

# 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...+60 °C
Operating pressure	0...1bar
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...27V DC
Power consumption	$< 0,5 \text{ W}$
Outputs	3-wire DC-PNP max. 200mA
Cable length	Measuring circuit: max. 300m, min. wire cross-section $0.5 \text{ mm}^2$
Operating mode	adjustable by wiring (MIN or MAX)

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LIMIT VALUE SWITCH  
**BAMOSWITCH**

LEV

514-01 /1

15-07-2022

M-514.01-EN-AD

## TECHNICAL DATA (continuation)

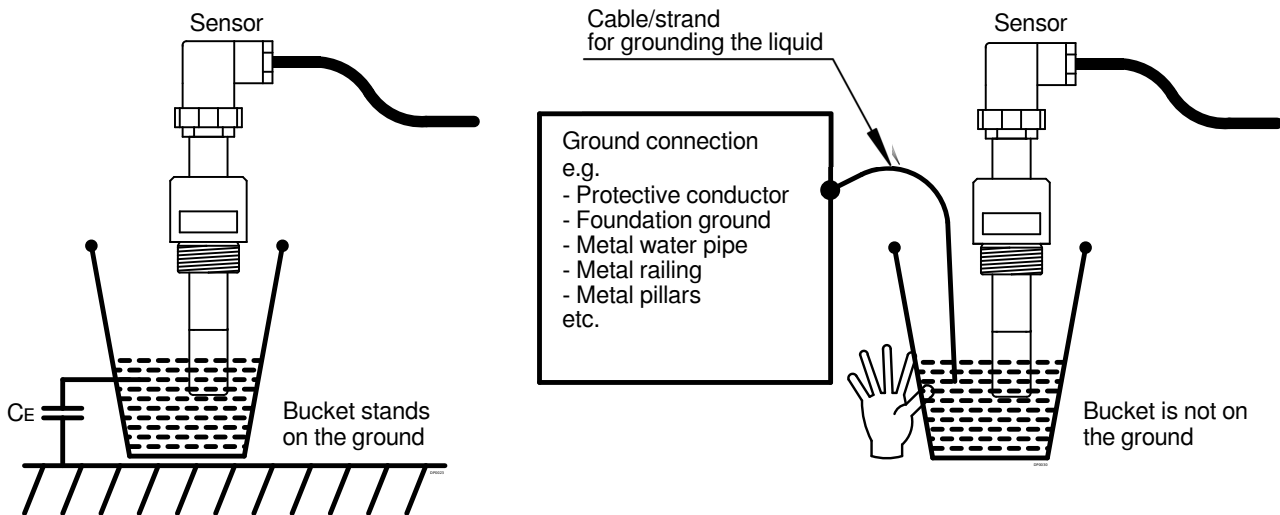
Reverse polarity protection If the polarity is reversed, the unit is automatically deactivated  
 Overload/short circuit protection If the output exceeds 250mA, it is automatically deactivated; after the overload has been eliminated, normal operation takes place after a few seconds.

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

## MAINTENANCE

When used as intended, the unit is maintenance-free

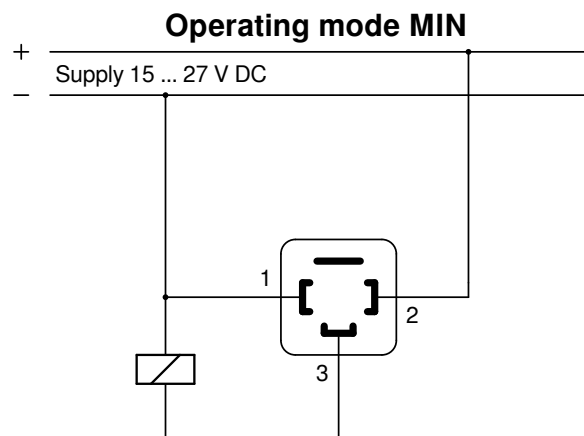
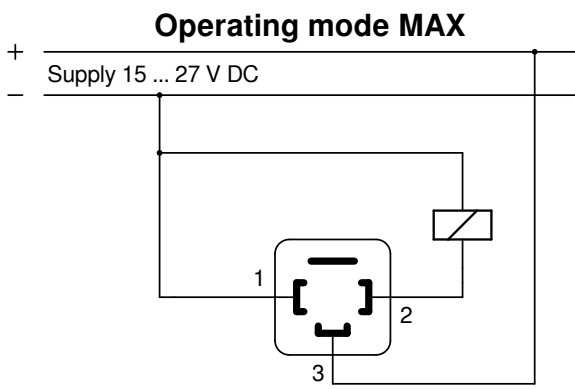
## FUNCTION TEST BEFORE INSTALLATION / DURING COMMISSIONING / DURING REVISIONS



- 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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