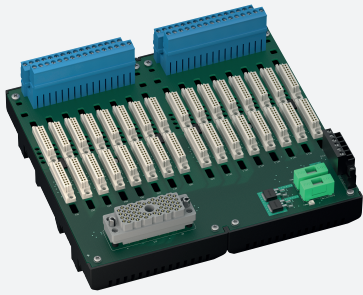


# Termination Board

## HiCTB16-TRX-RAC-PL-DI16



- System board for Schneider Electric, Tricon CX series by Triconex
- TAN48 approval
- For 32-channel (16+16) DI card 3506X
- For 16 modules
- Recommended modules: HiC2821 (DI), HiC2841 (DI), HiC2853R6 (DI)
- 24 V DC supply
- Hazardous area: pluggable screw terminals, blue
- Non-hazardous area: ELCO socket, 56-pin



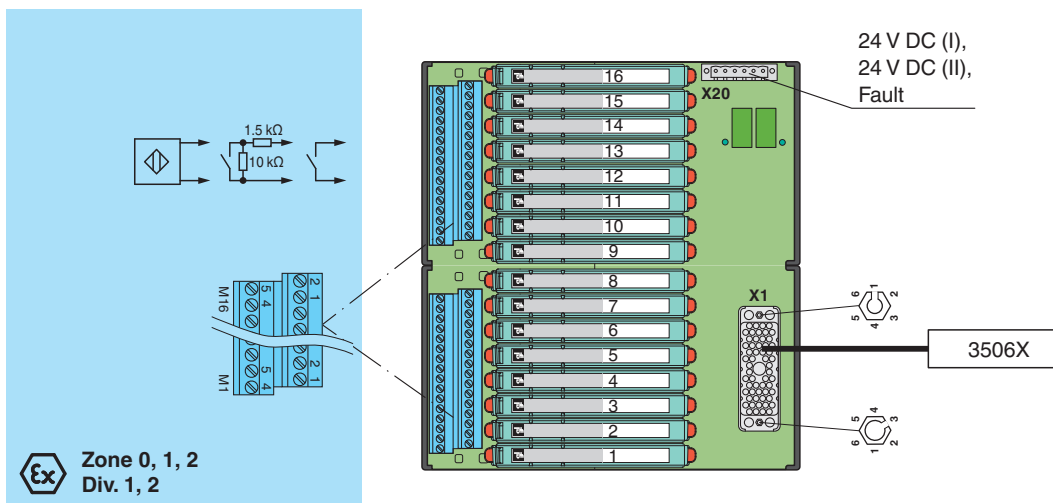
### Function

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 %

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

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## Technical Data

Fusing	4 A , in each case for 16 modules	
Power dissipation	≤ 500 mW , without modules	
Reverse polarity protection	yes	
<b>Redundancy</b>		
Supply	Redundancy available. The supply for the isolators is decoupled, monitored and fused.	
<b>Fault indication output</b>		
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 ( $T_{amb} = 25\text{ °C}$ (77 °F)) power supply fault/module fault: blocked output (off-state current ≤ 10 μA)	
<b>Indicators/settings</b>		
Display elements	LED PWR1 (termination board power supply), green LED LED PWR2 (termination board power supply), green LED	
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations)	
<b>Conformity</b>		
Electromagnetic compatibility	NE 21:2017 For further information see system description.	
Degree of protection	IEC 60529:2001	
<b>Ambient conditions</b>		
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)	
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)	
<b>Mechanical specifications</b>		
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 mm <sup>2</sup> (24 ... 12 AWG)	
Material	housing: polycarbonate, 10 % glass fiber reinforced	
Mass	approx. 765 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	
<b>Data for application in connection with hazardous areas</b>		
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	
<b>International approvals</b>		
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: 70127425\_eng.pdf

## Technical Data

IECEX marking

[Ex ia Ga] IIC  
 [Ex ia Da] IIC  
 [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](http://www.pepperl-fuchs.com).

## Safety Information

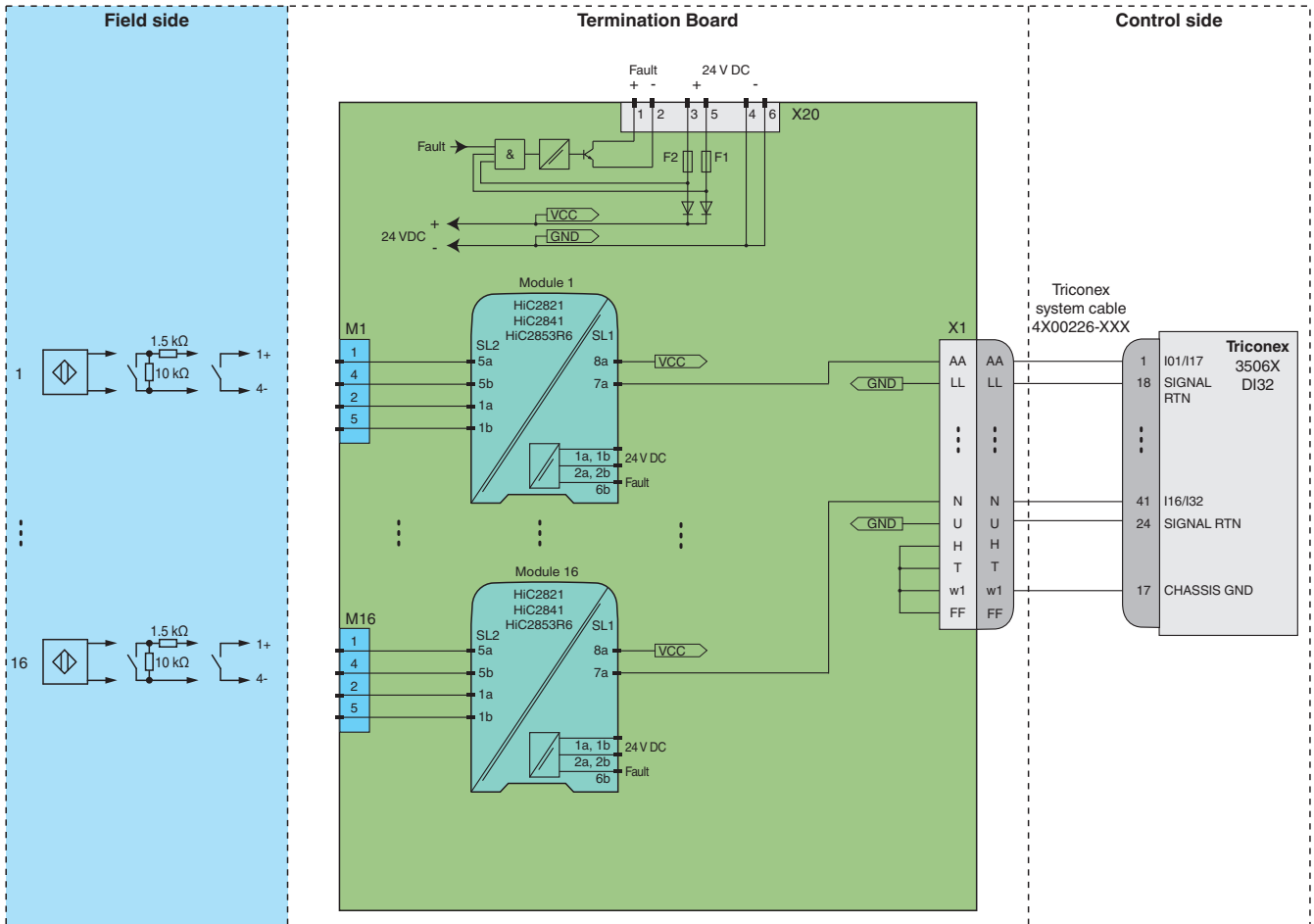
We recommend that you do not connect the device supply to a DC supply network. If you connect the device supply to a DC supply network, make sure that appropriate protective measures are implemented to ensure that no transient overvoltages occur.

## Accessories

	<b>HiALC-HICTB-SET-108</b>	Label carrier for HiC termination boards
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**Application**

**Typical circuit**



**Module switch settings**

Type (DI)	DIP switch	Position
HiC2821 (DI), HiC2841 (DI) <ul style="list-style-type: none"> <li>Mode of operation: open – energized close – de-energized</li> <li>Input line fault detection: enabled</li> </ul>	S1	I
	S2	I
	S3	no function
	S4	no function

Type (DI)	
HiC2853R6	not available



**HiC2853R6:**  
Observe the rated voltage  $U_r$  of the isolators: 21.6 ... 26.4 V DC.



For exact pin assignment for 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](http://www.pepperl-fuchs.com).

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