



EasyCom Com Unit for PROFIBUS DP/DP-V1

LB8106H0630

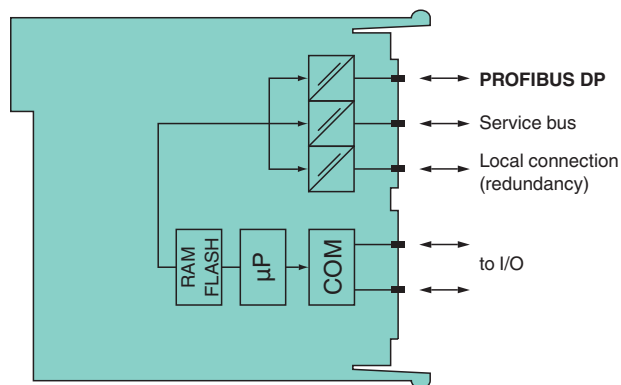
- Interface between the I/O modules and the PCS/PLC
- Com unit for 80 analog or 184 digital channels
- Communication via PROFIBUS DP
- Mounting in Zone 2, Class I/Div.2 or in the safe area
- HART communication via PROFIBUS DP V1 or service bus
- Configuration via GSD parameters from the control system
- Non-volatile memory for configuration and parameter settings
- Self configuration in redundant systems
- Permanently self-monitoring
- Outputs drive to safe state in case of failures
- Module can be exchanged under voltage



Function

The PROFIBUS com unit forms the interface between the I/O modules on the backplane and the process control system. It supports all single width and dual width I/O modules. Thereby signals from NAMUR sensors, mechanical contacts, high-power solenoid drivers, power relays, sounders, and alarm LEDs are transported to the higher-level bus system. The com unit can be easily configured via DTM and supports redundancy as well as HART.

Connection



Zone 2
Div. 2

Technical Data

Supply

| | | |
|-------------------|-------|--|
| Connection | | backplane bus |
| Rated voltage | U_r | 5 V DC , only in connection with the power supplies LB9*** |
| Power dissipation | | 1.8 W |
| Power consumption | | 1.8 W |

Fieldbus connection

| | | |
|---------------|--|----------------------------------|
| Fieldbus type | | PROFIBUS DP/DP-V1 |
| PROFIBUS DP | | |
| Connection | | 9-pin Sub-D socket via backplane |
| Baud rate | | up to 1.5 MBit/s |

Technical Data

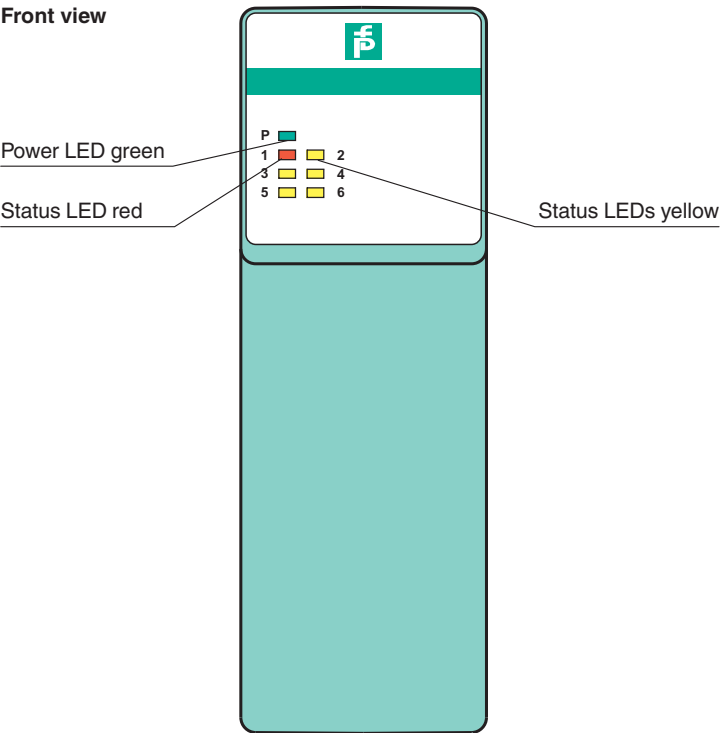
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|--|--|
| Protocol | PROFIBUS DP/DP V1 read/write services |
| Number of stations per bus line | max. 125 (PROFIBUS), max. 119 (service bus) |
| Cyclic process data | 240 bytes input and (simultaneously) 240 bytes output |
| Number of stations per bus segment | max. 31 (RS-485 standard) |
| Number of repeaters between Master and Slave | max. 3 |
| Supported I/O modules | all LB remote I/O modules |
| Bus length | max. 1000 m (FOL, 1.5 Mbaud), max. 1000 m (copper cable, 187.5 kBd), max. 200 m (copper cable, 1.5 MBd) |
| Addressing | via configuration software |
| PROFIBUS address | 0 ... 126 (factory standard setting: 126) |
| GSE file | PFV61710.gsd/gse |
| HART communication | via PROFIBUS or service bus |
| Internal bus | |
| Connection | backplane bus |
| Redundancy | via backplane |
| Indicators/settings | |
| LED indication | LED P: (power supply): On = operating, fast flash = cold start LED 1: (collective alarm): On = internal fault, flashing = no fieldbus connection LED 2: (operating mode): flashing 1 (1:1 ratio) = active, normal operation; flashing 2 (7:1 ratio) = active, simulation LED 3: (status fieldbus): flashing = fieldbus receive channel active LED 4: (status fieldbus): flashing = fieldbus response channel active LED 5: (status service bus): flashing = service bus receive channel active LED 6: (status service bus): flashing = service bus response channel active |
| Directive conformity | |
| Electromagnetic compatibility | |
| Directive 2014/30/EU | EN 61326-1 |
| Conformity | |
| Electromagnetic compatibility | NE 21 |
| Degree of protection | IEC 60529 |
| Fieldbus standard | IEC 61158-2 |
| 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) |
| 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 (module) , mounted on backplane |
| Connection | via backplane |
| Mass | approx. 120 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 | Ⓔ II 3 G Ex nA IIC T4 Gc |

Technical Data

| | | |
|---------------------------|--|---|
| 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 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, Zone 22 or Div. 2) 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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