

# 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, AutoSafe (version 4.3.1 or newer) and Autoprime (2.1.3 or newer).

**IMPORTANT:** Due to an important safety update in Autoprime version 2.1.3 the unit must not be used with Autoprime 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

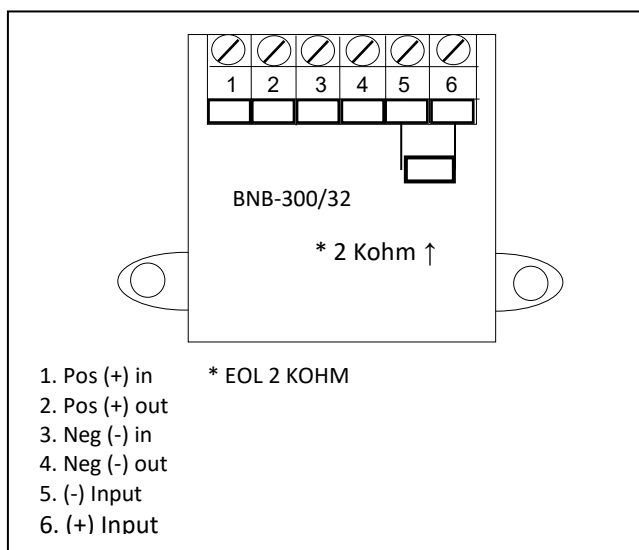
\* See separate datasheet

| 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:<br>Membrane inlets<br>PG inlets (PG-13,5) | IP54<br>IP67                                    |
| Working temperature                                             | -20 - +70 °C                                    |
| Humidity (non-condensing)                                       | Max. 95% RH                                     |
| Maintenance                                                     | None                                            |
| Service                                                         | Replace if faulty                               |
| Approvals                                                       | See website                                     |



## Connections



**Dimension Drawing (mm)**