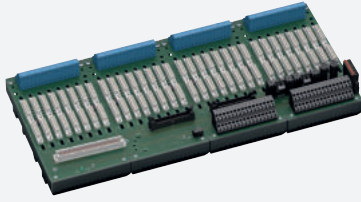


Termination Board

HiCTB32-HIM-RAS-SP-AI320X



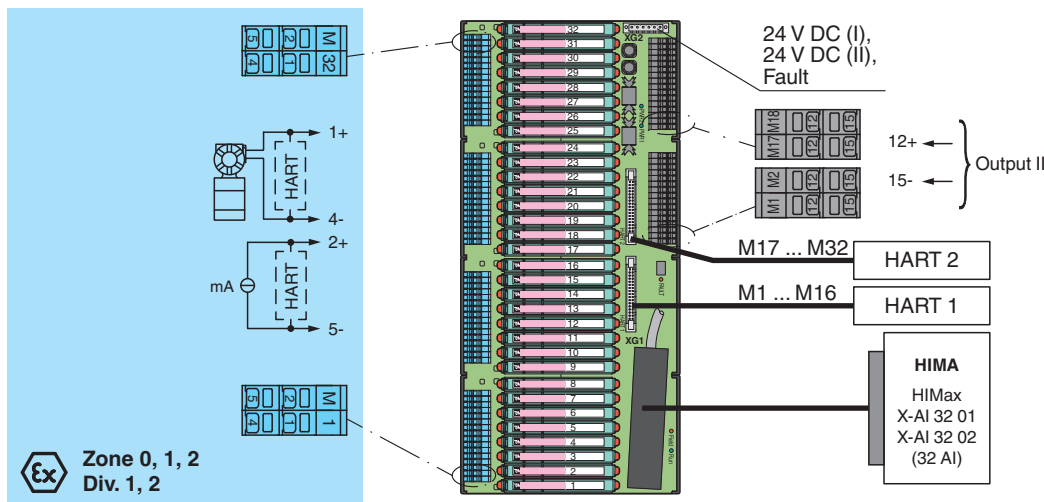
- System board for HIMA, HIMax
- For 32-channel cards X-AI 32 01 or X-AI 32 02 (AI)
- For 32 modules
- Recommended module: HiC2027 (AI)
- 24 V DC supply
- Hazardous area: spring terminals, blue
- Non-hazardous area: HIMA system connector, 96-pin
- Non-hazardous area: spring terminals, black



Function

The function of the termination board and the connector pin assignment is exactly fitted to the requirements of the HIMA HIMax system. The signal is output to the safety instrumented system via the system connector and additionally via spring terminals (signal splitter function). Information about a missing supply voltage of the isolated barriers is available for the system as a volt-free contact. Wiring faults from the field side will be reported via the same relay contact, if this function is supported by the isolated barriers. The termination board has a robust glass fiber reinforced plastic housing. The termination board is mounted in the switch cabinet on a 35 mm DIN mounting rail according to EN 60175.

Connection



Technical Data

Supply	
Connection	XG2: terminals 1, 3 (+); 2, 4 (-)
Nominal voltage	24 V DC , in consideration of rated voltage of used isolators
Voltage drop	0.9 V , voltage drop across the series diode on the termination board must be considered
Ripple	≤ 10 %
Fusing	4 A , in each case for 32 modules
Power dissipation	≤ 500 mW , without modules
Reverse polarity protection	yes
Redundancy	
Supply	Redundancy available. The supply for the isolators is decoupled, monitored and fused.

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

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Technical Data

Fault indication output		
Connection		XG2: terminals 5, 6
Output type		volt-free contact
Switch behaviour		no fault: relay contact closed power supply fault: relay contact open module fault: relay contact open
Contact loading		30 V DC, 1 A
Indicators/settings		
Display elements		LED PWR1 (termination board power supply), green LED LED PWR2 (termination board power supply), green LED LED FAULT (fault indication), red LED - LED lits: power supply fault - LED flashes: module fault LED Run, green LED - The HIMax I/O module is supplied with power and is connected to the Termination Board (FTA) via a system cable. LED Field, red LED - The HIMax I/O module detects faults in the connection between HIMax I/O module and Termination Board (FTA).
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations)
Conformity		
Electromagnetic compatibility		NE 21:2017 For further information see system description.
Degree of protection		IEC 60529:2001
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Degree of protection		IP20
Connection		
Field side		explosion hazardous area: spring terminals , blue
Control side		non-explosion hazardous area: HIMA system connector, 96-pin and spring terminals , black
Supply		pluggable spring terminals , black
Fault output		pluggable spring terminals , black
Core cross section		spring terminals: 0.25 ... 1.5 mm ² (24 ... 16 AWG)
Material		housing: polycarbonate, 10 % glass fiber reinforced
Mass		approx. 1385 g
Dimensions		432 x 200 x 163 mm (17 x 7.9 x 6.42 inch) (W x H x D) , depth including module assembly
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
Data for application in connection with hazardous areas		
EU-type examination certificate		CESI 06 ATEX 022
Marking		⊕ II (1)G [Ex ia Ga] IIC ⊕ II (1)D [Ex ia Da] IIIC ⊕ I (M1) [Ex ia Ma] I
Non-hazardous area		
Maximum safe voltage		250 V (Attention! U _m is no rated voltage.)
Galvanic isolation		
Field circuit/control circuit		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Directive conformity		
Directive 2014/34/EU		EN IEC 60079-0:2018+AC:2020 , EN 60079-11:2012 , EN 50303:2000
International approvals		
UL approval		E106378
Control drawing		116-0327
IECEx approval		
IECEx certificate		IECEx CES 06.0003

Release date: 2023-02-20 Date of issue: 2023-02-20 Filename: 269896_eng.pdf

Technical Data

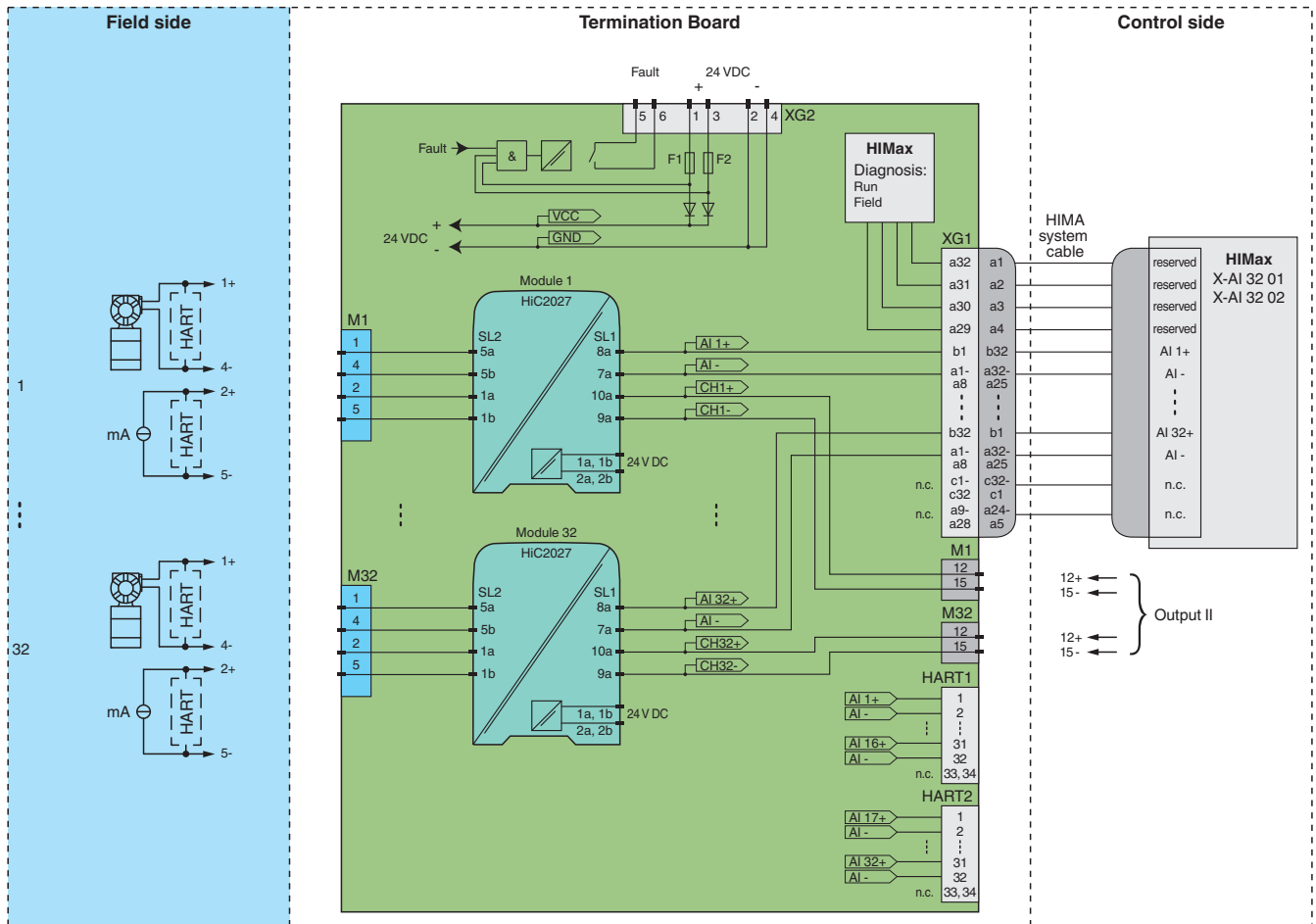
IECEEx marking	[Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I
General information	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .

Accessories

	HiATB01-HART-2X16	HART Communication Board
	HiDMux2700	HART Multiplexer Master
	HiALC-HICTB-SET-108	Label carrier for HiC termination boards
	HiACA-UNI-FLK34-FLK34-0M5	HART Connection Cable, length: 0,5 m
	HiACA-UNI-FLK34-FLK34-1M0	HART Connection Cable, length: 1 m
	HiACA-UNI-FLK34-FLK34-2M0	HART Connection Cable, length: 2 m
	HiACA-UNI-FLK34-FLK34-3M0	HART Connection Cable, length: 3 m
	HiACA-UNI-FLK34-FLK34-6M0	HART Connection Cable, length: 6 m

Application

Typical circuit



Module switch settings

Type (AI)	Channel	DIP switch	Position
HiC2027	1	S1	I
		S2	I
	2	S3	II
		S4	I



Both output loads must be connected to ensure a complete and correct operation within the technical specification.



For exact pin assignment for connection to field side and control side, see the documentation of the isolated barrier.



The pin-out configuration has to be observed. For information see corresponding pin-out table on www.pepperl-fuchs.com.