Product information

Electrolysis systems

Membrano EC 16 tank

Art. no.: 0531-001-00

Description

Membrano EC tank

Membrane electrolysis system for an electrochemical production of a highly effective disinfection solution with long-term stability.

The disinfection solution is stored in a small intermediate tank, which is used to cover peaks in demand. It is optionally possible to use a larger product tank.

Very simple and clear plant technology.

The chlorine solution is produced continuously and is controlled by the level in the selected product tank. The cathode water flow is controlled, which ensures a constant product concentration. Dosing via an on-site dosing pump, which is controlled via the measuring technology that must be provided by the customer. This ensures a demand-based production of the disinfectant solution. There is no need to install an addition energy-intensive injector with motive water circuit.

With this type of system it is also possible to supply two or more pool systems with one electrolysis system.

There is a minor carryover of salt into the disinfection solution.

The compact system technology and extensive pre-piping and electrical wiring reduce the installation/commissioning in the plant room to a minimum.

Membrano EC control technology

Membrano EC control with plain text display of all operating conditions and control states, including setpoint and actual values of system capacity, flow rates, filling level and operating messages. The control system is based on dinotec BUS technology. The control system records the actuating variables of an on-site measuring system and then controls system output and addition of lye accordingly.

The system can be integrated into the house network via Wi-Fi. When using the dinoAccess app the system can be viewed at any time on your smartphone or tablet.

Membrano EC tank process control:

The Membrano EC tank has as integrated activated carbon filtration and reverse osmosis for softening the process water. The brine tank is automatically refilled with softened water during the operating phase. The refilling is monitored.

Brine and current values are proportionally controlled via the dinotec Marathon technology; the permeate inflow is controlled and monitored in addition.

The system is controlled via the switch-on and switch-off points of the product tank. The level is measured hydropneumatically.

Technical data

Process technology	
Power consumption approx. (W)	100
Production output approx. (g/Cl_2/h)	16
Product concentration approx. (g/Cl_2/h)	6.5
System output	100% (constantly)
Max. daily output [g/d]	384
Salt consumption approx. ([g/NaCl/h)	38
Salt carry-over into product approx. (g/NaCl/h)	21
Supply voltage (V/Hz)	230V/50Hz
Fuse right/left (A)	6.3A / 0.400
Transport weight (kg)	approx. 25
Space requirements wall mounting plate (mm)	(h x w x d) 1030 x 900 x 250
Space required for installation (mm)	ca. 500 x 1300
Product reserve (l)	1 l (optionally extendable)
Softening plant	Reverse osmosis (integrated on mounting plate)
Power module	integrated on mounting plate

Operating conditions	
Connected load	0.3 kVA
Process water	Water quality according to the European Drinking Water Ordinance
Drinking water connection	1/2“
Min./max. room temperature (°C)	10 - 32
Process water inlet temperature (°C)	10 - 27
Process water initial pressure (bar)	2.5 - 3
System pressure after pressure reducer	approx. 2 bar
Hydrogen discharge	min. d25 continuously rising to the outside
Ventilation of installation room	Air exchange rate min. 2m³/h per m³ room volume (recommended)
Storage temperatures (°C)	5 - 40
Max. humidity (%)	90%, non-condensing
Separate technical room	No
Interfaces	Wi-Fi / dinoAccess
Recommended resources	dinosolit salt quality (approved according to the EC Directive on Biocides)
Drain	min. DN40

All information subject to error and technical change.

Application

Used for an efficient production of a pH-neutral, highly effective disinfection solution to be added directly to the swimming pool circuit.

Safety information

Local public utilities can stipulate the installation of a backflow preventer, air valve or pipe separator in front of the fresh water connection for the membrane cell electrolysis system.

It is mandatory to use salt to DIN EN 16370 (quality 1) to operate the system. We recommend the use of dinosolit tablet salt, which has been approved according to the EU Biocidal Product Regulation.

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