



PROTEGRA CS® RO/EDI REVERSE OSMOSIS SYSTEM

CONSISTENTLY HIGH WATER QUALITY WITHOUT THE USE OF CHEMICALS

The reverse osmosis Protegra CS® RO/EDI systems are designed to serve the need for high volumes of desalinated water. They produce pure water for many applications. The combination of the Protegra CS RO with the EDI-cell significantly increases the pure water quality.

The compact design with high-quality components and intelligent control places great emphasis on cost-effectiveness. The plant systems are characterized by a consistent pure water quality. Conductivities of $< 0.1 \mu\text{S}/\text{cm}$ in single-phase and $< 0.07 \mu\text{S}/\text{cm}$ in dual-phase systems are achieved. The TOC content is $< 30 \text{ ppb}$.

Germ reduction is achieved by means of the special arrangement of the separate bed process and a related pH-value shift into the acidic range, preventing the growth of bacteria in work spaces. No system operates more efficiently and economically, since the EDI-cell has a loss rate of only 10%. Low operating costs and a minimal maintenance outlay are features of this system.

These systems can be individually equipped with additional options such as different tank sizes and pressure boosting systems. They represent the core element in central water treatment plants in buildings and are used with the options necessary for a ring main operation. All systems have a RS 232 interface.

Degassing systems to reduce the CO_2 content in feed water are available – they ensure that the system remains within feed water specifications and protect the EDI-cell.

Benefits

- Easy plug & play installation (Scope of supply includes consumables)
- Compact service-friendly design, operable from all sides
- Dust and splash proof
- RS 232 interface
- Service/maintenance report
- EDI module with separate cation and anion resin chambers
- Made in Germany

Typical Applications

- Feed for ultrapure water systems, laboratory washing machines, autoclaves, environmental chambers
- General chemistry
- Buffer preparation
- Photometry
- Spectrophotometry
- Protein electrophoreses
- Microbiological media preparation
- Electrophoreses

SPECIFICATIONS PROTEGRA CS RO/EDI, EDI-CELL SINGLE STAGE MODULE

		Protegra CS RO/ EDI 120	Protegra CS RO/EDI 260	Protegra CS RO/EDI 500	Protegra CS RO/ EDI 750
Delivery flow rate	l/h	120	260	500	750
Pure water quality	µS/cm	< 0.5	< 0.5	< 0.5	< 0.5
Typical pure water quality	µS/cm	< 0.1	< 0.1	< 0.1	< 0.1
Max. yield	%	75	75	75	75
Max. working pressure	bar	14	14	14	14
Power consumption	kW/h	0.6	0.75	1.5	1.7
Power supply	V/Hz	230 / 50	230 / 50	400 / 50	400 / 50
Dimensions (HxWxD)	mm	1650 x 600 x 600		1650 x 600 x 750	
Shipping weight	kg	151	165	237	291
Catalog number		W3T200007	W3T199823	W3T200009	W3T198152

SPECIFICATIONS PROTEGRA CS RO/EDI, EDI-CELL TWIN STAGE MODULE

		Protegra CS RO/ EDI 120	Protegra CS RO/EDI 260	Protegra CS RO/EDI 500	Protegra CS RO/ EDI 750
Delivery flow rate	l/h	120	260	500	750
Pure water quality	µS/cm	< 0.1	< 0.1	< 0.1	< 0.1
Typical pure water quality	µS/cm	< 0.07	< 0.07	< 0.07	< 0.07
Max. yield	%	75	75	75	75
Max. working pressure	bar	14	14	14	14
Power consumption	kW/h	0.6	0.75	1.5	1.7
Power supply	V/Hz	230 / 50	230 / 50	400 / 50	400 / 50
Dimensions (HxWxD)	mm	1650 x 600 x 600		1650 x 600 x 750	
Shipping weight	kg	155	170	290	370
Catalog number		W3T199822	W3T199619	W3T200008	W3T197525

SPECIFICATIONS PROTEGRA CS RO/EDI

		Protegra CS RO/EDI 120	Protegra CS RO/EDI 260	Protegra CS RO/ EDI 500	Protegra CS RO/EDI 750
Pressure	bar	1 - 5	1 - 5	1 - 5	1 - 5
Conductivity	µS/cm	2000*	2000*	2000*	2000*
Silt density index	SDI	< 12*	< 12*	< 12*	< 12*
Free chlorine	mg/l	< 0.5*	< 0.5*	< 0.5*	< 0.5*
Total iron	mg/l	< 0.1	< 0.1	< 0.1	< 0.1
SiO ₂ **	mg/l	< 10	< 10	< 10	< 10
CO ₂ **	mg/l	< 15*	< 15*	< 15*	< 15*
Temperature	°C	5 - 35	5 - 35	5 - 35	5 - 35
Hardness	°dH	0	0	0	0

* with a pre-filter

** in total not larger than 20 mg/l



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