

## Relay output FB6306B2

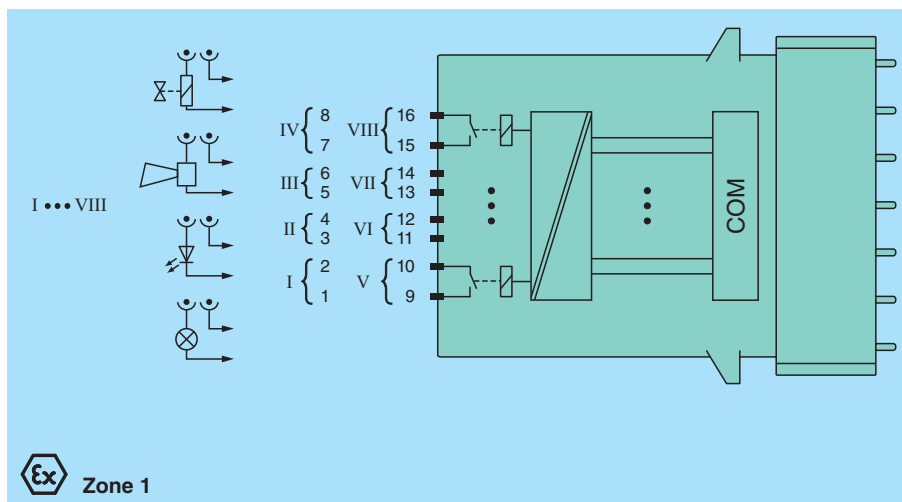
- 8-channel
- Outputs with plug-in Ex e terminals
- Installation in suitable enclosures in Zone 1
- Module can be exchanged under voltage (hot swap)
- Positive or negative logic selectable
- Simulation mode for service operations (forcing)
- Permanently self-monitoring
- Output with watchdog



### Function

The device features 8 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 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 , only in connection with the power supplies FB92** |
| Power dissipation | 1.4 W                                                             |
| Power consumption | 1.4 W                                                             |

#### Internal bus

|            |                                                |
|------------|------------------------------------------------|
| Connection | backplane bus                                  |
| Interface  | manufacturer-specific bus to standard com unit |

#### Digital output

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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## 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                                              | 24 V DC / AC                                                                                                                                                                                                                                     |
| Switching current                                              | 1 A DC / AC resistive load                                                                                                                                                                                                                       |
| Switch power                                                   | 30 VA / 30 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                                                                                                                                                                     |
| <b>Indicators/settings</b>                                     |                                                                                                                                                                                                                                                  |
| LED indication                                                 | LED green: supply<br>LED red: communication fault                                                                                                                                                                                                |
| Coding                                                         | optional mechanical coding via front socket                                                                                                                                                                                                      |
| <b>Directive conformity</b>                                    |                                                                                                                                                                                                                                                  |
| Electromagnetic compatibility                                  |                                                                                                                                                                                                                                                  |
| Directive 2014/30/EU                                           | EN 61326-1:2013                                                                                                                                                                                                                                  |
| <b>Conformity</b>                                              |                                                                                                                                                                                                                                                  |
| Electromagnetic compatibility                                  | NE 21:2007                                                                                                                                                                                                                                       |
| Degree of protection                                           | IEC 60529:2000                                                                                                                                                                                                                                   |
| Environmental test                                             | EN 60068-2-14:2009                                                                                                                                                                                                                               |
| Shock resistance                                               | EN 60068-2-27:2009                                                                                                                                                                                                                               |
| Vibration resistance                                           | EN 60068-2-6:2008                                                                                                                                                                                                                                |
| Damaging gas                                                   | EN 60068-2-42:2003                                                                                                                                                                                                                               |
| Relative humidity                                              | EN 60068-2-78:2001                                                                                                                                                                                                                               |
| <b>Ambient conditions</b>                                      |                                                                                                                                                                                                                                                  |
| 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 ± 0.075 mm/1 g; 10 cycles<br>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                                                                                                                                                    |
| <b>Mechanical specifications</b>                               |                                                                                                                                                                                                                                                  |
| 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. 750 g                                                                                                                                                                                                                                    |
| Dimensions                                                     | 57 x 107 x 132 mm (2.2 x 4.2 x 5.2 inch)                                                                                                                                                                                                         |
| <b>Data for application in connection with hazardous areas</b> |                                                                                                                                                                                                                                                  |
| EU-type examination certificate                                | BVS 11 ATEX E 093 X                                                                                                                                                                                                                              |
| Marking                                                        | Ⓔ II 2 G Ex db eb IIC T4                                                                                                                                                                                                                         |
| Galvanic isolation                                             |                                                                                                                                                                                                                                                  |
| Output/power supply, internal bus                              | safe electrical isolation acc. to EN 61010-1:2010                                                                                                                                                                                                |
| Directive conformity                                           |                                                                                                                                                                                                                                                  |
| Directive 2014/34/EU                                           | EN IEC 60079-0:2018+AC:2020<br>EN 60079-1:2014<br>EN 60079-7:2015+A1:2018                                                                                                                                                                        |
| <b>International approvals</b>                                 |                                                                                                                                                                                                                                                  |
| ATEX approval                                                  | BVS 11 ATEX E 093X                                                                                                                                                                                                                               |

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## Technical Data

### 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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> . |

## Assembly

### Front view

