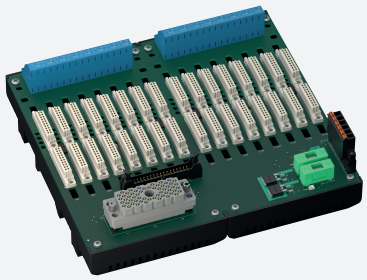
Termination Board

HiCTB16-TRX-RSC-SP-AI16



- System board for Schneider Electric, Tricon CX series by Triconex
- For 32-channel (16+16) AI cards 3722X and 3723X
- For 16 modules
- Recommended modules: HiC2025(A) (AI), HiC2081 (TI)
- 24 V DC supply
- Hazardous area: spring terminals, blue
- Non-hazardous area: ELCO socket, 56-pin

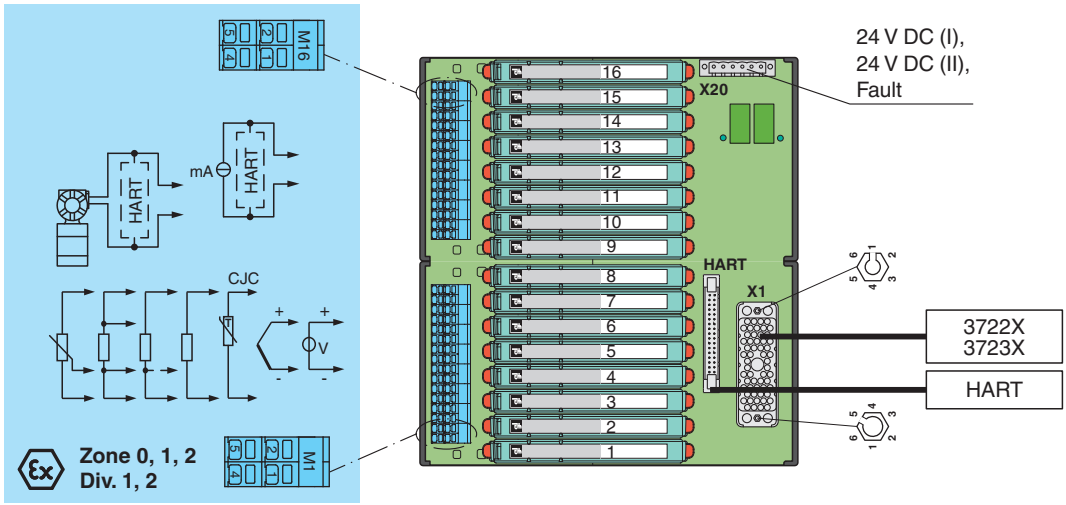
Function

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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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	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: 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: 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 mm² (24 ... 16 AWG)
Material		housing: polycarbonate, 10 % glass fiber reinforced
Mass		approx. 675 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		⟨Ex⟩ II (1)G [Ex ia Ga] IIC ⟨Ex⟩ II (1)D [Ex ia Da] IIIC ⟨Ex⟩ 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
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.

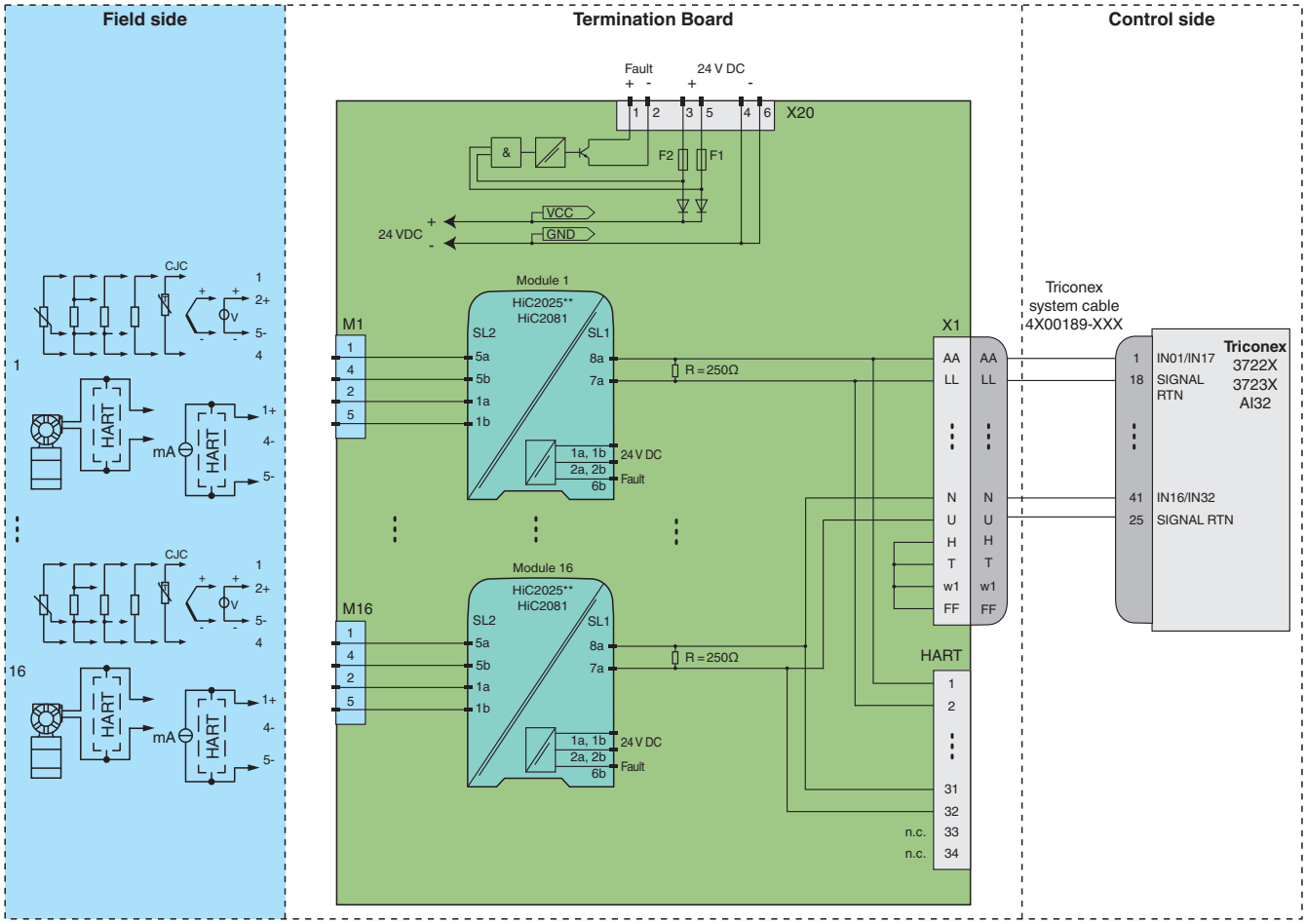
Accessories

	**HiATB01-HART-2X16**	HART Communication Board
	**HiDMux2700**	HART Multiplexer Master
	**H-CJC-Pt100**	Resistance thermometer for cold junction compensation for H-System termination boards
	**HiACA-UNI-FLK34-FLK34-0M5**	HART Connection Cable, length: 0,5 m
	**HIACA-UNI-FLK34-FLK34-1M0**	HART Connection Cable, length: 1 m
	**HiACA-UNI-FLK34-FLK34-2M0**	HART Connection Cable, length: 2 m
	**HiACA-UNI-FLK34-FLK34-3M0**	HART Connection Cable, length: 3 m
	**HiACA-UNI-FLK34-FLK34-6M0**	HART Connection Cable, length: 6 m
	**HiALC-HiCTB-SET-108**	Label carrier for HiC termination boards

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Application

Typical circuit



Module switch settings

Type (AI)	DIP switch	Position
HiC2025, HiC2025A, HiC2025Y1 (source 4 mA ... 20 mA)	S1	OFF
	S2	OFF
	S3	ON
	S4	OFF

Type (AI)	DIP switch	Position
HiC2081 (source)	S	I

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.

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