

Features

- Output: 24 ... 26 V/400 mA
- Couples PROFIBUS PA devices transparently to PROFIBUS DP
- High-power trunk for high device count and long cable lengths
- Installation in Zone 2/Class I, Div. 2
- Up to 1.5 MBit auto-adapting
- PROFIBUS DP terminator selectable
- Power Rail support

Function

The FieldConnex[®] basic Segment Coupler is an all-in-one gateway and fieldbus power supply for connecting PROFIBUS PA to PROFIBUS DP transparently. The power output suits long cable lengths and high device counts. Device couplers provide explosion protection for live work at the spur where needed.

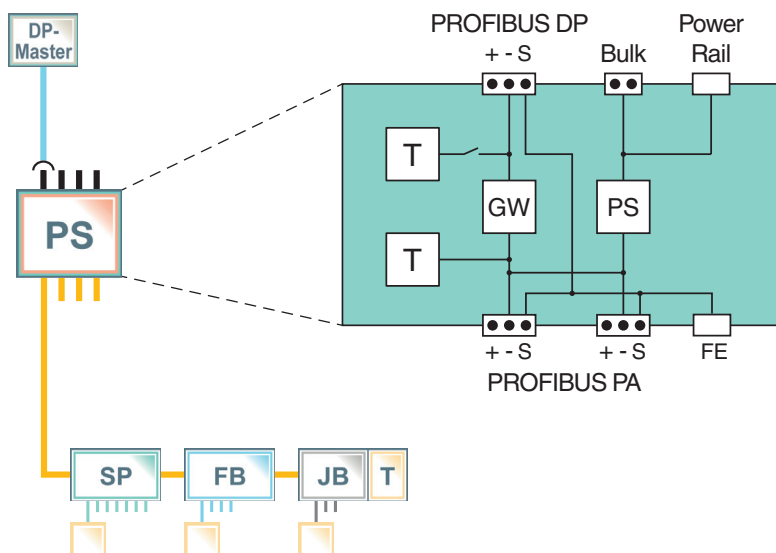
Communication is transparent between DP and PA. The gateway of the Segment Coupler makes each PA device appear as if it was connected to DP: This relates to addressing, cyclic/acyclic data exchange, and the transfer rate. Segment design is clear and easy to understand without subnetworks. The gateway itself is configuration-free. All in all, these features significantly reduce engineering work.

Availability and a long service life are achieved through a passive impedance filter and a design optimized for low heat dissipation. The fieldbus diagnostic handheld (FDH-1) connects directly to test plug sockets located on the plug-in terminal.

Assembly



Connection



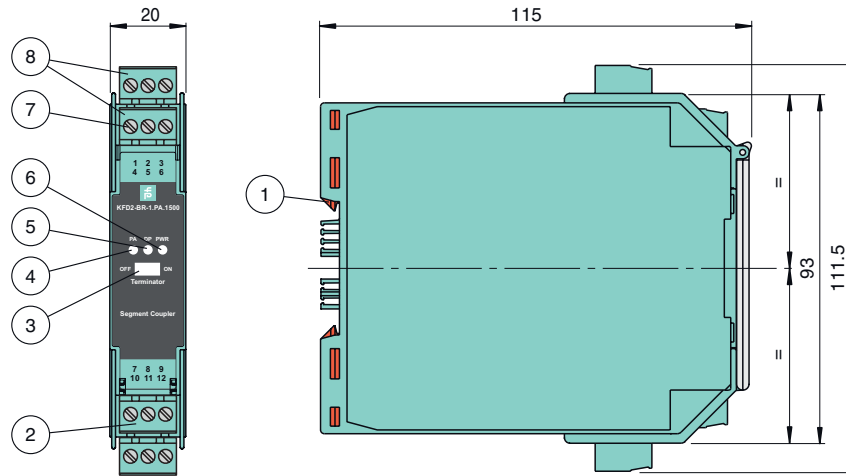
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General specifications		
Design / Mounting		Cabinet installation
Supply		
Connection		Power Rail or terminals 11 (L+), 12 (L-)
Rated voltage	U_n	20 ... 30 V DC
Ripple		≤ 10 %
Rated current	I_n	640 mA ... 365 mA
Power dissipation		max 2.5 W
Fieldbus interface		
PROFIBUS PA		
Connection		3+, 6+, 2-, 5-, 1 shield, 4 shield
Rated voltage		24 ... 26 V
Rated current		≤ 400 mA
Terminating impedance		100 Ω , integrated
PROFIBUS DP		
Connection		terminals 7 RxD/TxD-P, 8 RxD/TxD-N, 9 shield, 10 FE
Baud rate		1.5 MBit/s max.
Indicators/operating means		
Switch		PROFIBUS DP terminator
LED PWR		green: Power on
LED DP/ERR		red 2 Hz flashing: DP error red on: Hardware error red off: DP communication detected
LED PA		red 2 Hz flashing: No PA communication or overload Off: PA communication OK
Electrical isolation		
PROFIBUS DP/PROFIBUS PA		functional insulation acc. to IEC 62103, rated insulation voltage 50 V AC /70 V DC
PROFIBUS DP/Supply		basic insulation according to IEC/EN 61010, rated insulation voltage 253 V AC /357 V DC
PROFIBUS PA/Supply		basic insulation according to IEC/EN 61010, rated insulation voltage 253 V AC /357 V DC
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
Standard conformity		
Electromagnetic compatibility		
Degree of protection		NAMUR NE 21
Fieldbus standard		IEC/EN 60529
Climatic conditions		EN 50170/2
Shock resistance		DIN IEC 721
Vibration resistance		EN 60068-2-27
Ambient conditions		
Ambient temperature		EN 60068-2-6
Storage temperature		-40 ... 60 °C (-40 ... 140 °F)
Relative humidity		-40 ... 85 °C (-40 ... 185 °F)
Shock resistance		< 95 % non-condensing
Vibration resistance		15 g 11 ms
Pollution degree		1 g 10 ... 150 Hz
Corrosion resistance		max. 2, according to IEC 60664
Mechanical specifications		
Connection type		acc. to ISA-S71.04-1985, severity level G3
Core cross-section		Terminals
Housing material		up to 2.5 mm ²
Degree of protection		Polycarbonate
Mass		IP20
Mounting		180 g
Data for application in connection with Ex-areas		
Statement of conformity		DIN rail mounting
Group, category, type of protection, temperature class		TÜV 16 ATEX 7831 X
Directive conformity		⊕ II 3G Ex ec IIC T4 Gc
Directive 2014/34/EU		EN 60079-0:2012 , EN 60079-7:2015
International approvals		
CSA approval		CSA 16.70064204
Approved for		Class I, Division 2, Groups A, B, C, D
IECEX approval		Class I, Zone 2, Ex nA IIC T4 Gc
Approved for		IECEX TUR 16.0006X
General information		
Approved for Ex ec IIC T4 Gc		

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Supplementary information Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see

System Component Overview



Description:

- 1 Extendable lugs
- 2 PROFIBUS DP connection
- 3 Switch: Terminator for PROFIBUS DP
- 4 LED PA: Status of PROFIBUS PA
- 5 LED DP: Status of PROFIBUS DP and hardware
- 6 LED PWR: Status of power supply
- 7 Removable terminal with test plug sockets
- 8 PROFIBUS PA trunk connections

Accessories

Type Code	Description
UPR-03	Universal Power Rail®
KFD2-EB2	Power feed module
KFD2-EB2.R4A.B	Redundant power feed module

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