Features

- System Board for Triconex
- For 32-channel (16+16) DI card 3503E
- For 16 modules
- Recommended modules: HiD2822 (DI), HiD2842 (DI)
- 24 V DC supply
- Hazardous area: pluggable screw terminals, blue
- Safe area: ELCO socket, 56-pin

Function

The function of the Termination Board as well as the connector pin assignment exactly fit the requirement of Triconex systems.

The Termination Board has a fault bus that is available at the redundant power supply terminals. The fault bus can be daisy chained and monitored by the optional Fault Indication Board. The fault bus signals are then available to the control system as a potential-free contact.

The Termination Boards are supplied with a robust glass fiber reinforced plastic housing as standard. This design permits the fast and reliable installation on 35 mm DIN mounting rail acc. to EN 60715 in the cabinet.

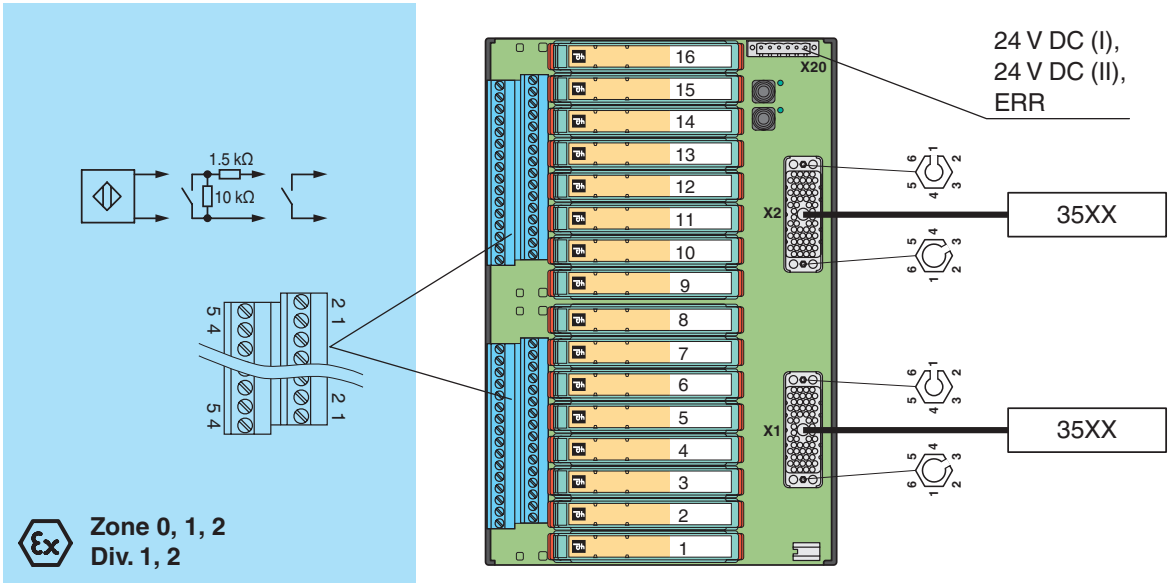
Application

Triconex card 3503E:

- Board 1 and cable 1: channel 1 ... 16
- Board 1 and cable 2: channel 17 ... 32

Assembly

Connection



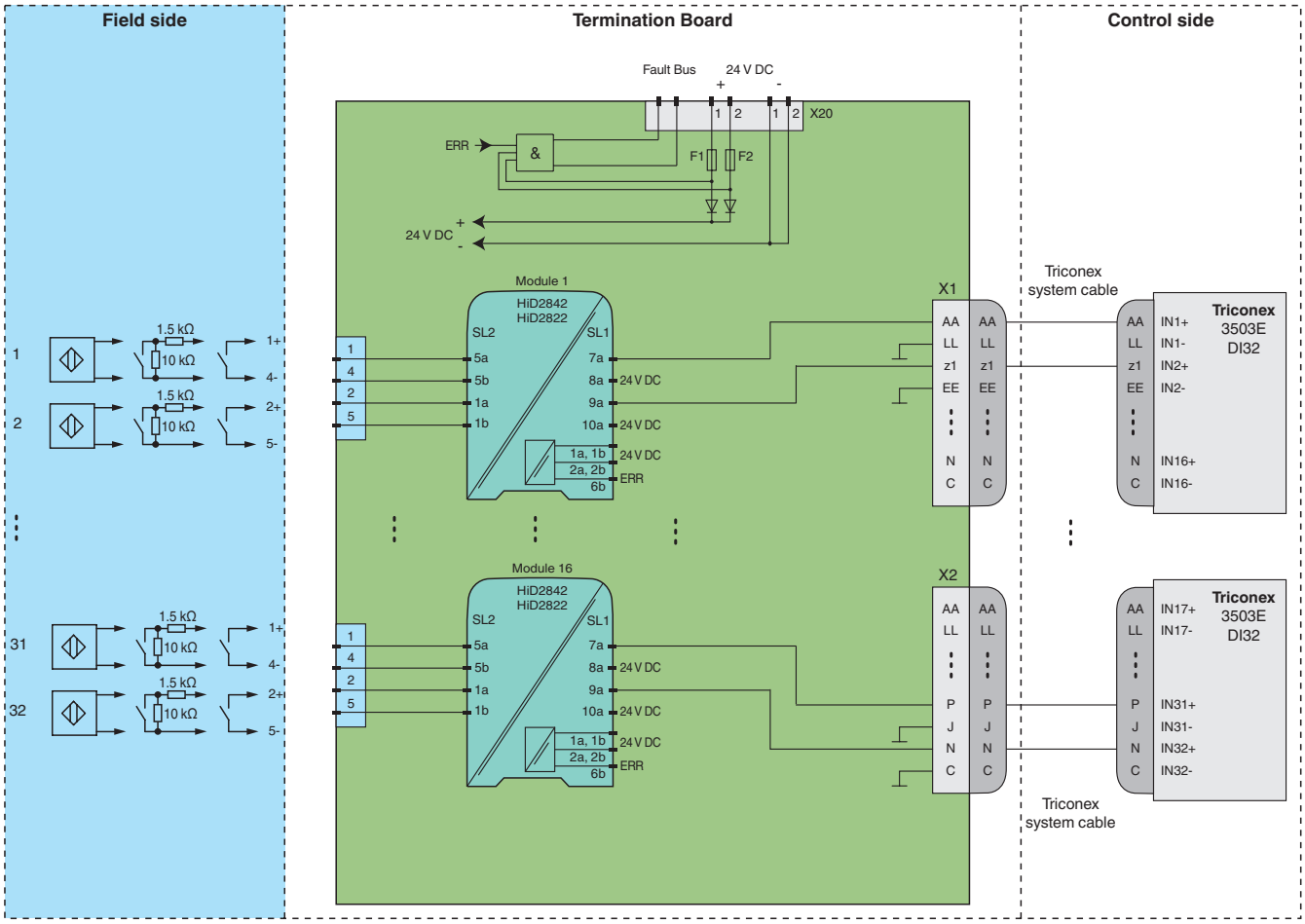
Release date 2014-07-18 10:58 Date of issue 2014-07-18 224802_eng.xml

Supply	
Rated voltage	24 V DC , in consideration of rated voltage of used isolated barriers
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
Power loss	≤ 500 mW , without modules
Reverse polarity protection	yes
Redundancy	
Supply	Redundancy available. The supply for the modules is decoupled, monitored and fused.
Indicators/settings	
Display elements	LEDs PWR ON (power supply) - LED power supply I, green LED - LED power supply II, green LED
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2013
Conformity	
Electromagnetic compatibility	NE 21:2011 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	hazardous area connection (field side): plugable screw terminals, blue safe area connection (control side): ELCO socket, 56-pin
Material	housing: polycarbonate, 30 % glass fiber reinforced
Mass	approx. 1600 g
Dimensions	300 x 200 x 163 mm (11.8 x 7.9 x 6.42 in) , height including module assembly
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
Data for application in connection with Ex-areas	
EC-Type Examination Certificate	CESI 11 ATEX 062 , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection	⟨Ex⟩ II (1)G [Ex ia Ga] IIC ⟨Ex⟩ II (1)D [Ex ia Da] IIIC ⟨Ex⟩ I (M1) [Ex ia Ma] I
Safe area	
Maximum safe voltage	250 V (Attention! U_m is no rated voltage.)
Electrical isolation	
Field circuit/control circuit	safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Directive conformity	
Directive 94/9/EC	EN 60079-0:2012, EN 60079-11:2012, EN 60079-26:2007 , EN 50303:2000
International approvals	
CSA approval	
Control drawing	see control drawing of correspoding modules
IECEx approval	IECEx CES 11.0022
Approved for	[Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.
Accessories	
Designation	optional accessories: - Fault Indication Board HiATB01-FAULT-01 - Label Carrier HiALC-Hi*TB-SET-1**

Release date 2014-07-18 10:58 Date of issue 2014-07-18 224802_eng.xml

Application

Typical loop



The pin-out configuration has to be observed. For information see corresponding pin-out table on www.pepperl-fuchs.com.

Module switch settings

Type (DI)	DIP switch	Position
HiD2822	S1	OFF
	S2	ON
	S3	OFF
	S4	ON
HiD2842	S1	OFF
	S2	ON
	S3	OFF
	S4	ON

Release date 2014-07-18 10:58 Date of issue 2014-07-18 224802_eng.xml