

Termination Board

HiCTB16-TRI-DIISD-EL-PL

- System board for Schneider Electric, Tricon series by Triconex
- TAN48 approval
- For 64-channel (32+32) DI card 3564
- For 16 modules
- Recommended module: HiC2822 (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 connector pinout is exactly fitted to the requirements of Triconex system.

The termination board has a fault bus (Fault) that is available at the redundant terminals. Power supply faults and module faults are indicated via this fault bus. The fault signals of several termination boards can be connected together and can be monitored by an optional fault indication board. The fault signals are then available to the control system as a volt-free contact.

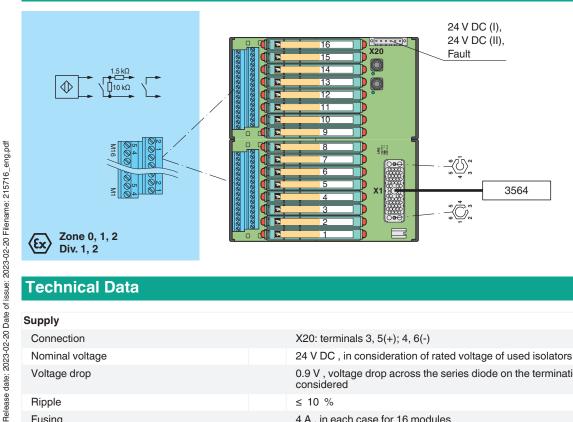
The termination board is supplied with a robust plastic housing. This design permits the fast and reliable installation on 35 mm DIN mounting rail according to EN 60715 in the switch cabinet.

Application

Triconex card Tricon:

- Termination board 1 and cable 1: channel 1 to 32
- Termination board 2 and cable 2: channel 33 to 64

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

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

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	redutidantly available. The supply for the isolators is decoupled, monitored and fused		
Connection	fault bus (Fault) : X20: terminals 1, 2		
Output type	volt-free contact		
Switch behaviour	fault bus (Fault) - no fault: relay contact of the fault indication board closed - power supply fault: relay contact of the fault indication board open - module fault: relay contact of the fault indication board open		
Contact loading	fault bus (Fault): 30 V DC, 1 A, see fault indication board		
Indicators/settings			
Display elements	LED PWR1 (termination board power supply), green LED LED PWR2 (termination board power supply), green LED		
Configuration	jumper SW1: card selection - position 1: DI card 3564 - position 2: n.c. (factory setting) - position 3: DI card 3504E		
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 70 °C (-40 158 °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: 0.2 2.5 mm ² (24 12 AWG)		
Material	housing: polycarbonate, 10 % glass fiber reinforced		
Mass	approx. 780 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 hazardo	-		
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		

Technical Data

IECEx approval			
IECEx certificate	IECEx CES 06.0003		
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.		

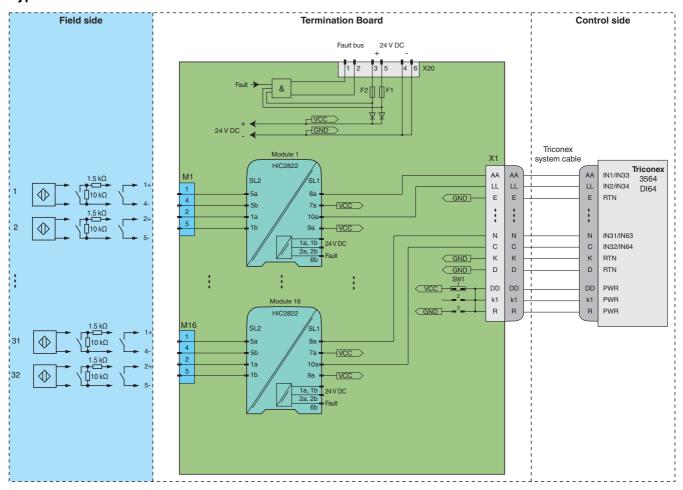
Accessories



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

Application

Typical circuit



Termination Board configuration

Jumper SW1	Position	Card selection	
	1	DI card 3564	
	2	n.c. (factory setting)	
	3	DI card 3504E	

Module switch settings

Type (DI)	DIP switch	Position
HiC2822	S1	II
Mode of operation:	S2	I
close – energized open – de-energized	S3	II
Input line fault detection: enabled	S4	I



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.