

XP95 I.S. Galvanic Barrier



Product overview

Product	XP95 I.S. Galvanic Barrier
Part No.	29600-098

Compliance



Product Information

The XP95 Intrinsically Safe (I.S.) Galvanic Barrier is used for intrinsic safety applications. It provides control and signal transfer to XP95 compatible fire and smoke alarm transmitters inside hazardous areas.

Since this isolator is loop-powered, use the technical data to verify that proper voltage is available to the field devices.

- Single channel isolated barrier
- Loop-powered
- XP95 fire alarm input
- Up to SIL3 acc. to IEC 61508

Technical data

All data is supplied subject to change without notice. Specifications are typical at 19 V, 25°C and 50% RH unless otherwise stated.

General specifications

Signal type *Analogue input*

Functional safety related parameters

Safety integrity level (SIL) *SIL3*

Supply

Rated voltage U_r *loop powered*

Power dissipation *< 0.2 W for $U_{in} = 24 V$, $I_o = 20 mA$*

Control circuit

Connection *terminals 11+, 12 -*

Voltage *0 - 24 V for $4 V \leq U_e \leq 24 V$; $\geq U_e - (0.41 \times \text{input current in mA}) - 0.5$*

Current *0 - 20 mA*

Field circuit

Connection *terminals 1+, 2-*

Short-circuit current *$\leq 65 mA$*

Transmission range *voltage 4 - 20 V dc/0 - 6 V_{pp} ac
current 1 - 20 mA*

Transfer characteristics

Deviation

after calibration $\leq 3.5 mA$ current loss at 20 mA load current

influence of ambient temperature $\pm 20 \mu A/K$

Rise time/fall time $\leq 50 \mu s$ (load current $\geq 1 mA$)

Galvanic isolation

Input/Output *safe electrical isolation acc.to IEC/EN60079-11, voltage peak value 375 V*

Indicators/settings

labelling *space for labelling at the front*

Directive conformity

Electromagnetic compatibility
Directive 2014/30/EU *EN61326-1:2013 (industrial locations)*

Conformity

Electromagnetic compatibility *NE 21:2006*

Degree of protection *IEC 60529:2001*

Protection against electrical shock *UL 61010-1*

Ambient conditions

Ambient temperature *-20 - 60 °C (-4 - 140 °F)*

Mechanical specification

Degree of protection *IP20*

Connection *screw terminals*

Mass *approx. 100g*

Technical data (cont'd)

Dimensions 20 x 107 x 115 mm (0.8 x 4.2 x 4.5 inch), housing type B1

Mounting on 35 mm DIN mounting rail acc. to EN 60715:2001

Data for application in connection with hazardous areas

EU-Type examination certificate	BAS 00 ATEX 7087
Marking	Ⓔ II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIC, [Ex ia Ma] I (-20 °C ≤ T amb ≤ 60°C) [circuit(s) in zone 0/1/2]
Voltage U₀	28 V
Current I₀	93 mA
Power P₀	653 mW
Supply	
Maximum safe voltage U_m	253 V (Attention! the rated voltage can be lower)
Type of protection [Ex ia]	
Certificate	TÜV 99 ATEX 1499X
Marking	Ⓔ II 3G Ex nA II T4 Gc [device in zone 2]
Galvanic isolation	
Input/Output	safe electrical isolation acc. to IEC/EN60079-11, voltage peak value 375 V
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013, EN 60079-11:2012, EN 60079-15:2010
International approvals	
FM approval	
Control drawing	116-0129 (cFMus)
UL approval	
Control drawing	116-0348 (cULus)
IECEX approval	
	IECEX BAS 08.0079 IECEX BAS 10.0007X
Approved for	[Ex ia Ga] IIC, [Ex ia Da] IIC, [Ex ia Ma] I EX nA II T4 Gc

Galvanic barrier terminal connections

