

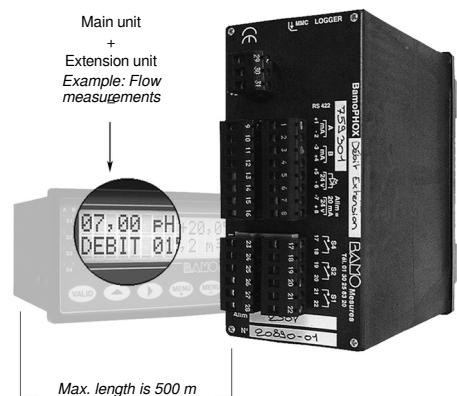
pH/mV meter BAMOPHOX 106



Panel mounting



Wall mounting



Rail DIN mounting, only for extension unit

- Programmable as pH or ORP meter (mV)
- Alphanumeric back lighted LCD display
- Adjustable scales:
0 - 14 pH; ± 1000 mV
- Temperature compensation
Automatic or manual
- 2 analogue outputs 0/4-20mA
- 3 relay outputs (independent)
- 1 relay as system alarm or for timer output
- **OPTIONS:**
RS 422 /J-BUS + Data Logger
Extension for 2nd measurement input

APPLICATIONS

pH or ORP measurements, alarms and regulation for water, chemical and industrial applications.

Examples:

- Electroplating industry
- Water treatment for process
- WWTP (e.g. neutralization)
- Groundwater or runoff water survey
- Regulation process in swimming pool, spa, fish tank
- Alarms on cooling plant (NH_3)

DESCRIPTION

BAMOPHOX 106 offers high flexibility on use mixing different built-in menus for regulation, thresholds, temperature compensation, and alarms. The 2 lines back lighted display, 16 alphanumerical characters, gives an easy reading.

It also displays the configuration menu and settings of thresholds, analogical outputs, operation data modes, calibration steps. To allow a quick and easy diagnostic after configuration a simulation program is built-in with direct actuation on contact outputs, analogical outputs and PID regulation. A copy of signal from 4-20 mA output can be set up within all the range of measurement. Temperature measurement is also available on a 4-20 mA output.

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

- Allows a second measurement parameter (Chlorine, Conductivity, Flow, etc.)
- Data from this blind unit are displayed on the main unit (second line display).
- Options RS422 and Data Logger are shared between both BAMOPHOX
- For cabinet, we propose in addition, a rail DIN mounting version for this Extension Terminal

BAMO INTERNATIONAL

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pH/mV meter
BAMOPHOX 106

10-03-2017

D-106.01-EN-AB

pH

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TECHNICAL FEATURES

End-user interface

Displayed information:	Menu Measurement Temperature
Display:	Back lighted 2 lines of 16 alphanumeric characters Height: 9,22 mm
Indication:	LED alarms status
Configuration:	8 push buttons keyboard on front face Keyword protected

Scales:

pH-meter configuration	0 to 14 pH / ± 1000 mV
mV-meter configuration	± 1000 mV
Accuracy:	$\pm 0,03$ pH or ± 3 mV
Input impedance	$>10^{13}$ Ω
Sensor signal input:	Screw connector on wall mounting model; coaxial on others

Temperature compensation

Automatic	Input for a sensor Pt 100 Ohm 3 wire, range 0 to 100 °C
Manual	Manual from 0 to 100 °C

Relay outputs	4 closing contacts (Silver alloy), voltage free
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Thresholds programmable	3 independent thresholds Adjustable hysteresis from 0 to 100 % Adjustable timer from 0 to 9999 sec
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Output relay (S4)	Common alarm signal for (simultaneously) - Too long injection - Temperature ... - pH > 14 or opened measuring loop - Sensor Pt 100 Ω dysfunction or probe cleaning function
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Contact Initial resistance	100 m Ω max. (voltage drop 6 V DC 1 A)
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Switching power	831 VA AC / 3 A / 277 V AC 90 W / 3 A / 30 V DC
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Switching capacity (minimum)	100 mA, 5 V DC (depending of switching frequency, ambient conditions, accuracy)
Mechanical life time (minimum)	5 x 10 ⁶ operations (180 commutation/min)

Electrical life time (as a minimum)	2 x 10 ⁵ (20 comm./min) for 3 A 125 V AC, 3 A 30 V DC 10 ⁵ (estimated rate) for 3 A 125 V AC
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ON/OFF Regulation	Adjustable cycle time from 0 to 9999 s High and low proportional bandwidths High and low dead zones
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PID Regulation	Adjustable proportionality from 0 to 200% Integrant and Derivative: 0 to 999 s
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Calibration sequence	Relay outputs inhibited Analogical outputs standing on latest values
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Cleaning program	Settings of frequency and duration Relay outputs inhibited, analogical outputs standing on latest values
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Measurement output	0/4-20 mA (max. 600 Ω) proportional to measurement
Temperature output / PID	0/4-20 mA (max. 600 Ω), scaling from 0 to 100 °C
Program Testing	Simulation through the menu on measurement, temperature, PID and relays outputs
Main power supply	230 V AC / 50-60 Hz [other on request] - Consumption 10 VA

Models	Panel mounting, IP65, 72 x 144 mm, wiring on screw terminal IP40 Wall mounting, IP65, cable glands, wiring on screw terminal
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OPTION (RS 422 + Data Logger)

Interface	RS422 output, J-BUS link, binary slave mode, 2400 to 9600 bauds
Data Logger	Record of cycle average measurement 150 000 records max. on memory card, reading on external driver

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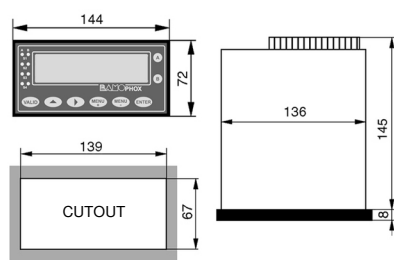
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pH

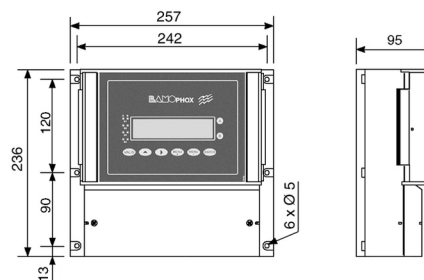
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DIMENSIONS

Extension terminal: Dimensions are identical to the panel or wall mounting models



Panel mounting version



Wall mounting version

CODE NUMBERS AND REFERENCES

Code	Reference	Description
106 500	BAMOPHOX 106 E	Panel mounting 72 x 144 - IP 65 front panel
106 501	BAMOPHOX 106 E/A	Panel mounting 72 x 144 / Extension blind monitor
106 503	BAMOPHOX106 D/A	DIN Rail mounting / Extension, blind monitor
106 550	BAMOPHOX106 E LOG BUS	Panel mounting 72 x 144 / RS422 + logger - IP 65 front panel
106 800	BAMOPHOX106 M	Wall mounting - IP 65
106 801	BAMOPHOX106 M/A	Wall mounting - IP 65 / Extension, blind monitor
106 850	BAMOPHOX106 M LOG BUS	Wall mounting - IP 65 / RS 422 + LOGGER - cable glands

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pH

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