

Termination Board

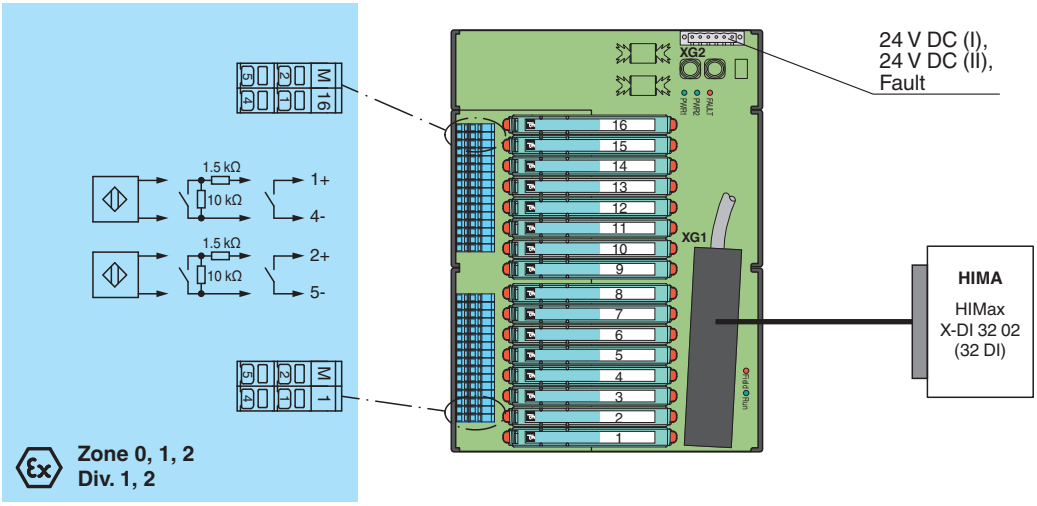
HiCTB16-HIM-RAC-SP-DI3202

- System board for HIMA, HIMax
- For 32-channel card X-DI 32 02 (DI)
- For 16 modules
- Recommended module: HiC2832 (DI)
- 24 V DC supply
- Hazardous area: spring terminals, blue
- Non-hazardous area: HIMA system connector, 96-pin

Function

The function of the Termination Board and the connector pin assignment is exactly fitted to the requirements of HIMA system.
The signal is output to the process control system via the system connector.
Information about a missing supply voltage of the isolated barriers is available for the system as a volt-free contact.
Wiring errors from field side will be reported via the same relay contact, if this function supported by the 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 16 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.

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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 21:2012 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
Supply	pluggable spring terminals , black
Fault output	pluggable spring terminals , black
Core cross-section	spring terminals: 0.25 ... 1.5 mm² (24 ... 16 AWG)
Material	housing: polycarbonate, 10 % glass fiber reinforced
Mass	approx. 800 g
Dimensions	266 x 200 x 163 mm (10.5 x 7.9 x 6.42 inch) , height 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	⟨Ex⟩ II (1)G [Ex ia Ga] IIC ⟨Ex⟩ II (1)D [Ex ia Da] IIIC ⟨Ex⟩ 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 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 50303:2000
International approvals	
UL approval	E106378
Control drawing	116-0327
IECEx approval	
IECEx certificate	IECEx CES 06.0003

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Technical Data

IECEx 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.

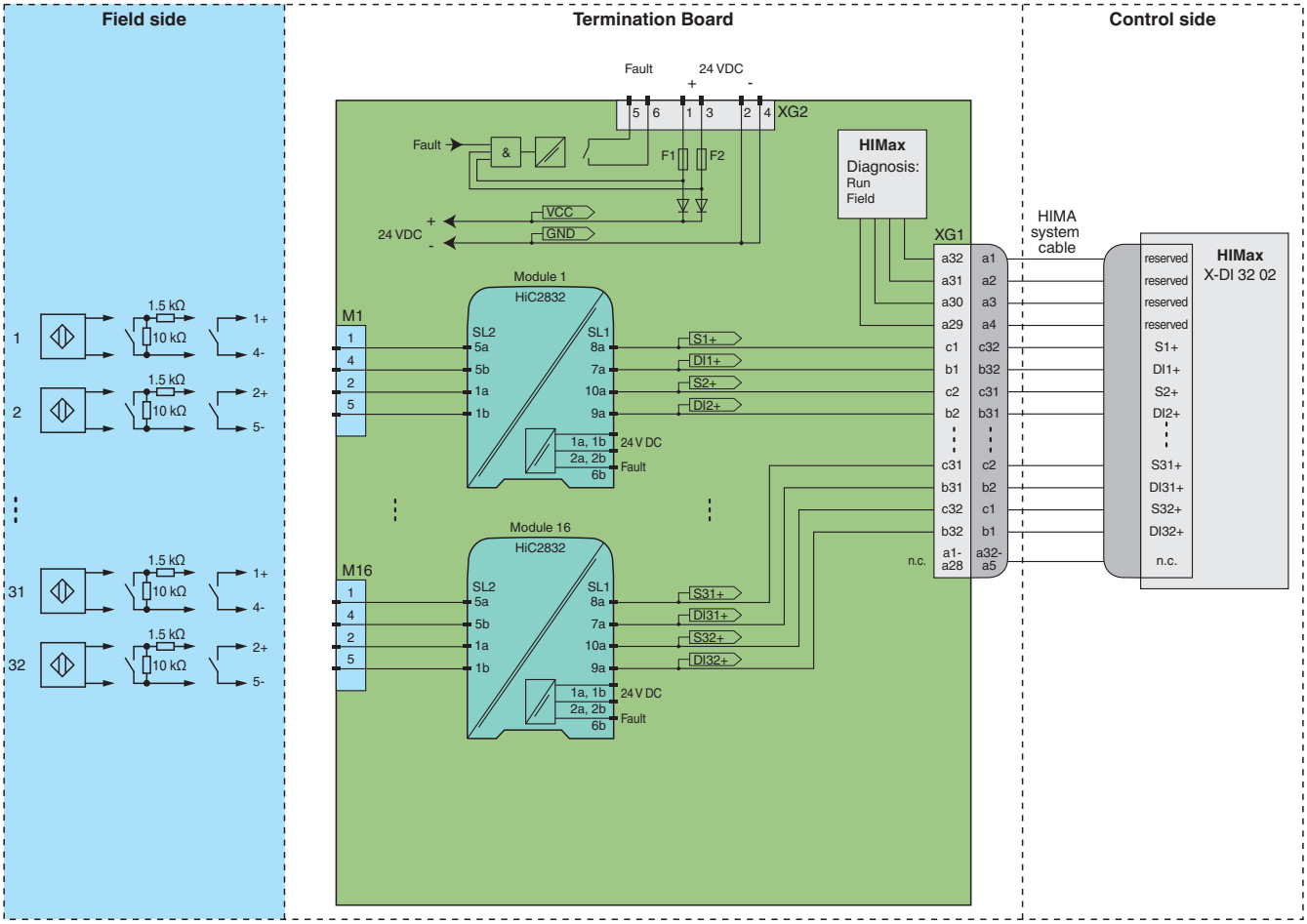
Accessories

	**HiALC-HiCTB-SET-108**	Label carriers for HiC termination boards

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Application

Typical loop



Module switch settings

Type	Channel	DIP switch	Position
HiC2832 (DI) • Mode of operation: Normal • Input line fault detection: ON	1	S1	II
		S2	I
	2	S3	II
		S4	I

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

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