# Power supply

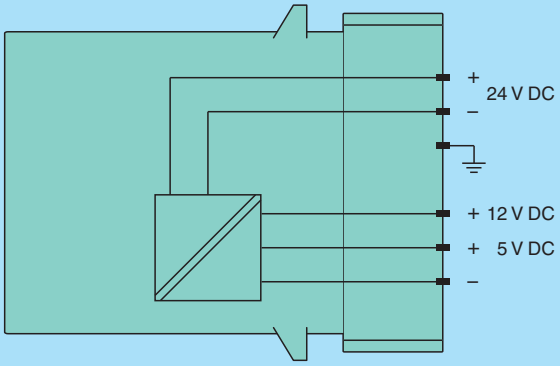
## FB9206D

- Power supply for 24 V DC
- Suitable for the supply of 24 I/O modules and 1 bus coupler
- Installation in suitable enclosures in Zone 1
- Module can be exchanged under voltage (hot swap)

## Function

The power supply provides power for the I/O modules and com units mounted on the backplane.
Input and output are galvanically isolated from each other (EN 60950-1).

## Connection




## Technical Data

| | | |
|---|---|---|
| **Slots** | | |
| Bus coupler | | 2 |
| I/O modules | | >12, depending on the type |
| **Supply** | | |
| Connection | | wired to Ex e terminals via backplane |
| Maximum safe voltage $U_m$ | | 60 V DC (SELV/PELV) |
| Input voltage range | U | 18 ... 32 V DC (SELV/PELV) |
| Power dissipation | | approx. 15 % of power consumption |
| Power consumption | | max. 45 W<br>parallel connection with other FB9206D (autom. power sharing) |
| Inrush current | | 1.5 A (10 ms) |
| **Output** | | |
| Voltage | | 5.4 V DC +/- 5% ,<br>12 V DC + 4/- 2% |

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## Technical Data

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|---|---|---|
| Power | | $P_{5V} \leq 5.4$ W, $P_{12V} \leq 39$ W - $P_{5V}$ |
| **Indicators/settings** | | |
| LED indication | | LED green: OFF in case of loss of 24V or 12V or 5V |
| **Directive conformity** | | |
| Electromagnetic compatibility | | |
| Directive 2014/30/EU | | EN 61326-1 |
| **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 ± 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 |
| **Mechanical specifications** | | |
| Degree of protection | | IP20 (module) , a separate housing is required acc. to the system description |
| Mass | | approx. 820 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 | | PTB 97 ATEX 1074 U |
| Marking | | ⟨Ex⟩ II 2 G Ex d IIC Gb |
| Galvanic isolation | | |
| Output/power supply | | EN 60950-1 (safety requirement < 60 V, external power supply SELV/PELV) |
| Directive conformity | | |
| Directive 2014/34/EU | | EN 60079-0:2009<br>EN 60079-1:2007<br>EN 60079-11:2007<br>EN 60079-26:2007<br>EN 61241-11:2006 |
| **International approvals** | | |
| ATEX approval | | PTB 97 ATEX 1075 |
| EAC approval | | Russia: RU C-IT.MIII06.B.00129 |
| Marine approval | | |
| Lloyd Register | | 15/20021 |
| DNV GL Marine | | TAA0000034 |
| American Bureau of Shipping | | T1450280/UN |
| Bureau Veritas Marine | | 22449/B0 BV |
| **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. |

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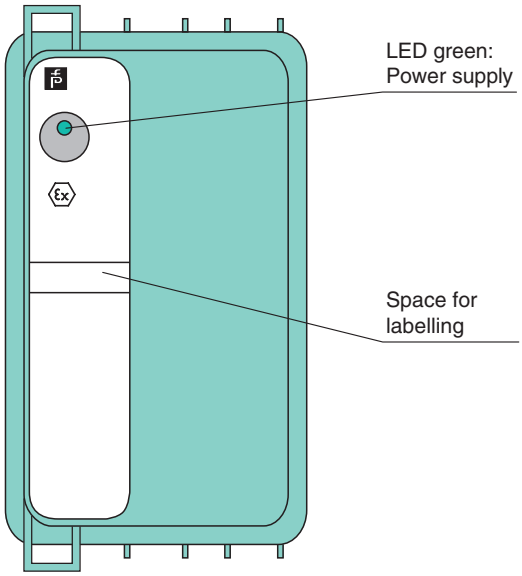
## Assembly

**Front view**

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