BX-I2

Input module for
SecuriLine eXtended

Beginning with edition number 20-2100016-01-01

The BX-I2 contains one primary input for polling potential-free contacts and one opto-isolator input, which can be used for monitoring an external voltage if necessary.

It meets the SecuiLine eXtended specification for operation on the addressable loop of the SecuriFire fire detection system.

Fig. 1 BX-I2

Description

The BX-I2 can be connected to the SecuriLine eXtended addressable loop of the SecuriFire fire detection system.

The BX-I2 contains one primary input for polling potential-free contacts. This can be inverted as well as parameterised with / without line monitoring, further is can be defined as logical element input or detector zone. The module has in addition an opto-isolator to monitor a potential-dependent signal or an external power supply. To install the module is used a plastic housing with IP 66 protection, which can be equipped with various cable inlets as required.

Addressing and parameter assignment for the BX-I2 is performed with PC software via the fire alarm control panel.

The module includes a short-circuit isolator. In the event of wire breakage or a short-circuit, this functionality ensures that the fault is localised and at the same time maintains the full operability of the addressable loop.

BX-I2 features

- Power supply via the SecuriLine eXtended
- Addressing and parameter assignment with PC software via SecuriLine eXtended
- Up to 62 modules can be connected per loop
- 1 monitored primary input
- 1 opto-isolator input for voltage monitoring
- Integrated short circuit isolator
- Robust plastic housing

Interfaces

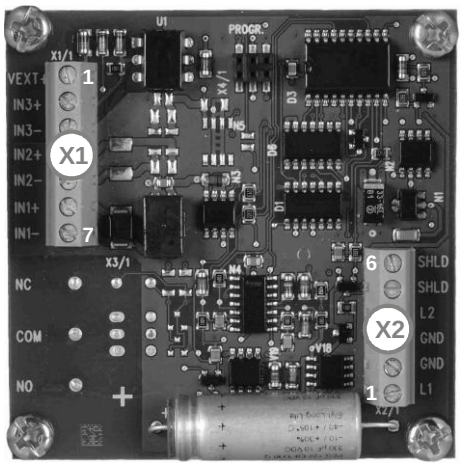


Fig. 2 BX-I2 interfaces

Inputs (X1)

Terminal	Designation	Description
1	VEXT+	Input voltage monitoring external, potential-free. Pin 1 and 3
2	IN3+	Input voltage monitoring external, - potential-dependent
3	IN3-	Input 3-
4	IN2+	No function
5	IN2-	
6	IN1+	Monitored primary input
7	IN1-	

Notice

The input IN3 is designated in SecuriFire Studio as input 2.

SecuriLine eXtended (X2)

Terminal	Designation	Description
6	SHLD	Screen support point
5	SHLD	Screen support point
4	L2	Data B
3	GND	GND B
2	GND	GND A
1	L1	Data A

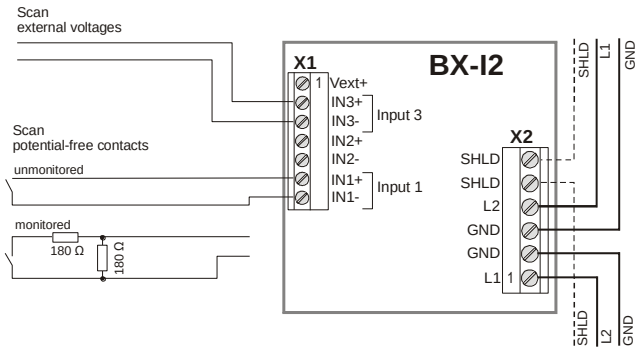
Power requirement

When both detectors and modules are operated on an addressable loop, note that the BX-I2 has a higher power consumption than a detector. For security reasons a maximum of 62 BX-I2 are permitted per addressable loop.

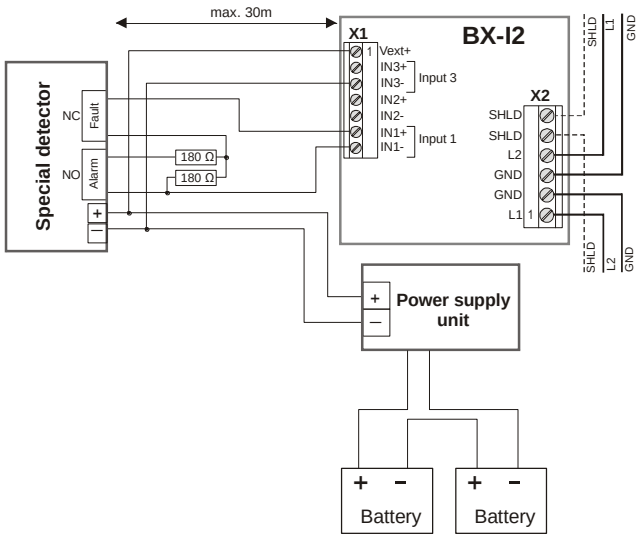
A tool is available for calculating the maximum possible loop length and the maximum number of participants.

Connection examples

Input monitored or unmonitored



Connection of special detectors



Article numbers / spare parts

Short designation	Swiss art. number	Art. number
Output module	--	20-2100016-01-02
Map case IP66 for BX-I2	403.239 917	FG020234
M20 step nipple	428.242578	MM000181

Technical data

Function	Input module	
Operating voltage	12 to 30	VDC
Power consumption (module's power consumption only)	0.46	mA
Signal transmission	Serial data transmission, 2-line technology	
Protection type	66 with map case	IP
Ambient temperature	-20 to +60	-°C
Connection	Screw terminals max. 1.5	mm^2
VdS approval	G212023	
EU certificate of conformity (EN 54-17/18)	0786-CPD-21143	
Dimensions (H x W x D)	67 x 67 x 20	mm
Dimensions with map case (H x W x D)	94 x 94 x 81	mm

Monitored inputs	**1**	Pc.
Connection	IN1- and IN1+ , potential-free contacts	
Polling current	10	mA
Polling voltage	3-6	V
Termination resistance	180	Ω
Alarm resistance	180	Ω
Line resistance	max. 30	Ω
Polling impulse	165	µs
Polling cycle	100	ms
Input filter	10	µs
Periodic duration	> 8	s
(switching states which last longer than 500 ms and whose repetition time is greater than 8 s are recorded)		
Line length	max. 30	m
Connection	Screw terminals max. 1.5	mm^2

Input voltage monitoring, potential-dependent	**1**	Pc.
Connection	IN3- and IN3+, potential-dependent signals	
Input voltage range	0 to 30	V
Input current	max. 6	mA
Input resistance	4,900	Ω
Galvanic separation	By opto-isolator	
Line length	max. 1,000	m
Connection	Screw terminals max. 1.5	mm^2

Input voltage monitoring, potential-free		1	Pc.
Connection	IN3- and VEXT, potential-free signals		
Input voltage range		0 to 30	V
Input current	@10 V	0,4	mA
	@24 V	1,9	mA
Input resistance		10	kΩ
Galvanic separation		By opto-isolator	
Line length		Max. 1,000	m
Connection		Screw terminals max. 1.5	mm^2

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