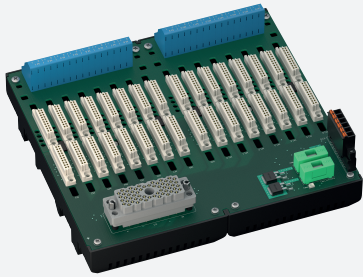


# Termination Board

## HiCTB16-TRX-RSC-SP-DO16



- System board for Schneider Electric, Tricon CX series by Triconex
- For 32-channel (16+16) DO card 3626X
- For 16 modules
- Recommended modules: HiC2871A (DO), HiC2873 (DO), HiC2883 (DO), HiC5861 (DO), HiC5863 (DO)
- 24 V DC supply
- Hazardous area: spring terminals, blue
- Non-hazardous area: ELCO socket, 56-pin



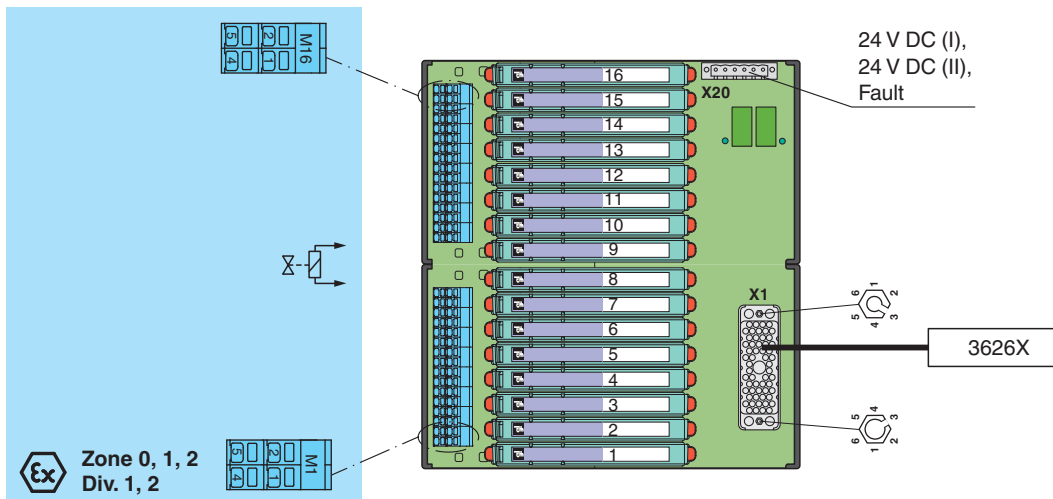
### Function

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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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))<br>power supply fault: blocked output (off-state current ≤ 10 μA) |
| <b>Indicators/settings</b>                                     |       |  |
| Display elements   |       | LED PWR1 (termination board power supply), green LED<br>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<br>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<br>Ⓜ II (1)D [Ex ia Da] IIIC<br>Ⓜ 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<br>[Ex ia Da] IIIC<br>[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).

## Accessories

|   |                                   |   |
|---|-----------------------------------|---|
|  | <p><b>HiALC-HiCTB-SET-108</b></p> | <p>Label carrier for HiC termination boards</p> |
|---|-----------------------------------|---|

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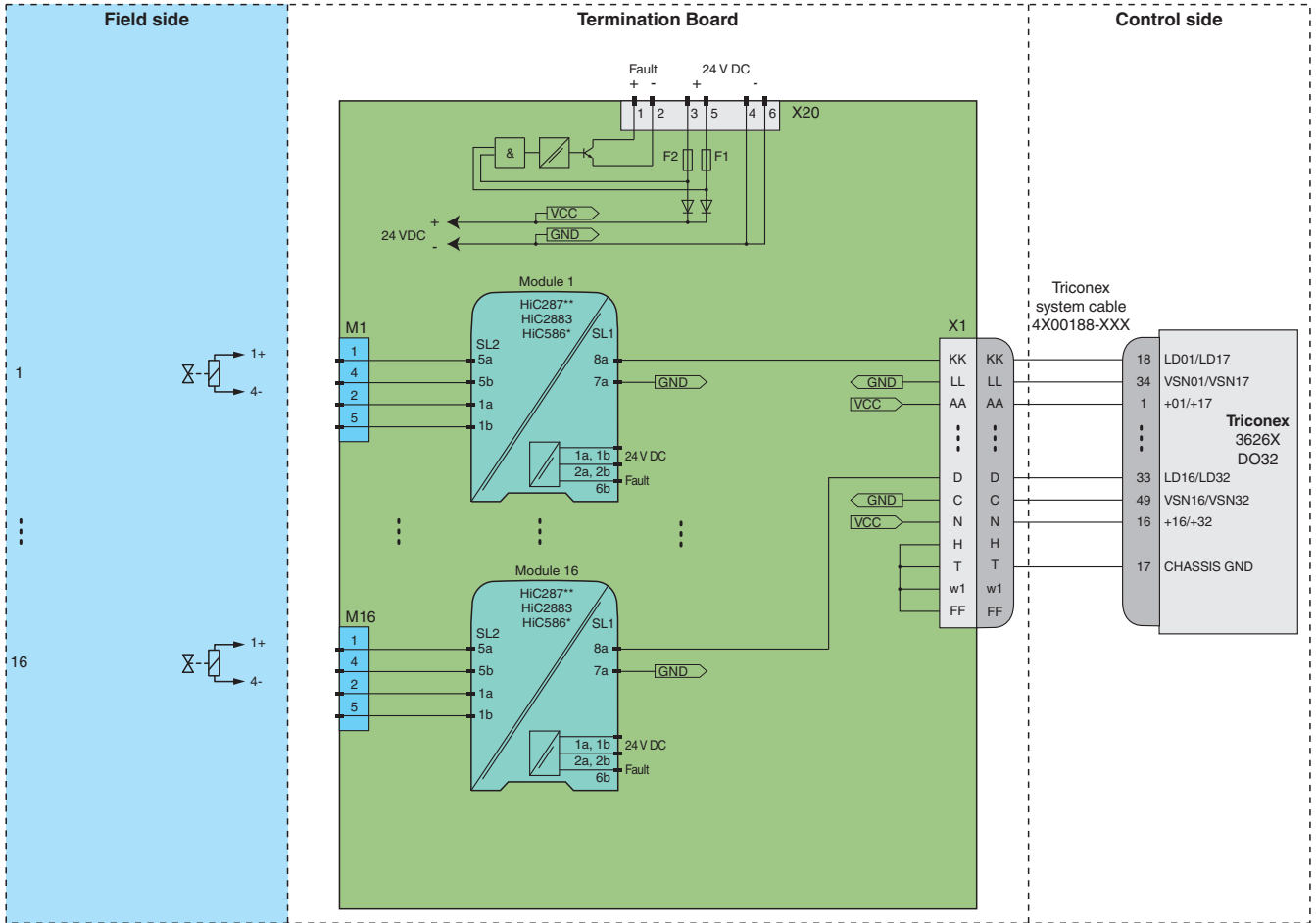
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**Application**

**Typical loop**



**Module switch settings**

| Type (DO)                                 | DIP switch | Position          |
|---|------------|-------------------|
| HiC2883<br>• Line fault detection enabled | S1         | I                 |
|   | S2         | freely selectable |
|   | S3         | freely selectable |
|   | S4         | no function       |

| Type (DO)                  | Position      |
|----------------------------|---------------|
| HiC2871A, HiC5861, HiC5863 | not available |

| Typ (DO)  | DIP switch | Position |
|---|------------|----------|
| HiC2873<br>• Loop powered<br>• Control input: without function<br>• Line fault detection disabled<br>• Filter enabled | S1         | OFF      |
|   | S2         | ON       |
|   | S3         | ON       |
|   | S4         | ON       |
|   | S5         | OFF      |
|   | S6         | ON       |
|   | S7         | OFF      |
|   | S8         | OFF      |



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](http://www.pepperl-fuchs.com).

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