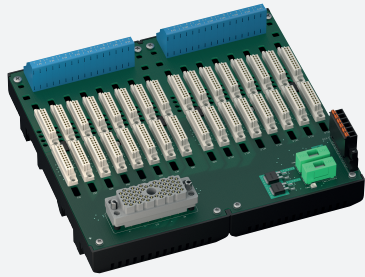


# Termination Board

## HiCTB16-TRX-RSC-SP-DI16



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



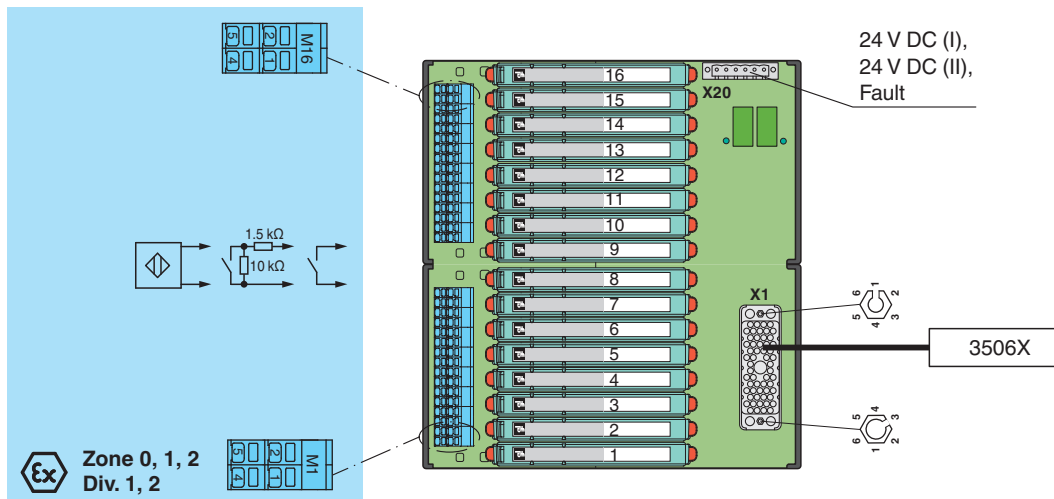
### Function

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.  
 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 %
Fusing	4 A , in each case for 16 modules

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

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## Technical Data

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: 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: 4 spring terminals per module , blue
Control side		non-explosion hazardous area: ELCO socket, 56-pin
Supply		pluggable spring terminals , black
Fault output		pluggable spring terminals , black
Core cross section		spring terminals 0.25 ... 1.5 mm <sup>2</sup> (24 ... 16 AWG)
Material		housing: polycarbonate, 10 % glass fiber reinforced
Mass		approx. 665 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
IECEx marking		[Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I

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## Technical Data

### 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

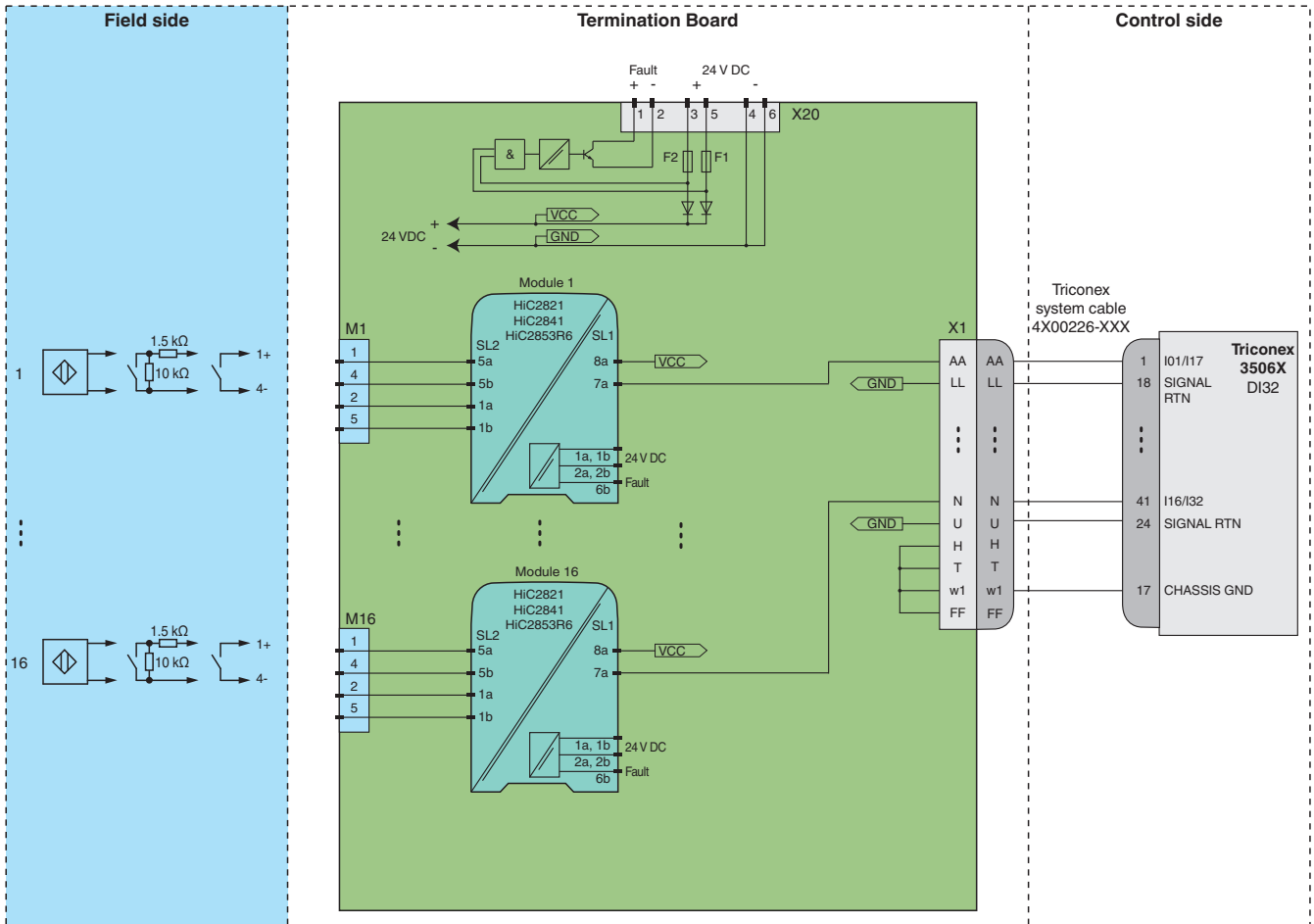
We recommend that you do not connect the device supply to a DC supply network. If you connect the device supply to a DC supply network, make sure that appropriate protective measures are implemented to ensure that no transient overvoltages occur.

## 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) • Mode of operation: open – energized close – de-energized • Input line fault detection: disabled	S1	I
	S2	II
	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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