INPUT UNIT WITH SELFVERIFY - BN-500/EX

Interactive fire detection systems
Product Datasheet

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

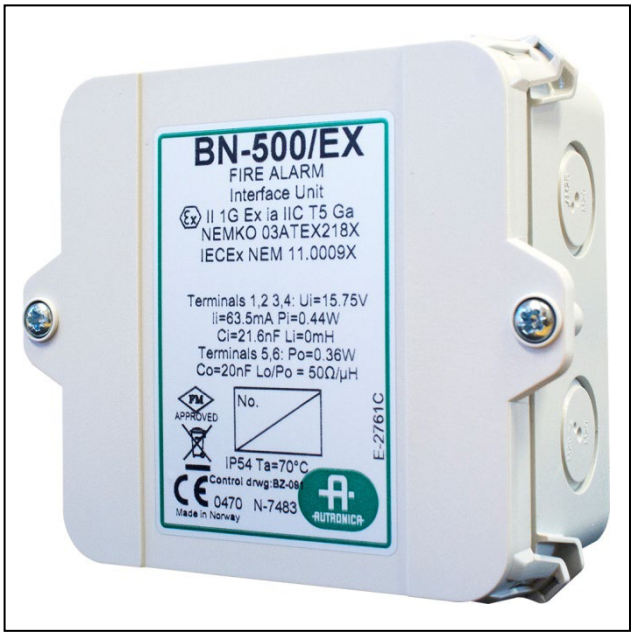
Description / Application

BN-500/EX is an input unit for use in hazardous area zone 0, 1, 2. It must be connected to the approved barrier BZ-500. The 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 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.

Application includes:

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

Related Drawing
No modifications permitted without reference to Ex Responsible



Principle

Monitoring 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.

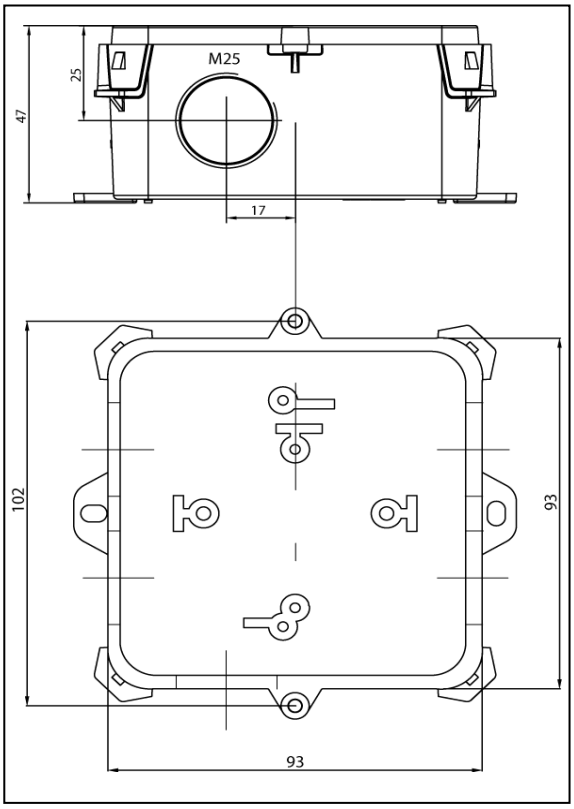
Technical specifications	
Weight	175 g
Material	Thermo plastic
Colour	Light grey
Input function	Configurable
Max. capacitance on input	30 nF
Voltage	10 - 27 VDC
Current consumption, stand by	0,3 mA
Environm. requirement	EN 54-5/EN 54-7
Degree of protection: Membr. inlets PG-inlets (PG-13,5)	 IP54* IP66*
Working temperature	-20 to +70 °C
Storage temperature	-55 to +70 °C
Humidity (non condensing)	Max. 95 % RH
Maintenance	None
Service	Replace if faulty
Notified body	Nemko ID No. 0470 CSA
Type examination certificate	NEMKO 03ATEX218X IECEx NEM 11.0009X
Directives, standards and Ex parameters	Refer to Doc-1003606 (Schedule drawing: “Control Drawing/User Manual/Technical Specifications and Instructions”) where this information is listed. A link to this document is included on the product page for this product at www.product.autronicafire.com.
Approvals	www.autronicafire.com

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

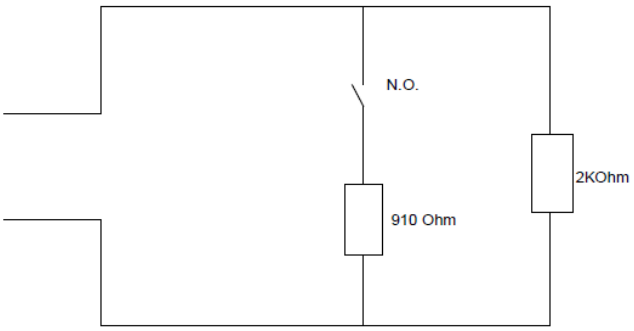
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Product Name	Part number	Description
BN-500/EX	116-BN-500/EX	Input unit for use in hazardous areas

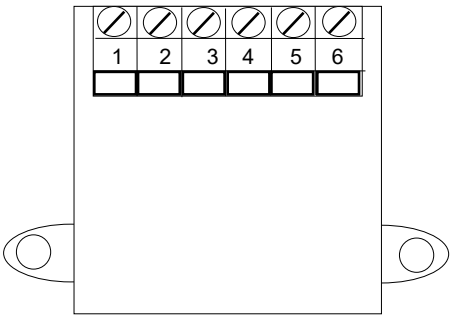
Dimension Drawing (mm)



Input Connection



Connections



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