



Repeater

KFD0-CS-1.50

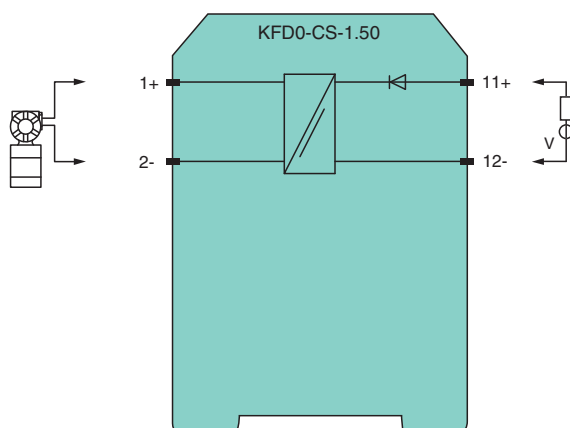
- 1-channel signal conditioner
- 24 V DC supply (loop powered)
- Current input/output 4 mA ... 20 mA
- transmitter power supply
- Accuracy 0.1 %
- Reverse polarity protection
- Up to SIL 2 acc. to IEC/EN 61508

CE SIL2

Function

This signal conditioner provides the galvanic isolation between field circuits and control circuits. The device can be used as a repeater or transmitter power supply for 2-wire transmitters. This device is loop powered. No additional power supply has to be connected. Use the technical data to verify that proper voltage is available to the field devices.

Connection



Technical Data

General specifications

Signal type Analog input/analog output

Functional safety related parameters

Safety Integrity Level (SIL) SIL 2

Supply

Rated voltage U_r 10 ... 35 V DC , loop powered

Power dissipation 0.2 W

Control circuit

Connection terminals 12-, 11+

Voltage 10 ... 35 V DC

Current 4 ... 20 mA

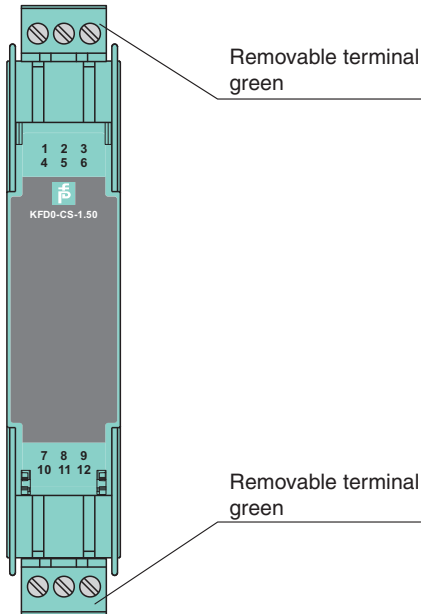
Technical Data

Power dissipation	< 150 mW per channel at 25 mA and U < 26.1 V < 400 mW per channel at 25 mA und U > 26.1 V	
Field circuit		
Connection	terminals 1+, 2-	
Voltage		≥ 0.9 x U _{in} - (0.23 x current in mA) - 0.7 for 10 V < U _{in} < 26.1 V ≥ 23 V - (0.23 x current in mA) for U _{in} > 26.1 V
Short-circuit current	max. 100 mA	
Transfer current		max. 25 mA
Transfer characteristics		
Accuracy		0.1 %
Deviation		
After calibration		U _{in} ≥ 5 V ± 20 µA/U _{in} ≤ 5 V ± 50 µA incl. calibration, linearity, hysteresis and output load fluctuations at the field side; at 20 °C (68 °F)
Influence of ambient temperature	≤ ± 2 µA/K at U _{in} ≤ 20 V; ≤ ± 5 µA/K at U _{in} > 20 V	
Rise time		≤ 5 ms at 4 ... 20 mA and U _{in} = input voltage < 26 V
Galvanic isolation		
Input/Output		basic insulation according to IEC 62103, rated insulation voltage 300 V _{eff}
Indicators/settings		
Labeling		space for labeling at the front
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations)	
Conformity		
Electromagnetic compatibility	NE 21:2012 EN 61326-3-2:2008	
Degree of protection		IEC 60529:2001
Protection against electrical shock	EN 61010-1:2010	
Ambient conditions		
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F) extended ambient temperature range up to 70 °C (158 °F), refer to manual for necessary mounting conditions	
Mechanical specifications		
Degree of protection	IP20	
Connection		screw terminals
Mass	approx. 100 g	
Dimensions		20 x 107 x 115 mm (0.8 x 4.2 x 4.5 inch) (W x H x D) , housing type B1
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001	
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

Front view



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