

# Wexiödisk<sup>W</sup>

## TRAY AND CUTLERY DISHWASHER WD-59CT, WD-66CT

(translation of the original documentation)

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### Installation and user manual

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66CT\_01



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# 1. General information

Read the instructions in this manual carefully as they contain important information regarding the correct, effective and safe installation, use and servicing of the dishwasher.

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

## 1.1 Symbols used in this manual



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



This symbol on a machine component warns of the presence of electrical equipment. The machine is sensitive to electrostatic discharge (ESD), which is why a static electricity wristband must be used when handling the electronics.



This symbol explains the correct way to perform a task in order to prevent poor results, damage to the dishwasher or hazardous situations.



This symbol identifies recommendations and hints to help you to get the best performance from the machine.



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

## 1.2 Symbols on the dishwasher

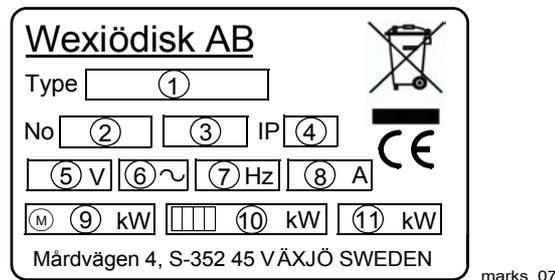


This symbol on a machine component warns of the presence of electrical equipment. The component may only be removed by a qualified electrician. The machine is sensitive to electrostatic discharge (ESD), which is why a static electricity wristband must be used when handling the electronics.

## General information

### 1.2.1 Machine marking

The rating plates are located at the bottom of the outfeed side and in the electrical cabinet. The technical information on the plates is also included on the machine's wiring diagram. The various rating fields show:



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

### 1.3 RoHS compatible

The machine is RoHS compatible, which means that it meets the requirements of the RoHS directive concerning substances in electrical and electronic products which are hazardous and harmful to the environment.

### 1.4 Checking that the machine and the manual correspond

Check that the type description on the rating plate corresponds with the type description on the front of the manual. 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 plates.

## 2. Safety instructions

### 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.



Modifying the equipment without the approval of the manufacturer invalidates the manufacturer's product liability.

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.



Switch off the machine immediately in the event of a fault or malfunction. The machine must only be serviced by trained engineers. The regular checks described in the manual must be carried out in accordance with the instructions. The machine must be serviced by a person authorised to do so by the manufacturer. Use original spare parts. Contact an authorised service company to draw up a programme of preventative maintenance. Hazardous situations may arise if the instructions above are not followed.

Before using the machine, ensure that personnel are given the necessary training in operating and maintaining the machine.

### 2.2 Transport



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

### 2.3 Installation



The electrical cabinet must only be opened by an authorised electrician. The machine is sensitive to electrostatic discharge (ESD), which is why a static electricity wristband must be used when handling the electronics.



Water and steam pipes must only be connected by authorised personnel.



Water pipes must be connected in a way that complies with the current regulations of the local water supply authority. Check the tightness of the water and steam connections before operating the machine.

Make sure that the mains voltage is the same as that indicated on the machine's rating plate.

## Safety instructions

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### 2.4 Detergent and drying agent



Only detergent and drying agent intended for industrial dishwashing machines must be used. 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.



Be aware of the risk of handling washing and drying agents. Protective gloves and safety glasses should be used when handling dishwasher detergent. Read the warning text on the detergent and drying agent containers as well as the detergent supplier's regulations.

### 2.5 Operation

#### 2.5.1 Crushing risk



Avoid contact with the conveyor belt during use. The movement of the belt can cause crushing injuries at the inlet and outlet of the machine. When servicing the machine, avoid contact with the conveyor belt's drive system during use. Crushing injuries can occur between the drive motor's chain and the chainwheel.

#### 2.5.2 Risk of slipping



Keep the floor dry to eliminate any risk of slipping. Mop up any water which has been spilled.

### 2.6 Safety instructions if the machine is not functioning



Check the following:

- Has the machine been used according to the instructions?
- Are all the removable parts in the correct place?
- Is the main switch in the ON position?
- Are the fuses in the electrical cabinet undamaged? Ask the service personnel to check the fuses.

If this does not solve the problem, ask authorised service personnel to check the machine.

## Safety instructions

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### 2.7 Cleaning



The water in the chemical wash tank is at a temperature of approx. 60 °C and contains detergent. Be careful when emptying and cleaning the tanks. Use protective gloves.

#### 2.7.1 Pressure washing



The machine must not be cleaned with a pressure washer, either inside or out.

In order to satisfy current requirements, electrical components of approved enclosure classes are used. No enclosure classes are designed to withstand pressurised water.

#### 2.7.2 The outside of the machine



Pressure washers and hoses must not be used to wash the outside of the machine. Water can penetrate into the electrical cabinet and the control panel and damage the equipment, which may affect the safety of the machine.

#### 2.7.3 Cleaning the floor



When the floor is washed, water can splash up under the machine and damage the components. These have not been designed to withstand being washed with water. Do not wash the floor within 1 metre of the dishwasher. Pressure washers have special protective cases which can be fitted to prevent water splashing. Problems with splashing can also occur when using ordinary hoses.

### 2.8 Repairing and servicing the dishwasher



Disconnect the power supply before removing the front panels. Avoid touching hot pipes and the booster heaters.

### 2.9 Recycling the machine



When the dishwasher has reached the end of its service life, it must be recycled in accordance with current regulations. Contact professionals who specialise in recycling.

## 3. Installation

### 3.1 General information



The machine must be installed by authorised personnel only.

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

The instructions should be used together with the machine drawing, wiring diagram and flow diagram.



The machine is CE marked. The CE mark is only valid for machines that have not been modified. If the machine is damaged as a result of the instructions not being followed, this invalidates the supplier's guarantee and the product liability.

### 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 change rate is required in the dish-washing room. The ventilation requirements for the room are calculated as per applicable standards.

#### 3.2.3 Drain

There must be floor drains for the machine's waste water and for water used for cleaning. For the size, capacity and location of floor drains, see the chapter entitled "Connections".

## Installation

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### 3.2.4 Space for servicing

The area above the machine must not contain any equipment which could prevent the fitting, servicing and replacement of parts. A free height of at least 2.8 metres is required in order to remove the inspection doors.

A 1-metre free space should be allowed in front of the machine and around the infeed and outfeed ends for service purposes.

### 3.3 Transport and storage

Check that there is sufficient height available to transport the machine to its installation site.

The machine is supplied in sections with a pallet under each section. Transport each section to the installation site using a handtruck.

The sections are transported transversely with the forks of the truck inserted from the long side. (The side marked "FRONT"). If the space available does not permit transverse transport, each section should be transported using two handtrucks, one at each short end. Do not lift the machine where its legs are positioned. These positions are indicated by labels on the outside of the packaging.



*Label which marks the position of the legs*



Take care during transport, as there is a risk of the equipment tipping over.



NOTE: 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 an ordinary pallet, always check that none of the components underneath the machine can be damaged.

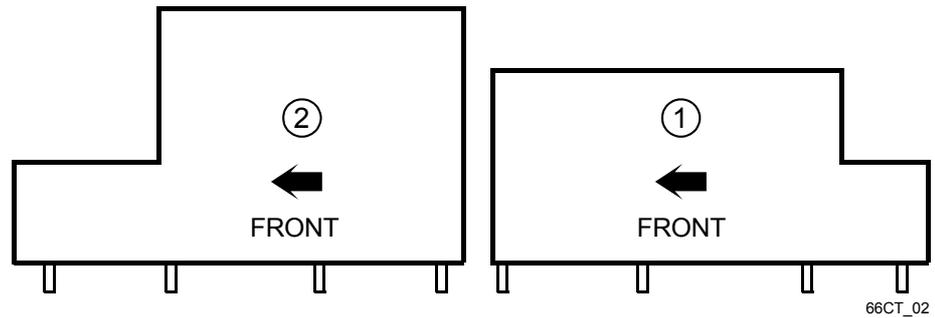


If the machine is not to be installed immediately, it must be stored in a frost-free area where the air is dry.

### 3.4 Marking of sections

The machine is normally divided into two sections. The installation instructions describe the assembly of a machine that has been split into two sections. The sections are marked on the outside of the packaging with the following information.

- Numbering 1-2. Section 1 = infeed section with washing zones, Section 2 = outfeed section with final rinse and drying zone.
- Arrows which indicate the feed direction of the machine.
- Marking of the front. FRONT = Front.



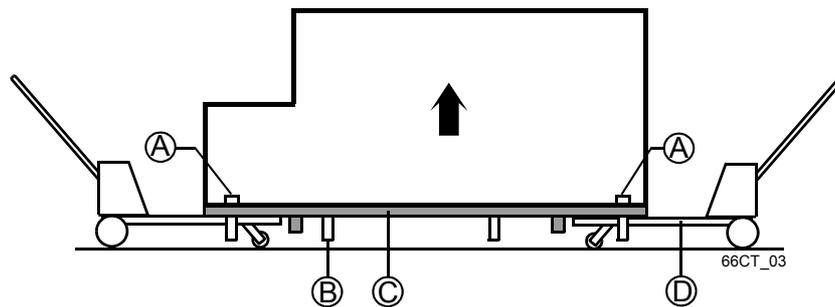
*Section marking on the packaging*

## Installation

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### 3.5 Unpacking

- Check against the delivery note that all the units have been delivered.
- Remove the packaging, but leave the pallet and any transport supports in place.
- Inspect the machine for any transport damage.
- Lift the section at both ends using a handtruck. Assemble the legs (B) so that they extend below the bottom edge of the pallet (C). Lower the section. Split the pallet and take it away.
- If the section should need to be lifted again from the short sides, a wooden runner should be placed under the cross-bar (A) on the section stand.



*A=Stand cross-bar*

*B=Leg*

*C=Pallet*

*D=Handtruck*



Packaging must be disposed of or recycled in accordance with local regulations.

## 3.6 Installation

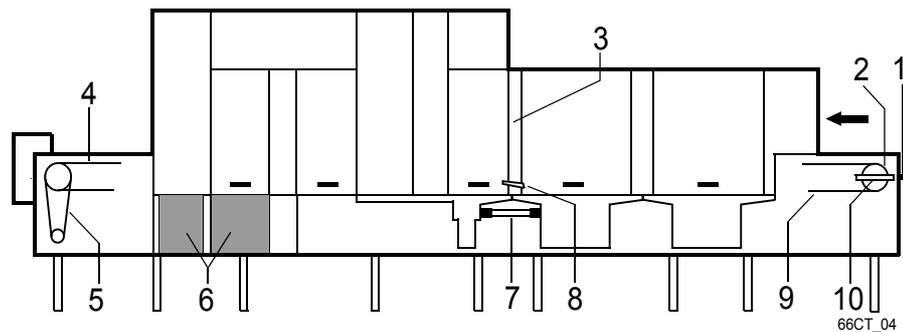
### 3.6.1 General information

Parts which must be assembled are prepacked inside each machine section together with the necessary bolts, nuts, etc.

Remove all lower cover plates (6).

The final position of the machine is either free-standing in the room or placed with the back against a wall. If the machine is to be placed against a wall, the assembly should be carried out with sufficient space behind the machine for access during the fitting of components on the back of the machine. The fully assembled machine is then pushed into position.

The picture below shows a machine with the feed direction from right to left. The picture shows parts which must be assembled during the installation and the adjusting device for tensioning the conveyor belt.

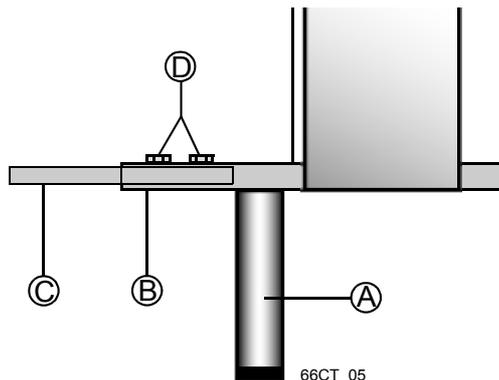


1. Adjusting screws for the conveyor belt
2. Tension wheel
3. Coverplate
4. Upper track
5. Chain
6. Coverplate
7. Overflow pipe
8. Drainage plate
9. Lower track
10. Belt tensioner

## Installation

### 3.6.2 Assembly of sections

- Remove any transport supports.
- Place section 2 in the appropriate place at the right height. Check that the section is horizontal using a spirit level. Adjust the machine using the legs.
- Undo the bolts (D) on the stand on section 2 and pull the joining tube (C) out a few centimetres. Lock the joining tube in this extended position using the bolts.



*Assembling the joining tube.*

*A=Leg*

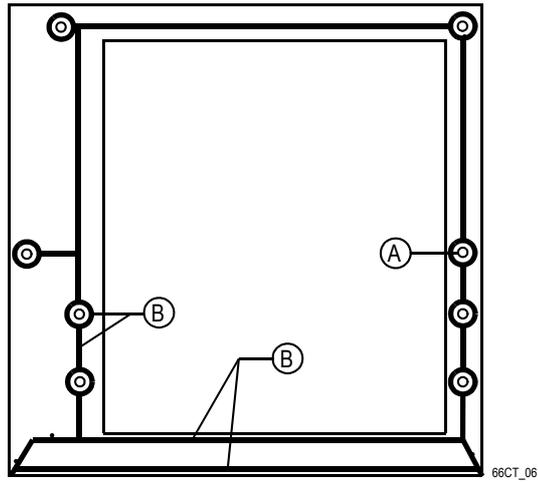
*B=Stand*

*C=Joining tube*

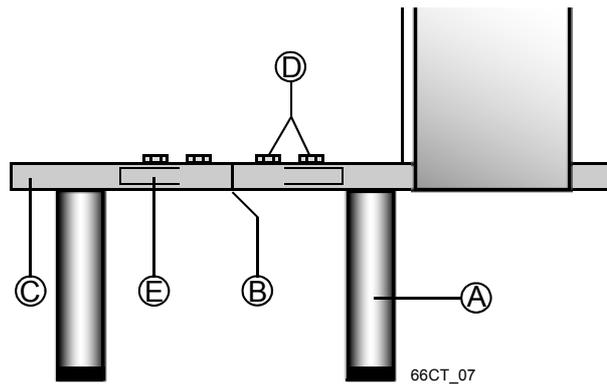
*D=M6x10Bolts*

- Place section 1 next to section 2 so that the rectangular metal pieces on the stands of both sections are in line with each other. Check that section 1 is horizontal using a spirit level. Adjust using the legs.
- Push section 1 towards section 2 until the joining tube on the stand is pushed partly into section 1, but do not push the sections completely together. There should still be a distance between them in order to apply the silicon around the openings.
- Apply plenty of silicon around the openings of both sections and around all bolt holes. Place two strands of silicon along the lower edge.
- Push the sections together. Hold them together with a screw clamp and fit the bolts that hold the hoods together. Lock the stand on the front and back of the machine using two M6x10 bolts. Check that the machine is horizontal using a spirit level.

Installation



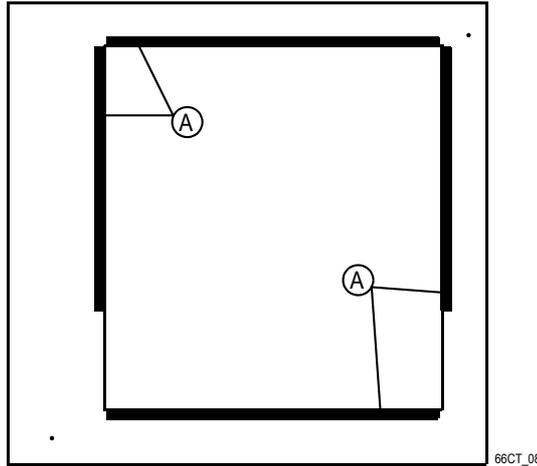
*Example of application of silicon.*  
 A=Bolt hole  
 B=Silicon



*Locking the stand.*  
 A=Leg  
 B=Joint on the stand  
 C=Stand  
 D=M6x10 Bolts  
 E=Joining tube

### Assembly of clamp strips and upper cover plates

- When the sections have been fitted together, the clamp strips (A) should be fitted inside the joint. Fit the upper clamp strip first. Apply a small amount of silicon to the strips before fitting them into place.
- Seal the joint between the sections on the outside of the machine (back and top) using silicon. Attach masking tape to both sides of the joint and fill the joint with silicon.
- Fit the upper cover plate (3) between the sections.



*Assembling the clamp strips.  
A=Clamp strip*

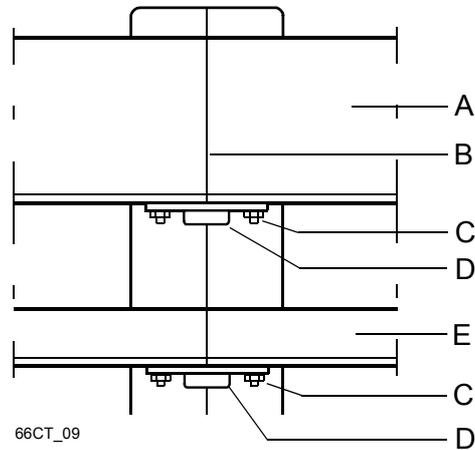
### 3.6.3 Pipes

Fit together all pipes for water, steam, condensation water and waste (pipe for steam and condensation water on steam-heated machines only). The pipes are split at the section join. The necessary parts for joining the pipes together are fitted to the pipes at the joint. The pipes should be lubricated with a sealant before joining.

## Installation

### 3.6.4 Assembling the track and conveyor belt

Screw the upper and lower tracks (4.9) of the conveyor belt together at the joint between the sections using the support plates and nuts supplied.



*Locking the upper and lower tracks.*

*A=Upper track*

*B=Joint*

*C=Flange nuts*

*D=Support plate*

*E=Lower track*

- Fitting the drainage plate (8).
- Joint the belt if it is in position in the machine.
- If the belt is not in position, the installation is carried out as follows:
- Feed in the belt on the upper track through the outfeed opening. Pull the belt through the machine through to the infeed opening and around the tension wheel (2).
- Use a piece of rope and pull the belt back on the lower track to the outfeed opening. Join the ends of the belt.
- Tension the belt. Undo the screws for the belt sections (10). The screws are accessible from the inside of the infeed section. Tension the belt using the adjusting screws (1). When the belt is tensioned correctly, it should be possible to lift it by about 2-3 cm at the centre of the infeed. Tighten the screws for the belt tensioners (10).

## Installation

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### 3.6.5 Other assembly

- Fit the overflow pipe (7) between the tanks.
- Fit the chain (5) to the drive motor.
- Pull out and connect the electric cables for the pumps and other components. The cables are located at the section joint.
- Each cable is marked with the same designation as the component to which it must be connected. The marking for each component is on the component itself and on the machine's stand. The cables are placed in existing cable runs.
- The photocells for the infeed are fitted on the adjacent tray conveyor.

### 3.6.6 Placement against a wall

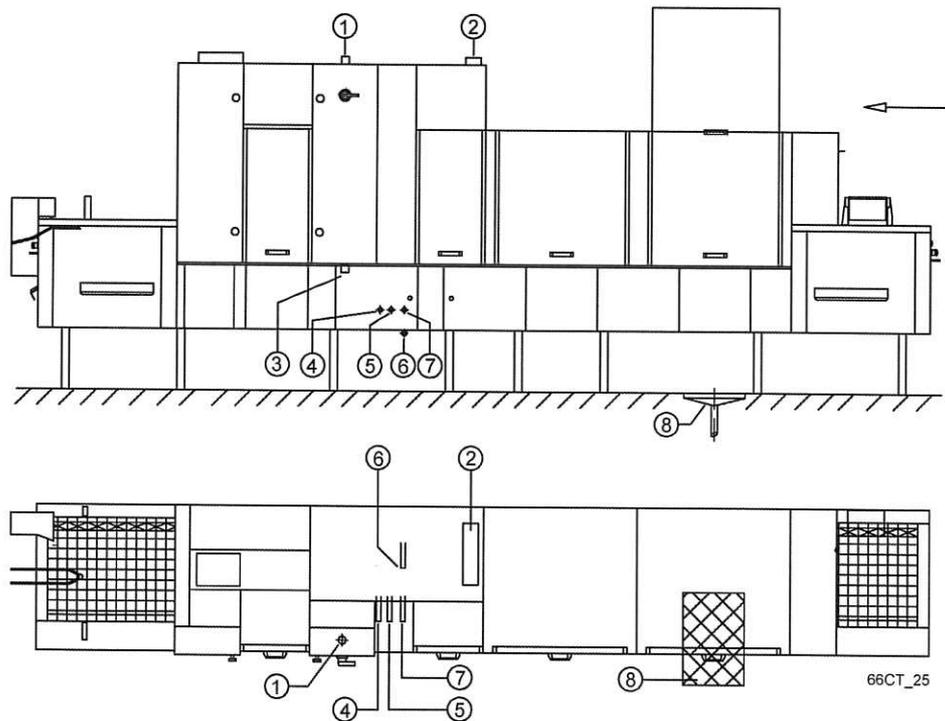
If after assembly the machine is to be moved and placed with the back against a wall, place wooden runners under the stand and push the machine into position with the aid of a handtruck.

Using a spirit level check that the machine is horizontal and adjust the legs of the machine if necessary.

### 3.7 Connections

The pictures show machines with the feed direction from right to left. The machines can also operate in the opposite direction. For the exact location of the various connection points, see the machine drawing located in the electrical cabinet. The drawing can also be obtained from the manufacturer.

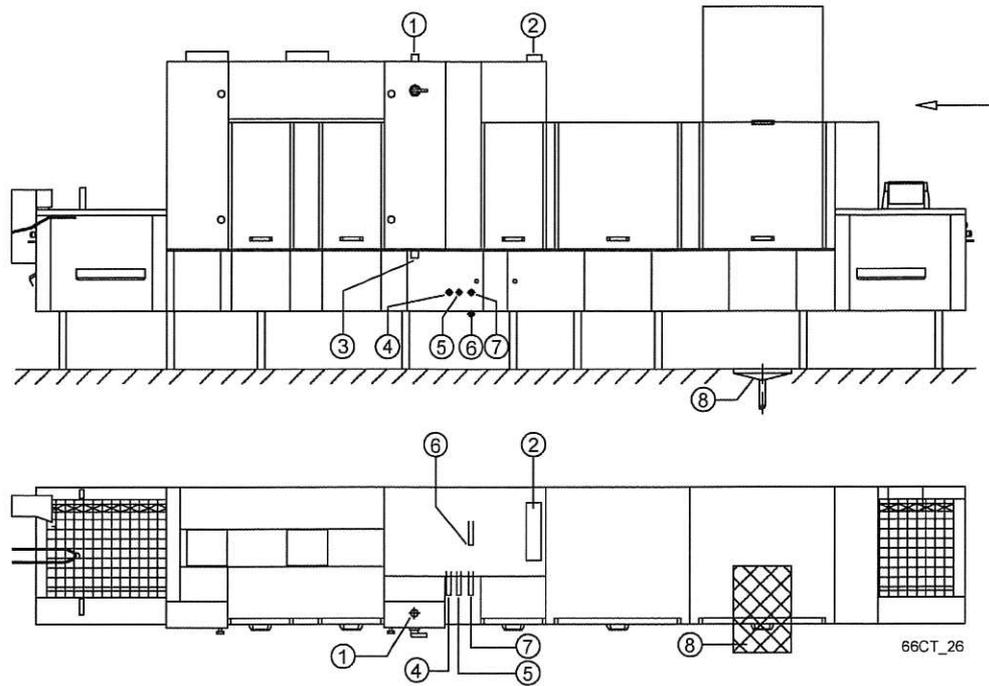
#### 3.7.1 Dishwasher WD-59CT



1. Electrical connection from ceiling
2. Ventilation connection 400x100 mm without damper.
3. Alternative electrical connection from floor
4. Hot water connection (Connection from floor or ceiling).
5. Cold water connection (Connection from floor or ceiling).
6. Condensation water connection R 3/4" (Steam-heated machines).
7. Steam connection (Steam-heated machines. Connection from floor or ceiling). Connection for steam pressure 50-140 kPa = R 1 1/4". Connection for steam pressure 150-250 kPa = R 1".
8. Floor drain 400x600 mm. Capacity 3 litres/sec.

## Installation

## 3.7.2 Dishwasher WD-66CT



1. Electrical connection from ceiling
2. Ventilation connection 400x100 mm without damper.
3. Alternative electrical connection from floor
4. Hot water connection (Connection from floor or ceiling).
5. Cold water connection (Connection from floor or ceiling).
6. Condensation water connection R 3/4" (Steam-heated machines).
7. Steam connection (Steam-heated machines. Connection from floor or ceiling). Connection for steam pressure 50-140 kPa = R 1 1/4". Connection for steam pressure 150-250 kPa = R 1".
8. Floor drain 400x600 mm. Capacity 3 litres/sec.

## Installation

### 3.7.3 Water connection

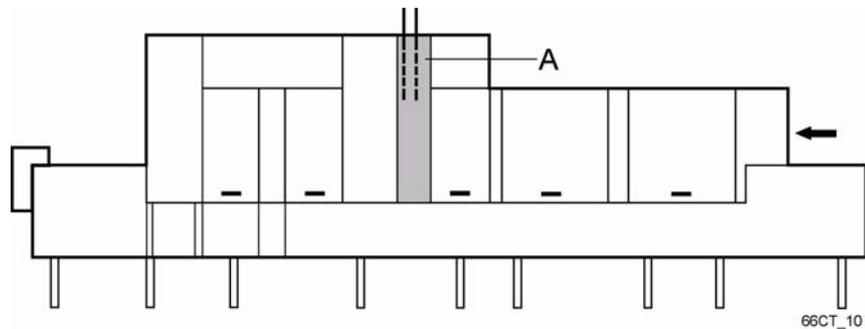
The machine is supplied as standard without stopcocks for the water supply. Stopcocks must be installed on incoming pipes.

It is important that the water supply has sufficient pressure to ensure the correct flow of water to the machine.

Water pressure: 300-600 kPa. Tank volume: 245 litres

The hot water connection is fitted with a filter. The cold water connection has a filter, non-return valve, safety valve and vacuum valve.

When installing a connection from the ceiling, the pipes must be fed from above down through the cable duct behind the cover plate (A) next to the electrical cabinet. Remove the cover plate and break away the perforated plate on top of the cover plate.



*Connection from ceiling.  
A=Cover plate*

### 3.7.4 Steam connection (Extra equipment)

A steam connection is only provided on steam-heated machines. The connection is fitted with a filter. The machines are supplied as standard without stopcocks for steam. A shut-off valve must be installed on the incoming pipe. When connecting a pipe from the ceiling, it is taken into the same area as the water pipes behind the cover plate next to the electrical cabinet.

### 3.7.5 Condensation water connection (extra equipment)

A condensation water connection is only provided on steam-heated machines. The pipe is connected to the system's steam boiler.

## Installation

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### 3.7.6 Drain connection

The drain is connected using a 50mm metal tube which tolerates mechanical impacts. The drain must run to a floor drain, where its opening must be above the water level.

### 3.7.7 Detergent and drying agent

The machine comes ready for the connection of a detergent and drying agent system. The water outlet for the detergent is located on the incoming hot water pipe. The drying agent connection is located on the pipe leading to the booster heaters (see the flow diagram). This flow diagram is shown on the inside of the electrical cabinet.

Contact a suitable supplier to arrange for the equipment to be installed.

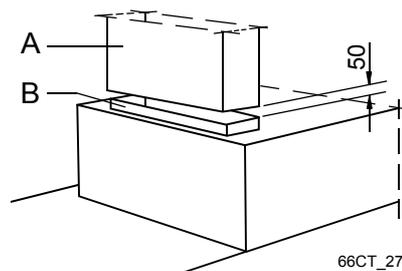
Avoid making unnecessary holes in the machine. If possible the equipment should be placed on a wall next to the machine.

Electrical connections: See the wiring diagram. This wiring diagram is shown on the inside of the electrical cabinet.

### 3.7.8 Ventilation

Next to the machine's condensing battery is a connection for ventilation. If a sound trap is supplied, it is fitted directly to this connection. The connection to the ventilation system is made using a strain-relief grip.

The location and size of the connection are shown on the installation diagram.



*Connection with pull-off connector.*

*A=Ventilation duct 405 x 105 mm*

*B=Machine's ventilation connection 400 x 100 mm*

The ventilation requirements for the room are calculated as per applicable standards.

## Installation

### 3.7.9 Electrical connection



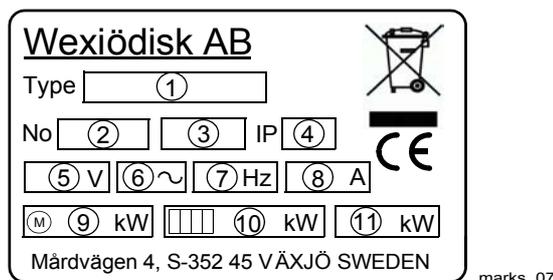
This symbol on a machine component warns of the presence of electrical equipment. The component may only be removed by a qualified electrician. The machine is sensitive to electrostatic discharge (ESD), which is why a static electricity wristband must be used when handling the electronics.

Information about electrical connections can be found on the machine's wiring diagrams. The wiring diagrams are shown on the inside of the electrical cabinet door. Store the diagrams in the electrical cabinet after installation.

The machine has a built-in main switch. Rating data is given on the rating plates, which are located on the end of the outfeed and in the electrical cabinet. Electrical data is also shown on the machine's wiring diagram. The installation diagram shows the location of the electrical connection.

The various fields on the rating plate show:

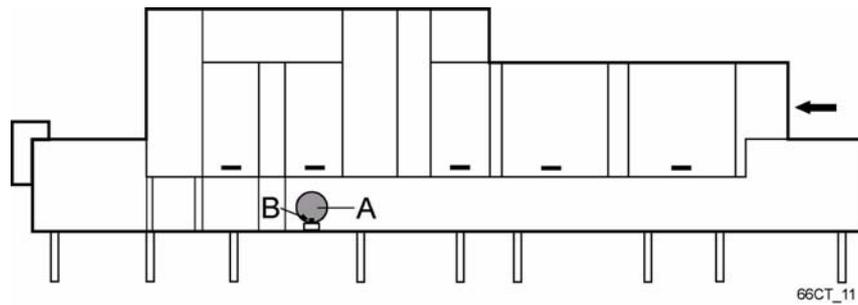
1. Machine type
2. Machine serial number
3. Year of manufacture
4. Enclosure protection class
5. Voltage
6. Number of phases, with or without zero
7. Frequency
8. Main fuse
9. Motor output
10. Electrical heating output
11. Max. output



#### Rating plate

An earth cable for potential equalisation is connected to the earth bolt (B) on the stand. The connection is located on the beam in front of the heat exchanger (A).

## Installation



*Position of the earth bolt.*

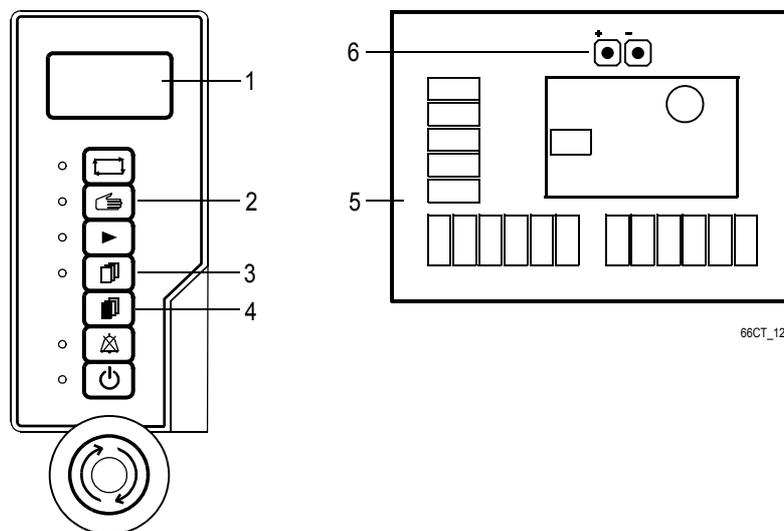
*A=Heat exchanger*

*B=Earth bolt*

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

### 3.8 Setting the flows

The water flow is set in the factory, but should be checked after the machine has been installed.



*Functions on control panel and circuit board for checking and setting the flow*

1. Display for showing texts
2. Button for manual operation
3. Button for the diagnostics function.
4. Button for switching between diagnostic messages
5. Circuit board
6. Plus and minus buttons

### **3.8.1 Checking and setting the final rinse flow**

- Prepare the machine for use in accordance with the INSTRUCTIONS FOR USE.
- Start the machine using button (2) and let it run continuously.
- Press and hold button (3) until the display (1) shows a menu with the following groups: SETPOINTS - DIAGNOSIS - RELAY TEST - STATISTICS.
- Select DIAGNOSIS using button (3).
- Press button (4) to display the first message and then use button (4) to scroll through the messages until DI16 CARD1 BV02 FLOW SENSOR is displayed. The final rinse flow is displayed at the same time in litres/min.
- Adjust the flow using the reducing valve which is located next to the water meter BV02. The flow should be 5 litres per minute.
- Exit the diagnostics function by pressing button (3). Press and hold the button until the corresponding LED goes out. Stop the machine using button (2).

### **3.8.2 Checking and setting the flow to the pre-wash tank and intermediate rinse**

The flow to the pre-wash tank and intermediate rinse is adjusted using needle valves connected to the filling pipe of the pre-wash tank/the rinse pipe of the intermediate rinse.

- Start the machine using button (2) and let it run continuously..
- Press and hold button (3) until the display (1) shows a menu with the following groups: SETPOINTS - DIAGNOSIS - RELAY TEST - STATISTICS.
- Select DIAGNOSIS using button (3).
- Press button (4) to display the first message and use button (4) to scroll through the messages until DI15 CARD1 BV2 FLOW SENSOR is displayed. The flow is shown together as litre/min.
- Close the needle valve to the pre-wash tank. Water meter BV2 should now show a flow of 2 litres/min. for the intermediate rinse. Use the needle valve of the intermediate flow to adjust the flow if necessary.
- Open the needle valve of the pre-wash tank until the display shows a flow of 4 litres/min.
- Exit the diagnostics function by pressing button (3). Press and hold the button until the corresponding LED goes out. Stop the machine using button (2).

## **3.9 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.

If a start-up report has been supplied with the machine, this should be used for the trial run and testing.

## Installation

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### 3.9.1 Checks during trial run

If there is a start-up report, follow the instructions in the report and carry out the checks described.

Start the machine and run it continuously in manual mode (see the instructions for use).

If a start-up report was not provided with the machine, the following checks must be carried out:

- Tank and final rinse temperatures. The water temperatures must be maintained during the washing process.
- Leakage. Check that no leakage is occurring at the hose connections and couplings.
- Direction of rotation of the pump motor. The direction of rotation must conform 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.
- The function of the door switches. The machine will stop if any of the doors open while washing is in progress.
- Detergent and drying agent. Contact the detergent supplier when setting the dosing equipment.
- Check the setting of reference values. All the reference values are set to the recommended values on delivery.
- Check that the belt is not running crookedly and that it is correctly tensioned.
- Check that the overload switch for the feed is working by attempting to hold the belt still for a few seconds. If the switch does not activate (the belt should stop), it must be adjusted immediately.
- If possible, run the machine with dirty dishware. Check that the dishware is cleaned and that it dries.

### 3.9.2 Concluding the trial run

- Empty the machine if it is not being used after the trial run has been concluded. Clean the inside of the machine if dirty dishware has been used for the trial run. Leave the doors open.
- Turn off the power at the main switch and re-tighten all electrical connections in the electrical cabinet. Turn on the main switch again.
- Fit the lower cover plates (6). The plates are marked F1, F2.....B1, B2, etc. F = front, B = back. The numbering of the plates starts at the infeed end of the machine.
- Any start-up report must be completed and acknowledged by the customer. The report should be returned to the supplier.
- Train dishwashing staff.

## Installation

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### 3.9.3 Acknowledgement of completed start-up

If a start-up report is not supplied with the machine on delivery, the following information must be completed and acknowledged by the customer for each start-up:

Machine type:

Machine serial number:

Installation date:

<b>Customer:</b>
Postal address:
Telephone:
Contact:

<b>Dealer:</b>
Telephone:
Contact:

<b>Installation company:</b>
Telephone:
Contact:

<b>Service company:</b>
Telephone:

<b>Detergent supplier:</b>
Telephone:

<b>End user's signature:</b>

<b>Name in block capitals</b>

### 3.10 Cleaning the exterior

Remove the protective plastic from the machine and polish it with a suitable cleaning material for stainless steel plate.



Use a suitable solvent to remove any residual adhesive from the plastic. Rub with a forwards and backwards movement in the polishing direction of the plate. Wire brushes or wire wool should not be used as they will damage the stainless steel plate.

### 3.11 Technical documentation



To ensure that the machine is operated and serviced correctly, it is important that the documentation supplied with the machine is made available to the personnel using it. The installation and user manual, which describes handling and care among other things, should be stored near the machine.

Any other manuals which are supplied with the machine must be given to the authorised service engineer.

## 4. Instructions for use



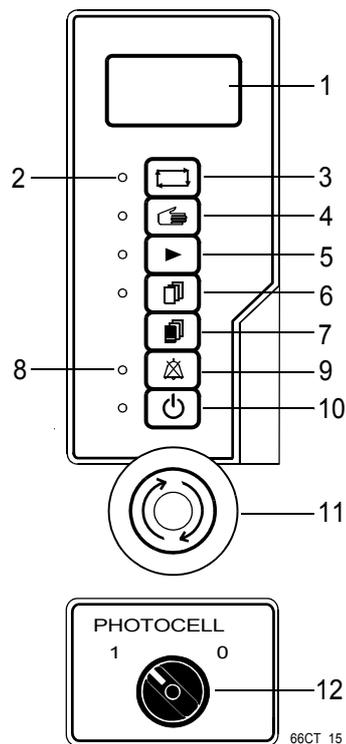
All staff using the machine must be given training in how the machine works by the person responsible for staff safety.

The dishwasher should not be used by anyone suffering from a physical or mental illness.

Children should be supervised to ensure that they do not play with the machine.

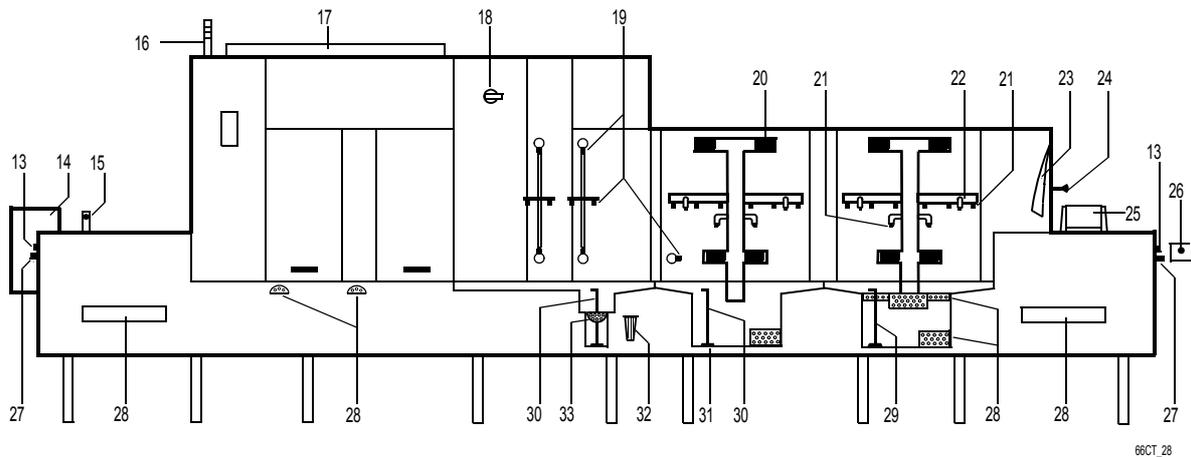
### 4.1 Preparations

#### 4.1.1 The machine's design



*Control panel*

## Instructions for use



1. Display
2. LEDs (5) which indicate that a function is activated
3. Button for automatic operation
4. Button for manual operation
5. Button for 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. On/Off
11. Emergency stop
12. Knob for activation of photocell (15) at outfeed area (extra equipment)
13. Button for selecting automatic or manual operation
14. Door for cutlery
15. Photocell (extra equipment)
16. Alarm lamp for indication of alarm, etc
17. Cover for drying zone fans
18. Main switch
19. Rinse nozzle
20. Washer arm for trays (removable)
21. Wash nozzle
22. Washer arm for cutlery (removable)
23. Curtain
24. Lever for switching between Normal/Heavily soiled wash (Extra equipment)
25. Cutlery funnel
26. Photocell
27. Emergency stop
28. Filter
29. Outlet seal
30. Outlet seal
31. Rubber sleeve
32. Filter
33. Filter for the final rinse

## Instructions for use

---

### 4.1.2 Preparations before filling

Check:

- that the machine has been cleaned and that the stopcocks for the water are open.
- the amount of detergent and drying agent.
- that the dispensers are in place.



NOTE: Ordinary washing-up liquid must not be used in the machine or for soaking. It causes foam to form and produces poor washing results.

Fit:

- outlet seals (29,30). The rubber sleeve (31) on the outlet seals must seal against the bottom plate..
- strainers (28, 33).
- curtains (23)

### 4.1.3 Filling and heating the machine

- The doors must be closed.
- Press button (10) to switch on the power supply.
- Press button (3). The filling and heating process will begin.
- When the machine is filled and heated, it starts and runs for a while to mix the detergent.
- When the detergent is mixed, the message on the display indicates that the feed should start. Start the conveyor belt by pressing button (5).
- The machine is now ready to wash.

## 4.2 Using the machine

### 4.2.1 Washing

#### Setting for normal or heavily soiled loads (Extra equipment)

If the machine has this function, you can change the wash pressure using lever (24). Put the lever in the position for normal loads when washing normally soiled items.

When the lever is in the position for heavily soiled loads, heavily soiled items can be washed.

#### Soaking and pre-rinse

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

When washing heavily soiled loads, the items must be rinsed off before being fed into the machine.

#### Washing with automatic operation

For automatic operation, press button (3). The corresponding LED lights up.



#### *Button for automatic operation*

- The cutlery is normally removed from the trays using a cutlery sorter.
- Trays with cutlery are transported on a tray conveyor. The trays are fed into the machine automatically.
- Cutlery must not be placed directly on the tray conveyor. It must be placed on the trays.
- The wash and rinse process will start automatically when the trays and cutlery are fed into the machine.
- If no new trays are fed in, the machine will stop. After a while the trays and cutlery are automatically removed from the machine.

## Unloading items manually

If the machine has stopped and you do not wish to wait for automatic unloading, manual mode can be used to transport the dishware out of the machine.

Press button (4) for manual operation. The corresponding LED lights up.



### *Button for manual operation*

If the machine is being run in manual mode and new trays are fed in, the machine switches to automatic operation.

## Button for selecting operating mode

Automatic or manual operation can also be selected by pressing one of the buttons (13) at the infeed/outfeed end.



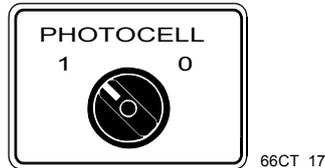
66CT\_29

## Storage in the dispenser

If washed trays are being stored in the tray dispenser connected to the machine's outfeed, the alarm lamp (16) shows yellow when the dispenser is full. If the machine is connected to a tray exchanger for two dispensers, the lamp shows a yellow light when both dispensers are full. The machine stops. When empty dispensers are put in position, the machine starts automatically.

## Washing heavily soiled items and other types of items

The machine can be additionally fitted with a photocell (15) at the outfeed. The photocell has a stop function when items other than trays and cutlery are to be washed, e.g. heavily soiled items. The control panel then has an additional knob (12) for activation of the photocell. In this case, the machine must run in manual mode.



*Knob for activation of photocell (15). (Extra equipment)*

- Activate the photocell by turning the knob (12) to position 1.
- Press button (4) for manual operation. The machine starts and runs continuously.
- When the washed items activate the photocell (15) on the outfeed, the conveyor stops. The belt will restart when the items have been removed.
- If the machine is being run in manual mode and trays are fed onto the tray conveyor, the machine switches to automatic mode.

### 4.2.2 Emergency stop

The machine has three emergency stop buttons. One of the emergency stop buttons (11) is located beneath the control panel. The other emergency stop buttons (27) are located at the infeed and outfeed. If the machine has been stopped by an emergency stop button being pressed when the machine is running, the emergency stop button must be reset by turning it in the direction of the arrows. Then press button (5) to restart the feed.

### 4.2.3 Lights which indicate alarms (extra equipment)

The alarm light (16) indicates the following:

- Green light = Machine in operation.
- Yellow light = Alarm. Check the message on the control panel display. Rectify the cause of the alarm. See the section "Operating problems".
- Red light = Serious fault. Check the message on the control panel display. Contact service personnel.

### 4.2.4 Changing the water

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

- Switch the machine off by pressing button (10).
- Remove the filter from the pre-wash tank and empty the machine by turning the outlet seals (29, 30) a quarter of a turn.
- Clean the tanks, outlet seals and filters. Refit the components.
- Refill the machine. See "Filling and heating the machine".

## 4.3 After use

### 4.3.1 End of wash, cleaning

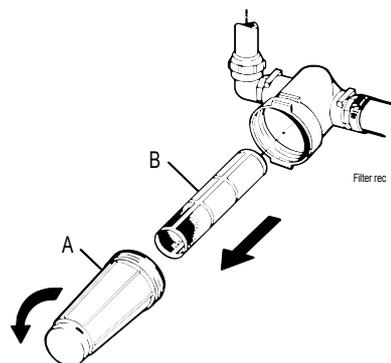


HACCP is a preventive inspection system which ensures that hygiene requirements are met during the washing process and the cleaning of the machine. As a result of its design, the machine meets strict hygiene requirements. Regular, thorough cleaning is also important from a hygiene perspective. Cleaning the machine carefully helps to ensure good washing results and reduces the risk of dirt accumulating inside the machine.

### 4.3.2 Daily cleaning

#### Cleaning the inside

- Switch the machine off by pressing button (10).
- Empty the tanks by turning the drain seals (29,30) a quarter of a turn.
- Clean the filters (28), all the curtains (23), the outlet seals (29,30) and the rinse nozzles (19). Never leave the outlet seals so that the rubber sleeve rests on a surface. The sleeve can become deformed leading to the risk of water leakage in the tanks.
- Clean the washer arm nozzles (20, 21).
- Clean the back of the doors.
- Clean the cutlery funnel (25).
- Rinse all the inside surfaces of the machine and clean the tanks.
- Finally, clean the filter (33).
- Clean the filter (32). The filter is located behind the lower door for the final rinse zone. Unscrew the cover (A) and remove the filter (B). Clean the filter. Make sure that the cover seal provides a good seal when refitting.



*Filter for final rinse.*

*A=Cover*

*B=Filter*

- Refit all removable parts and leave the doors open.

## Instructions for use

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### Cleaning the exterior

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



If detergent is used, it must not contain abrasives. Detergents containing abrasives will damage the stainless steel panels.



The outside of the machine must not be hosed down. Water can enter the machine and damage the control panel and electrical equipment.

### Incorrect cleaning methods

NOTE: If the incorrect cleaning method is used, this may damage the machine. The following points must be observed:



Do NOT use steel wool as it will cause corrosion to form in the machine.

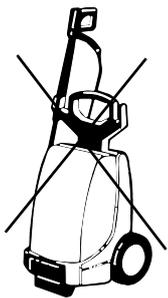


*Steel wool can cause rust to form in the machine*



Pressure washers can damage the machine and must NOT be used for cleaning purposes. Never use a pressure washer to clean the floor within 1 metre of the dishwasher without the special protective covers that are available to prevent splashing. 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.

There is a risk of splashing even if the floor is hosed down.



*Pressure washers must not be used for cleaning*

## Instructions for use

### 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, follow these instructions:

- Clean the washer arms (20). Remove the lower washer arms by pushing the lock on the front of the washer arm down and pulling the washer arm out. Remove the upper washer arms by turning the knob beneath the front of the washer arms a half turn. Pull the washer arm down slightly and out. Brush and rinse the inside of the washer arms and clean the nozzles.
- Clean the washer arms (22). Turn the washer arms and pull them out. Brush and rinse the inside of the washer arms and clean the nozzles.
- Check and clean the rinse nozzles (19).
- Check that the overload switch for the feed is working by attempting to hold the belt still for a few seconds. If the switch does not activate (the belt should stop), it must be adjusted immediately.
- Refit all cleaned components.

### 4.3.4 Operating problems

#### Error messages

Machine faults and user faults are indicated with messages on the display (1). If an alarm occurs, LED (8) will light up or flash. If the LED flashes, the alarm can be reset by pressing button (9).

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

Alarm texts		
Alarm text	Cause	Action
(63) POWER SUPPLY FAILURE - CHECK THE EMERGENCY SWITCH	One of the emergency stop buttons (11,27) has been pressed.	Reset the emergency stop by turning it in the direction of the arrows. Start the feed by pressing button (5).
(1) EMERGENCY STOP ACTIVATED	One of the emergency stop buttons (11,27) has been pressed.	Reset the emergency stop by turning it in the direction of the arrows. Start the feed by pressing button (5).
(9) COMMUNICATION ERROR FREQUENCY CONVERTER - CALL SERVICE	---	Reset the alarm by pressing button (9). Contact service personnel.
(10) FREQUENCY CONVERTER ERROR - CHECK POWER SUPPLY - CALL SERVICE	---	Reset the alarm by pressing button (9). Contact service personnel.
(11) OVERTEMPERATURE FREQUENCY CONVERTER - CALL SERVICE	---	Reset the alarm by pressing button (9). Contact service personnel.
(12) DC BUS OVERVOLTAGE FREQUENCY CONVERTER - CALL SERVICE	---	Reset the alarm by pressing button (9). Contact service personnel.
(14) WEAK SIGNAL FROM PHOTOCCELL START WASH - CLEAN PHOTOCCELL	There is dirt on one of the photocells (26) at the infeed.	Clean the photocells. The alarm in the display will disappear after cleaning.

## Instructions for use

Alarm texts		
Alarm text	Cause	Action
(15) WEAK SIGNAL FROM PHOTOCELL END LIMIT - CLEAN PHOTOCELL	There is dirt on one of the photocells (15) at the outfeed.	Clean the photocells. The alarm in the display will disappear after cleaning.
(47) HACCP ALARM PUMP FUNCTIONALITY DEFECT - PRESS RESET	One of the pumps is not working.	Reset the alarm by pressing button (9). Contact service personnel.
	The water level in one of the tanks is low. The outlet seals (29, 30) are not closed. The rubber sleeves are not sealing against the bottom plate.	Close the outlet seals. Check the rubber sleeves. Reset the alarm using button (9).
(64) HACCP-LARM FELAKTIG TEMPERATUR I TANK - TRYCK RESET	The washing temperature in one of the tanks is too low.	Reset the alarm by pressing button (9). Contact service personnel.
(67) HACCP ALARM WRONG TEMPERATURE IN BOILER - PRESS RESET	The temperature in one of the booster heaters is too low.	Reset the alarm by pressing button (9). Contact service personnel.
(72) HACCP ALARM WASHING DETERGENT FUNCTIONALITY DEFECT - PRESS RESET	The detergent has run out.	Check and fill with new detergent. Reset the alarm by pressing button (9).
(78) HACCP ALARM FINAL RINSE DEFECT - PRESS RESET	The water stopcock is closed. The rinse nozzles (19) for the final rinse are blocked.	Open the stopcock. Clean the nozzles. Reset the alarm by pressing button (9).
(26) SENSOR ERROR PULSE SENSOR B18 - RESTART FEEDING	---	Reset the alarm by pressing button (9). Start the feed by pressing button (5).
(27) SENSOR ERROR PULSE SENSOR B17 - MAN MODE - CALL SERVICE	---	The machine can be run in manual mode. Reset the alarm by pressing button (9). Contact service personnel.
(29) EXTERNAL ALARM INPUT ACTIVATED	---	Reset the alarm by pressing button (9).
(30) TIMEOUT FILLING OF TANKS - PRESS RESET	The water stopcocks are closed. The outlet seals (29, 30) are not closed. The rubber sleeves are not sealing against the bottom plate.	Open the stopcocks. Close the outlet seals. Check the rubber sleeves. Reset the alarm using button (9).
(31) TIMEOUT HEATING TANKS AND BOILERS - PRESS RESET	---	Reset the alarm by pressing button (9). Contact service personnel.
(33) DOOR IS OPEN - CLOSE DOOR	---	Close the door and start the feed by pressing button (5).
(40) LOW LEVEL IN TANK 1 (PRE RINSE TANK)	The outlet seal is not closed. The outlet seal's rubber sleeve is not sealing against the bottom plate.	Close the outlet seal. Check the rubber sleeve.
(41) LOW LEVEL IN TANK 2 (CHEM WASH TANK 1)	The outlet seal is not closed. The outlet seal's rubber sleeve is not sealing against the bottom plate.	Close the outlet seal. Check the rubber sleeve.
(45) LOW LEVEL IN FINAL RINSE TANK	The outlet seal is not closed. The outlet seal's rubber sleeve is not sealing against the bottom plate.	Close the outlet seal. Check the rubber sleeve.
(49) MOTOR PROTECTION FEEDER ACTIVATED - CALL SERVICE - RESTART FEEDING	---	Contact service personnel. Start the feed by pressing button (5).

## Instructions for use

Alarm texts		
Alarm text	Cause	Action
(51) OVERLOAD FEEDING ACTIVATED - REMOVE OBJECT - RESTART FEEDING	An object has stopped the belt.	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	An object has activated the photocell (15).	Remove the object. The conveyor will start automatically.
(53) ALARM TRAY EXCHANGER - CHECK TRAY EXCHANGER	The tray exchanger has stopped.	Start the tray exchanger.
(54) TRAY DISPENSER OUT OF POSITION - CHECK TRAY DISPENSER	The tray dispenser is in the wrong position or there is no tray dispenser in place.	Adjust the dispenser if it is in the wrong position or connect an empty dispenser to the machine or tray exchanger.
(55) TRAY DISPENSER FULL - CHECK TRAY DISPENSER	---	Change the dispenser.
(56) OVERLOAD CUTLERY TRACK ACTIVATED - CHECK AND RESTART FEEDING	The cutlery has jammed and has activated the switch inside the door (14).	Open the door and remove the cutlery. Start the feed by pressing button (5).
(57) END LIMIT CUTLERY TRACK ACTIVATED - CHECK CUTLERY TRACK	The door (14) is not closed.	Close the door. The conveyor will start automatically.
(71) WASHING DETERGENT ALARM ACTIVE - CHECK DETERGENT DEVICE	The detergent has run out.	Check and fill with new detergent.
(77) FINAL RINSE ERROR - SENSOR ERROR FLOW METER BV02	---	Reset the alarm by pressing button (9).
(76) FINAL RINSE ERROR - NO FLOW IN THE MACHINE	The water supply is shut off.	Check that the stopcocks on the incoming water supply are open. Reset the alarm by pressing button (9).
(75) FINAL RINSE ERROR - LOW FLOW IN THE MACHINE	The rinse nozzles (19) for the final rinse are blocked.	Clean the nozzles. Reset the alarm by pressing button (9).
(83) TIME FOR MAINTENANCE - CONTACT YOUR MAINTENANCE SUPPLIER	---	Contact service personnel. Reset the alarm by pressing button (9).

## Instructions for use

### 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 by pressing button (10).	The main switch (18) is off.	Turn on the mains switch.
The machine does not fill with water.	The stopcock on the incoming water supply is closed.	Open the stopcock.
The machine does not stop filling.	The outlet seals are not in place.	Fit the outlet seals.
	The rubber sleeve on one of the outlet seals is not sealing against the bottom plate.	Check that the outlet seals are closed. Replace the rubber sleeves, if they are damaged.
Noise from the wash pump.	Low water level in the tank.	Check that the tank's outlet seal 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 formation in the washing tanks.	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 items to be washed.	Soak the items before washing.
	The rinsing pressure is too low.	Check that lever (24) for setting normal or heavily soiled loads is in the correct position. (Extra equipment).
	The water in the tanks is too dirty.	Change the water.
The dishware tips over.	Rinsing pressure is too high.	Check that lever (24) is set to the position for normal loads. (Extra equipment).
The washed items do not dry.	The rinsing nozzles 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 installation date
- A brief description of the problem
- What happened immediately before the fault occurred

## 5. Technical information



The technical data, which is specific to each machine, can be found in the machine's flow, machine and wiring diagrams. These are supplied with each machine and are on the inside of the electrical cabinet door.

Technical data		
	WD-59CT	WD-66CT
Pump motor, pre-wash (kW)	3	3
Pump motor, chemical wash (kW)	3	3
Pump motor, final rinse (kW)	0.74	0.74
Condensing fan (kW)	0.22	0.22
Fan, drying zone 1 (kW)	0.62	0.62
Fan, drying zone 2 (kW)	---	0.62
Drive motor, belt (kW)	0.15	0.15
Booster heater 1 (kW)	6	6
Booster heater 2 (kW)	12	12
Tank heater, chemical wash (kW)	15	15
Drying zone , heater (kW)	9	9
Heat recovery, cooling surface (m <sup>2</sup> )	51	51
Heat recovery fan, flow (m <sup>3</sup> /hour)	900	900
Tank volume, pre-wash tank (litres)	104	104
Tank volume, chemical wash tank (litres)	120	120
Tank volume, final rinse tank (litres)	21	21
Weight, machine in operation (kg)	1500	1560
Enclosure class (IP)	55	55

Capacity and operating data		
	WD-59CT	WD-66CT
Capacity (trays/min)	25	25
Capacity cutlery (cutlery items/min)	75	75
Max. tray size (mm)	530x530	530x530
Cold water consumption, final rinse (litres/min)	5	5
Energy consumption (kWh of connected power)	70-90 %	70-90 %
Steam consumption at 150-250 kPa (kg/hour) *	50	55
Steam consumption at 50-140 kPa (kg/hour) *	50	55
Surface temperature at a room temperature of 20 °C (°C)	35	35
Noise level (dB(A)) **	72	72
-		
* When the machine is steam-heated.		
** Measured 1 metre from the side of the machine		

## Technical information

Connection, electrically heated machine		
	WD-59CT	WD-66CT
Total connected power (kW)	49.7	50.4
Main fuse 400V 3N~ (A)	80	100
Max. connection area 400V 3N~ (L1-L3, N, PE) Cu (mm <sup>2</sup> )	70	70

Connection, steam-heated machine 150-250 kPa		
	WD-59CT	WD-66CT
Total connected power (kW)	7.7	8.4
Main fuse 400V 3N~ (A)	25	25
Max. connection area 400V 3N~ (L1-L3, N, PE) Cu (mm <sup>2</sup> )	35	35
Steam connection (internal thread)	R 1"	R 1"
Condensing water connection (internal thread)	R ¾"	R ¾"

Connection, steam-heated machine 50-140 kPa		
	WD-59CT	WD-66CT
Total connected power (kW)	16.7	17.4
Main fuse 400V 3N~ (A)	35	35
Max. connection area 400V 3N~ (L1-L3, N, PE) Cu (mm <sup>2</sup> )	35	35
Steam connection (internal thread)	R 1¼"	R 1¼"
Condensing water connection (internal thread)	R ¾"	R ¾"

Connections, water and drain		
	WD-59CT	WD-66CT
Water quality, hardness (°dH)	2-7	2-7
Hot water connection 50-65 °C (internal thread)	R ¾"	R ¾"
Cold water connection 5-12 °C (internal thread)	R ¾"	R ¾"
Drain connection, PP pipe (mm)	ø 50	ø 50
Water capacity, cold water, pressure (kPa)	300-600	300-600
Water capacity, cold water, flow (litres/minute)	18	18
Water capacity, hot water, min/max pressure (kPa)	100/600	100/600
Floor drain, capacity (litres/sec)	3	3

Size and weight for transport Standard, divided machine *		
	WD-59CT	WD-66CT
Size part 1 (LxWxH) (mm) **	3100x1100x2100	3100x1100x2100
Size part 2 (LxWxH) (mm) **	3200x1100x2100	3800x1100x2100
Weight part 1 (kg) **	950	950
Weight part 2 (kg) **	520	580
-		
* Normal delivery in 2 parts. Option of delivery in more parts		
** Including packaging.		

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