AQUALABO
CONTRÔLE

RANGE S200

WATER CONTROL SYSTEM
FOR OZONE AND PH MEASUREMENT
COMPLETE SET OF MEASURE AND CONTROL

MAIN APPLICATION AREAS

- Chemical and process technology
- Water and Waste water treatment
- Cooling water treatment
- Drinking water and beverage

ADVANTAGES OF THE MEASURING SYSTEM

- The principle of measure is based on a potentiostatic sensor, without reagent or consumable, on a closed-loop so reducing the costs of functioning and avoiding the loss of online water.
- The whole WCS for Ozone includes all necessary for the measure of Ozone concentration : electrode potentiostatic indestructible for the measure of Ozone, electrode pH, measure and compensation in flow, room of opaque measure, closed-loop …
- Function of automatic auto-cleaning by electrolysis allowing to dissolve the firm deposits: limestone or fats.

ADVANTAGES OF THE CONTROLLER S200

- Access to the menus of programming secured via password (3 user's levels).
- Controller possessing numerous possibilities of piloting: 2 digital output for the control of the frequency of functioning of dosing pump, 3 relay output potential free NO contacts., 2 analog output 0/4-20 mA, 2 separately adjustable PI..controllers.
- Temperature compensation manually or by using a Pt100 or Pt1000
- Calibration of the pH with automatic detection of the value of the buffer solution..
- Calibration of Ozone with DPD method in single point.

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ADVANTAGES

- Accurate measurement of Ozone concentration
- Measured parameters : • Ozone : 0-1.000 mg/L or 0-5.00 mg/L • pH : -2.00 to +16.00 pH • Temperature : -30.00 to +140.00 °C
- Complete system plug and play
- Self-cleaning of the system

TECHNICAL CHARACTERISTICS SENSOR

Measured parameter	
Measuring principle Free Chlorine **Measuring principle pH**	Potentiostatic with one gold ring, Reference used on the pH probe Combined electrode reference / measure
Measuring range	Ozone : 0-1.000 mg/L or 0-5.00 mg/L, pH : -2.00 to +16.00, Temperature : -30.00 to +140.00 °C
Resolution	Ozone : 0.001 mg/L or 0.01 mg/L, pH : 0.01 mV Resistor > 5x1011 Ω, Temperature : 0.1 °C/Pt100/Pt1000
Accuracy	+/- 2 % Full Scale
Response time	30 s
Ozone sensor	
Material in contact with the middle	Glass/gold
Water temperature max.	70 °C
Pressure max	8 bars at 20 °C
Flow	Between 40 and 120 l/h, Fluctuations Compensated and checked
Temperature	Pt1000
pH sensor	
Water temperature max.	70 °C
Pressure max	8 bars at 20 °C
Flow	Between 40 and 120 l/h, Fluctuations Compensated and checked

TECHNICAL CHARACTERISTICS S200

Software and functionality	
2 Digital input	Controller stop by external contact, Pulse input of measuring water turbine (flow measurement)
2 Analog outputs	0/4-20 mA electrically isolated, freely configurable Load max. 500 Ω, resolution < 0.01 mA
3 Relay outputs	2 digital output, freely assignable to control outputs - 1 as permanent alarme relay - 1 potential-free NO contact Max. 250 V, 6A, 1000 VA
Digital relay outputs	2 digital output, freely assignable to control outputs Per control output 1 potentiel-free make contact Max. 12 V, 200 mA
Controller	2 separately adjustable controllers On-Off control (with hysteresis), P or PI control
Control behavior	On-Off controller with adjustable hysteresis, Pulse – pause controller, Pulse frequency controller, Continuous controller (analog output)
Limit value	Minimum and maximum limit value per controller Adjustable time delay (0 …..9999 s)
Digital interface 1	Modbus RTU Slave
Constructional design wall-mounted casing S200	
Mains power	230 V/AC, +/- 10 % (50/60 Hz), 110 V/AC, +/- 10 % (50/60 Hz), Consumption16 VA
Display	LCD display, 4x20 characters, alphanumeric, backlight Easy operation by means of 5 keys
Dimensions (WxHxD)	160 x 165 x 85 mm
Weight	1,1 Kg
Protection class	IP 65
Operating temperature	-20 to + 55 °C Max 90 % relative humidity at 40 °C non-condensing
Storage temperature	-20 to +65 °C

All components required for measurements are mounted on a plastic plate, dimensions 495 x 580 x 80 mm.

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