

**Features**

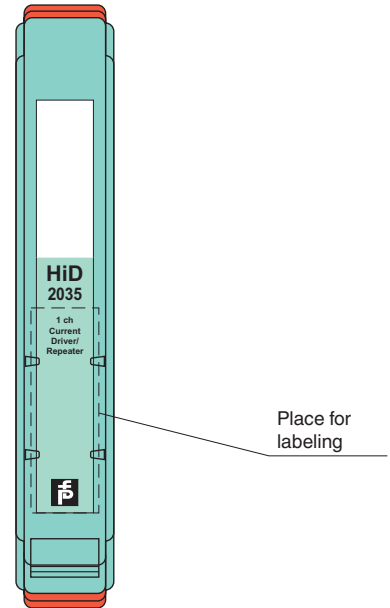
- 1-channel isolated barrier
- 24 V DC supply (loop powered)
- Current input/output 1.5 mA ... 50 mA
- Fire detector or I/P supply
- Accuracy 0.1 %

**Function**

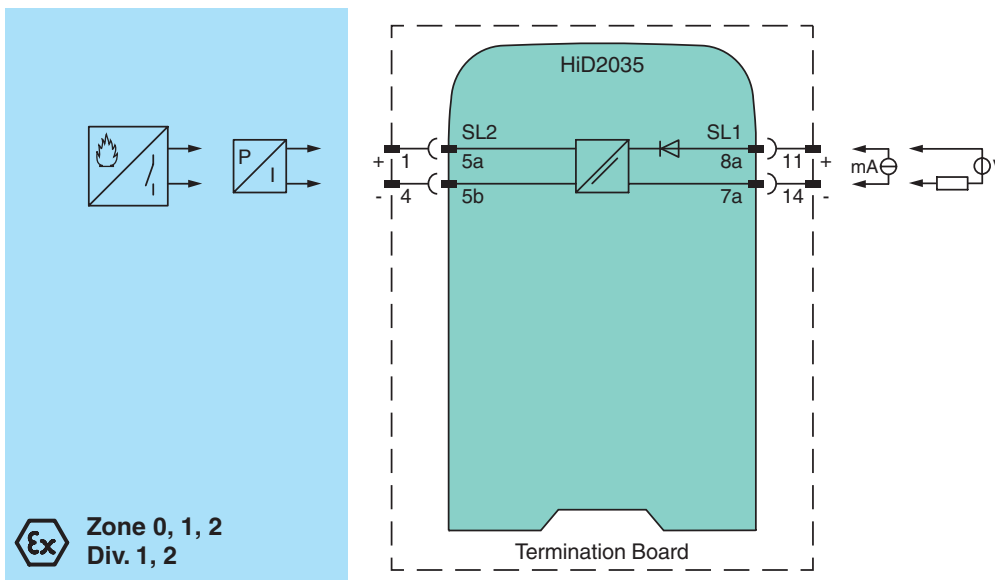
This isolated barrier is used for intrinsic safety applications. It is loop-powered and is primarily intended to interface with fire and smoke detectors or with similar switched resistor systems requiring a wide output current range (1.5 mA ... 50 mA) to operate correctly. It is also used to drive a current to I/ P converter. Reverse polarity protection prevents damage to the isolator caused by faulty wiring. This module mounts on a HiD Termination Board.

**Assembly**

Front view



**Connection**



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

<b>General specifications</b>	
Signal type	Analog input/analog output
<b>Supply</b>	
Connection	via input terminals
Rated voltage $U_r$	6 ... 30 V DC loop powered , reverse polarity protected
Power dissipation	0.7 W at 40 mA , 24 V
<b>Control circuit</b>	
Connection	SL1: 8a(+), 7a(-)
Current consumption	< 0.6 mA at 24 V and open circuit
Current	1.5 ... 50 mA , loop powered
Signal level	voltage drop 9.6 V at 20 mA and 500 $\Omega$ load (4 V at 4 mA)
<b>Field circuit</b>	
Connection	SL2: 5a(+), 5b(-)
Characteristics	for fire and smoke detectors $U_{out} = (U_{in} - 1.6) - (0.4 \times I_{out})$ 6 V < $U_{in}$ < 25 V $U_{out} = (25 - 1.6) - (0.4 \times I_{out})$ 25 V < $U_{in}$ < 30 V
Load	0 ... 750 $\Omega$ for I/P applications
Signal	1.5 ... 50 mA for fire and smoke detectors 4 ... 20 mA on a load of max. 750 $\Omega$ for I/P applications
Ripple	$\leq$ 150 $\mu$ A peak to peak for I/P applications
Response time	50 ms , 10 ... 90 % step change for I/P applications
<b>Transfer characteristics</b>	
Accuracy	< $\pm$ 0.1 % of full-scale value (range 4 ... 20 mA)
Influence of temperature	< $\pm$ 0.01 %/K
Repeat accuracy	< $\pm$ 300 $\mu$ A, 6 V < $U_{in}$ < 25 V/1.5 mA < $I_{out}$ < 50 mA
Influence of load	< $\pm$ 0.3 % of full-scale value from 0 ... 750 $\Omega$
Linearity	< $\pm$ 0.1 % of full-scale value (range 4 ... 20 mA)
<b>Indicators/settings</b>	
Labeling	space for labeling at the front
<b>Directive conformity</b>	
Electromagnetic compatibility Directive 2004/108/EC	EN 61326-1:2006
<b>Conformity</b>	
Electromagnetic compatibility	NE 21:2006 For further information see system description.
Degree of protection	IEC 60529
<b>Ambient conditions</b>	
Ambient temperature	-20 ... 60 $^{\circ}$ C (-4 ... 140 $^{\circ}$ F)
Relative humidity	5 ... 90 % , non-condensing up to 35 $^{\circ}$ C (95 $^{\circ}$ F)
<b>Mechanical specifications</b>	
Degree of protection	IP20
Mass	approx. 140 g
Dimensions	18 x 106 x 128 mm (0.7 x 4.2 x 5 inch)
Mounting	on Termination Board
Coding	pin 1 and 3 trimmed For further information see system description.
<b>Data for application in connection with hazardous areas</b>	
EU-Type Examination Certificate	CESI 02 ATEX 086
Marking	$\text{\textcircled{Ex}}$ II (1)G [Ex ia Ga] IIC , $\text{\textcircled{Ex}}$ II (1)D [Ex ia Da] IIIC
Output	Ex ia, Ex iaD
Voltage $U_o$	26 V
Current $I_o$	93 mA
Power $P_o$	605 mW
<b>Supply</b>	
Maximum safe voltage $U_m$	250 V AC (Attention! $U_m$ is no rated voltage.)
Type of protection [EEx ia]	
Certificate	PF 11 CERT 2109 X
Marking	$\text{\textcircled{Ex}}$ II 3G Ex nA IIC T4 Gc [device in zone 2]
Galvanic isolation	
Input/Output	safe electrical isolation acc. to EN 60079-11: 2007, voltage peak value 375 V
Directive conformity	
Directive 94/9/EC	EN 60079-0:2009, EN 60079-11:2007, EN60079-15:2005 , EN 60079-26:2007 , EN 61241-11:2006
<b>International approvals</b>	
CSA approval	

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Control drawing	366-005CS-12B (cCSAus)
IECEX approval	IECEX TUN 04.0012
Approved for	[Ex ia] IIC
<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> .

### Configuration

No user configuration available for this device.



*The pins for this device are trimmed to polarize it according to its safety parameter. Do not change! For further information see system description.*

### Output characteristic

