

## Features

- 2-channel
- Plugs directly in to field side of KF modules
- Analog or digital signal inputs
- Surge protection up to 10 kA
- Protects leads 1, 3, 4 and 6 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.

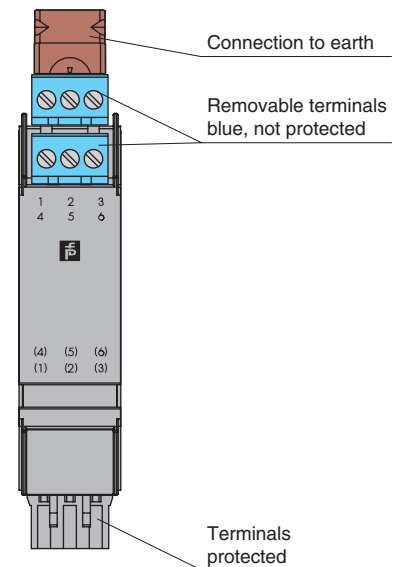
The end digits of the model designation correspond to the protected terminals of the respective KF module.

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

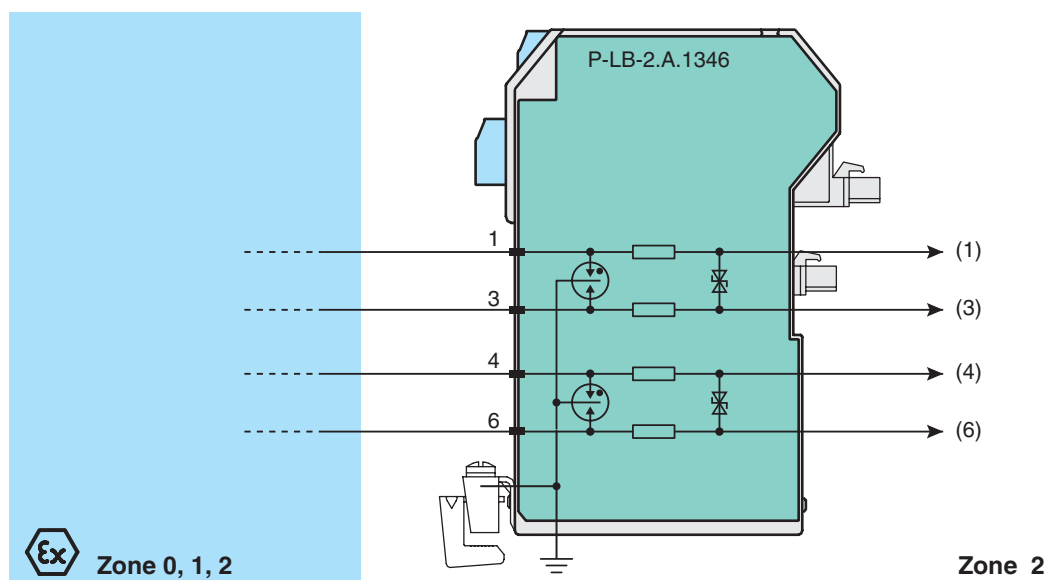
**Note:** Surge Protection Barriers must always be connected to a solid and effective ground and be at the same equipotential level as the instrument it is protecting. The ground system must comply with all applicable regulations.

## Assembly

Front view



## Connection



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

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

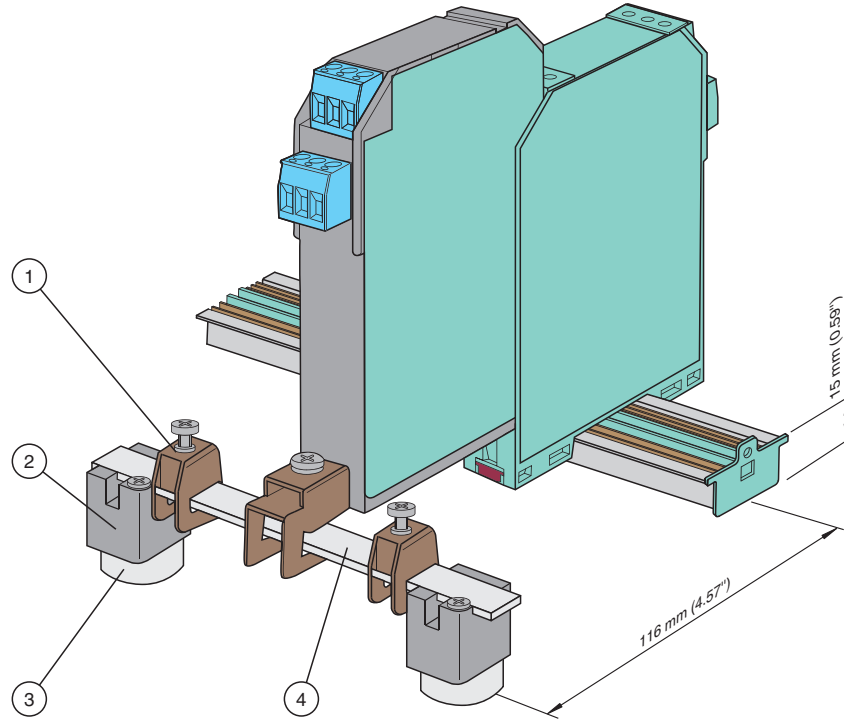
Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

<b>General specifications</b>		
Number of protected signal lines		4
<b>Signal lines</b>		
Connection		terminals 1, 3; 4, 6
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 inch)
Mounting		on the KF module
<b>Data for application in connection with hazardous areas</b>		
EU-Type Examination Certificate		PTB 02 ATEX 2044
Marking		 II (1)G [Ex ia Ga] IIC
Voltage	$U_i$	30 V
Current	$I_i$	250 mA
Internal capacitance	$C_i$	negligible
Internal inductance	$L_i$	200 $\mu\text{H}$
Maximum leakage current		10 kA (8/20 $\mu\text{s}$ ) per conductor
<b>Nominal response time</b>		
Symmetrical		1 ns
Asymmetric		100 ns
Series resistor		$\leq 0.5\text{ }\Omega$ per wire
Bandwidth		$\geq 40\text{ kHz}$
Certificate		PF 16 CERT 3908 X
Marking		 II 3G Ex nA IIC T4 Gc
<b>Directive conformity</b>		
Directive 2014/34/EU		EN 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 60079-15:2010
<b>International approvals</b>		
<b>IECEX approval</b>		
IECEX certificate		IECEX BAS 12.0123
IECEX marking		[Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
Standards		IEC 60079-0:2011 , IEC 60079-11:2011
<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> .

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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.