Features

- 1-channel isolated barrier
- 24 V DC supply (Power Rail)
- Current output up to 650 Ω load
- HART I/P and valve positioner
- · Lead breakage monitoring
- Accuracy 0.1 %
- · Housing width 12.5 mm
- Up to SIL 2 acc. to IEC 61508

Function

This isolated barrier is used for intrinsic safety applications. It drives SMART I/P converters, electrical valves, and positioners in hazardous areas.

Digital signals are superimposed on the analog values at the field or control side and are transferred bi-directionally.

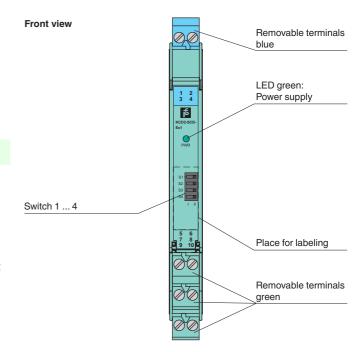
Current transferred across the DC/DC converter is repeated at terminals 1 and 2.

An open field circuit presents a high input impedance to the control side to allow lead breakage monitoring by control system.

If the loop resistance for the digital communication is too low, an internal resistor of 250 Ω between terminals 6 and 8 is available, which may be used as the HART communication resistor.

Sockets for the connection of a HART communicator are integrated into the terminals of the device.

Assembly

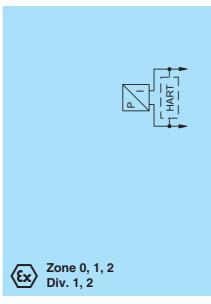


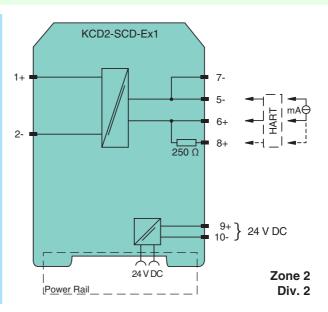




SIL 2

Connection





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Mechanical specificationsIP20Degree of protectionIP20Connectionscrew terminalsMassapprox. 100 gDimensions12.5 x 114 x 124 mm (0.5 x 4.5 x 4.9 inch) , housing type A2Mountingon 35 mm DIN mounting rail acc. to EN 60715:2001Data for application in connection with hazardous areasEU-Type Examination CertificateCESI 06 ATEX 021Marking⟨∑ (1)G [Ex ia Ga] C , ⟨∑ (1)D [Ex ia Da] C , ⟨∑ (M1) [Ex ia Ma] Output[Ex ia Ga] C , [Ex ia Da] C , [Ex ia Ma]		-20 60 °C (-4 140 °F)
Degree of protection IP20 Connection screw terminals Mass approx. 100 g Dimensions 12.5 x 114 x 124 mm (0.5 x 4.5 x 4.9 inch) , housing type A2 Mounting on 35 mm DIN mounting rail acc. to EN 60715:2001 Data for application in connection with hazardous areas EU-Type Examination Certificate CESI 06 ATEX 021 Marking ⊗ II (1)G [Ex ia Ga] IIC , ⊗ II (1)D [Ex ia Da] IIIC , ⊗ I (M1) [Ex ia Ma] I Output [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I		
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Mass approx. 100 g Dimensions 12.5 x 114 x 124 mm (0.5 x 4.5 x 4.9 inch) , housing type A2 Mounting on 35 mm DIN mounting rail acc. to EN 60715:2001 Data for application in connection with hazardous areas EU-Type Examination Certificate CESI 06 ATEX 021 Marking ⟨x I (1)G [Ex ia Ga] IIC , ⟨x I (1)D [Ex ia Da] IIIC , ⟨x I (M1) [Ex ia Ma] I Output [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I	<u> </u>	
Dimensions 12.5 x 114 x 124 mm (0.5 x 4.5 x 4.9 inch) , housing type A2 Mounting Data for application in connection with hazardous areas EU-Type Examination Certificate Marking Output CESI 06 ATEX 021 (Ex ia Ga] IIC , ⟨⟨∞⟩ II (1)D [Ex ia Da] IIIC , ⟨∞⟩ I (M1) [Ex ia Ma] I [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I		
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EU-Type Examination Certificate Marking Output CESI 06 ATEX 021 () II (1)D [Ex ia Da] IIIC, () I (M1) [Ex ia Ma] I () II (Ex ia Da] IIIC, () IIIC,		
Marking	Mounting Data for application in connection	on 35 mm Dira mounting rail acc. to EIA 607 15:2001
Output [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I	Mounting Data for application in connection with hazardous areas	
	Mounting Data for application in connection with hazardous areas	CESI 06 ATEX 021
Supply	Mounting Data for application in connection with hazardous areas EU-Type Examination Certificate	CESI 06 ATEX 021 ⟨ၹ (1)G [Ex ia Ga] (1)D [Ex ia Da] (M1) [Ex ia Ma]
Supply	Mounting Data for application in connection with hazardous areas EU-Type Examination Certificate Marking	CESI 06 ATEX 021 ⟨ၹ (1)G [Ex ia Ga] (1)D [Ex ia Da] (M1) [Ex ia Ma]



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Maximum safe voltage	U_{m}	250 V AC (Attention! U _m is no rated voltage.)
Equipment		terminals 1+, 2-
Voltage	U_o	25.2 V
Current	I _o	100 mA
Power	P_{o}	630 mW
Certificate		PF 06 CERT 0973 X
Marking		⟨x⟩ II 3G Ex nA IIC T4 Gc
Galvanic isolation		
Input/Output		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Output/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 50303:2000
International approvals		
FM approval		
Control drawing		116-0419 (cFMus)
UL approval		
Control drawing		116-0420 (cULus)
IECEx approval		IECEx CES 06.0001
Approved for		[Ex ia Ga] IIC , [Ex ia Da] IIIC , [Ex ia Ma] I
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com.

Switch position

Function	S1	S2	S3	S4
Open loop voltage of the control system < 23 V	I	I	II	II
Open loop voltage of the control system < 27 V	II	I	II	II

Factory settings: open loop voltage of the control system < 23 V

Accessories

Power feed module KFD2-EB2

The power feed module is used to supply the devices with 24 V DC via the Power Rail. The fuse-protected power feed module can supply up to 150 individual devices depending on the power consumption of the devices. Collective error messages received from the Power Rail activate a galvanically-isolated mechanical contact.

Power Rail UPR-03

The Power Rail UPR-03 is a complete unit consisting of the electrical insert and an aluminium profile rail 35 mm x 15 mm. To make electrical contact, the devices are simply engaged.

Profile Rail K-DUCT with Power Rail

The profile rail K-DUCT is an aluminum profile rail with Power Rail insert and two integral cable ducts for system and field cables. Due to this assembly no additional cable guides are necessary.



Power Rail and Profile Rail must not be fed via the device terminals of the individual devices!

www.pepperl-fuchs.com