

Dissolved oxygen monitor BAMOPHOX 451



Panel mounting monitor



Wall mounting monitor

- Alphanumeric back lighted LCD display
- Friendly using menu
- Data-logger on MMC card
- 1 input for sensor AQUAPLUS
- Scales: 0 to 500% or in mg/L
- 2 analogical outputs 0/4-20mA, galvanic insulated
- 3 relay outputs
- 1 relay output for alarm on system or for timer
- 1 input to set on stand-by the regulation
- Wall mounting IP 65 or panel mounting
- OPTIONS:

Extension for 2nd measurement signal

EXTENSION TERMINAL

An extension terminal (wall or panel mounting):

- Allows a second measurement parameter (pH, Flow, Conductivity, etc.)
- Data from this blind device are displayed on the main device (second line display).
- A 4 wires shielded cable is used to link both devices (longest length is 500m)
- The data logger is shared between both BAMOPHOX.
- May be fitted inside a cabinet on a rail DIN.

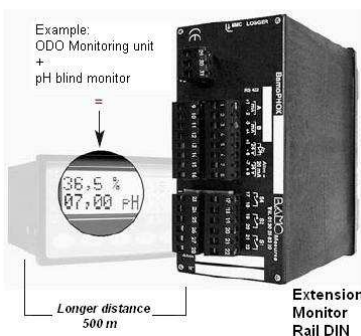
DESCRIPTION

BAMOPHOX 451 in use with the sensor AQUAPLUS offers a high grade measurement and survey of dissolved oxygen for WWTP, pharmaceutical industry, fish breeding, etc.

Mixing different built-in programmes for regulation, thresholds, temperature compensation, and alarms, BAMOPHOX 451 offers a high flexibility on use to the operator.

To allow a quick and easy diagnostic after configuration a simulation program is built-in with direct actuation on contacts outputs and analogical outputs.

A copy of the signal is available on the 4-20 mA output; it is galvanic insulated; it can be set up within the complete measuring range. Temperature measurement is also available on a 4-20 mA output.



BAMO MESURES

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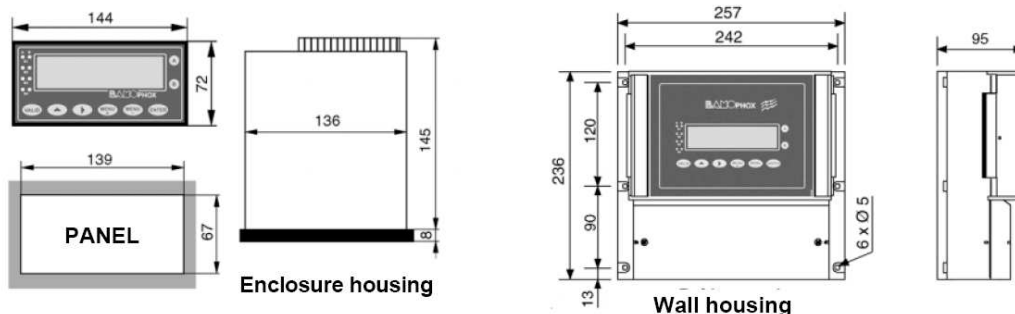
OXY

451-02

TECHNICAL FEATURES

Displayed parameters:	Measurement values - Configuration Menu - Temperature value
Display:	Back lighted - 2 lines of 16 alphanumeric characters ; 9.2 mm high
Indication:	LED alarms status
Programming:	8 push buttons keyboard on front face - Keyword protected
Measuring range:	0 to 500% or mg/L
Accuracy	Input DO: +/- 0.1% from 0 to 200 % ; +/-1% from 200 to 500 %
	Input temperature: +/- 0.3 %
Input signal:	For sensor AQUAPLUS, screw connectors
Temperature compensation:	Automatic: input for 1 sensor Pt 100 Ohm/0°C, range 0 ...+100°C Manual: programming in the menu temperature between 0 and 100°C
4 output relays:	4 closing contacts (Silver alloy), voltage free Initial resistance 100 mΩ as a maximum (voltage drop 6 V DC 1 A) Rated at 831 V AC / 3 A / 277 V AC ; 90 W / 3 A / 30 V DC Switching capacity (minimum) 100 mA, 5 V DC (depending of switching frequency, ambient conditions, accuracy) Mechanical life time (minimum) 5 x10 ⁶ operations (180 commutation/min) Electrical life time (minimum) 2 x10 ⁵ (20 comm./min) [3 A, 125 V AC], [3 A, 30 V DC] and 10 ⁵ (evaluated charge) for 3 A, 125 V AC
3 Relays S1, S2 & S3	Thresholds: 3 programmable independent thresholds - with adjustable hysteresis 0...100% - and adjustable timer from 0 to 9999 s On/Off Regulation: High and low proportional bandwidth, high and low dead zones PID regulation: proportionality 0...200%, - Integrant and Derivative: 0...999 second
Output relay (S4):	Common alarm signal for: - System malfunction - Temperature out of range - Pt 100 Ω dysfunction or probe cleaning function - Signal, over-range or opened loop
Calibration sequence:	Regulation on standby, relay outputs inhibited, analogical outputs stand on last values
Self-cleaning program:	Frequency and duration settings, with regulation inhibited and analogical outputs standing on last values
Measurement output:	0/4-20 mA (maxi 600 Ω), galvanic insulated
Temperature output/ PID:	0/4-20 mA (max 600 Ω), scalable on 0...100°C, galvanic insulated
Program Testing:	Simulation through the menu on measurement, temperature, PID and relay outputs
Main power supply:	230 V AC / 50-60 Hz [other on request] - Consumption 10 VA
Models:	Panel mounting, IP65, 72 x 144 mm, connections on screw terminal IP40 Wall mounting, IP65, cable glands, connections on screw terminal
Data Logger:	Cycle average measurement record, with a programmable period, 150000 records maxi on MMC (<i>multi-media-card</i>) / External driver necessary

DIMENSIONS



CODE NUMBERS AND REFERENCES

Code	Reference	Description
451350	BAMOPHOX 450 E LOG BUS	Panel mounting 144 x 72 / RS422 + logger - IP 65 front panel - screw terminal IP40
451450	BAMOPHOX 450 M LOG BUS	Wall mounting / RS422 + logger - IP 65 - cable glands, internal screw terminals

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