Features

- 2-channel
- · AC version
- Working voltage 13 V at 10 μA
- Series resistance max. 115 Ω
- Fuse rating 50 mA
- · DIN rail mounting
- · Star connection

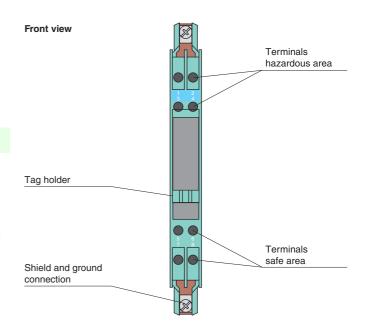
Function

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

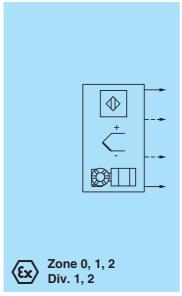


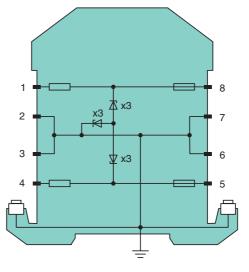


Connection

Date of issue 2013-09-24 071859_eng.xml

Release date 2013-09-24 10:21





Zone 2 Div. 2

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

071859 ena.xml	
2013-09-24	
Date of issue	
2013-09-24 10:21	
Release date	

General specifications		
Туре		AC version
Electrical specifications		
Nominal resistance		100 Ω
Series resistance		max. 115 Ω
Fuse rating		50 mA
Hazardous area connection		OO HIEL
		terminals 1, 2; 3, 4
Connection Safe area connection		terrimas 1, 2, 0, 4
		terminals 5, 6; 7, 8
Connection Working voltage		
Working voltage		max. 13.6 V , 13 V at 10 μA
Conformity		150 00500
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	3	
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 EN 60715:2001
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		\textcircled{k} II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C \leq T _{amb} \leq 60 °C) [circuit(s) in zone 0/1/2]
Voltage	U _o	15 V
Current	I _o	153 mA
Power	P _o	570 mW
Supply	- 0	
Maximum safe voltage	U _m	250 V
Series resistance	Om	min. 98 Ω
Statement of conformity		TÜV 99 ATEX 1484 X , observe statement of conformity
Group, category, type of protection,		⟨ S I 3G Ex nA IIC T4 Gc [device in zone 2]
temperature class		
Directive conformity		EN 60070 0:0000 EN 60070 11:0007 EN 61041 11:0000 EN 60070 15:0010
Directive 94/9/EC		EN 60079-0:2009, EN 60079-11:2007, EN 61241-11:2006 , EN 60079-15:2010
International approvals		
FM approval		440.0440
Control drawing		116-0118
UL approval		
Control drawing		116-0139
CSA approval		
Control drawing		116-0119
IECEx approval		IECEx BAS 09.0142
Approved for		[Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
General information		
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.

