

Relay output

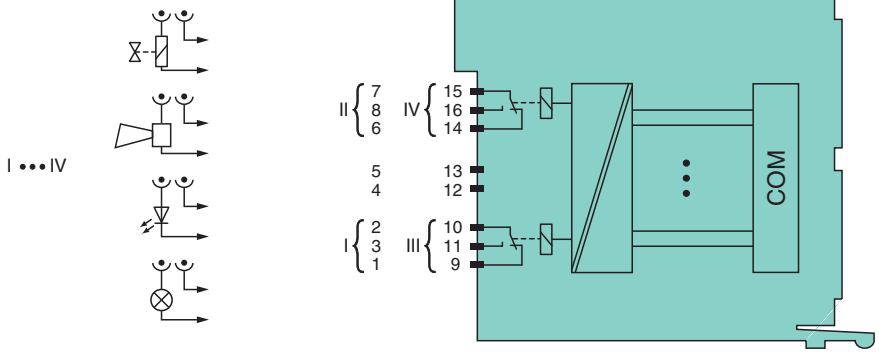
LB6005A

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

Function

The device features 4 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		2
Supply		
Connection		backplane bus
Rated voltage	U_r	12 V DC , only in connection with the power supplies LB9***
Power dissipation		1.05 W
Power consumption		1.05 W
Internal bus		
Connection		backplane bus
Interface		manufacturer-specific bus to standard com unit
Digital output		

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Technical Data

Number of channels	4
Field device interface	
Connection	Relay output
Connection	channel I: 1-2 NC, 3; channel II: 6-7 NC, 8; channel III: 9-10 NC, 11; channel IV: 14-15 NC, 16
Relay	
Switching voltage	DC: 30 V AC: 150 V
Switching current	1 A DC / AC resistive load
Switch power	DC: 30 W , AC: 60 W
Minimum load	1 V 1 mA
Electrical life	0.1 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 (I) red: communication error
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 60068-2-56
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
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
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. 130 g
Dimensions	32.5 x 100 x 102 mm (1.28 x 3.9 x 4 inch)
Data for application in connection with hazardous areas	
Certificate	PF 08 CERT 1234 X
Marking	⟨Ex⟩ 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	

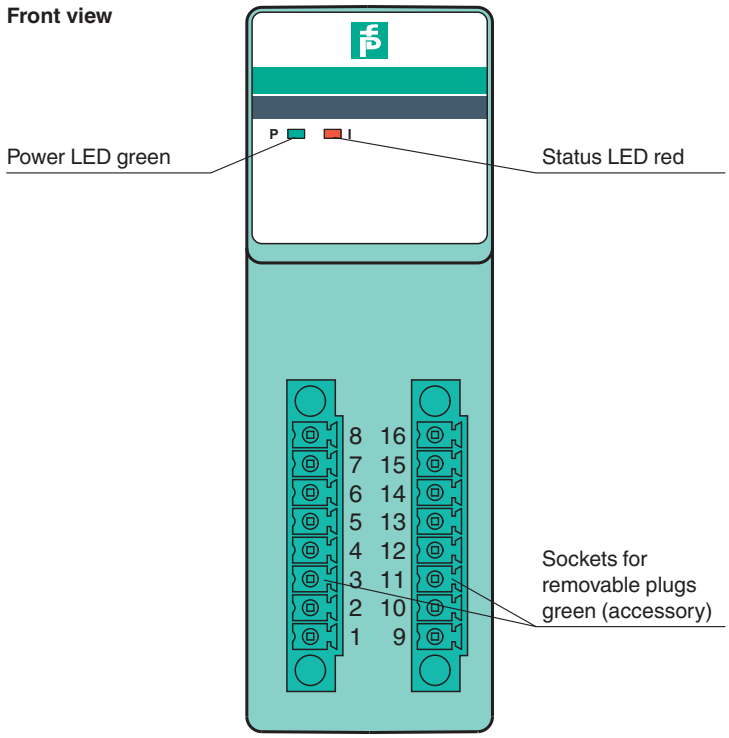
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Technical Data

Directive 2014/34/EU		EN IEC 60079-0:2018+AC:2020 EN 60079-15:2010
International approvals		
UL approval		E106378
IECEx approval		BVS 09.0037X
Approved for		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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