

Termination Board

HiCTB16-FBM-RAC-SC-DI16

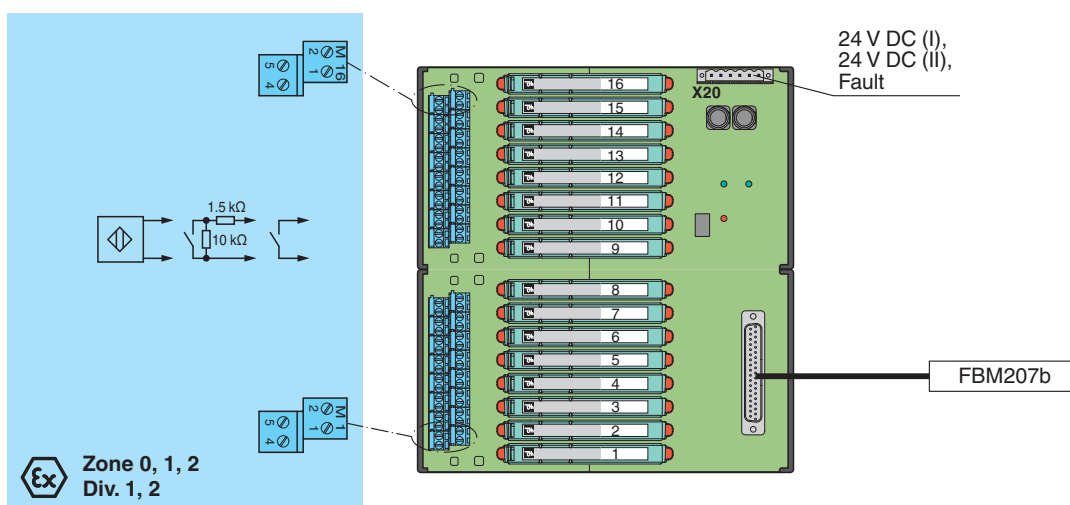
- System board for Schneider, Foxboro FBM series
- For 16 modules
- For 16-channel DI card FBM207b
- 24 V DC supply
- Recommended modules: HiC2821 (DI), HiC2841 (DI)
- Hazardous area: screw terminals, blue
- Non-hazardous area: Sub-D connector (male), 37-pin



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
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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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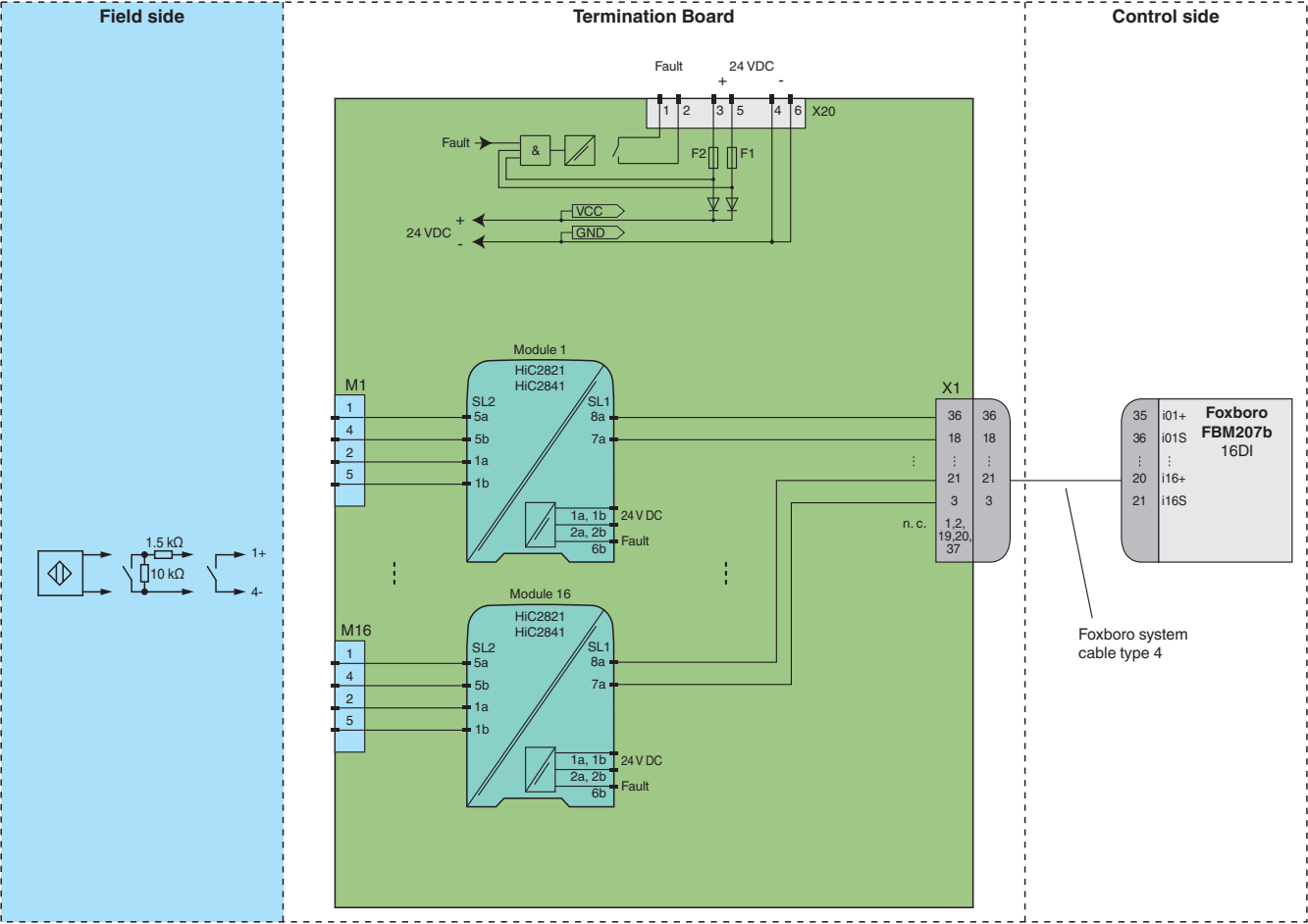
Accessories

	HiALC-HICTB-SET-108	Label carrier for HiC termination boards
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Application

Typical loop



Module switch settings

Type (DI)	DIP switch	Position
HiC2821, HiC2841	S1	I
• Mode of operation:	S2	I
open – energized	S3	no function
close – de-energized	S4	no function
• Input line fault detection: enabled		



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.