

# **CHLORINE DIOXIDE** PRODUCT (CIO<sub>2</sub>)

CDP



M005-61 - Rev. 01 - 12/2010

## TECHNICAL DATA SHEET

#### **GENERAL INFORMATION**

The CDP product has been designed to produce and dose chlorine dioxide for water disinfection purposes. Chlorine dioxide is an water disinfectant extremely efficient against all types of germs and pathogens, as for example Legionella bacteria. It also destroys biofilms, eliminating the nourishment for microorganisms and preventing their formation. Moreover, its disinfection strength is not affected by water pH level. This system is used in many different applications, e.g. water purification and sewage systems, water disinfection in sanitary plants and food industry, treatment of process water, boilers and cooling towers. The CDP product produces chlorine dioxide (ClO2) in aqueous solution from the chemical reaction between hydrochloric acid (HCI) and sodium chlorite (NaClO2). Chlorine dioxide solution can be dosed directly in-line or in a controlled mode. For controlled dosage the system is supplied with storage tank and up to three external dosing pumps, which are activated by an external consent. The whole system is managed by a PLC equipped with a touch-screen display, for simple and intuitive operations. The user can configure, start and stop the system, choose the working mode and alarm/error management.

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#### TECHNICAL DATA

Production rate	4 to 10, 20 or 40 g/h ClO <sub>2</sub> (depending on model)
CIO <sub>2</sub> solution concentration	2000 ppm
Dilution water	particle-free, noncorrosive, drinking water, max 3 bar e 30°C, connection ¾" GAS threaded
External dosing pump rate	4 I/h to 10 bar
CIO <sub>2</sub> storage tank	capacity of 0.85 litre
CIO <sub>2</sub> in-line injection outlet	pipe connection 10/12, max pressure 5 bar
Dimensions	approx. L 1040 x h 650 x 250 mm (model with tank and external dosing pumps) approx. L 850 x h 650 x 250 mm (in-line model)
Weight	approx. 30 to 40 kg, depending on model



#### **Environment**

Storage temperature	0 to 50 °C
Working temperature	10 to 40 °C
Dilution water temperature	10 to 30 °C
Process water temperature	0 to 60 °C
RH	max. 90% noncondensing
Protection rate	IP56 (electrical cabin, main switch, PLC display, S508 controller) IP65 (dosing pumps)
Recommendations	protect from direct sunlight and frost

### **Electrical Characteristics**

Power supply	230 Vac ±10%, 50/60 Hz	
Power consumption	200 VA max	
Electrical protections	ELCB ΔI=30 mA; 3.15 A fuse on the 24 Vdc secondary	
Display	touch-screen, colour, 5.7" QVGA LCD	
Analogue input	2 analogue inputs (4-20 mA) for proportional automatic working mode and gas sensor	
Digital input	1 input for automatic working mode management 3 inputs for external dosing pumps (model with tank)	
Internal digital input	3 inputs for controlling the level sensors of reagent dosing pumps 3 inputs for flow sensors of reagent dosing pumps 2 inputs for tank min. and max level sensors (model with tank)	
Digital output	1 alarm relay, contact type, max 250 Vac (software settings)	
Internal digital output	6 outputs for driving dosing pump magnets (3 reagent pumps and 3 external pumps)	
Tele-control serial output	RJ45, LAN connection for control from remote PC	