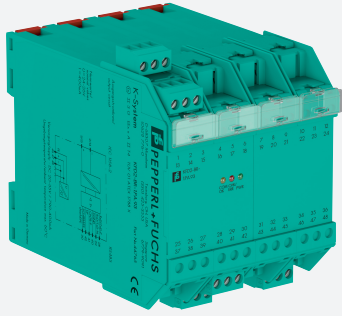


Segment Coupler 1

KFD2-BR-1.PA.93



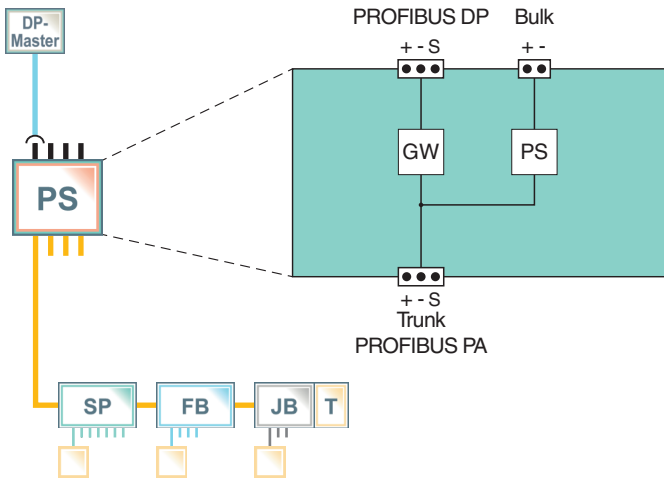
- Output: 24 ... 26 V/400 mA
- Couples PROFIBUS PA devices transparently to PROFIBUS DP
- High-power trunk for high device count and long cable lengths
- Installation in Zone 2/Class I, Div. 2
- Fixed, high-availability terminator
- For all non-redundant masters
- Cyclic/acyclic data exchange



Function

The Segment Coupler 1 (SK1) is an all-in-one gateway and fieldbus power supply for connecting PROFIBUS PA to PROFIBUS DP transparently. The Segment Coupler powers a single PROFIBUS PA segment adapting current and voltage. Power output is designed for long cable lengths and device counts suiting the needs of most fieldbus applications. 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. SK1 supports any PROFIBUS DP master at a fixed transfer rate of 93.75 kbps.

Connection



Technical Data

General specifications

Design / Mounting Cabinet installation

Supply

Connection Power Rail or terminals 47 (L+), 48 (L-)

Rated voltage U_r 20 ... 35 V DC

Ripple ≤ 10 %

Rated current I_r 790 mA ... 400 mA

Fieldbus connection

PROFIBUS PA

Connection terminals 3, 15+; 2, 14-

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

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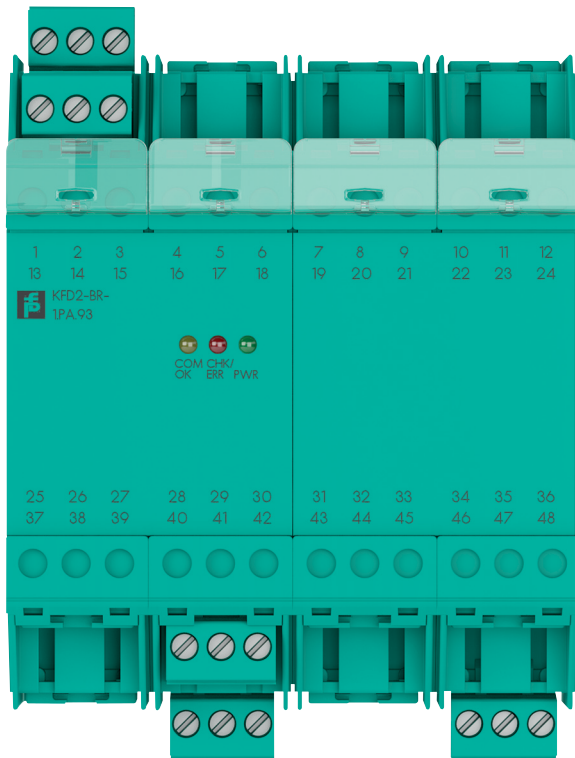
pf PEPPERL+FUCHS

Technical Data

Rated voltage	24 ... 26 V
Rated current	max. 400 mA
Terminating impedance	100 Ω , integrated
PROFIBUS DP	PROFIBUS with RS-485 transmission technology
Connection	terminals 28 RxD/TxD-P, 29 RxD/TxD-N, 30 shield/FE, 40 DGND, 41 CNTR-P, 42 VP
Baud rate	93.75 kBit/s
Terminating impedance	with rotary switch (S1) switchable: 1 = on; 0 = off
Galvanic isolation	
PROFIBUS DP/PROFIBUS PA	safe galvanic isolation acc. to EN 50020, voltage peak value 50 V
PROFIBUS DP/Supply	functional insulation acc. to DIN EN 50178, rated insulation voltage 50 V _{eff}
PROFIBUS PA/Supply	safe galvanic isolation acc. to EN 50020, voltage peak value 50 V
All circuits/FE	functional insulation acc. to DIN EN 50178, rated insulation voltage 50 V _{eff}
Directive conformity	
Electromagnetic compatibility	
Directive 89/336/EEC	EN 61326, EN 50081-2
Standard conformity	
Galvanic isolation	EN 50178
Electromagnetic compatibility	NAMUR NE 21
Degree of protection	IEC/EN 60529
Fieldbus standard	EN 50170/2
Climatic conditions	DIN IEC 721
Ambient conditions	
Classification	3K3
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	< 75 %
Pollution degree	max. 2, according to IEC 60664
Mechanical specifications	
Connection type	Terminals
Core cross section	up to 2.5 mm ²
Housing	80 mm x 115 mm x 107 mm
Degree of protection	IP20
Mass	600 g
Mounting	DIN rail mounting
Data for application in connection with hazardous areas	
Certificate	TÜV 01 ATEX 1788X
Marking	Ⓢ 3G EEx nA II T4
Directive conformity	
Directive 94/9/EC	EN 50021:1999
General information	
Supplementary information	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



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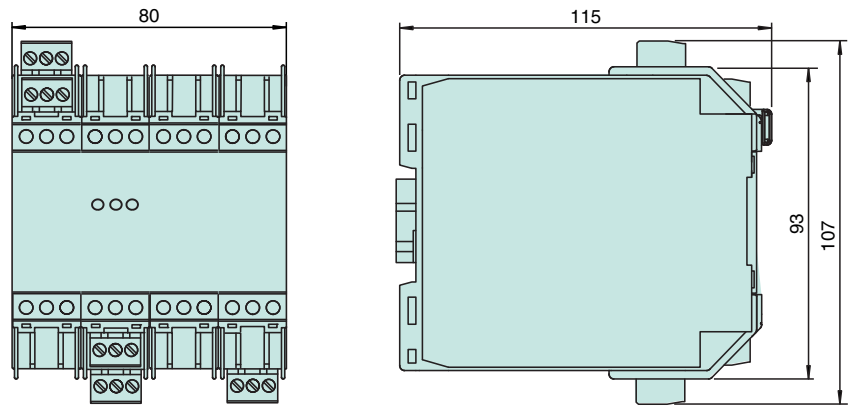
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Additional Information

Dimensions



Accessories

Type Code	Description
UPR-03	Universal Power Rail
KFD2-EB2	Power Feed Module
KMD0-FT-Ex	Fieldbus Terminator, Cabinet Installation
F*-FT-Ex1.I.IEC	Fieldbus Terminator
F*-FT-Ex1.D.IEC	Fieldbus Terminator

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