

SecuriFire  
**BX-I2**  
 Input module for  
 SecuriLine eXtended

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 SecuriLine 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 it 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.

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 isolators
- Robust plastic housing (option)

**Interfaces**

- X1 Inputs**
- X2 SecuriLine eXtended**

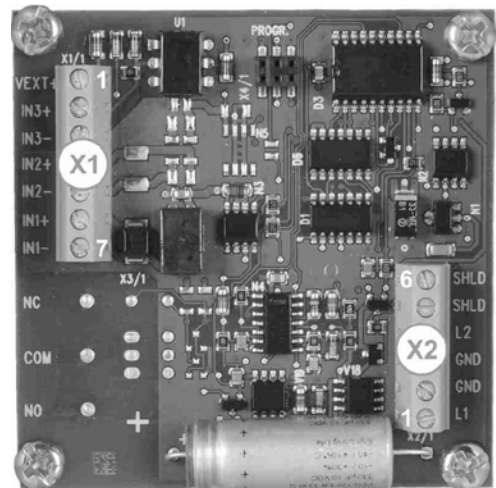


Fig. 2 BX-I2 interfaces

**Inputs (X1)**

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

<sup>1)</sup> 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 / external voltage

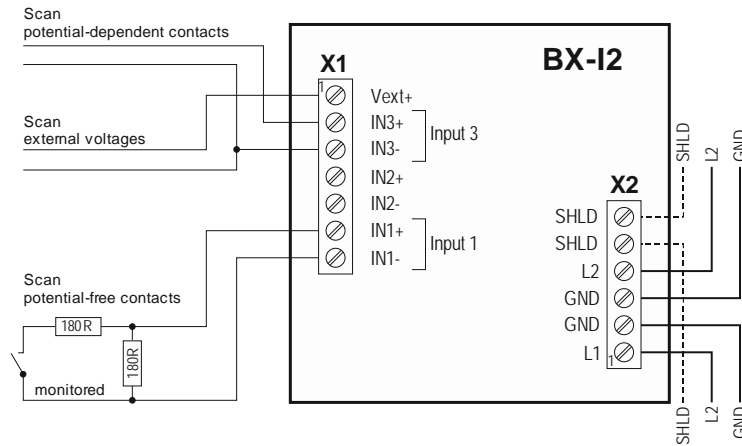


Fig. 3 Scan contacts / scan external voltages

### Connection of special detectors

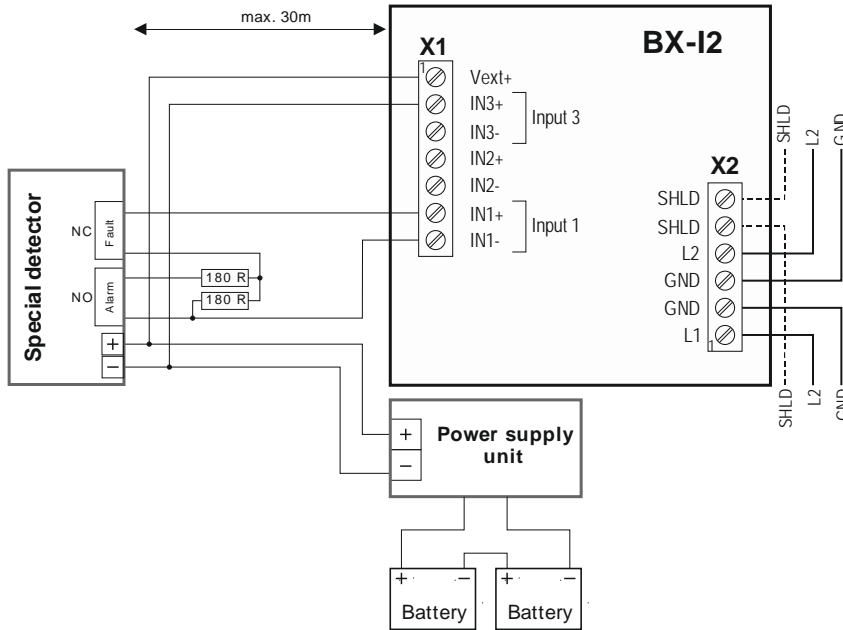


Fig. 4 Connection of special detectors

## Article numbers / spare parts

Short designation		Art. number CH	Art. number
BX-I2	Output module	on demand	20-2100016-01-xx
<b>Accessories</b>			
GEH MOD IP66	Map case polystyrene IP66 for BX-I2 (indoor applications)	239917	FG020234
TK PC 99-6-M	Map case polycarbonate IP66 for BX-I2 (outdoor applications)	→	20-2101000-01-xx
MM SM M20	M20 step nipple	242578	MM000181
MM ANB M16	M16 mounting screw union	on demand	MM000185
MM GM M16	M16 counter-nut	on demand	MM000186
MP MOD KL	Small mounting plate for loop modules	265417	30-6800021-01-xx

## Technical data

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 without map case/with map case	00/66	IP
Ambient temperature	-20 to +60	°C
Connection	Screw terminals max. 1.5	mm <sup>2</sup>
VdS approval	G212023	
Declaration of performance (DoP)	CPR-20-13-014-DE-EN	
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
Weight	xx	g

**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 <sup>2</sup>

**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 <sup>2</sup>

**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 <sup>2</sup>