

Under counter Dishwasher Instruction manual

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Foreword

This instruction manual (hereinafter referred to as "the Manual") provides useful information for user's correct and safe operation for the purpose of easy operation of this machine hereinafter referred to as "Machine", "Dishwasher" or "Equipment").

The followings are not considered as the list of long-term and strict warning but are proper instruction for improvement of machine performance. In particular, they may prevent personnel and animal injury or property damage due to improper operating procedures.

All the people involved in machine transpiration, installation, start, operation and maintenance, repair and disassembling must check and carefully read the Manual before operations to avoid incorrect and improper actions having negative influence on the completeness of the Machine or endangering personnel safety.

The Manual must be available for operator's access at any time and properly kept at the location of the Machine so that you may immediately access in case of problem or if necessary.

After reading the Manual, if you still have problem(s) to the Machine, you should immediately contact the manufacturer or authorized after-sales service center to get quick and accurate assistance for better and more efficient operation of the Machine.

In the process of machine operation, always follow applicable laws, rules and regulations for safety, health and environmental protection. The user shall be responsible for ensuring that the Machine can only be started and operated under the best conditions to human, animal and property safety.

This equipment may not be used by disabled or deaf or blind or mentally disabled people or inexperienced or unskillful operators (including children) except that they are supervised or instructed by a person who is responsible for their safety when operating this equipment.

Children must be supervised so that they are not keeping in touch with this equipment.

A General Information

A1 Introduction

This chapter introduces the symbols (types of marks and warning identification) used in this manual and gives the definitions of terms used in this manual, and responsibilities and copyright.

A2 Definitions

The followings are the definitions of main terms used in this manual. Please read carefully them before use.

Operator

People performing installation, adjustment, use, maintenance, cleaning, repair and transportation of this machine.

Manufacturer

Electrolux (Shanghai) Professional Appliance Co., Ltd. or its any other authorized assistance and service centers

Qualified operator for normal use of machine

People who are receiving proper information, instruction and training with respect to tasks and hazard for normal use of machine.

Professional technician or technical assistant

An operator received instruction/training from manufacturer. According to his training, experience and knowledge with respect to regulations for accident prevention, they can evaluate the operation on machine and identify and prevent possible risks. His professional knowledge covers mechanical, electrical and electronic fields.

Danger

Possible personnel injury resulting from incorrect operation of machine.

Hazard

Any situation that an operator is exposed to one

or more dangers.

Risk

Possibility of injury or health hazard under dangerous situation and risks combination

Safeguard

Safety measure protecting operator from danger using special technical means (guard and safety device).

Guard

A special component to provide protection through a physical barrier on machine.

Safety device

Device eliminating or reducing risk (except guard). It may be independently used or used in combination with guard.

Customer

People purchasing, managing, and using machine, for example, company or entrepreneur

Emergency brake

A set of components for emergency braking. It is activated by a single action to prevent or reduce personnel/animal injury and damage to machine/property.

Death due to electric shock

Current discharging to human body accidentally.

A3 Agreement of Printing

For the best use of the manual and machine, we strongly suggest that you have good knowledge about the terms used in the document and agreement of printing.

The Manual uses the following symbols to mark and identify various hazards.



Warning!

Operator's danger of health and safety



Warning!

Danger of Electric Shock - Dangerous Voltage!

For a machine with this sign, the g and protection device must only be opened by a qualified operator after switching off the power supply of the machine.



Warning!

Danger of Damage to Machine.

Words and safety alert further warning and explaining types of danger, which are placed near the symbol in the text.

These are intended to ensure personnel safety and prevent machine or products being processed from being damaged.

The drawings and charts in the Manual are not plotted proportionally. They roughly supplement written information but are not intended to provide details of machine.

The values on the installation drawings of the machine are indicated in millimeters (see Section E6.2 "Installation Drawings").

A4 Identification Data of Machine and Manufacturer

The following example shows the copy of the identification or nameplate of the Machine.



Figure 1 Copy of Identification or Nameplate on Machine

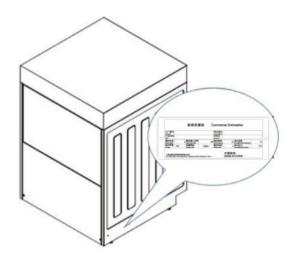


Figure 2 Position of Marks



Warning!

Don't delete or alter the machine marks or make them illegible.



Important Information!

Please check the data on the nameplate of the manufacturer (e.g. when placing an order of spare parts).



Important Information!

Destroy marks and signs on the machine when it is disposed.

A5 Equipment Identification

A5.1 How to Identify Technical Data

To identify technical data (Figure 3), please read the product manufacturer on the nameplate, identify main machine data and check Table 1 "Main Technical Features, Performance and Consumption".

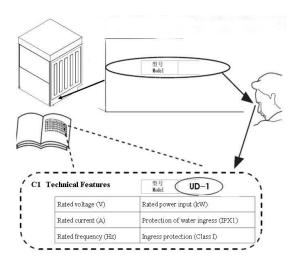


Figure 3 Identification of Technical Data

A5.2 How to Understand Manufacturer's Explanations

The manufacturer's information on the nameplate show the following designation (see the following examples):

Model-1

UD = Under counter	
-1 = Serial number of development	
B = Marine type	

Model-2

(1)	(2)	(3)	(4)	(5)	(6)	(7)
0	UC	1	DP	/		
0	UC	3	PG	/		
0	UC	1	DP	/	6	
Е	UC40	/	G	1		TL
E	UC40	/	G	1	6	

- 1) O = Veetsan E = Electrolux Professional
- (2) UC = Under counter 40 = 40Basket/hour
- (3)/(5) 1 = 230V/1P 3 = 400V/3P
- (4) DP = Rinse aid dispenser +Drain pump PG/G = Rinse aid dispenser + detergent dispenser + Drain pump
- (6) 6 = 60Hz / = 50Hz
- (7) TL = Thermal Label

Description of variables					
Rated voltage (V)	Requirements for power supply				
Nated Voltage (V)	voltage of machine				
Rated power input	Maximum absorbed power of				
(W)	machine				
Rated current (A)	Maximum current of machine				
Protection of water	Protection water ingress				
ingress (IPX1)	1 Totection water ingress				
Poted frequency (Hz)	Requirements for power supply				
Rated frequency (Hz)	frequency of machine				
Ingress protection	Drotaction type of machine				
(Class I)	Protection type of machine				

A6 Copyright

The Manual is only for operators' information. It can only be given to any other third party with written consent. Electrolux (Shanghai) Professional Appliance Co., Ltd.

A7 Responsibilities

These instructions are updated to the month and year indicated in the box on the lower right of the cover.

Revision number each new version replaces and cancels the old versions.

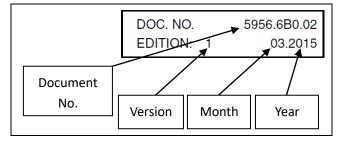


Figure 4 Example of Document Identification Data

The manufacturer will bear no responsibility for any damage and defect resulting from the following reasons:

- Not in line with the instructions in the Manual;
- The maintenance is made unskillfully and replacement is performed with spare parts

other than those designated in the Manual (use and installation of non-genuine spare parts will have adverse influence on machine operation);

- The machine is operated by a non-professional technician;
- Unauthorized modification and operation;
- Improper maintenance
- Improper use of machine
- Unexpected unusual incident
- The machine is used by an operator who is not familiar with machine and not trained.
- Failure to follow applicable HSE regulations for workspace of the country where the machine is installed.

The manufacturer will bear no responsibilities for damage due to user's or customer's modification or alteration or change without authorization.

The employer or manager on jobsite will be responsible for determination and selection of proper personal protective devices for operator according to applicable regulations of the country where the machine is installed.

Electrolux (Shanghai) Professional Appliance Co., Ltd. will bear no responsibility for possible inaccurate description in the Manual arising from incorrect printing or translation.

Any supplementary information received by the customer from the manufacturer must be kept with the Manual, which is integral part of the Manual.

A8 Personal Protective Equipment

The personal protective equipment (PPE) to be used in the whole machine lifetime is summarized as follows.

Stages	Protective clothes	Safety boots	Gloves	Glasses	Safety helmet
Transportation		•	0		0
Handling	•	•	0	5-25	
Unpacking	0	•	0	3	
Assembling	0	•	0	5-26	
Normal use	•	•	• (1)	0	
Adjustment	0	•	_	:—:	
Routine cleaning	0	•	• (1)	0	
Special cleaning	0	•	• (1)	0	
Maintenance	0	•	0	. — :	
Dismantling	0	•	0	5 02	-
Disposal	0	•	0		

Legend:	
•	PPE required
0	PPE optional or if necessary
_	PPE not required

 Heat resistant gloves suitable for keeping in contact with water and substances involved (see the Material Safety Data Sheet for other possible PPE).

There will be possible risk of exposure to chemicals and possible health injury if an operator, professional technician or user fails to use correct personal protective equipment.

A9 Keeping Manual

The Manual must be kept with care in the whole machine lifetime until decommissioning.

The Manual must be kept together with the machine and consigned to the new operator in the event that the machine is transferred, sold on, rented, approved for use or lease, etc.

A10 Use of Manual

The Manual is used for:

- Carrier and handling operator
- Installer and start-up operator
- Employer and manager on jobsite of machine operator
- Operator responsible for normal use of machine
- Professional technician technical assistant (see wiring diagram and service manual)

B Machine General Information

B1 Instructions to Machine

This dishwasher applies to wash bowl, dish, glass, mug, tableware, tray; plastic and/or steel vessel for preparation, cooking and service; and various ceramic and/or metal cooking utensil.

This machine is designed for above applications. In any case, the machines cannot be used for other applications or used in a way not mentioned in the Manual.

This equipment is manufactured to accommodate the demands for better work environment and economic benefits. These dishwashers may be used for restaurants, cafes, cooking centers and large-scale organizations. The special dish rack may be provided with various accessories for easy and practical operation with good washing effect. The electronic system may monitor the whole washing process.

The control panel features temperature display and various state indicators, which may show temperature, operating condition and anomaly signal.

The dish wiping and wetting system (e.g. manual pre-spraying washing system) as well the classification and placement areas on the rack must be arranged before the dishwasher.

C Technical Data

C1 Technical Features

Table 1 Main Technical Features, Performance and Consumption

Model	Veetsan	UD-1/UD	-1B series	
		OUC1DP	OUC1DP6	
		OUC3DP	OUC3DP6	
		OUC1PG	OUC1PG6	
		OUC3PG	OUC3PG6	
	Veetsan Star	VUC1PG	VUC1PG6	
		VUC3PG	VUC3PG6	
	Electrolux	EUC40G1	EUC40G16	EUC40GTL ^[1]
		EUC40G3	EUC40G36	EUC40GTL ^[1] 6
Supply Voltage:				
——3-Phase 1	V	380-415V 3P+N	380-415V 3P+N	400V 3P+N
——3-Phase 2	V	220-240V 3P	220-240V 3P	
——Single Phase	V	220-240V 1P+N	220-240V 1P+N	
Supply Frequency	Hz	50	60	50/60
Maximum Power (3-Phase 1)	kW	5.05	5.05	7.05
Maximum Power (3-Phase 2)	kW	3.55	3.55	
Maximum Power (Single Phase)	kW	3.55	3.55	
Rinse Heater Power (3-Phase 1)	kW	4.5	4.5	4.5
Rinse Heater Power (3-Phase 2)	kW	3	3	
Rinse Heater Power (Single Phase)	kW	3	3	
Wash Heater Power	kW	2	2	
Water Supply Pressure	kPa	200-500	200-500	200-500
Water Supply Temperature	°C	10-60	10-60	10-60
Water Supply Hardness	°fH[dH]	14[8] Max.	14[8] Max	14[8] Max
Water Supply Conductivity	mS/cm	< 400	< 400	< 400
Water Consumption (Per Cycle)	1	2.4	2.4	2.4
Rinse Boiler Volume	1	5.5	5.5	5.5
Wash Tank Volume	1	13	13	13
Wash Cycle	sec	90/120/180	90/120/180	90/120/180
Operating Noise	dB(A)	< 70	< 70	< 70
IP Class		IPX1	IPX1	IPX1
Net Weight	kg	55	55	55
Power Cable Type		RVV	RVV	RVV
Core of Power Cable (Min to Max)	mm ²	2.5—4	2.5—4	2.5—4

The standard cycle time may be varied with different temperatures of water supply.

[1] Type with "TL" indicates that the model can pass the NSF 71 degree thermal label test.

Hereinafter referred to as "TL model".

380-415V 3P+N		220-240V 3P	220-240V 1P+N		
С	S	С	S	С	S
RVV 3x2.5mm ² +2x2.5mm ²	16A	RVV 3x2.5mm ² +1x2.5mm ²	25A	RVV 2x4mm ² +1x2.5mm ²	32A

C = Power Cable

S = Circuit Breaker

C2 Features of Power Supply

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

- Max. Fluctuation of voltage: ±10%
- Max. Fluctuation of frequency: ±1%, with short-time endurance of ±2%.

The harmonic distortion, unbalanced 3 - phase supply voltage, voltage impulse, power failure, sudden drop and other electrical characteristics must comply with the standard EN60204-1 (IEC60204-1), sub clause 4.3.2.



Important Information!

The machine power supply must be protected with fuse or proper magnetic thermal breakers to prevent overcurrent (short circuit and overloading).

These must be installed in the full-grade switching-off system, with a contact gap of 3 mm at least.



Important Information!

In order to prevent indirect contact (depending on mains type and grounding of equipotential protection circuit), please refer to EN 60204-1(IEC60204-1), sub clause 6.3.3. Use protective devices to ensure that TN the or TT svstem automatically switch off the power supply under condition with fault isolated, or the IT system uses isolation controller or differential current protection to activate automatic power failure (one isolation controller must be provided to indicated possible first grounding

fault of a component, unless otherwise that one protective device is provided to disconnect the power supply if this is the case.) This equipment must activate audible and/or visual signal. Such signal must be kept available during fault occurrence.



Important Information!

The customers should follow these instructions. Otherwise, the manufacturer will not ensure that the machine may continuous operate and/or has no fault.

D Transport, Loading/Unloading

and Storage

D1 Introduction

Special equipment with sufficient capacity must be used for transportation (the machine is moved from one place to another place) and handling (the machine is transferred to another jobsite).

The machine must only be transported, handled and stored by qualified people. They must be:

- technically trained and experienced;
- familiar with applicable laws and safety regulations concerning application fields;
- have knowledge about general requirements of safety;
- able to identify and avoid any possible danger.

D1.1 Transportation: Instructions to Carrier



Warning!

Don't stand under the load in the height when loading/unloading. Don't enter into the work area without authorization.



Important Information!

The machine weight cannot sufficiently keep its stability.

The transported load may be carried under the following circumstances:

- —with brake applied;
- —at the time of acceleration;
- -when turning;
- —on a rough road.

D2 Handling

The machine should be unloaded and stored on a properly flat area.

D2.1 Handling Procedures

For correct and safe lifting operation:

- Use equipment type with suitable features and capacity (e.g. electric pallet truck or forklift);
- Cover sharp edges;
- Check forklift and lifting procedures according to indications on the package.

Before lifting:

- All the operators must present at a safe position. People not involved in operation must not enter into the handling area;
- Ensure that the load is stable;
- Ensure that no material may be fallen during lifting and ensure vertical operation to avoid impact.
- When handling machine, ensure that the distance between the machine and the ground shall be kept as minimum as possible.



Caution!

When lifting machine, don't use case, wire channel, pneumatic elements and other moving or weak components as support.

D2.2 Handling

Operators must:

- Have overall planning about handling path;
- Stop operation under hazardous situation

D2.3 Load Bearing

Before placing load, ensure that the path is free and the ground is flat to correctly bear load.

D3 Storage

The Machine and/or its components must be stored in room temperature ranging from -10 to 50° C, without vibration and erosion to protect from

moisture.

The Machine storage area must have a flat support surface to avoid machine distortion or damage to support leg.



Important Information!

The machine must be positioned, installed and dismantled by professional technicians!



Important Information!

Don't modify the components supplied with machine. Any missing or defective components must be replaced with genuine ones.

E Assembly and Installation



Important Information!

For install the machine, one must wear the proper personal protective equipment (safety shoes, gloves, glasses, working clothes, etc.), tools, appliances and auxiliary means must be provided for professional technicians.

E1 Customer's Responsibilities

The Customer must make the following preparations:

- -Disconnector, 30 mA residual current circuit-breaker and overcurrent protection device (for manual resetting or with fuse for magnetic thermal cutoff) with at least equal to electrical capacity indicated in the technical data sheet shall be installed between the equipment and outlet socket. The devices you selected must be able to be locked in the "OFF" position during maintenance.
- -A correct power supply is installed before the machine according to the equipment technical specifications (see Table 1 and C2 "Features of Power Supply").
- -The electrical system at the workplace is equipotential bonded to the metal structures of the Machine with copper cables of proper component (see the Position B of E6.2 "Installation Drawings").
- -Electrical connection between the electrical panel and equipment at the workplace;
- -Connection for water supply, drain pipe and etc. indicated in Table 1 and E6 "Connection to Pump Unit".

E2 Features of Machine Installation Site

The Machine is designed for kitchen installation instead of for household. The sump/metal grill

must be arranged on the floor for machine water drainage (see E6.2 "Installation Drawing". It is possible to use a single sump with flow rate of 3 L/s at least.

E3 Machine Space Restriction

A proper space must be kept around the machine for easy operation, maintenance, etc. The operator's access to machine must be 50cm wide, except the rear of the Machine.

The passage must be widened if it used for operating and/or transferring other equipment and/or tools or the workplace must have route to exit.

E4 Positioning

This machine must be installed in place and the mounting plate can only be removed at the time of machine installation.

Important Information!

Keep the dishwasher away from heat sources such as frying pan, oven or heating plate, etc.

Machine arrangement:

• Unpack the machine using protective gloves (Figure 5).

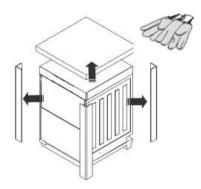


Figure 5 Unpacking

• Use a forklift to lift the equipment. Remove the mounting plate, and position the equipment in place (Figure 5).



Figure 6 Positioning Machine

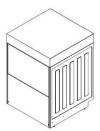


Figure 7 Unwrapping Packaging Film

- Be cautious to remove the protective film from the external plate, but not to be torn, to avoid adhesive mark remained (Figure 6).
- Rotate the special adjustable support leg to adjust the equipment to ensure that it is longitudinally and transversely kept in a perfect condition (Figure 8).

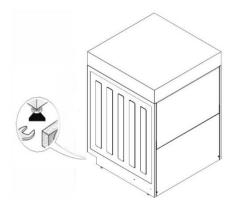


Figure 8 Adjusting Supporting Leg

E5 Disposal of Packaging Materials

All the packaging materials are environmentally friendly. They must be safely stored, recycled, or sent to a special incinerator for incineration. The recyclable plastic components are marked as follows:



Polyethylene: Outer package, pouch of instruction manuals.



Polypropylene: Top packaging plate, tie-down straps



Foaming polystyrene: Protective plate of edges and corners

The wooden materials and cardboards must be disposed of in line with regulations of the country where the machine is installed.

E6 Connection of Pump Unit Important Information!

The watermark label machine must be installed in accordance with AS/NZS 3500.1.

The water inlet and outlet pipes of the machine are installed according to the following pipeline diagrams and installation drawings.

 Connect the water pipe "C" (see E6.2 "Installation Drawing")to the manifold. Install shut-off valve, supplied filter and pressure gauge between the equipment and manifold. (Figure 9)

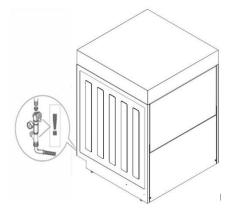


Figure 9 Connection to Water Inlet Pipe

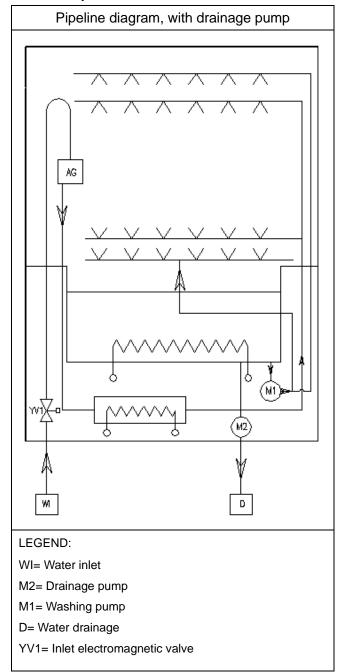
Check the dynamic pressure of water supply.
 Measure the pressure between the equipment and manifold, which should be ranged from200 to 500 kPa (the test should be performed with dishwasher water tank or boiler fully filled).

In case of excessively high pressure, install a proper pressure-reducing valve on the water pipe.

· Connect the wastewater drain pipe "D" (see

E6.2 "Installation Drawing")to the manifold drain pipe. Install the trap or place the drain pipe into the S-shaped trap on the floor.

E6.1 Pipelines



E6.2 Installation Drawing

The following installation drawing shows the outlined machine dimensions and connection to water and electricity.

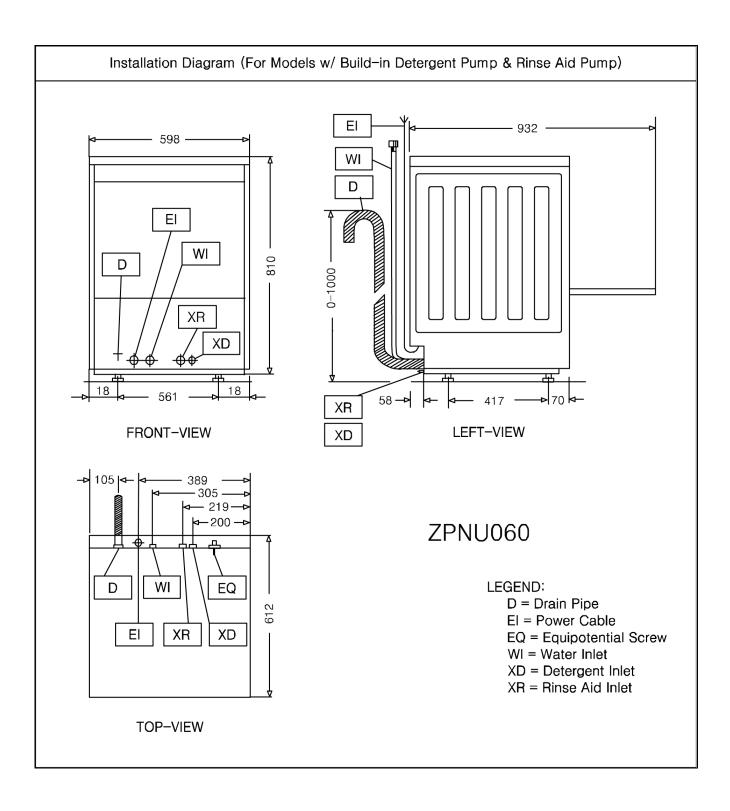


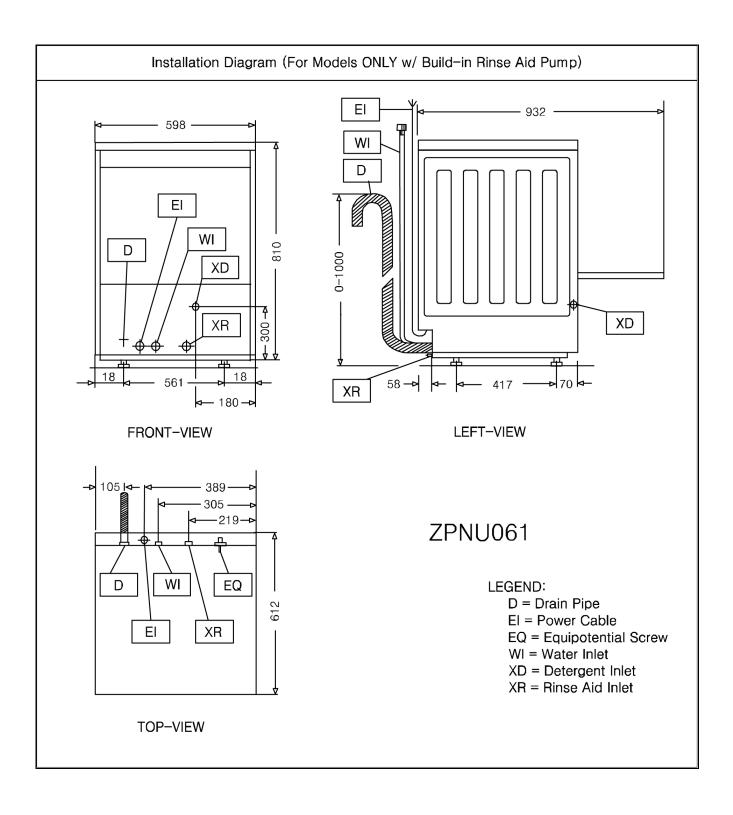
Important Information!

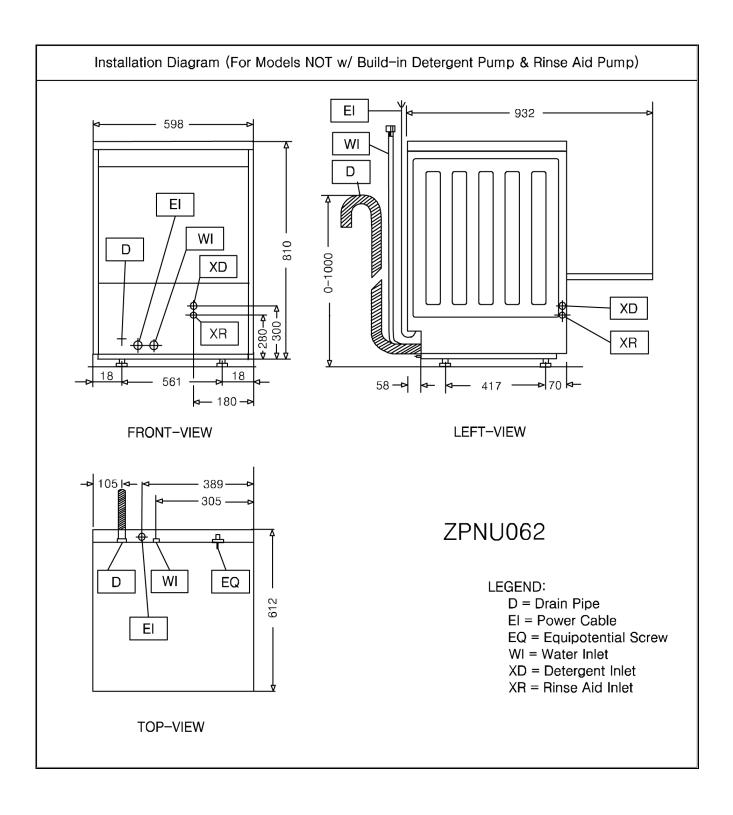
Ensure that an extraction hood is installed to remove steam from the machine.

The calculation of air flow must take into account the machine installation type and work environment where the machine is installed.

In any case, the recommended air flow rate is 1000 to 1500 cubic meters per hour.







E7 Electric Connection

The electrical connection must follow the regulations of the country where the machine is installed.



Important Information!

The work on the electrical system must only be performed by a qualified electrician.

- Ensure that the power supply voltage (Table
 indicated on the nameplate conforms to the grid voltage.
- Ensure that the power supply of the system is arranged to bear actual load electric current and follow the applicable regulations of the country where the machine is installed to professionally make construction work.
- The earth wire of the terminal must be longer than the phase cable (by a maximum 20 mm).
- The earth wire of the power supply cable is connected to the effective grounding clamp. The equipment is also included in the equipotential system and connected through the bolt "B"(see E6.2 "Installation Drawing") with marking " ♥ " symbol. The equipotential cables must have a cross-section area of 10mm².

Power supply 380-415V 3P+N (Standard)

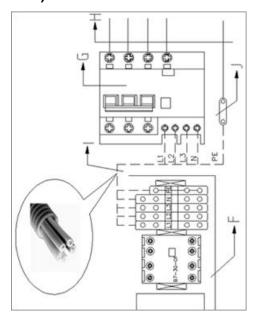


Figure 10 380-415V 3P+N

Connect the power supply as shown in Figure 10: Use the supplied power supply cables (I) (refer to technical data sheet). Connect the 3-phase cable "L1,L2,L3,N" to the residual leakage circuit-breaker (G) which should be supplied by the customer. Connect the PE to the customer's ground terminal.

Power supply 220-240V 3P

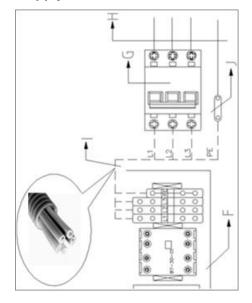


Figure 11 220-240V 3P

Connect the power supply as shown in Figure 11: Use the supplied power supply cables (I) (refer to technical data sheet). Connect the 3-phase cable

"L1,L2,L3" to the residual leakage circuit-breaker (G) which should be supplied by the customer. Connect the PE to the customer's grounding terminal.

Power supply 220-240V 1P+N

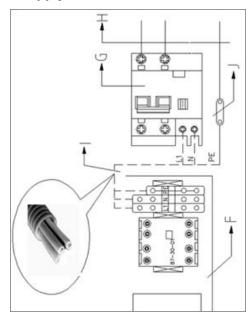


Figure 12 220-240V 1P+N

Connect the power supply as shown in Figure 12: Use the supplied power supply cables (I) (refer to technical data sheet). Connect the 1-phase cable "L1,N" to the residual leakage circuit-breaker (G) which should be supplied by the customer. Connect the PE to the customer's grounding terminal.

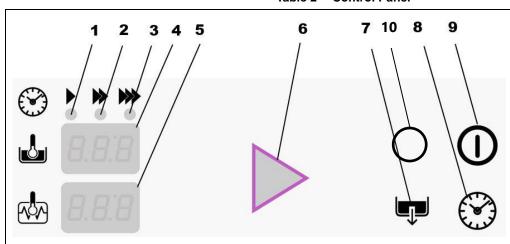
E8 Safety Devices

- The automatically resettable thermal protective device that is incorporated into the winding of the electric pump may cut off the power supply in case of fault.
- In case of faulty main water supply pipe, a device is used to prevent the boiler water from being returned into the main pipe.
- Level balance: When the level is higher than the standard value, the drain pump discharges water so that the tank level is kept constant.

Fail to follow the safety regulations will release all the responsibilities of manufacturer.

F Instruction to Control Panel

Table 2 Control Panel



Key:

1=Indicator light of washing cycle 1

2=Indicator light of washing cycle 2

3=Indicator light of washing cycle 3

4=Temperature display of main washing

5=Temperature display of rinsing

6=Start/pause key

7=DOWN/drainage key

8=Start/function key

9=Key of mains switch

10=UP key

Important Information!

- In a state of water supplying, the "Start/Pause" key is displayed in yellow.
- · After water supplying and in a standby state for heating, the "Start/Pause" key is displayed in green.
- · At the beginning of washing, the "Start/Pause" key is displayed in blue.
- · In case of failure alarm, the "Start/Pause" key is flickering in red.

If "Start/Pause" becomes red, please switch off the power supply and contact the repairman to take remedies.

The following lists all the single pushbutton and functions of the above models of control panel. Some functions are available for all the models and other functions are only for partial models.

F1 Basic Control Key

"Power" key



Press the right power supply switch and the indicator light of power supply is ON, indicating that the machine is switched on. Press again the power supply switch, the indicator light of power supply is OFF and the unit's decimal point within the rinsing temperature display area will be flickering, indicating that the machine is switched off.

Choosing Washing Cycle







From the left to right, the first indicator light ON shows that the washing cycle is selected by 90s; the second indicator light ON shows that the washing cycle is selected by 120s. The third indicator light ON shows that the washing cycle is selected by 180 s.

Spraying temperature





The current boiler water temperature is displayed and the diagnostic trouble code (DTC) is displayed in case of fault.

Main washing temperature





The current water tank temperature is displayed and the "Er-" is displayed in case of fault.

Function key



The setting key is located immediately under the power supply switch. When the computer is energized but not started, the parameters of the dishwasher may be set with this key.

When the computer is started and in standby state, the washing cycle time may be set with this key.

Drain button



When the computer is in standby state, press the button for 2 s and the machine is entered into the drainage program. The machine will be stopped after machine self-cleaning and drainage program is automatically cycled for 3 s.

Start/Pause key



Used to start or pause the washing program.

F2 Model Setting and Input and Output Wiring Connection

1. Model setting: Set the toggle switch position on the SR-5001K board.

Switch $1 \rightarrow ON$,

Switch 2→ ON,

Switch $3 \rightarrow ON$.

Switch 4→ OFF.

2. Input/output on SR-5001J board:

X8-1: AC220-240V power supply input (power supply output of all relays)

X7-1: Switching on. The relay is picked to output the power supply of AC220-240V phase cable.

X7-2: Rinsing heating output control. The relay is picked to output the power supply of AC220-240V phase cable.

X7-3: Main washing heating output control. The relay is picked to output the power supply of AC220-240V phase cable.

X7-6: Main washing water pump output control. The relay is picked to output the power supply of AC220-240V phase cable.

X8-5: Inlet electromagnetic valve output control. The relay is picked to output the power supply of AC220-240V phase cable.

X8-6: Water drainage pump output control.

The relay is picked to output the power supply of AC220-240V phase cable.

3. Input/output on SR-5001K board:

3.1. X5 plug block:

AC12V: Power supply input of SR-5001 series computer board (AC power supply input is available: AC12V±20%).

3.2. X6 plug

+12V - 0V: If AC12V power supply input is not available, DC power supply: DC12V±20% may be used.

0V: common terminal (COM) for switch signal input of S1 - S12.

3.3. X1 plug block:

X1-4: Water tank level signal input, switch of water level OFF, water may be available.

X1-5: Door switch signal input, door closed, and switch OFF.

3.4. X3/X4 plug block

X3-5/X4-5: Input of rinsing temperature display sensor.

X3-4/X4-4: Input of rinsing temperature control sensor.

X3-3/X3-4: Input of main washing temperature sensor.

4. Communication cable, 4-core metallic STP jacket wire, 1.8m, connected to SR-5001X, SR-5001K boards.

F3 Parameters Setting by Energization after Correct Connection

The parameters may be set after energization, in OFF state, and when the unit's decimal point of the PV window is flickering:

Press the "Set" key to enter into the setting state. The main washing temperature display window shows "PA-", indicating entry of password. The rinsing temperature display window shows "0".

Press the numerical digit UP key, the PV window shows numerical digit. Enter the password and press the "Set" key. If the password is incorrect, enter into the parameter setting. Otherwise, return. (The defaulted user password is 65)



The main washing temperature display window shows "P1-", indicating the rinsing temperature setting. The rinsing temperature display window shows the original setpoint. Press the numerical digit UP or DOWN key to modify the rinsing temperature setpoint. (Setting range: 70-90°C, STD model defaulted value: 82°C, TL model defaulted value: 85°C)



Press the "Set" key, the main washing temperature display window shows "P2-", indicating the main washing temperature setting. The PV window shows the original setpoint. Press the numerical digit UP or DOWN key to modify the main washing temperature setpoint. (STD model setting range: 40-70°C, defaulted value: 60°C; TL model setting range: 40-80°C, defaulted value: 75°C)



Press the "Set" key, the main washing temperature display window shows "P3-", indicating the filling water temperature setting. The rinsing temperature display window shows the original setpoint. Press the numerical digit UP or DOWN key to modify the filling water temperature setpoint.

(STD model setting range: 10-70°C, defaulted value: 60°C; TL model setting range: 10-80°C, defaulted value: 75°C)



Press the "Set" key, the XV window shows "P4-", indicating the rinsing restricted temperature setting. The rinsing temperature display window shows the original setpoint. Press the numerical digit UP or DOWN key to modify the rinsing restricted temperature setpoint. (STD model setting range: 10-82°C, defaulted value: 82°C; TL model setting range: 10-90°C, defaulted value: 85°C)



Press the "Set" key, the main washing temperature display window shows "P5-", indicating the rinsing time setting. The rinsing temperature display window shows the original setpoint. Press the numerical digit UP or DOWN key to modify the rinsing time setpoint. (Setting range: 8-15 s, defaulted value: 10 s)



Press the "Set" key, the main washing temperature display window shows "P6-", indicating the water supplying delay time setting. The rinsing temperature display window shows the original setpoint. Press the numerical digit UP or DOWN key to modify the water supplying delay time setpoint. (Setting range: 5-40 s, defaulted value: 20 s)



Press the "Set" key, the main washing temperature display window shows "P7-", indicating the mode setting. The rinsing temperature display window shows the original setpoint. Press the numerical digit UP or DOWN key to modify the mode setpoint. (Setting range: 0-1, defaulted value: 0)





Press the "Set" key, the main washing temperature display window shows "P8-", indicating the water drainage delay time setting. The rinsing temperature display window shows the original setpoint. Press the numerical digit UP or DOWN key to modify the water supplying delay time setpoint. (Setting range: 10-40 s, defaulted value: 30 s)



Press the "Set" key, the main washing temperature display window shows "PC-", indicating the user password setting. The rinsing temperature display window shows the original setpoint. Press the numerical digit UP or DOWN key to modify the user password setpoint. (Setting range: 0-99, defaulted value: 65)



Press the "Set" key to return.

Note: In setting state, it will automatically return by waiting for 5 s without pressing key.

F4 Instructions to Display and Operation

1. Power on initialization:

After energization, it performs self-checking of display and all the digital tubes are ON for 4 s and the 3-color indicator light (red, green, and blue) is respectively ON for 1 S. Check the communication connection. If connection is normal, the main washing temperature display window shows "Sr-" and the rinsing temperature display window shows "U--". Then, the digital tube becomes dark. And, the unit' decimal point of the rinsing temperature display window is flickering, entering into the OFF state after energization.

2. Start the machine:

Press the power supply switch to start the machine to enter into the operation state. The main washing temperature display window shows main washing temperature value. The rinsing temperature display window shows rinsing temperature value.

- 3. Description of 3-color indicator light indication:
- 3.1. State of water filling: The Start/Pause key is permanently ON in yellow.
- 3.2. Standby state (state of door opened): The Start/Pause key is flickering in green.
- 3.3. Standby state (state of door closed): The Start/Pause key permanently ON in green.
- 3.4. State of washing: The Start/Pause key is permanently ON in blue.
- 3.5. State of fault: The Start/Pause key is flickering in red.
- 3.6. State of water drainage: The Start/Pause key is OFF. Both the main washing temperature display window and rinsing temperature display window show "- - , - ".

4. Display of heating:

The unit' decimal point of the main washing temperature display window is ON, indicating the heating state of main washing. OFF: Not heated The unit' decimal point of the rinsing temperature display window is ON, indicating the heating state of rinsing. OFF: Not heated

5. Selection of washing cycle time: Selection is made in standby state.

Press the function key to select the washing cycle time. If the LED1 is ON, select the washing cycle time of 90 s. If the LED2 is ON, select the washing cycle time of 120 s; If the LED3 is ON, select the washing cycle time of 180 s

After stopping, start again the machine to automatically enter into LED1 ON and select the washing cycle time of 90 s.

Operating time of washing cycle: Washing cycle = Washing time + 5s (pause time) + Rinsing time (settable).

- Water drainage: In standby state (with door closed), press the numerical digit DOWN key to enter into the state of water drainage. After the drainage is completed, the machine will be automatically switched off.
- Washing: In standby state (with door closed), press the Start/Stop key to enter into the washing state. In the washing state, press again the Start/Stop key to stop washing operation.
- 8. Press the power supply key to switch on/off.

F5 DTC Display:

In case of fault, the machine must only normally operate after troubleshooting with machine stopped.

- 1. Faulty sensor:
- 1.1. If the rinsing temperature sensor 1 (R1) is faulty, the main washing temperature display window shows "Er-". The rinsing temperature display window shows "001".
- 1.2. If the rinsing temperature sensor 2 (R2) is faulty, the main washing temperature display window shows "Er-". The rinsing temperature display window shows "002".
- 1.3. If the main washing temperature sensor (R3) is faulty, the main washing temperature display window shows "Er-". The rinsing temperature display window shows "003".

window shows "041".

- If the rinsing heating is faulty, the main washing temperature display window shows "Er-". The rinsing temperature display window shows "011".
- 3. Faulty communication:
- 3.1. If the initialized communication is faulty, the main washing temperature display window shows "Er-". The rinsing temperature display window shows "040".
- 3.2. If the ON-state communication is faulty, the main washing temperature display window shows "Er-". The rinsing temperature display

G Start

G1 Preliminary Check, Adjustment and Operation Test



Important Information!

These operations must be made by professional technician with personnel protective equipment (safety shoes, gloves, glasses, etc.), tools and proper auxiliary equipment.

G1.1 Checking Electrical and Pipelines

Before start:

- Check correct connection of machine feeder cables:
- Ensure that the power supply voltage and frequency consist with those data in Table 1;
- Check correct connection of water supply and drainage pipes (see E6 "Connection of Pump Unit");
- Ensure that all the guards and safety equipment are kept in place and effective.

G1.2 Checking Position of Water Tank Components



Important Information!

The following operations must be made with personnel protective equipment (e.g. protective gloves, etc.) and with machined stopped and cooled down.

G1.2.1 Checking Pipe Joints of Filter and Overflow Pipe

Ensure that the suction filter "2", lifting cup "3", mini filter "4" and screen "4" are correctly installed, when install the suction filter "2", need to rotate clockwise until tight. (Figure 13).

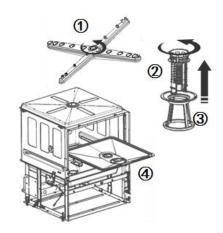


Figure 13 Filter, Overflowing Pipe and Washing Arm

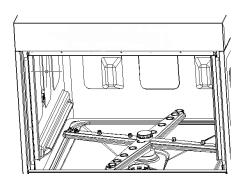


Figure 14 Checking Washing Arm

G1.2.2 Checking Arm Parts

Ensure that both upper and lower washing arm, and flushing arm are correctly installed (Figure 14).

G2 Start

- Open the water supply valve;
- Switch on the breaker "G" (electrically connected);
- Press lightly the power supply key of the machine, see Table 2 ("A"

 "Control Panel");

G3 Connection between Automatic Washer and Quick-Dry Distributor

Important Information!

The pipes within the creeping pump distributor (detergent) and the quick-dry agent distributor need regularly maintained (once or twice a year at least) or will be maintained after the machine has not been used for a long time.

Dishwasher without built-in detergent distributor (optional or configured by user) (Figure 15)

The user may use optional dosing distributor with automatic detergent distribution (Figure 15). When the machine is in every washing cycle, the "S" dose is pumped into the water tank. If it is configured by the user, follow the connection instructions of Figure 15. The "R" is the detergent inlet. The hose on the one end is connected to the "S" and that on the other end is inserted into the dose vessel.

2. Dishwasher with built-in siphon-type quick-dry agent distributor (Figure 15)

The machine is provided with siphon-type quick-dry agent distributor. The Customer may adjust the dosing distribution with knob. If the dosage distributor is configured by the Customer, follow the connection instructions as shown in Figure 15. The "T" is quick-dry distributor. The hose on the one end is connected to the "0" and that on the other end is connect to the quick-dry dose vessel.

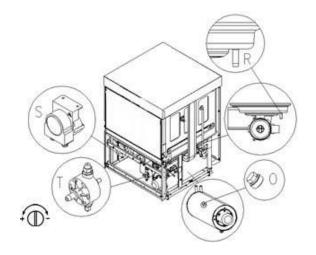


Figure 15 Connection to Automatic Detergent and Quick-Dry Agent Distributors

Power Supply Connection to Detergent Distributor and Rinse Aid Distributor

The circuit board is provided with 220-240V/2A power supply terminal for external distributor.

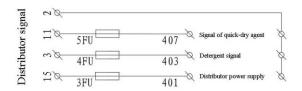


Figure 16 Connection to Power Supply of Dosage
Distributor

- 1. The detergent distributor is connected between terminals "403" and "2". These terminals are activated in each washing cycle.
- The quick-dry agent is connected between terminals "407" and "2". (They will not be connected if the built-in siphon-type distributor is used). It is only used for the distributor of creeping pump configured by the Customer. These terminals are activated in each washing cycle.

Change type of detergent/rinse-aid agent

If you want to change various types of detergent/quick-dry agent (even if from the same manufacturer), when you are connecting new detergent/quick-dry agent vessel, you must flush the sucking and pressure hoses.

Important Information!

The mixing of various detergent/quick-dry agent will cause crystallization, possibly resulting in clogged and damaged pipelines. Failure to follow this condition will void warranty and product liability.

H General Safety Rules

H1 Introduction

The machine is equipped with electrical and/or mechanical safety device protecting operator and machine itself. Therefore, the user must not remove or modify these devices.

The manufacturer will bear no responsibility for any damage resulting from modification or not using them.

H 1.1 Protection Devices Installed on Machine

H 1.1.1 Guard

The guards on the machine are:

- Fixed guards (e.g. housing, cover, and side panel): Fixed onto the machine and/or frame with screws or quickly released coupling and can only be removed or opened with tool;
- Interlocked moving guard (front panel) for accessing the inside of the machine;
- Access door of electric equipment of the machine, made of hinged plate that may be opened with tool.

If there is equipment inside the door, which become dangerous if activated or under pressure, this door cannot be opened if the machine is operating.



Important Information!

The illustrations in the Manual represent full or partial machine without guard or of which guard is removed. It is only for the purpose of explanation. Never operate the machine without guard or of which safety device is deactivated.

H1.2 Safety Signs Displayed on Machine or Near Working Area

		Designation		
Don'ts		Don't grease, lubricate,		
		maintain and adjust the		
		moving parts.		
	4	Don't remove the safety		
		device.		
		Don't extinguish fire with		
		water (indicated on		
		electrical parts)		
Danger		Danger of hands pinched!		
	<u></u>	Danger of injuries!		
	\wedge	Danger of electrical shock!		
	14	(Indicated on the electric		
		parts and with voltage		
		indicated).		



Warning!

Don't delete or alter the machine labels or make them illegible.

H₂ Stop

Remove the power supply and water lines to make the machine cannot be used if the machine is not in service.

H3 Instructions to Use and Maintenance

The machine will present possible mechanical, thermal and electrical risks.

If possible, the risks may be:

- solved directly through proper design scheme;
- or indirectly eliminated through guard, protection and safety equipment.

In any case, signal may be shown on the digital screen of the control panel.

During maintenance, several risks remain because these cannot be eliminated. They must be released through specific actions and precautions. Don't perform any check, cleaning, repair or maintenance on the moving parts.

Notify the workers of precautions in legible signs. In order to ensure the efficiency and correct operation of the machine, regular maintenance must be performed according to this manual.

In particular, check regularly that all the safety devices are correctly connected and that the power supply cables are insulated. Replace them if damaged.



Important Information!

For machine maintenance, all the proper personnel protective equipment (safety shoes, gloves, glasses, working clothes, etc.), tools, appliances and auxiliary means must be provided for professional technicians.



Warning!

Never operate the machine through removal, modification or alteration of guard and protection or safety devices.



Important Information!

Before operation, always read the Manual giving correct procedures and containing important information of safety.

H4 Foreseeable Improper Use

Improper purpose means any other purposes different from those designated in the Manual. During operation, don't allow other work or activities that are considered as improper use and may cause possible safety risk to operators and damage to the system.

Improper purposes include:

The power supply cannot be switched off by

- disconnecting the circuit breaker before adjustment, cleaning, resetting and maintenance:
- The power supply cannot be switched off by disconnecting the circuit breaker at the end of a day;
- Lack of maintenance, cleaning and regular checking of the machine;
- Structural change or modification to operating logic;
- Modify guard or safety devices without authorization;
- The operator, professional technician and maintainer fail to use personal protective equipment;
- Failure to use proper parts (for example, use equipment and ladder that are not suitable for maintenance of equipment inside the machine.
- Store combustible or flammable materials or materials whatsoever incompatible or unrelated to work near the machine.
- Abnormal machine installation (see Section E "Installation and Assembly");
- Any object or substance is found in the machine, which may be incompatible with washing, possibly cause clogged/damaged machine or human, and pollute the environment;
- Failure to meet the requirements for correct machine operation;
- Other actions causing risks that the manufacturer cannot eliminate.

H 5 Other Dangers

The machine has dangers that cannot be fully eliminated from design or use of proper protection.

The Manual will provide this dangerous information to operators and explain detailed personal protection equipment of operators.

During installation, there will be sufficient space to restrict these dangers.

To fulfill these conditions, the areas and passages around the machine must:

- have no obstacle (e.g. ladder, tool, container, box, etc.);
- be clean and dry;
- be well lit.

For complete customer information, the other risks are given as follows. These actions are incorrect. Therefore, they must be prohibited.

Application Stages:

Table 3 Other Dangers

Table 3 Other Dangers				
Potential	Explain of hazards			
risks				
Slipping or falling (U-M)	Operators may be slipped due to water accumulation on the ground.			
Scald (U-M-P)	Operators intentionally or unintentionally touch some internal parts without gloves or when the parts are hot.			
Death due to electric shock (M)	Operators touch a live part of the machine when performing maintenance if the switchboard is live. Operators lie down on the wet floor for maintenance (an electric tool is used or the machine power supply is not switched off)			
Falling from				
Falling from the height	Operators access the machine upper part using improper tool (e.g. ladder or			
(I-U-M)	climbing) for maintenance.			
Load	When using improper system or			
Turnover	accessories to move the machine or its			
(I-M)	package; when the load is unbalanced.			
Chemical	Exposure to chemical substance (detergent, brightener, scale remover,			
product	etc.) without sufficient safety measures			
(I-U-M-P)	Please refer to label description and			
	safety information on the product.			
Injury by pressing and cutting (I-U-M)	There is possibility of risk that an operator's hands are injured when the cover is closed.			

I =Installation, U =Normal use, M =Maintenance,

P = Clean

I Intended Use of Machine

I1 Correct Use

This equipment is specially designed and improved to achieve excellent performance and efficiency. It must be for the designed purpose, i.e. used for dish washing with water and special detergent. Any other purposes are considered as improper use.

12 Features of Operators on Machine

A qualified operator for normal use of machine must at least:

- have knowledge for technology and experiences of machine operation;
- be able to read and understand the contents of the Manual;
- be able to understand the drawings, signs and icons;
- have technical knowledge for following the Manual;
- knowledge of occupational health and safety regulations.

In case of obvious fault (e.g. short circuit, faulty lead of terminal block, faulty motor, worn electric cable sleeve, etc.), a qualified operator for normal use of machine must at least:

- shut down the machine by press the power supply key;
- disconnect the breaker of the equipment;
- close the water supply valve and shut off the water supply of the machine.

13 First Purpose

Without dishes, perform two cycles, flush to discharge any industrial grease remained in the water tank and pipes.

14 Daily Activation of Machine

 Ensure that the spraying arm, rinsing arm, lifting cup, filter of the machine are installed

- in place and the equipment door is closed.
- Open the water supply valve;
- Switch on the circuit breaker "G" (refer to "E7");
- Press the "Start" key for 2 s then press again for 2 s under the "ON" condition.





 The machine is being filled and heated when the indicator light of operating condition is ON in green.

15 Washing Cycle

The washing cycle includes the washing operation performed with hot water and detergent at 60° C at least and the flushing operation performed with hot water and quick-dry agent at 82° C at least.

This machine may operate in 3 modes, including "Washing Cycle 1", "Washing Cycle 2", "Washing Cycle 3", of which washing cycle times and washing temperatures are different (see time table).

Time table

Washing cycle	Washing cycle time	Main washing temperature	Rinsing temperature
Washing Cycle 1	90	55	82
Washing Cycle 2	120	60	82
Washing Cycle 3	180	65	82

If the boiler water does not reach minimum temperature needed, the washing time will be extended.

16 Operation

The machine has been finished heating and filling if the indicator light of operating condition is ON in green.



The equipment is ready for use:

- Open the equipment door.
- Fill the water tank with needed amount of detergent (for a machine without automatic distributor).
- Place the dishes on the rack in a good order, avoiding decorated bowls, dishes, and silverware in contact with other metals during washing, and avoiding residuals on the dishes become dry.

Important Information!

Removal large-size residuals on the dishes to avoid filter clogging.

- Without any detergent, the dishes are sprayed for pre-washing with cold or warm water.
- Insert the bowl basket with dirty dishes.
- Close the cover. Then select proper washing cycle and corresponding indicator light will be ON.

Washing Cycles Available:

- Washing Cycle 1

Suitable for washing glasses, tableware made of glass.



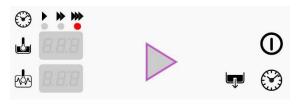
- Washing Cycle 2

Suitable washing ceramic cups/dishes, tableware made of ceramic.



- Washing Cycle 3

Suitable washing ceramic dishes/bowls, very dirty ceramic-made tableware.



 Press the "Start" key to start the washing operation and the indicator light is ON in blue.



- Press the "Start" key to stop the washing cycle. The washing operation will be stopped if the door is opened during washing operation.
- Press again the "Start" key to continue the washing cycle.
- Open the cover and take out the dish basket

with clean dishes.

- Scale removal

Remove the scale with special scale remover. It is recommended following the table for operation: It is recommended following the table for cycle operation:

Water hardness		Iness	The scale removal shall be performed approximatel y at an	For 30 cycles per day, use Cycle 2 and remove scale at an interval as
			interval as follows:	follows(*):
°f	°d	°e	Cycles	Day
5	2.5	3.5	1500	50
10	5.6	7.0	750	25
15	8.4	10.5	510	17
20	11.2	14	380	13
25	14	17.5	300	10
30	16.8	21.1	250	8

Perform operation as follows:

- Open the equipment door.
- Take out dishes.
- Add the special scale remover into the water tank.
- Operate the machine for no-load operation of washing.

Important Information!

The scale removal shall be lasted for 1 h and 30 s at least, about 5 washing cycles. During this, don't open the cover or don't wash tableware.

After scale removal, fill again with water for no-load operation of washing and drained. Then, fill with water for tableware washing.

Important Information!

The coked food attached on the dishes cannot be removed. The dishes attached with coked food shall be mechanically/chemically removed (for example, pre-washing using tap water) before they are placed into the dishwasher.

Important Information!

Use of "foamed"/non-special detergent or failure to follow the manufacturer's recommendations for detergent use will cause damage to the dishwasher and have adverse influence on washing effect.

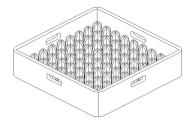
Important Information!

Failure to remove residual detergent of manual pre-washing will cause damage to the dishwasher and have adverse influence on washing effect.

Replace the water from the water tank at least once a day.

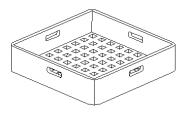
Dish basket type and loading

Punctured basket (standard)



Suitable for loading of bowl, plate, dish and other tableware.

Flat basket (optional)



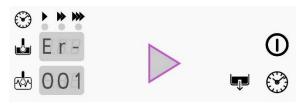
Suitable for loading of knife, fork, spoon,

chopsticks, etc.

17 Alarm

Message signal will be sent in case of general dishwasher fault.

For example



Both "Er-"and "001" are ON:

Faulty rinsing temperature sensor 1 (R1)

Troubleshooting:

- 1. Check that the resistance of the rinsing temperature sensor is normal.
- 2. Check that the resistance of the rinsing temperature sensor is connected.

(If the above conditions are normal, please call the Service Center)

Alarms of troubles, causes/remedies

Alarm fault:

Er-001	Faulty rinsing temperature sensor 1	
	(R1)	
Er-002	Faulty rinsing temperature sensor 2	
	(R2)	
Er-002	Faulty main washing temperature	
	sensor (R3)	
Er-011	Faulty heating of rinsing	
Er-040	Faulty initialized communication	
Er-041	Faulty ON-state communication	

18 End of Services and Routine Internal Cleaning

Switch off the equipment power supply before any cleaning operation.

Important Information!

Wash the stainless steel surface with warm soapy water. Never use progressive detergent or steel scraper, common steel wire wool, brush or scraping straightedge. Wipe to dry using warm cloth after wetting.

Use soft wet cloth and neutral detergent (if necessary) to clean the control panel. Never directly spray pressurized water onto the washing equipment.

To reduce pollution to the environment, please use product of which 90% components may be biodegradable to clean the equipment (external parts and internal parts to be cleaned).

Open the cover when the equipment is not in use.

19 Correct Use

Everyday finish work with dishwasher, please drain thoroughly the water tank

If the dishwasher is not in use for a long time (for example, for a month), please observe the following instructions.

- Close the water tap;
- Drain thoroughly the water tank;
- · Take out and carefully clean the filter.
- Drain thoroughly the distributor hoses and take them out of the vessel.
- Drain thoroughly the boiler.
- See I8 "End of Services and Routine Internal Cleaning" for washing operation of the external and internal parts of the machine.
- Apply a layer of wax film onto the stainless steel surface.

For re-putting into service of the machine, please follow I4 "Daily Activation of Machine".

I10 Machine Disposal

After the equipment service life is expired, ensure that the equipment will not be abandoned. The equipment must be disposed of according to the applicable regulations of the country where the machine is installed.

All the metallic parts are made of stainless steel (AISI 304) and removable. The plastic parts are attached with material symbol and designation.

The symbols on the product represent that the Equipment cannot be disposed of like household waste and that it shall be disposed of to prevent adverse influence on the environment and human health.

For recycling of this product, please contact your sales agent, dealer, and after-sales service center or waste disposal service.

I11 Troubleshooting

Dishwasher unable to be energized

- 1. Ensure that the outlet socket is live;
- 2. Ensure that the plug is plugged into the outlet socket;
- 3. Check the fuse. Replace if necessary.

Bad washing result

- Check that the suction filter is dirty and clean thoroughly it;
- 2. Ensure that the washing nozzle is clogged by residual solid food:
- Check that the initialized detergent amount or sequent addition is correct.
- 4. Too short selected washing cycle. Repeat this cycle;
- 5. Check that the water tank shall have a temperature of 55°C / 131°F at least;
- Check that the dishes are correctly placed in the dish basket.

Not dried glasses and dishes

- Check that vessel is not empty for quick-dry agent.
 Fill if necessary.
- 2. Check the dosage setting of quick-dry agent (refer to section "Connection to Distributor"
- 3. Check that the water temperature is $80-90^{\circ}$ C.

Condensation on the glass

- Check that vessel is not empty for quick-dry agent.
 Fill if necessary.
- 2. Check the dosage setting of quick-dry agent (refer to section "Connection to Distributor"
- Remove the glass rack immediately after the end of the cycle.

Stain on the glass

1. Use only special "foamless" detergent for dishwasher.

Too much foam in the water tank

- Check that the washing water temperature is not less than 55°C / 131°F.
- Check that the dosage of the detergent distributor is proper.
- Ensure that improper detergent is not used for cleaning the water tank. Drain the water tank and flush thoroughly before new washing cycle;

4. If foamed detergent is used, drain the water tank and filled with water until the foam is disappeared.

Stain or spot on the glass

 Reduce the dosage of quick-dry agent (refer to section "Connection to Distributor"

Slow rotation of washing or rinsing arm

- Remove and thorough clean the washing arm;
- 2. Clean the suction filter of the washing pump;
- 3. Check that the water pressure is 2 bar.

