

Fieldbus Power Supply

FieldConnex® Fieldbus

KLD2-FBPS-1.12.220

- Output: 12 ... 13 V/220 mA
- For battery or solar-powered applications
- For demanding environmental conditions
- Installation in Zone 2/Class I, Div. 2
- For FOUNDATION Fieldbus H1
- Fixed, high-availability terminator
- Low heat dissipation

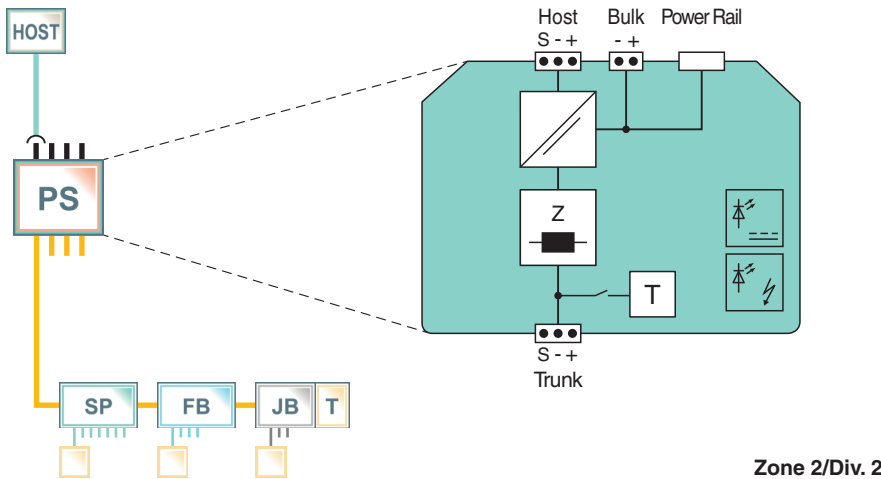
Fieldbus power supply with low voltage for compact plants also in island mode



Function

This fieldbus power supply is an all-in-one module for single fieldbus segments. It adapts current and voltage and provides the impedance filter required. Reliability of communication is enhanced through galvanic isolation between segment and bulk power supply. This supply is specifically designed for very demanding environmental conditions. Low input ratings and very low heat dissipation are suitable for battery or solar-powered application. Availability and a long service life are achieved through a passive impedance filter and a design optimized for low heat dissipation. Modules can be mounted with no spacing required in any direction for an optimized and space-saving cabinet layout. The mobile Advanced Diagnostic Module connects directly to test plug sockets located on the plug-in terminal. In conjunction with the modular Segment Protector it is a perfectly expandable solution.

Connection



Technical Data

General specifications	
Installation in hazardous area	Zone 2 / Div. 2
Supply	
Connection	Power Rail or terminals 8+, 11+; 9-, 12-
Rated voltage	U_r 10 ... 30 V DC
Rated current	I_r 350 ... 120 mA
Power dissipation	typ. ≤ 0.5 W
Fieldbus connection	
Number of segments	1
Connection	terminals 3+, 6+; 2-, 5-; 1S, 4S (S=screen connection)

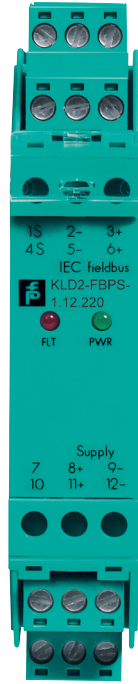
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Technical Data

Rated voltage	U _N	12 ... 13 V
Rated current	I _N	220 mA
Galvanic isolation		
Fieldbus segment/Supply		functional insulation acc. to IEC 62103, rated insulation voltage 250 V AC
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
Standard conformity		
Electromagnetic compatibility		
		NE 21:2006
Degree of protection		IEC/EN 60529
Fieldbus standard		IEC 61158-2, ISA S 50.02 part 2
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
Ambient conditions		
Ambient temperature		
		-40 ... 70 °C (-40 ... 158 °F)
Storage temperature		
		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		
		< 95 % non-condensing
Shock resistance		
		15 g 11 ms
Vibration resistance		
		1 g , 10 ... 150 Hz
Pollution degree		
		max. 2, according to IEC 60664
Corrosion resistance		
		acc. to ISA-S71.04-1985, severity level G3
Mechanical specifications		
Connection type		
		screw terminal , pluggable
Core cross section		
		up to 2.5 mm ²
Housing		
		20 mm x 115 mm x 107 mm
Housing material		
		Polycarbonate
Degree of protection		
		IP20
Mass		
		approx. 210 g
Mounting		
		DIN rail mounting
Data for application in connection with hazardous areas		
Certificate		
		TÜV 06 ATEX 553079 X
Marking		
		Ⓜ II 3G Ex ec IIC T4 Gc
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2012 , EN 60079-7:2015
International approvals		
FM approval		
FM certificate		FM 19 US 0015 X and FM 19 CA 0011 X
FM marking		AEx/Ex ec IIC T4
Certificates and approvals		
Marine approval		
		DNV A-14038
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .

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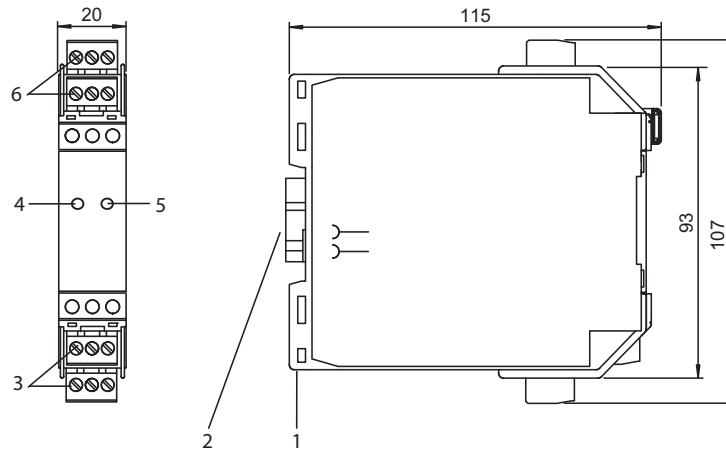
Assembly



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Additional Information

Dimensions and Assembly



Description:

- 1 Extendable lugs
- 2 Protective cap, remove for power supply via Power Rail
- 3 Removeable terminals
- 4 LED red: Fault signal
- 5 LED green: Power supply
- 6 Test plug socket; removeable terminals

Operation

Indication

LED indicators:	Conditions
green ON red OFF	Device ready for operation
green OFF red OFF	Device not ready for operation
green OFF red 2 Hz flashing	OVERLOAD, load current > 250 mA typ.

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