# **Voltage Repeater**

## Features

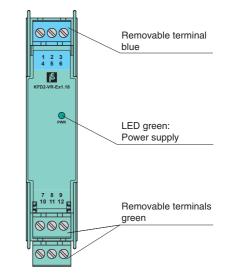
- 1-channel isolated barrier
- 24 V DC supply (Power Rail)
- Voltage input 0 V ... 12 V
- Voltage output 0 V ... 12 V

# 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.

It repeats 0 V  $\dots$  12 V signals from strain gauges, transducers, and inductive motion sensors with signal frequencies up to 1.2 kHz.



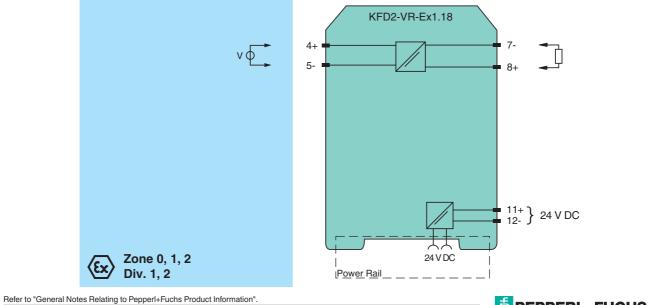
CE

Assembly

Front view



# Connection



KFD2-VR-Ex1.18

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Generation      Analog input        Signal type      Analog input        Signal type      Power Rail or terminals 11+, 12-        Read voltage      Up        Signal type      Consection        Read voltage      Up        Read voltage      Up        Read voltage      Up        Read voltage      Up        Parted voltage      0			
SuppiNumerial or terminal 11, 12-0.Rated voltageVoeRated voltage voltage2035 VOERated voltage volt	General specifications		
<table-container>Connection99908 b/OCRelate vicing08 b/OCRelate vicing08 b/OCRelate vicing008 b/OCInsult00Insult vicing008 b/OCRelate vicing008 b/OCRelate vicing008 b/OCInsult vicing/burnel008 b/OCRelationer008 b/OCRelationer008 b/OCRelationer008 b/OCRelationer008 b/OCRelationer008 b/OCRelationer008 b/OCRelationer008 b/OCRelationer008 b/OCRelationer008 b/OCRelationer08 b/OC08 b/OCRelationer08 b/OC<td>• •</td><td></td><td>Analog input</td></table-container>	• •		Analog input
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Rest orantIConclusionInput resistance10 MAConclusion10 MATransmission rango012 VOffer voltaging/current2 mW < 7 nA	Rated voltage	Un	
input"Compotionseminal A. 6-5Expertediations rangeSeminal A. 6-5Expertediations rangeSeminal A. 6-5Expertediations rangeSeminal A. 6-5Distry obligations rangeSeminal A. 7.8ConsectionEminals 7, 8-4Output residenceSeminal A. 6.8Output residenceSeminal A. 6.8Output residenceSeminal A. 6.8Prove characteristicsSeminal A. 6.8Prove characteristicsSeminal A. 6.8Prove characteristicsSeminal A. 6.8BandwidthSeminal A. 6.8Res fundSeminal A. 6.8SeminalSeminal A. 6.8Output residence more stateSeminal A. 6.8Diverside constative more stateSeminal A. 6.8Output residence more stateSeminal A. 6.	Ripple		within the supply tolerance
Connocionterminals 44, 5-Transmission range012 VOfficat voltageburent> 210 MAOfficat voltageburent> 210 VOfficat voltageburent> 210 VConnectionterminals 7, 9-Connection112 VOutput> 210 VOutput> 210 VDarbat> 210 VConnection2 012 VOutput resistance2 0.02Darbat> 210 VDarbat> 210 VDarbat> 210 VDarbat> 210 VInstance of antient temperature> 2005 % of range per KInduction> 210 VInduction Insulation, rated insulation voltage 50 VACDirective compatibilityInternation voltage 50 VACDirective 2004/08/ECEN 61326-12006Directive 2004/08/ECEN 61326-120	Rated current	I <sub>n</sub>	< 20 mA
input residence      9.019        Order      012 V        Contaction      012 V        Output residence      0012 V        Directive contornity      0012 V        Electronagnetic compatibility      Verol 100 V/OUTPU        Directive contornity      Electronagnetic compatibility        Electronagnetic compatibility      Verol 112 V/OUTPU        Degree of protection      FE 0.002 V/OUTPU        Degree of protection      Verol 124 V/OUTPU        Degree of protection      Papox 100 Q        Degree of protection      Verol 124 V/OUTPU        Degree of protection      Papox 100 Q        Degree of pro	Input		
Tamba de la construit      2	Connection		terminals 4+, 5-
Olise violagiourint<2 mV / <7 nAOutput<2 mV / <7 nAOutputConnactionValues<2 a 12 VOutput residence<2 a 12 VColuput residence<2 a 12 VDivision<Transfer characteristicsDivision<2 a 10 × C (8 P)Influence of antibut tumperature<2 a 00 × C (8 P)Bandwidth<2 b 00 × C (8 P)Disciput coluption tumperature<2 b 00 × C (8 P)Bandwidth<2 b 00 × C (8 P)Disciput coluption tumperature<2 b 00 × C (4 - 140 P)Mechanical spectation to CentralityNE 21Disciput coluption tumperature<2 b 00 × C (4 - 140 P)Mechanical spectation to CentralityNE 20 × C (4 - 140 P)Disciput coluption tumperature<2 b 00 × C (4 - 140 P)Mechanical spectation to Centrality<2 b 00 × C (4 - 140 P)Contractify coluption tumperature<2 b 00 × C (4 - 140 P)Disciput coluption tumperature<2 b 00 × C (4 - 140 P)Disciput coluption tumperature<2 b 00 × C (4 - 140 P)Disciput coluption tumperature <th< td=""><td>Input resistance</td><td></td><td><math>\geq</math> 10 M<math>\Omega</math></td></th<>	Input resistance		$\geq$ 10 M $\Omega$
Output      Meminale 7, 8+        Connection      Lemminale 7, 8+        Output resistance      5:00        Transfer characteristics      State Call Call Call Call Call Call Call Cal	Transmission range		0 12 V
ConsignerImage 7, 8-Voltagie012 VVoltagie2.02Voltagie2.02Voltagie3.02Neution3.02Neution3.02Neution2.0.02Neution2.0.02Neution2.0.02Neution2.0.02Neution2.0.02Neution2.0.02Neution2.02	Offset voltage/current		< 2 mV / < 7 nA
Voltgo012 VOutput rosistance≤ 20 ΩTansfar characteristicsDeviation= 5 mV al 20 °C (68 °F)Influence of ambient temperature≤ 0.005 % of range per KBandwidth1 2 kHz (3 dB)Rise time< 0.40 ms	Output		
Outpuint      <20 Q	Connection		terminals 7-, 8+
Tansfer characteristics      Internation        Deviation      = 5 mV at 20 °C (68 °F)        Influence of ambient temperature      50.005 % of range per K        Bardwidth      12 kHz (3 dB)        Bardwidth      12 kHz (3 dB)        Bardwidth      12 kHz (3 dB)        Electrical isolation      0.04 ms        Electrical compability      functional insulation, rated insulation voltage 50 V AC        Directive conformity      Electromagnicic compability        Electromagnicic compability      NE 21        Electromagnicic compability      NE 21        Degree of protection      16C 60529        Ambient conditions      20 - 60 °C (4 - 140 °F)        Ambient conditions      20 - 60 °C (4 - 140 °F)        Mechanical begree of protection      1P20        Mass      apport. 100 g        Dimensions      20 × 107 × 115 mm (0.8 × 4.2 × 4.5 in), housing type B1        Data for application in comection      40 B (116 kg ll uC, [Exial] (2.0 °C < T <sub>amb</sub> ≤ 60 °C) (circuit(s) in zone 0/1/2]        Vatage      Up      18 V        Courtent      42 mA        Power      Po      19 mW        Supper      Supper SU	Voltage		0 12 V
Transfer characteristics      Image:	Output resistance		$\leq$ 20 $\Omega$
Affer calibration      ± 5 mV at 20 °C (68 °F)        Influence of ambient temperature      5 0.005 °s of range par K        Bandwidth      1.2 kHz (3 dB)        Bise time      5.0 nms        Electrical isolation      Unctional insulation, rated insulation voltage 50 V AC        Directive conformity      Unctional insulation, rated insulation voltage 50 V AC        Directive conformity      Electronagenetic compatibility        Directive conformity      Electronagenetic compatibility        Directive conformity      Electronagenetic compatibility        Degree of protection      EC 660529        Ambient conditions      20	•		
Affer calibration      ± 5 mV at 20 °C (68 °F)        Influence of ambient temperature      5 0.005 °s of range par K        Bandwidth      1.2 kHz (3 dB)        Bise time      5.0 nms        Electrical isolation      Unctional insulation, rated insulation voltage 50 V AC        Directive conformity      Unctional insulation, rated insulation voltage 50 V AC        Directive conformity      Electronagenetic compatibility        Directive conformity      Electronagenetic compatibility        Directive conformity      Electronagenetic compatibility        Degree of protection      EC 660529        Ambient conditions      20	Deviation		
Influence of ambient temperature      ≤ 0.005 % of range per K        Bandwith      1.2 kHz (3 dB)        Bise time      < 0 A ma			+ 5 mV at 20 °C (68 °F)
Bandwidth 1 2. kHz (3 dB) Rise time 5.04 ms Electrical isolation Unput/power supply Uncload insulation, rated insulation voltage 50 V AC Directive conformity Uncload insulation, rated insulation voltage 50 V AC Directive conformity Electromagnetic compatibility E 1 Electromagnetic compatibility E 2 1 Electromagnetic E 2 2 1 0 / 0 / 11 8 V Electromagnetic E 2 2 1 0 / 0 / 0 / 11 8 V Electromagnetic E 2 2 1 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0		erature	
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Electrical isolation      Functional insulation, rated insulation voltage 50 V AC        Output/power supply      Intentional insulation, rated insulation voltage 50 V AC        Directive companity      Electronagnetic compatibility        Directive 2004/108/EC      EN 61326-1:2006        Conformity      Electronagnetic compatibility      NE 21        Degree of protection      EG 605:29        Ambient conditions      -      -        Ambient conditions      -      -        Ambient conditions      EC 0: 0° C (4 140 °F)      -        Mechanical specification      IP 20      -        Mass      20.x 10° C (4 140 °F)      -        Mechanical specification in compatibility      So 0 (C (4 140 °F)      -        Mass      20.x 10° X 115 mm (0.8 x 4.2 x 4.5 in), housing type B1      -        Directive of protection      IB AS 01 ATEX 7282, for additional certificates see www.pepperif-uchs.com      Gine (10 100 (MI) [Ex ia] II (-20 °C × T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]        Voltage      Uo      18 V      -        Current      IG      4.2 mA      -        Power      Po      19 mW      -        Supply <t< td=""><td></td><td></td><td></td></t<>			
Output/power supply      Innetional insulation, rated insulation voltage 50 V AC        Directive conformity      File        Directive 2004/108/EV      File        Directive 2004/108/EV      File        Electromagnetic compatibility      NE 21        Electromagnetic compatibility      NE 21        Degree of protection      LEC 60529        Ambient comparature      00.00 °C (-4140 °F)        Degree of protection      IP20        Dimensions      00.00 °C (-4140 °F)        Degree of protection      IP20        Dimensions      00.00 °C (-4140 °F)        Degree of protection      IP20        Dimensions      Sour for No (B x 4.2 x 4.5 in), housing type B1        Dimensions      Sour for No (B x 4.2 x 4.5 in), housing type B1        Current      IG      IP1(I)(D, I (MI) [Ex in] I/C, [Ex in] I, (E2° °C × T <sub>amb</sub> < 60 °C) [dircuit(b in zone 0/1/2]			
Directive conformity      Electromagnetic compatibility        Electromagnetic compatibility      EN 61326-11:2006        Conformity      NE 21        Electromagnetic compatibility      NE 21        Degree of protection      IEC 60529        Ambient temperature      2060 °C (4140 °F)        Mechanical specifications      IP20        Mass      approx100 g        Dimensions      20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in), housing type B1        Electromagnetic compatibility      BAS 01 ATEX 7262, for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      (B) (11(BC). I (MI) [Ex ia] II:(20 °C ≤ T <sub>amb</sub> ≤ 60 °C) (circuit(s) in zone 0/1/2]        Vatage      U <sub>0</sub> 18 V        Current      U <sub>0</sub> 4.2 mA        Powor      P <sub>0</sub> 19 mW        Supply      Sup V      Sup V (Attention1 The rated voltage is lower.)        Type of protection [Ex ia]      Sup V (Attention1 The rated voltage is lower.)        Statement of conformity      BAS EEFA 10 ATEX X079X, observe statement of conformity        Group, category, type of protection, fex ial I 4 device in zone 21      Sup VI (Attention1 The rated voltage is lower.)        Input/Output      safe electrical isola			functional insulation, rated insulation voltage EQ.V.A.C
Electromagnetic compatibility      Fel 84824-1:2006        Conformity      Electromagnetic compatibility      NE 24        Degree of protection      Electromagnetic compatibility      NE 24        Ambient compatibility      NE 24      Electromagnetic compatibility      NE 24        Ambient compatibility      NE 26      Electromagnetic compatibility      NE 26        Ambient compatibility      NE 26      Electromagnetic compatibility      Electromagnetic compatibility      Ne 26        Mathem compatibility      Ne 0 of C4 140 °F)      Electromagnetic compatibility      Electromagnetico compatibility      Electromagnetico c			Turiotional insulation, rateu insulation voitage 30 V AC
Directive 2004/108/EC      EN 61326-1:2006        Conformity      EN 61326-1:2006        Electronagnetic compatibility      NE 21        Degree of protection      IEC 60529        Ambient emperature      2060 °C (4 140 °F)        Mechanical specifications      IP20        Dagree of protection in connection      IP20        Mass      approx100 g        Dimensions      20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in), housing type B1        Data for application in connection with Exarces      BAS 01 ATEX 7282, for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      BAS 01 ATEX 7282, for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      BAS 01 ATEX 7282, for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      BA 19 V      Zort (10 G) ((int)) (Ex ia) 11/2 (2 °C ≤ T <sub>amb</sub> ≤ 60 °C) (circuit(s) in zone 0/1/2]        Votage      U <sub>o</sub> 4.2 mA      Zort (2 C T math) ≤ 0 °C) (xircuit(s) in zone 0/1/2]        Supply      Zort (Attention) The rated voltage is lower.)      Zort (2 C V (Attention) The rated voltage is lower.)        Supply      BASEEFA 10 ATEX 0079X, observe statement of conformity      Go (2 (1 G C T math) ≤ 0 C (2 C C T math) ≤ 00 °C) (circuit(s) in zone 0/1/2]			
Eventority      NE definition        Electronagnetic compatibility      NE 66 0529        Degree of protection         Ambient temperature         Ambient temperature         Degree of protection         Mechanical specifications         Degree of protection         Degree of protection         Dimensions         Corp, category, type of protection         So application to neuritik      So 10 ATEX 7262, for additional certificates see www.pepperf-fuchs.com        Voltago      Quitty      So 11 ATEX 7262, for additional certificates see www.pepperf-fuchs.com        Voltago      Quitty      So 11 (ILM) (LKi a) (L, [Ex ia]) (Ex ia] (20 °C ≤ T <sub>amb</sub> ≤ 60 °C) (circuit(s) in zone 0/1/2]        Voltago      Quitty      Is V        Arranting after voltage      Quitty      So 10 (Attention The rated voltage is lower.)        Supply       So V Attention The rated voltage is lower.)        Submerature of contomity      Quitty IS Contextority      Quitty IS Contextority        Group Category, type of protecting      Quitty IS Contextority      Quitty IS Contextority        Imamum safe voltage	,		
Electromagnetic compatibility    NE 21      Degree of protection    EC 60529      Ambient temperature    -2060 °C (-4 140 °F)      Mechanical specifications    IP20      Degree of protection    IP20      Mass    approx. 100 g      Data for application in commercian    Con 100 x 4.2.x 4.5. in ), housing type B1      Data for application in commercian    BAS 01 ATEX 7262, for additional certificates see www.peppenf-fuchs.com      Group, category, type of protection    Go II (1/GD, 1/M1) [Ex ia]] IC, [Ex ia]] (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]      Voltage    U <sub>o</sub> 18 V      Ourrent    I <sub>o</sub> 4.2 mA      Power    Pa    19 mW      Supply    In 9 mW    Supply      Maximum safe voltage    U <sub>m</sub> 50 V (Attention! The rated voltage is lower.)      Type of protection [Ex ia]    Um    Supply      Maximum safe voltage    U <sub>m</sub> Supply      Input/Output    Supple commercians    Supple commercians      Input/Output    Supple commercians    Supple commercians      Input/Output    Safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V      Input/Output    Safe ele			EN 61326-1:2006
Degree of protection      IEC 60529        Ambient conditions      -2060 °C (4 140 °F)        Mechanical specification      IP20        Mass      aprox. 100 g        Dimensions      2010 °T x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1        Data for application in connection      Go x 0, 07 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1        Data for application in connection      Go x 107 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1        Data for application in connection      Go x 107 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1        Data for application in connection      Go x 101 X X X 262 , for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      Go x 101 X X X 262 , for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      Go x 101 X X X 262 , for additional certificates see www.pepperl-fuchs.com        Youtage      Uo      18 V        Current      I,0      18 V        Supply      So Y (Attention! The rated voltage is lower.)      So Y (Attention! The rated voltage is lower.)        Ype of protection [Ex ia]      Go x All IT 4 [device in zone 2]      Go x All IT 4 [device in zone 2]        Input/Output      Sale electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V      III A 10	•		
Ambient conditions      Ambient conditions        Ambient temperature      -2060 °C (-4140 °F)        Mechanical specifications      IP20        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        Discrete application in connection      BAS 01 ATEX 7262 , for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      Go II (1)GD, I (M1) [Ex ia] II (-20 °C < T <sub>amb</sub> < 60 °C) [circuit(s) in zone 0/1/2]			
Ambient temperature    <2060 °C (4140 °F)	<b>v</b> ,		IEC 60529
Mechanical specifications      IP20        Degree of protection      IP20        Mass      approx.100 g        Dimensions      20 × 107 x 115 mm (0.8 x 4.2 x 4.5 in), housing type B1        Data for application in converture      EAS 01 ATEX 7262, for additional certificates see www.pepperl-fuchs.com        C-Type Examination Certificate      BAS 01 ATEX 7262, for additional certificates see www.pepperl-fuchs.com        C-Type Examination Certificate      BAS 01 ATEX 7262, for additional certificates see www.pepperl-fuchs.com        C-Type Examination Certificate      BAS 01 ATEX 7262, for additional certificates see www.pepperl-fuchs.com        Current      I_0      4.2 mA        Power      P_0      19 mW        Supply	Ambient conditions		
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        Data for application in connection      S0 x 107 x 115 mm (0.8 x 4.2 x 4.5 in ), housing type B1        Charl paplication in connection      S0 x 107 x 115 mm (0.8 x 4.2 x 4.5 in ), housing type B1        EC-Type Examination Certificates      BAS 01 ATEX 7262, for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      Sull (1)GD, 1 (M1) [Ex ia] IC, [Ex iaD], [Ex ia] 1 (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]        Voltage      U_o      18 V        Power      P_o      19 mW        Power      P_o      19 mW        Supply       19 mW        Supply      Supply      Supply        Maximum safe voltage      Um      Super A 10 ATEX 0079X, observe statement of conformity        Maximum safe voltage      Um      Super A 10 ATEX 0079X, observe statement of conformity        Group, category, type of protection      Sup BASEEFA 10 ATEX 0079X-11, voltage peak value 375 V        Input/Output      Safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V        Input/Output      Safe electrical isolation acc. to IEC/EN 60079-11, voltage peak v	Ambient temperature		-20 60 °C (-4 140 °F)
Mass      approx. 100 g        Dimensions      20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in), housing type B1        Data for application in connection      BAS 01 ATEX 7262, for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      BAS 01 ATEX 7262, for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      Go II (1)GD, I (M1) [Exi a] IIC, [Exi aD], [Exi a] I (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]        Voltage      U <sub>0</sub> 18 V        Current      U <sub>0</sub> 4.2 mA        Power      Po      19 mW        Supply      Sto V (Attention! The rated voltage is lower.)        Type of protection [Exi a]      250 V (Attention! The rated voltage is lower.)        Statement of conformity      BASEEFA 10 ATEX 0079X, observe statement of conformity        Maximum safe voltage      U <sub>0</sub> 113 G Ex nA II T4 [device in zone 2]        Input/Output      safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V        Input/Output      safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V        Input/Output      safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V        Input/Output      Safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V <t< td=""><td colspan="2">-</td><td></td></t<>	-		
Dimensions      20x 107 x 115 mm (0.8 x 4.2 x 4.5 in), housing type B1        Data for application is connection with Ex-areas      Examination Certificate      BAS 01 ATEX 7262, for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      Give 11 (I)GD, 1 (M1) [Ex ia] IIC, [Ex iaD], [Ex ia] I (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]        Voltage      U_o      18 V        Current      0_o      4.2 mA        Power      P_o      19 mW        Supply      Supply      Sol V (Attention! The rated voltage is lower.)      Supply        Maximum safe voltage      U_m      Supply      Suply (Attention! The rated voltage is lower.)	Degree of protection		IP20
Data for application in connection with Ex-areas      BAS 01 ATEX 7262 , for additional certificates see www.pepperl-fuchs.com        EC-Type Examination Certificate      BAS 01 ATEX 7262 , for additional certificates see www.pepperl-fuchs.com        Group, category, type of protection      (a) II (1)GD, I (M1) [Ex ia] IIC, [Ex iaD], [Ex ia] I (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]        Voltage      Uo      18 V        Current      Io      4.2 mA        Power      Po      19 mW        Supply      250 V (Attention! The rated voltage is lower.)        Type of protection [Ex ia]      250 V (Attention! The rated voltage is lower.)        Statement of conformity      BASEEFA 10 ATEX 0079X, observe statement of conformity        Group, category, type of protection, temperature class      (a) II 3G Ex n A II T4 (device in zone 2]        Electrical isolation      (a) II 3G Ex n A II T4 (device in zone 2]        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        Input/power supply      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        Input/power suppl	Mass		approx. 100 g
with Exama      Indext of the the term of term of term of the term of	Dimensions		20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1
Group, category, type of protection    Image in the time of ti			
Voltage      U <sub>0</sub> 18 V        Current      I <sub>0</sub> 4.2 mA        Power      P <sub>0</sub> 19 mW        Stupply      50 V (Attention! The rated voltage is lower.)        Maximum safe voltage      Um      250 V (Attention! The rated voltage is lower.)        Type of protection [Ex ia]      250 V (Attention! The rated voltage is lower.)        Maximum safe voltage      Um      250 V (Attention! The rated voltage is lower.)        Statement of conformity      BASEEFA 10 ATEX 0079X, observe statement of conformity        Group, category, type of protection, temperature class      Safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V        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 94/9/EC      EN 60079-0:2009, EN 60079-11:2012, EN 60079-11; voltage peak value 375 V        Directive 94/9/EC      EN 60079-0:2009, EN 60079-11:2012, EN 60079-15:2010        FM approval      116-0129        Control drawing      116-0129        UL approval      116-0133 (cULus)        Control drawing      116-0132        Control drawing      116-0132	EC-Type Examination Certificate		
CurrentIo4.2 mAPowerPo19 mWSupply-Maximum safe voltageUm250 V (Attention! The rated voltage is lower.)Type of protection [Ex ia]-Output-Maximum safe voltageUm250 V (Attention! The rated voltage is lower.)Statement of conformityBASEEFA 10 ATEX 0079X, observe statement of conformityGroup, category, type of protection, fermperature class-Electrical isolation-Input/Outputsafe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 VInput/Power supplysafe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 VDirective conformity-Directive of y/9/ECEMaximum approval-FM approval-Control drawing116-0129UL approval-Control drawing-Control drawing-Control drawing116-0173 (cULus)Control drawing-Control drawing- <td>Group, category, type of pr</td> <td>otection</td> <td><math>\langle Ex \rangle</math> II (1)GD, I (M1) [Ex ia] IIC, [Ex iaD], [Ex ia] I (-20 °C <math>\leq T_{amb} \leq 60</math> °C) [circuit(s) in zone 0/1/2]</td>	Group, category, type of pr	otection	$\langle Ex \rangle$ II (1)GD, I (M1) [Ex ia] IIC, [Ex iaD], [Ex ia] I (-20 °C $\leq T_{amb} \leq 60$ °C) [circuit(s) in zone 0/1/2]
Power      Po      19 mW        Supply          Maximum safe voltage      Um      250 V (Attention! The rated voltage is lower.)        Type of protection [Ex ia]          Output      500 V (Attention! The rated voltage is lower.)         Maximum safe voltage      Um      250 V (Attention! The rated voltage is lower.)         Maximum safe voltage      Um      250 V (Attention! The rated voltage is lower.)         Statement of conformity      BASEEFA 10 ATEX 0079X, observe statement of conformity      BASEEFA 10 ATEX 0079X, observe statement of conformity        Group, category, type of protection, temperature class      Sol V (Attention! The rated voltage is lower.)         Electrical isolation      Sol Secret A 10 ATEX 0079X, observe statement of conformity      Sol V (Attention! The rated voltage is lower.)        Input/Output      Sol Secret A 10 ATEX 0079X, observe statement of conformity      Sol V (Attention! Tax 0079X, observe statement of conformity        Input/Output      safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V      Sol electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V        Input/output      EN 60079-0:2009, EN 60079-11; 2012, EN 60079-15; 2010      Imaget tettttttttttttttttttttttttttttttttt	Voltage	Uo	18 V
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Supply      Maximum safe voltage      Um      Statement of conformity      Stafe electrical isolation acc. to IEC/EN 60079-11; vol	Power		19 mW
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	Approved for		Ex nA II T4

Refer to "General Notes Relating to Pepperl+Fuchs Product Information". Pepperl+Fuchs Group www.pepperl-fuchs.com USA: +1 330 486 0002 pa-info@us.pepperl-fuchs.com

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#### General information

Supplementary information

EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperlfuchs.com.

## 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 100 individual devices depending on the power consumption of the devices. A galvanically isolated mechanical contact uses the Power Rail to transmit collective error messages.

#### **Power Rail UPR-03**

The Power Rail UPR-03 is a complete unit consisting of the electrical inset 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!



