

Surge Protector

FieldConnex®

FS-LBAS-IA1



- For Ethernet-APL spur ports
- Intrinsically safe according to 2-WISE
- Stainless steel housing for field device mounting, ISO 20 mm thread

Surge protector, Ethernet-APL, field mounting, Ex ia, Ex d, Ex e, 20 mm ISO thread



ethernet-apl™
advanced physical layer

Function

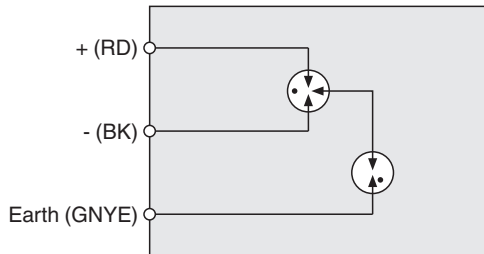
The surge protector protects spur ports of Ethernet-APL field devices.

The surge protector directs power from voltage surges and lightning to earth via gas discharge tubes.

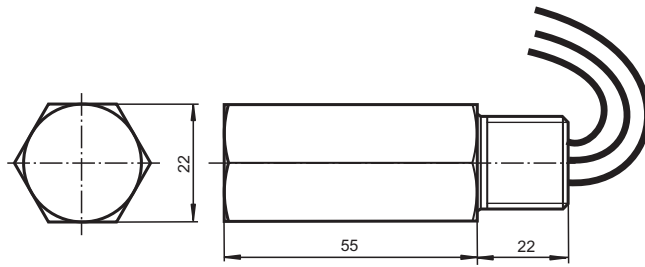
The device is certified intrinsically safe for circuits in explosion-hazardous areas Zone 0 ... 2 according to 2-WISE and FISCO. The surge protector can be installed in Zone 1 ... 2.

A 20 mm ISO mounting thread permits easy installation on field devices and fieldbus junction boxes.

Connection



Dimensions



Technical Data

General specifications		
Design / Mounting		Outside installation
Installation in hazardous area		Zone 1
Ethernet Interface		
Interface type		Ethernet-APL auxiliary device
Electrical specifications		
Rated voltage	U_r	30 V
Rated current	I_r	500 mA
Impulse rating		2 kV/1 kA (category C1) per line 5 kV/2,5 kA (category C2) per line 0,5 kA (category D1) per line
Impulse discharge current (10/350 μ s)	I_{imp}	0.5 kA per line
Nominal discharge current (8/20 μ s)	I_n	
per line		2.5 kA
total		5 kA
Max. surge current (8/20 μ s)	I_{max}	5 kA overstressed fault mode 1 acc. to IEC 61643-21
Voltage protection level	U_p	
Line/Earth		max. 1800 V C1 , 1 kA per line max. 2100 V C2 , 2.5 kA per line max. 50 V C3 , 50 A per line max. 1400 V B2 , 50 A per line
Standard conformity		
Degree of protection		IEC/EN 60529
Climatic conditions		IEC 60721
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
Surge protection		IEC 61643-21
Ethernet		Ethernet-APL , IEEE 802.3 for 10BASE-T1L
Ambient conditions		
Ambient temperature		-50 ... 80 °C (-58 ... 176 °F)
Storage temperature		-50 ... 90 °C (-58 ... 194 °F)
Shock resistance		15 g 11 ms
Vibration resistance		1 g , 10 ... 150 Hz
Mechanical specifications		
Connection type		wire ends APL + red , APL - black , protective conductor (PE) green/yellow
Core cross section		APL +, APL - 0.8 mm ² , PE 1.3 mm ²

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Technical Data

Housing material	Stainless steel 1.4401/316	
Degree of protection	IP67	
Mass	200 g	
Mounting	ISO 20 mm	
Data for application in connection with hazardous areas		
EU-type examination certificate	TÜV 22 ATEX 8786 X	
Marking	2-WISE auxiliary device	
Marking	Ⓢ II 2 (1) G Ex ia [ia Ga] IIC T6 Gb , Ⓢ II 2 (1) D Ex ia [ia Da] IIIC T80°C Db , Ⓢ I M2 (M1) Ex ia [ia Ma] I Mb , Ⓢ II 2 G Ex db eb mb IIC T6 Gb , Ⓢ I M2 Ex eb mb I Mb , Ⓢ II 2 (1) G Ex db [ia Ga] IIC T6 Gb	
Voltage	U_i	30 V
Current	I_i	500 mA
Internal capacitance	C_i	negligible 0 nF
Internal inductance	L_i	negligible 0 μ H
Directive conformity		
Directive 2014/34/EU	EN 60079-0:2018 , EN 60079-7:2015+A1:2018 , EN 60079-11:2012 , EN 60079-18:2015 , EN 60079-1:2014 , IEC TS 60079-47:2021	
International approvals		
IECEx approval	IECEx TUR 22.0017X	
Approved for	Ex ia [ia Ga] IIC T6 Gb , Ex ia [ia Da] IIIC T80°C Db , Ex ia [ia Ma] I Mb , Ex db eb mb IIC T6 Gb , Ex db eb mb I Mb , Ex db [ia Ga] IIC T6 Gb	
General information		
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .	

Product Photo

