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ELEKTROGERÄTEBAU GMBH

AQUACON CL2/CHLOR

Process analyzers for the determination of Chlorine

The AQUACON CL2 and AQUACON CHLOR process photometers can be used for the monitoring and control of the chlorine concentration in water. Measurement principle is the photometric determination of chlorine by dosing a special reagent based on N,N-Diethyl-p-phenylendiaminsulfat (DPD) to a buffered water sample. The wine-red colour formed as a result of the reaction is detected by a monochromatic photometric detection system. The AQUACON CL2 determines the concentration of free chlorine or of total chlorine. The AQUACON CHLOR determines the concentration of free chlorine and of total/bounded chlorine. The analyzers consist of a control unit with touchscreen and an analysis unit with measuring chamber, valve, dosing pumps and all required tube connections. The control unit includes a microprocessor which controls the automatic measurement incl. sampling, rinsing, reagent dosing and surveillance of the photodetection system. Main applications for the photometers are the monitoring of the chlorine concentration in drinking water, cooling water and swimming pool water.

Your advantages:

- ⇒ Automatic measurement incl. self test and drift compensation
- ⇒ Easy operation via touchscreen
- ⇒ Adjustable limit value and alarm value
- ⇒ Programmable analog output (0/4-20 mA, AQUACON CHLOR has 2 analog outputs)
- ⇒ Optional: USB port for easy data storage
- ⇒ Optional: data transfer via wireless network
- ⇒ Adjustable break time between two analysis
- ⇒ External start/stop of an analysis possible
- ⇒ No external calibration required
- ⇒ External plug connections (IP65) for alarm relay, limit relay, analysis relay, external start/stop, analog output 0/4-20 mA
- ⇒ Multi range power supply (110–230 Volt, 50–60 Hz)
- ⇒ Including polycarbonate wall cabinet

Example: AQUACON CHLOR

Order informations:

AQUACON CL2	0,02 – 2,00 ppm Cl_2	Order No. 693 2725 01
AQUACON CHLOR	0,02 – 2,00 ppm Cl_2	Order No. 693 2725 02
Reagent CL2-R1001	(250 ml)	Order No. 101 2725 01
Reagent CL2-R1002	(250 ml)	Order No. 102 2725 01
Reagent CL2-R1003	(250 ml)	Order No. 103 2725 01

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Technical Data

Current output	1 x 0/4-20 mA, max. load 500 ohm (CL2) 2 x 0/4-20 mA, max. load 500 ohm (CHLOR)
Display	240 x 128 dots, touchscreen
Relays	1 x Alarm, potential-free 230 V/50 Hz, 3A 1 x Limit, potential-free 230 V/50 Hz, 3A (CL2) 2 x Limit, potential-free 230 V/50 Hz, 3A (CHLOR) 1 x Analysis state, potential-free 230 V/50 Hz, 3A
External Switching	potential-free contact, 18 V DC, ca. 4 mA
Power Supply	110 - 230 V -- 50/ 60 Hz
Power Consumption	approx. 16 VA
Dimensions	640 x 315 x 190 mm (H x W x D)
Protection	IP 65 (transmitter housing)
Connections	Plugs with circular connection 1,5 mm^2
Temperature	5° to 45°C, at consumption of reagents within 6 months

Since it is company policy to continuously improve its product range, we reserve the right to make changes in the product design without notification to its users.

Specifications

Parameter	Chlorine (free and or total/bounded)	
Description	Automatic microprocessor controlled analyzer for the photometric determination of Chlorine	
Typical Applications	Control of chlorination plants (drinking water, pools, cooling water)	
Analysis Method:	Photometric determination of Chlorine (DPD method)	
Analyzer type	AQUACON CL2	AQUACON CHLOR
Measuring Range	0,02 – 2,00 ppm Cl_2 (free or total)	0,02 – 2,00 ppm Cl_2 (free) 0,02 – 2,00 ppm Cl_2 (total or bounded)
Resolution	0,01 ppm	
Accuracy	2 % of end value	
Reproducibility	1 % of end value	
Zero-point Stability	automatic adjustment	
Number of Samples	1	
Sample		
Operating Pressure	0,1 - 10 bar	
Temperature	5 - 30 °C	
Sample Volume	25 ml per analysis (excluding rinsing)	
Sample Condition	clear, filtrated	
Chemical Demands	pH 4-8	
Drain	pressure free into open drain	
Reagents		
Number	2	3
Storage Temp.	5 – 25°C	5 – 25°C
Usage/analysis	appr. 0,27 ml / each reagent	appr. 0,27 ml / each reagent
Reagent volume	250 ml / 250 ml	250 ml / 250 ml / 250 ml
Suitable for	appr. 925 analysis	appr. 925 analysis
Analysis		
Cycle (approx.)	3 - 5 min (excluding flushing time)	
Sample interval	1 – 99 min or external start/stop	