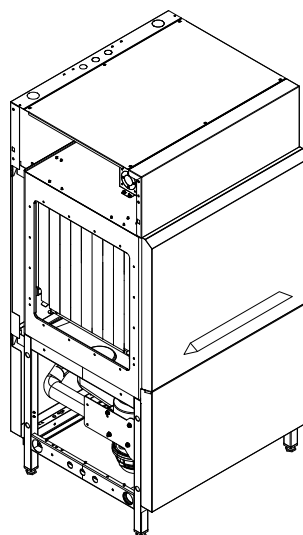


# Prewash module

Medium 22" - Large 35"



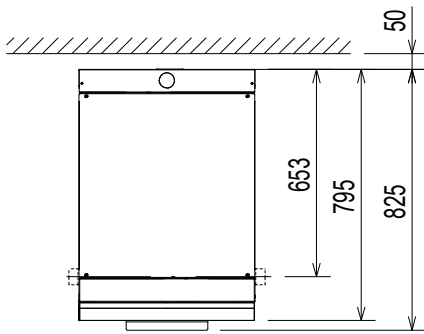
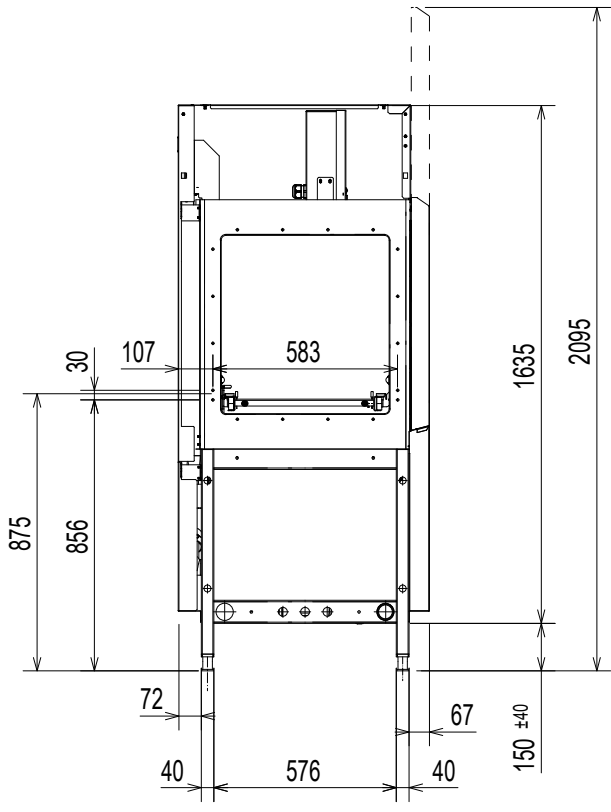
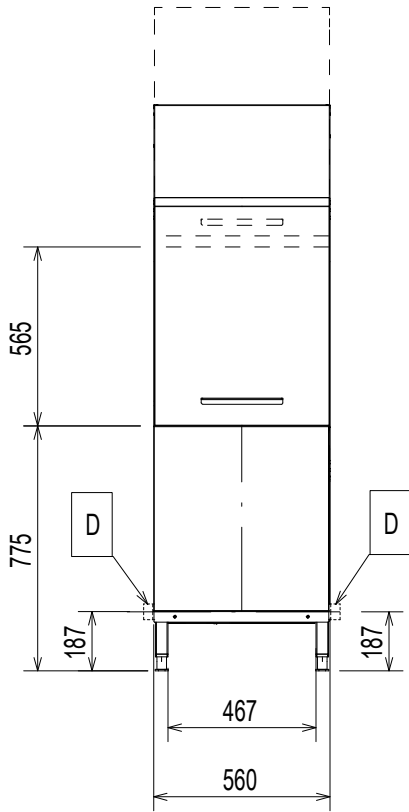
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EN Installation manual \*



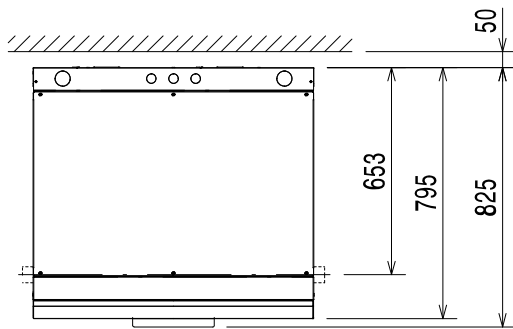
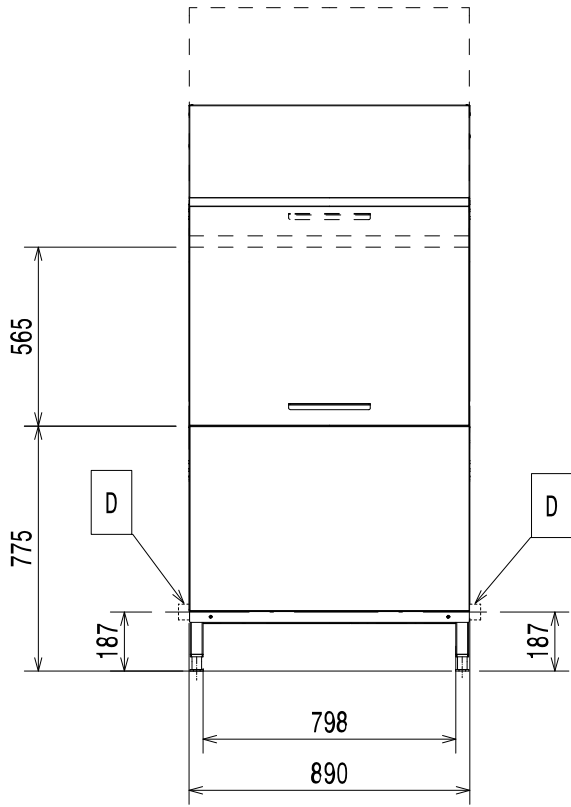
# Installation diagram

# Prewash module 22"



**Installation diagram**

**Prewash module 35"**



D = Drain outlet  $\varnothing=50$  mm (external)

## Foreword



Read the following instructions, including the warranty terms before installing and using the appliance.

Visit our website [www.electroluxprofessional.com](http://www.electroluxprofessional.com) and open the **Support** section to:

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Register your product



Get hints & tips of your product, service and repair information

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

The following must not be considered a long and exacting list of warnings, but rather a set of instructions suitable for improving appliance 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 appliance 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 appliance'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 appliance, regarding its use and maintenance.

The manual must be available to operators and carefully kept in the place where the appliance 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 appliance 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 appliance. During all stages of appliance use, always respect the current regulations on safety, work hygiene and environmental protection. It is the user's responsibility to make sure the appliance 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 [www.electroluxprofessional.com](http://www.electroluxprofessional.com);
- The manual must always be kept in an easily accessed place near the appliance. Appliance operators and maintenance personnel must be able to easily find and consult it at any time.

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## A SAFETY INFORMATION

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### A.1 General information

To ensure safe use of the appliance 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 appliance or the product.



#### **IMPORTANT**

Important instructions or information on the product



Equipotentiality



Read the instructions before using the appliance

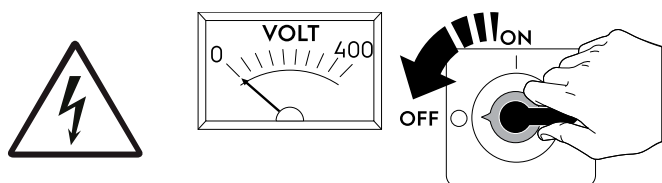


Clarifications and explanations

- Only specialised personnel are authorised to operate on the appliance.
- This appliance is intended to be used for commercial applications, for example in kitchens of restaurant, canteens, hospitals. It must be used for washing or drying plates, dishes, glassware, cutlery and similar articles.
- This appliance is not intended for use by persons (including children) with reduced physical, sensor or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of appliance by a person 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 your safety do not store or use gasoline or other flammable materials, vapours and liquids in the vicinity of this or any other appliance.
- Do not store explosive substances, such as pressurized containers with flammable propellant, in this appliance.
- Refer to the data given on the appliance's data plate for relations with the Manufacturer (e.g. when ordering spare parts, etc.).
- When scrapping the appliance, the marking CE must be destroyed.
- Save these instructions carefully for further consultation by the various operators.

## A.2 General safety

- The appliances are provided with electric and/or mechanical safety devices for protecting workers and the appliance itself.
- Never operate the appliance, removing, modifying or tampering with the guards, protection or safety devices.
- Do not make any modifications to the parts supplied with the appliance.
- Several illustrations in the manual show the appliance, or parts of it, without guards or with guards removed. This is purely for explanatory purposes. Do not use the appliance without the guards or with the protection devices deactivated.



Disconnect the appliance from the power supply before carrying out any installation, assembly, cleaning or maintenance procedure.






- Do not remove, tamper with or make illegible the CE marking, the safety, danger and instruction signs and labels on the appliance.
- The A-weighted emission sound pressure level does not exceed 70 dB(A).
- The following operations have to be carried out by specialised authorised personnel or Customer Care Service provided with all the appropriate personal protection equipment (A.3 *Personal protection equipment*), tools, utensils and ancillary means, who can ask the manufacturer to supply a servicing manual:
  - Installation and assembly
  - Positioning
  - Electrical connection
  - Appliance cleaning, repair and extraordinary maintenance
  - Appliance disposal
  - Work on electrical equipment

## A.3 Personal protection equipment

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

Stage	Protective garments	Safety footwear	Gloves	Glasses	Safety helmet
Transport	—	●	○	—	○
Handling	●	●	○	—	—
Unpacking	○	●	○	—	—
Installation	○	●	● <sup>1</sup>	—	—
Normal use	●	●	● <sup>2</sup>	○	—
Adjustments	○	●	—	—	—
Routine cleaning	○	●	● <sup>1-3</sup>	○	—



Stage	Protective garments 	Safety footwear 	Gloves 	Glasses 	Safety helmet 
Extraordinary cleaning	○	●	● <sup>1-3</sup>	○	—
Maintenance	○	●	○	—	—
Dismantling	○	●	○	○	—
Scrapping	○	●	○	○	—
<b>Key:</b>					
●	<b>PPE REQUIRED</b>				
○	<b>PPE AVAILABLE OR TO BE USED IF NECESSARY</b>				
—	<b>PPE NOT REQUIRED</b>				

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 Protection devices installed on the appliance

### Guards

The appliance has:




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




### Safety devices

The appliance has:

- interlocks on the door(s) giving access to inside the appliance;
- emergency switch push buttons and stops must be installed on the rack handling tables in case the racks exceed their travel.

## A.5 Safety signs to be placed on the appliance 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)

## A.6 Transport, handling and storage

- Transport (i. e. transfer of the appliance from one place to another) and handling (i. e. transfer inside workplaces) must occur with the use of special and adequate means.
- Please refer to indications on packaging for stackability during transport, handling and storage.
- Do not stand under suspended loads during loading or unloading operations. Unauthorized personnel must not enter the work area.
- The weight of the appliance alone is not sufficient to keep it steady.
- For appliance handling, do not lift and anchor it to movable or weak parts such as: casings, electrical raceways, pneumatic parts, etc.
- Do not push or pull the appliance to move it, as it may tip over. Use proper tool to lift the appliance.
- Arrange a suitable area with flat floor for appliance unloading and storage operations.
- Appliance transport, handling, shifting and storage personnel must be adequately instructed and trained regarding the safely use of lifting systems and personal protection equipment suitable for the type of operation carried out.
- When removing the anchoring systems, make sure the stability of the appliance parts does not depend on the anchoring and, therefore, that this operation does not cause the load to fall off the vehicle. Before unloading the appliance components, make sure all the anchoring systems are removed.

## A.7 Installation and assembly

- The operations described must be carried out in compliance with the current safety regulations and provisions in force in the country of use.

- Do not install a damaged appliance. Any missing or faulty parts must be replaced with original parts.
- Make sure that the floor where you install the appliance is flat, stable, heat resistant and clean.
- If available, make sure to install the accessory to fix the appliance to the floor or on the support. Refer to E *INSTALLATION AND ASSEMBLY* for the instructions.
- Use a ladder with suitable protection for work on appliances with high accessibility.
- Do not install the appliance over 2000 meters above sea level.
- The appliance is not suitable for installation outdoors and/or in places exposed to atmospheric agents (rain, direct sunlight, etc.).

## A.8 Water connection

- The plumbing connections must be carried out by a specialised personnel.
- The machine is to be connected to the water mains using the new supplied hose-sets. Do not use old hose sets.
- Always use a new set of joints if you remove and re-install the water inlet pipe to the machine.
- Before connection to new pipes, pipes not used for a long time, where repair work has been carried out or new devices fitted (water meters, etc.), let the water flow until it is clean and clear.
- The operating water pressure (minimum and maximum) must be between:
  - 1.5 bar [150 kPa] and 6 bar [600 kPa] for models with ESD;
- Make sure that there are no visible water leaks during and after the first use of the machine.
- Install an approved dual check valve upstream according to the regulation of the installation country.

## A.9 Electrical connection

- The power supply system must be suitable for the rated current of the connected appliance; the connection must be carried out in compliance with the regulations and provisions in force in the country of use.
- The information regarding the appliance power supply voltage and frequency is given on the data plate.
- If the power cable is damaged or too short, it must be replaced by the Customer Care Service or in any case by specialised personnel, in order to prevent any risk.
- The manufacturer declines any liability for damage or injury resulting from breach of the above rules or non-compliance with the electrical safety regulations in force in the country where the appliance is used.
- The appliance must be correctly earthed.



### NOTE!

The manufacturer is not responsible for the consequences of an inadequate earthing system.

- If present, connected the appliance to the equipotential protection circuit  $\nabla$ .
- To protect the power supply of the appliance against short circuits and/or overloads, install a thermal fuse or a suitable automatic thermal magnetic circuit breaker, ADS (Automatic Disconnection of Supply).
- To protect the power supply of the appliance against current leakages, install between the power cable and the electric line, a suitable high-sensitivity manual-reset differential

omnipolar thermal-magnetic switch with contact gap enabling complete disconnection in category III overvoltage conditions and complying with the current regulations.

- For protection against indirect contacts (depending on the type of supply provided for and connection of earths to the equipotential protection circuit  $\nabla$ ) refer to point 6.3.3 of EN 60204-1 (IEC 60204-1) with the use of protection devices that ensure automatic cut-off of the supply in case of isolation fault in the TN or TT systems or, for IT systems, the use of isolation controllers or differential current protection devices to activate automatic power disconnection (an isolation controller must be provided for indicating a possible first earth fault of a live part, unless a protection device is supplied for switching off the power in case of a such a fault. This device must activate an acoustic and/or visual signal which must continue for the entire duration of the fault). For example: in a TT system, a residual current device with cut-in current (e.g. 30 mA) coordinated with the earthing system of the building where the appliance is located must be installed ahead of the supply.
- For all additional modules installed later, make sure to:
  - move the emergency switch at the ends of the equipment;
  - check that the power cable supply is properly sized.

## A.10 Appliance cleaning

- Do not touch the appliance with wet hands or feet or when barefoot.
- Use a ladder with suitable protection for work on appliances with high accessibility.
- Put the appliance in safe conditions before starting any cleaning operation.
- Respect the requirements for the various routine and extraordinary maintenance operations. Non-compliance with the instructions can create risks for personnel.
- Do not spray water or use water jets, steam cleaner or high pressure cleaner.

## A.11 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 appliance not compliant with the safety standard.

## A.12 Disposal of packing

- Dispose of each packaging items respecting the current regulation in the country of installation.

## A.13 Appliance disposal

- Make the appliance unusable by removing the power cable and any compartment closing devices, to prevent the possibility of someone becoming trapped inside.

---

## B GENERAL INFORMATION

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### B.1 Introduction

This manual contains information relevant to various appliances. The product images in this guide are only an example.

The drawings and diagrams given in the manual are not in scale. They supplement the written information with an outline, but are not intended to be a detailed representation of the appliance supplied.

The numerical values given on the appliance installation diagrams refer to measurements in millimeters and/or inches.

### B.2 Definitions

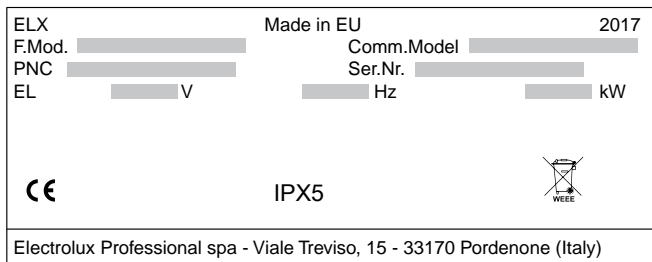
Listed below are the definitions of the main terms used in the manual. It is advisable to read them carefully before use.

Operator	appliance 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 appliance use	an operator who has been informed and trained regarding the tasks and hazards involved in normal appliance use.

Customer Care service or specialised personnel	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 appliance and recognise and prevent any risks. His professionalism covers the mechanical, electrotechnical and electronics fields etc.
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 appliance 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 appliance and/or who manages and uses it (e. g. company, entrepreneur, firm).
Electrocution	an accidental discharge of electric current on a human body.
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/appliances/property/animals.

### B.3 Appliance and manufacturer's identification data

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



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

F.Mod.	factory description of product
Comm.Model	commercial description
PNC	production number code
Ser.Nr.	serial number
V	power supply voltage
Hz	power supply frequency
kW	max. power input
IPX5	dust and water protection rating
CE	CE marking
Electrolux Professional SpA Viale Treviso 15 33170 Pordenone Italy	manufacturer

The data plate is located on the front panel of the equipment.

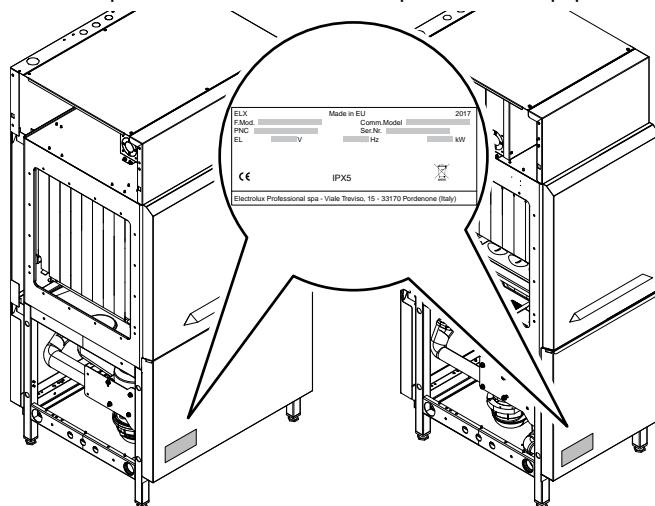


Fig. 1 Data plate position



#### IMPORTANT

When installing the appliance, make sure the electrical connection is carried out in compliance with that specified on the data plate.



#### NOTE!

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

### B.4 Additional indications

The drawings and diagrams given in the manual are not in scale. They supplement the written information with an outline, but are not intended to be a detailed representation of the machine supplied

The numerical values given on the machine installation diagrams refer to measurements in millimeters and/or inches.

Conventionally, the appliance are depicted with the rack feed side on the right ("R"); appliance with left rack feed ("L") are depicted only if necessary, in which case the side will be expressly specified.

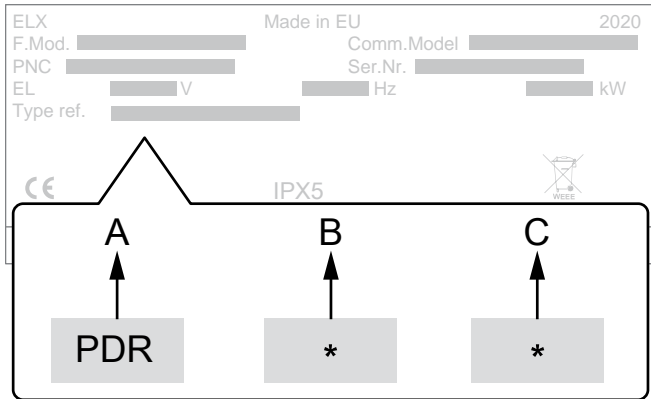
#### B.4.1 How to interpret the factory description

The factory description on the data plate has the following meaning:

(1)	(2)	(3)	(4)	(5)	(6)
N	M	PW	DR	E	5
N	L	PW	DR	E	5

	Description	Possible variables
(1)	Brand	N=To brand
(2)	Module Length	M=22"; L=35"
(3)	Type of module	PW=Prewash
(4)	Appliance type	DR=Dual Rinse
(5)	Supply	E = Electric
(6)	Other functions	5=50 Hz 6=60 Hz 4 = 220-240V/3 8 = 208V/3 M = Marine (400V/3 — 440V/3 — 480V/3)

## B.5 Type reference



### Legend

<b>A</b>	Type of appliance • Dual Rinse Prewash
<b>B</b>	Dimension • 0 = Prewash 22" • 1 = Prewash 35"
<b>C</b>	Power supply • 0 = Electric



### CAUTION

For all the additional modules installed later, make sure that the power cable supply is properly sized.

## B.6 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 appliance operation and invalidates the original manufacturer warranty);
- operations carried out by non-specialised personnel;
- unauthorized modifications or operations;
- missing, lack or inadequate maintenance;
- improper appliance use;
- unforeseeable extraordinary events;
- use of the appliance 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.

## B.7 Copyright

This manual is intended solely for consultation by the operator and can only be given to third parties with the permission of Electrolux Professional SpA company.

## B.8 Keeping the manual

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

## B.9 Recipients of the manual

This manual is intended for:

- the carrier and handling personnel;
- installation and commissioning personnel;
- specialised personnel - Customer Care service (see service manual).

## B.10 Disposal of packing

The packing must be disposed of in compliance with the current regulations in the country where the appliance is used. All the packing materials are environmentally friendly.

They can be safely kept, recycled, or burned in an appropriate waste incineration plant. Recyclable plastic parts are marked as follows:

	<b>Polyethylene</b> • Outer wrapping • Instructions bag
	<b>Polypropylene</b> • Straps
	<b>Polystyrene foam</b> • Corner protectors

The parts in wood and cardboard can be disposed of, respecting the current regulations in the country where the appliance is used.

## C TECHNICAL DATA

### C.1 Main technical characteristics

Model		PW 22"	PW 35"
Power supply		Electric	Electric
Power supply voltage		380 - 415V - 3N - 50Hz	380 - 415V - 3N - 50Hz
Frequency		380 - 415V - 3N - 60Hz 220 - 240V - 3 - 60Hz 400V - 3 - 50Hz 440V - 3 - 60Hz	
Max. power. absorbed	kW	7.37	15.5

Model		PW 22"	PW 35"
Supply water pressure	bar [kPa]	1.5 bar [150 kPa]...6 bar [600 kPa]	1.5 bar [150 kPa]...6 bar [600 kPa]
Cold water supply temp.	°C	5-30 [15] <sup>1</sup>	5-30 [15] <sup>1</sup>
Tank capacity	l	35	70
Washing temperature (min - max)	°C	10 - 40	10 - 40
Pump power	kW	0.37	1.5
Tank heating element	kW	7	14
Max. current absorbed	A	10.3	22
Concentration of chlorides in water	ppm	<20	<20
Supply water hardness	°f/°d/°e	0-14/0-8/0-10	0-14/0-8/0-10
Net weight	kg	112	163
Protection rating		IPX5	IPX5

1. Cold water temperature recommended for dishwasher with energy recovery device.

## C.2 Characteristics of power supply

The AC power supply to the machine must meet the following conditions:

- max. voltage variation  $\pm 6\%$
- max. frequency variation  $\pm 1\%$  continuous  $\pm 2\%$  for a short period.

Harmonic distortion, unbalanced three-phase supply voltage, voltage pulses, interruption, dips and the other electric characteristics must respect the provisions of point 4.3.2 of Standard EN 60204-1 (IEC 60204-1).

## D TRANSPORT, HANDLING AND STORAGE



### WARNING

Refer to "Safety Information".

- make sure no material can fall during lifting. Manoeuvre vertically in order to avoid impacts;
- handle the appliance, keeping it at minimum height from the ground.

### D.1 Introduction

Transport (i. e. transfer of the appliance from one place to another) and handling (i. e. transfer inside workplaces) must occur with the use of special and adequate means.



### CAUTION

The appliance must only be transported, handled and stored by specialised personnel, who must have:

- specific technical training and experience in the use of lifting systems;
- knowledge of the safety regulations and applicable laws in the relevant sectors;
- knowledge of the general safety rules;
- personal protection equipment suitable for the type of operation carried out;
- the ability to recognize and avoid any possible hazard.



### IMPORTANT

Immediately check for any damage caused during transport. Inspect the packaging before and after unloading.

### D.2 Handling

Arrange a suitable area with flat floor for appliance unloading and storage operations.

#### D.2.1 Procedures for handling operations

##### Before lifting:

- send all operators to a safe position and prevent persons from entering the handling area;
- make sure the load is stable;

#### For correct and safe lifting operations:

- use the type of equipment most suitable for characteristics and capacity (e.g. electric pallet truck or lift truck);
- cover sharp edges;
- check the forks and lifting procedures according to the instructions given on the packing.

#### D.2.2 Shifting

##### The operator must:

- have a general view of the path to be followed;
- stop the manoeuvre in case of hazardous situations.

#### D.2.3 Placing the load

- Before placing the load, make sure the way is free and that the floor is flat and can take the load.
- Remove the appliance from the wooden pallet, move it to one side, then slide it onto the floor.

### D.3 Storage

The appliance and/or its parts must be stored and protected from damp, in a non-aggressive place, free of vibrations and with room temperatures between  $-10^{\circ}\text{C}$  [ $14^{\circ}\text{F}$ ] and  $50^{\circ}\text{C}$  [ $122^{\circ}\text{F}$ ].

The place where the appliance is stored must:

- can take the appliance load,
- have a flat support surface to avoid deforming the appliance or damage to the support feet.

### D.4 Customer packaging checks

- The forwarder is responsible for the goods during transport and delivery.
- Make a complaint to the forwarder in case of visible or hidden damage.

- Specify any damage or shortages on the dispatch note.
- The driver must sign the dispatch note: the forwarder can reject the claim if the dispatch note is not signed (the forwarder can provide the necessary form).
- For hidden damage or shortages becoming apparent only after unpacking, request the forwarder for inspection of the goods within and no later than 15 days after delivery.

### After packaging checks

1. Remove the packaging.  
Take care when unpacking and handling of the appliance to not cause any shocks on itself.
2. Keep all the documentation contained in the packaging.

## E INSTALLATION AND ASSEMBLY



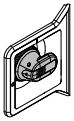
### WARNING

Refer to “*Safety Information*”.

### E.1 Introduction



### WARNING



Make sure that the switch disconnector of the machine is locked in the Off position - “O”.

### E.2 Customer responsibilities

The Customer must provide for the following:

- installation of an adequate electrical power supply ahead of the appliance, according to the equipment’s technical specifications (C *TECHNICAL DATA* and C.2 *Characteristics of power supply*);
- adducting for the electrical connection between the workplace electric panel and the equipment;
- the water supply and drain connections and other connections as indicated in the technical data table and in the installation diagram;
- the addition of the prewash module changes the arrangement of the emergency stops. This arrangement must be re-examined (E.13 *Positioning of emergency switches*).

### E.3 Installation of prewash module on the rack-type dishwasher

The Manufacturer provides for the possibility of connecting the prewash module only to rack-type dishwashers included in the Electrolux Professional SpA catalogue.

### E.4 Characteristics of the place of machine installation

This additional module is designed for installation in professional and not domestic-type kitchens (for installation of the entire machine, refer to the rack-type dishwasher instruction manual). For this module, water collection traps/metal grates must be arranged in the floor at the machine discharges (refer to “*Installation diagram*”), possibly replaceable with a single water trap sized for a flow rate of at least 3 l/s.

### E.5 Appliance space limits

- A suitable space must be left around the machine (for operations, maintenance, for a correct air exchange, etc.).
- This space must be increased in case of use and/or transfer of other equipment and/or means or if exit routes are necessary inside the workplace.



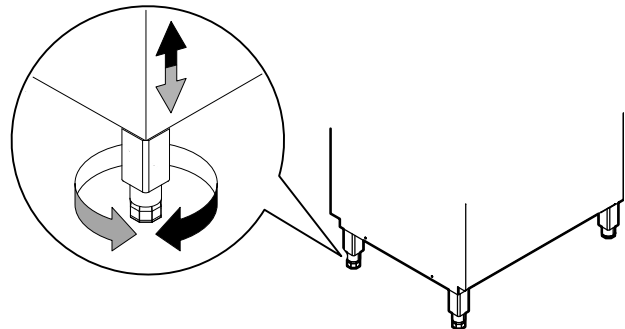
### CAUTION

- Install the machine at a distance of not less than 50 mm from the wall so as not to affect correct ventilation of internal components.
- For the machine with heat pump, make sure that the distance from the ceiling is not less than 300 mm.

### E.6 Positioning

Unless otherwise agreed, the prewash module is supplied in a single unit. The prewash module must be taken to the place of installation and the packing base removed only when being installed.

- Position the prewash module in the required place.
- Adjust the prewash module by turning the special adjustable feet.



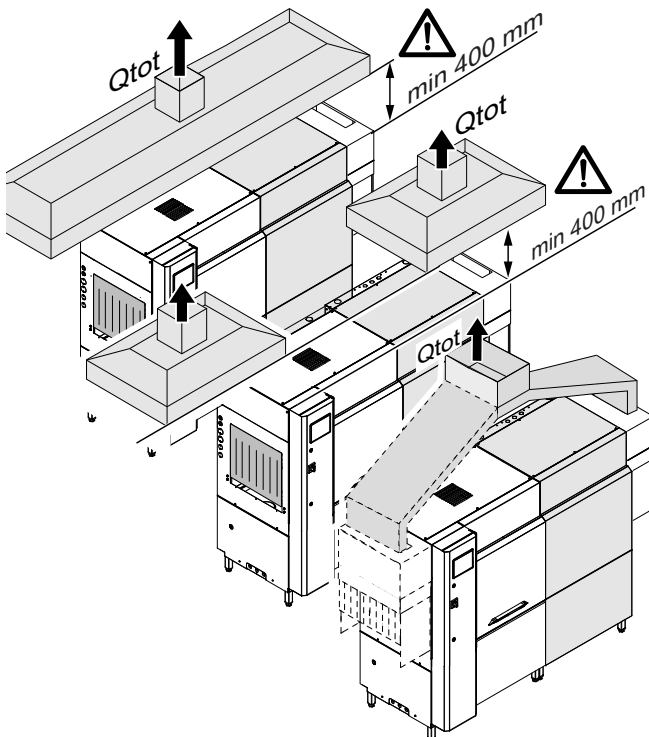
- Fix the prewash module to the existing dishwasher.  
The installer must carefully follow the installation instructions.
- Carefully remove the protective film from the outer panels without tearing it, to avoid leaving traces of glue.

### E.7 Extraction hood

Make sure to position the possible extraction hood at a distance of not less than 400 mm from the machine so as not to compromise machine operation.

The extractor hood is installed to remove the steam emitted by the machine. The hood air delivery must be calculated taking into account the machine model, the type of installation and the work environment where installed.





Model	Qtot (VDI2052)
...DR20P.... (without ESD)	3195 m <sup>3</sup> /h
...DR20P.... (with ESD)	1665 m <sup>3</sup> /h
...DR25P....(without ESD)	3410 m <sup>3</sup> /h
...DR25P....(with ESD)	1795 m <sup>3</sup> /h
...DR250....(without ESD)	3410 m <sup>3</sup> /h
...DR250....(with ESD)	1795 m <sup>3</sup> /h

### E.8 Disposal of packing

The packing must be disposed of in compliance with the current regulations in the country where the appliance is used. All the packing materials are environmentally friendly.

They can be safely kept, recycled, or burned in an appropriate waste incineration plant. Recyclable plastic parts are marked as follows:

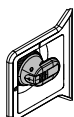
 <b>PE</b>	<b>Polyethylene</b> <ul style="list-style-type: none"> <li>• Outer wrapping</li> <li>• Instructions bag</li> </ul>
 <b>PP</b>	<b>Polypropylene</b> <ul style="list-style-type: none"> <li>• Straps</li> </ul>
 <b>PS</b>	<b>Polystyrene foam</b> <ul style="list-style-type: none"> <li>• Corner protectors</li> </ul>

The parts in wood and cardboard can be disposed of, respecting the current regulations in the country where the appliance is used.

### E.9 Mechanical connections



## WARNING



Make sure that the switch disconnector of the machine is locked in the Off position - "O".



## WARNING

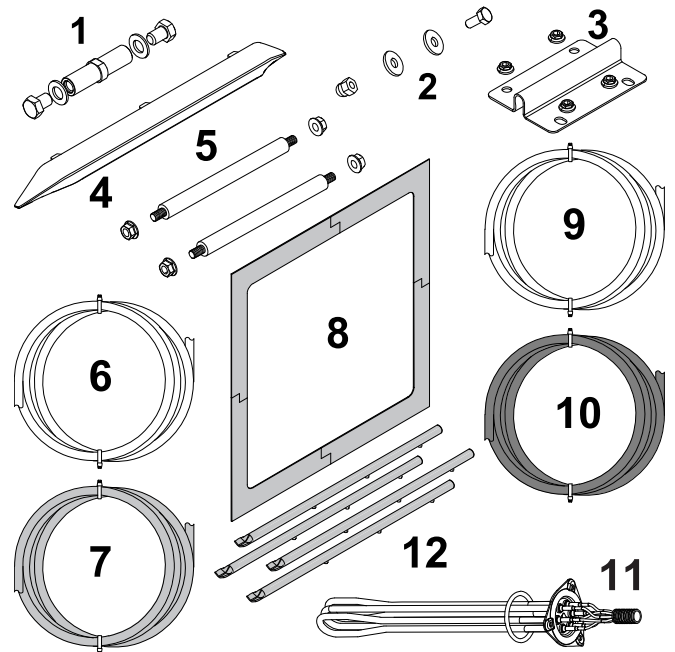
Before starting the installation of the prewash module, make sure that the machine is cold.



### CAUTION

Refer to "A.3 Personal protection equipment" for suitable personal protection equipment. Use gloves and other personal protection equipment according to the risks present (e.g. glasses in case of risk of flying splinters during drilling).

#### E.9.1 Prewash module for dishwasher without the energy saving device (ESD)



#### Joining kit list

1	4 special spacer, 4 screws (M14x20mm), 4 washers ( $\varnothing=15 \times 28$ mm).
2	18 screws (M6x14mm), 36 washers ( $\varnothing = 6 \times 18$ mm), 18 cap nuts ( $\varnothing = 6$ mm).
3	2 connection bracket and 8 flange nuts ( $\varnothing = 5$ mm).
4	<b>Handle</b> <ul style="list-style-type: none"> <li>• Depending on the model, install the right handle at the end of all operations.</li> </ul>
5	Pins and nuts to fix the slide of the dryer to the slide of the machine
6	Transparent hose for descaling agent.
7	Grey hose for liquid detergent.
8	Junction gasket.
9	Transparent hose for solid detergent (internal diameter $\varnothing=20$ mm).
10	Blue hose for rinse aid.
11	Heating element and its O-ring.
12	4 rinse arms.



**IMPORTANT**

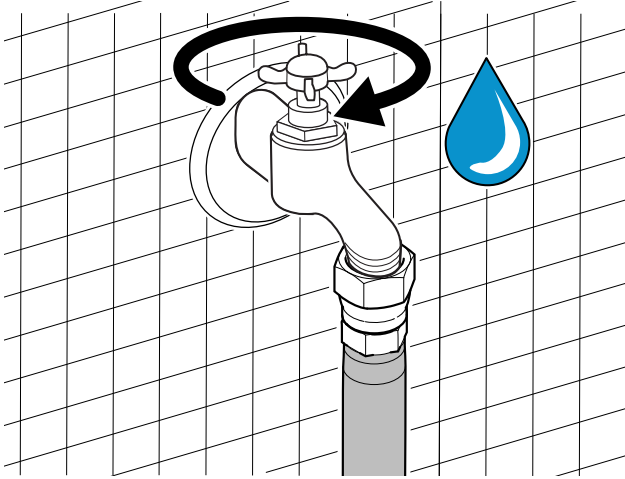
**Only for prewash module 22"**

- Make sure to replace the default rinse arms of the appliance with the new ones provided with the kit when the model denomination of the dishwasher contains "...DR200...".

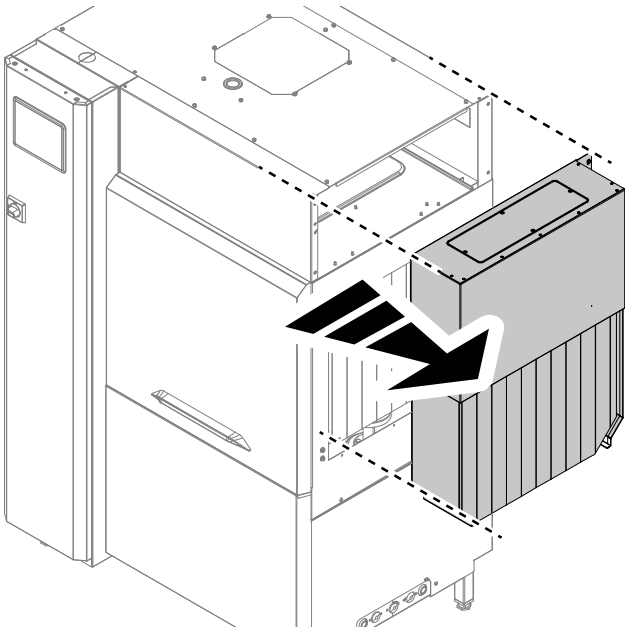
**Only for prewash module 35"**

- Make sure to replace the default rinse arms of the appliance with the new ones provided with the kit when the model denomination of the dishwasher contains "...DR150...".

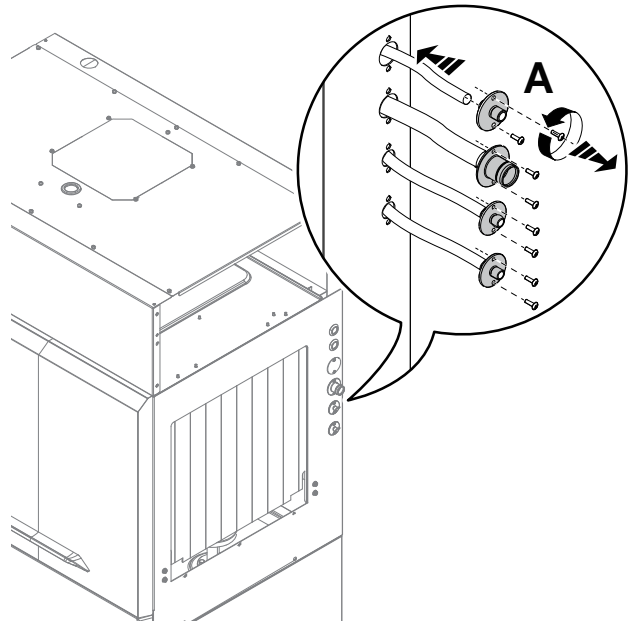
- Close the water inlet tap or taps (cold-hot).



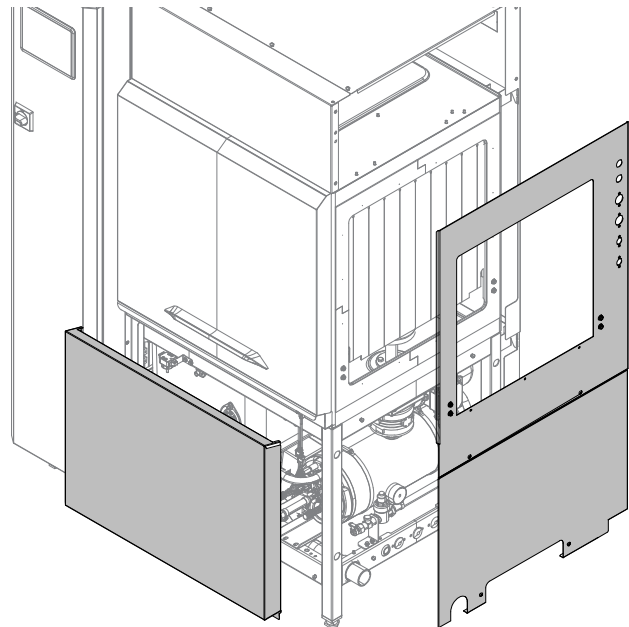
- If present, remove the vent for the steam.



- Remove all chemical injectors and their hoses from the side panel (see detail "A").



- Remove the front and the side panels from the dishwasher.

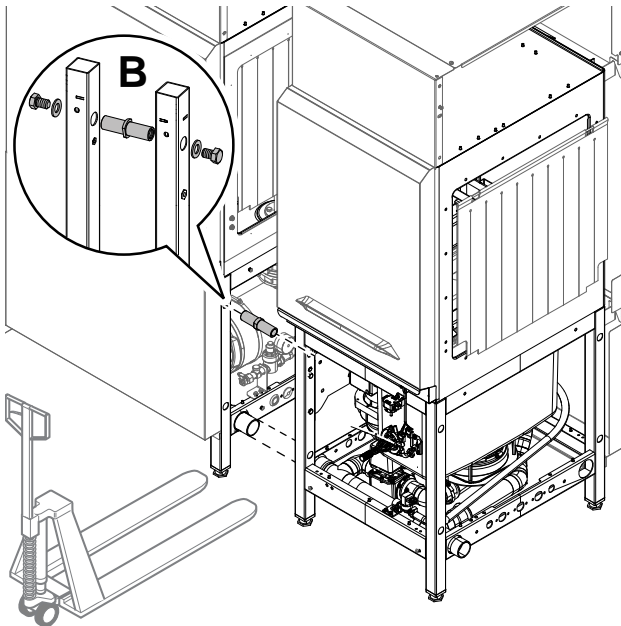


- Place the prewash module near the machine, remove the front panel and join it with the special spacers with the respective screws and washers (see detail "B"). Join also the drain hose of the module with the dishwasher one.



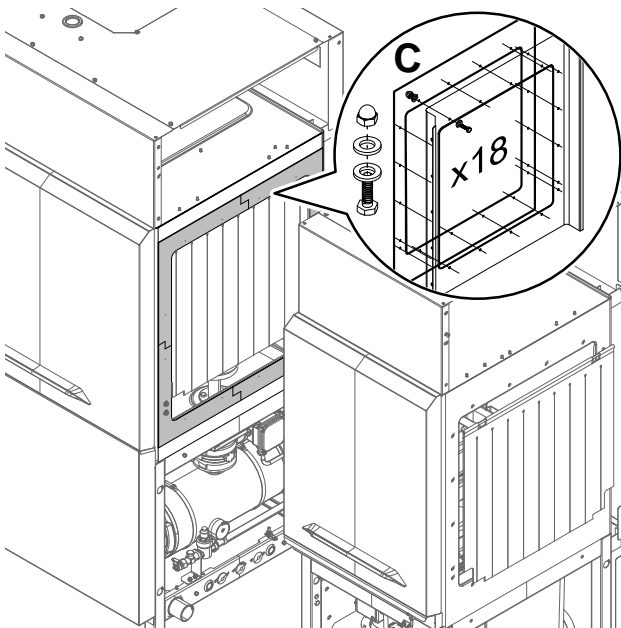
**IMPORTANT**

Make sure the modules are correctly aligned. If necessary use a pallet trucks to make easy this operation.

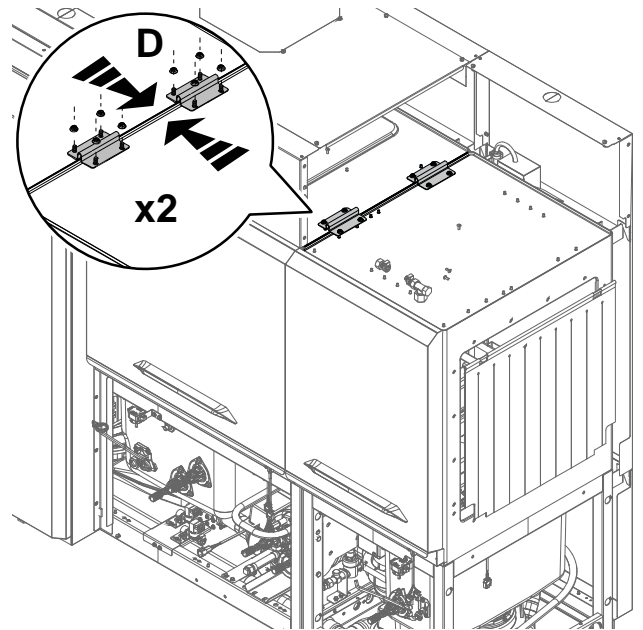


- To compensate for possible misalignment between prewash module and machine, use the grey gasket provided with the kit.

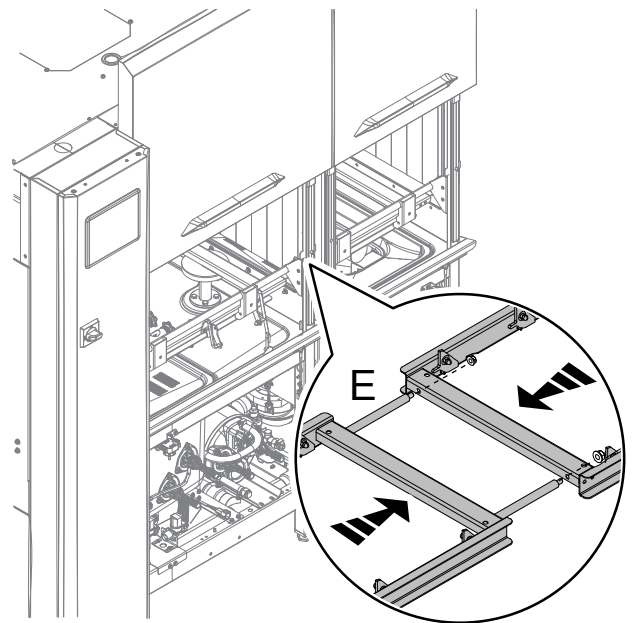
Join the openings of the prewash module and the machine with the bolts, washer and nuts (see detail "C").



- Join the roofs of the prewash module and the machine, fitting the connection bracket on the  $\varnothing=5$  mm stud bolts. Firmly secure the brackets with  $\varnothing=5$  mm flange nuts (see detail "D").

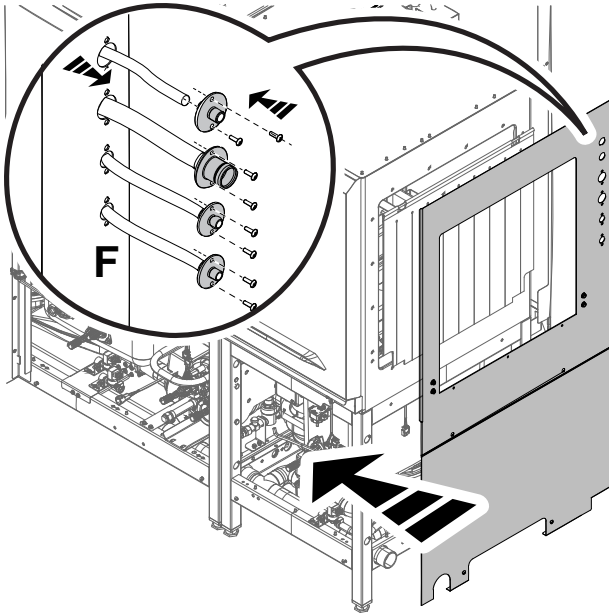


- Fix the slide of the dryer to the slide of the machine (see detail "E").

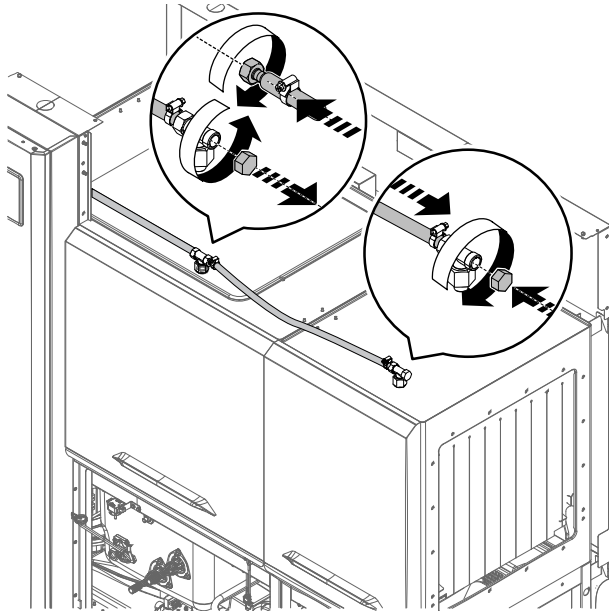


- Replace the hoses of the chemical injectors with the proper ones provided with the kit.
- Refit the dishwasher side panels on the side of the prewash module.

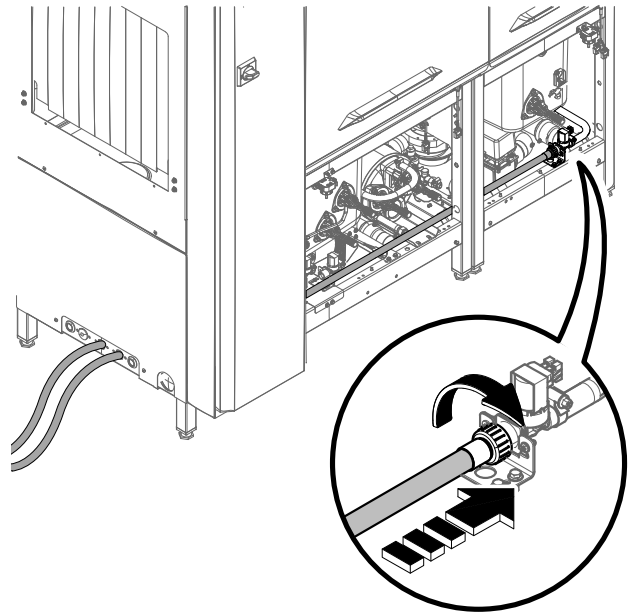
- Refit all chemical injector into side panel (see detail "F").



- Connect the door cleaning system of the prewash module.
- Refit the vent for the steam.



- Connect the water inlet hose of the prewash module to the cold tap.



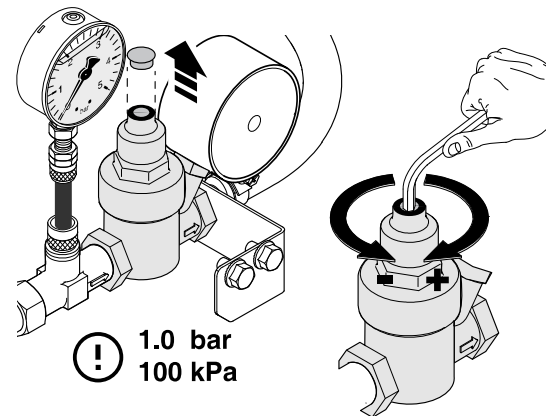
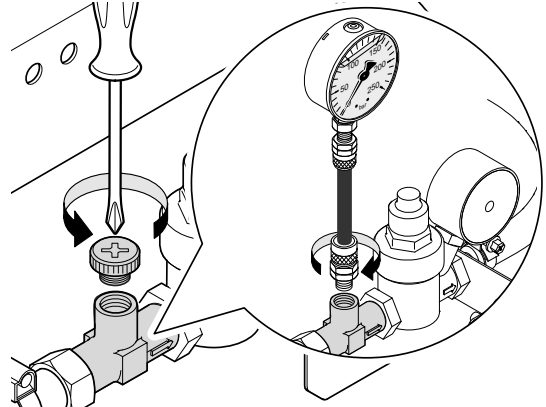
**CAUTION**

Use the hose provided with the module.



**IMPORTANT**

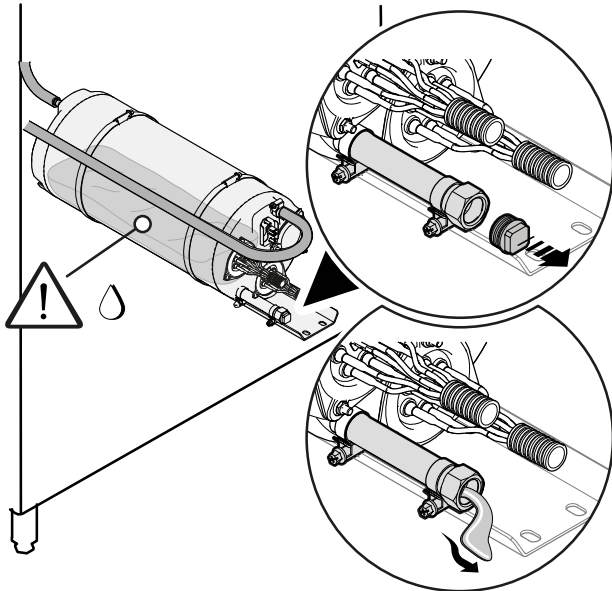
Only for model denomination DR250... or DR25P..., adjust the dynamic rinse water pressure to 1.0 bar [100 KPa].



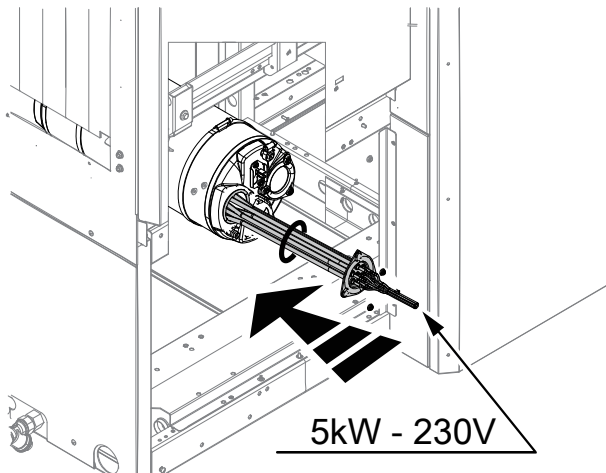
**!** 1.0 bar  
100 kPa

**Only for prewash module 35"**

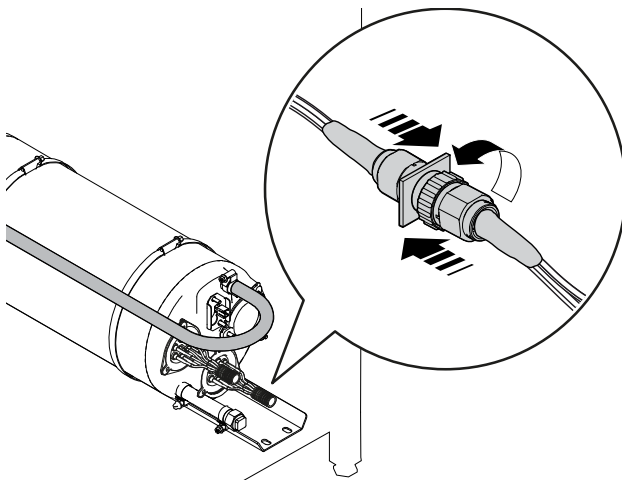
- Drain the water of the boiler.



- Install the heating element, provided with the kit, in the boiler of the appliance.

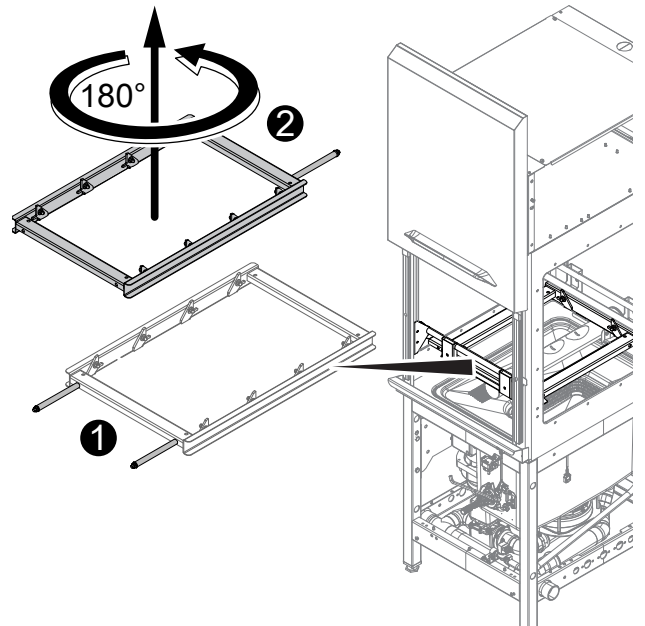


- Take the coil of wiring cables provided with the prewash module and connect it to the additional heating element. Then pass it along the dishwasher to the electrical box.

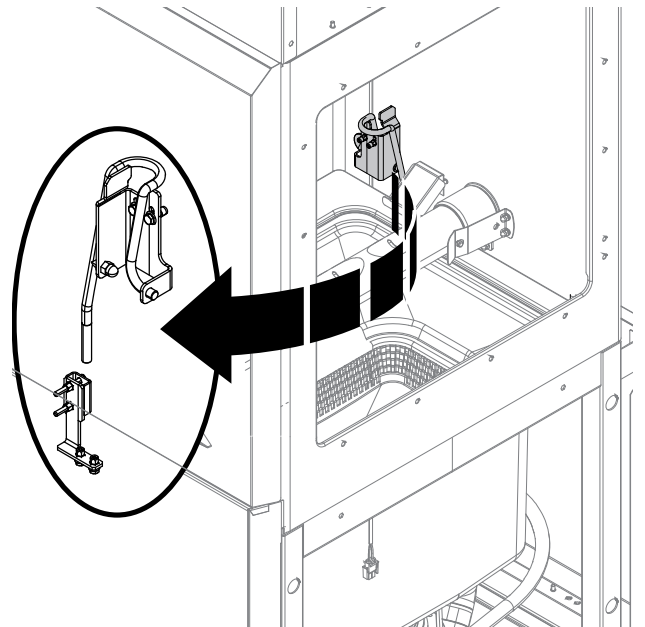


To install the prewash module in a left to right dishwasher, it is necessary reverse the position of the:

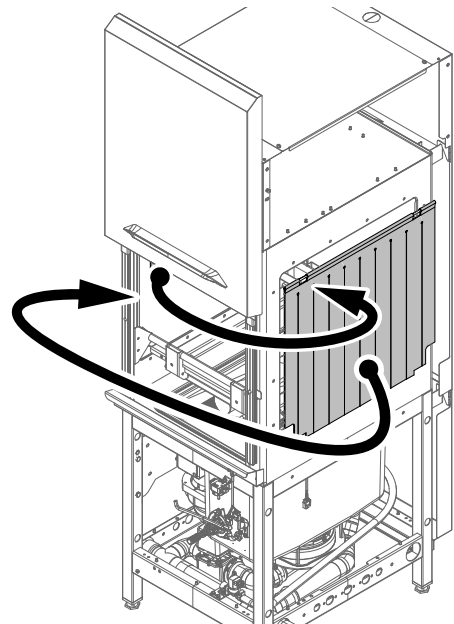
- slide for baskets;



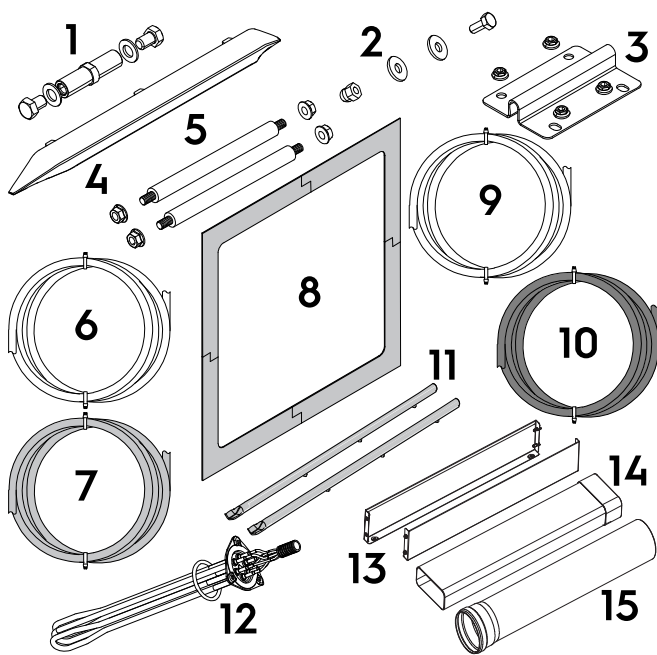
- auto-start lever;



- curtains.



## E.9.2 Prewash module for dishwasher with the energy saving device (ESD)



### Joining kit list

1	4 special spacer, 4 screws (M14x20mm), 4 washers ( $\varnothing=15 \times 28$ mm).
2	18 screws (M6x14mm), 36 washers ( $\varnothing = 6 \times 18$ mm), 18 cap nuts ( $\varnothing = 6$ mm).
3	2 connection bracket and 8 flange nuts ( $\varnothing = 5$ mm).
4	Handle
<p><b>i</b> NOTE! Depending on the model, install the handle at the end of all operations.</p>	
5	Pins and nuts to fix the slide of the dryer to the slide of the machine
6	Transparent hose for descaling agent.
7	Grey hose for liquid detergent.
8	Junction gasket.
9	Transparent hose for solid detergent (internal diameter $\varnothing=20$ mm).
10	Blue hose for rinse aid.
11	4 rinse arms.
12	Heating element and its O-ring.
13	Upper frames.
14	Flat plastic duct and its fitting.
15	Extension hose for the steam suction.



### IMPORTANT

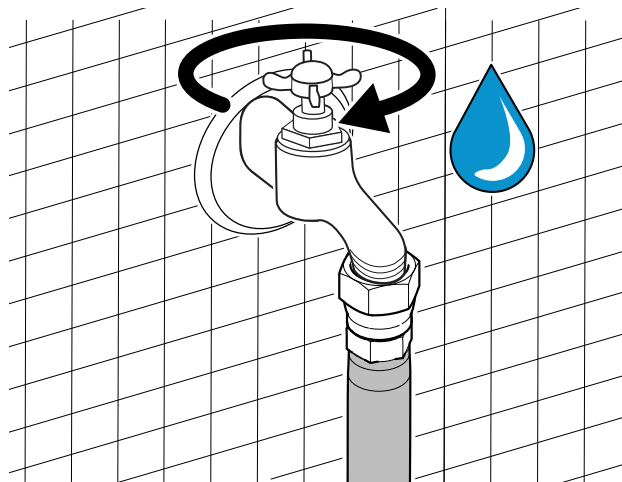
#### Only for prewash module 22"

- Make sure to replace the default rinse arms of the appliance with the new ones provided with the kit when the model denomination of the dishwasher contains "...DR200...".

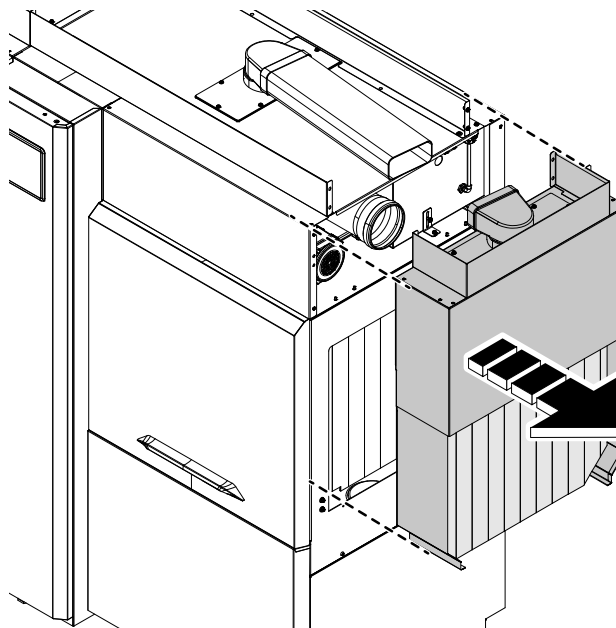
#### Only for prewash module 35"

- Make sure to replace the default rinse arms of the appliance with the new ones provided with the kit when the model denomination of the dishwasher contains "...DR150...".

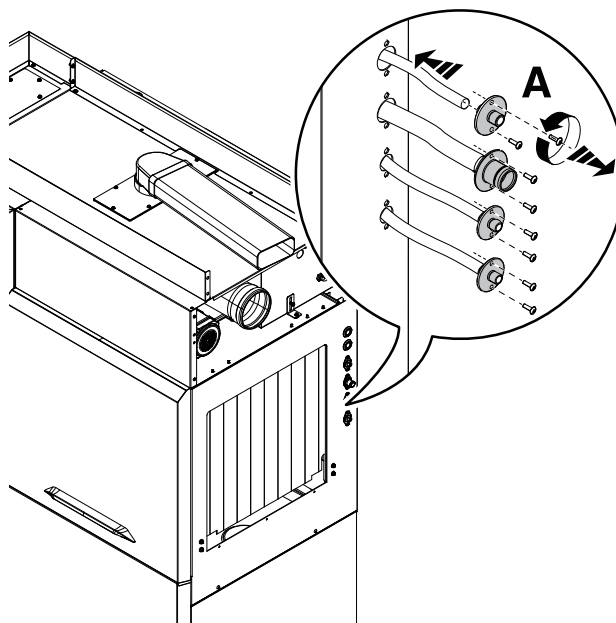
- Close the water inlet tap or taps (cold-hot).



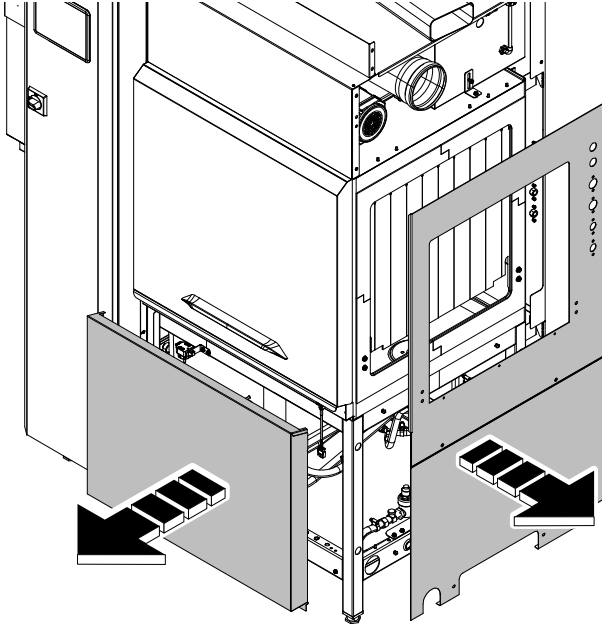
- Remove the vent for the steam.



- Remove all chemical injectors and their hoses from the side panel (see detail "A").



- Remove the front and the side panels from the dishwasher.

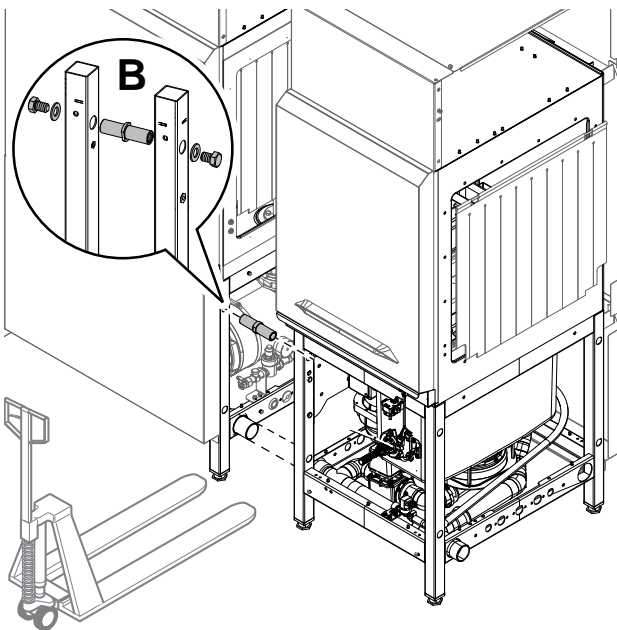


- Place the prewash module near the machine, remove the front panel and join it with the special spacers with the respective screws and washers (see detail "B"). Join also the drain hose of the module with the dishwasher one.



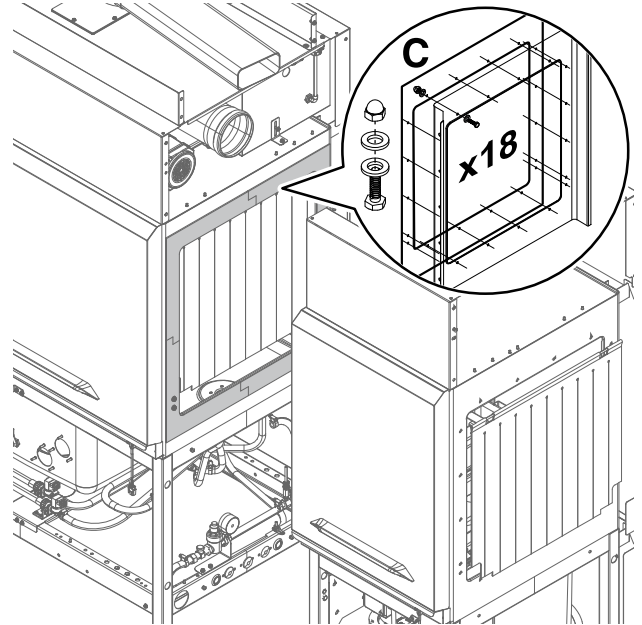
**IMPORTANT**

Make sure the modules are correctly aligned. If necessary use a pallet trucks to make easy this operation.

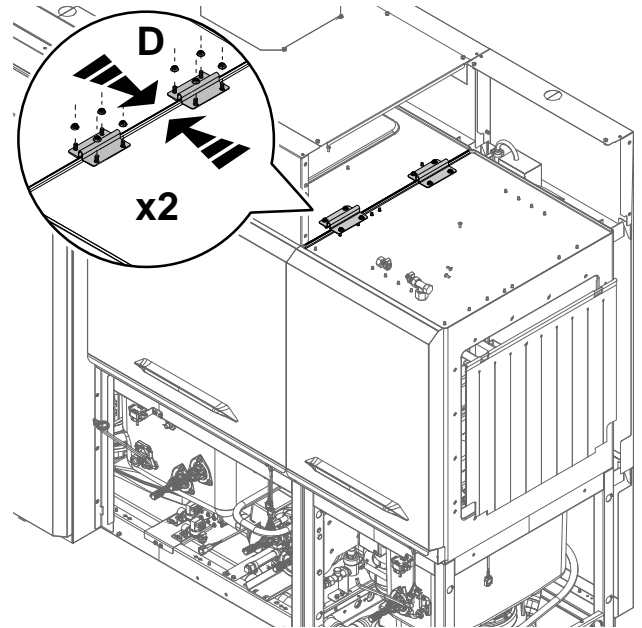


- To compensate for possible misalignment between prewash module and machine, use the grey gasket provided with the kit.

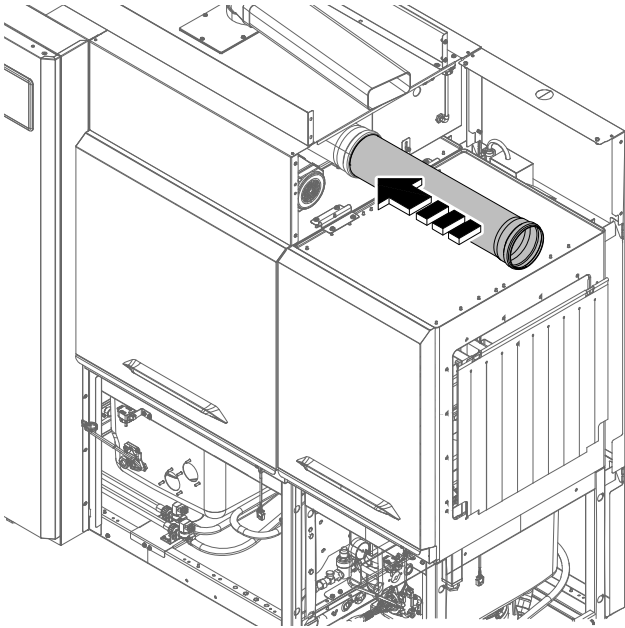
Join the openings of the prewash module and the machine with the bolts, washer and nuts (see detail "C").



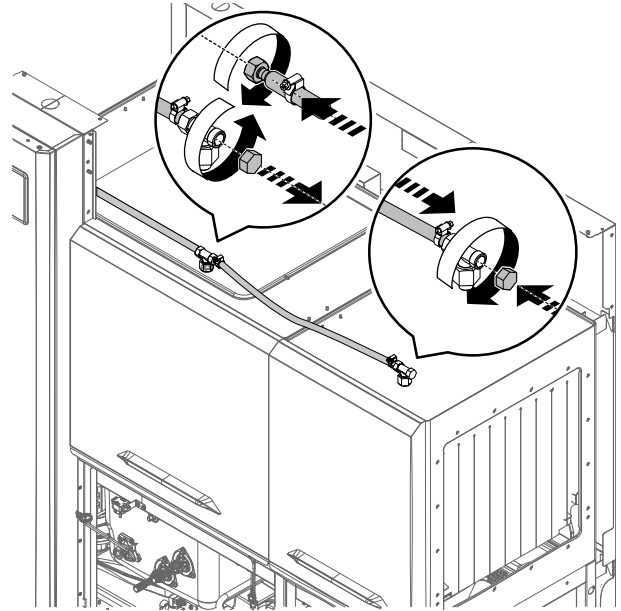
- Join the roofs of the prewash module and the machine, fitting the connection bracket on the  $\varnothing=5$  mm stud bolts. Firmly secure the brackets with  $\varnothing=5$  mm flange nuts (see detail "D").



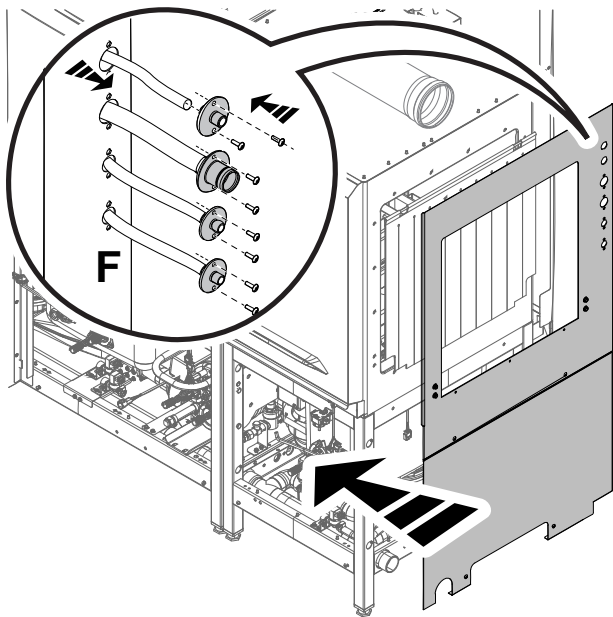
- Install the extension hose for the steam suction. Make sure that the hose is fitted properly.



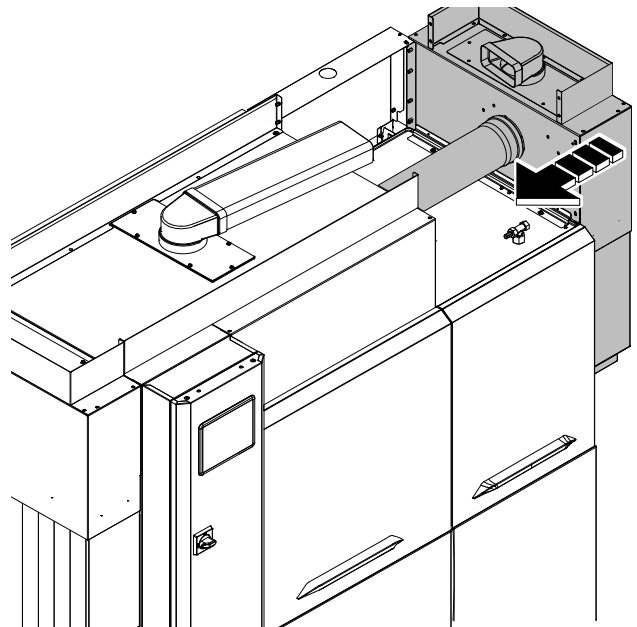
- Connect the door cleaning system of the prewash module.



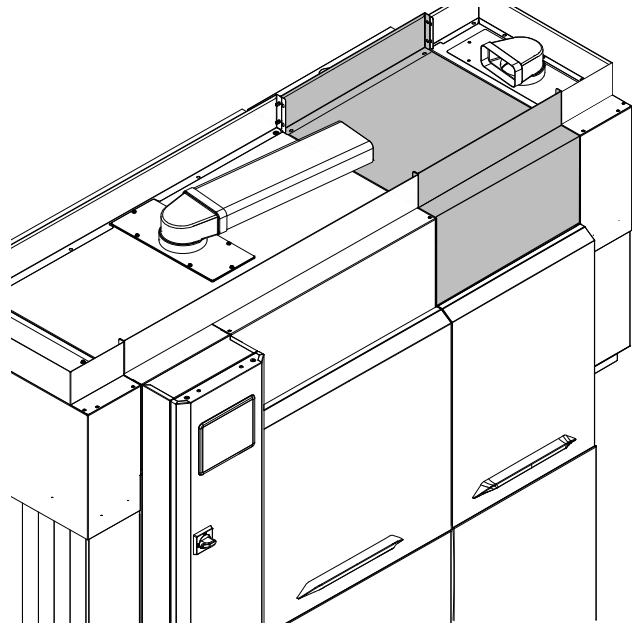
- Replace the hoses of the chemical injectors with the proper ones provided with the kit.
- Refit the dishwasher side panels on the side of the prewash module.
- Refit all chemical injector into side panel (see detail "E").



- Refit the vent for the steam. Make sure that the extension hose is fitted properly on the vent.

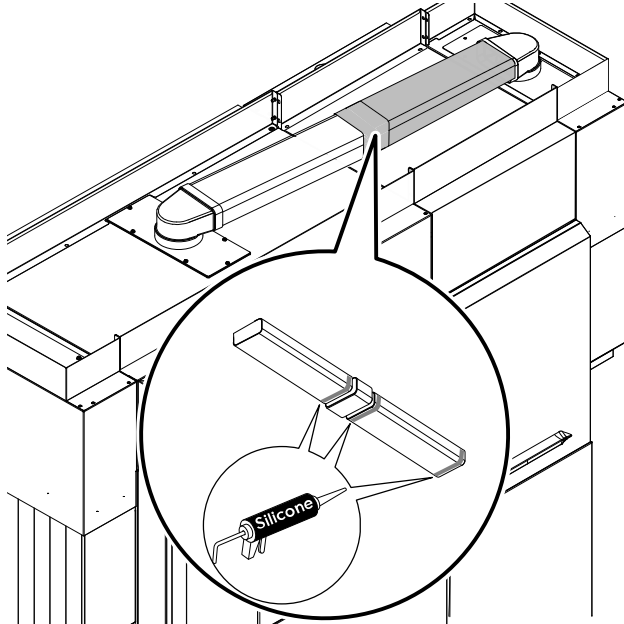


- Refit top and front panels. Install the upper frames.





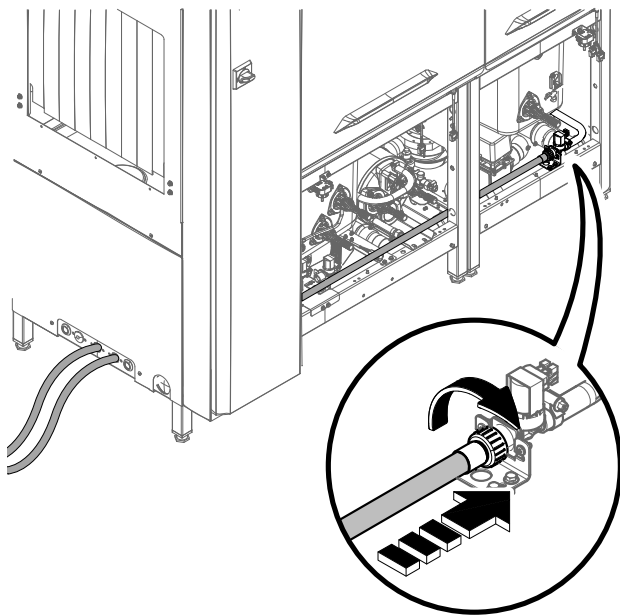
- Install the flat plastic duct to the vent using its fitting.



**IMPORTANT**

Seal the ends of the duct.

- Connect the water inlet hose of the prewash module to the cold tap.

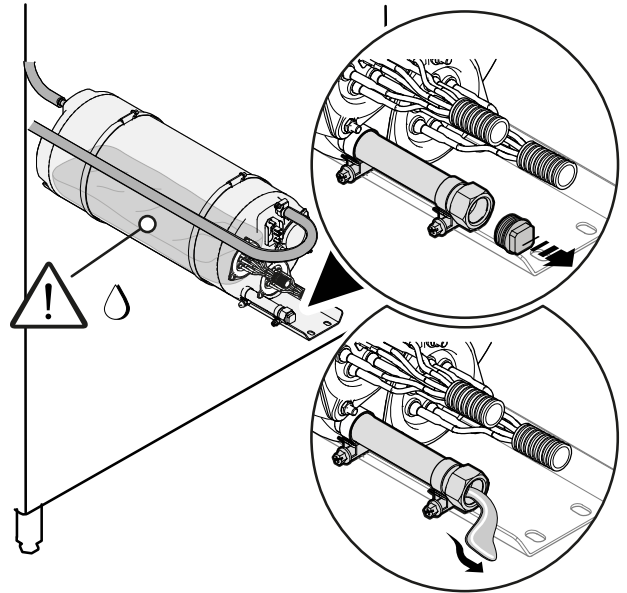


**IMPORTANT**

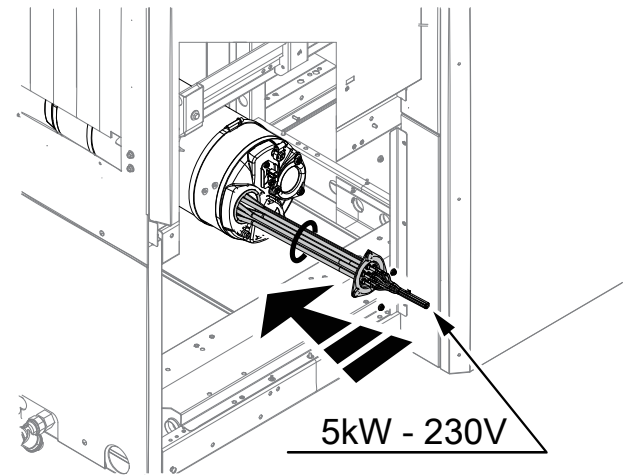
Use the hose provided with the module.

**Only for prewash module 35"**

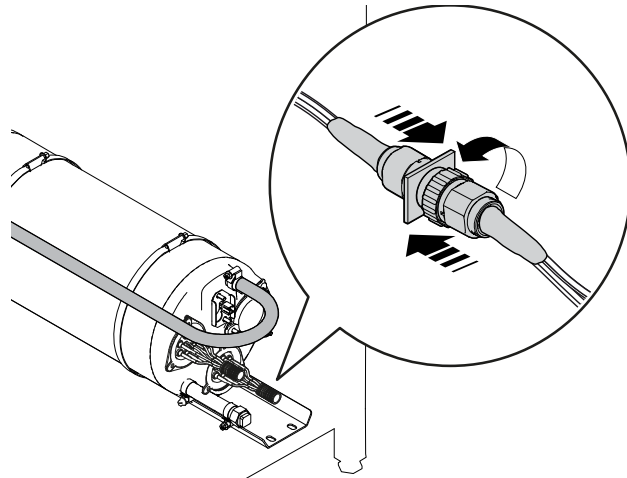
- Drain the water of the boiler.



- Install the heating element, provided with the kit, in the boiler of the appliance.

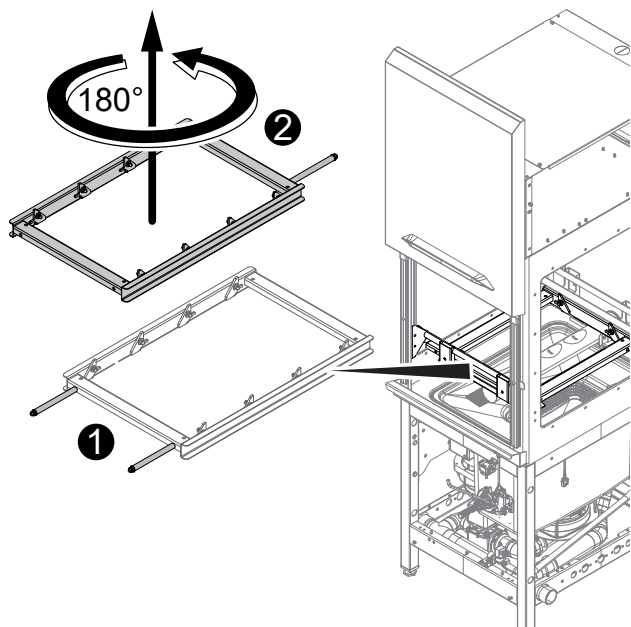


- Take the coil of wiring cables provided with the prewash module and connect it to the additional heating element. Then pass it along the dishwasher to the dishwasher electrical box.

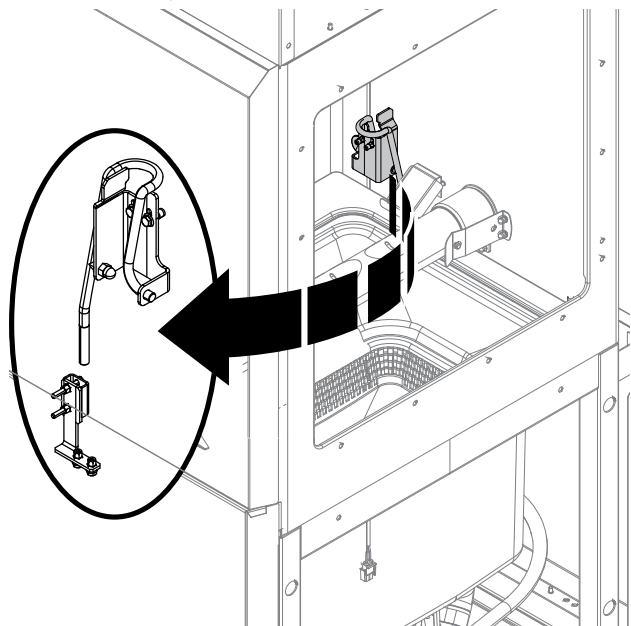


To install the prewash module in a left to right dishwasher, it is necessary reverse the position of the:

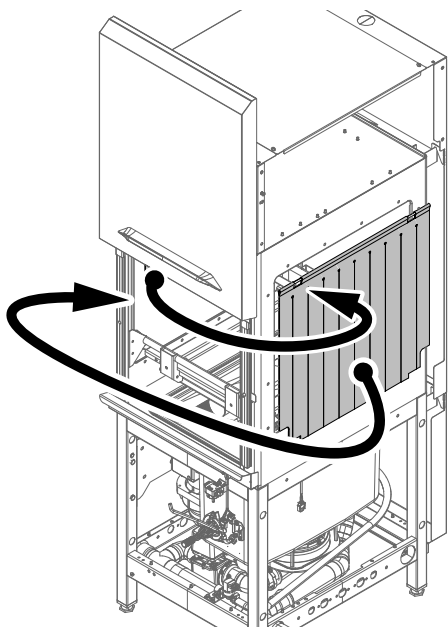
- slide for baskets;



- auto-start lever;



- curtains.



## E.10 Electrical connection



### WARNING

Refer to “*Safety Information*”.

Make sure the machine power supply voltage specified on the data plate matches the mains voltage B.3 *Appliance and manufacturer's identification data*.

Make sure the system power supply is arranged and able to take the actual current load and that it is executed in a workmanlike manner according to the regulations in force in the country of use.



### IMPORTANT

To complete the installation of the prewash module, it is necessary to install the below components in the electric box of the dishwasher.



### CAUTION

For all electrical connections, **always** refer to the wiring diagram, supplied with the equipment.

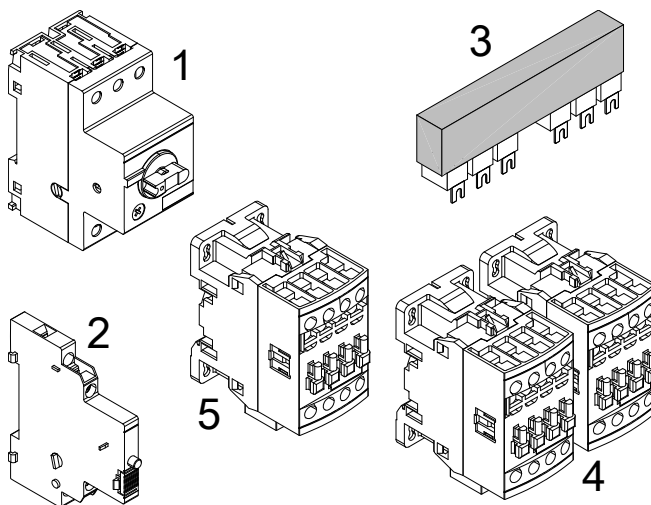
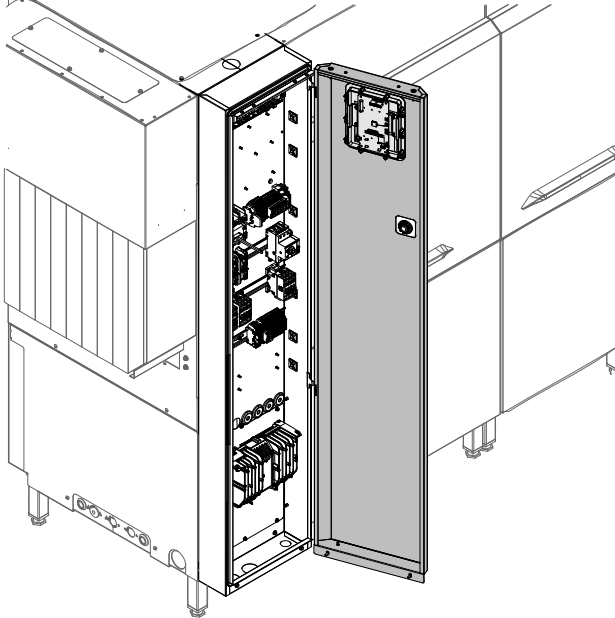


Fig. 2 Electrical components

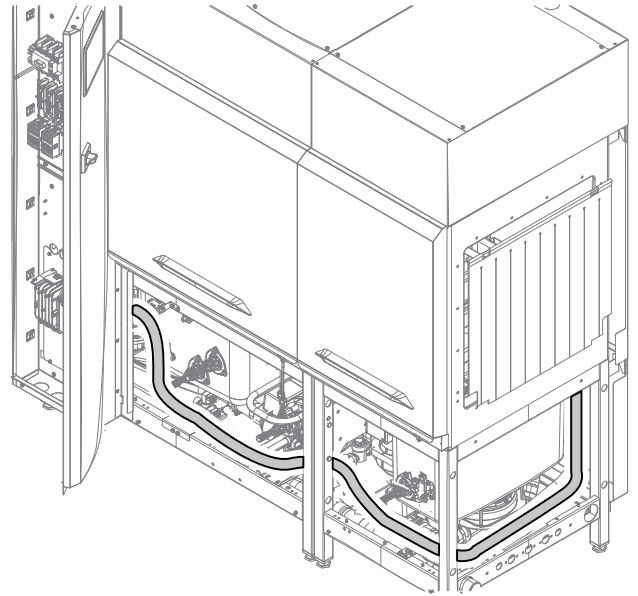
#### Electrical components list

1	Prewash pump protection switch (QM14)
2	Signal contact (SK1)
3	Electrical connection bar
4	KM13 = Prewash tank heating elements contactor KM14 = Prewash pump contactor
5	<b>Only for prewash module 35''</b> KM5 = Contactor for additional boiler heating element.

- Open the door of the dishwasher electric box.



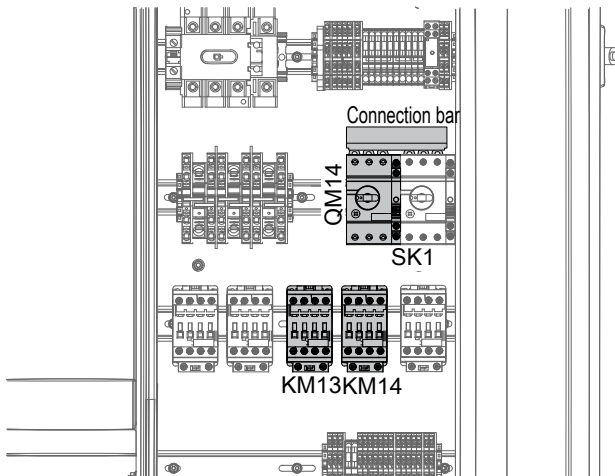
- Take the coil of wiring cables located in the bottom part of the prewash module and pass it along the dishwasher to the dishwasher electrical box.



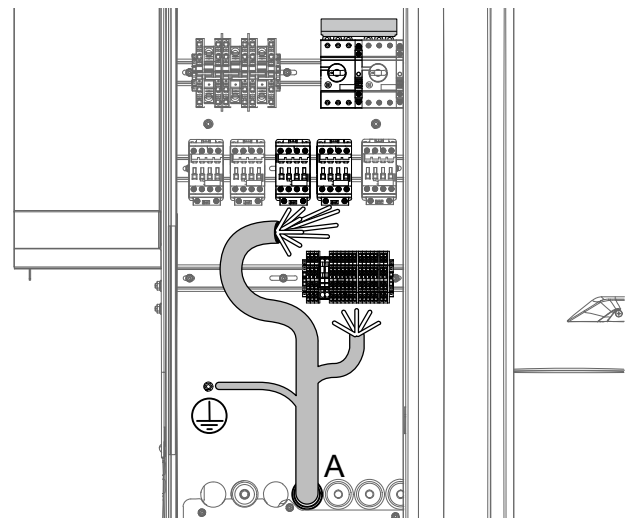
**IMPORTANT**

Check if the optional control board ACU#2 is installed in the electric box. If not, order it as additional electric components [865506 KIT ELECTRONIC BOARD FOR DUAL RINSE RACK TYPE]. To install the additional control board ACU#2, refer to the installation instructions provided with the accessory kit.

- Install the components in the same position as in the picture below.

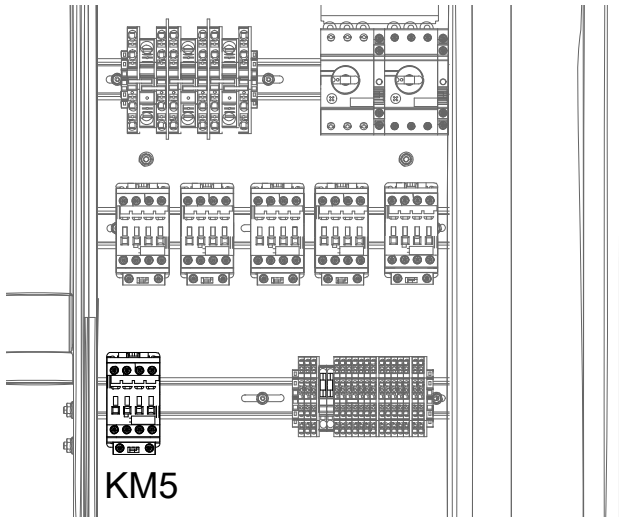


- Pass the wiring cables through the cable gland "A" and:
  - connect the yellow/green ground cable in the ground connection point ⊕.
  - connect the power cables "L1", "L2" and "L3" to the prewash tank heating elements contactor KM13;
  - connect the prewash pump protection switch QM14 to the prewash pump contactor KM14;
  - connect contactors KM13 and KM14;
  - connect the terminal board XT2.

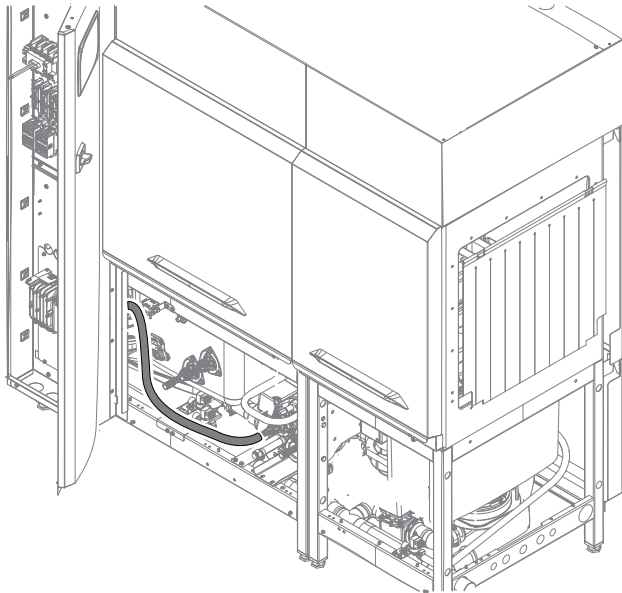


**Only for prewash module 35"**

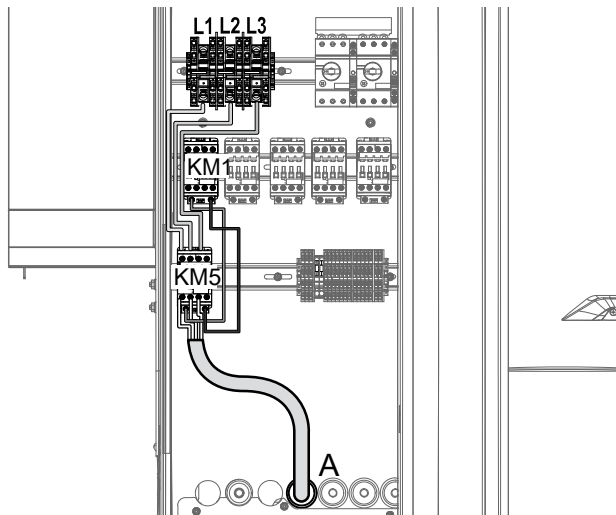
- Install the contactor KM5 as in the picture below.



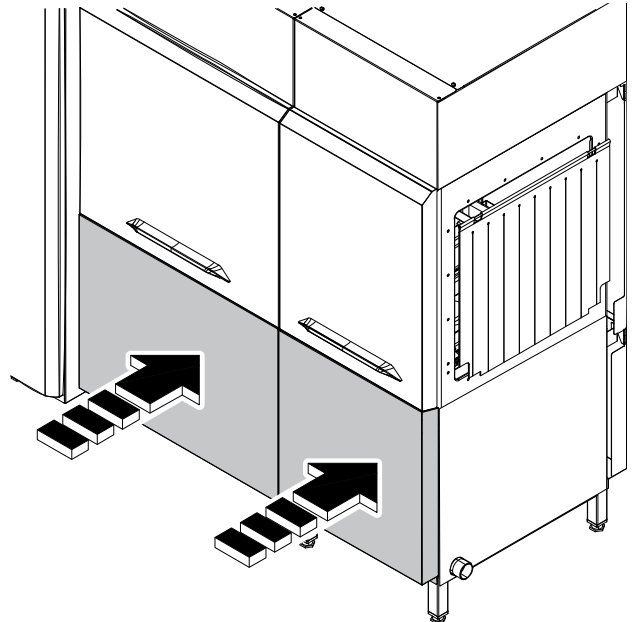
- Take the coil of wiring cables for additional heating element and pass it along the dishwasher to the dishwasher electrical box.



- Pass the wiring cables through the cable gland "A" and:
  - connect the power cables "L1", "L2" and "L3" to the contactor KM5;
  - connect the additional heating element to the contactor KM5;
  - connect KM5 to the contactor KM1;



- Refit the front panels (dishwasher and prewash module).



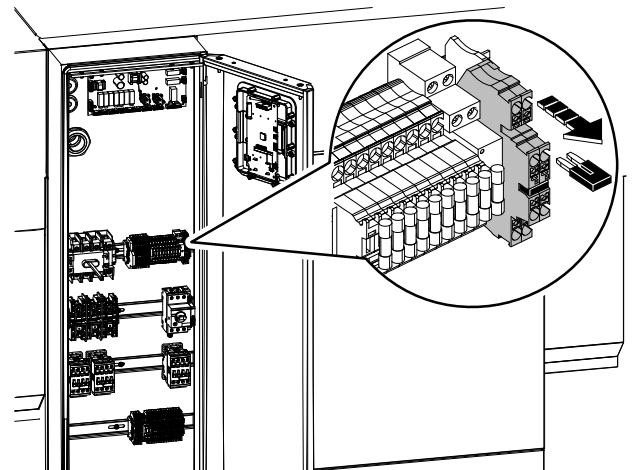
**E.10.1 Remove the jumper from terminal board**



**IMPORTANT**

Before to activate the equipment, it is necessary to remove the upper jumper from the dishwasher terminal board "XT1".

- Open the electrical box of the dishwasher, locate the terminal board "XT1" and remove the upper jumper.



**E.10.2 Check list for internal cabling**

		YES	NO
1	Joined the auxiliary contact AUXSK1 with the motor protection circuit breaker QM14 of prewash pump M14.		
2	Placed the motor protection circuit breaker QM14(+AUX SK1) in the electrical box.		
3	Placed the contactors KM13 for prewash heater R13 in the electrical box.		
4	Placed the contactors KM14 for prewash pump M14 in the electrical box.		
5	Connected the two motor protection circuit breakers QM14 and QM8 by the electrical connection bar.		
6	Connected the motor protection circuit breaker QM14 and contactor KM14 by dedicated harness (wires 216-218-220).		

		YES	NO
7	Connected the contactor KM13 to the main terminals XL1-XL2-XL3 by dedicated harness (wires 222-224-226).		
8	Connected auxiliary AUX contact SK1 (of motor protection circuit breaker QM14) to J7 connector on ACU#2 by prearranged wires 620-621 in electrical box.		
9	Connected the contactor coil of KM13 to J23 connector on ACU#2 by prearranged wires 701 (N to A2) and 702 (L to A1) in the electrical box.		
10	Connected the prearranged neutral wire 703 between the terminal A2 of contactor coil KM13 to the terminal A2 of contactor coil KM14.		
11	Connected the contactor coil of KM14 to J31 connector on ACU#2 by prearranged wire 810 (L to A1) in the electrical box.		

### E.11 Parameter configuration update

Configure the machine parameters according to the service manual. Check if all the parameters are correct.



#### IMPORTANT

Only Electrolux Professional approved service technician can update the machine parameters after the installation of the prewash module.

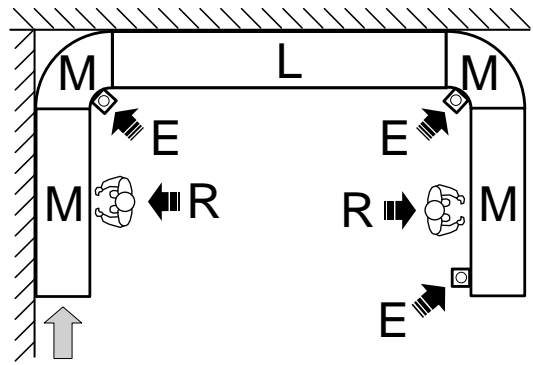
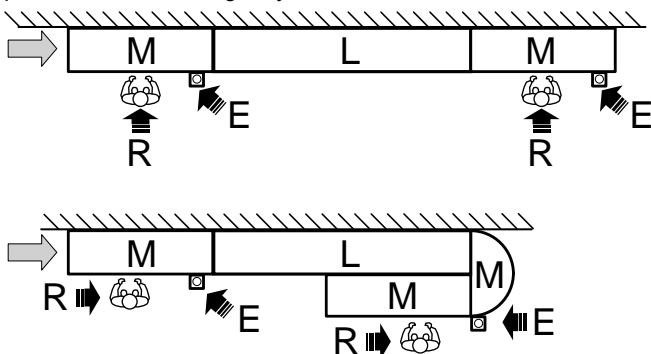
### E.12 Constructional modifications

The Manufacturer provides for the possibility of connecting the rack-type dishwasher to rack handling systems included in the Electrolux Professional product catalogue, with the possibility of obtaining various configurations. The "EC" Conformity Declaration provided with the machine also envisages these configurations. The Manufacturer does not provide for the possibility of making other constructional modifications to the machine, but allows the execution of other types of combinations with systems different from those described above (in order to create a series of machines arranged and controlled in an integral way), as illustrated in this documentation. In which case it is necessary to comply with provisions of the applicable European Directives or current regulations in the country of use, and obtain the required certifications. The Manufacturer declines any liability for damage caused by arbitrary modifications and conversions carried out by the user or third parties. For requests or for further information, contact Electrolux Professional SpA - Via Treviso, 15 - 33170 Pordenone - Italy.

### E.13 Positioning of emergency switches

If rack handling systems are connected at the infeed or outfeed of a rack-type dishwasher, install on such systems emergency switches that are clearly visible and identifiable and easily accessed by the operator "R" who must use them.

Described below are possible couplings of dishwashers "L" with rack handling systems "M", with the corresponding positions of the emergency switches "E" and work stations "R".



"R" Operator or work station

"L" Dishwasher

"M" Rack handling systems

"E" Emergency switch

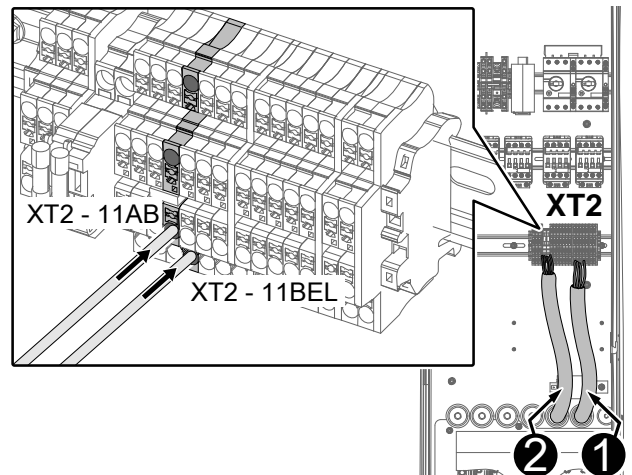
### E.13.1 Electrical connection

Proceed as follows to connect the emergency switches to the machine:

1. open the door electrical box;
2. pass the cables for connection through the cable glands "1" or "2";
3. connect the emergency switches to:

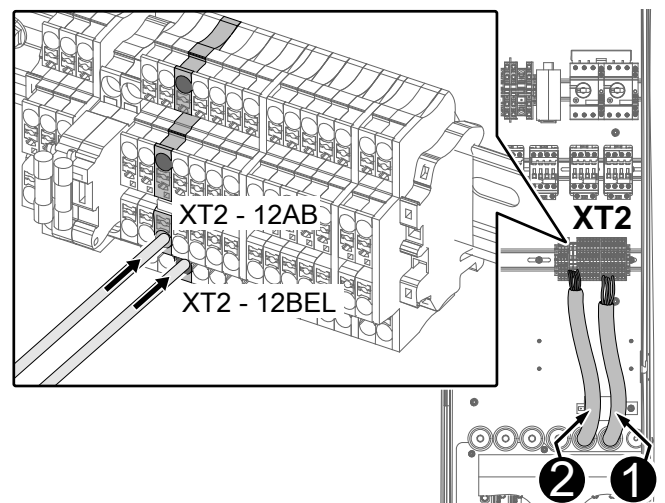
#### Emergency switch IN

- XT2-11BEL and XT2-11AB terminal blocks



#### Emergency Switch OUT

- XT2-12BEL and XT2-12AB terminal blocks



## E.14 Emergency stop 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.

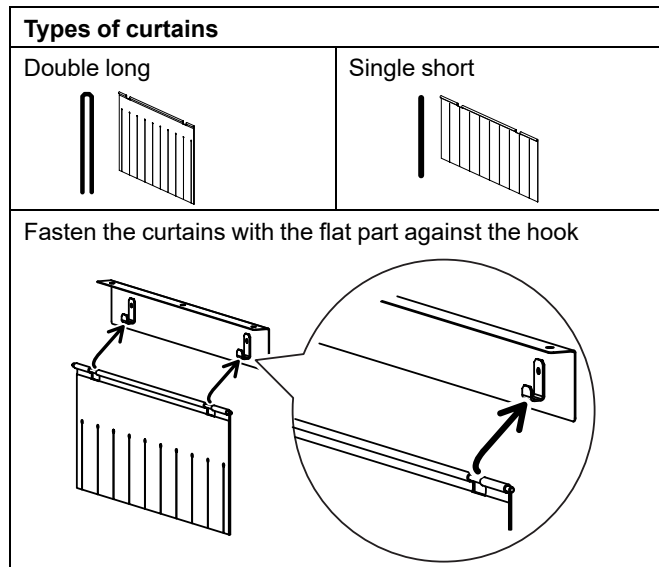
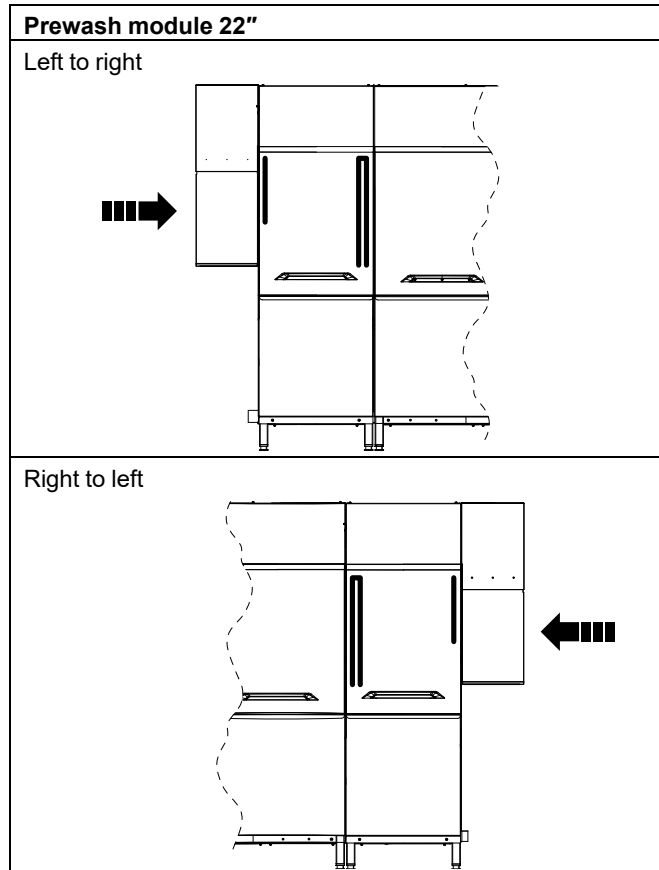
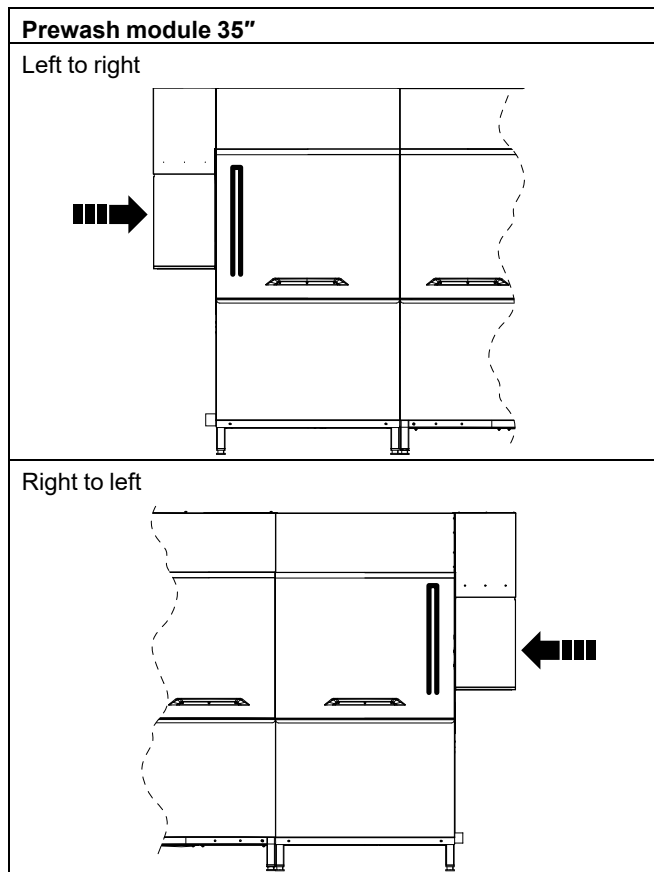
If the EMERGENCY SWITCH is operated during machine operation, the entire machine is deactivated.

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 "**Daily activation**".

## E.15 Fitting curtains

With the machine switched off and cold, fit or refit the curtains as illustrated below.



## F COMMISSIONING

### F.1 Preliminary checks, adjustments and operational tests

Before starting the machine, check:

1. electrical and plumbing connections;
2. positioning of tank components;
3. washing and rinse arms position and fitting;
4. curtains position and fitting.

These operations must only be carried out by specialized technicians provided with adequate personal protection equipment (refer to A.3 *Personal protection equipment*), tools and suitable ancillary equipment with the machine switched off and cold.

### F.2 Electrical and plumbing connection

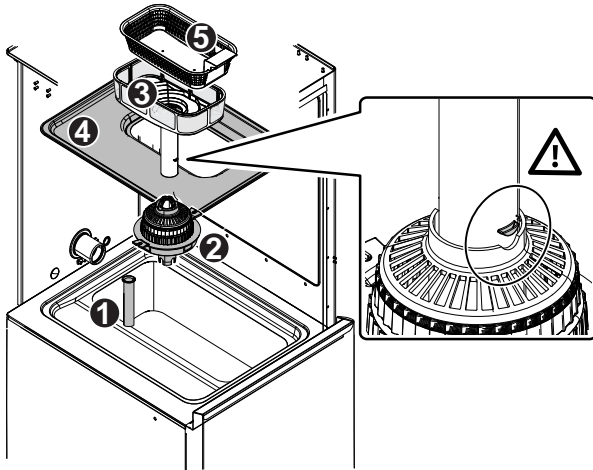
Before starting the machine, check:

1. correct connection of the electrical wires that feed the machine;
2. the power supply voltage and frequency match the data given in the technical data table;
3. correct connection of the water supply and drain pipes;
4. guards, safety devices and emergency switches are in place and properly installed.

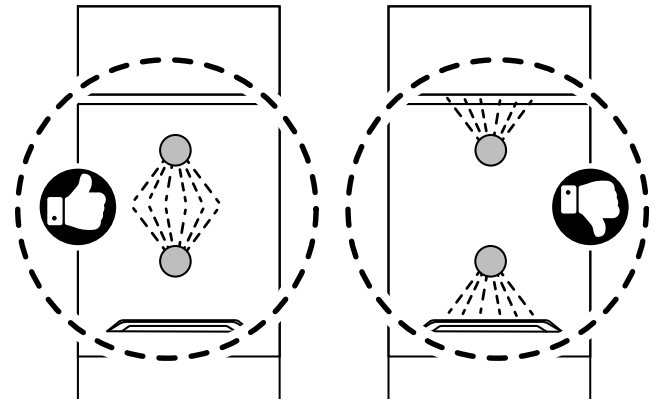
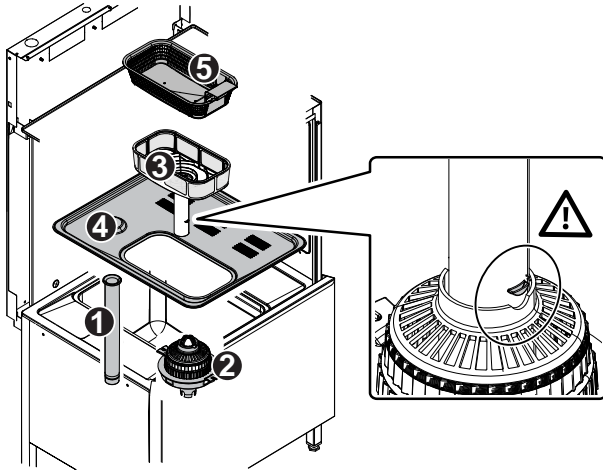
### F.3 Positioning and fitting of the prewash tank components

Before starting the machine, check the fitting of filters and overflows of:

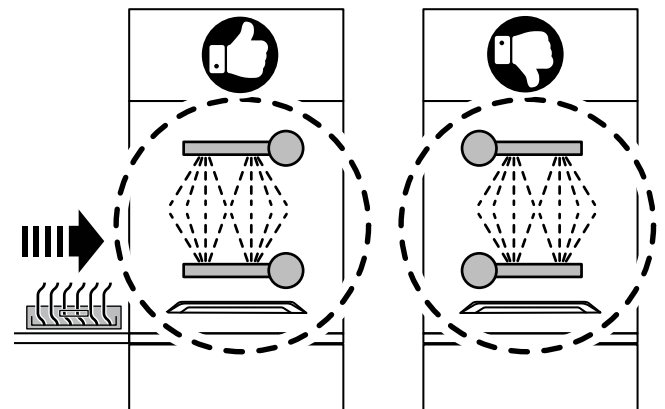
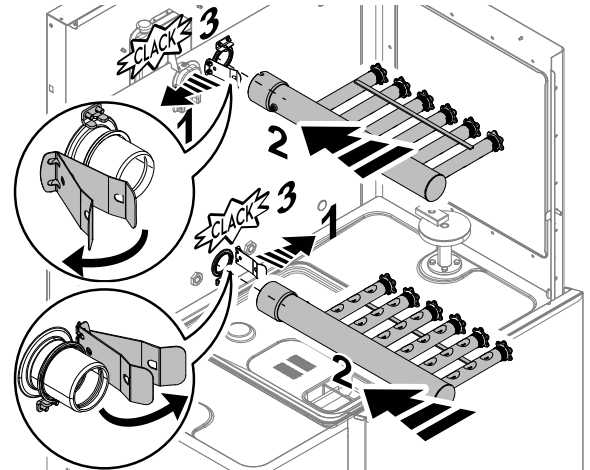
1. prewash 22" module, if present;



2. prewash 35" module, if present;



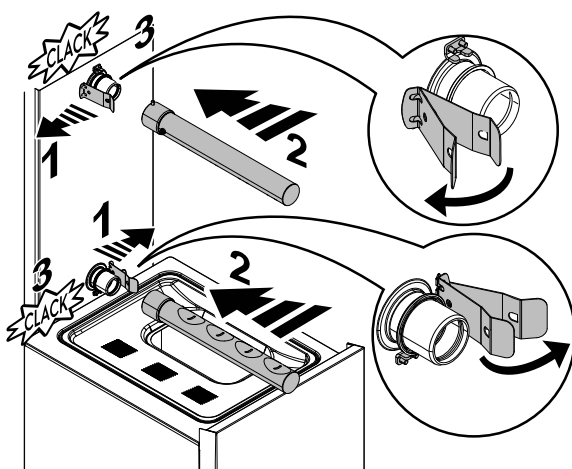
2. prewash 35" (if present) and wash module;



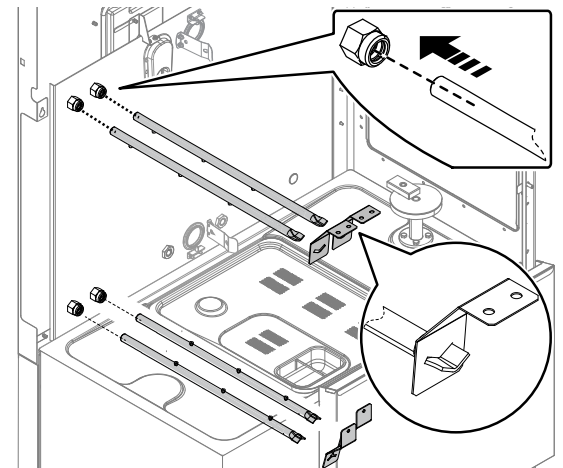
### F.4 Positioning and fitting of the washing and rinse arms

Before starting the machine, check the fitting of upper and lower arms of:

1. prewash 22" module (if present);



3. the arms of rinse module.



## F.5 Positioning and fitting of the curtains

Make sure all the types of curtains, provided with the machine, are correctly fitted according to that indicated in paragraph "E.15 Fitting curtains".

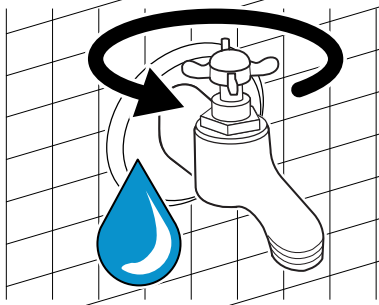


### IMPORTANT

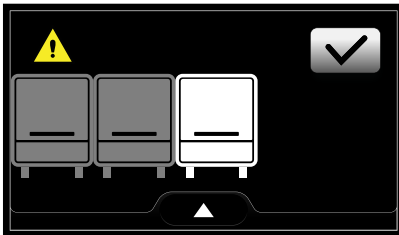
Close the doors of the various appliance modules only when all the parts previously described are correctly installed, then start the machine.

## F.6 First starting

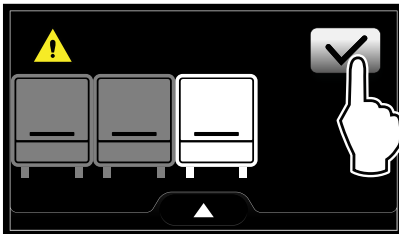
1. Open the water supply taps.



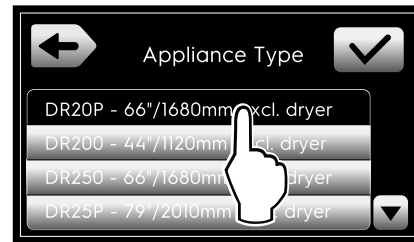
2. Turn the switch disconnecter, placed on the door of the electric cabinet, from position "O" to "I" to power the machine.
3. The touch screen switches on and the machine recognizes that a prewash module have been added. The display blinks alternatively every second showing the icon of the new module.



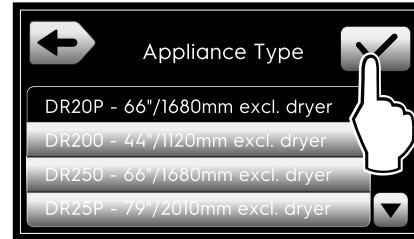
4. Confirm the presence of the new module.



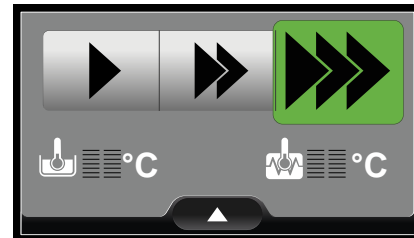
5. The display shows all the available options to select the right type of the new updated equipment.



6. Confirm your selection.



7. Automatically the dishwasher upload all new additional parameters. All the equipment restarts again to make all the updating fixed.
8. When the display shows the ready status, the dishwasher is ready to work.



## G NORMAL USE

### G.1 For additional information, refer to manual supplied with the appliance



#### NOTE!

If the Installation, User manual or Quick Guide is not available, you can find it in digital format by:

- contacting the dealer or reference customer care;
- downloading the latest and up to date manual on the web site: [www.electroluxprofessional.com](http://www.electroluxprofessional.com).





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