

# EQUIPMENT FOR THE STERILIZATION OF THE RESINS MOD. CL180

# **INSTRUCTIONS MANUAL**

## WARNING!

<u>The equipment must be used only for the utilization for which they have been</u> <u>designed, as shown in the technical documentation.</u> <u>Read carefully this leaflet until the end before starting any operation.</u> <u>Proceed strictly according to all directions included in this manual.</u>

CL 180 is manufactured for the sterilization of the resins for softening of water supplied from municipalities or from well.

#### ANY OTHER APPLICATIONS OF THE EQUIPMENT DIFFERENT THAN THE MENTIONED ONES IS MADE UNDER THE ONLY RESPONSIBILITY OF THE USER.

For any assistance concerning the installations, maintenance or utilization of the equipment apply the NOBEL Service Center closest to you or directly :

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## <u>Annex</u>

- dosing pump AXL602 manual
- wiring diagram

# 1. Safety

## 1.1. General

The equipment has been designed and constructed according to D.P.R. n° 459 of 24th July 1996 (regulation for accomplishment of Norms 89/392/CEE, 91/368/CEE, 93/44/CEE and 93/68/CEE regarding the unification of States members laws in so far as machines are concerned).

It has been designed and constructed according to European Norms UNI EN 292-1, UNI EN 292-2, UNI EN 292-2/A1, CEI EN 60439-1, CEI EN 60 204-1.

Only authorized and skilled personnel will be allowed to carry out installation, start up as well as routine and planned maintenance.

### 1.2. Hydraulics

All operations must be performed by and/or under direct supervision of skilled and authorized operators, using proper tools and personal protection devices if required (CE marked).

Before any operation of taking out pipes or part of hydraulic system, it is required to release the pressure inside and empty the part of the system.

#### 1.3. Electrical

Before starting any operation on electrical devices, be sure that main power supply is OFF. All operations must be performed by skilled and authorized operators.

In case of liquid leakage, switch off the main power supply before operate. Before the switching ON, be sure all the parts of the system are perfectly dry. Check that the available electrical power is correct, before connection. Do not make preliminary wiring connections.

	t = °C	t = °F	humidity rel.	notes
<ul> <li>closed rooms</li> </ul>	5÷45	41÷113	5÷95% without condensate	
<ul> <li>open space</li> </ul>	5÷45	41÷113	5÷95% without condensate	protect from sun-light and rain
<ul> <li>transport</li> </ul>	5÷45	41÷113	5÷95% without condensate	protect from sun-light and rain
<ul> <li>installation</li> </ul>	5÷45	41÷113	5÷95% without condensate	protect from sun-light and rain

#### 1.4. How to store, delivery and install

# 2. Principles of working

The equipment consists of a dosing pump that automatically adds sodium hypochlorite inside the brine tank during the regeneration.

# 3. Technical characteristics

power supply	V ph/Hz W	230 1/50 460
dimensions	lxwxh	400 x 400 x 900
weight	kg	8

### 4. Installation

#### 4.1. How to remove packaging

Open the packagin and withdraw carefully the equipment. Keep the cards and everything contained inside the packaging.

#### 4.2. Placing and hydraulic connection

- Place the tank, with pump already mounted, close to the brine tank of the softener.
- Insert the delivery tubing of the dosing pump inside the protection well of the brine tank, allowing that the chemical injected will be addicted directly to the brine.

#### 4.3. Electrical wiring connections

- Connect the terminals 3 and 4 of the control panel to the terminals inside the programmer of the softener :
  - ♦ C-NC for programmers type S, SV, T, AQUA TIMER
  - ♦ C-NA for programmers type AQUA CUBIC
  - ♦ Q1 for programmers of softeners serie AM/D and AM/D DUPLEX

For the connection, use a proper sized wire, according to the trasmitted signal (24V~, 80 mA)

• Connect the power feed wire of the control panel to a 230V, 50Hz, 460 W socket.

#### NOTES for programmers S, SV, T, AQUA TIMER, AQUA CUBIC only :

- the terminals are available by removing the frontal cover, by unscrewing the 4 fixing screws
- the signal of running regeneration (free voltage contact) and the related terminals are available only upon request; hence CL180 unit can be connected to any softener, only by a special arrangement of its own programmer.
- whether it is required to control CL180 unit and, in the same time, to use the signal of running regeneration for other purpose, it is possible to use the second contact of relais R inside the panel of CL180. Run the connection directly to the terminals of the base of the relais.

# 5. Adjustment

- Prepare, inside the tank of CL180, a solution with 5 liters of sodium hypochlorite (commonly available ~ 15%) and 70 liters of water.
- Adjust the flow of the pump, according to the volume of the resins of softener, as follows :

AM 2700 (resins	lt 450)	dosing adjustement 11 %.
AM 3300 (resins	lt 550)	dosing adjustement 14 %.
AM 3600 (resins	lt 600)	dosing adjustement 15 %.
AM 4200 (resins	lt 700)	dosing adjustement 17 %.
AM 4500 (resins	lt 750)	dosing adjustement 19 %.
AM 5400 (resins	lt 900)	dosing adjustement 23 %.
AM 6600 (resins	lt 1100)	dosing adjustement 28 %.
AM 7200 (resins	lt 1200)	dosing adjustement 30 %.

For softener with larger quantity of resins, adjust the pump at higher value (%) keeping the same proportion chemical/resins according to the shown values.

