

## Features

- 2-channel
- DC version, positive polarity
- Working voltage 13 V at 10  $\mu$ A
- Series resistance max. 107  $\Omega$
- Fuse rating 100 mA
- DIN rail mounting

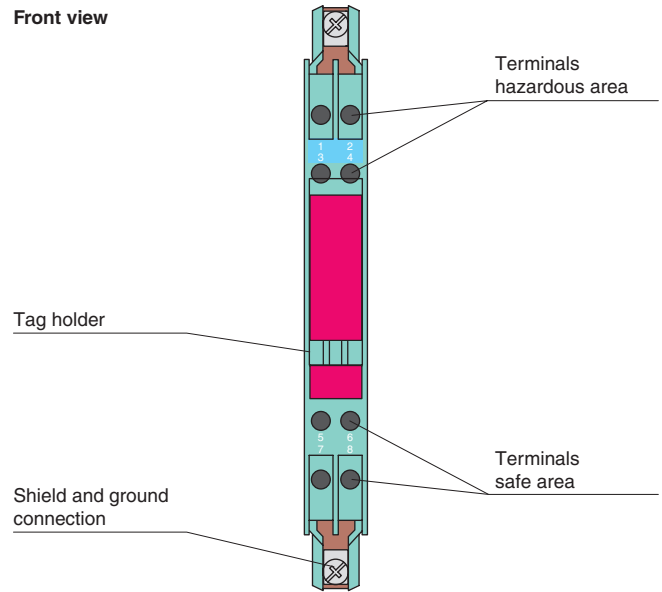
## Function

The Zener Barrier prevents the transfer of unacceptably high energy from the safe area into the hazardous area.

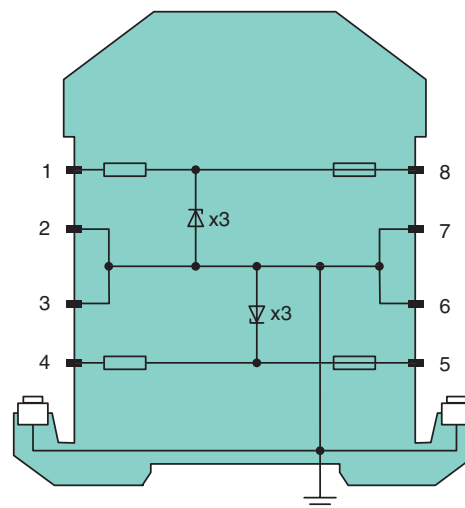
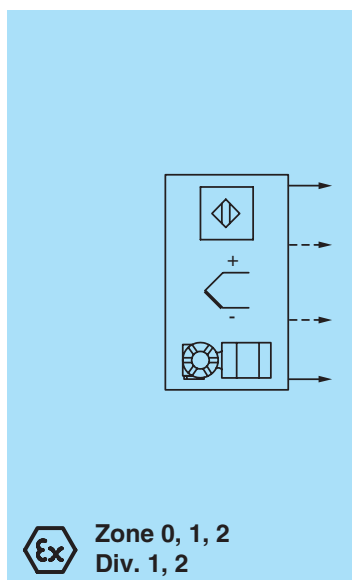
The zener diodes in the Zener Barrier are connected in the reverse direction. The breakdown voltage of the diodes is not exceeded in normal operation. If this voltage is exceeded, due to a fault in the safe area, the diodes start to conduct, causing the fuse to blow. The Zener Barrier has a positive polarity, i. e. the anodes of the zener diodes are grounded.

Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

## Assembly



## Connection



Zone 2  
Div. 2

<b>General specifications</b>	
Type	DC version, positive polarity
<b>Electrical specifications</b>	
Nominal resistance	100 $\Omega$
Series resistance	$\leq 107 \Omega$
Fuse rating	100 mA
<b>Hazardous area connection</b>	
Connection	terminals 1, 2; 3, 4
<b>Safe area connection</b>	
Connection	terminals 5, 6; 7, 8
<b>Working voltage</b>	
Supply loop	$\leq 13.3 \text{ V}$
Measurement loop	$\leq 13 \text{ V}$ at 10 $\mu\text{A}$
<b>Conformity</b>	
Degree of protection	IEC 60529
<b>Ambient conditions</b>	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-25 ... 70 °C (-13 ... 158 °F)
Relative humidity	max. 75 % , without condensation
<b>Mechanical specifications</b>	
Degree of protection	IP20
Connection	screw terminals
Core cross-section	max. 2 x 2.5 ... mm <sup>2</sup>
Mass	approx. 150 g
Dimensions	12.5 x 115 x 110 mm (0.5 x 4.5 x 4.3 inch)
Construction type	modular terminal housing , see system description
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	BAS 01 ATEX 7005
Marking	Ⓔ II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C $\leq T_{\text{amb}} \leq 60$ °C) [circuit(s) in zone 0/1/2]
Voltage $U_o$	14.7 V
Current $I_o$	150 mA
Power $P_o$	550 mW
<b>Supply</b>	
Maximum safe voltage $U_m$	250 V
Series resistance	min. 98 $\Omega$
<b>Permissible connection values [EEx ia]</b>	
Certificate	TÜV 99 ATEX 1484 X
Marking	Ⓔ II 3G Ex nA IIC T4 Gc [device in zone 2]
<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>FM approval</b>	
Control drawing	116-0118
<b>UL approval</b>	
Control drawing	116-0139 (cULus)
<b>IECEX approval</b>	
	IECEX BAS 09.0142 IECEX BAS 17.0091X
Approved for	[Ex ia Ga] IIC , [Ex ia Da] IIIC , [Ex ia Ma] I Ex ec IIC T4 Gc
<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> .