# **Rack Type dishwasher**

## ESR20EL5-ESR20ER5-ESR20EL6-ESR20ER6-ESR20EL3-ESR20ER3-ESR20EL5TL-ESR20ER5TL

## Single-Rinse



EN	Installation manual * 5
ZH	安装手册25

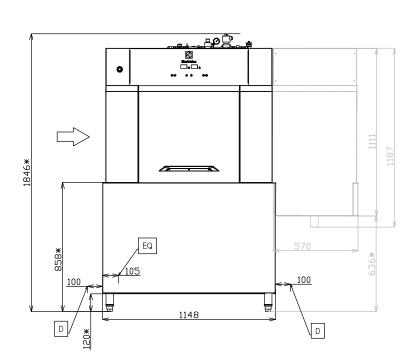


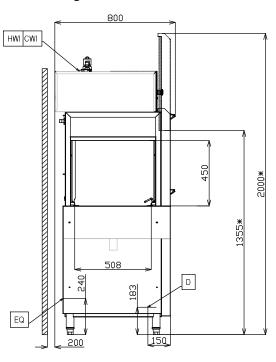


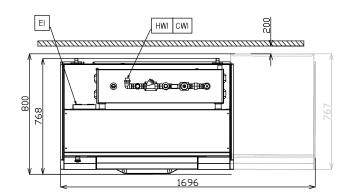
2021.01

PM00729

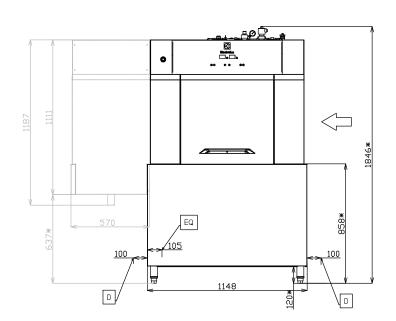
### ESR20EL.... left to right

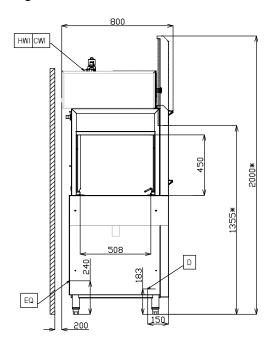


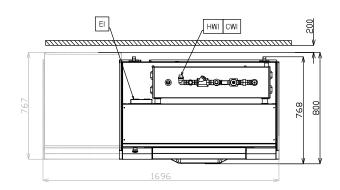




## ESR20ER.... right to left







CWI = Cold water inlet pipe [3/4"] HWI = Hot water inlet pipe [3/4"] D = Drain pipe [ $\emptyset$  = 2"] EI = Electrical inlet EQ = Equipotential screw V = Vents \* = Adjustable feet [100~180 mm]

#### **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.

## Contents

Α	SAFE	SAFETY INFORMATION			
	A.1	General information	. 7		
	A.2	General safety	. 7		
	A.3	Personal protection equipment			
	A.4	Transport, handling and storage	٤.		
	A.5 A.6	Installation and assembly			
	A.7	Electrical connection	10		
	A.8	Service			
	A.9	Disposal of packing			
	A.10	Machine disposal	11		
В	GENE	RAL INFORMATION	11		
_	B.1	Introduction			
	B.2	Definitions	11		
	B.3	Machine and Manufacturer's identification data			
	B.4	Appliance identification	12		
		B.4.1 How to identify the technical data	12		
		B.4.2 How to interpret the factory description	12		
	B.5	Responsibility	12		
	B.6	Copyright	13		
	B.7 B.8	Keeping the manual	13 12		
	Б.0 В.9	Warranty terms and exclusions	13		
_		•			
С		UCT OVERVIEW			
	C.1	General description			
	C.2 C.3	Machine overview	1 d 1 /		
_					
D		NICAL DATA			
	D.1	Main technical characteristics	14		
	D.2	Characteristics of power supply			
Ε	TRAN	SPORT, HANDLING AND STORAGE	15		
	E.1	Introduction	15		
	E.2	Transport: Instructions for the carrier			
	E.3	Handling			
		E.3.1 Procedures for handling operations	15		
		E.3.2 Shifting	15		
		E.3.3 Placing the load	16		
	E.4	Storage	16		
	E.5	Unpacking			
F	INICTA	LLATION AND ASSEMBLY			
•					
	F.1 F.2	Customer responsibilities			
	F.3	Extraction hood			
	F.4	Positioning			
	F.5	Disposal of packing			
	F.6	Plumbing connections	18		
	F.7	Plumbing circuits	18		
	F.8	Positioning of emergency switches			
	F.9	Installation of detergent/rinse aid dispensers			
	F.10	F.9.1 Conductivity probe			
	F.10 F.11	Changing the type of detergent/rinse aid	າະ 20		
	F.12	Electrical connections.			
	F.13	Fitting curtains			
G	CONT	ROL PANEL DESCRIPTION			
J	G.1	Control panel description			
	G.1 G.2	Basic Controls			
ы	_				
H COMMISSIONING					
	H.1	Preliminary checks, adjustments and operational tests			
	H.2 H.3	Electrical and plumbing connection			
	п.э Н.4	Fitting of wash and rinse arms	22 23		
	H.5	Positioning and fitting of the curtains			
	H.6	First use			

### A 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 machine 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 machine.
  - 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 or tamper with the machine's safety devices.
- Before carrying out any machine installation, always consult the installation manual, which gives the correct procedures and contains important information on safety.
- Unauthorized personnel must not enter the work area.
- Remove any flammable products or items from the work area.

 Machine positioning, installation and disassembly must be carried out by the specialised personnel in conformity with the current safety regulations, regarding the equipment used and the operating procedures.

## 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
	M			00	
Transport		•	0		0
Handling	• —	•	•	_	_
Unpacking	<u> </u>	•	0	_	_
Installation	0 _	•	•1	_ •	_
Normal use	• -	• -	• <sup>2</sup> 3 4	<del>-</del>	_
	0	0	<del>-</del> 0		
Adjustments	0 —	•	<del>-</del> 0	<del>-</del> 0	_
Routine cleaning	0 —	•	● 1-5	0 —	_
Extraordi- nary cleaning	•	•	● 1–5	•	_
Maintenance	•	•	•	_ 0 •	_
Dismantling	•	•	•	•	_
Scrapping	•	•	•	• •	_
Key:					
•	PPE REQUIR	ED			

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

Stage	Protective garments	Safety footwear	Gloves	Glasses	Safety helmet
				00	
0	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 protect hands from the cold tray when being removed from the appliance. 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 heatproof to protect hands from contact with hot food or hot parts of the appliance and/or when removing hot items from it. 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).
- 4. 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).
- 5. 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 Transport, handling and storage

- Due to their size, the machines cannot be stacked on top of each other during transport, handling and storage; this eliminates any risks of loads tipping over due to stacking.
- 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 machine lifting and anchoring, do not use movable or weak parts such as: casings, electrical raceways, pneumatic parts, etc.
- Do not push or pull the machine to move it, as it may tip over. Use proper tool to lift the machine.
- Machine transport, handling and storage personnel must be adequately instructed and trained regarding the use of lifting systems and personal protection equipment suitable for the type of operation carried out.

### A.5 Installation and assembly

- Follow the installation instruction supplied with the machine.
- Do not install a damaged machine. Any missing or faulty parts must be replaced with original parts.
- Do not make any modifications to the parts supplied with the machine.
- Disconnect the machine from the power supply before carrying out any installation procedure. Connect the machine to the power supply only at the end of the installation.
- The machine is not suitable for installation outdoors and/or in places exposed to atmospheric agents (rain, direct sunlight, freeze, humid and dusty location, etc.).
- Do not install the machine over 2000 meters above sea level.
- Make sure that the floor where you install the machine is flat, stable, heat resistant and clean.

Use a ladder with suitable protection for work on machines with high accessibility.

### A.6 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:
  - and 600 kPa [6 bar];
- 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.7 Electrical connection

- Work on the electrical systems must only be carried out by a specialised personnel.
- Make sure that the electrical information on the rating plate agrees with the power supply.
- Make sure to install the machine in accordance with the safety regulations and local laws of the country where used.
- 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.
- The machine must be correctly earthed. The manufacturer is not responsible for the consequences of an inadequate earthing system.
- If present, connected the machine to the equipotential protection circuit  $\nabla$ .
- To protect the power supply of the machine 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 machine against current leakages, install a highsensitivity manual reset RCD (Residual Current Device), suitable for overvoltage category III.
- For protection against indirect contacts (depending on the type of supply provided for and connection of earths to the equipotential protection circuit ♥) refer to point 6.3.3 of EN 60204-1 (IEC 60204-1) with the use of protection devices that ensure automatic cutoff 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 machine is located must be installed ahead of the supply.
- Make sure to install an emergency switch at the infeed and outfeed of the rack-type dishwasher. For all additional modules installed later, move the emergency switch at the ends of the equipment.

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

### A.8 Service

Only original spare parts can ensure the safety standards of the appliance.

### A.9 Disposal of packing

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

### A.10 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 GENERAL INFORMATION

#### **B.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.

### **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	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.

## B.3 Machine and Manufacturer's identification

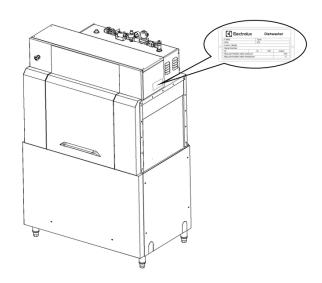
An example of the marking or dataplate on the machine is given below:

	Electro	lux	商用洗碗机 Commercial I	Dishwashe	er	
	工厂型号	序列号		执行标准		
	商业型号 F.Model	Serial No. 认证型号		Executive standard 产品代码		
	Comm.Model	Туре		PNC		
	額定电压 Rated voltage	額定输入功率 Rated input power	kW	防护等级 IP Grade	IP	$\parallel$
	額定频率 Rated frequency	額定电流 Rated current	A	绝缘等级 Insulation class	Class I	
	伊莱克斯(上海)商用机器有限责任公司 Electrolux (Shanghal) Profossional Appliance Co., Ltd. 上海市奉政医森特廷和政策的第2688号 No.2888 West Huancheng Road, Fengxian District, Shanghai ,China MADE IN CHINA 编译器					

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
380-400V/3N~	power supply voltage
_	electric convertibility
50 or 60	power supply frequency
44.5 kW	max. power
60℃	max water temperature
600 kPa [6 bar]	max water pressure
IPX4	dust and water protection rating
Electrolux (Shanghai) Professional Applia- nce Co., Ltd.	manufacturer

The dataplate is located in front panel of the equipment.





## **WARNING**

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



#### **IMPORTANT**

When scrapping the machine, the marking must be destroyed.



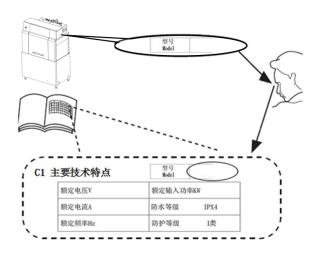
#### NOTE!

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

### B.4 Appliance identification

### B.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 D.1 Main technical characteristics paragraph.



### B.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)	(6)	(7)
Е	SR	20	Е	L	5	1
Е	SR	20	Е	R	5	1
Е	SR	20	Е	L	3	1
Е	SR	20	Е	R	6	1
Е	SR	20	Е	L	5	TL
Е	SR	20	Е	R	5	TL

### Variable description

(1) Brand	E = Electrolux Professional
(2) Machine type	RT = Rack Type Dishwasher
(3)Rack/hour	20 = 200 rackss/hour
(4) Supply	E = electric S = steam
(5) Direction	L = left R = right
(6) Frequency	5 = 50Hz 3 = 220V60Hz 6 = 60Hz
(7) Additional configuration	TL = 71 Thermal Label

### B.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.

### **B.6** Copyright

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

### B.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.

### B.8 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.9 Warranty terms and exclusions

- Electrolux Professional provides warranty services in line with local regulations and is conditional on the equipment 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 requirements.
- Electrolux Professional strongly recommends to use Electrolux Professional approved cleaning agents, rinse and descaling
  agents to obtain better results and maintain product efficiency over time.

The Electrolux Professional warranty does not cover damages and inefficiencies deriving from external causes beyond the manufacturer's responsibilities, such as:

- Insufficient and abnormal capacity of the electrical, hydraulic and gas systems, irregular supply voltage, impurities contained in
  the gas or water supply that does not comply with the technical requirements for each machine, insufficient extraction systems,
  customer's negligence and misuse;
- Deterioration caused by action of unsuitable detergents, additives or cleaning means;
- · Non-compliance with the use and care instructions detailed in this manual;
- Tampering, modifications and repairs carried out by third parties not entrusted in writing by Electrolux Professional;
- Use of non-original components (e.g.: consumables, wear and tear, or spare parts);
- Modification of safety systems;
- · Poor maintenance and misuse;
- Warranty does not include scheduled planned maintenance activities, or the supply of cleaning agents unless specifically
  covered within any local agreement, subject to local terms and conditions.

### C PRODUCT OVERVIEW

### C.1 General description

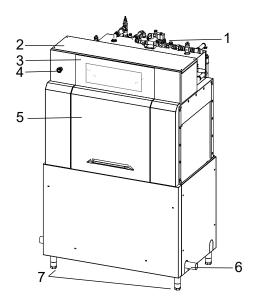
The rack-type dishwasher is suitable for washing dishes, glasses, cups, cutlery, trays, containers and receptacles in plastic and/or steel used for preparing, cooking and serving; as well as various cooking utensils in ceramic and/ or metal. This machine is designed for the above-mentioned applications.

Under no circumstances may the machine be used for other applications or ways not provided for in this manual. This machine has been produced to meet the needs for a better work environment and economical efficiency. The rack-type dishwasher is used in restaurants, cafeterias, cooking centres and large institutions. The special dish racks, that can be equipped with various inserts, offer practical and easy use for obtaining excellent washing results. Rack handling inside the machine occurs automatically.

The electronic system enables complete supervision of the washing process.

In this type of machine the rack is taken from the loading point to the unloading point, through the various washing functions. Systems for scraping and wetting the dishes (e. g. manual prewash spray) and areas for sorting and arranging them in the racks must be arranged ahead of the dishwasher.

### C.2 Machine overview



1	Water inlet
2	Electric box

3	Control panel
4	Emergency switch
5	Door
6	Drain
7	Feet

### C.3 Description of machine features

#### Control Box

The control box is located at the top of the machine. There are three control switches inside: power switch, wash switch and manual switch. The emergency stop is on the side. The transformer in the box is used to control power with voltage 110V. There is a mechanical thermometer in the power box, which shows wash and rinse temperature. Normally, temperature of water in wash tank is 60-65°C, rinse temperature 82-90°C.

### Wash Pump and Conveyor Motor

Manual reset overheated protections are equipped for the conveyor motor and the stainless steel centrifugal type wash pump.

#### **Tank Heater Protection**

A ball float pressure switch is located in the wash tank. The power supply will be automatically off under low water level. Once the water returns to a safe level, the heater will be activated when needed. An overheated protector is also provided for electric heater. If overheat should occur, the power supply will be turned off automatically. Turn the POWER switch OFF when overheating happened and contact the local authorized service office.

#### **Booster Heater Protection**

The booster water temperature is regulated by the thermostat to keep the rinse water temperature on 82-90°C. The thermostat is preset at the factory and no adjustment should be

required. When rinse temperature is not sufficient, please turn off the power and contact the local authorized service office.

### Booster main power circuit protection

To ensure normal operation of booster heater, a circuit breaker is set in the control box. When overheating or short circuit happens in main circuit, the circuit breaker will automatically trip off the power.

#### Door Interlocks

Door interlock switches will prevent machine operation while an inspection door is open. If a door is open while the machine is operating, the pumps and conveyor will automatically stop working. After the door is closed, the machine must be restarted by pushing the WASH switch to ON.

#### Auto Fill

Close door (s) and push the POWER switch to ON. The machine fills automatically after 5 seconds. Water is heated in booster, and then flows into wash tank. After the tank is filled, the solenoid valve is closed automatically.

#### **Auto Timer**

The Auto Timer is designed to save energy. The machine will shut off wash pump, conveyor motors and other auxiliary control system after the last rack exits the dishwasher. To restart, slide a rack into the machine or push WASH switch to ON to change time setting, please contact the local authorized service office.

#### Wash Actuator and Rinse Actuator

Wash actuator, which is located at the entrance of the machine, works only when the timer is on AUTO. When the rack enters into the machine, wash begins. The rinse actuator is located at the exit of the machine. When the rack enters rinse section from the wash tank, the rinse actuator activates, the final rinse begins.

#### Wash and Rinse Arms

Wash and rinse arms are removable, convenient for cleaning and obstructions clearing.

### D TECHNICAL DATA

### D.1 Main technical characteristics

Model		ESR20xxx	ESR20xxx3	NMDSREx (Optional Accessory )
Three phases voltage	V	380-400V/3N~	220V/3~	380-400V/3N~
Convertible to	V		_	_
Frequency	Hz	50 or 60 <sup>1</sup>	60	50 or 60 <sup>1</sup>
Maximum absorbed power	KW	45.8	27.8*/50.8	4.3
Boiler heating power	KW	36	18*/36	1
Water tank heating power	KW	7.5	7.5*/12	/
Dryer heating power	KW	1	1	4.3
Inlet water pressure	Kpa [bar]	100 kPa [1 bar] 600 kPa [6 bar]	100 kPa [1 bar] 600 kPa [6 bar]	1
Inlet water hardness	°fH [°dH]	14 [8]	14 [8]	1
Concentration of chlorides in water	ppm	<20	<20	<20
Inlet water conductivity	mS/cm	<400	<400	<400
Water supply temperature	°C	10-60 <sup>3</sup>	10-60 <sup>3</sup> /50-60*	/
Cold water supply temperature	°C	10-60²	10-60 <sup>3</sup> /50-60*	10-60 <sup>2</sup>
Hot water supply temperature	°C	10-60 <sup>3</sup>	10-60 <sup>3</sup> /50-60*	10-60 <sup>3</sup>

### Electrical models (cont'd.)

Model		ESR20xxx	ESR20xxx3	NMDSREx (Optional Accessory )	
Rinse water consumption	l/h	300	300	/	
Boiler capacity	1	23	23	23	
Tank capacity	1	90	90	1	
Noise level	dB(A)	<70	<70	<70	
Protection level		IPX4	IPX4	IPX4	

- 1. Appliances with 50 Hz or 60 Hz power frequency can be selected.
- 2. Recommended cold water supply temperature 10°C
- Recommended hot water supply temperature 50°C.
   \*means low power model

Main ON/OI	FF switch (residual current	circuit breaker)			
Max power [KW]		45.8	50.3	50.1	54.6
C 380V		90	100	100	108

Power supply cable				
Max power [KW]	45.8	50.3	50.1	54.6
S	YJV3*35+2*16 YJV3*35+2*10	YJV3*35+2*16 YJV3*35+2*10	YJV3*35+2*16 YJV3*35+2*10	YJV3*35+2*16 YJV3*35+2*10

### D.2 Characteristics of power supply

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

- max. voltage variation ± 6%
- max. frequency variation ± 1% continuous ± 2% for a short period.

Harmonic distorsion, 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).

### E TRANSPORT, HANDLING AND STORAGE



### WARNING

Refer to "Safety Information".

### E.1 Introduction

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



### CAUTION

The machine 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.

### **E.2** Transport: Instructions for the carrier



#### **IMPORTANT**

The transported load can shift:

- · when braking;
- when accelerating;
- · in corners;
- on rough roads.

### E.3 Handling

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



### CAUTION

The appliances must be handled in the upright position. If the appliance is handled in a horizontal position, make sure to wait a few hours before making it operational.

## E.3.1 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;
- make sure no material can fall during lifting. Manoeuvre vertically in order to avoid impacts;
- handle the machine, keeping it at minimum height from the ground.

### 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.

### E.3.2 Shifting

### The operator must:

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

### E.3.3 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.

### E.3.4 Placing the load

Before placing the load, make sure the way is free and that the floor is flat and can take the load.

For more information please refer to the installation chapter.

### E.4 Storage

The machine 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°C [14°F] and 50°C [122°F].

The place where the machine is stored must have a flat support surface to avoid deforming the machine or damage to the support feet.



#### **CAUTION**

Do not make modifications to the parts supplied with the appliance. Any missing or faulty parts must be replaced with original parts.

### E.5 Unpacking



#### **IMPORTANT**

Immediately check for any damage caused during transport.

Inspect the packaging before and after unloading.

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.

#### Note

- 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.

### **INSTALLATION AND ASSEMBLY**



F

### **WARNING**

Refer to "Safety Information".

### F.1 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 (D.1 Main technical characteristics and D.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 D.1 Main technical characteristics and in the paragraph F.6 Plumbing connections;

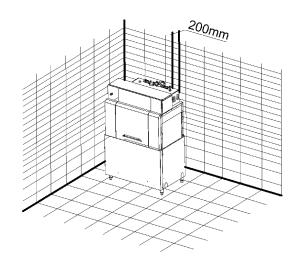
### F.2 Machine space limits

- 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**

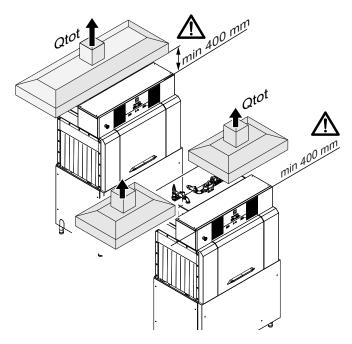
Install the machine at a distance of not less than 200 mm from the wall so as not to affect correct ventilation of internal components.



### F.3 Extraction hood

The extractor hood is installed to remove the steam emitted by the machine

- 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 hood air delivery must be calculated taking into account the machine model, the type of installation and the work environment where installed.





#### NOTE!

General ventilation for the room should be still provided in accordance with "UNI ISO EN 7730" norm, "VDI2052" guideline and "DW/172 UK" or local regulation.

### F.4 Positioning

To facilitate transport and site installation or disassembly and transportation to the work site, technicians authorized by this company are responsible for assembly.



#### NOTE!

The company will not assume any responsibility for any damage or danger caused by unauthorized disassembly and installation.

After commissioning is complete, the machine can be used. The machine must be taken to the place of installation and the packing base removed only when being installed.

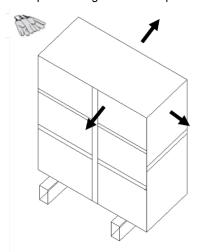


### **IMPORTANT**

Do not place the dishwasher near hot sources such as fryers, ovens, or hotplates.

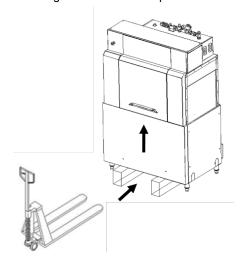
#### Arranging the machine

1. Wear protective gloves and unpack the machine.

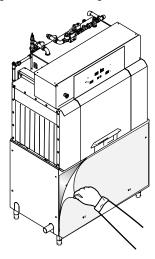


2. Lift the equipment with a lift truck, remove the base and position it the place of use.

3. Put each section of the machine in sequence and connect them together and install in place.

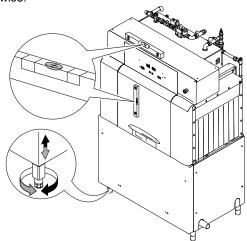


4. Carefully remove the protective film from the outer plate without tearing it, to avoid leaving traces of glue.



Adjust the equipment by turning the special adjustable feet.

Make sure it is perfectly level, both length wise and crosswise.



### F.5 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:



PF

### Polyethylene

- · Outer wrapping
- · Instructions bag
- · Protective film for gas nozzle



### Polypropylene

- Straps
- · Top packaging panels



### Polystyrene foam

· Corner protectors

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

### F.6 Plumbing connections



### **IMPORTANT**

Watermark labelled appliances must be installed in accordance with AS/NZS 3500.1 and drainage to be in accordance with 3500.2.

Install the machine water inlets and drain pipes according to the plumbing circuit and installation diagrams.

#### If the water pressure is:

- more than600 kPa [6 bar], a pressure reducing valve must be installed on the inlet pipe. The supply water temperature is related to the machine setup;
- is less than 100 kPa [1 bar], a booster pump must be installed ahead of the machine.

### Water connection ISO 228/1 DN 20 (G3/4")

- · Cold water inlet temperature:
  - 10-60°C
  - The recommended cold water temperature is: 10°C
- · Hot water inlet temperature:
  - 10-60°C
  - The recommended hot water temperature is: 50°C
- · Water inlet pressure:
  - - 600 kPa [6 bar]



#### **CAUTION**

For every connection, installing a cut-off valve and a pressure gauge between the machine and the mains.

Pay attention to seal every component in order to avoid any water leaks.

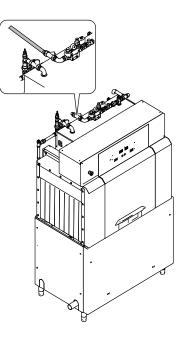


#### NOTE!

Connection pipes with anti-return/back flow protection and check valve and on/off valve are available as optional accessories.

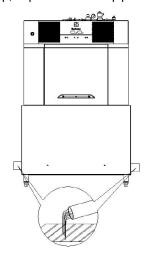
To ensure efficient machine operation, install a water treatment device on the dishwasher inlet connection piping if:

- the water hardness exceeds 14°fH/8°dH/10°eH (a water softener and/or a water demineralizer);
- the water concentration of chlorides in water exceeds 20 ppm (a reverse osmosis device).

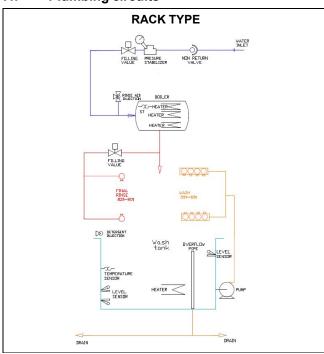


#### **Drain outlet hose connection**

 Connect the drain outlet hose to the main drain pipe, fitting a trap, or place the outlet pipe set into the Sewer entrance.



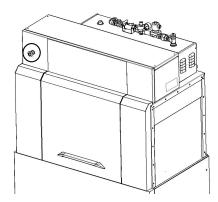
### F.7 Plumbing circuits



### F.8 Positioning of emergency switches

There is an emergency switch at the near the control panel of the dishwasher that are clearly visible and identifiable and easily accessed by the operator who must use them.

Operator can find it easily on below picture



## F.9 Installation of detergent/rinse aid dispensers

The machine is pre-configured for installation of detergent and rinse aid dispensing devices.

The dispensers must be installed in a way that does not compromise machine operation or safety.

The first time the machine is turned on, the dispenser should be manually activated and filled;



### WARNING

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.



#### CAUTION

Do not start the machine if the dispenser devices do not meet the safety requirements of "EC" Directives or current regulations in the country of use.



### CAUTION

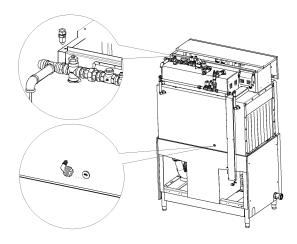
The use of "foaming"/non-specific detergents or in any case detergents used in different ways from that prescribed by the manufacturer, can cause damage to the dishwasher and compromise washing results.

### **Detergent dispenser**

- Connect the detergent pipe, coming from the external dispenser (see below picture, the lower one).
- · Remove the cap plug:
- · Connect the dispenser hose to the injector;
- Insert the inlet hose of the detergent dispenser into the proper container.

#### Rinse aid dispenser

- Connect the detergent pipe, coming from the external dispenser(see below picture, the upper one).
- · Remove the cap plug;
- · Connect the dispenser hose to the injector;
- Insert the inlet hose of the rinse aid dispenser into the proper container.





#### **IMPORTANT**

The peristaltic dispensers (detergent and rinse aid) and the tube inside the rinse aid dispenser require periodical maintenance (at least once or twice a year) or after prolonged machine idle periods.



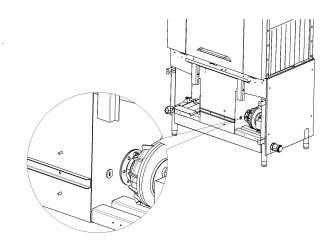
#### NOTE!

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.

### F.9.1 Conductivity probe

Remove the front panel. In the lower part of the tank there is an additional closed hole ( $\emptyset$  = 22 mm) to be used for the installation of the conductivity probe.

Remove the plug and install the conductivity probe.



### F.10 Dispensers electrical connection

The electric box is equipped with a power connection terminal for external distributor that can be used for 220 V and rated current 3 A. The terminals are activated when the appliance is on.

Connect the power supply of the dispenser between terminals "401" and "2".

#### **Detergent dispenser**

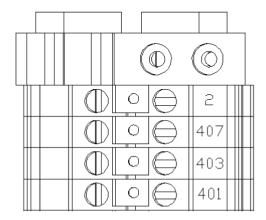
• Connect the power supply of the detergent dispenser between terminals "403" and "2".

These terminals will be activated during the wash phase.

### Rinse aid dispenser

• Connect the power supply of the rinse aid between terminals "407" and "2".

These terminals will be activated during the rinse phase.



### F.11 Changing the type of detergent/rinse aid

If changing to a different detergent/rinse aid type (even one by the same manufacturer), you must rinse the suction and pressure hoses with fresh water before connecting the new detergent/rinse-aid container.



### **CAUTION**

Mixing of different types of detergent/ rinse-aid will cause crystallization, which may result in a breakdown of the dosing pump. Failure to observe this condition will invalidate the guarantee and product liability.

#### F.12 Electrical connections



### **WARNING**

Refer to "Safety Information".



### **CAUTION**

The connection cable must be "H07RN-F" type, oil proof. Tighten the cables properly using a maximum torque of 6 Nm.

Make sure the machine power supply voltage specified on the data plate matches the mains voltage B.3 *Machine 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.

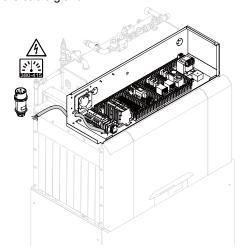
The earth wire from the terminal board side must be longer (max 20 mm) than the phase wires. Connect the power cable earth wire to an efficient earth.

The machine must also be included in an equipotential system, whose connection is made by means of screw EQ (see par.

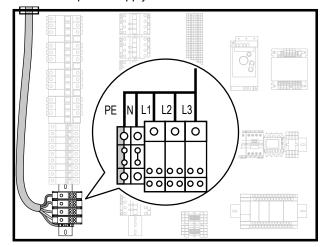
Installation diagram) indicated by the symbol  $\heartsuit$ . The equipotential wire must have a section of at least 10 mm².

#### Connect the power cable to the equipment:

 Remove the top panel and insert the power supply cable through the cable gland.



Connect the power supply cable to the terminal block.





### **IMPORTANT**

Make sure to refit the top panel of the electric box at the end of the installation.



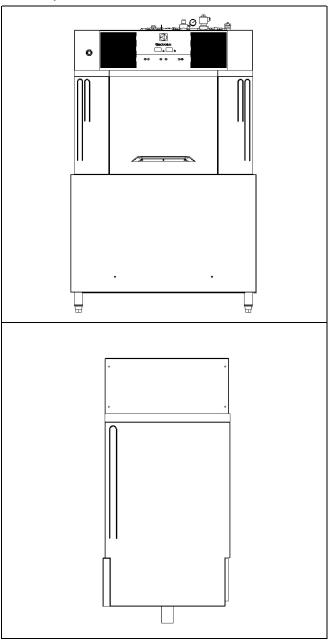
#### NOTEL

For additional information, refer to the wiring diagram, supplied with the equipment.

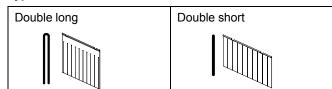
### F.13 Fitting curtains

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

### **Curtains position**

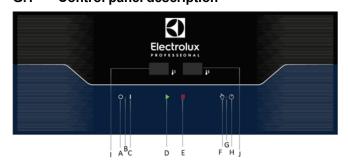


### Types of curtains



### **G** CONTROL PANEL DESCRIPTION

### G.1 Control panel description



Α	OFF button
В	POWER light
С	ON button
D	START button
E	PAUSE button
F	MANUAL button
G	AUTOMATIC light
Н	AUTOMATIC button
I	Wash temperature display of tank
J	Wash temperature display of boiler

### G.2 Basic Controls

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

• 1	ON button and POWER indicator light	Select On Key to switch Dishwasher on When the machine is on, the led is green lighted			
0	OFF button	Press the OFF button to switch the appliance off.			
	START button	Press this button to start the washing cycle.			
11	PAUSE button	Press this button to stop the washing cycle.			
€	MANUAL button	Select manual to send the basket with hand(the speed depends on the operator)			
$\odot$	AUTOMATIC button	Select automatic to send the basket with the same speed			
Io	Wash tank temperature display	Display the working temperature of the wash tank			
<b>I</b> ≱	Boiler temperature display	Display the working temperature of the boiler			

### **H** COMMISSIONING

## H.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.

### H.2 Electrical and plumbing connection

Before starting the machine, check:

- correct connection of the electrical wires that feed the machine;
- the power supply voltage and frequency match the data given in the technical data table (D.1 Main technical characteristics);
- 3. correct connection of the water supply and drain pipes (F.6 *Plumbing connections*);
- 4. guards, safety devices and emergency switches are in place and properly installed.

### H.3 Fitting of filters and overflows

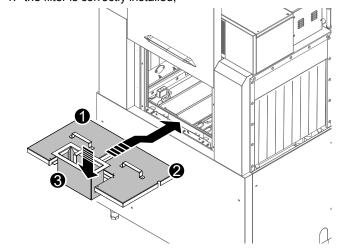


#### **CAUTION**

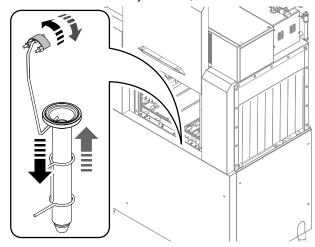
The below operations must be performed when the machine is cold and switched off.

#### Make sure that:

1. the filter is correctly installed;



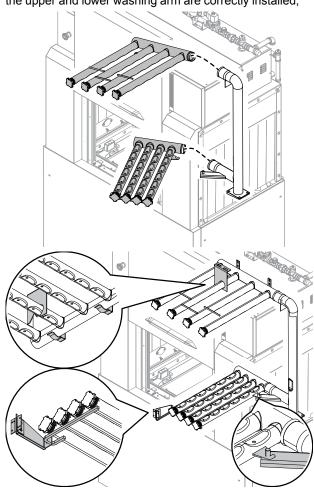
2. the overflows are correctly installed;



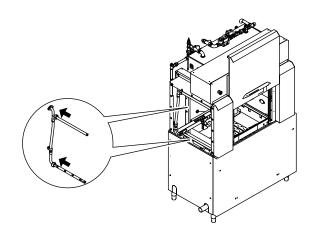
### H.4 Fitting of wash and rinse arms

Make sure that:

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



2. the rinsing arm is correctly installed.



### H.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 "F.13 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.

### H.6 First use

· Open the water supply taps.



- Press the button to switch the appliance ON;
- Remove the label when the boiler is filled with water, and switch on the breaker of heater in the electrical box.





### **IMPORTANT**

Only when the water in the boiler is filled can the circuit breaker of the heaters be switched on.

 Wait for several minutes to check the wash tank and boiler temperature.





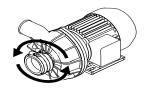


### NOTE!

To change the default factory settings, call the Customer Care service or specialised technician authorized by the company.

- Press START button to start the washing cycle.
- Press the PAUSE button to stop the washing cycle.
- Check if the rotation of wash pump and transmission motor is in the direction as indicated by the arrow.





### How to fix the wrong rotation

- To reverse the motor rotation change the position of the power lines "L1", "L2", "L3" of the power supply cable (see paragraph F.12 Electrical connections).
- Check again if the components works properly.
- Close firmly the electrical box.

### 序言

安装、使用和维护手册(下文简称"手册")为用户提供了正确和安全地使用机器(或称"设备")所必需的信息。 以下不能被视为长期和严格的警告列表,而是一组在各个方面提高机器性能的适当说明,尤其是防止由于操作程序不当而造成人 身和动物伤害或财物损坏。参与机器运输、安装、调校、使用、维护、维修和拆卸的人员在开始各种操作前,应仔细阅读本手册,以防止错误和不当的行动 破坏机器整体性或出现人身伤害。务必定期将安全规定告知用户。务必就机器的使用和维护向经授权操作机器的人员提供说明和 更新信息。本手册必须始终可让操作人员随时查阅使用,并妥善保存在机器所在之处,这样在有疑问或需要时始终可供查阅。 如果阅读本手册后,对机器的使用仍有疑虑,请立即联系制造商或授权的服务中心,以获得迅速和准确的援助,以便更好和最高 效地操作本机。在机器使用的各个阶段,始终遵守现行安全、工作卫生和环保法规。使用者负责确保机器只在对人、动物及财物安全的最佳条件下启动和操作机器。



#### 重 要

- 制造商对由于不遵循本手册中的指示而在设备上进行的操作所造成的损失概不负责。
- 制造商保留对本手册中叙述的设备进行修改而恕不另行通知的权利。
- 禁止部分或完整转载本手册。
- 本手册有数字版本, 获取方式为
  - ▶ 联系经销商或售后服务部;
  - ▶ 在网站上下载最新的手册;
- 手册必须始终放置在机器附近易于拿取的位置。机器操作人员和维护人员必须能够随时方便地查阅手册。

# 中文 **目录**

Α	安全信息	27
	A.1 一般信息	27
	A.2 一般安全	27
	A.3 个人防护用品	
	A.4 运输、搬运和存放	
	A.5 安装和组装	
	A.6 水连接	
	· · - • · ·	
	A.7 电气连接	
	A.8 维修	
	A.9 包装材料的废弃处理	
	A.10 机器废弃	
В	一般信息	30
	B.1 介绍	30
	B.2 定义	30
	B.3 机器和制造商的标识数据	
	B.4 设备标识	
	B.4.1 如何识别技术数据	
	B.4.2 如何理解厂家说明	
	B.5 责任	
	B.6 版权	
	B.7 保存手册	
	B.8 本手册的受众	
	B.9 保修条款和排除	
С	产品概述	31
	C.1 产品描述	32
	C.2 机器概述	32
	C.3 机器功能描述	
D	技术参数	
D	D.1 主要技术特点	
	D.2 电源特点	
_		
E	运输、搬运和存放	
	E.1 介绍	
	E.2 运输: 适用于承运商的说明	33
	E.3 搬运	33
	E.3.1 搬运作业程序	33
	E.3.2 移动	34
	E.3.3 放置载荷物	34
	E.4 存放	
	E.5 开箱	
	F 安装和组装	
	F.1 客户的责任	
	F.2 机器空间限制	
	F.3 排烟机	
	F.4 机械连接	34
	F.5 包装材料的废弃处理	35
	F.6 管路连接	35
	F.7 管路	36
	F.8 紧急开关的定位	36
	F.9 洗涤剂/光亮剂分配器的安装	
	F9.1 电导探针	
	F.10 分配器电气连.接	
	F.11 更改洗涤剂/光亮剂的类型	
	F.12 电气连接	
	F.13 帘子安装	
G	控制面板描述	38
	G.1 控制面板介绍	
	G.2 基本控制	39
Н	调试	
	H.1 初步检查、调整和试机	
	H2 电气和管道连接	
	- · · · · · - · - · · · ·	
	H.3 过滤网和溢水管的安装	
	H.4 主洗臂和喷淋管的安装	
	H.5 帘子的定位和装配	40

### A 安全信息

### A.1 一般信息

要确保机器的安全使用以及正确理解手册,必须熟悉文档中使用的条款和印刷约定。为了标记和识别各种危险情形,本手册使用了以下的符号:

## ⚠警告

操作员的健康和安全危险。

# <u>承</u>警告

触电危险-危险电压。

# ●警示

机器或产品受损风险。

## ①重要

有关产品的重要说明或信息

- **□**使用设备前请仔细阅读说明
- **i** 说明和解释

### A.2 一般安全

- 本设备不得由残疾、聋盲或智障人士或缺乏相关经验和知识的人员(包括 儿童在内)使用,除非这些人员在负责其安全的人员的指导下使用本设 备。
  - ▶ 请勿让儿童操作本设备。
  - 将所有包装和洗涤剂放置在儿童接触不到的地方。
  - ▶ 儿童必须在成人监督下进行清洁和用户维护保养。
- 有关合适的个人防护用品,请参阅"A.3 个人防护用品"。
- 本手册的有几个插图示出了没有防护罩或防护罩已拆除的机器的全部或部分。这只是为了解释。不要在防护罩或保护装置停用的情况下安装机器。
- 请勿拆卸、篡改机器上的安全、危险和说明符号以及标签,或使其不符合要求。
- 不要删除、篡改机器的标签或使之难以辨认。
- 不要删除或篡改机器的安全装置。
- 未经授权的人员不得进入工作区域。
- 从工作区移除任何易燃产品或物品。

### A.3 个人防护用品

在机器使用寿命的各个阶段将要使用的个人防护用品((PPE))的汇总表。

阶段	防护服	安全鞋	手套	眼镜	安全头盔				
	N			600					
运输		•	0	_	0				
搬运	•	•	0	_	_				
拆包	0	•	0	_	_				
安装	0	•	•	— 0 — 0					
正常使用	•	•1							
调整	0	•1	_						
例行清洁	0	•1	•						
特别清洁	0	•	• 0	0	_				
维护	0	•	0	_	_				
拆卸	0	•	0	0	_				
废弃	0	•	0	0	_				
图例:									
•	要求使用个人	要求使用个人防护用品							
0	可用或必要时使用个人防护用品								
	不要求使用个	不要求使用个人防护用品							

1. 使用适合与水和所用物质接触的耐热手套(见用于检查其它可能 PPE 的所用物质的安全数据表)。如果操作员、专业人员或用户不使用个人防护用品,可能会有暴露于化学品的风险,并可能损害健康(具体取决于型号)。

### A.4 运输、搬运和存放

- 由于机器的尺寸,在运输、搬运和存放期间不能将其彼此堆叠;由此消除由于堆叠而导致载荷物翻倒的 风险。
- 在装载或卸载操作期间不要站在悬空的载荷物下面。未经授权的人员不得进入工作区域。
- 仅靠设备的重量不足以保持它稳定。
- 起重和固定机器时,不可使用壳体、线槽、气动元件等活动或薄弱的部件。
- 不要推或拉机器来搬运,因为它可能会翻倒。使用适当工具提升机器。
- 执行机器的运输、搬运和存放的人员必须就提升系统的使用和适合所从事的工作的个人防护用品而受过 充分的指导和培训。

### A.5 安装和组装

- 按照随机器提供的安装说明操作。
- 请勿安装损坏的机器。任何丢失或出现故障的部件必须用原装部件更换。
- 不要对机器随附部件进行任何改装。
- 执行任何安装程序前,应断开机器的电源连接。仅在安装结束后才能将机器连接到电源。
- 本机器不适合安装在室外和/或暴露在大气作用下的地方(雨淋,阳光直射、结冰、潮湿和灰尘多的位置等)。
- 请勿将机器安装在海拔超过 2000 米的地方。
- 确保安装机器的地面平整、稳定、耐热且清洁。

● 在需要攀高的机器上工作时,请使用具有适当保护的梯子。

### A.6 水连接

- 管路连接必须由合格人员进行。
- ◆ 本机器应连接到使用新提供的软管头的总水管。请勿使用旧水管头。
- 如果拆除进水管并重新将其安装到设备,请始终使用一组新接头。
- 执行维修操作或安装新设备(水表等)后,在连接到新水管或临时水管之前,请让水流 出,直到水流变得干净清澈。
- 操作水压范围(最低和最高)必须介于:
  - ▶ 100 kPa 和 600 kPa 之间 (对于带 ESD 的模块);
- 确保在首次使用机器过程中和之后看不到明显的渗水迹象。
- 根据安装所在国家/地区的法规在上游安装认可的双止回阀。

### A.7 电气连接

- 电气系统上的操作只能由专业人员进行。
- 确保电源符合铭牌上的电气信息。
- 确保根据设备使用所在国家/地区的安全法规和当地法律安装机器。
- 如果电源线损坏,必须由客户服务中心更换,或在任何情况下由专业人员更换,以防止任何危险。
- 本机器必须正确接地。制造商对接地系统不良所造成的任何后果概不负责。
- 如果有,请将机器连接到等电位保护电路。
- 要防止机器的电源短路和/或过载,请安装热熔保险丝或适当的自动热磁断路器保护,即 ADS(自动切断电源)。
- 要防止机器电源泄漏电流,请安装适合类别 III 过压状态的高灵敏度手动重置 RCD (漏电断路器)。
- 为防止间接触点(取决于电源类型和等电位保护电路的接地),请参阅 EN 60204-1(IEC 60204-1) 第 6.3.3 点,使用漏电保护装置以确保在 TN 或 TT 系统绝缘故障的情况下可自动切断电源,或者对 IT 系统使用隔离控制器或差动电流保护装置,以激活自动断电(还必须提供隔离控制器,以指示一个部件可能发生的第一接地故障,除非提供了保护装置,在发生这种故障时断开电源。)此设备必须激活声响和/或视觉信号,这种信号必须在整个故障时间持续。例如:在 TT 系统中,一个与机器所在的建筑物的接地系统相应(如 30 毫安)的漏电断路器,必须安装在电源之前。
- 确保在通道式洗碗机的输入和输出端安装紧急开关。对于随后安装的所有其他模块,移动 设备两端的紧急开关。
- 对于随后安装的所有其他模块,确保电源线的尺寸正确。

### A.8 维修

● 仅原装备件可确保符合本设备的安全标准。

### A.9 包装材料的废弃处理

● 任何包装物品的处置都必须遵守安装国家/地区的现行法规。

### A.10 机器废弃

● 电气设备上的操作只能由专业人员在断开电源的情况下进行。

- 拆除操作必须由合格人员进行。
- 剪断电源电缆和任何内格关闭装置,令废旧设备不可再使用,以避免人员受困在里面。
- 有关适当的个人防护用品,请参阅"A.3 个人防护用品"。
- 在拆解机器时,必须销毁"CE"标记、本手册以及其他有关设备的文档。

## ①重要

请妥善保存以上说明,以便所有相关操作人员进一步咨询。

### B 一般信息

### B.1 介绍

下面是有关此设备的预期用途和测试的一些信息,以及所用符号的描述(确定警告类型)、手册中使用的术语的定义以及对设备用户有用的信息。

### B.2 定义

下面列出的是本手册中所用的主要术语的定义。建议在使用之前仔细阅读

细阅读	
操作员	机器安装、调节、使用、维护、清 洁、维修和运输人员。
4.154.2	
制造商	Electrolux Professional China 或由
	Electrolux Professional China 授权的
	任何其他服务中心。
正常使用机器	受过制造商指导/培训的操作人员,
的操作人员	基于他 的专业技能培训,他的经验
	以及在故障预 防方面的知识,能够
	评价在机器上进行的 操作并识别和
	防止可能出现的任何风险。其他的
	专业涵盖了机械、电工和电子领
	域。
客户服务中心	可能造成损伤或危害健康的来源。
或专业技术人	16000000000000000000000000000000000000
员	
	操作员暴露于一个或多个危险的任
<b>尼</b> 阿	
2 M += 10	何情况 
危险情况	在危险的情况下伤害或危害健康的
	可能性 和风险的组合。
风险	使用特定技术工具(防护罩和安全
	装置) 保护操作员免受风险的安全
	措施。
保护设备	机器中以特定使用方式提供隔离保
	护的一 种部件。
安全装置	消除或减少风险装置(除了护栏以
	外);它可以单独使用,或与护栏结
	合使用。
客户	购买机器和/或管理和使用机器的人
	(如公 司、企业家、工厂)。
紧急制动装置	一组用于紧急停机功能的部件;该
	装置通 过简单动作激活,可防止或
	减少对人/机器/财物/动物的损害。
触申.	意外事故造成对人体放电。
714 D	心って表を表づくである。

### B.3 机器和制造商的标识数据

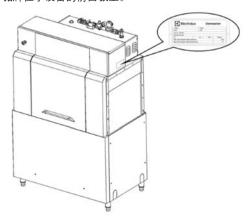
机器上的标识或铭牌的示例如下:

	Elec	rolux	商用洗碗机 Commercial		ır		
	工厂型号	序列号 Serial No.		执行标准 Executive standard		1	
$_{\sim}$ l	南业型号 Comm. Model	认证型号		产品代码			
7	额定电压 Rated voltage	额定输入功率 Rated irout power	ž KW	防护等级	IP	ĺ	
	模定频率 Rated frequency	Hz 额定电流 Rated current	Α.	绝缘等级 Insulation plans	Class I		
	伊莱克斯 (上海) 南用机器有限责任公司 Electrobus (Shanghai) Professional Applance Co., Ltd. 上海市事贸品解析程文运程 R2669号 No 2688 West Huancheng Road, Fenguian District, Shanghai, China MADE IN CHINA 端常型 CE						

铭牌提供产品标识和技术数据;下面列出了在其上提供的 各种信息的含义。

-	
F.Mod.	产品生产厂家的说明
Comm.Model	商业型号
PNC	生产编号代码
Ser.No.	系列号
380-400V3N~	电源电压
_	电可转换性
50 或 60	电源频率
60°C	最高水温
600kPa	最大水压
IPX4	防水、防尘等级
伊莱克斯(上海)商	制造商
用机器有限责任公司	

铭牌位于设备的前面板上。





不要删除、篡改机器标志或使之难以辨认

## ①<sub>重</sub>

当废弃机器时,标志必须销毁。

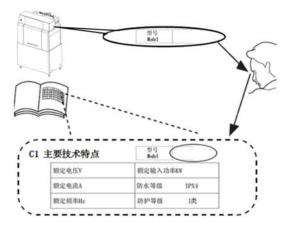
#### [**i**] <sub>请注意</sub>

请参照机器标志之上的数据,来查阅与制造商相关的数据(例如订购备件等)。

### B.4 设备标识

#### B.4.1 如何识别技术数据

- 请阅读铭牌上的产品(F.Mod.)出厂说明;
- 确定主要机器数据;
- 请查看段落 F.1 主要技术特点



#### B.4.2 如何理解厂家说明

铭牌上的厂家说明具有以下含义(下面给出了一些例子):

_							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Е	SR	20	Е	L	5	/
	Е	SR	20	Е	R	5	/
	Е	SR	20	Е	L	3	/
	Е	SR	20	Е	R	6	/
	Е	SR	20	Е	L	5	TL
	Е	SR	20	Е	R	5	TL

### 变量描述

又重油处	
(1)品牌	E=Electrolux Professional
(2)机器类型	RT=通道式洗碗机
(3)碗碟/小时	20=200 筐/小时
(4)电源	E=电加热 S=蒸汽加热
(5)方向	L=左进 R=右进
(6)频率	5=50Hz 6=60Hz 3=220V60Hz
●(7)额外配置	TL=71 度试纸

#### B.5 责任

### 制造商对以下所造成的任何损坏和故障概不负责

- 与本手册中的说明不符;
- 由非授权人员进行维修,使用非认定的备件进行更换 (安装和使用非原装的备件和配件,会对机器操作产 生负面影 响并让初始制造商保修失效);
- 由非专业人员执行操作;
- 未经授权的改装或操作;
- 没有进行维护或维护不足;
- 机器使用不当;
- 不可预见的非常事件;
- 不熟悉和未受过培训的人员使用机器;

机器的使用不符合所在国家关于工作场所的安全、卫生和 健康的现行规定。制造商对由用户或客户进行的任意修改 或改型操作而造成的损坏概不负责。

雇主、工作场所的经理或维修技术人员负责按照所在国家的现行法规确定和选择适当的个人防护用品,让操作员穿

制造商对由于印刷或翻译错误而在手册中包含的可能不准确的描述概不负责。

客户从制造商收到的对于安装、使用和维护手册的任何补 充将构成手册密不可分的部分,因此必须和手册一起保 存。

#### B.6 版权

本手册仅供操作人员查阅,要提供给第三方,必须得到 伊莱克斯(上海)商用机器有限责任公司的授权。

#### B.7 保存手册

本手册必须在机器的整个使用寿命期间妥善保存,直到报废。 本手册在机器转让、出售、出租、批准使用或租赁等情况下必 须随机保存。

#### B.8 本手册的受众

本手册用于:

- 机器使用者的雇主和工作场所的管理者
- 正常使用机器的操作人员

专业技术人员-客户服务中心(请参阅"服务手册")。

### B.9 保修条款和排除

- Electrolux Professional 根据当地法规提供保修服务,但前提是设备按照设计目的安装并用于适当的设备文档中所述。
- 如果客户仅使用原厂备件并进行了维护、则保修适用。符合 Electrolux Professional 的用户和维护要求。
- Electrolux Professional 强烈建议使用 Electrolux Professional 认可的清洁剂,进行冲洗和除垢代理以获得更好的结果并随着时间的推移保持产品效率。伊莱克斯专业保修不涵盖因外部原因导致的损坏和效率低下。制造商的责任,例如:
- 电气,液压和燃气系统的容量不足和异常,电源电压不规则,其中包含杂质供气或供水不符合每台机器的技术要求,抽气系统不足,客户的疏忽和滥用;
- 由于不适当的清洁剂,添加剂或清洁剂的作用而导致的劣化;
- 不遵守本手册中详细说明的使用和保养说明;
- 未经伊莱克斯专业人员书面委托的第三方进行的篡改,修改和维修;
- 使用非原装组件(例如:易损件,磨损或备件);
- 修改安全系统;
- 不良的维护和滥用;
- 保修不包括计划内的计划维护活动或清洁剂的供应,除非特别说明受当地条款和条件约束,在任何本地协议中均包含在内。

### C 产品概述

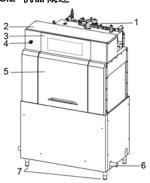
### C.1 产品描述

通道式洗碗机适用于用塑料和/或钢制的碗碟,杯子,杯子,餐具,托盘,容器和容器来洗涤,烹饪和使用;以及陶瓷和/或金属的各种炊具。为上述应用而设计。

在任何情况下都不能将机器用于本手册未提供的其他应用程序或方式。该机器的生产是为了满足更好的工作环境和经济效益的需要。 机架式洗碗机用于餐厅,自助餐厅,烹饪中心和大型机构。特殊的篮筐可以配备各种插入物,提供实用且便于操作,可以实现出色的洗涤效果。内置的篮筐操作机构可以自动运输。

电子系统可以对洗涤过程进行完全监控。在这种类型的机器中,通过各种清洗功能将机架从装载点移至卸载点。用于刮擦和润湿餐具的系统(例如手动预洗喷雾)以及用于分拣和布置餐具的系统,必须将搁板布置在洗碗机之前。

### C.2 机器概述



1	进水口	
2	电箱	
3	操作面板	
4	急停按钮	
5	门	
6	排水管	
7	支撑脚	

#### C.3 机器功能描述

### 控制盒

控制盒位于洗碗槽的上部,控制面板共有三个操作控制开关: 即电源 开关(OFF-ON) 、停止/启动开关(OFF-ON)、手动/自动切换开关(手动-自动)。控制电路变压器的功能在于将不同的电源电压降至 110V 供控制回路使用。控制面板上有清洗温度表和喷淋温度表,清洗温度表用于显示清洗缸水温,正常温度为  $55^{\circ}$   $-65^{\circ}$  ; 喷淋温度表用于显示加热包内温度即喷淋温度,温度范围为  $82^{\circ}$   $-90^{\circ}$  。

#### 马达和泵部件

清洗泵为离心式铸造不锈钢泵,泵壳及叶轮均为不锈钢。 清洗水箱超温器保护

水箱里的一个浮球开关,会在水位太低时自动将加热源关闭。等到水位恢复安全状态后,加热电路会在机器需要加热时重新开启。电力加热装置设有超温保护装置。倘若发生过热现象,加热会自动停止。请将电源开关按至 OFF,并和您当地授权服务站联络。

#### 加热包过热保护装置

加热包内部设置水温控制器。温控器使喷淋水温保持在 82 - 90℃范围内。温控温度出厂时已设定好,用户请勿随意调整温控器。如喷淋温度无法在正常范围内工作,请将电源开关按至 OFF 位置,并和您当地授权服务站联络。

#### 加热包过热保护装置

为确保加热包正常运行,在控制箱中设置了断路器。过热 或短路时发生在主电路中时,断路器将自动断开电源。

#### 门连锁

门连锁开关会使机器在检视门没有关闭好的时候无法开始操作。如果检视门在机器操作过程中被打开,泵及输送带会自动停止。门关上之后,必须将停止/启动开关按至ON,机器才会重新运转。

#### 清洗、冲洗臂

清洗及冲洗的上下洗臂都是可拆卸的。

#### 自动注水

关上门后将电源开关按到 ON 的位置, 机器便开始自动注水。自来水先经加热包加热升温, 然后进入清洗水箱, 直至水箱加满水为止, 电磁阀自动关闭。

### 自动计时器

自动计时器位于控制盒前面板,其功能在于节省能源,可在最后一个碗筐送出洗碗机后,关闭水泵、驱动马达。若要再重新启动,请将洗碗筐推进机器内,或将停止/启动开关按至 ON 的位置。如果您想改变设定的时间,请和您当地授权服务站联络。

#### 清洗限位架和喷淋限位架

清洗限位架位于机器的入口,仅在计时器处于自动状态时才起作用。 当机架进入机器时,将开始清洗。漂洗装置重新放置在机器出口处。 当架子从清洗槽进入冲洗区时,其内部执行器启动,最终冲洗开始。

#### 清洗、冲洗臂

清洗及冲洗的上下洗臂都是可拆卸的。

### D 技术参数

### D.1 主要技术特点

### 电气参数

型号 型号		ESR20xxx	ESR20xxx3	NMDSREx (可选配件)
三相电压	V	380-400V 3N~	220V 3~	380-400V 3N~
可转换为	V	_	_	_
频率	Hz	50 或 60¹	60	50 或 60¹
额定功率	kW	45.8	27.8*/50.8	4.3
加热包加热管功率	Kw	36	18*/36	/
水箱加热管功率	kW	7.5	7.5*/12	/
烘干加热管功率	kW	/	/	4.3
进水压力	Kpa [bar]	100kPa[1bar] 600kPa[6bar]	100kPa[1bar] 600kPa[6bar]	100kPa[1bar] 600kPa[6bar]
进水硬度	°fH [°dH]	14 [8]	14 [8]	14 [8]
水中氯化物的浓度	ppm	<20	<20	<20
进水电导率	mS/cm	<400	<400	<400
进水温度	℃	10-60	10-60/50-60*	/
冷水进水温度	℃	10-60 <sup>2</sup>	10-60/50-60*	/
热水进水温度	℃	10-60 <sup>3</sup>	10-60 <sup>3</sup> /50-60 <sup>*</sup>	/
喷淋水消耗量	l/h	300	300	/
加热包容量	1	23	23	/
水箱容量	1	90	90	/
噪音等级	dB(A)	<70	<70	<70
防护等级		IPX4	IPX4	IPX4

- 1. 可选择 50Hz 或者 60Hz 的机型
- \*代表低功率机型
- 2. 推荐冷水进水温度 10℃
- 4 持热水进水温度 50℃

主要 ON/OFF 开关(漏电断路器)					
额定功率[kW]		45.8	50.3	50.1	54.6
С	380V	90	100	100	108

电源线				
额定功率	45.8	50.3	50.1	54.6
线径	YJV3*35+2*16	YJV3*35+2*16	YJV3*35+2*16	YJV3*35+2*16
	YJV3*35+2*10	YJV3*35+2*10	YJV3*35+2*10	YJV3*35+2*10

### D.2 电源特点

机器的交流电源必须满足以下条件:

- 最大电压变动±6%
- 最大频率变动±1%,短时间内持续±2%。

谐波失真,不平衡的三相电源电压,电压脉冲,断电,骤降和其他电气特性都必须符合标准 EN 60204-1 (IEC 60204-1) 的第 4.3.2 点的规定。

### E 运输、搬运和存放

### E.1 介绍

运输(即把机器从一个地方转移到另一个地方)和搬运(即在工作场所内转移)时必须使用有足够能力的特定设备。



机器只能由专业人员运输、搬运和存放,他们必须具备:

- 接受过专门的技术培训并有起重系统的使用经验;
- 相关领域的法律和安全法规知识;
- 通用的安全知识;
- 适合所执行操作类型的个人防护用品;
- 识别并避免任何可能危险的能力。

### E.2 运输: 适用于承运商的说明

### ① 重要

以下情况下运输机器会引起移动:

- 制动时;
- 加速时;
- 在拐角处;
- 在崎岖的道路上。

#### E.3 搬运

安排一个适当平坦的区域,用于机器的卸载和存放操作。

### E.3.1 搬运作业程序

#### 起重前:

将所有操作员送到一个安全的位置,并禁止外人进入搬运区域;

- 确保载荷物是稳定的;
- 在起重之前确保不会有物体掉落。垂直操作以避免冲
- 搬运机器时,使之与地面的距离保持在最低高度。 对于正确和安全的起重作业:

- 使用特点和能力最合适的设备类型 (例如电动托盘搬运车 或升降运送车);
- 覆盖锋利的边缘;
- 根据包装上的指示检查车叉和起重程序。

#### E.3.2 移动

操作员必须:

- 了解运输线路;
- 在危险的情况下停止前进。

#### E.3.3 放置载荷物

- 放置载荷物前,确保路径畅通无阻,地板平坦,可以承载
- 将设备从木质托盘上取下,将其移动至一侧,然后滑动到 地板上。

#### E.4 存放

机器及其部件必须防潮,在室温介于-10℃ [14℃] 和 50℃ [122℃] 之间、没有振动和侵蚀性的地方存放和保护。 存放机器的地方, 必须有一个平坦的支撑面, 以免机器变形或 支撑脚损坏。

不要对设备随机部件进行改装。任何丢失 或出现故障的部件必须用原装部件更换。

#### E.5 开箱

#### 重要

立即检查在运输期间造成的任何损坏。 在卸载前后检查包装材料。

1. 拆除包装材料。

拆包和搬运设备时要小心, 以免碰撞到设备。

2. 妥善保管包装中的所有文档。

#### 注释

- 运送人负责确保货物在运输和交付过程中完好无损。
- 如果发现明显或隐性损坏,请向运送人投诉。
- 请在发运单上指明任何损坏或短缺。
- 司机必须在发运单上签字: 如果发运单上没有签字, 运 送人可拒绝索赔(运送人可提供必要的表格)。
- 对于在拆包后才能发现的隐性损坏或短缺、请要求运送 人在交付后最多不超过15天的时间内检查商品。

### F 安装和组装



警告

参见"*安全信息*"

### F.1 客户的责任

客户必须作下列准备:

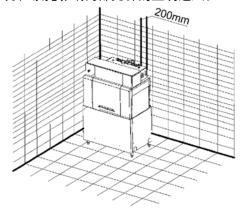
- 根据设备的技术规格(D.1 主要技术特点和 D.2 电源特 点),在设备前安装一个适当的电源器;
- 工作场所的电气系统通过适当部件的铜电缆与本机的金 属结构的电位连接 ♥ (请参阅安装图中的"EQ"位置);
- 工作场所电气开关和设备之间的电路连接;
- D.1 主要技术特点和 F.6 管路连接一节所示的供水和排水 连接和其它连接;

### F.2 机器空间限制

- 机器周围必须留下适当的空间(以方便操作、维修和保证 适当通风等)。
- 如果使用和/或转移其它设备和/或工具,或如果工作场所 内必须有出口路线时,该空间必须加大。



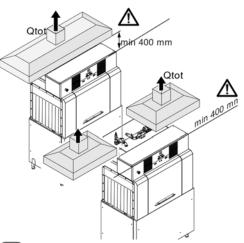
将机器安装在离墙距离不小于 200 mm 的地 方. 以免影响内部元件的正确通风。



### F.3 排烟机

安装的抽取盖的作用的去除机器产生的蒸汽。

- 确保将排烟机罩定位在距离机器不小于 400mm 的地方, 以免影响机器操作。
- 抽油烟机排气量的计算必须考虑到机器的型号、安装类 型和安装所在的工作环境。



机器室内全面通风的规定必须符合"UNI ISO EN7730"规范、 "VDI2052" 原则和"DW/172 UK" 或当地法规。

### F.4 机械连接

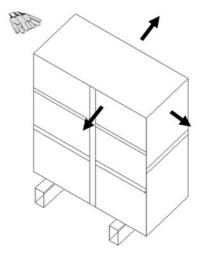
请注意!

确保安装机器的室内温度至少达到 18℃ [64.5℃]。

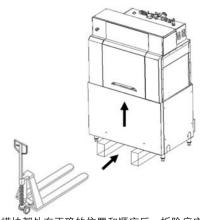
请勿把洗碗机放置在炸锅、烤炉或加热板等热源的

安排机器的各个模块:

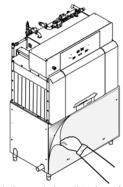
1.佩戴防护手套并拆除机器各模块的包装。



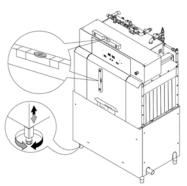
2.使用起重叉车将各模块定位到所需位置。



3.当所有模块都处在正确的位置和顺序后,拆除底座。 4.小心从外部板撕下保护膜, 但不要将其撕破, 以免留下胶水痕 迹。



5.通过转动特殊可调脚来调节设备。确保其在长度和宽度方 向上完全水平。



### F.5 包装材料的废弃处理

包装材料的废弃必须符合设备使用所在国的现行法规。所有的 包装材料均符合环保要求。

它们必须安全存放、回收再用或送往一个授权的焚化站焚毁。 可回收再用的废弃塑料部件标有以下标记:



#### 聚乙烯

- 外部包裹
- 说明资料袋



#### 聚丙烯

捆带



### 发泡聚苯乙烯

边角保护块

木质和纸板部分的废弃必须符合设备使用所在国的现行法规。

### F.6 管路连接



水印标记的设备必须按照 AS/NZS 3500.1 进行安装,并 且排水必须符合 3500.2。

根据管路图和安装图,安装机器的进水管和排水管。

#### 如果水压:

- 高于 600 kPa, 必须在进水管上安装减压阀。供水温度与 机器的设定有关;
- 低于 100 kPa, 必须在机器前安装增压器泵。

### 水连接 ISO 228/1 DN 20 (G3/4")

- 冷水入口温度:
  - 10-60°C
  - 建议的冷水温度为: 10℃
- 热水入口温度:
  - 10-60°C
  - 建议的热水温度为: 50℃
- 进水压力:
  - 100 kPa 600 kPa



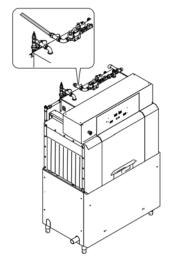
对于每个连接, 在机器和主水管之间安装一个截止阀和 一个压力表。注意密封连接每个部件,以免漏水。



带有止回/回流保护及止回阀和开/关阀的连接管路可作为 备选配件提供。

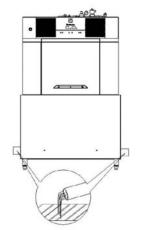
在以下条件下, 为了确保机器高效运行, 请在洗碗机入 口连接管道上安装水处理设备:

- 水硬度超过 14°fH/8°dH/10°eH (软水器和/或水 脱盐装置);
- 水中的氧化物浓度超过 20 ppm (反渗透装置)。

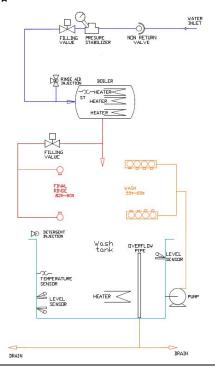


#### 出口排放管连接

将出口排放管连接到总管排放管,安装弯管或将排放管放置在下水道入口上。



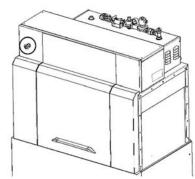
### F.7 管路



### F.8 紧急开关的定位

在洗碗机的控制面板附近可以很清楚的找到一个明显的紧急开 关,操作人员可以很容易的找到它。

操作员在下图可以很容易的找到这个紧急开关



### F.9 洗涤剂/光亮剂分配器的安装

本机为方便安装洗涤剂和分配器,已经做了提前配置。 分配器的安装必须不影响机器的操作或安全。 首次打开机器时,应当手动激活和灌注分配器;



不采取适当的安全措施(如个人防护用品) 而与化学物质(如洗涤剂,光亮剂,除垢剂 等)接触,可能有暴露于化学物质的风险并 可能有损健康。请参阅使用的产品上的标签 注释和安全信息。

警示

如果分配装置不符合"EC"标准或使用国家现行法规的安全要求,不要启动机器。

● 警示

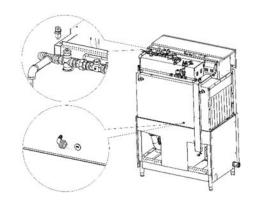
使用"泡沫型"/非规定的洗涤剂,或没有根据制造 商规定的方式使用洗涤剂,将会导致洗碗机损害和 影响洗涤效果。

### 洗涤剂分配器

- 连接洗涤剂管道,该管道从外部分配器通向(参见下图,下面的图示)。
- 拆下盖塞;
- 将分配器软管连接至注射器;
- 将洗涤剂分配器的入口软管插入正确的容器。

### 光亮剂分配器

- 连接洗涤剂管道,该管道从外部分配器通向(参见下图,上面的图示)。
- 拆下盖塞;
- 将分配器软管连接至注射器;
- 将喷淋光亮剂分配器的入口软管插入正确的容器。



# ①<sub>重要</sub>

蠕动泵分配器(洗涤剂和过水增亮剂)和过水增亮剂分配器 内的管道需要定期保养(至少一年一次或两次),或机器闲 置时间延长后需要保养。

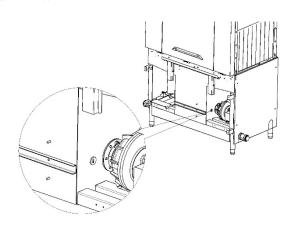
# **i** 请注意!

为了获得卓越的洗涤性能,请使用 Electrolux Professional 建议的洗涤剂、过水光亮剂和除垢剂。在 Electrolux Professional 网站上, 打开"配件和消耗品"网页, 然后导航 到洗碗设备选项卡以订购最合适的洗涤剂和配件。

### F9.1 电导探针

拆下前面板, 在水箱的下部有一个额外的封闭孔 (M22mm), 可用于电导率探针的安装。

拆下闷盖并安装探头。



### F.10 分配器电气连接

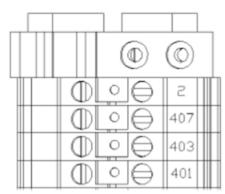
配电箱配备有外部分配器的电源连接端子, 该端子可用于 220V 和额定电流3A。当设备开启时,会将端子激活。 将分配器的电源连接在端子"401"和"2"之间。

### 洗涤剂分配器

将洗涤剂分配器的电源连接在端子"403"和"2"之间。 这些端子将在洗涤阶段期间激活。

### 光亮剂分配器

将光亮剂分配器的电源连接在端子"407"和"2"之间。 这些端子将在喷淋阶段期间激活。



### F.11 更改洗涤剂/光亮剂的类型

如果更改使用不同类型的洗涤剂/过水光亮剂(即使来自同一家 厂商), 您在连接新的不同的洗涤剂/过水光亮剂容器前必须冲 洗抽吸和压力软管。



不同类型的洗涤剂/过水光亮剂的混合将造成结晶化,这 可能导致计量泵故障。未能遵守这个条件将使保证和产 品责任无效。

### F.12 电气连接



参见"*安全信息*"



连接电缆必须是"H07RN-F"型,耐油。使用最大扭 矩 6 Nm 正确紧固电缆。

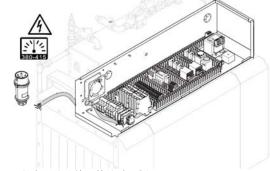
确保铭牌上标出的机器电源电压与电网电压 B.3 机器和制造商 的标识数据相符。

确保系统电源的配置能够承受实际负载电流,并根据机器使用 所在国家的现行法规以专业性的施工方法执行。端子板一侧的 地线必须比相线长 (最多 20 mm)。将电源线 接地线连接到有效的地线。

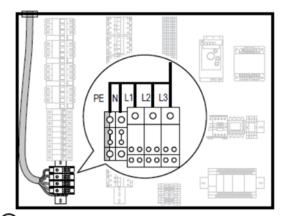
该机器还必须包含在等电位系统中,该系统通过符号♡所示 的螺丝 EO (参阅安装图一节) 进行连接。等电位电线的横截 面积最小应为 10 mm<sup>2</sup> 中提供的说明。

### 将电源线连接到设备:

拆下顶部面板并通过电缆密封套插入电源线。



将电源线连接至接线端子板。



①重要

确保在安装结束时重新安装配电箱的顶部面板。

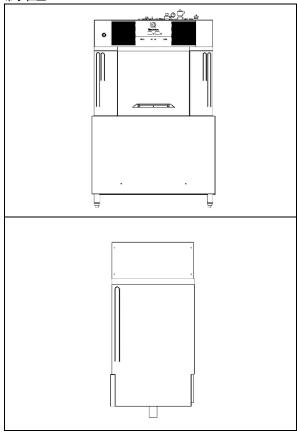
**i** 请注意!

有关更多信息,请参见设备随附的接线图。

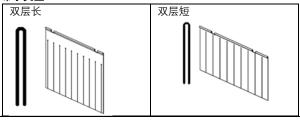
### F.13 帘子安装

在关机和机器冷却的情况下, 安装帘子, 如下所示。

### 帘子位置

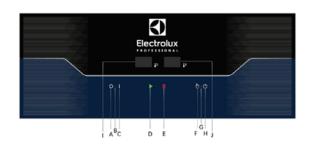


帘子类型



### G 控制面板描述

### G.1 控制面板介绍



Α	OFF 按钮
В	电源指示灯
С	ON 按钮
D	开始按钮
E	暂停按钮
F	手动按钮
G	自动指示灯
Н	自动按钮
1	水箱温度显示
J	加热包温度显示

### G.2 基本控制

部分功能对范围内的所有型号都是通用的,而另一些功能只有某些型号才有。

• 1	ON 按钮	按下 ON 按钮将洗碗机启动 当机器启动时,led 灯亮起
0	OFF 按钮	按下 OFF 按钮关闭洗碗机
	开始接钮	按下开始按钮,机器开始运行
	暂停按钮	按下暂停按钮,清洗暂停
₹ <u></u>	手动按钮	按下手动按钮,机器将手动送筐
<b>(</b>	自动按钮	按下自动按钮,机器将自动送筐
Į o	水箱温度显示	显示水箱的工作温度
<b>I</b> ≱	加热包温度显示	显示加热包的工作温度

### H 调试

### H.1 初步检查、调整和试机

启动机器前,请检查:

- 1. 电气和管道连接;
- 2. 箱组件的定位;
- 3. 洗涤和喷淋臂的位置和装配;
- 4. 帘子位置和装配。

这些操作必须由配备适当个人防护用品(参见 A.3 个人防护用 品)、工具和合适辅助设备的专业技术人员在机器已关闭且冷却的情况下进行。

### H.2 电气和管道连接

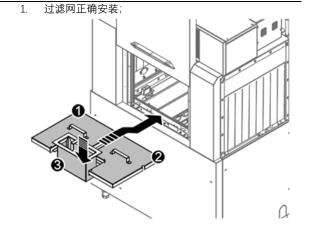
启动机器前,请检查:

- 1. 机器供电电线的连接是否正确;
- 2. 电源电压和频率符合技术数据表 (*D.1 主要技术特点*) 中给出的数据;
- 3. 供水和排水管的连接是否正确 (F.6 管路连接);
- 4. 防护罩、安全装置和紧急开关已就位并且正确安装。

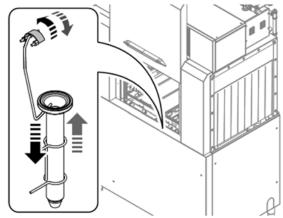
### H.3 过滤网和溢水管的安装



当机器冷却并且关闭时必须执行下面的操作。 <sub>确保:</sub>

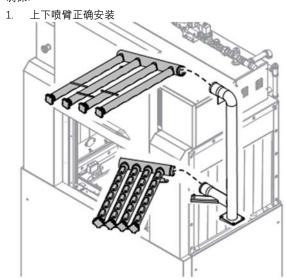


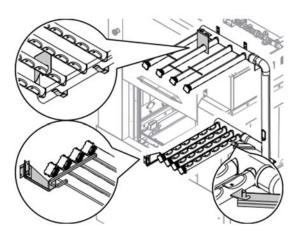
### 2. 溢水管正确安装



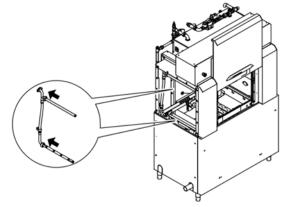
H.4 主洗臂和喷淋管的安装

### 确保:





### 2. 喷淋管正确安装



### H.5 帘子的定位和装配

确保随机器提供的所有型号的帘子,已根据段落"*F.13 帘子安装*"所示正确安装。

## ①<sub>重要</sub>

只有当前述的所有部件已正确安装时才关闭设备各模块 的门,然后启动机器。

### H.6 首次使用

● 打开水龙头



● 按下开启按钮将洗碗机开启。



● 当加热包中水灌满后取下标签,并且闭合在电箱中的 加热包加热管断路器。



## **①**重要

只有当加热包中水灌满后,才能打开加热包加热管的断 路器。 等待数分钟以检查洗涤箱和锅炉温度。



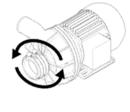


# **i** 请注意!

要更改默认出厂设置,可致电公司授权的客户服 务中心或专业技术人员。

- 按下开始按钮 开始洗涤循环。
- 按下暂停按钮 停止洗涤循环。
- 检查洗涤泵和传送带电机的旋转是否在箭头指示的方向 上。





● 修复错误旋转的方法 要将电机旋转反向,可更改电源线的电线"L1"、 "L2"、"L3"的位置(参见段落 F.12 电气连接)。 再次检查组件是否正常工作。 将配电箱牢固关闭。



Electrolux (Shanghai) Professional Appliance Co., Ltd.
No.2688 West Huan Cheng Road
Feng Xiang District
Shanghai, China
www.electrolux.com/professional