

## Features

- 1-channel
- Plugs directly in to field side of KF modules
- Analog or digital signal inputs
- Surge protection up to 10 kA
- Protects leads 1 and 3 of KF modules
- Uninterruptable operation (auto reset)

## Function

This Surge Protection Barrier is designed for use with K-System (KF modules).

By simply snapping the barriers into a standard KF module, the modules are safely protected against voltage surges of different origin (e. g. lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

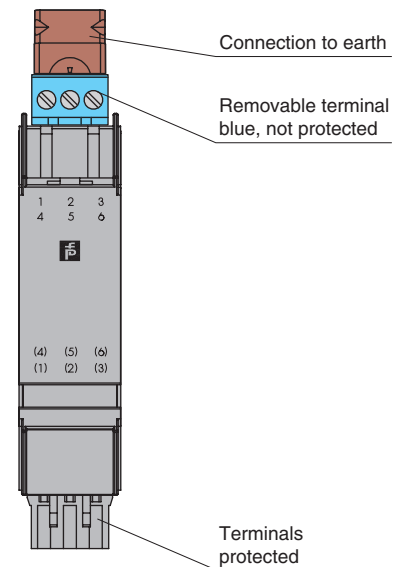
The end digits of the model designation correspond to the protected terminals of the respective KF module.

For additional information, refer to the manual and [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

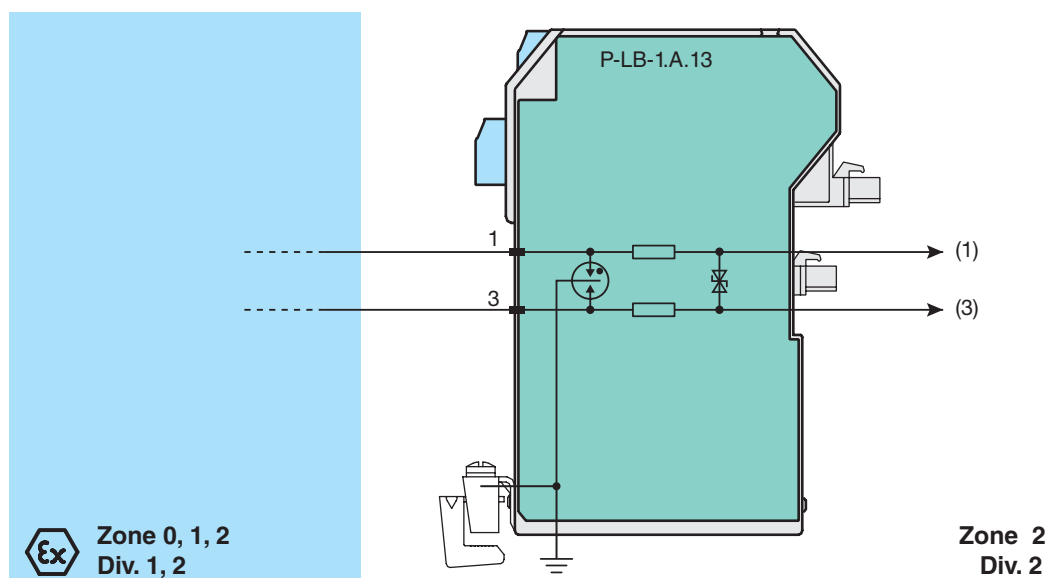
**Note:** Surge Protection Barriers must always be connected to a solid and effective ground and be at the same equipotential level as the instrument it is protecting. The ground system must comply with all applicable regulations.

## Assembly

Front view



## Connection



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

Pepperl+Fuchs Group  
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Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

<b>Signal lines</b>		
Connection		terminals 1, 3
Rated voltage	$U_B$	$\leq 30\text{ V}$
Rated current	$I_B$	$\leq 250\text{ mA}$
Leakage current		$\leq 5\text{ }\mu\text{A}$
On-state voltage		$\leq 45\text{ V}$
Ground insulation		$\leq 500\text{ V}$ breakdown voltage
<b>Conformity</b>		
Degree of protection		IEC 60529:2001
<b>Ambient conditions</b>		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
<b>Mechanical specifications</b>		
Degree of protection		IP20
Mass		approx. 70 g
Dimensions		20 x 62 x 115 mm (0.8 x 2.4 x 4.5 in)
<b>Data for application in connection with Ex-areas</b>		
EC-Type Examination Certificate		PTB 02 ATEX 2044 , for additional certificates see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>
Group, category, type of protection		 II (1)G [EEx ia] IIC
Voltage	$U_o$	$\leq 30\text{ V}$
Current	$I_i$	$\leq 250\text{ mA}$
Power	$P_o$	$\leq 1.3\text{ W}$
Type of protection [EEx ia and EEx ib]		
Maximum leakage current		10 kA (8/20 $\mu\text{s}$ ) per conductor
Nominal response time		
Symmetrical		1 ns
Asymmetric		100 ns
Series resistor		$\leq 0.5\text{ }\Omega$ per wire
Bandwidth		$\geq 40\text{ kHz}$
Declaration of conformity		Pepperl+Fuchs
Group, category, type of protection, temperature class		 II 3G EEx nA II T6
Directive conformity		
Directive 94/9/EC		EN 50014, EN 50020, EN 50021
<b>International approvals</b>		
CSA approval		
Control drawing		116-0187 (cCSAus)
IECEX approval		IECEX BAS 12.0123
Approved for		[Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
<b>General information</b>		
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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

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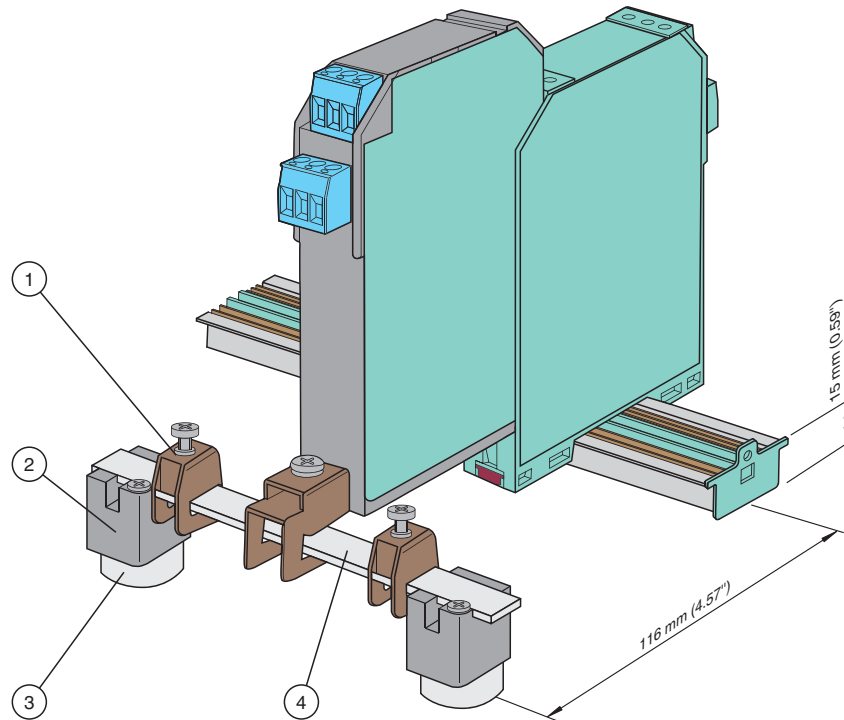
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**Accessories**

- 1 Connection terminal           ZH-Z.AK16
- 2 Mounting block               ZH-Z.AB/SS
- 3 Spacing roller                when mounting on 35 mm DIN EN 60715 mounting rail:  
   – installation height 15 mm: spacing roller ZH-Z.AR.85  
   – installation height 7.5 mm: no spacing roller necessary
- 4 Grounding rail                ZH-Z.NLS-Cu3/10



Keep the drilling distance of 116 mm between center mounting rail and center grounding bar.