

SecuriFire
B5-MRI16
 Relay board with 24 V contacts

The B5-MRI16 board contains 16 bistable 24 V / 3 A relays.



Fig. 1 B5-MRI16

Domain: SCP3000

Function/Application

The B5-MRI16 has 16 freely programmable bistable 24 V / 3 A relays. Defining whether the contact is a working or normally closed contact is done with planning software. Further, for each relay a "Fail-Safe-Position" can be defined for instances in which there is a power failure or the SCP is switched off.

The system connection to the B5-BUS is on the rear side using a 64-pin male connector. Connection to the relay bus is made using a 32-pin male connector. The peripheral devices are connected on the front side of the board with two 16-pin plug-in terminals.

Interfaces

- X1 Connection to the B5-BUS
- X2 Connection to the relay BUS
- X3 Connector plug for relays 1-8 (24V / 3A)
- X4 Connector plug for relays 9-16 (24V / 3A)

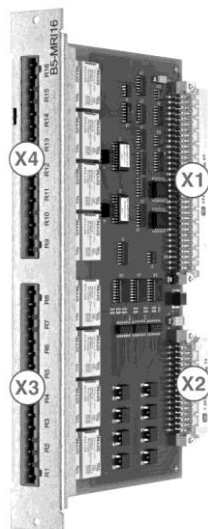


Fig. 2 B5-MRI16 interfaces

Plug for relays (X3 and X4)

Plug X3			Plug X4		
Relay	Terminal	Desig.	Relay	Terminal	Desig.
16	1	R16	8	1	R8
	2	R16		2	R8
15	3	R15	7	3	R7
	4	R15		4	R7
14	5	R14	6	5	R6
	6	R14		6	R6
13	7	R13	5	7	R5
	8	R13		8	R5
12	9	R12	4	9	R4
	10	R12		10	R4
11	11	R11	3	11	R3
	12	R11		12	R3
10	13	R10	2	13	R2
	14	R10		14	R2
9	15	R9	1	15	R1
	16	R9		16	R1

Technical data X3 and X4

Relay type	bistable
Switching voltage	max. 30 VAC / 30 VDC
Switching current	max. 3 A
Breaking capacity	max. 60W (2 A at 30 V)
Contact resistance	max. 30 mΩ
Mechanical	plug-in screw terminal, max. 2.5mm ²

Planning

The country-specific directives apply when planning and installing automatic fire detector systems.

The B5-OM8 is built to be redundant to ensure system availability. All logical functional blocks are doubled.

If there is a fault, a switch is made automatically to the second system, and the operability remains fully in tact in this case.

Data sheet

The B5-MRI16 can be fitted in the unit rack of each SecuriFire 3000 at slots 2 to 9 of the unit rack. When fitting to slot 9, relay boards B3-REL10, B3-REL16 and B3-REL16E on slots 11 to 13 can also be actuated.

Defining whether the contact is a working or normally closed contact is done with planning software SecuriFire Studio. By programming an "Active in Fail-Safe-Position", the state of each individual relay can be defined for power supply failure or shut down of the SCP.

The B5-MRI16 is supported beginning with SecuriFire Studio R 1.0.

Connection examples

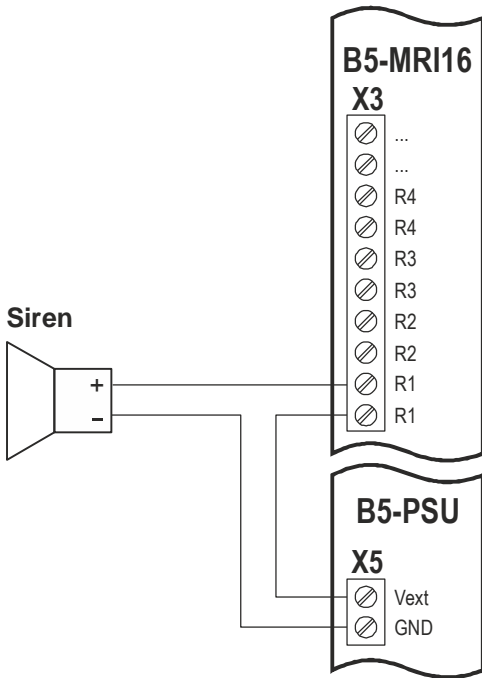


Fig. 3 Connecting working contact

When connecting inductive loads, it is recommended to use a freewheel diode (e.g. 1N4007).

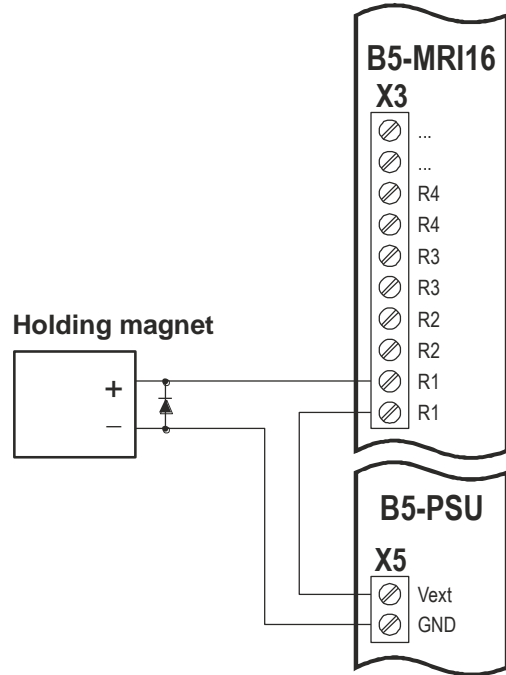


Fig. 4 Connecting normally closed contact

Article numbers / spare parts

Short designation		Art. number CH	Art. number
B5-MRI16	Relay board with 24 V contacts (incl. ST-SET REL16)	115.249 843	20-1000006-01-01
ST-SET REL16	2 pcs. plug straight (frontal screwable)	239.972 312	20-1040100-01-01
ST-SET REL16 W	2 pcs. plug angled	239.239 690	FG74105

Technical data

Power supply	provided by the B5-PSU power supply unit via the B5-BUS
Quiescent current consumption	6 mA
Protection type	according to control panel
Ambient temperature, Relative humidity, Air pressure	according to control panel
Weight (gross/net)	335/220 g