

# Warewashing green&clean multi-rinse Rack Type, Energy Saving Device, ZERO LIME Device, electric, 150r/h, L>R

ITEM #	
MODEL #	
NIAN (F	
NAME #	
SIS #	
AIA #	



### 535017 (EMR15NELEW)

Multi Rinse Rack Type
Dishwasher, 150 racks/hour,
electric, Left>Right, Energy
Saving Device, constant
rinse, self cleaning, ZERO
LIME Device, CLEAR BLUE
Filtering System, WASHSAFE CONTROL, touch
screen, variable speeds,
insulated doors, WRAS/
Watermark a

# **Short Form Specification**

## Item No.

Unit to be multi-rinse rack type dishwasher. Operating direction left to right or right to left. Featured built-in Energy Saving Device (ESD) recovers the heat inside the machine to heat up incoming cold water to the boiler. ZERO LIME device automatically de-scales the whole hydraulic circuit and all washing & rinsing chambers. Multi-rinse area with built-in Wash-Safe Control system and rinse booster pump augrantees constant rinse pressure, CLEAR BLUE filtering system removes majority of soil from the wash water to ensure clean water for long time. Maximum Water Contact (MWC) wash arms are positioned along the full length of the wash tank. Powerful wash pump and specially designed wash spray arms augrantee cleaning. Washing is done with water circulating at  $55-65^{\circ}$ C. Final rinsing is done with clean water heated up to 85°C that is re-used in several phases in pre-rinse at around 70°C. Multi-rinse with double rinse tanks and multi rinse arms re-uses rinsing water several times to ensure hygiene on washed wares. Constant 0.4 liter/rack rinse water consumption of cold water in any conveyor speed. Three conveyor speeds are selectable by the operator, one for maximum capacity, one compliant to DIN 10510 and one certified according to NSF/ANSI 3. Intuitive touch screen control panel provides easy communication on different levels. Large counter-balance door in all tanks has heat and noise insulation with easy internal access. Easy drain of water done through control panel. Standard end of the day self cleaning cycle and sanitation cycle both including internal side of the door. Modularity allows split delivery, customization and upgrade on-site and over time.

### APPROVAL:

## **Main Features**

- CLEAR BLUE filtering system removes soil from the wash water providing cleaner water and highly active detergent thus ensuring better washing performance and lower running costs.
- Built-in WASH-SAFE CONTROL system raises water temperature to 85°C to sanitize the rinse water. No external boiler is required. Built-in air break and rinse booster pump ensure constant temperature and pressure throughout the rinsing cycle regardless of the inlet water condition.
- Deep drawn pressed wash tank with fully rounded corners, sloped towards the drain to prevent dirt build up provides fast drainage in only a few minutes. Pressed wash tank with no welded points offer a guaranteed water tight solution.
- Three conveyor speeds can be selected through the control panel by the operator and customized on site
- Maximum Water Contact (MWC) wash arms are positioned along the full length of the wash tank.
- Multi-rinse arms in combination with double rinse tanks re-use final rinsing water in several phases to ensure hygiene and complete detergent removal on the washed wares.
- Built-in drain valve in the tanks allows automatic dump and fill to refresh the water in the tank without any interruption of the washing process.
- Intuitive touch screen control panel features userfriendly display to easily operate the machine and to monitor machine status. Three different levels of interaction are available each show relevant messages and information to the operator, the general maintenance staff and the authorized service partners.
- Automatic drain, clean and sanitize cycles featured as standard. The internal chambers, including the internal doors are completely cleaned or sanitized avoiding bacteria proliferation for maximum hygiene and reducing manual work/ time for operator.
- Self-draining wash pumps provide maximum hygiene and all wash and rinse zones drain automatically at the push of a button.
- All internal components: wash and rinse arms, tank filters, curtains can be easily removed for cleaning.
- IP25 protection against water jets, solid objects and small animals (larger than 6 mm).
- Large counter balanced inspection doors allow unrestricted all-round access to the wash and rinse area. Door is insulated with injected foam. This adds strength as well as reduces noise and heat loss
- Adjustable feet for full access underneath the machine for cleaning.
- Splashhood at the entrance avoids water spilling outside the machine.
- Unit equipped with USB port making it simple to read data such as machine identification, counters and consumption, components, devices and alarm logs. Machine parameters can be uploaded and downloaded and firmware updated.
- Automatic back-up mode is activated when a







failure occurs. Guided troubleshooting for fast fixes including 300 precises notifications and 23 easy-to-follow Included Accessories processes.

## Construction

- Modularity design allows the machine not only be disassembled for delivery and re-assembled at customer's **Optional Accessories** site, but also to be customized and upgraded on-site and 

  Medium hot air blower zone without
- All main components made in heavy duty anti-corrosive 304 type stainless steel: external front, side panels and internal chambers, wash and rinse arms, doors and rack transportation system.
- Dishwasher structure is held together with a solid 50 x 50 mm stainless steel frame to provide long-term sturdiness.
- All electric components are put in one IP65 central box Large pre-wash zone for green&clean PNC 535037 isolated from water and steam to ensure high reliability.
- External pre-arrangement for inlet water, drain water, detergent & rinse aid connections for fast and easy installation on both sides of the unit.
- The unit is built on modularity concept for easy to add prewash, wash and up to 2 dryer modules onsite.
- Table-to-table length, 1780mm.

# Sustainability



- ZERO LIME Device as a fully automatic cycle ensures total Connection bracket for plain scale removal from the boiler, the hydraulic circuit, the washing chamber and the rinsing chamber allowing ultimate performances and lower energy consumption thanks to highly efficient heating elements.
- Built-in Energy Saving Device (ESD) utilizes the hot steam generated by the machine in the rinse and wash tanks to heat up incoming cold water up to 55°C before entering the boiler, thus saving energy.
- Multi-rinse technology guarantees rinse water consumption of 0.4 liters/rack regardless of the conveyor speed to ensure low energy, water, detergent and rinse aid consumption.
- Maximum capacity per hour of 150 racks easy to switch to
   Kit water meter DIN 10510 or NSF ANSI 3 compliant speed.
- All chambers without internal pipes and therefore no hidden dirt traps.
- Auto-start/stop equipped in different zones ensures that the zone runs only when a rack is passing through it. This reduces water, energy, chemical consumption and noise.

- 1 of Kit splash hood for rack type with PNC 865280
- 1 of Kit delime for rack type PNC 865282

- PNC 534056 door for green&clean Multi Rinse Rack Type Dishwasher PNC 535036 • Medium pre-wash zone for
- green&clean Multi Rinse Rack Type Dishwasher with Energy Saving Device, ZERO LIME Device, WRAS/ Watermark approval
- Multi Rinse Rack Type Dishwasher with Energy Saving Device, ZERO LIME Device, WRAS/Watermark approval

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PNC 865232

PNC 865235

PNC 865291

- Medium drying zone with door for green&clean Multi Rinse Rack Type PNC 535038 Dishwasher
- Kit to adapt motorized table with green&clean Rack Type - Europe, UK, M.E., Africa, Asia, Latin America, Oceania
- undershelf and grid undershelf (to be used if roller conveyor is connected directly to Rack Type Dishwasher with splash hood)
- PNC 865253 Inclined extension table for roller conveyor
- Inclined extension table for splash PNC 865254 hood
- Kit splash hood for rack type with ESD PNC 865280 Kit water softener for Rack Type PNC 865284
- dishwasher PNC 865286
- Kit electronic connection for PNC 865290 motorized table and remote pre-wash module
- Kit of splash panel to change on the splash hood for 90° and 180° curve
- Lateral panel (to be used instead of PNC 865489 splash hood on Rack Type with ESD)
- HACCP cable connection for Rack PNC 865490 Type dishwasher
- Kit water softener and reverse osmosis PNC 865494 for Rack Type Dishwasher
- Ethernet board (NIU-LAN) for PNC 922696 green&clean Rack Type Dishwashers



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## **Electric**

Supply voltage:

**535017 (EMRI5NELEW)** 380-415 V/3N ph/50 Hz

**Default Installed Power:** 27.8 kW **Electrical power min:** 20.8 kW

When the machine runs at DIN 10510 compliant speed.

**Energy consumption:** 24.7 kWh

At average working conditions.

Wash tank heating

elements: 14 kW

Triple tank heating

elements: 7 kW
Boiler heating elements: 3.5 kW
Wash pump size: 1.5 kW

Rinse pump size (final, duo,

triple): 0.55 / 0.32 / 0.32 kW

### Water:

Inlet water line size: G 3/4"
Inlet cold water line size: G 3/4"
Drain line size: 50mm
Inlet water supply pressure: 1.5-6 bar

Inlet water supply temperature (wash and

rinse): 5 - 65°C

The higher the temperature, the faster the warm-up.

Recommended temperature: 50°C.

Inlet water supply

temperature (rinse and pre-

**wash):** 5 - 30 °C

Inlet water supply hardness: 0-14 °fH / 0-8 °dH

Flow rate of wash pump: 500 l/h

When below 7°fH/4°dH special detergent and rinse aid

are needed.

Peak rate of drain flow:1.8 l/sWash tank size:70 lDuo rinse tank size:20 lTriple rinse tank size:20 l

Rinse water consumption:

# **Key Information:**

Productivity per hour (max.

speed): 150 racks/2700dishes

Productivity per hour (DIN

compliant speed):

114 racks/2052 dishes

Productivity per hour (NSF

compliant speed):

96 racks/1728 dishes

Wash Temperature: 55 - 65 °C

Duo rinse temperature: 75-80 °C

Final rinse temperature: 85 °C

Triple rinse temperature: 70 - 75 °C

External dimensions, Width: 2080 mm

External dimensions, Depth: 895 mm

For transportation purpose only, the depth can be reduced to 795mm by removing the control box and the

door handles.

External dimensions, Height: 1785 mm
Height with door open: 2095 mm
Charging hole size (width): 530 mm
Charging hole size (height): 490 mm
Net weight: 395 kg
Shipping weight: 461 kg

Shipping height:1970 mmShipping width:1050 mmShipping depth:2570 mmShipping volume:5.32 m³Reference norm used to measure the noise:

IEC60335-2-58 annex AA.

Table to table distance: 2080 mm

### Air Emission:

Air flow (top, exit):  $145 / 145 \text{ m}^3/\text{h}$ Air temperature: 45 - 45 °CAir humidity (top, exit): 100 / 100 % r.h.

The data is measured at exhaust points at 25°C and 60% r.h. ambient conditions, 18°C inlet water temperature and

refer only to the machine.

Latent heat: 12300 W Sensible heat: 5000 W

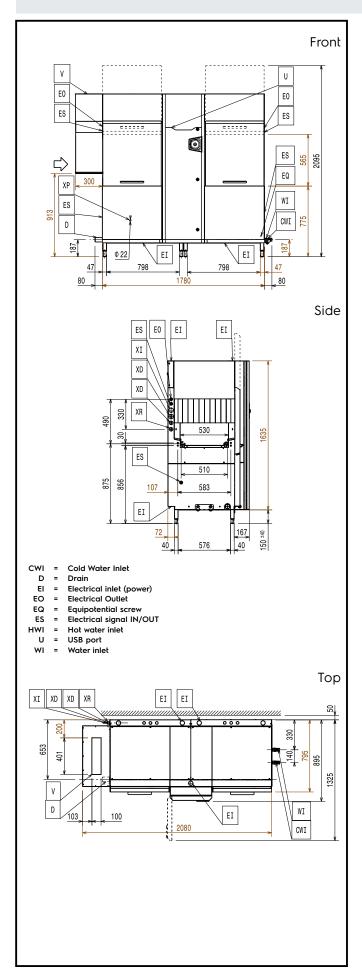
This model requires a ventilation hood. Please refer to the attached Recommended Exhaust Hood Design.

# Sustainability

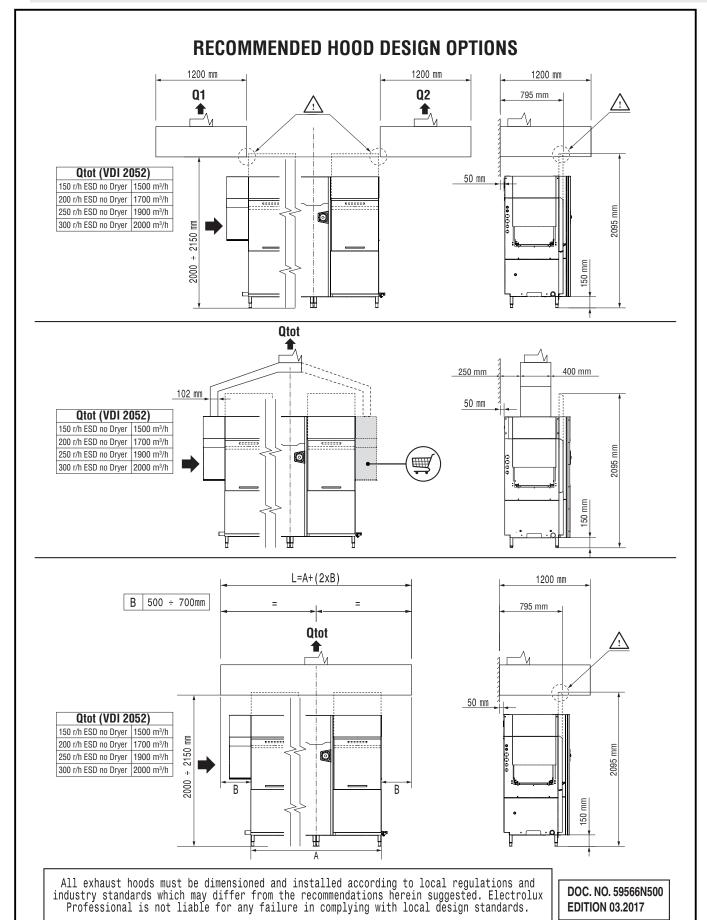
Rinse water consumption at

max. speed: 60 l/h
Noise level: <62 dBA



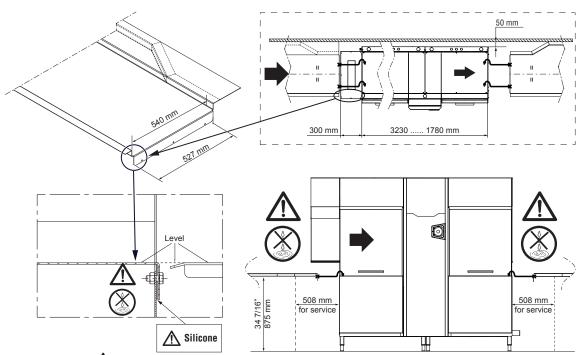




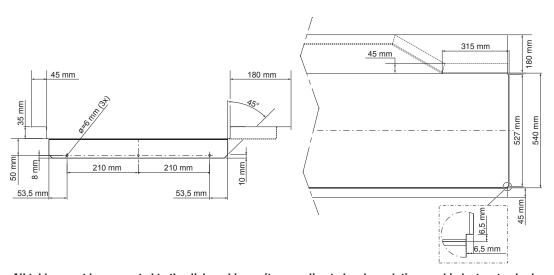




# RECOMMENDED TABLE CONNECTION



Apply silicone between the machine and the table and make sure that there are not any water leakages.



All tables must be connected to the dishwashing units according to local regulations and industry standards which may differ from the recommendations herein suggested. Electrolux Professional is not liable for any failure in complying with local design standards.

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