INPUT UNIT WITH SELFVERIFY - BN-300

Interactive fire detection systems
Product Datasheet

Features

- Interactive
- Configurable input
- Interface unit for interfacing external units, clean contacts, alarm relays, etc., onto fire detection system
- Monitored input
- Short circuit isolator in each unit
- Automatic addressing
- Proven technology
- With SelfVerify function for reduced maintenance/testing and increased reliability
- Designed to meet the requirements of the major maritime classification societies

Description / Application

BN-300 input unit is used to interface different types of signal devices of ON/OFF type onto the detector loop. The unit has been designed for use with Autronica's fire detection systems, AutroSafe (version 4.3.1 or newer) and Autroprime (2.1.3 or newer).

IMPORTANT: Due to an important safety update in Autroprime version 2.1.3 the unit must not be used with Autroprime version older than 2.1.3.

The unit includes the SelfVerify function, ensuring the highest grade of reliability and reduces the need for manual testing, because all units comprising this function are automatically checked once every 24 hours.

There is also a BN-500/N version for use in hazardous area zone 2. It must be connected to the BSD-310/N loop driver but does not require an isolator/barrier unit.

Due to EMC-filtering, alarms will not be activated before 4-5 seconds.

Application includes:

- Alarm pushbuttons
- Flame detectors with relay contacts
- Sprinkler contacts, etc.

Principle

Monitoring of input signal level. Can be configured to operate at different levels:

Normally open contact. Closing of contact (short-circuiting of input) will give alarm. Monitored for open circuit

Normally open contact with alarm resistor. Closing of contact (910 Ohm on input) will give alarm. Monitored for open and short circuit on input

Note:
Cannot be used with conventional heat detectors or any unit requiring working voltage.

SelfVerify: the unit's ability to initiate alarm signal is regularly checked.

Versions

- BN-300   Input unit with SelfVerify
- BN-500/EX* Input unit with SelfVerify.
              Ex ia version for use in zone 0, 1 and 2
- BN-500/N*   Input unit with SelfVerify.
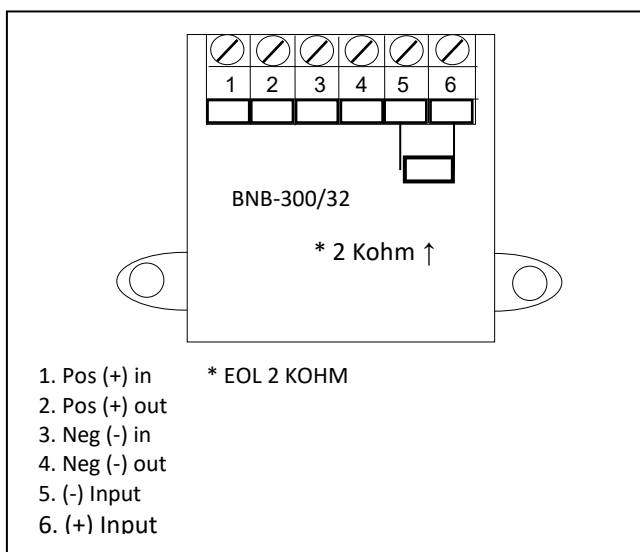   Ex ic version for use in zone 2

* See separate datasheet

Product Name	Part number	Description
BN-300	116-BN-300	Input unit

Technical specifications	
Weight	175 g
Material	Fiberglass reinforced polycarbonate (PC +GF10%)
Colour	Light grey
Input function	Configurable
Voltage	10 - 27 VDC
Max. capacitance on input	30 nF
Current consumption stand-by	0,3 mA
Environmental requirements	EN 54-5/EN 54-7
Degree of protection: Membrane inlets PG inlets (PG-13,5)	IP54 IP67
Working temperature	-20 - +70 °C
Humidity (non-condensing)	Max. 95% RH
Maintenance	None
Service	Replace if faulty
Approvals	See website

RECOGNIZED
COMPONENT
Conforms to
UL Std. 864
ETL
LISTED
US
CM
Intertek
5022802

Connections

BNB-300/32

* 2 Kohm ↑

1. Pos (+) in   * EOL 2 KOHM
2. Pos (+) out
3. Neg (-) in
4. Neg (-) out
5. (-) Input
6. (+) Input

CE

Dimension Drawing (mm)