Too little drying agent.	Check the quantity of drying agent.

When you contact service personnel, you will need to provide the following information:

- Machine model
- Machine serial number and date when the machine was installed.
- A brief description of the problem.
- What happened immediately before the fault occurred

## 5. Technical information

The manufacturer reserves the right to make changes to the technical data.

<b>Technical data</b>	
Pump motor chemical wash (kW)	1.5
Pump motor, recirculating rinse (kW)	0.11
Condensing fan (kW)	0.12
Drying zone fan I (kW)	1.1
Drive motor, belt (kW)	0.12
Booster heater (kW)	12
Pump motor, final rinse (kW)	0.11
Tank heater (kW)	12
Heater, drying zone (kW)	6
Heat recovery, cooling surface (m <sup>2</sup> )	25
Condensing fan, capacity (m <sup>3</sup> /hour)	100
Tank volume (litres)	100
Tank volume, final rinse tank (litres)	4
Weight, machine in operation (kg)	620
Enclosure protection class (IP)	55

<b>Capacity and operating data</b>	
Capacity (trays/hour)	960
Max. tray size (mm)	530x330
Cold water consumption final rinse (litres/hour)	150
Steam consumption at 150 - 250 kPa (kg/hour) *	40
Steam consumption at 50 - 140 kPa (kg/hour) *	40
Sound pressure level, LPA (dBA) **	69
Sound power level LWA (dBA) **	83

\* When the machine is steam-heated

\*\* in accordance with EN 60 335-2-58, §ZAA.2.8 with instruments that satisfy class 1.

Measurements of the sound pressure level on site are performed in three places 20 cm from the edges of the front at a height of 1.55 m using a microphone. When measuring sound power level, create an imaginary measurement area consisting of five sides at a distance of 1 m from all edges of the machine.

<b>Connection, electrically-heated machines</b>	
Total connected power (kW)	36
Main fuse 400 V 3N~ (A) *	63
Max. connection area 400 V 3N~ (L1-L3, N, PE) Cu (mm <sup>2</sup> )	35
Main fuse 230 V 3~ (A) *	125

## Technical information

### Connection, electrically-heated machines

Max. connection area 230 V 3~ (L1-L3, PE) Cu (mm <sup>2</sup> )	70
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\* Other voltages on request

### Connection, steam-heated machine 50-140 kPa

Total connected power (kW)	12
Main fuse 400 V 3N~ (A) *	32
Max. connection area 400 V 3N~ (L1-L3, N, PE) Cu (mm <sup>2</sup> )	35
Main fuse 230 V 3~ (A) *	35
Max. connection area 230 V 3~ (L1-L3, PE) Cu (mm <sup>2</sup> )	35
Steam connection (internal thread)	R <sup>3</sup> / <sub>4</sub> "
Condensing water connection (internal thread)	R <sup>1</sup> / <sub>2</sub> "

\* Other voltages on request

### Connection, steam-heated machines 150-250kPa

Total connected power (kW)	12
Main fuse 400 V 3N~ (A) *	32
Max. connection area 400 V 3N~ (L1-L3, N, PE) Cu (mm <sup>2</sup> )	35
Main fuse 230 V 3~ (A) *	35
Max. connection area 230 V 3~ (L1-L3, PE) Cu (mm <sup>2</sup> )	35
Steam connection (internal thread)	R <sup>3</sup> / <sub>4</sub> "
Condensing water connection (internal thread)	R <sup>1</sup> / <sub>2</sub> "

\* Other voltages on request

### Water, drain and ventilation connections

Water quality (hardness) (°dH)	2-7
Hot water connection, 50-65°C (internal thread)	R <sup>1</sup> / <sub>2</sub> "
Cold water connection, 5-12°C (internal thread)	R <sup>1</sup> / <sub>2</sub> "
Drain connection, PP - pipe (ø mm)	50
Water capacity, cold water, pressure (kPa)	250-600
Water capacity, cold water, flow (litres/minute)	6
Water capacity, hot water, min./max. pressure (kPa)	100/600
Floor drain, capacity (litres/sec.)	3
Heat load room, sensitive (kW)	4.5
Heat load room, latent (kW)	3
Heat load room, total (kW)	7.5
Capacity heat recovery fan (m <sup>3</sup> /hour)	100

### Size and weight for transport

Size * (LxWxH) (m)	2.7x0.8x2.0
Weight * (kg)	510

\*\* Including packaging

