Repeater

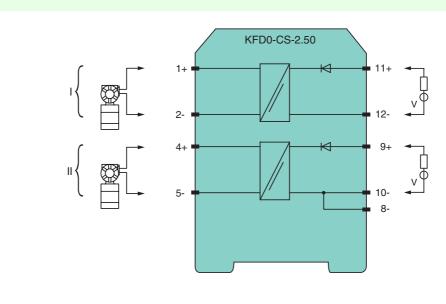
KFD0-CS-2.50

Features	Assembly	
 2-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 SIL2 acc. to IEC 61508 	Front view	Removable terminals green
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.		Removable terminals green

CE

SIL2

Connection



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General specifications	
Signal type	Analog input
Supply	
Rated voltage U _n	loop powered
Power loss	0.4 W
Control circuit	
Connection	terminals 12-, 11+; 8-, 10-, 9+
Voltage	10 35 V DC
Current	4 20 mA
Power loss	< 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-; 4+, 5-
Voltage	\ge 0.9 x U _{in} - (0.23 x current in mA) - 0.7 for 10 V < U _{in} < 26.1 V \ge 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	
Deviation	
After calibration	$U_{in} \ge 5 \text{ V} \pm 20 \ \mu\text{A}/U_{in} \le 5 \text{ V} \pm 50 \ \mu\text{A}$ incl. calibration, linearity, hysteresis and output load fluctuations at 20 °C (68 °F)
Influence of ambient temperature	\leq ± 2 µA/K at U _{in} \leq 20 V; \leq ± 5 µA/K at U _{in} > 20 V
Rise time	\leq 5 ms at 4 20 mA and U_{in} = input voltage < 26 V
Electrical isolation	
Input/Output	basic insulation according to IEC 62103, rated insulation voltage 300 $\mathrm{V}_{\mathrm{eff}}$
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Conformity	
Insulation coordination	EN 50178:1997
Electromagnetic compatibility	NE 21:2006
Degree of protection	IEC 60529:2001
Ambient conditions	
Ambient temperature	-20 60 °C (-4 140 °F)
Mechanical specifications	
Degree of protection	IP20
Mass	approx. 100 g
Dimensions	20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
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.

Refer to "General Notes Relat	ing to Pepperl+Fuchs Product Inform	ation".
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