

Relay output FB6301B150

- 2-channel
- Outputs wired to Ex e terminals
- Installation in suitable enclosures in Zone 1
- Module can be exchanged under voltage (hot swap)
- Positive or negative logic selectable
- Simulation mode for service operations (forcing)
- Permanently self-monitoring
- Output with watchdog





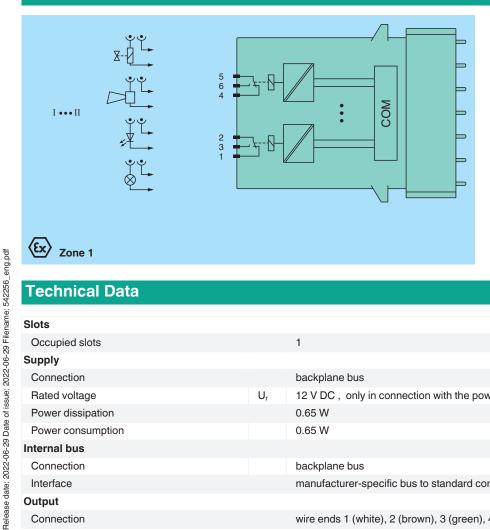
Function

The device features 2 independent channels.

The device can be used to switch solenoids, sounders, or lamps.

The device can perform general switching operations, such as switching auxiliary power circuits. The outputs are galvanically isolated from the bus and the power supply.

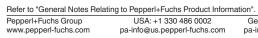
Connection



Technical Data

Slots		
Occupied slots		1
Supply		
Connection		backplane bus
Rated voltage	U_{r}	12 V DC, only in connection with the power supplies FB92**
Power dissipation		0.65 W
Power consumption		0.65 W
Internal bus		
Connection		backplane bus
Interface		manufacturer-specific bus to standard com unit
Output		
Connection		wire ends 1 (white), 2 (brown), 3 (green), 4 (yellow), 5 (grey), 6 (pink)

Technical Data	
Minimum load	1 V , 1 mA
Relay	, , , , , , , , , , , , , , , , , , , ,
Switching voltage	24 V DC / 230 V AC
Switching current	1 A DC / AC resistive load
Switching power	30 W , 230 VA resistive load
Electrical life	0.5 Mio. cycles
Response time	20 ms (depending on bus cycle time)
Contact Material	AgPd gold plated
Watchdog	within 0.5 s the device goes in safe state, e.g. after loss of communication
Indicators/settings	
LED indication	LED green: supply LED yellow: signal (status)
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1
Low voltage	
Directive 2006/95/EC	EN 61010-1
Conformity	
Electromagnetic compatibility	NE 21
Degree of protection	IEC 60529
Environmental test	EN 60068-2-14
Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
Damaging gas	EN 60068-2-42
Relative humidity	EN 60068-2-78
Ambient conditions	
Ambient temperature	-20 60 °C (-4 140 °F)
Storage temperature	-25 85 °C (-13 185 °F)
Relative humidity	95 % non-condensing
Shock resistance	shock type I, shock duration 11 ms, shock amplitude 15 g, number of shocks 18
Vibration resistance	frequency range 10 150 Hz; transition frequency: 57.56 Hz, amplitude/acceleration \pm 0.075 mm/1 g; 10 cycles frequency range 5 100 Hz; transition frequency: 13.2 Hz amplitude/acceleration \pm 1 mm/0.7 g; 90 minutes at each resonance
Damaging gas	designed for operation in environmental conditions acc. to ISA-S71.04-1985, severity level G3
Mechanical specifications	
Degree of protection	IP20 (module), a separate housing is required acc. to the system description
Connection	wire ends or shielded cable tail wiring connection: separately covered Ex e terminals required
Mass	approx. 350 g
Dimensions	28 x 107 x 132 mm (1.1 x 4.2 x 5.2 inch)
Data for application in connection with hazardo	
EU-type examination certificate	PTB 97 ATEX 1074 U
Marking	
Galvanic isolation	
Output/power supply, internal bus	safe electrical isolation acc. to EN 61010-1
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2009 EN 60079-1:2007 EN 60079-11:2007 EN 60079-26:2007 EN 61241-11:2006
International approvals	
Marine approval	
Bureau Veritas Marine	22449/B0 BV
General information	



Assembly

Front view

