

Flight Type dishwasher

EFTD052E-EFTD064E-EFTD082E-
EFTD108E-EFTD052S-EFTD064S-
EFTD082S-EFTD108S



EN User manual *

*Original instructions



PM00510- 2020.03

Foreword



The installation, use and maintenance manual (hereinafter Manual) provides the user with information necessary for correct and safe use of the machine (or “appliance”).

The following must not be considered a long and exacting list of warnings, but rather a set of instructions suitable for improving machine performance in every respect and, above all, preventing injury to persons and animals and damage to property due to improper operating procedures.

All persons involved in machine transport, installation, commissioning, use and maintenance, repair and disassembly must consult and carefully read this manual before carrying out the various operations, in order to avoid wrong and improper actions that could compromise the machine's integrity or endanger people. Make sure to periodically inform the user regarding the safety regulations. It is also important to instruct and update personnel authorised to operate on the machine, regarding its use and maintenance.

The manual must be available to operators and carefully kept in the place where the machine is used, so that it is always at hand for consultation in case of doubts or whenever required.

If, after reading this manual, there are still doubts regarding machine use, do not hesitate to contact the Manufacturer or the authorised Service Centre to receive prompt and precise assistance for better operation and maximum efficiency of the machine. During all stages of machine use, always respect the current regulations on safety, work hygiene and environmental protection. It is the user's responsibility to make sure the machine is started and operated only in optimum conditions of safety for people, animals and property.



IMPORTANT

- The manufacturer declines any liability for operations carried out on the appliance without respecting the instructions given in this manual.
- The manufacturer reserves the right to modify the appliances presented in this publication without notice.
- No part of this manual may be reproduced.
- This manual is available in digital format by:
 - contacting the dealer or reference customer care;
 - downloading the latest and up to date manual on the web site;
- The manual must always be kept in an easily accessed place near the machine. Machine operators and maintenance personnel must be able to easily find and consult it at any time.

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A WARNING AND SAFETY INFORMATION

A.1 General information

To ensure safe use of the machine and a proper understanding of the manual it is necessary to be familiar with the terms and typographical conventions used in the documentation. The following symbols are used in the manual to indicate and identify the various types of hazards:



WARNING

Danger for the health and safety of operators.



WARNING

Danger of electrocution - dangerous voltage.



CAUTION

Risk of damage to the machine or the product.



IMPORTANT

Important instructions or information on the product



Equipotentiality



Read the instructions before using the appliance








Clarifications and explanations

A.2 General safety

- The appliance must not be used by people (including children) with limited physical, sensory or mental abilities or without experience and knowledge of it, unless instructed in its use and supervised by those responsible for their safety.
 - Do not let children play with the appliance.
 - Keep all packaging and detergents away from children.
 - Cleaning and user maintenance shall not be made by children without supervision.
- For suitable personal protection equipment, refer to chapter “A.3 *Personal protection equipment*”.
- Several illustrations in the manual show the machine, or parts of it, without guards or with guards removed. This is purely for explanatory purposes. Do not install the machine without the guards or with the protection devices deactivated.
- Do not remove, tamper with or make illegible the safety, danger and instruction signs and labels on the machine.
- Do not remove, tamper with or make the labels on the machine illegible.
- Do not remove or tamper with the machine’s safety devices.
- Unauthorized personnel must not enter the work area.
- Remove any flammable products or items from the work area.

A.3 Personal protection equipment

Summary table of the Personal Protection Equipment (PPE) to be used during the various stages of the machine's service life.

Stage	Protective garments 	Safety footwear 	Gloves 	Glasses 	Safety helmet 
Transport	—	●	○	—	○
Handling	●	●	○	—	—
Unpacking	○	●	○	—	—
Installation	○	●	● ¹	—	—
Normal use	●	●	● ²	○	—
Adjustments	○	●	—	—	—
Routine cleaning	○	●	● ¹⁻³	○	—
Extraordinary cleaning	○	●	● ¹⁻³	○	—
Maintenance	○	●	○	—	—
Dismantling	○	●	○	○	—
Scrapping	○	●	○	○	—
Key:					
●	PPE REQUIRED				
○	PPE AVAILABLE OR TO BE USED IF NECESSARY				
—	PPE NOT REQUIRED				

1. During these operations, gloves must be cut-resistant. Failure to use the personal protection equipment by operators, specialized personnel or users can involve exposure to damage to health (depending on the model).
2. During these operations, gloves must be heatproof and suitable for contact with water and the substances used (refer to the safety data sheet of the substances used for the information regarding the required PPE). Failure to use the personal protection equipment by operators, specialised personnel or users can involve exposure to chemical risk and cause possible damage to health (depending on the model).
3. During these operations, gloves must be suitable for contact with chemical substances used (refer to the safety data sheet of the substances used for information regarding the required PPE). Failure to use the personal protection equipment by operators, specialized personnel or users can involve exposure to chemical risk and cause possible damage to health (depending on the model).

A.4 Water connection

- The operating water pressure (minimum and maximum) must be between:
 - 100 kPa [1 bar] and 600 kPa [6 bar];
- Make sure that there are no visible water leaks during and after the first use of the machine.

A.5 Electrical connection

- Work on the electrical systems must only be carried out by a specialised personnel.
- If the power cable is damaged it must be replaced by the Customer Care Service or in any case by specialised personnel, in order to prevent any risk.

A.6 Machine cleaning and maintenance

- Refer to “A.3 *Personal protection equipment*” for suitable personal protection equipment.
- Put the machine in safe conditions before starting any maintenance operation. Disconnect the machine from the power supply and carefully unplug the power supply cable, if present.
- Depending on the model and type of electric connection, during maintenance operations, the cable and plug must be kept in a visible position by the operator carrying out the work.
- Do not touch the machine with wet hands or feet or when barefoot.
- Do not remove the safety guards.
- Use a ladder with suitable protection for work on machines with high accessibility.
- Respect the requirements for the various routine and extraordinary maintenance operations. Non compliance with the instructions can create risks for personnel.
- Extraordinary maintenance, checking and overhaul operations must only be carried out by a specialised personnel or the Customer Care Service, provided with suitable personal protection equipment (safety shoes and gloves), tools and ancillary means.

Ordinary maintenance

- Do not clean the machine with jets of water.
- Contact with chemical substances (e.g. detergent, rinse aid, scale remover, etc.) without taking appropriate safety precautions (e.g. personal protection equipment) can involve exposure to chemical risk and possible damage to health. Therefore always refer to the safety cards and labels on the products used.

Repair and extraordinary maintenance

- Repair and extraordinary maintenance have to be carried out by specialised authorised personnel. The manufacturer declines any liability for any failure or damage caused by the intervention of an unauthorized technician by the Manufacturer and the original manufacturer warranty will be invalidated.

A.7 Machine disposal

- Work on the electrical equipment must only be carried out by a specialised personnel, with the power supply disconnected.
- Dismantling operations must be carried out by specialised personnel.
- Make the appliance unusable by removing the power cable and any compartment closing devices, to prevent the possibility of someone becoming trapped inside.
- Refer to “A.3 *Personal protection equipment*” for suitable personal protection equipment.
- When scrapping the machine, the “CE” marking, this manual and other documents concerning the appliance must be destroyed.



IMPORTANT

Save these instructions carefully for further consultation by the various operators.

B WARRANTY

B.1 Warranty terms and exclusions

If the purchase of this product includes warranty coverage, warranty is provided in line with local regulations and subject to the product being installed and used for the purposes as designed, and as described within the appropriate equipment documentation.

Warranty will be applicable where the customer has used only genuine spare parts and has performed maintenance in

accordance with Electrolux Professional user and maintenance documentation made available in paper or electronic format.

Electrolux Professional strongly recommends using Electrolux Professional approved cleaning, rinse and descaling agents to obtain optimal results and maintain product efficiency over time.

The Electrolux Professional warranty does not cover:

- service trips cost to deliver and pick up the product;
 - installation;
 - training on how to use/operate;
 - replacement (and/or supply) of wear and tear parts unless resulting from defects in materials or workmanship reported within one (1) week from the failure;
 - correction of external wiring;
 - correction of unauthorized repairs as well as any damages, failures and inefficiencies caused by and/or resulting from:
 - insufficient and/or abnormal capacity of the electrical systems (current/voltage/frequency, including spikes and/or outages);
 - inadequate or interrupted water supply, steam, air, gas (including impurities and/or other that does not comply with the technical requirements for each machine);
 - plumbing parts, components or consumable cleaning products that are not approved by the manufacturer;
 - customer's negligence, misuse, abuse and/or non-compliance with the use and care instructions detailed within the appropriate equipment documentation;
 - improper or poor: installation, repair, maintenance (including tampering, modifications and repairs carried out by third parties not authorized third parties) and modification of safety systems;
 - Use of non-original components (e. g.: consumables, wear and tear, or spare parts);
 - environment conditions provoking thermal (e. g. overheating/freezing) or chemical (e. g. corrosion/oxidation) stress;
 - foreign objects placed in- or connected to- the product;
 - accidents or force majeure;
 - transportation and handling, including scratches, dents, chips, and/or other damage to the finish of the product, unless such damage results from defects in materials or workmanship and is reported within one (1) week of delivery unless otherwise agreed;
 - product with original serial numbers that have been removed, altered or cannot be readily determined;
 - replacement of light bulbs, filters or any consumable parts;
 - any accessories and software not approved or specified by Electrolux Professional.
- Warranty does not include scheduled maintenance activities (including the parts required for it) or the supply of cleaning agents unless specifically covered within any local agreement, subject to local terms and conditions.
- Check on Electrolux Professional website the list of authorized customer care.

C GENERAL SAFETY RULES

C.1 Introduction

The machines are provided with electric and/or mechanical safety devices for protecting workers and the machine itself.

Therefore the user must not remove or tamper with such devices. The Manufacturer declines any liability for damage due to tampering or their non-use.

C.2 Mechanical safety characteristics, hazards

The machine does not have sharp edges or protruding parts. The guards for the moving and live parts are fixed to the cabinet with screws, to prevent accidental access.

C.3 Guards

The guards on the machine are:

- fixed guards (e.g. casings, covers, side panels, etc.), fixed to the machine and/or frame with screws or quick-release connectors that can only be removed or opened with tools;
- interlocked movable guards (door) for access inside the machine;
- machine electrical equipment access top panel, made from a panel openable with tools. The panel must not be opened when the machine is connected to the power supply.



IMPORTANT

Several illustrations in the manual show the machine, or parts of it, without guards or with guards removed. This is purely for explanatory purposes. Do not use the machine without the guards or with the protection devices deactivated.

C.4 Emergency switch

The emergency switches installed do not exempt operators from diligent and careful use of the machine.

The function of these devices guarantees prompt intervention in case of emergency.

- Operators must know the position of the emergency switches installed on the machine.
- The paths to reach and operate them must be kept free of obstacles.
- Anyone detecting a danger for persons must immediately operate one of the emergency stops. The same applies in

case of operation anomalies and/or damage to parts of the machine requiring it to be stopped immediately.

C.4.1 Emergency switch reinstatement

When an emergency switch is operated, restart the machine only after making sure that:




- the cause requiring operation of the emergency switch has been eliminated;
- restarting machine operation does not involve any hazard.




If the EMERGENCY SWITCH is operated during the use of the machine, the entire machine is deactivated.

To reinstate machine operation, proceed as follows:

- release the previously operated red emergency button, turning or pulling it in order to disconnect its interlock;
- restart the machine according to what is described in paragraph "1.3 Starting".

C.5 Safety signs to be placed on the machine or near its area

Prohibition	Meaning
	do not oil, lubricate, repair and adjust moving parts
	do not remove the safety devices
	do not use water to extinguish fires (placed on electrical parts)

Danger	Meaning
	danger of crushing hands
	caution, hot surface
	danger of electrocution (shown on electrical parts with indication of voltage)

C.6 Instructions for use and maintenance

Risks mainly of a mechanical, thermal and electrical nature exist in the machine. Where possible the risks have been neutralised:

- directly, by means of adequate design solutions.
- indirectly by using guards, protection and safety devices.

Any anomalous situations are signalled on the control panel display.

During maintenance several risks remain, as these could not be eliminated, and must be neutralised by adopting specific measures and precautions.

Do not carry out any checking, cleaning, repair or maintenance operations on moving parts. Workers must be informed of this prohibition by means of clearly visible signs.

To guarantee machine efficiency and correct operation, periodical maintenance must be carried out according to the instructions given in this manual.

Make sure to periodically check correct operation of all the safety devices and the insulation of electrical cables, which must be replaced if damaged.

C.7 Reasonably foreseeable improper use

Improper use is any use different from that specified in this manual. During machine operation, other types of work or activities deemed improper and that in general can involve risks for the safety of operators and damage to the appliance are not allowed. Reasonably foreseeable improper use includes:

- lack of machine maintenance, cleaning and periodical checks;
- structural changes or modifications to the operating logic;
- tampering with the guards or safety devices;
- failure to use personal protection equipment by operators, specialised personnel and maintenance personnel;
- failure to use suitable accessories (e.g. use of unsuitable equipment or ladders);
- keeping combustible or flammable materials, or in any case materials not compatible with or pertinent to the work, near the machine;
- wrong machine installation;
- placing in the machine any objects or things not compatible with its use, or that can damage the machine, cause injury or pollute the environment;
- climbing on the machine;
- non-compliance with the requirements for correct machine use;
- other actions that give rise to risks not eliminable by the Manufacturer.



WARNING

The previously described actions are prohibited!

C.8 End of use

When the appliance is no longer to be used, make it unusable by removing the mains power supply wiring.

C.9 Residual risks

The machine has several risks that were not completely eliminated from a design standpoint or with the installation of adequate protection devices. Nevertheless, through this manual the Manufacturer has taken steps to inform operators of such risks, carefully indicating the personal protection equipment to be used by them. In order to reduce the risks, provide for sufficient spaces while installing the unit. To preserve these conditions, the areas around the machine must always be:

- kept free of obstacles (e.g. ladders, tools, containers, boxes, etc.);
- clean and dry;
- well lit.

For the Customer's complete information, the residual risks remaining on the machine are indicated below: such situations are deemed improper and therefore strictly forbidden.

Residual risk	Description of hazardous situation
Slipping or falling	The operator can slip due to water or dirt on the floor
Catching, dragging or crushing	Catching or dragging of the operator or other persons in the drive, during the machine work phase, due to improper actions, such as: <ul style="list-style-type: none"> • placing an arm inside the machine to remove a stuck rack without stopping the machine by operating an emergency switch; • accessing the rack handling system without stopping the machine by operating an emergency switch. Use of improper clothing with loose parts (e.g. necklaces, scarves, shawls, ties, etc.) or long hair not gathered, which could get caught up in moving parts.
Burns/abrasions (e.g. heating elements, cold pan, cooling circuit plates and pipes)	The operator deliberately or unintentionally touches some components inside the machine without using protective gloves.
Stab wounds	The operator deliberately or unintentionally touches some components with sharp edges during the machine cleaning without using protective gloves.
Burns	The operator deliberately or unintentionally touches some components inside the machine or dishes at the outfeed without using gloves or without allowing them to cool.
Shearing of upper limbs	The operator violently closes the front panels.
Electrocution	Contact with live parts during maintenance operations carried out with the electrical panel powered
Falling from above	The operator intervenes on the machine using unsuitable systems to access the upper part (e.g. rung ladders, or climbs on it)

Residual risk	Description of hazardous situation
Crushing or injury	The specialised personnel may not correctly fix the control panel when accessing the technical compartment. The panel could close suddenly.
Crushing or shearing	Possible risk of injury to upper limbs during the hood closing operation.

Residual risk	Description of hazardous situation
Tipping of loads	When handling the machine or the packing containing it, using unsuitable lifting systems or accessories or with the unbalanced load
Chemical	Contact with chemical substances (e.g. detergent, rinse aid, scale remover, etc.) without taking adequate safety precautions. Therefore always refer to the safety cards and labels on the products used.



IMPORTANT

In case of a significant anomaly (e.g. short circuits, wires coming out of the terminal block, motor breakdowns, worn electrical cable sheathing, etc.) the operator must immediately deactivate the machine.

D GENERAL INFORMATION

D.1 Introduction

Given below is some information regarding the intended use of this appliance, its testing, and a description of the symbols used (that identifies the type of warning), the definitions of terms used in the manual and useful information for the appliance user.

D.2 Definitions


Listed below are the definitions of the main terms used in the manual. It is advisable to read them carefully before use.

Operator	machine installation, adjustment, use, maintenance, cleaning, repair and transport personnel.
Manufacturer	Electrolux Professional SpA or any other service centre authorised by Electrolux Professional SpA.
Operator for normal machine use	an operator who has been informed and trained regarding the tasks and hazards involved in normal machine use.
Customer Care service or specialised technician	an operator instructed/trained by the Manufacturer and who, based on his professional and specific training, experience and knowledge of the accident-prevention regulations, is able to appraise the operations to be carried out on the machine and recognise and prevent any risks. His professionalism covers the mechanical, electrotechnical and electronics fields.
Danger	source of possible injury or harm to health.
Hazardous situation	any situation where an operator is exposed to one or more hazards.
Risk	a combination of probabilities and risks of injury or harm to health in a hazardous situation.
Protection devices	safety measures consisting of the use of specific technical means (guards and safety devices) for protecting operators against risks.
Guard	an element of a machine used in a specific way to provide protection by means of a physical barrier.
Safety device	a device (other than a guard) that eliminates or reduces the risk; it can be used alone or in combination with a guard.
Customer	the person who purchased the machine and/or who manages and uses it (e.g. company, entrepreneur, firm).

Emergency stop device	a group of components intended for the emergency stop function; the device is activated with a single action and prevents or reduces damage to persons/machines/property/animals.
Electrocution	an accidental discharge of electric current on a human body.

D.3 Machine and Manufacturer's identification data

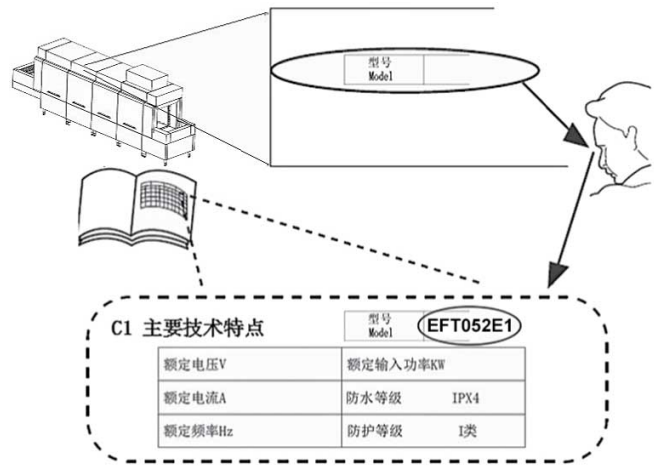
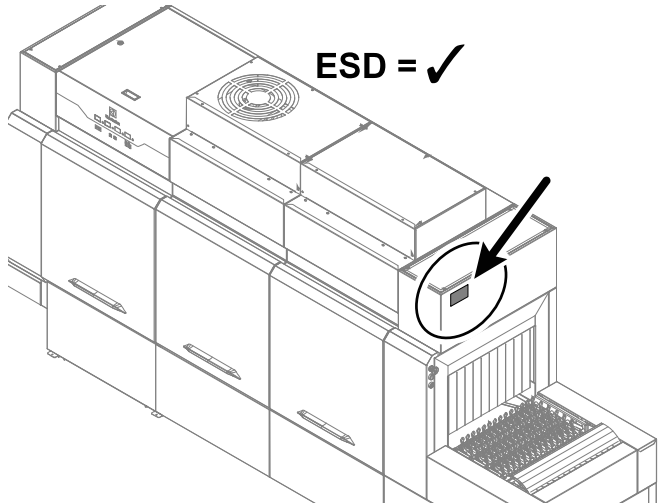
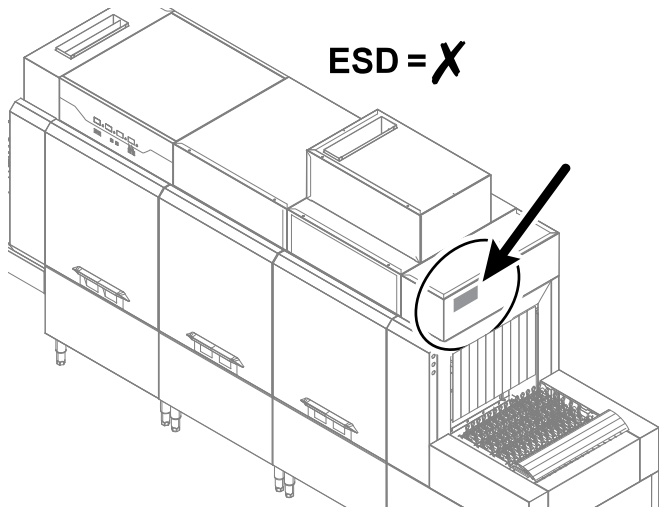
An example of the marking or dataplate on the machine is given below:

		Dishwasher		
F.Mod.	EFTD064E2	Type	EFT064HO	
PNC	520138	IPX4		
Comm.Model	EFTD064EL3U1D2FER38			
Serial	85100001			
EL.	380V 3N	50 Hz	46.5 KW	Class I
Max. permissible water pressure			600 kPa	
Max. permissible water temperature			60 °C	

The dataplate gives the product identification and technical data; listed below is the meaning of the various information given on it.

F.Mod.	factory description of product
Comm.Model	commercial description
PNC	production number code
Ser.No.	serial number
380-415V 3N~	power supply voltage
—	electric convertibility
50 or 60	power supply frequency
44.5 kW	max. power
60°C	max water temperature
600 kPa [6 bar]	max water pressure
IPX4	dust and water protection rating
Shanghai Veetsan Electrical Appliance Co., Ltd	manufacturer

The dataplate is located in front panel of the equipment.



D.4.2 How to interpret the factory description

The factory description on the dataplate has the following meaning (some examples are given below):

(1)	(2)	(3)	(4)	(5)
E	FTD	052	E	1
E	FTD	082	S	1
E	FTD	1081	E	1
E	FTD	108	E	1
E	FTD	1081	S	1
E	FTD	108	S	1

Variable description

(1) Brand	E = Electrolux
(2) Machine type	FTD = Flight Type Dishwasher
(3) Dishes/hour	052 = 5200 dishes/hour 064 = 6400 dishes/hour 082 = 8200 dishes/hour 108 = 10800 dishes/hour
(4) Supply	E = electric S = steam
(5) Drying unit	1 = one dryer 2 = two dryers



WARNING

Do not remove, tamper with or make the machine marking illegible.



IMPORTANT

When scrapping the machine, the marking must be destroyed.



NOTE!

Refer to the data given on the machine marking for relations with the Manufacturer (e.g. when ordering spare parts, etc.).

D.4 Appliance identification

D.4.1 How to identify the technical data

- Read the factory description of the product (F. Mod.) on the dataplate;
- identify the main machine data;
- consult G.1 *Main technical characteristics* paragraph.

D.5 Responsibility

The Manufacturer declines any liability for damage and malfunctioning caused by:

- non-compliance with the instructions contained in this manual;
- repairs not carried out in a workmanlike fashion, and replacements with parts different from those specified in the spare parts catalogue (the fitting and use of non-original spare parts and accessories can negatively affect machine operation and invalidates the original manufacturer warranty);
- operations carried out by non-specialised personnel;
- unauthorized modifications or operations;
- missing, lack or inadequate maintenance;
- improper machine use;
- unforeseeable extraordinary events;
- use of the machine by uninformed and / or untrained personnel;
- non-application of the current provisions in the country of use, concerning safety, hygiene and health in the workplace.

The Manufacturer declines any liability for damage caused by arbitrary modifications and conversions carried out by the user or the Customer.

The employer, workplace manager or service technician are responsible for identifying and choosing adequate and suitable personal protection equipment to be worn by operators, in compliance with regulations in force in the country of use.

The Manufacturer declines any liability for inaccuracies contained in the manual, if due to printing or translation errors.

Any supplements to the installation, use and maintenance manual the Customer receives from the Manufacturer will form an integral part of the manual and therefore must be kept together with it.

D.6 Copyright

This manual is intended solely for consultation by the operator and can only be given to third parties with the permission of Shanghai Veetsan Electrical Appliance Co., Ltd.

D.7 Keeping the manual

The manual must be carefully kept for the entire life of the machine, until scrapping. The manual must stay with the machine in case of transfer, sale, hire, granting of use or leasing.

D.8 Recipients of the manual

This manual is intended for:

- the employer of machine users and the workplace manager
- operators for normal machine use
- specialised technicians - Customer Care service (see service manual).

E NORMAL USE

E.1 Correct use

Our machines are designed and optimized in order to obtain high performance and efficiency.

This equipment must only be used for its expressly designed purpose, i. e. washing dishes with water and specific detergents. Any other use is to be deemed improper.

E.2 Characteristics of personnel enabled to operate on the machine

The Customer is responsible for ensuring that persons assigned to the various duties:

- read and understand the manual;
- receive adequate training and instruction for their duties in order to perform them safely;
- receive specific training for correct machine use.

E.3 Characteristics of personnel trained for normal machine use

The Customer must make sure the personnel for normal machine use are adequately trained and skilled in their duties, as well as ensuring their own safety and that of other persons.

The Customer must make sure his personnel have understood the instructions received and in particular those regarding work hygiene and safety in use of the machine.

E.4 Operator qualified for normal machine use

Must have at least:

- knowledge of the technology and specific experience in operating the machine;
- adequate general basic education and technical knowledge for reading and understanding the contents of the manual, including correct interpretation of the drawings, signs and pictograms;
- sufficient technical knowledge for safely performing his duties as specified in the manual;
- knowledge of the regulations on work hygiene and safety.

In case of a significant anomaly (e. g. short circuits, wires coming out of the terminal block, motor breakdowns, worn electrical cable sheathing, etc.) the operator for normal machine use must:

- immediately deactivate the machine by turning the switch disconnecter to "O" or operating the main emergency switch on the equipment;
- close the machine water supply by shutting off the water.

F PRODUCT OVERVIEW

F.1 Modules list

The excellent modular design includes:

- A. inlet module;
- B. pre-wash module;
- C. wash module;
- D. rinse module;
- E. drying module;
- F. outlet module.

(the maximum configuration has one pre-wash module, three wash modules, two rinse modules and a drying module.

The composition can be selected as required. (Make sure to specify when ordering).

Stainless steel insulated wash tank, wash chambers and low-flow rotating rinse system, efficiently save energy and reduce operating costs.

The standard large insulated door provides easy access to clean and maintain the inside.

Two conveyor speed are available for operators to adjust the transporting speed depending on the dirt degree and variety of cutlery and tableware.

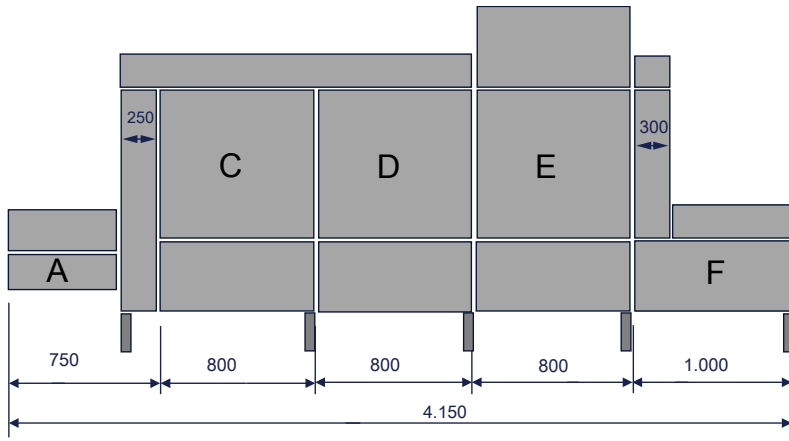
Steam heating and electric heating are available for "EFTD" series dishwasher. (Make sure to specify when ordering).

Equipped with a built-in electric or steam heating device (27 KW or 18 KW) to help you select according to feeding water temperature and energy conditions (Make sure to specify when ordering).

Modules composition

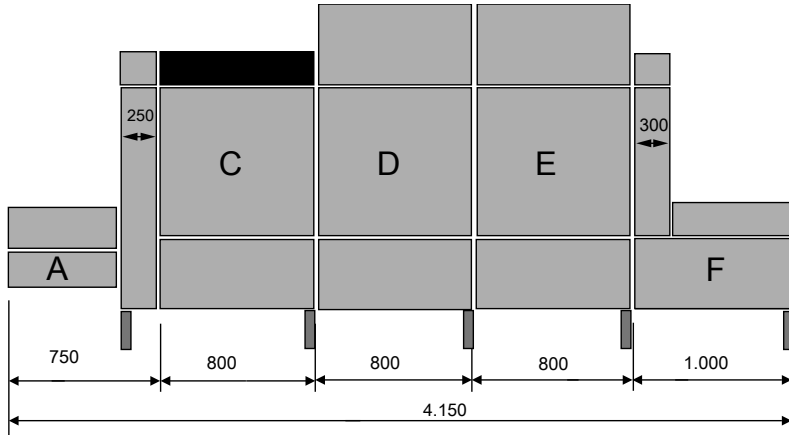
EFT052D...1

ESD = ✗



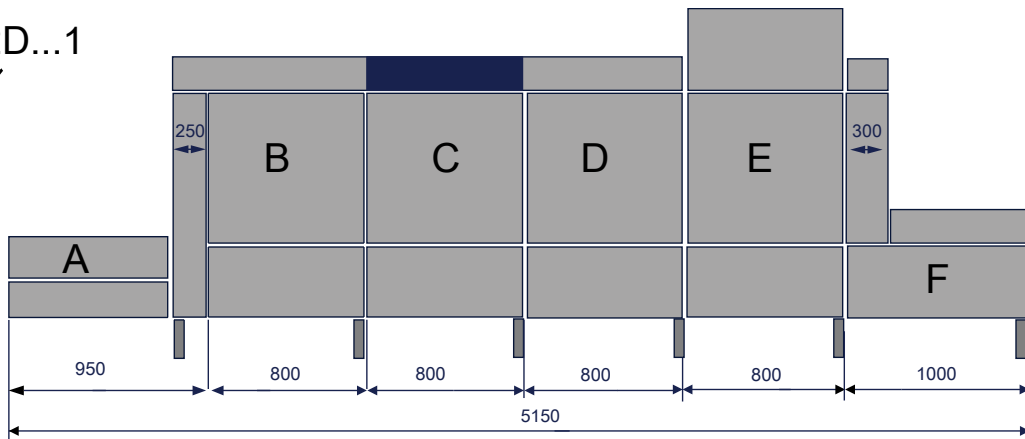
EFT052D...1

ESD = ✓



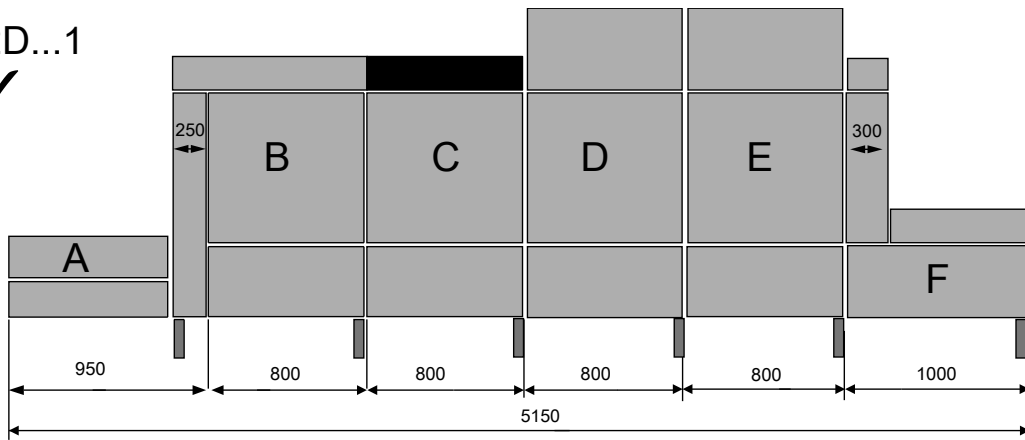
EFT062D...1

ESD = ✗



EFT062D...1

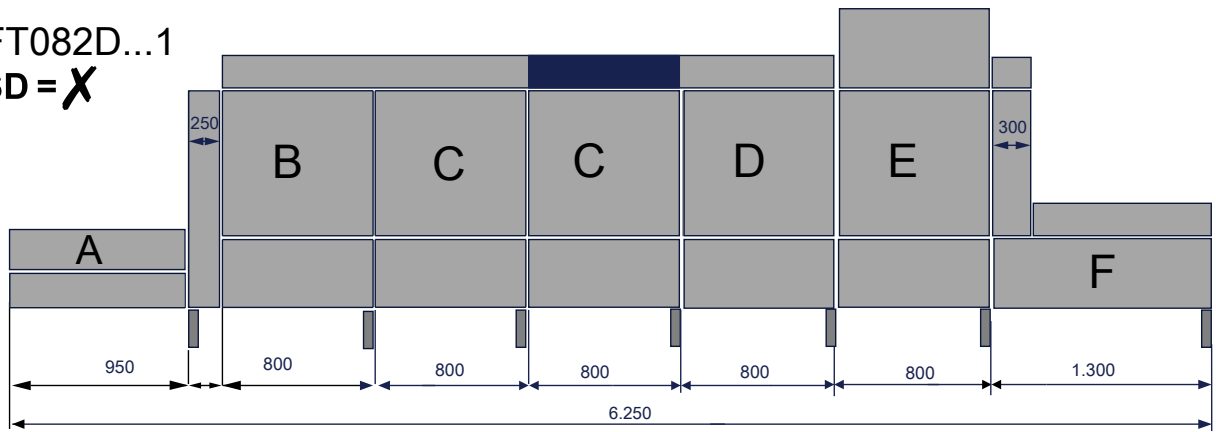
ESD = ✓



Modules composition (cont'd.)

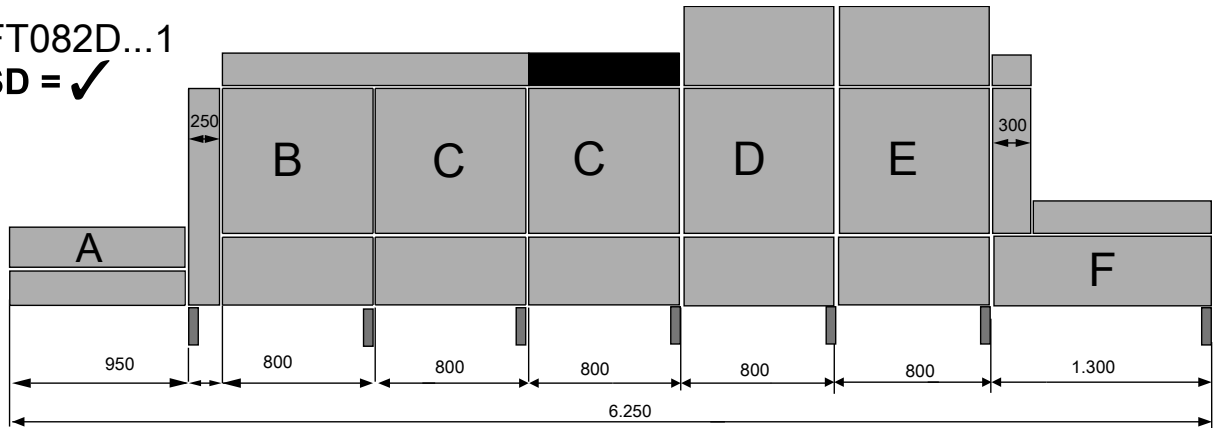
EFT082D...1

ESD = ~~X~~



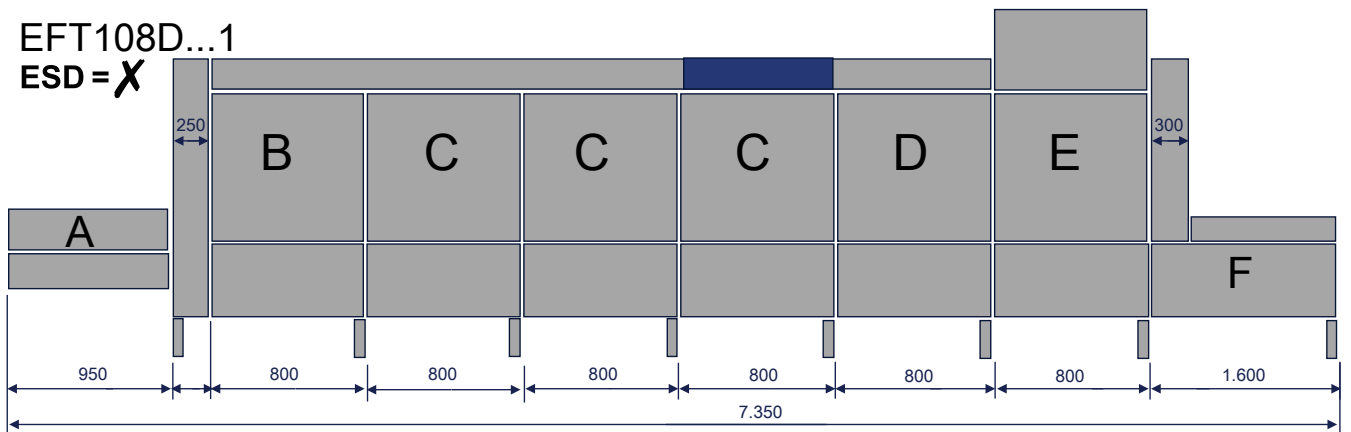
EFT082D...1

ESD = ✓



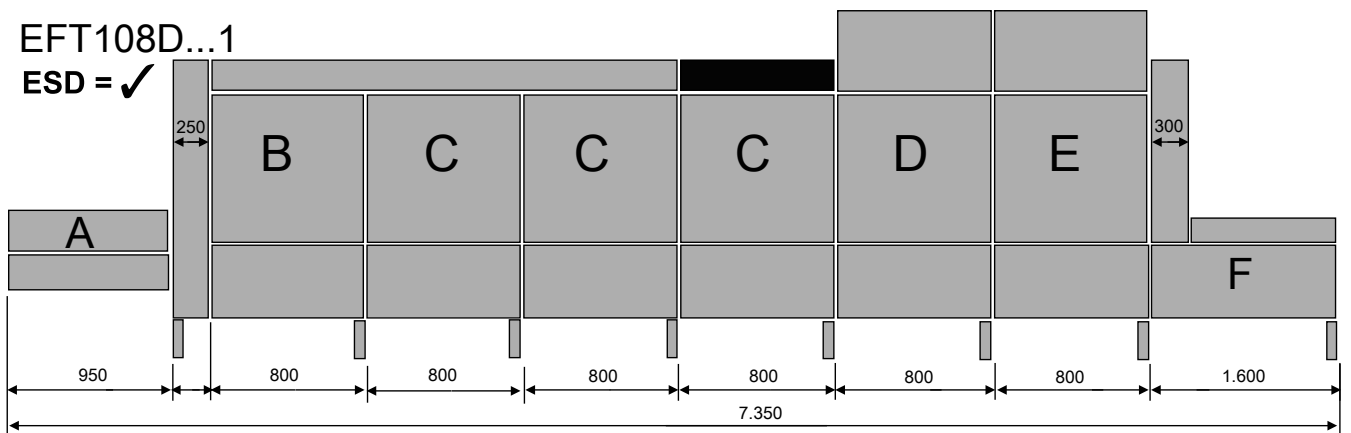
EFT108D...1

ESD = ~~X~~



EFT108D...1

ESD = ✓



Modules descriptions

A	Inlet	3 optional lengths	1	750 mm
			2	950 mm
			3	1100 mm
B	Prewash section	Optional module	P	800 mm



Modules descriptions (cont'd.)

C	Wash section	3 optional lengths	1	800 mm
			2	1600 mm
			3	2400 mm
D	Rinse section	Rinse module	R	800 mm
D	Rinse section	Rinse module	R	800 mm
E	Dryer section	Optional module	D	800 mm
F	Outlet section	5 optional lengths	1	1000 mm
			2	1300 mm
			3	1600 mm
			4	1900 mm
			5	2200 mm

G TECHNICAL DATA

G.1 Main technical characteristics

Electrical models

Model		EFTD052E1	EFTD064E1	EFTD082E1	EFTD108E1
Three phases voltage	V	380-415V 3N~	380-415V 3N~	380-415V 3N~	380-415V 3N~
Convertible to	V	—	—	—	—
Frequency	Hz	50 or 60 ¹	50 or 60 ¹	50 or 60 ¹	50 or 60 ¹
Maximum absorbed power [NO ESD] ²	KW	46.5	48.5	76	93.5
Maximum absorbed power [ESD] ³	KW	42.7	44.7	66.7	87.7
Boiler heating power	KW	9x2 ⁴	9x2 ⁴	9x3 ⁴	9x3 ⁴
Boiler heating power	KW	7x2 ⁴	7x2 ⁴	9x2 ⁴	7x3 ⁴
Wash tank heating power	KW	8x2 [1 tank]	8x2 [1 tank]	8x2 [2 tanks]	8x2 [3 tanks]
Prewash pump power	KW	-	2	2	2
Wash pump power	KW	2 [1 tank]	4 [2 tanks]	6 [3 tanks]	8 [4 tanks]
Dryer heating power	KW	9	9	9	9
Inlet water pressure	Kpa [bar]	100 kPa [1 bar] 600 kPa [6 bar]	100 kPa [1 bar] 600 kPa [6 bar]	100 kPa [1 bar] 600 kPa [6 bar]	100 kPa [1 bar] 600 kPa [6 bar]
Inlet water hardness	°fH [°dH]	14 [8]	14 [8]	14 [8]	14 [8]
Concentration of chlorides in water	ppm	<20	<20	<20	<20
Inlet water conductivity	mS/cm	<400	<400	<400	<400
Cold water supply temperature for model without ESD	°C	10-65	10-65	10-65	10-65
Cold water supply temperature for model with ESD	°C	10-65 ⁵	10-65 ⁵	10-65 ⁵	10-65 ⁵
Hot water supply temperature	°C	10-65 ⁶	10-65 ⁶	10-65 ⁶	10-65 ⁶
Rinse water consumption	l/h	210	210	280	320
Boiler capacity	l	23	23	23	23
Tank capacity	l	92 1 tank	196 2 tanks	294 3 tanks	392 4 tanks
Speed 1 	m/min	1.0	1.4	2.0	2.7
Speed 2 		1.6	2.0	2.6	3.3
Noise level	dB(A)	<70	<70	<70	<70
Protection level		IPX4	IPX4	IPX4	IPX4

1. Appliances with 50 Hz or 60 Hz power frequency can be selected.



2. For appliance without Energy Saving Device

3. For appliance with Energy Saving Device

Electrical models (cont'd.)



4. If the inlet water temperature is higher than 45°C, reduce the boiler heating power of 9 KW.
5. Recommended cold water supply temperature 10°C
6. Recommended hot water supply temperature 50°C.

Steam Models

Model		EFTD052S1	EFTD064S1	EFTD082S1	EFTD108S1
Three phases voltage	V	380-415V 3N~	380-415V 3N~	380-415V 3N~	380-415V 3N~
Convertible to	V	—	—	—	—
Frequency	Hz	50 or 60 ¹	50 or 60 ¹	50 or 60 ¹	50 or 60 ¹
Maximum absorbed power	KW	3.5	5.5	7.5	9.5
Maximum absorbed power	KW	3.7	5.43	7.7	9.68
Prewash pump power	KW	-	2	2	2
Wash pump power	KW	2 [1 tank]	4 [2 tanks]	6 [3 tanks]	8 [4 tanks]
Boiler heating power	KW	/	/	/	/
Water tank heating power	KW	/	/	/	/
Dryer heating power	KW	/	/	/	/
Inlet water pressure	Kpa [bar]	100 kPa [1 bar] 600 kPa [6 bar]	100 kPa [1 bar] 600 kPa [6 bar]	100 kPa [1 bar] 600 kPa [6 bar]	100 kPa [1 bar] 600 kPa [6 bar]
Inlet water hardness	°fH [°dH]	14 [8]	14 [8]	14 [8]	14 [8]
Concentration of chlorides in water	ppm	<20	<20	<20	<20
Inlet water conductivity	mS/cm	<400	<400	<400	<400
Cold water supply temperature for model without ESD	°C	10-65	10-65	10-65	10-65
Cold water supply temperature for model with ESD	°C	10-65 ²	10-65 ²	10-65 ²	10-65 ²
Hot water supply temperature	°C	10-65 ³	10-65 ³	10-65 ³	10-65 ³
Rinse water consumption	l/h	210	210	280	320
Boiler capacity	l	23	23	23	23
Tank capacity	l	92 1 tank	196 2 tanks	294 3 tanks	392 4 tanks
Speed 2 	m/min	1.0	1.4	2.0	2.7
Speed 1 		1.6	2.0	2.6	3.3
Noise level	dB(A)	<70	<70	<70	<70
Steam consumption	kg/h	75	75	88	101
Steam pressure	Kpa [bar]	100-300 [1-3]	100-300 [1-3]	100-300 [1-3]	100-300 [1-3]
Protection level		IPX4	IPX4	IPX4	IPX4

1. Appliances with 50 Hz or 60 Hz power frequency can be selected.
2. Recommended cold water supply temperature 10°C
3. Recommended hot water supply temperature 50°C.

Productivity table

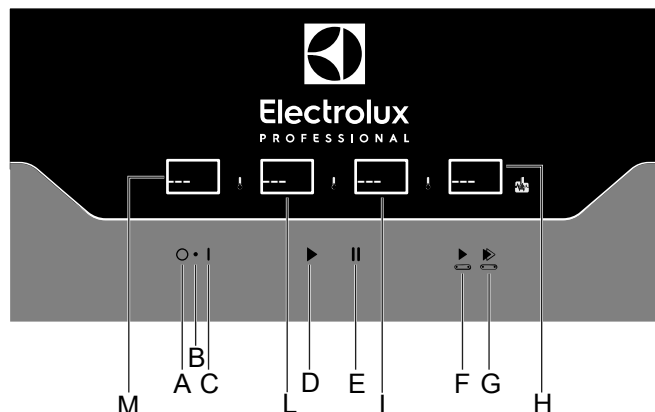
Models		EFTD052...1	EFTD064...1	EFTD082...1	EFTD108...1
Speed 1 	Productivity [dish/h]	3200	4500	6400	8600
Speed 2 		5200	6400	8200	10800

Main ON/OFF switch (residual current circuit breaker)							
Max power [KW]		2-6	30-36	53-60	61-67	68-87	88-110
C	220V	25A	125A	200A	225A	300A	350A
	380V	16A	63A	125A	125A	160A	200A

Power supply cable						
Max power [KW]	2-6	36	37-42	43-69	70-85	86-108
S	YJV3*2.5+2*1.5	YJV3*6+2*4	YJV3*16+2*10	YJV3*25+2*16	YJV3*35+2*16	YJV3*50+2*25

H CONTROL PANEL DESCRIPTION

H.1 Control panel description



A	OFF button
B	POWER light
C	ON button
D	START button
E	PAUSE button
F	SPEED 1 button
G	SPEED 2 button
H	Boiler temperature display
I	Wash temperature display of tank 1
L	Wash temperature display of tank 2
M	Wash temperature display of tank 3

H.2 Basic Controls

Some functions are common to all models of the range, whereas others are available only on some versions.

	ON button and POWER indicator light	Press this button to switch the appliance on. The Power indicator light is on and the water start to fill the tanks. After some minutes also the tank heating elements start to warm the water. The red indicator light of the pause button blinks alternately every second during the filling and heating phases. When the dishwasher is ready to work the green indicator light of the start button flashes 2 times and for 2 second is off.
	OFF button	Press the OFF button to switch the appliance off. The POWER indicator light is off.
	START button	Press this button to start the washing cycle.
	PAUSE button	Press this button to stop the washing cycle.
	Wash SPEED 1 button	Press this button to set the conveyor belt at the low speed. It is suitable for heavily soiled dishes.
	Wash SPEED 2 button	Press this button to set the conveyor belt at the high speed. It is suitable for normally soiled dishes.
	Wash tank temperature display	It shows the temperature of the water inside the wash tank.
	Boiler temperature display	It shows temperature of the water inside the boiler.

I NORMAL MACHINE USE

I.1 Fitting of filters and overflows

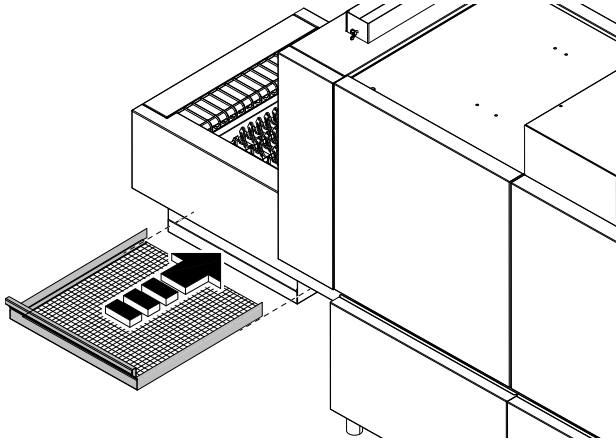


CAUTION

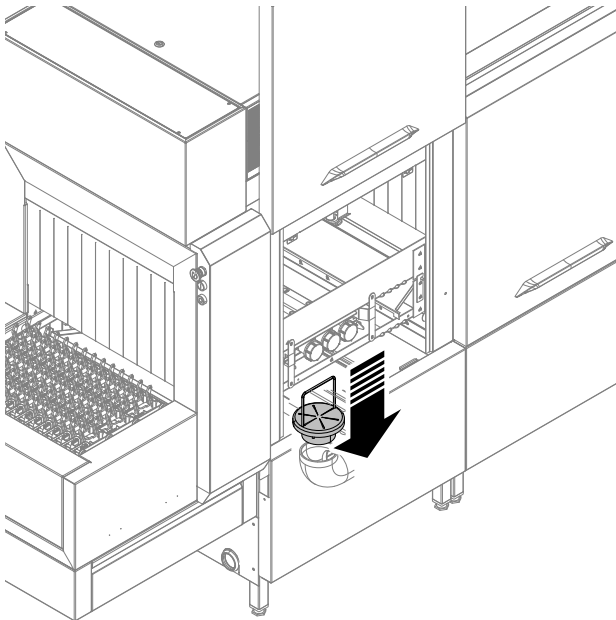
The below operations must be performed when the machine is cold and switched off.

Make sure that:

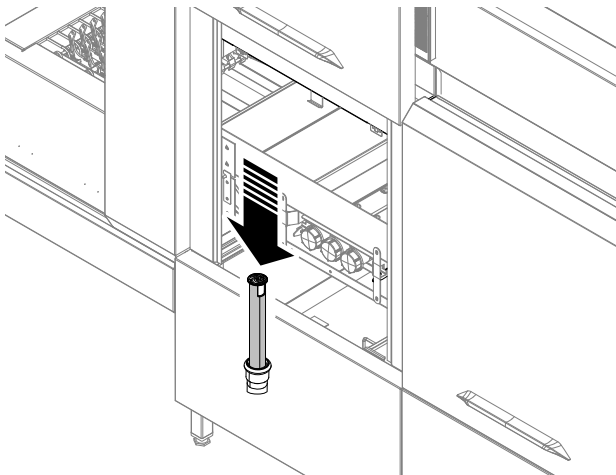
1. the inlet filter is correctly installed;



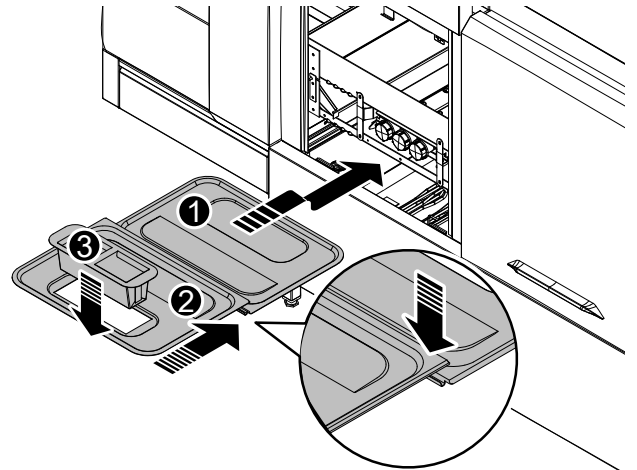
2. the filter of prewash and wash pump is correctly installed;



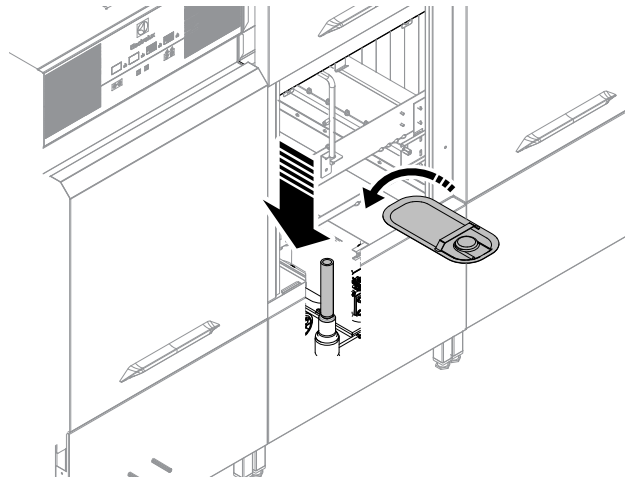
3. the prewash/wash tank overflows are correctly installed;



4. the prewash/wash tank filters are correctly installed;



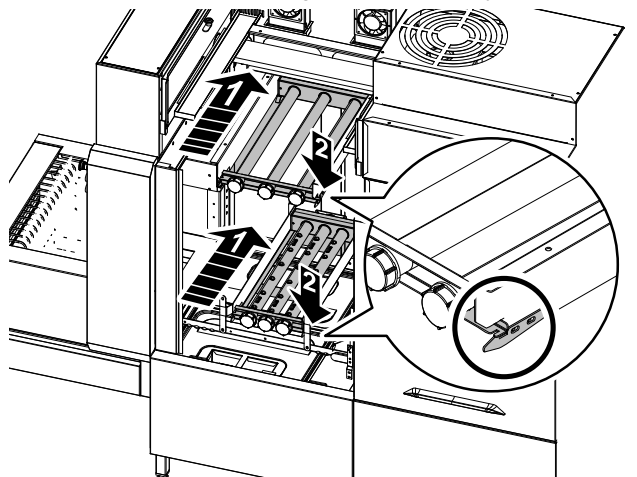
5. the filter and the overflow of the rinse tank are correctly installed.



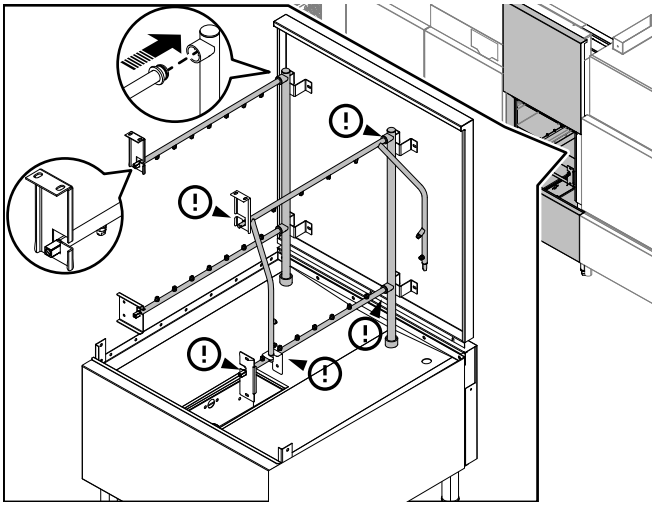
I.2 Fitting of wash and rinse arms

Make sure that:

1. the upper and lower washing arm are correctly installed;

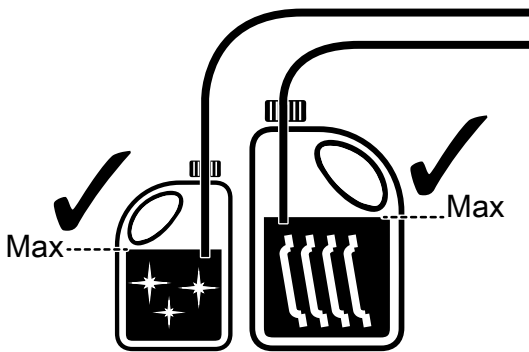


2. the rinsing arm is correctly installed.



I.3 Starting

- Make sure all the types of curtains, provided for the machine model, are correctly fitted.
- Close the doors of the various machine modules.
- Check the detergent or rinse aid containers. Refill or replace them with new ones in order to always obtain the good washing results.



NOTE!
To obtain excellence washing performance, use detergent, rinse aid and descaling agent suggested by Electrolux Professional. In the Electrolux Professional web site, open the "Accessories and Consumables" web page and navigate into the dishwashing equipment tab to order most suitable detergents and accessories.

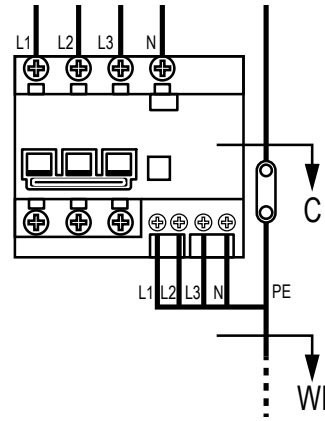


CAUTION
The use of "foaming/nonspecific" detergents or in any case detergents used in different ways from that prescribed by the manufacturer, can cause damage to the dishwasher and compromise the washing results.

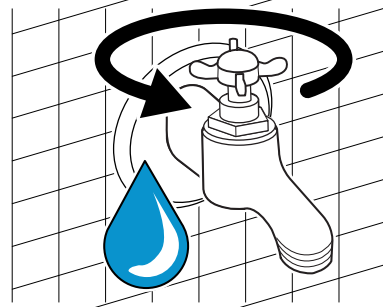


WARNING
When using chemicals, comply with the safety notes and dosage recommendations printed on the packaging. Refer to the chapter *A.3 Personal protection equipment* for handling chemical products.

- Activate the main ON/OFF switch.





- Open the water supply tap.



- Make sure the filters, arms and the overflows are correctly fitted in their position.
- Press the ON button to switch the dishwasher on.



- The red indicator light of the pause button  blinks alternately every second during the filling and heating phases. When the dishwasher is ready to work the green indicator

light of the start button  flashes 2 times and for 2 second is off and the displays of the wash tank and boiler show the working temperature.



Tank temperature



Boiler temperature



- To shut down the dishwasher, press the OFF button.





I.4 Washing phase

The washing phase includes washing with hot water and detergent at a temperature of 60°C and rinsing with hot water and a rinse aid at a temperature of 82°C.

This machine can operate in 2 modes:


1. Speed 1  : low speed for heavily soiled dishes.
2. Speed 2  : high speed for normally soiled dishes.

Conveyor belt speed and productivity table

Model				
	(m/min)	dish/h	(m/min)	dish/h
EFTD052...1	1.0	3200	1.6	5200
EFTD064...1	1.4	4500	2.0	6400
EFTD082...1	2.0	6400	2.53	8200
EFTD108...1	2.7	8600	3.4	10800

1.5 Operation

The dishwasher is ready for use when the green indicator light

of the start button  flashes 2 times and for 2 second is off and the display shows:

- the temperature of the tank is at 60°C or more;
- the boiler temperature is at 82°C or more.

1.5.1 Loading/unloading tableware

This dishwasher is suitable for washing dishes, cups, cutlery, trays, containers and receptacles in plastic and/or steel used for preparing, cooking and serving; as well as a wide variety of ceramic and/or metal cooking utensils. However it is advisable not to wash decorated dishes or place silverware in contact with other metals.



IMPORTANT

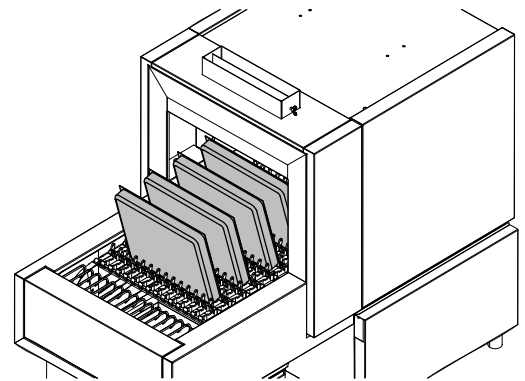
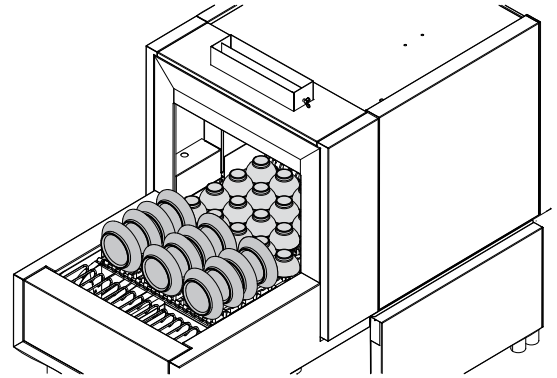
All the dishes must be arranged in the special conveyor belt in order to be washed. Before arranging the dishes into the conveyor belt, clear the dishes of any food residuals and rinse them in order not to clog the filters. Use cold or warm water (at a max. temperature of 35°C) with a manual prewash spray.



CAUTION

Failure to remove the residuals of detergent possibly used for manual prewash can cause malfunctioning of the dishwasher and compromise washing results.

- Load dishes, bowls, trays and pans neatly onto the conveyor, avoiding collisions and damage.



NOTE!

To facilitate the flow of water leave a space of about 100 mm between each pan.

- Avoid to arrange or overfill the conveyor belt of items too close, because this cause a bad washing results. The washing arms of the machine with several angled water jets are not able to perfectly clean the dishes.
- Make sure that large utensils like pots, big plates, big trays can be transported through smoothly before washing them. If the large dishes can not easily pass through the machine, please don't try again.
- Remove the tableware from the outlet module and put it into storage boxes.

When the conveyor belt is empty for a certain period of time, the dishwasher automatically stops. When a tableware is loaded again, the dishwasher starts washing again.



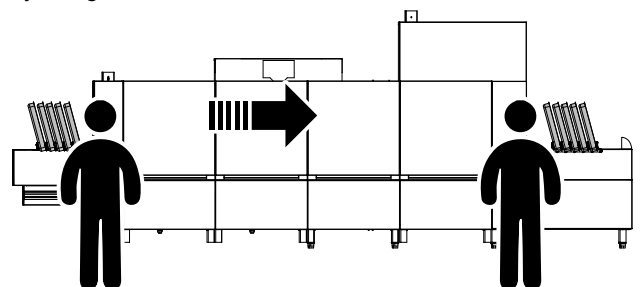
NOTE!

It is advisable that 2 operators load and unload tableware from the dishwasher conveyor belt.

- One operator puts the tableware neatly onto the conveyor belt, and presses the START button.

The machine starts washing, and the tableware exits from the outlet module after a washing cycle.

- Second operator remove the cleaned tableware. If the tableware activates the end limit switch the dishwasher stops immediately. Remove the tableware from the conveyor belt and press the start button to start the washing cycle again.





WARNING

Danger of crushing.
Keep hands and arms away from
the conveyor belt entry zone.

I.5.2 Change the conveyor speed

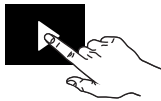
1. Press PAUSE button to stop the dishwasher.



2. Select the required speed.



3. Press the START button to set the new speed.



NOTE!

When changing the speed while the conveyor is running, the speed will not take effect immediately. Always stop and re-start the dishwasher.



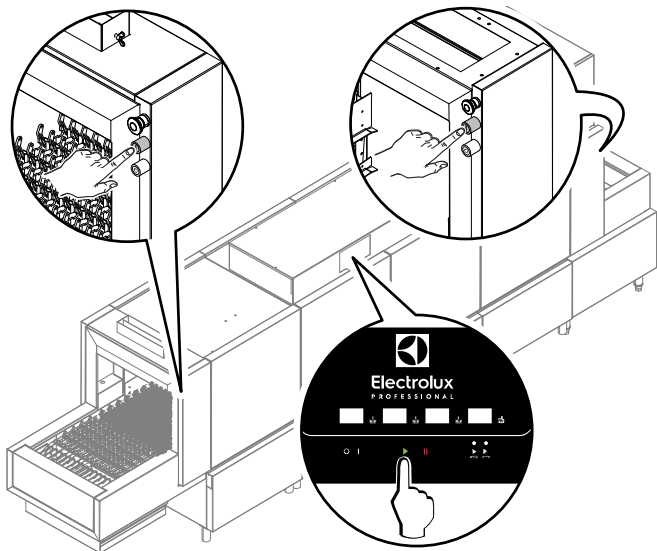
IMPORTANT

Call the Customer Care service to change the default dishwasher speed of washing.

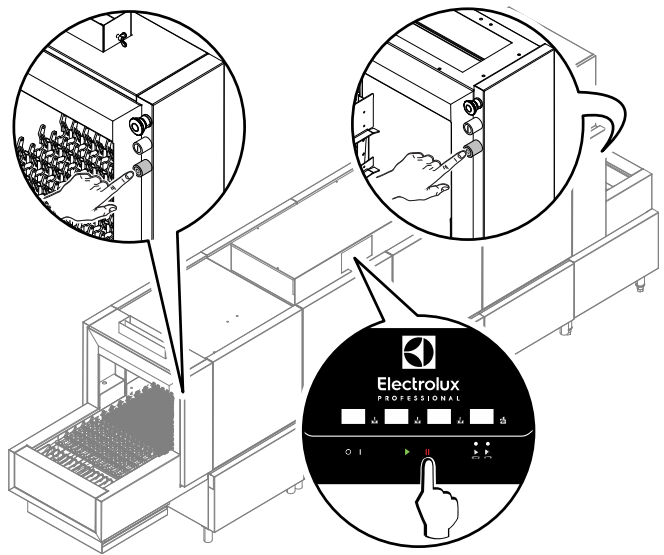
I.5.3 Start/stop washing cycle

Make sure that all doors of the dishwasher are closed.

Press the START button on the control panel or the green START button in the inlet or outlet module to start the washing cycle.



Press the STOP button on the control panel or the red STOP button in the inlet or outlet module to stop the washing cycle. It is also possible to stop the washing cycle opening a door.

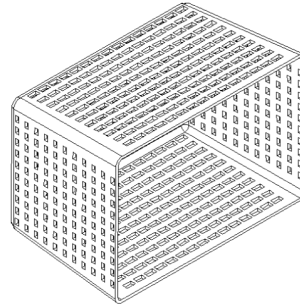


I.6 Type of tableware

- Place all tableware including dishes, plates, trays on the conveyor belt to a certain degree.
- Bowls needs to be fitted into the conveyor belt. Cups, glasses and silverware should be placed in a rack, although they can be directly put on conveyor belt.
- Make sure that large utensils like pots, big plates, big trays can be transported through smoothly before washing them. If the large dishes can not easily pass through the machine, please don't try again.

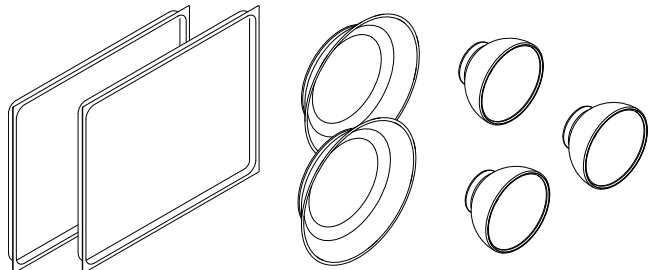
I.6.1 Plastic or metal baskets

Plastic, or metal baskets wherein the size does not exceed 600 X 450 X 340 mm.



I.6.2 Plastic or ceramic dishes

Plastic or ceramic dishes, bowls or trays wherein the size does not exceed 400 X 400 X 340 mm.



J DAILY CLEANING AND MAINTENANCE



WARNING

Refer to “Warning and Safety Information”.

J.1 Machine cleaning

Cleaning must be carried out after every day of use. Use hot water, a neutral detergent/cleaner if necessary, and a soft brush or sponge. If another type of detergent is used, carefully follow the producer's instructions and observe the safety rules given in the information sheets provided with the product or substance.

In order to reduce the environmental impact of pollutants it is advisable to clean the machine (externally and, where necessary, internally) with products that are more than 90% biodegradable.



CAUTION

Do not use steel wool or similar material to clean stainless steel surfaces. Do not use detergents containing chlorine.



WARNING

When using chemicals, comply with the safety notes and dosage recommendations printed on the packaging. Refer to the chapter *A.3 Personal protection equipment* for handling chemical products.



J.2 Daily internal cleaning



IMPORTANT

It is recommended to clean the dishwasher after each operation or at least daily.



CAUTION

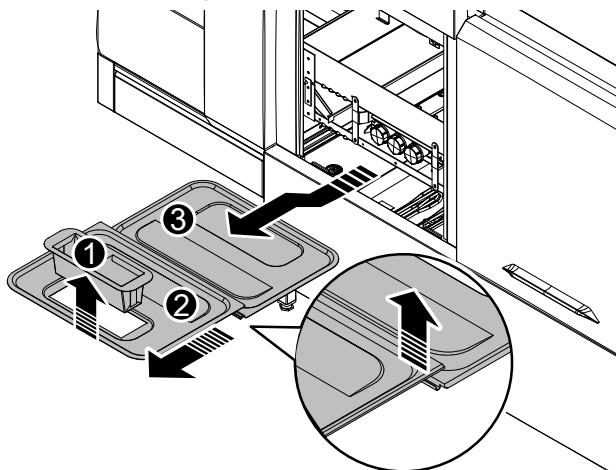
Do not use steel wool or similar material to clean stainless steel surfaces. Do not use detergents containing chlorine



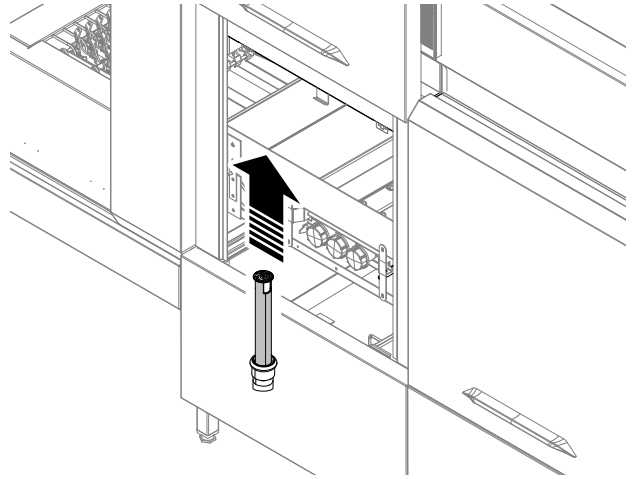
NOTE!

For better result use a brush with a plastic bristles and a sponge.

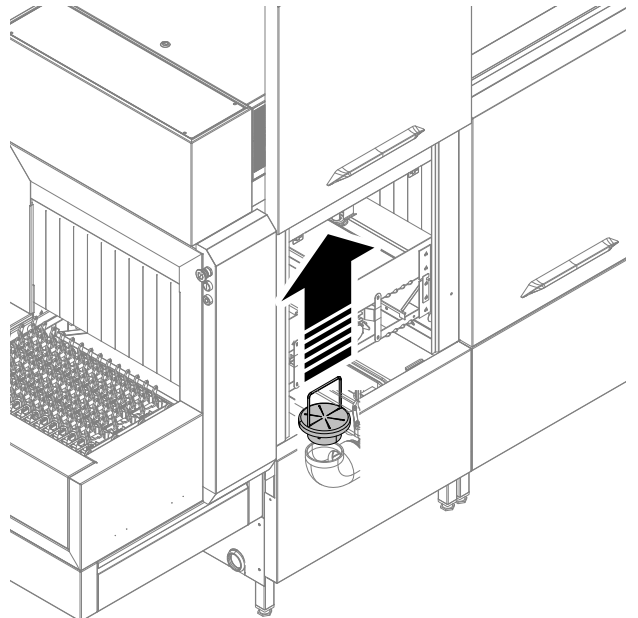
1. Switch the dishwasher off and deactivate the main circuit breaker. Open all doors of the dishwasher.
2. Remove the strainer baskets, flat filters of the tanks and clean them with water. Do not use hard objects to clean them.



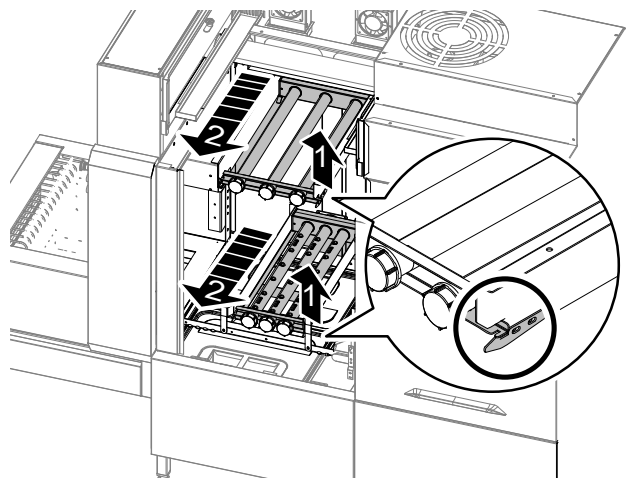
3. Pull up the overflows of each tanks to drain the water.



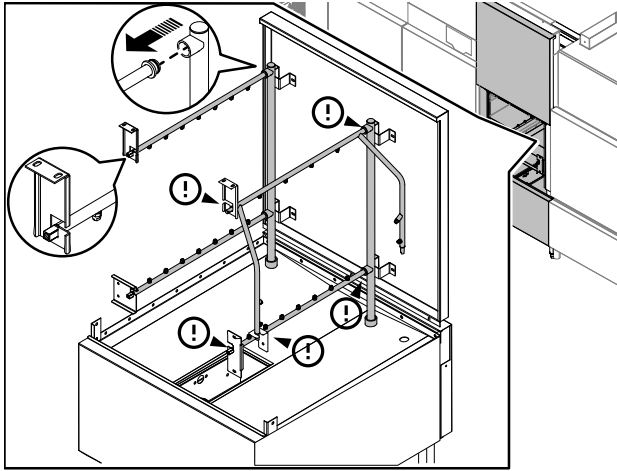
4. Remove the curtains and clean them.
5. Spray water to wash out debris on inlet and outlet tables into the machine, thoroughly clean the interior of the appliance;
6. When the tank is empty, remove and clean the pump filter.



7. Clean the washing arms:
 - remove the upper and lower washing arms;
 - remove the caps and clean the arms with fresh water.



8. Clean the rinse arms:
 - remove the rinse arms;
 - unscrew the end cap;
 - clean nozzles and rinse the arms.



9. Thoroughly clean the internal wall and bottom of the tanks with water of high pressure, wash away all debris and dishwasher surroundings.
10. Refit the pump filter, the overflows, the flat filters and strainer baskets.
11. Refit the wash and rinse arms.
12. Refit all the curtains;
13. Clean the exterior with wet cloth and neutral soap.
14. Leave the door ajar so that air can circulate inside, preventing the formation of unpleasant odours.



NOTE!
Open the access door after the power switch turned off for 30 seconds, in case that hot water splash out on operators.



CAUTION
When the machine is running, the operators **MUST** not stretch out hands into the machine or reach containers scattered inside.

J.3 Maintenance

The inspection and maintenance intervals depend on the actual machine operating conditions (total wash hours) and ambient conditions (presence of dust, damp, etc), therefore precise time intervals cannot be given. In any case, careful and periodical machine maintenance is advisable in order to minimise service interruptions.

It is advisable to:

- Descale the boiler, inner surfaces of the tank and the machine's pipes once or twice a year (call the Customer Care Service).

- Every month descale the wash and rinse jets with scale remover (call the Customer Care Service).
- The internal tube of the peristaltic rinse aid and detergent dispenser must undergo periodical maintenance (call the Customer Care Service).



NOTE!
It is also advisable to sign a preventive and scheduled maintenance contract with the Customer Care Service

J.3.1 Repair and extraordinary maintenance

Repair and extraordinary Maintenance have to be carried out by specialised authorised personnel. The manufacturer declines any liability for any failure or damage caused by the intervention of an unauthorized technician by the Manufacturer and the original manufacturer warranty will be invalidated.

J.3.2 Parts and accessories

Use only original accessories and/or spare parts. Failure to use original accessories and/or spare parts will invalidate the original manufacturer warranty and may render the machine not compliant with the safety standard.

J.3.3 Prolonged period of inactivity

If the dishwasher is not to be used for a long time, proceed as follows:


- Close the water supply tap.
- Completely drain the tank.
- Remove and carefully clean the filters.
- Completely drain the dispenser hoses (call Customer Care Service).
- Completely drain the boiler (call Customer Care Service).
- Spread a thin film of Vaseline oil over all the stain-less steel surfaces.

J.4 Machine disposal

At the end of the product's life cycle, make sure the equipment is not dispersed in the environment. The equipment must be disposed of in compliance with current regulations in the country of use.

All metal parts are in stainless steel (AISI 304) and removable. Plastic parts are marked with the letters of the material.







The symbol  on the product indicates that this product should not be treated as domestic waste, but must be correctly disposed of in order to prevent possible negative consequences for the environment and the human health.

Regarding the recycling of this product, please contact the sales agent or dealer of your product, your Customer Care service or the appropriate waste disposal service.


K TROUBLESHOOTING

K.1 Alarms

Description	Start button  Green indicator light	Pause button  Red indicator light	Solution
Emergency stop	OFF	The indicator light always flashes	Remove tableware from conveyor belt
Door is open	OFF	The indicator light flashes 2 times and for 1 second is off.	Close the door
Conveyor motor fault	OFF	The indicator light flashes 3 times and for 1 second is off.	Call Customer Care Service

Description	Start button  Green indicator light	Pause button  Red indicator light	Solution
Tank heating element fault	OFF	The indicator light flashes 4 times and for 1 second is off.	Call Customer Care Service
Boiler boiler heating element fault	OFF	The indicator light flashes 5 times and for 1 second is off.	Call Customer Care Service

K.2 Common faults

Dishwasher does not switch on	<ol style="list-style-type: none"> 1. Check if the power supply plug is powered. 2. Check if the power supply cable is properly inserted into the plug. 3. Check the fuse and replace it if necessary. 4. Check if the external residual current circuit-breaker is activated. 5. Check if the "QF1" circuit breaker, inside the electric box, is activated.
Dishwasher does not wash well	<ol style="list-style-type: none"> 1. Check if the suction filter is dirty and clean it thoroughly. 2. Check if the wash jets are clogged by solid food remains. 3. Check that the initial amount of detergent or subsequent additions are correct. 4. Check that the tank temperature is at least 60 °C. 5. Check that the tableware in the conveyor belt is stacked correctly.
Glasses and dishes are not dried properly	<ol style="list-style-type: none"> 1. Check if there is rinse-aid in the container and, if necessary, top up. 2. Check the set amount of rinse aid. 3. Check that the water temperature is between 80°C and 90°C.
Condensation on glasses	<ol style="list-style-type: none"> 1. Check that there is rinse-aid in the container and, if necessary, top up. 2. Check the set amount of rinse aid.
Stains on the glasses	<ol style="list-style-type: none"> 1. Only use "non-foaming" products for professional dishwashers.
Excessive foam in the tank	<ol style="list-style-type: none"> 1. Check if the wash water temperature is not less than 60°C. 2. Check if there is excessive detergent. 3. Ensure that the tank has not been cleaned with unsuitable cleaners. Drain the tank and rinse thoroughly before new wash cycles. 4. If a foaming detergent has been used, drain and refill the tank with water until the foam disappears.
Smears or spots on the glasses	<ol style="list-style-type: none"> 1. Reduce the amount of rinse-aid.
Rinsing water flow is too low	<ol style="list-style-type: none"> 1. Check on the pressure gauge if the water pressure is at least 2 bar.
Continuous rinse operation	<ol style="list-style-type: none"> 1. Check if any object is in front of the photoelectric safety device in the inlet module switch. If the fault persists call Customer Care Service.
No or slow fill	<ol style="list-style-type: none"> 1. Check if the filter of the water inlet hose is dirty. Close the water supply tap, unscrew the water inlet hose, clean the filter and refit it. <p> CAUTION Always use a new set of joints if you remove and refit the water inlet hose.</p>
Dryer does not operate	<ol style="list-style-type: none"> 1. Check if the fuse needs to be replaced. 2. Check if the circuit-breaker is active. 3. Check if the door is firmly closed.

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