

## Features

- 1-channel
- DIN rail mount module
- For intrinsically safe or non-intrinsically safe 30 V applications
- Protects field or control circuit inputs
- Max. surge current (8/20  $\mu$ s) 20 kA
- Uninterruptable operation (auto reset)

## Function

The device limits induced transients of different causes, e. g. lightning or switching operations. The limitation is achieved by diverting the current to earth and limiting the signal loop voltage during the duration of the overvoltage pulse.

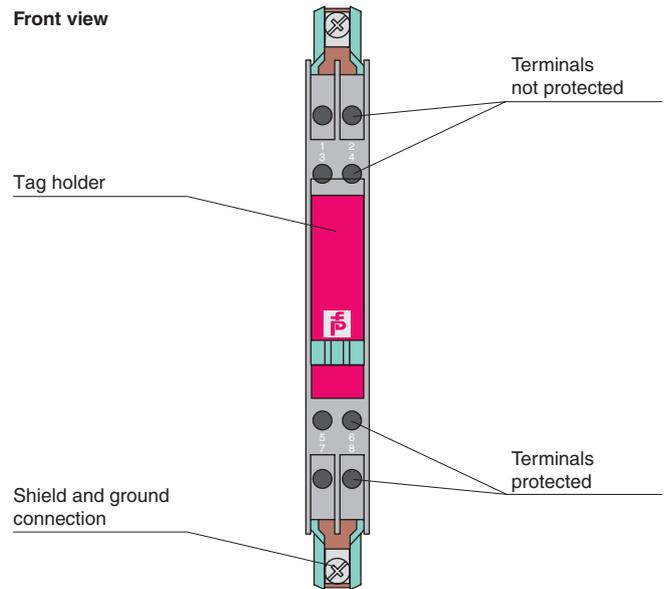
The device is HART transparent.

The device is mounted on a 35 mm DIN mounting rail according to EN 60715.

### Note:

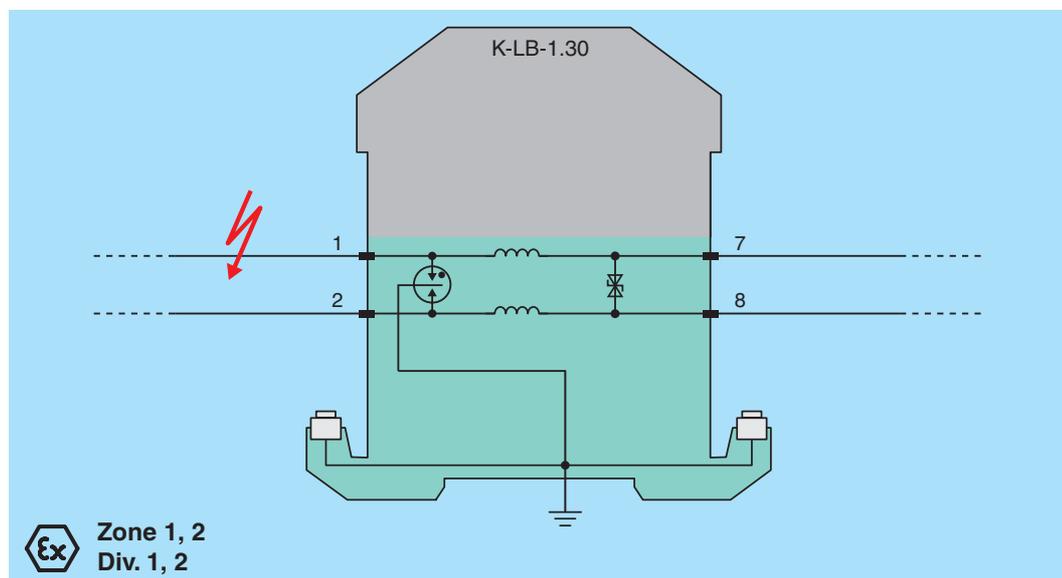
Always connect the device to high-quality ground connections. The device must have the same potential as the devices it protects. Install the ground system in accordance with the applicable regulations.

## Assembly



CE

## Connection



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

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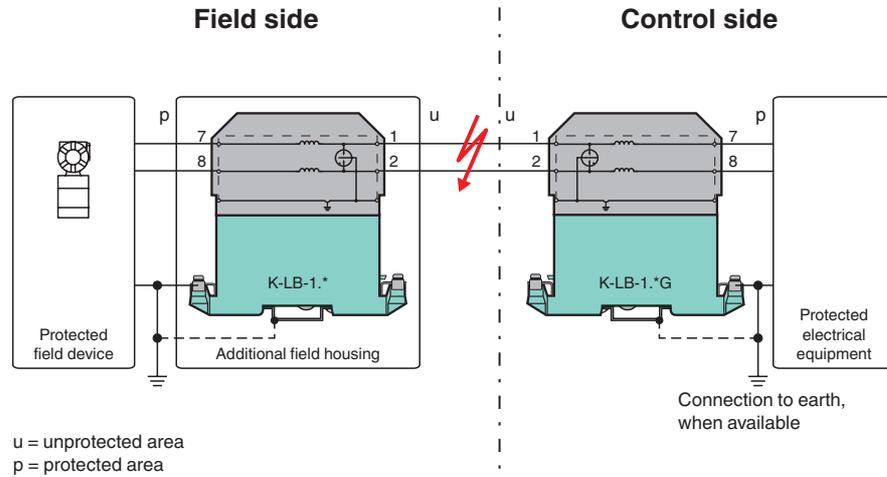
<b>General specifications</b>	
Number of protected signal lines	2
Topology	non-grounded
<b>Electrical specifications</b>	
Connection	protected area: terminals 7, 8 unprotected area: terminals 1, 2
Rated current $I_r$	250 mA
Leakage current	< 5 $\mu$ A at 24 V and 25 °C (77 °F) , line-line
Nominal voltage	24 V DC
Maximum continuous operating voltage $U_c$	30 V DC
Series resistance	< 0.5 $\Omega$ per line
Impulse rating	10 kV/5 kA (category C2) 2 kV/2 kA (category D1)
Impulse discharge current (10/350 $\mu$ s) $I_{imp}$	2 kA per line (2x)
Nominal discharge current (8/20 $\mu$ s) $I_n$	5 kA per line (10x)
Rated surge current (8/20 $\mu$ s) $I_{SM}$	10 kA per line (1x)
Total discharge current (8/20 $\mu$ s) $I_{total}$	20 kA (1x)
Voltage protection level $U_p$	$\leq$ 75 V line-line for nominal discharge current $I_n$ $\leq$ 1.2 kV line-earth for nominal discharge current $I_n$
Impulse reset time	< 30 ms
Insertion loss	$\leq$ 0.05 dB, at 0 ... 4 kHz, in 600 $\Omega$ -System $\leq$ 3 dB, at 0 ... 174 kHz, in 100 $\Omega$ -System
<b>Indicators/settings</b>	
Labeling	space for labeling at the front
<b>Conformity</b>	
Degree of protection	IEC 60529:2013
Surge protective devices for low voltage	EN 61643-21:2001+A1:2009+A2:2013 IEC 61643-21:2001+A1:2008+A2:2012
<b>Operating conditions</b>	
Installation conditions	
Mounting location	indoor
<b>Ambient conditions</b>	
Ambient temperature	-30 ... 80 °C (-22 ... 176 °F) For usage in hazardous area observe EC-type examination certificate.
Relative humidity	5 ... 95 %
<b>Mechanical specifications</b>	
Degree of protection	IP20
Connection	screw terminals
Core cross-section	2 x 2.5 mm <sup>2</sup>
Mass	approx. 100 g
Dimensions	12.5 x 115 x 110 mm (0.5 x 4.5 x 4.3 inch)
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	PTB 00 ATEX 2176 X
Marking	 II 2(1)G Ex ia IIC T6/T5/T4
Temperature class	T6 for ambient temperature $\leq$ 50 °C T5 for ambient temperature $\leq$ 70 °C T4 for ambient temperature $\leq$ 80 °C
Voltage $U_i$	30 V
Current $I_i$	250 mA
Internal capacitance $C_i$	negligible
Internal inductance $L_i$	200 $\mu$ H
Certificate	PF 16 CERT 4065 X
Marking	 II (3)D [Ex ic Dc] IIIC
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013 , EN 60079-11:2012
<b>International approvals</b>	
CSA approval	
Control drawing	116-0187 (cCSAus)
IECEX approval	
IECEX certificate	IECEX BAS 14.0010X
<b>General information</b>	

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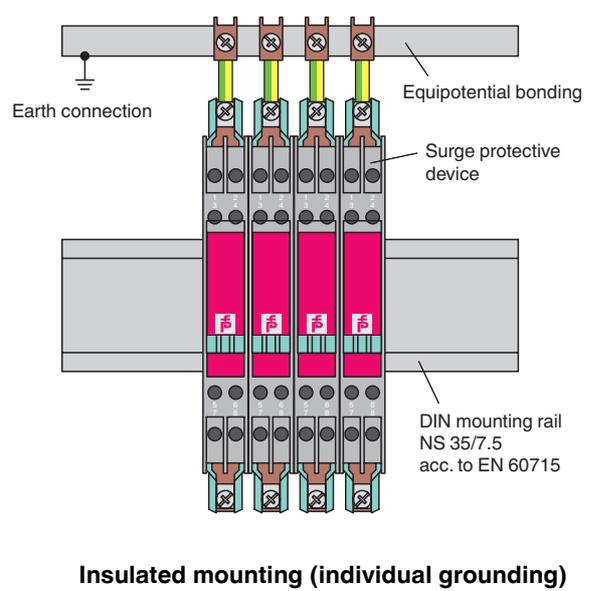
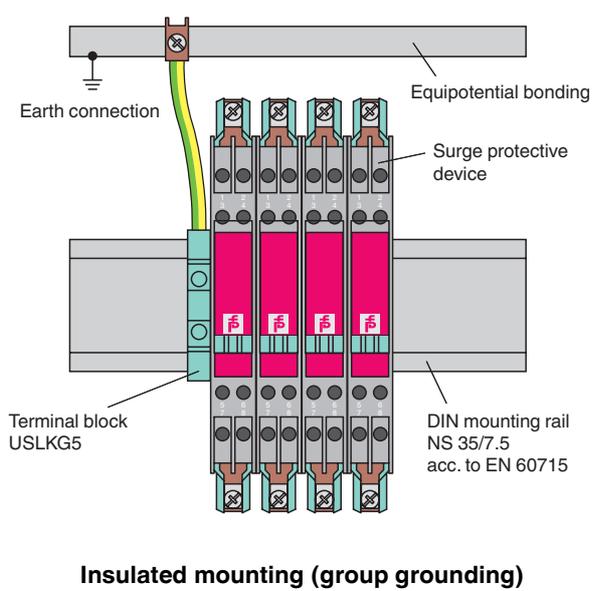
Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Supplementary information Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

**Topology**



**Installation examples**



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