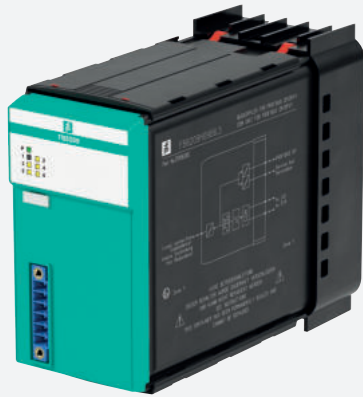




Unicom Com Unit for PROFIBUS DP/DP-V1

FB8209H0908.3

- Interface between the I/O modules and the PCS/PLC
- Com unit for 80 analog or 184 digital channels
- Communication via PROFIBUS DP
- Installation in suitable enclosures in Zone 1
- HART communication via PROFIBUS DP V1 or service bus
- Configuration via FDT 1.2 DTM
- Configuration in run (CiR) for any PCS
- 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

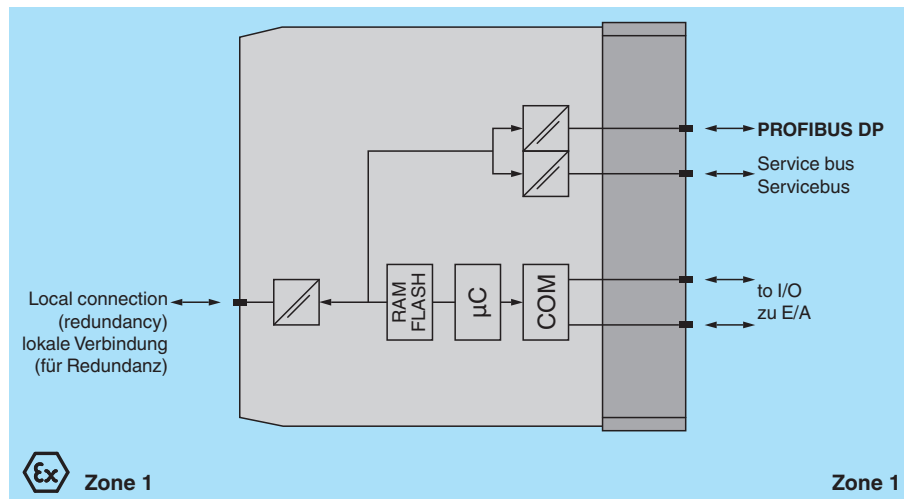
Unicom Com Unit for PROFIBUS DP/DP-V1



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. Configuration in Run (CiR) enables configuration of a running system without a PROFIBUS restart, even in non-redundant systems.

Connection



Technical Data

Slots		
Occupied slots	2	
Supply		
Connection	backplane bus	
Rated voltage	U _r	5 V DC , only in connection with the power supplies FB92**
Power dissipation	1.8 W	
Power consumption		1.8 W
Fieldbus connection		
Fieldbus type		PROFIBUS DP/DP-V1

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

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PEPPERL+FUCHS

Technical Data

PROFIBUS DP		
Connection		wired to Ex e terminals via backplane
Baud rate		up to 1.5 MBit/s
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 FB remote I/O modules
Configuration (240 bytes I/O)		Standard: 80 analog, 184 digital Universal 2I2O: 48 analog, 184 digital Universal 4I4O: 60 analog, 120 digital
Bus length		max. 1000 m (FOL, 1.5 MBit/s), max. 1000 m (copper cable, 187.5 kBit/s), max. 200 m (copper cable, 1.5 MBit/s)
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 front connector
Indicators/settings		
LED indication		LED green (power supply): On = operating, fast flash = cold start, slow flash = HCIR loading active LED red (collective alarm): On = internal fault, flashing = no PROFIBUS connection LED yellow (operating mode): flashing 1 (1:1 ratio) = active, normal operation; flashing 2 (7:1 ratio) = active, simulation
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
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
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) , a separate housing is required acc. to the system description
Connection		via backplane
Mass		approx. 750 g
Dimensions		57 x 107 x 132 mm (2.2 x 4.2 x 5.2 inch)

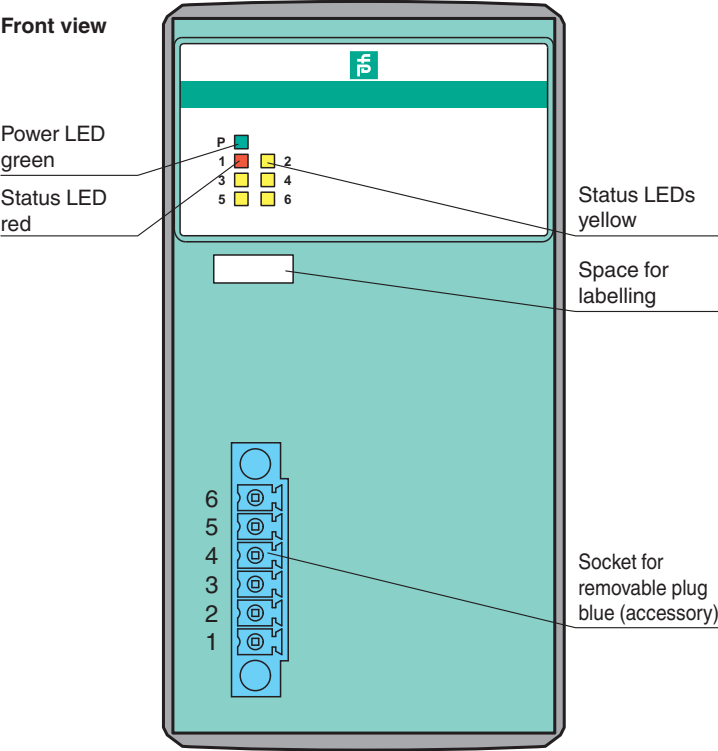
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Technical Data

Data for application in connection with hazardous areas		
EU-type examination certificate		Presafe 19 ATEX 14058U
Directive conformity		
Directive 2014/34/EU		EN IEC 60079-0:2018+AC:2020 EN 60079-1:2014 EN 60079-5:2015 EN 60079-7:2015+A1:2018 EN 60079-11:2012
International approvals		
ATEX approval		Presafe 19 ATEX 14058U
IECEx approval		IECEx PRE 19.0013U
Approved for		Ex db eb q [ib] 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



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