

Features

- 2-channel
- AC version
- Working voltage 11.3 V/14.3 V/16.2 V at 10 μ A
- Series resistance max. 46 Ω /61 Ω /107 Ω
- Fuse rating 80 mA
- DIN rail mounting
- Star connection

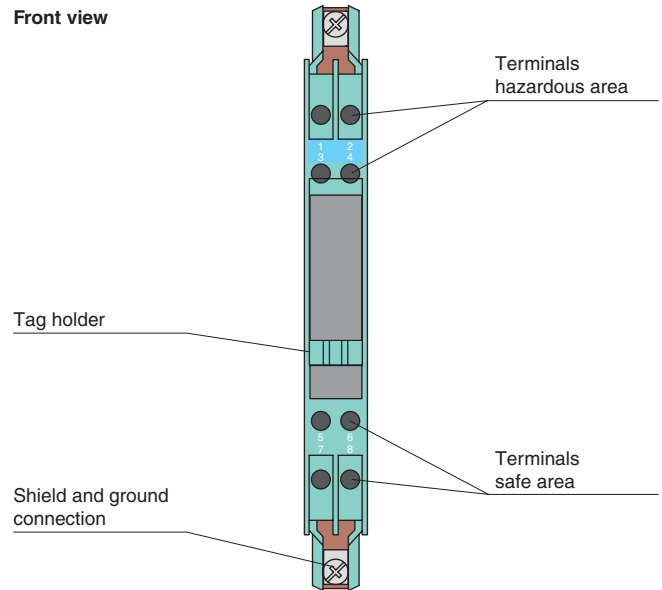
Function

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

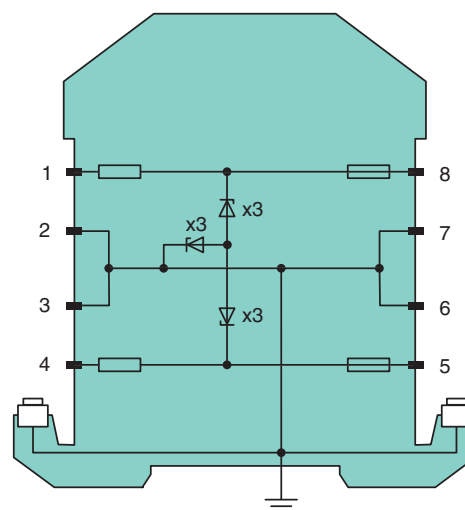
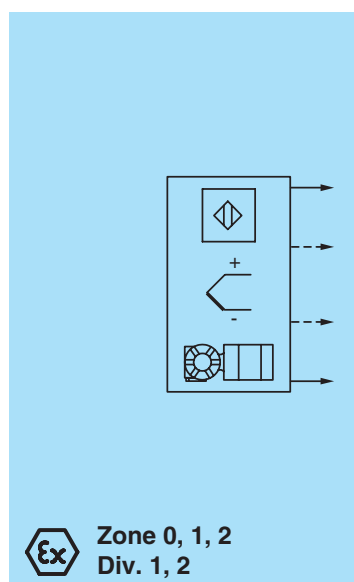
The zener diodes in the Zener Barrier are connected in the reverse direction. The breakdown voltage of the diodes is not exceeded in normal operation. If this voltage is exceeded, due to a fault in the safe area, the diodes start to conduct, causing the fuse to blow. The Zener Barrier has alternating polarities, i. e. interconnected zener diodes are employed and one side is grounded. The Zener Barrier can be used for both alternating voltage signals and direct voltage signals.

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

General specifications		
Type	AC version	
Electrical specifications		
Nominal resistance	terminals 1, 2, 3: 36 Ω terminals 2, 3, 4: 51 Ω terminals 1, 4: 87 Ω	
Series resistance	max. 46 Ω / 61 Ω / 107 Ω	
Fuse rating	80 mA	
Hazardous area connection		
Connection	terminals 1, 2; 3, 4	
Safe area connection		
Connection	terminals 5, 6; 7, 8	
Rated voltage	terminals 6, 7, 8: 15 V terminals 5, 6, 7: 18 V terminals 5, 8: 19 V	
Supply voltage	terminals 6, 7, 8: max. 13.4 V terminals 5, 6, 7: max. 16.4 V terminals 5, 8: max. 18.4 V max.	
Working voltage	terminals 6, 7, 8: 11.3 V (-7.0 V) at 10 μA terminals 5, 6, 7: 14.3 V (-10.0 V) at 10 μA terminals 5, 8: 16.2 V (-16.2 V) at 10 μA	
Conformity		
Protection degree	IEC 60529	
Ambient conditions		
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)	
Storage temperature	-25 ... 70 °C (-13 ... 158 °F)	
Relative humidity	max. 75 % , without moisture condensation	
Mechanical specifications		
Protection degree	IP20	
Connection	self-opening connection terminals, max. core cross-section 2 x 2.5 mm ²	
Mass	approx. 150 g	
Dimensions	12.5 x 115 x 110 mm (0.5 x 4.5 x 4.3 in)	
Construction type	modular terminal housing , see system description	
Mounting	on 35 mm DIN mounting rail acc. to DIN EN 60715	
Data for application in connection with Ex-areas		
EC-Type Examination Certificate		BAS 01 ATEX 7005 , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection		 II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C ≤ T _{amb} ≤ 60 °C) [circuit(s) in zone 0/1/2]
Supply		
Maximum safe voltage	U _m	250 V
Series resistance		35.6 Ω / 50.5 Ω / 20.8 Ω
Equipment		terminals 1, 2, 3
Voltage	U _o	14.24 V
Current	I _o	400 mA
Power	P _o	1.42 W
Equipment		terminals 2, 3, 4
Voltage	U _o	17.6 V
Current	I _o	349 mA
Power	P _o	1.53 W
Equipment		terminals 1, 2, 3, 4
Voltage	U _o	19.24 V
Current	I _o	749 mA at 15.63 V
Power	P _o	2.95 W
Equipment		terminals 1, 4
Voltage	U _o	19.24 V
Current	I _o	224 mA
Power	P _o	1.08 W
Statement of conformity		TÜV 99 ATEX 1484 X , observe statement of conformity
Group, category, type of protection, temperature class		 II 3G Ex nA IIC T4 Gc [device in zone 2]
Directive conformity		
Directive 94/9/EC		EN 60079-0:2009, EN 60079-11:2007, EN 61241-11:2006 , EN 60079-15:2010
International approvals		
UL approval		
Control drawing		116-0139

IECEX approval	IECEX BAS 09.0142
Approved for General information	[Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
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.pepperl-fuchs.com .