



Relay output FB6306B3

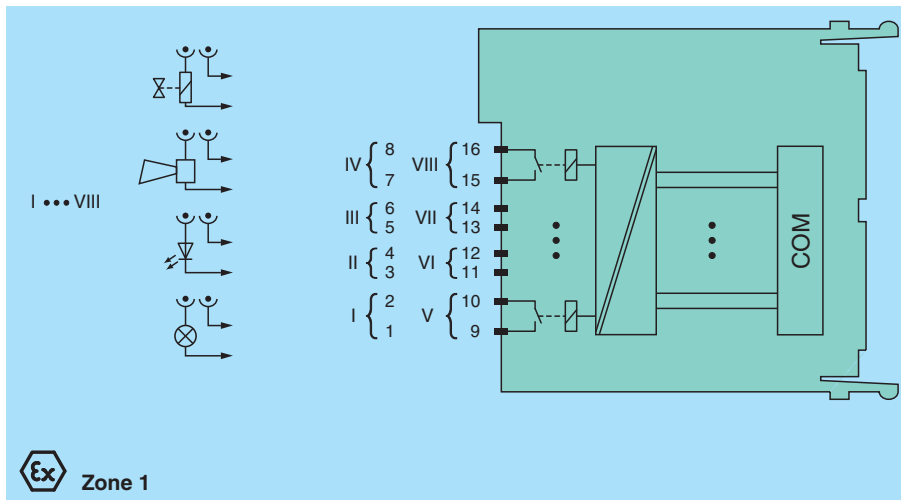
- 8-channel
- Installation in suitable enclosures in Zone 1
- Positive or negative logic selectable
- Simulation mode for service operations (forcing)
- Permanently self-monitoring
- Output with watchdog
- Outputs with Ex e terminals



Function

The device features 8 independent channels.
 The device can be used to switch solenoids.
 The device can perform general switching operations, such as switching auxiliary power circuits.
 The device is supplied with plug-in Ex e terminals and protective cover.
 The outputs are galvanically isolated from the bus and the power supply.

Connection



Technical Data

Slots	
Occupied slots	2
Supply	
Connection	backplane bus
Rated voltage	U_r 12 V DC +4/-2 % , only in connection with the power supplies FB92**
Power dissipation	1.9 W
Power consumption	1.4 W
Internal bus	
Connection	backplane bus
Interface	manufacturer-specific bus to standard com unit
Digital output	

Release date: 2025-03-03 Date of issue: 2025-03-03 Filename: 70151719_eng.pdf

Technical Data

Number of channels	8
Field device interface	
Connection	Relay output
Connection	channel I: 1-2 NO; channel II: 3-4 NO; channel III: 5-6 NO; channel IV: 7-8 NO; channel V: 9-10 NO; channel VI: 11-12 NO; channel VII: 13-14 NO; channel VIII: 15-16 NO
Relay	
Switching voltage	30 V DC
Switching current	1 A DC
Switch power	30 W
Minimum load	5 V 10 mA
Electrical life	0.1 million switching cycles at maximum load and temperature
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 Diagnostic LED (I) red: module fault , red flashing: Communication error or active safety shutdown , white: fixed parameter set (parameters from com unit are ignored) , white flashing: requests parameters from com unit Status LED (1-8) yellow: Channel status
Coding	optional mechanical coding via front socket
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1
Low voltage	
Directive 2014/35/EU	EN 61010-1 , EN 60664-1
Conformity	
Degree of protection	IEC 60529
Environmental test	EN 60068-2-14
Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
Relative humidity	EN 60068-2-78
Ambient conditions	
Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
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
Mechanical specifications	
Degree of protection	IP20 (module) , a separate housing is required acc. to the system description
Connection	Ex e spring terminal with protective cover
Mass	approx. 945 g
Dimensions	57 x 107 x 132 mm (2.2 x 4.2 x 5.2 inch)
Data for application in connection with hazardous areas	
EU-type examination certificate	FIDI 23 ATEX 0077 U
Marking	Ⓜ II 2G Ex db eb q IIC Gb
Galvanic isolation	
Output/power supply, internal bus	basic insulation according to IEC/EN 61010-1, rated insulation voltage 30 V DC
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0 EN 60079-1 EN 60079-5 EN 60079-7

Technical Data

International approvals	
ATEX approval	FIDI 23 ATEX 0077 U
IECEX approval	
IECEX certificate	IECEX FIDI 23.0009U
IECEX marking	Ex db eb q IIC Gb
General information	
System information	The module has to be mounted in appropriate backplanes (FB92**) in Zone 1, 2, or outside hazardous areas. Observe the corresponding EC-type examination certificate.
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

