

Amperometric sensors signal monitor BAMOPHOX 194



Panel mounting (main device)



Wall mounting (main device)

- Alphanumeric back lighted LCD display
- Friendly using menu
- 1 sensor input (4-20 mA or 0/-2 V)
- Parameters according to the sensor in use: free chlorine, total chlorine, chlorine dioxide, ozone, hydrogen peroxide, peracetic acid
- 2 analog outputs 0/4-20 mA, galvanic insulated
- 3 relay outputs
- 1 relay for default or timer
- 1 flow controller input
- 2 models: panel mounting or wall mounting
- **OPTIONS:**
RS 422/ J-BUS + Logger
Extension monitor for a second parameter

EXTENSION TERMINAL

An extension terminal (wall, panel mounting or DIN rail mounting):

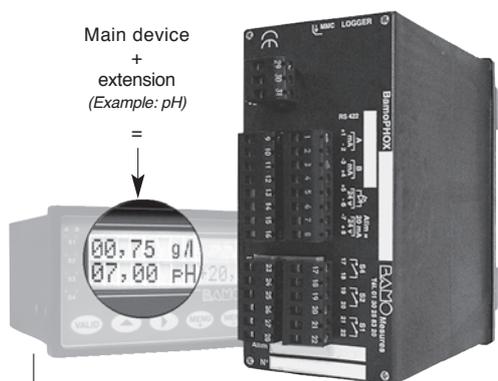
- Allows a second measurement parameter (pH, flow rate, turbidity, etc.)
- The data from this blind device are displayed on the main device (2nd line display).
- A 4 wires shielded cable is necessary to link both devices (length ≤ 500 m)
- The options RS422 and the data logger are shared between both Bamophox.

DESCRIPTION

The BAMOPHOX 194 is designed for measuring and regulation of various chemicals (free chlorine, total chlorine, chlorine dioxide, ozone, hydrogen peroxide, peracetic acid) with the use of our amperometric sensors 193 line. It offers a high flexibility on use mixing different built-in programmes for regulation, thresholds, temperature compensation, and alarms.

The 2 lines back lighted display, 16 alphanumeric characters, gives an easy measurement and temperature reading in any conditions. It also displays the configuration menu and settings of thresholds, analogical output and operation data modes, calibration steps.

To allow a quick and easy diagnostic after configuration a simulation program is built-in with direct actuation on contacts outputs and analogical output. A copy of the signal on the 4-20 mA output is galvanic insulated; it can be set up within the all range of the parameter. Temperature measurement is also available on a 4-20 mA output.



Maximum cable length: 500 meter

DIN Rail mounting (extension)



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Amperometric signal monitor
BAMOPHOX 194

08-11-2012

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TECHNICAL FEATURES

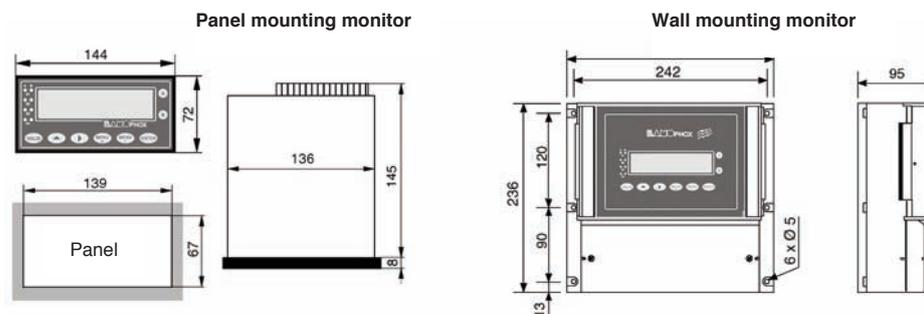
Displayed parameters:	Measured values - Configuration Menu - Temperature
Display:	Back lighted - 2 lines of 16 alphanumeric characters ; 9 mm high
Indication:	LED alarms status
Configuration:	8 push buttons keyboard on front board - Keyword protected
Sensor input:	For amperometric sensors 4-20 mA (<i>2 wire technique</i>) or 0/-2 V (<i>4 wire technique</i>)
Scales:	Configuration within the sensor in use, from 0.001 to 9999 ppm or g/L
Accuracy:	depending of the sensor in use (<i>see technical features of sensor</i>)
Flow control	Input for inductive sensor type NPN (<i>making contact if present flow rate</i>)
Temperature:	±3.0°C
Relay outputs:	4 contacts (Silver alloy), voltage free
Thresholds:	3 programmable independent thresholds - with adjustable hysteresis 0...100 % and adjustable, timer from 0 to 9999 sec * threshold S3 available in copy of external input signal (<i>example: flow sensor</i>)
Output relay (S4)	Common alarm signal for: Too long injection, Temperature out of range etc.
Contact:	Initial resistance 0.1 Ohm 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 (<i>minimum</i>) 100 mA, 5 V DC (<i>depending of switching frequency, ambient conditions, accuracy</i>) Mechanical life time (<i>minimum</i>) 5 x10 ⁶ operations (<i>180 commutation /min</i>) Electrical life time (<i>minimum</i>) 2 x10 ⁵ (<i>20 comm./min</i>) [3 A, 125 V AC], [3 A, 30 V DC] and 10 ⁵ (evaluated charge) for 3 A, 125 V AC
ON/OFF Regulation:	Pulse time 0...9999 sec - High and low proportional bandwidth, high and low dead zone.
Calibration sequence:	Regulation on standby, relay outputs inhibited, analog outputs stand on last values
Measurement output:	0/4-20 mA (maxi 600 Ohm) proportional to measurement, galvanic insulated
Temperature output:	0/4-20 mA (max 600 Ohm), scaling -20 to +160°C, galvanic insulated
Program Testing:	simulation through the menu on measurement, temperature, 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 Idem DIN Rail mounting, only for blind monitor Wall mounting, IP65, cable glands, connections on screw terminal

OPTION (RS 422 + Logger)

Communication:	RS422 output, J-BUS link, binary slave mode, 2400 to 9600 bauds
Data Logger:	Cycle average measurement record, with a programmable period, 150 000 records on MMC (multi media card) / External driver necessary for reading

DIMENSIONS

Extension terminal:
identical to the panel
or wall mounting



CODES AND REFERENCES

Code	Reference	Designation
194 000	BAMOPHOX 194 E	Panel mounting 72 x 144 - IP 65 front panel - screw terminal IP40
194 001	BAMOPHOX 194 E/A	Panel mounting 72 x 144 / Extension blind monitor - screw terminal IP40
194 003	BAMOPHOX 194 D/A	DIN Rail mounting / Extension, blind monitor - screw terminal IP40
194 020	BAMOPHOX 194 E LOG BUS	Panel mounting 72 x 144 / RS422 + logger - IP 65 front panel - screw terminal IP40
194 010	BAMOPHOX 194 M	Wall mounting - IP 65 - cable glands, connections on screw terminal
194 011	BAMOPHOX 194 M/A	Wall mounting - IP 65 / Extension, blind monitor - cable glands, connections on screw terminal
194 021	BAMOPHOX 194 M LOG BUS	Wall mounting - IP 65 / RS 422 + LOGGER - cable glands, connections on screw terminal

BAMO MESURES

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