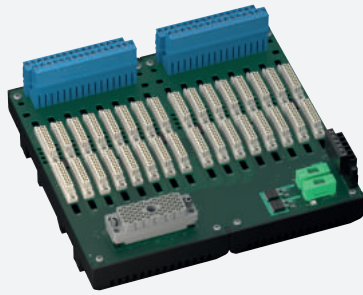


Termination Board

HiCTB16-TRX-RAC-PL-DO16



- System board for Schneider Electric, Tricon CX series by Triconex
- TAN48 approval
- For 32-channel (16+16) DO card 3626X
- For 16 modules
- Recommended modules: HiC2871A (DO), HiC2873 (DO), HiC2883 (DO), HiC5861 (DO), HiC5863 (DO)
- 24 V DC supply
- Hazardous area: pluggable screw terminals, blue
- Non-hazardous area: ELCO socket, 56-pin



Function

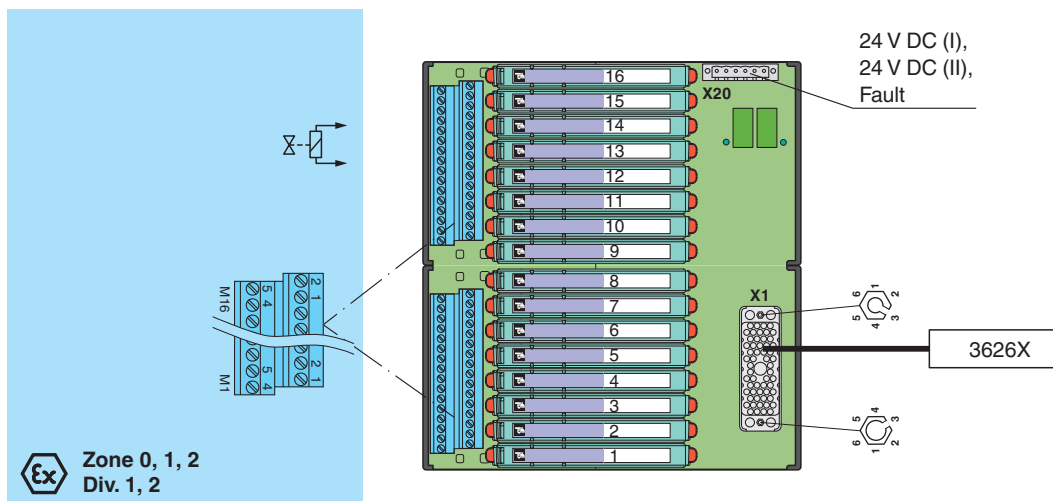
The function of the termination board and the system connector pin assignment is exactly fitted to the requirements of the Triconex Tricon CX system.
The signal is output to the safety instrumented system via the system connector.
Information about missing supply voltage of the isolated barriers is available for the system at the volt-free transistor output.
Wiring faults from the field side will be reported via the volt-free transistor output, if this function is supported by the isolators.
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.

Application

Triconex card Tricon CX:

- Termination board 1 and cable 1: channel 1 ... 16
- Termination board 2 and cable 2: channel 17 ... 32

Connection



Technical Data

Supply	
Connection	X20: terminals 3, 5(+); 4, 6(-)
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 %

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

PEPPERL+FUCHS

Technical Data

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.	
Fault indication output		
Connection	X20: terminals 1(+), 2(-)	
Output type		volt-free transistor output , not short-circuit protected , not overload protected
Rated voltage	U _r	30 V DC
Rated current	I _r	100 mA
Signal level	no fault: (external voltage) - 1 V max. for 100 mA (T _{amb} = 25 °C (77 °F)) power supply fault/module fault: blocked output (off-state current ≤ 10 µA)	
Indicators/settings		
Display elements	LED PWR1 (termination board power supply), green LED LED PWR2 (termination board power supply), green LED	
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: pluggable screw terminals , blue
Control side		non-explosion hazardous area: ELCO socket, 56-pin
Supply		pluggable screw terminals , black
Fault output		pluggable screw terminals , black
Core cross section		screw terminals 0.25 ... 2.5 mm² (24 ... 12 AWG)
Material	housing: polycarbonate, 10 % glass fiber reinforced	
Mass		approx. 770 g
Dimensions	216 x 200 x 163 mm (8.5 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: 2023-10-23 Date of issue: 2023-10-23 Filename: 70127427_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 .

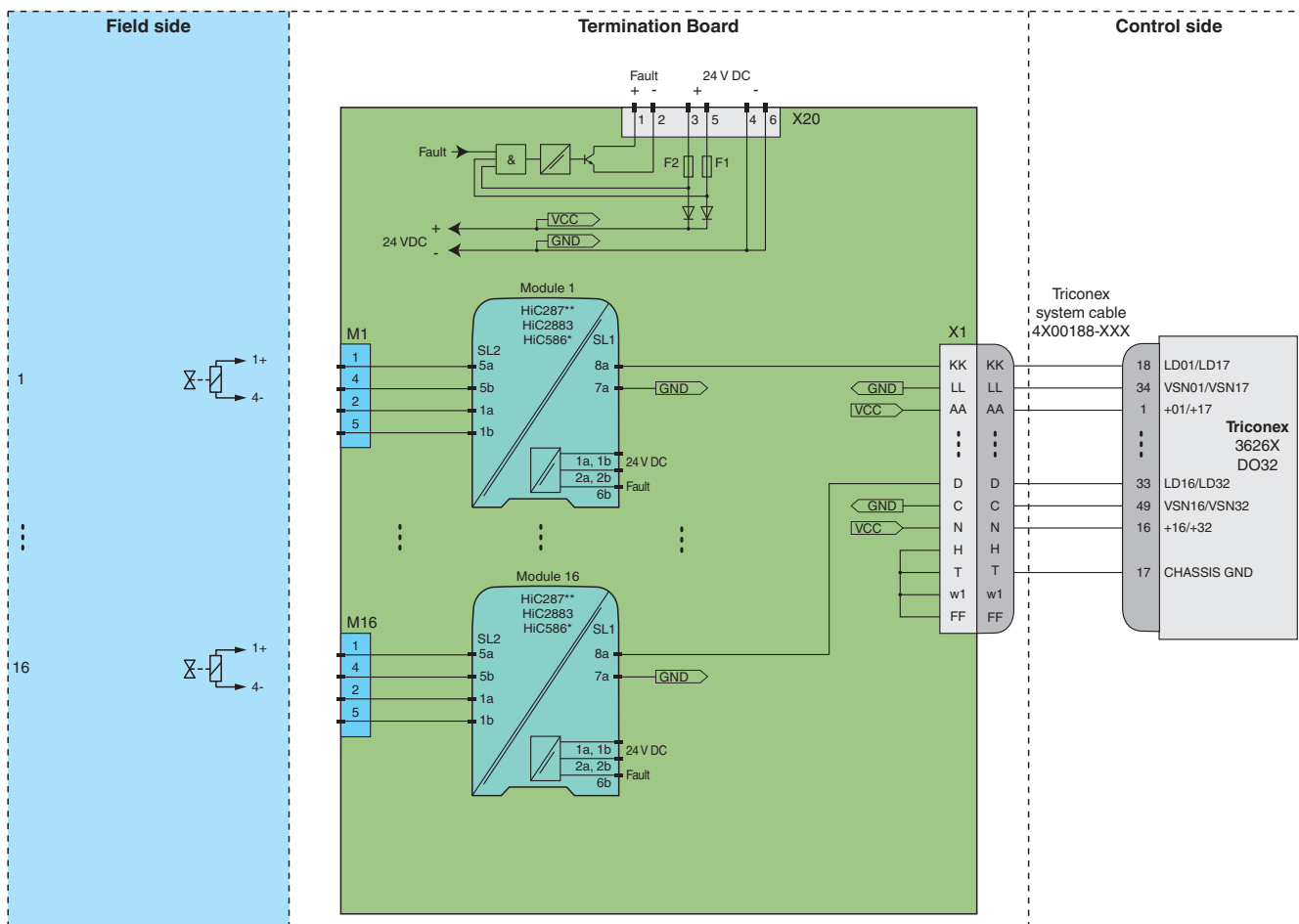
Accessories

	HiALC-HiCTB-SET-108	Label carrier for HiC termination boards
---	----------------------------	--

Release date: 2023-10-23 Date of issue: 2023-10-23 Filename: 70127427_eng.pdf

Application

Typical loop



Module switch settings

Type (DO)	DIP switch	Position
HiC2883	S1	I
	S2	freely selectable
	S3	freely selectable
	S4	no function

Type (DO)	
HiC2871A, HiC5861, HiC5863	not available

Type (DO)	DIP switch	Position
HiC2873	S1	OFF
	S2	ON
	S3	ON
	S4	ON
	S5	OFF
	S6	ON
	S7	OFF
	S8	OFF



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.