Relay output

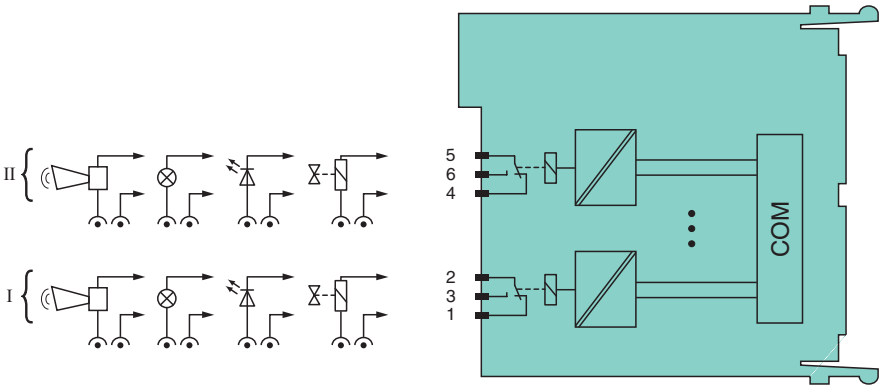
LB6101H

- 2-channel
- Simulation mode for service operations (forcing)
- Mounting in Zone 2, Class I/Div.2 or in the safe area
- Permanently self-monitoring
- Output with watchdog
- Module can be exchanged under voltage

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



Zone 2

Technical Data

Slots		
Occupied slots		1
Supply		
Connection		backplane bus
Rated voltage	U_r	12 V DC , only in connection with the power supplies LB9***
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		channel I: 1-2 NC, 3; channel II: 4-5 NC, 6

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Technical Data

Minimum load		1 V , 1 mA
Relay		
Switching voltage		DC: 30 V , AC: 230 V , 60 V (UL)
Switching current		1 A DC / AC resistive load
Switching power		30 VA / 30 W / 230 VA , 60 W (UL)
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
Digital output		
Number of channels		2
Field device interface		
Connection		Relay output
Connection		channel I: 1-2 NC, 3; channel II: 4-5 NC, 6
Relay		
Switching voltage		DC: 30 V , AC: 230 V , 60 V (UL)
Switching current		30 VA / 30 W / 230 VA
Switch power		30 VA / 30 W / 230 VA
Minimum load		1 V 1 mA
Electrical life		0.5 Mio. cycles
Contact Material		AgPd gold plated
Response time		20 ms (depending on bus cycle time)
Watchdog		within 0.5 s the device goes in safe state, e.g. after loss of communication
Indicators/settings		
LED indication		Power LED (P) green: supply Status LED (1, 2) yellow: signal (per channel)
Coding		optional mechanical coding via front socket
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
Low voltage		
Directive 2014/35/EU		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		-40 ... 60 °C (-40 ... 140 °F) , 70 °C (non-Ex)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		95 % non-condensing
Altitude		max. 2000 m
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 ± 0.075 mm/1 g; 10 cycles frequency range 5 ... 100 Hz; transition frequency: 13.2 Hz amplitude/acceleration ± 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 when mounted on backplane

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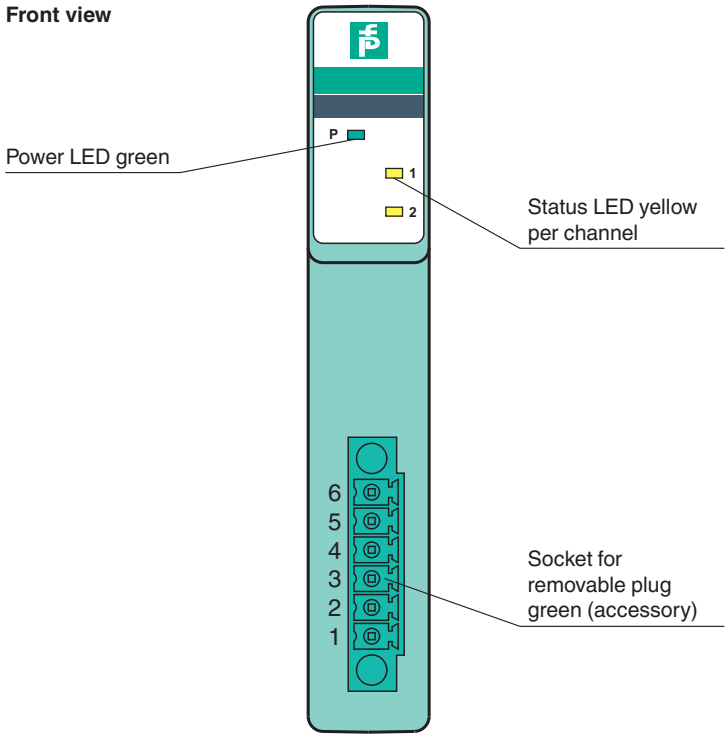
Technical Data

Connection		removable front connector with screw flange (accessory) wiring connection via spring terminals (0.14 ... 1.5 mm²) or screw terminals (0.08 ... 1.5 mm²)
Mass		approx. 90 g
Dimensions		16 x 100 x 102 mm (0.63 x 3.9 x 4 inch)
Data for application in connection with hazardous areas		
Certificate		PF 08 CERT 1234 X
Marking		Ⓔx II 3 G Ex nA nC IIC T4 Gc
Galvanic isolation		
Output/power supply, internal bus		safe electrical isolation acc. to EN 61010-1
Directive conformity		
Directive 2014/34/EU		EN IEC 60079-0:2018+AC:2020 EN 60079-15:2010
International approvals		
ATEX approval		PF 08 CERT 1234 X
UL approval		E106378
IECEx approval		
IECEx certificate		IECEx BVS 09.0037X
IECEx marking		Ex nA nC IIC T4 Gc
General information		
System information		The module has to be mounted in appropriate backplanes (LB9***) in Zone 2 or outside hazardous areas. Here, observe the corresponding declaration of conformity. For use in hazardous areas (e. g. Zone 2 or Zone 22) the module must be installed in an appropriate enclosure.
Supplementary information		EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.

Assembly

Front view



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