

BAMOPHOX 322 E - M

Conductivity monitor and controller



INSTRUCTION MANUAL

BAMO MESURES

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Conductivity
monitor and controller
BAMOPHOX 322

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322 M1 01 I

MES

322-01/1

Conductivity monitor and controller BAMOPHOX 322 E & M

Content

(Technical information and Manual for LOGGER /RS422 version are on a specific document)

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1. 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
Configuration:	8 push buttons keyboard on front face - Keyword protected
Scales:	From 0...2 μ S to 0...20 mS; please see details on page 9
Accuracy:	$\pm 0,3\%$, $\pm 0,3^{\circ}\text{C}$
Probe input:	BNC plug
Temperature compensation:	Automatic with an input for a 3 wires Pt 100 Ohm/ 0°C , range 0... 100°C Manually from 0... 100°C
Relay outputs:	4 closing contacts (Silver alloy), voltage free
Thresholds:	3 programmable independent thresholds - with adjustable hysteresis 0...100% and adjustable timer from 0 to 9999 sec
1 Output relay:	Common alarm signal for system dysfunction
Contact:	Initial resistance 100 m Ω 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
Measurement output:	0/4-20 mA (maxi 600 Ω) proportional to measurement, galvanic insulated
Temperature output:	0/4-20 mA (max 600 Ω), scaling 0... 100°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 Cycle average measurement record, with a programmable period, 150000 records maxi on MMC (multi media card) / External driver necessary

OPTION (RS 422 + Logger)

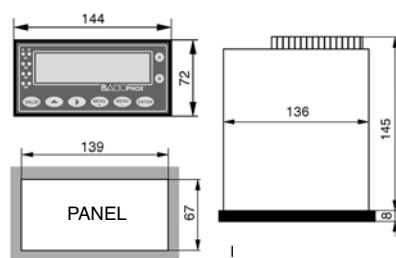
Communication:	RS422 output, J-BUS link, binary slave mode, 2400 to 9600 bauds
Data Logger:	Cycle average measurement record, with a programmable period, 150000 records maxi on MMC (multi media card) / External driver necessary
CE label:	Label CE in conformity with 73/23/CEE low power and electromagnetic compatibility 89/336/CEE

CAUTION

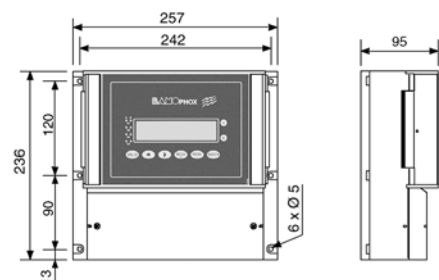
- The instrument may not be subject to vibrations and should be protected against direct sun shining.
- The ambient temperature should be between 0 and 50°C .
- Wiring has to be done by a specialist.
- Any error on electrical connection may cancel terms of warranty.
- Before to switch on your instrument, please check that the main power supply corresponds to the device requirement.

2. DIMENSIONS

Extension terminal:
identical to the panel or wall mounting



Panel mounting instrument

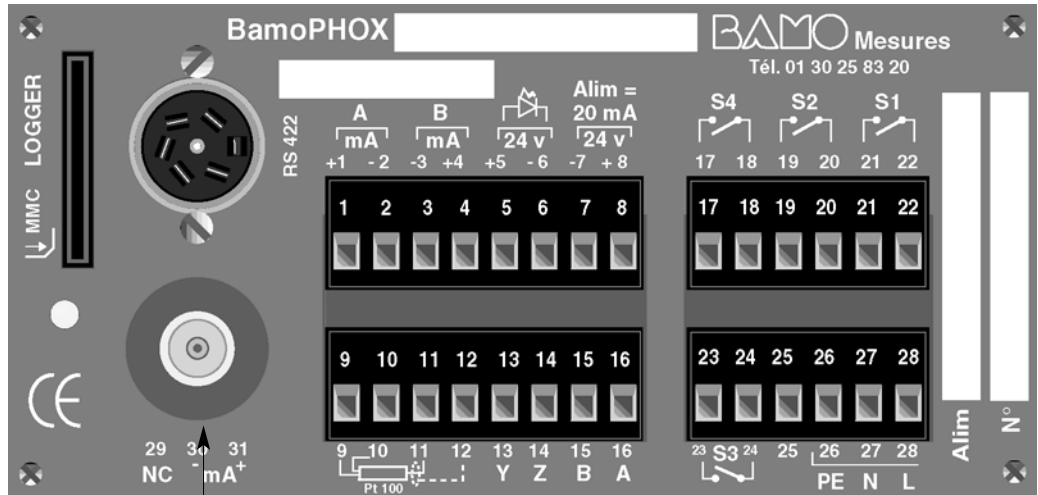


Wall mounting instrument

3. WIRING

ENCLOSURE BOX

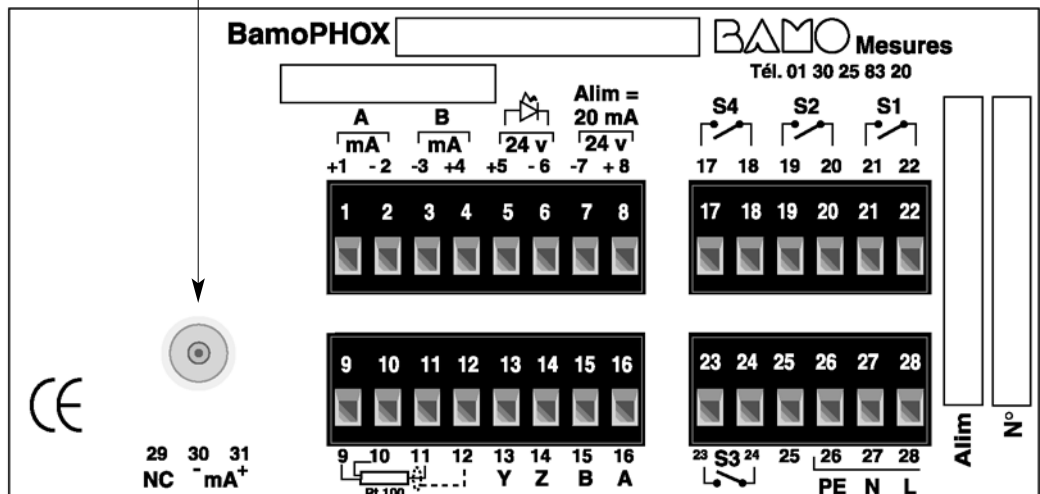
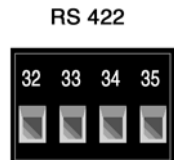
OPTION:
LOGGER
&
RS 422



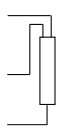





BNC plug
Input measurement

WALL HOUSING

OPTION:
LOGGER
&
RS 422
*(accessible by
removal the
higher cap)*



BamoPHOX terminal

1	+ mA measure output	
2	- mA measure output	
3	- mA temperature output	
4	+ mA temperature output	
5	+ 24 V	
6	- 24 V	
7	- 24 V	
8	+ 24 V	
9	 Pt 100 Ω	
10		
11		
12		
13	Y	
14	Z	
15	B	
16	A	
17	 S4 relay / not used	
18		
19	 S2 relay (NO contact) / alarme commande 2	
20		
21	 S1 relay (NO contact) / alarme commande 1	
22		
23	 S3 relay (NO contact) / alarme commande 3	
24		
25	Not connected	
26	 Grounding (equipotential)	
27		N
28		L

Wiring from wall or panel mounting BAMOPHOX to an Extension terminal BAMOPHOX

- Maximum length cable
500 m

- Wire specifications:
Mains cable or 4 wires shielded cable
≥ 0,25 mm² cross section

