

LIMIT VALUE SWITCH BAMOSWITCH



SAFETY INSTRUCTIONS

- Installation, initial start-up and maintenance may only be performed by trained personnel!
- The device may only be connected to supply power which complies with the specifications included in the technical data and on the serial plate!
- The device must be disconnected from all sources of power during installation and maintenance work!
- The device may only be operated under the conditions specified in the operating instructions!

DESCRIPTION

The device is suitable for use with electrically conductive liquids whose impedance is $< 5 \text{ k}\Omega$ or whose coupling capacitance to earth is $> 50 \text{ pF}$. The liquids must not form any insulating or conductive deposits.

The unit has 2 operating modes:

- **MAX:**
BAMOSWITCH keeps the electronic switch closed as long as the sensor tip is free.
When the supply voltage is applied for the first time in MAX mode, the switch is open briefly (about 1 second).
- **MIN:**
BAMOSWITCH keeps the electronic switch closed as long as the sensor tip is touched by a liquid.
When the supply voltage is applied for the first time in MIN mode, the switch is closed briefly (about 1 second).

APPLICATION

The limit switch BAMOSWITCH is suitable for electrically conductive liquids whose impedance is $< 5 \text{ k}\Omega$ or whose coupling capacitance to earth is $> 50 \text{ pF}$.

TECHNICAL DATA

Operating principle	capacitive-high-frequency
Ambient temperature	$-20 \dots +60 \text{ }^\circ\text{C}$
Operating pressure	$0 \dots 1 \text{ bar}$
Installation dimension	Standard 69mm or 125mm (others on request)
Material	PE, PP
Connection	Connector DIN EN 175301-803-A For cables $\varnothing 4.5$ to 10mm (cable gland M16x1.5 mm)
Protection class	IP65 according to EN 60529
Process connection	G1" (standard), others on request
Supply voltage	$15 \dots 27 \text{ V DC}$
Power consumption	$< 0,5 \text{ W}$
Outputs	3-wire DC-PNP max. 200mA
Cable length	Measuring circuit: max. 300m, min. wire cross-section 0.5 mm^2
Operating mode	adjustable by wiring (MIN or MAX)

BAMO INTERNATIONAL

22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL

Tel +33 (0)1 30 25 83 20 Web www.bamo.eu

Fax +33 (0)1 34 10 16 05 E-mail export@bamo.fr

LIMIT VALUE SWITCH
BAMOSWITCH

LEV

514-01 /1

15-07-2022

M-514.01-EN-AD

TECHNICAL DATA (continuation)

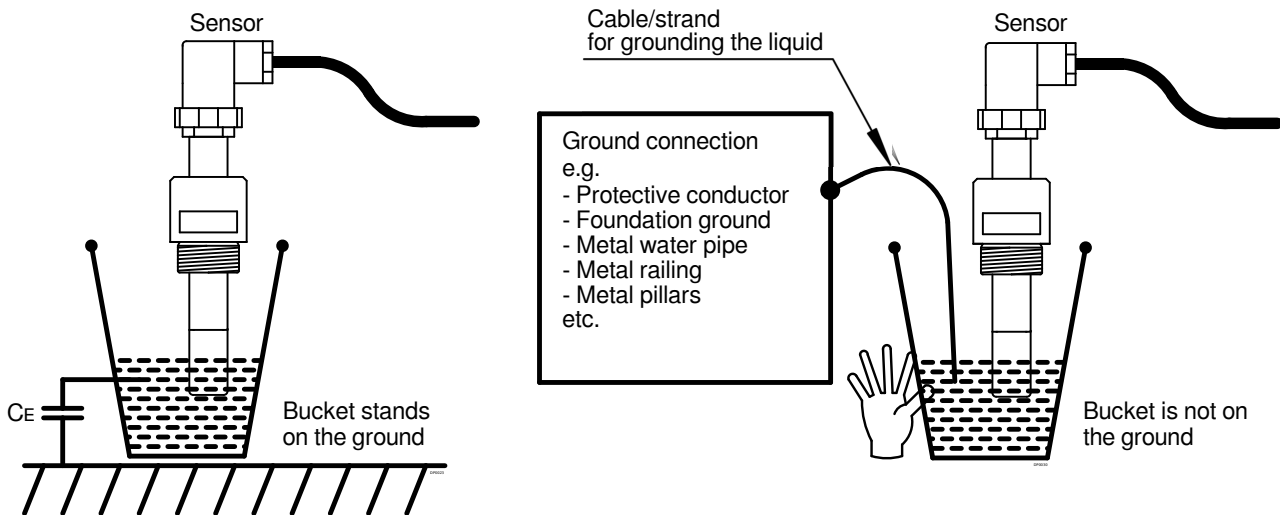
Reverse polarity protection If the polarity is reversed, the unit is automatically deactivated
 Overload/short circuit protection If the output exceeds 250mA, it is automatically deactivated; after the overload has been eliminated, normal operation takes place after a few seconds.

EC Conformity: The instrument meets the legal requirements of the current European Directives.

MAINTENANCE

When used as intended, the unit is maintenance-free

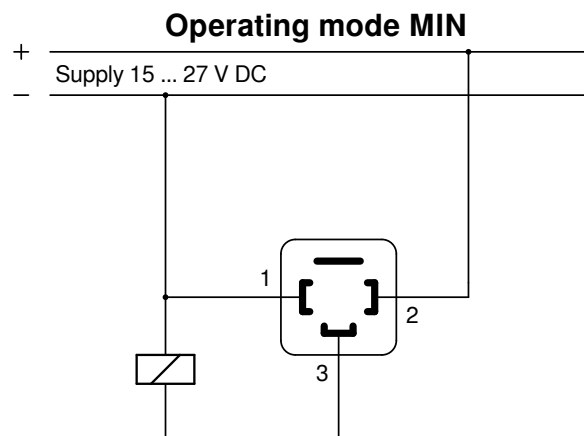
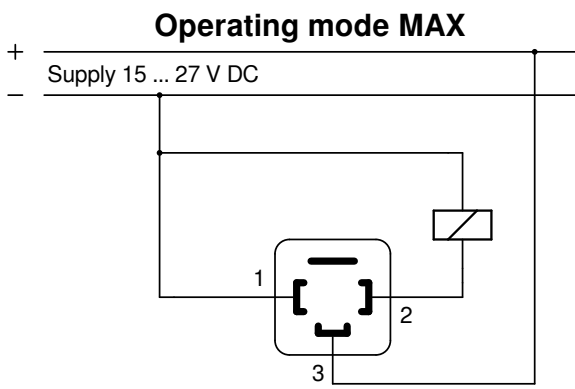
FUNCTION TEST BEFORE INSTALLATION / DURING COMMISSIONING / DURING REVISIONS



- Bucket (plastic or metal) with original liquid or fill with water (at least 5 litres) and place on the floor
- Immerse/remove probe several times
- Check the switching status of the measuring circuit

- Bucket (plastic or metal) with original liquid or fill with water (at least 5 litres)
- Ground the filled liquid with cable/stranded wire or Grasp the bucket from the outside with your hand.
- immerse/remove the probe several times in the process
- Check the switching status of the measuring circuit

ELECTRICAL CONNECTION



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