

Termination Board

HiCTB16-TRX-RSC-SP-DI16-NEX

- 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)
- Field side: spring terminals, black
- Control side: 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.

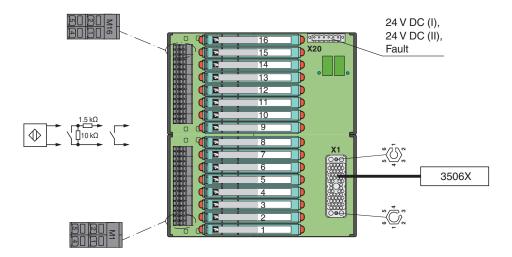
The termination board is mounted in the switch cabinet on a 35 mm DIN mounting rail according to EN 60175.

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	$0.9\mbox{V}$, 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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Technical Data		
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	l _r	100 mA
Signal level		no fault: (external voltage) - 1 V max. for 100 mA (T_{amb} = 25 °C (77 °F)) power supply fault: blocked output (off-state current \leq 10 μ A)
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		4 spring terminals per module , black
Control side		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 ² (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
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see 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

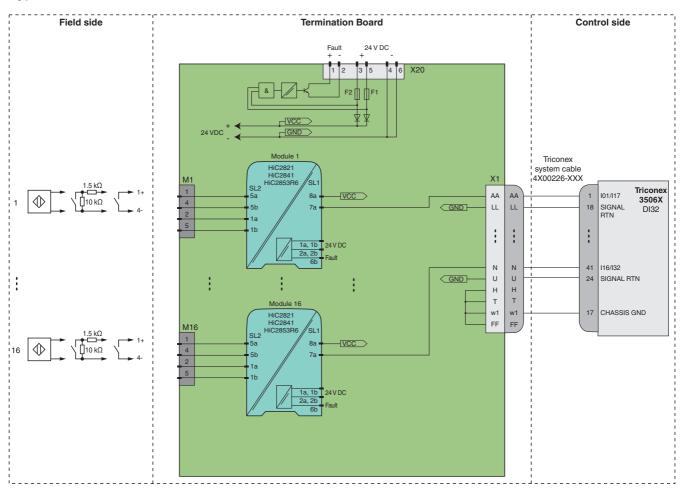


HIALC-HICTB-SET-108

Label carrier for HiC termination boards

Application

Typical circuit



Module switch settings

Type (DI)	DIP switch	Position
HiC2821 (DI), HiC2841 (DI)	S1	I
Mode of operation:	S2	II
open – energized	S3	no function
close – de-energizedInput line fault detection: disabled	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.