BARRIER UNIT BZ-500

Interactive Fire Alarm Systems
Product Datasheet

Features

- Interactive
- Covers EX zones 0, 1, 2
- Ex ia IIC approval
- Galvanic isolator
- No PE conductor required
- Can accommodate up to 20 loop units
- For use with Autronica's interactive detectors, call points and I/O units

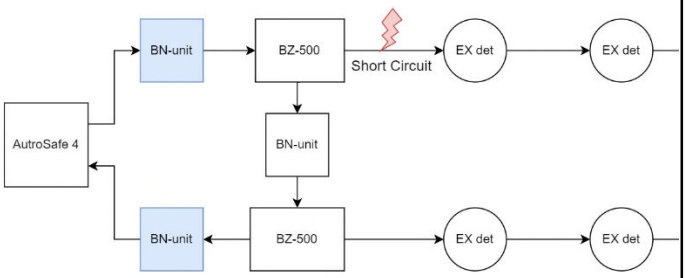
Description / Application

BZ-500 is a barrier unit designed for intrinsically safe installation of detectors in hazardous area zone 0, 1 or 2. The barrier is a galvanic isolator; hence the installation requires no PE conductor.

BZ-500 must be installed in safe area and is connected to the AL_Com detection loop.

IMPORTANT

When a loop with BZ-500 barriers is set up, there must always be one addressable unit (for example, a BN-unit or a detector) in front of the barrier (see example in the drawing to the right). This is necessary to ensure correct fault handling in AutroSafe if a short circuit occurs.



Also, a separate 24 V supply is required. If BZ-500 is supplied from the panel, an optional 24 V DC/DC converter must be used to regulate the power (see part no. overleaf). The loop branch-off into the hazardous area accepts 1-20 loop units (legacy units) depending on cable type and loop unit type. All loop units must be Exi approved.

Related Drawing
No modifications permitted without reference to Ex Technical Responsible

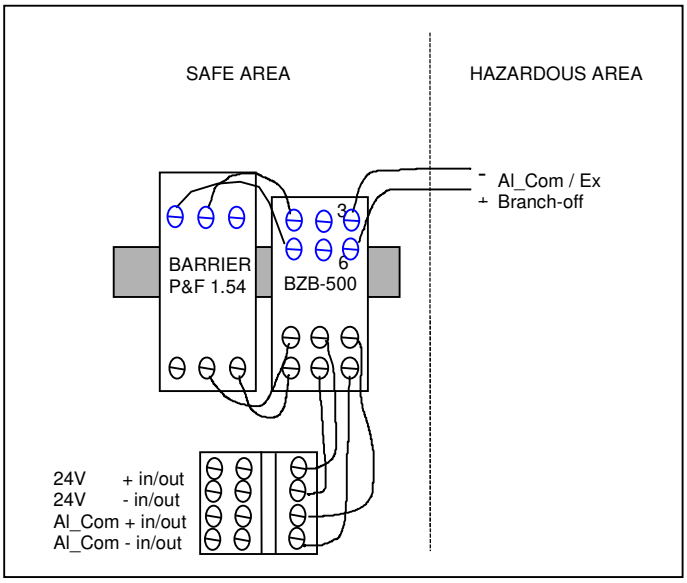
Technical specifications	
Weight	1840 g
Material	Polycarbonate
Colour	Light grey
Degree of protection	IP55
Temperature	-20 - +60 °C
Humidity (non condensing)	Max. 95 %
Supply voltage	23 - 27 VDC
Current consumption	50 mA
Maintenance	None
Service	Replace if faulty
Environmental requirement	EN 50020
Barrier certificate	BAS 00 ATEX 7087 IECEx BAS 08.0079
Barrier	Pepperl+Fuchs KFD0-CS-Ex1.54
Notified body	NEMKO ID no. 0470 CSA
EX certificates	NEMKO 03ATEX230 IECEx NEM 11.0008
Approvals/Certificates	See website www.product.autronicafire.com

The total capacitance in the cable and the Ci of the detectors must not exceed C0. Capacitance in the cable varies with the cable type. When cable type is unknown, 200pF per metre may be used as a maximum.

Due to the electrical characteristics of the barrier, cable limitations must also be followed. The limitations are: R_{cable} max = 20 Ohm; C_{cable} max = 250 nF.

Product Name	Part number	Description
BZ-500	116-BZ-500	Complete unit
BZ-500/01	116-BZ-500/01	Spare part, interface unit + barrier
Optional		**DC/DC converter**
	116-4660-055.0001	SD-150B-24 6.3 A
	116-4660-009.0004	24 VDC/24 VDC 3 A
	116-4660-016.0001	24 VDC/24 VDC 1 A, DIN rail mount.

Connections



Dimension Drawing (mm)