

## Features

- 1-channel isolated barrier
- 24 V DC supply (Power Rail)
- Voltage input 0 V ... 12 V
- Voltage output 0 V ... 12 V

## Function

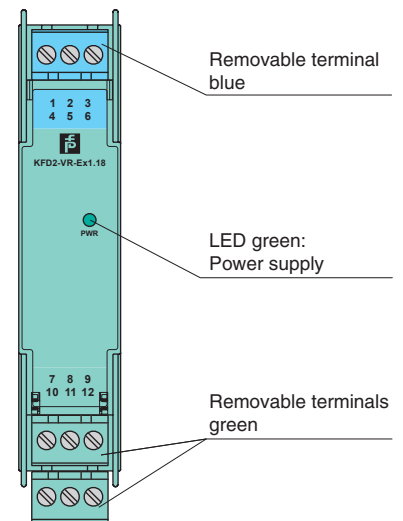
This isolated barrier is used for intrinsic safety applications. It transfers voltage signals from hazardous areas to safe areas.

The input voltage of the terminals 4 and 5 is transferred to the terminals 7 and 8. The terminals 4 and 8 have the same polarity.

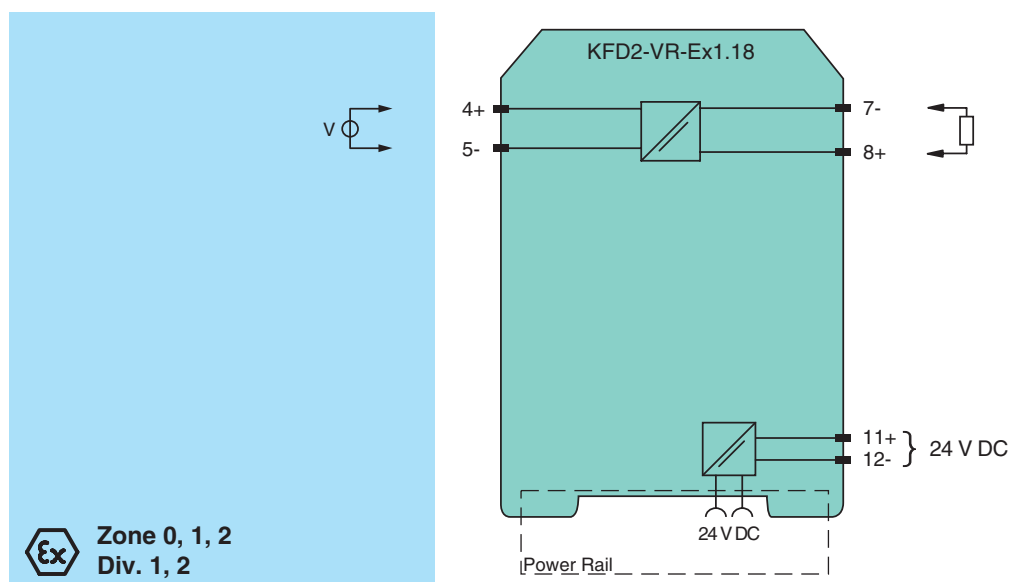
The device repeats 0 V ... 12 V signals from strain gauges, transducers, and inductive motion sensors with signal frequencies up to 1.2 kHz.

## Assembly

Front view



## Connection



Release date 2019-05-29 14:09 Date of issue 2019-05-29 072036\_eng.xml

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

<b>General specifications</b>		
Signal type		Analog input
<b>Supply</b>		
Connection		Power Rail or terminals 11+, 12-
Rated voltage	$U_r$	20 ... 35 V DC
Ripple		within the supply tolerance
Rated current	$I_r$	< 20 mA
<b>Input</b>		
Connection side		field side
Connection		terminals 4+, 5-
Input resistance		$\geq 10 \text{ M}\Omega$
Transmission range		0 ... 12 V
Offset voltage/current		< 2 mV / < 7 nA
<b>Output</b>		
Connection side		control side
Connection		terminals 7-, 8+
Voltage		0 ... 12 V
Output resistance		$\leq 20 \Omega$
<b>Transfer characteristics</b>		
Cut-off frequency		1.2 kHz (-3 dB)
Deviation		
After calibration		$\pm 5 \text{ mV}$ at 20 °C (68 °F)
Influence of ambient temperature		$\leq 0.005 \%$ of range per K
Rise time		$\leq 0.4 \text{ ms}$
<b>Galvanic isolation</b>		
Output/power supply		functional insulation, rated insulation voltage 50 V AC
<b>Indicators/settings</b>		
Display elements		LED
Labeling		space for labeling at the front
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations)
<b>Conformity</b>		
Electromagnetic compatibility		NE 21
Degree of protection		IEC 60529
<b>Ambient conditions</b>		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
<b>Mechanical specifications</b>		
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) , housing type B1
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>		
EU-type examination certificate		BAS 01 ATEX 7262
Marking		$\text{Ex}$ II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C $\leq T_{\text{amb}} \leq 60$ °C) , [circuit(s) in zone 0/1/2]
Voltage	$U_o$	18 V
Current	$I_o$	4.2 mA
Power	$P_o$	19 mW
Supply		
Maximum safe voltage	$U_m$	250 V (Attention! The rated voltage is lower.)
Type of protection [Ex ia]		
Output		
Maximum safe voltage	$U_m$	250 V (Attention! The rated voltage is lower.)
Certificate		
Marking		$\text{Ex}$ II 3G Ex ec IIC T4 Gc [device in zone 2]
Galvanic isolation		
Input/Output		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Input/power supply		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 60079-7:2015+A1:2018
<b>International approvals</b>		
FM approval		
Control drawing		116-0129

Release date 2019-05-29 14:09 Date of issue 2019-05-29 072036\_eng.xml

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<b>UL approval</b>	
Control drawing	116-0173 (cULus)
<b>CSA approval</b>	
Control drawing	116-0132
<b>IECEX approval</b>	
IECEX certificate	IECEX BAS 10.0040X
IECEX marking	Ex ec IIC T4 Gc
<b>General information</b>	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .
<b>Accessories</b>	
Optional accessories	<ul style="list-style-type: none"> <li>- power feed module KFD2-EB2(.R4A.B)(.SP)</li> <li>- universal power rail UPR-03(-M)(-S)</li> <li>- profile rail K-DUCT-BU(-UPR-03)</li> </ul>

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