

# INPUT UNIT WITH SELFVERIFY - BN-500/N

## Interactive fire detection systems Product Datasheet

### Technical specifications and instruction

### Features

- Interactive
- Interface unit for interfacing external units, clean contacts, alarm relays etc. onto the interactive 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 requirement of the major maritime classification societies.

### Description / Application

BN-500/N is an input unit used to interface different types of signal devices of ON/OFF type onto the detector loop. The unit is designed for use with Autronica's interactive fire detection systems, and comprises the SelfVerify function. This function ensures 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. The unit is for use in hazardous area zone 2. It must be connected to a loop driver approved for zone 2.

Application includes:

- Alarm pushbuttons
- Detectors with relay contact outputs
- Sprinkler contacts etc.

#### Schedule Drawing

No modifications permitted  
without reference to the  
Notified Body



### 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 only

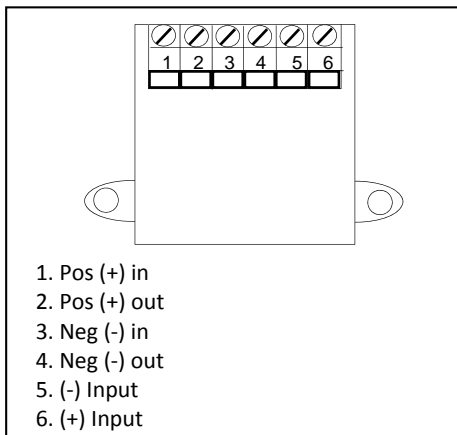
\* See separate datasheet

Product Name	Part number	Description
BN-500/N	116-BN-500/N	Input unit for use in hazardous areas

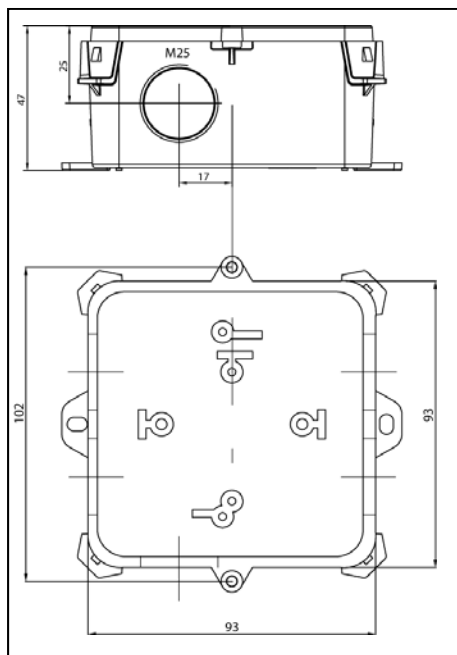
Technical specifications	
Weight	175 g
Material	Thermo plastic
Colour	Light grey
Input function	Configurable
Max. capacitance on input	30 nF
Voltage	10 - 27 VDC
Current consumption, stand by	0,3 mA
Environmental requirement	EN 54-5/EN 54-7
Degree of protection: Membrane inlets PG-inlets (PG-13,5)	IP54 IP67*
Working temperature	- 20 - +70 °C
Storage temperature	-55 - +70 °C
Humidity (non condensing)	Max. 95 % RH
Maintenance	None
Service	Replace if faulty
Certificates	See website
Notified body	Nemko ID No. 0470 CSA
Type examination certificate	NEMKO 03ATEX217X IECEX NEM 11.0017X
Directives and standards	2014/34/EU (ATEX) EN 60079-0:2012 EN 60079-11:2012 IEC 60079-0:2011 IEC 60079-11:2011 2014/30/EU (EMC) Immunity: EN 50130-4:2011 Emission: EN 61000-6-3:2001  CAN/CSA-C22.2 No. 0-10 CAN/CSA-C22.2 No. 205-12 CAN/CSA-60079-0-11 CAN/CSA-60079-1-11 CAN/CSA-60079-11-11 CAN/CSA-C22.2 No. 60529-05  UL 464, 9th Edition UL 60079-0, 5th Edition UL 60079-1, 6th Edition UL 60079-11, 5th Edition  ANSI/IEC 60529:2004 ANSI/ISA-60079-26: 2011
Ex parameters	 II 3G Ex ic IIB T4 Gc Class I, Zone 2, AEx ic IIB T4 Gc  <b>Warning: Do not rub.</b>

\*requires approved cable glands and/or plugs of minimum the same IP level

## Connections



## Dimensions (mm)



Control drawing

