

Termination Board

HiCTB16-FBM-RAC-SC-AI16

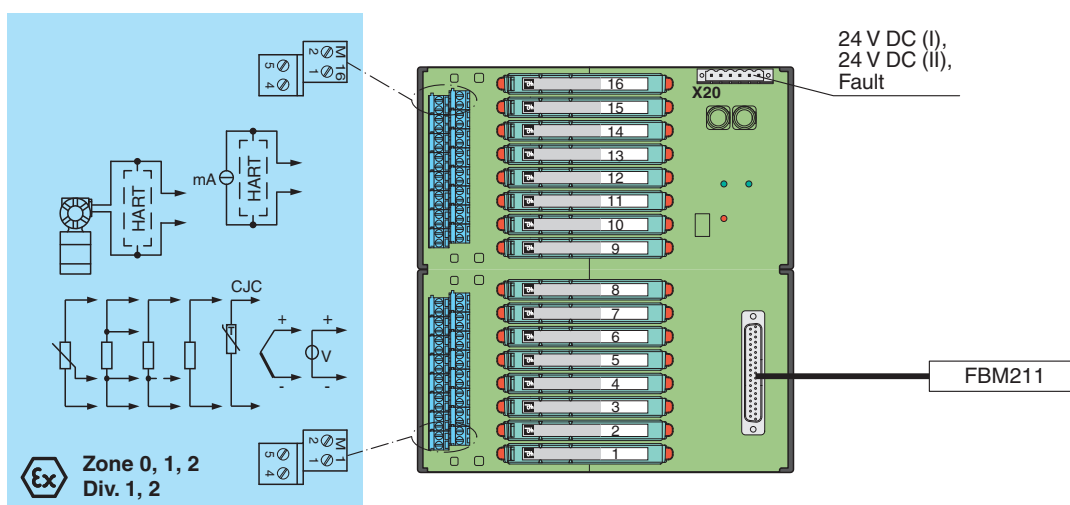
- System board for Schneider, Foxboro FBM series
- For 16 modules
- For 16-channel AI card FBM211
- 24 V DC supply
- Recommended modules: HiC2025(A) (AI), HiC2025ES (AI), HiC2081 (TI)
- Hazardous area: screw terminals, blue
- Non-hazardous area: Sub-D connector (male), 37-pin



Function

The function of the termination board and the connector pin assignment are exactly fitted to the requirements of the Foxboro FBM system. The signal is output to the process control system via the system connector. Information about a missing supply voltage of the isolated barriers is available for the system as a volt-free contact. Wiring errors from field side will be reported via the same relay contact, if this function is supported by the isolators. 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.

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
Power dissipation	≤ 500 mW , without modules
Reverse polarity protection	yes

Redundancy

Supply	Redundancy available. The supply for the isolators is decoupled, monitored and fused.
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

Fault indication output		
Connection		X20: terminals 1, 2
Output type		volt-free contact
Switch behaviour		no fault: relay contact closed power supply fault: relay contact open module fault: relay contact open
Contact loading		30 V DC, 1 A
Indicators/settings		
Display elements		LED PWR1 (termination board power supply), green LED LED PWR2 (termination board power supply), green LED LED FAULT (fault indication), red LED - LED lits: module fault - LED flashes: power supply fault
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: 4 screw terminals per module , blue
Control side		non-explosion hazardous area: Sub-D connector , 37-pin
Supply		pluggable screw terminals , black
Fault output		pluggable screw terminals , black
Core cross section		screw terminals: 0.25 ... 1.5 mm ² (24 ... 12 AWG)
Material		housing: polycarbonate, 10 % glass fiber reinforced
Mass		approx. 720 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		Ⓔ 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
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 .

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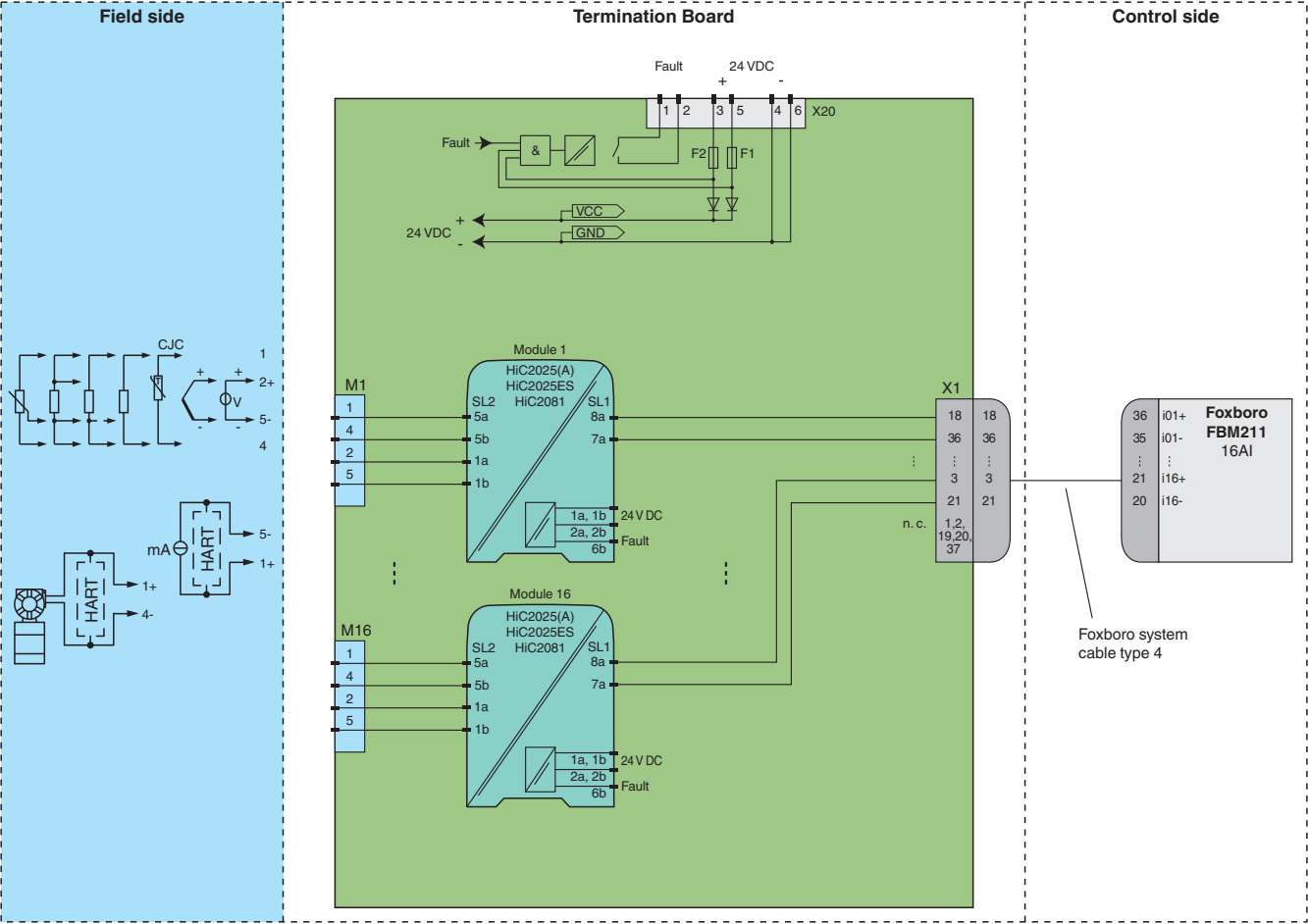
Accessories

	H-CJC-Pt100	Resistance thermometer for cold junction compensation for H-System termination boards
	HiALC-HiCTB-SET-108	Label carrier for HiC termination boards

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Application

Typical loop



Module switch settings

Type (AI)	DIP switch	Position
HiC2025, HiC2025A, HiC2025ES (current source 4 mA ... 20 mA)	S1	OFF
	S2	OFF
	S3	ON
	S4	OFF

Type (TI)	DIP switch	Position
HiC2081 (source)	S	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.