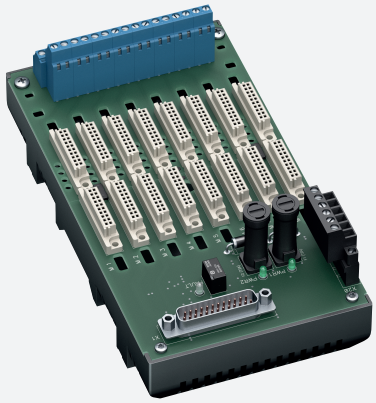


Termination Board

HiCTB08-FBM-RAC-SC-IO08

- System board for Schneider, Foxboro FBM series
- For 8 modules
- For 8-channel cards FBM201/214(b)/216(b) (AI), FBM215/218/237 (AO), FBM204/205 (AO/AI), FBM244 (AI/AO), FBM247/248 (UIO)
- 24 V DC supply
- Recommended modules: HiC2025(A) (AI), HiC2025ES (AI), HiC2031 (AO), HiC2081 (TI), HiC2831R5 (DI), HiC2883 (DO), HiC2441 (UIO)
- Hazardous area: screw terminals, blue
- Non-hazardous area: Sub-D connector (male), 25-pin

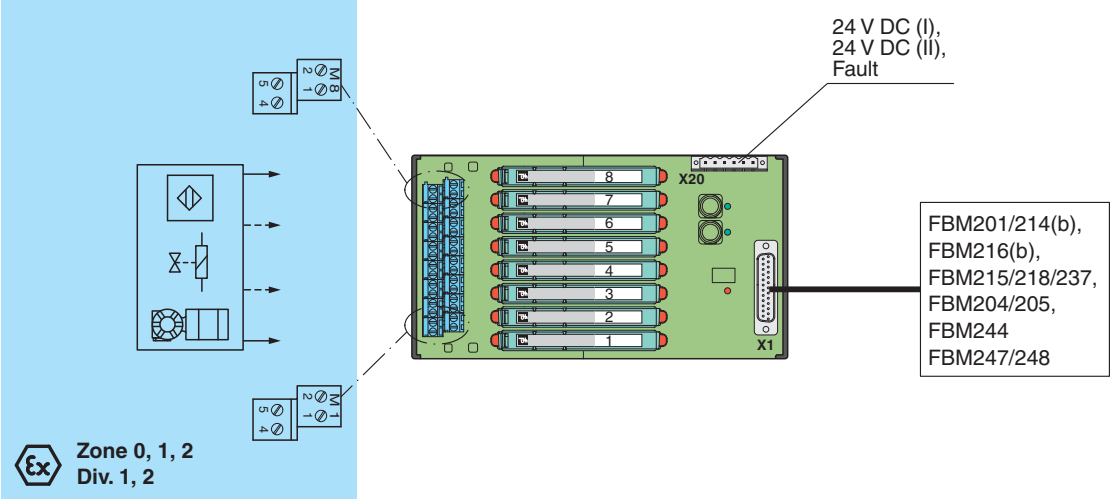
Function

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.

Application

For detailed listing of connectable cards and recommended modules see application section.

Wiring Diagram



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	2 A , in each case for 8 modules
Power dissipation	≤ 500 mW , without modules

Release date: 2026-04-07 Date of issue: 2026-04-07 Filename: 319784_eng.pdf

Technical Data

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 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 , 25-pin
Supply	pluggable screw terminals , black
Fault output	pluggable screw terminals , black
Core cross section	screw terminals: 0.25 ... 1.5 mm² (24 ... 12 AWG)
Material	housing: polycarbonate, 10 % glass fiber reinforced
Mass	approx. 380 g
Dimensions	108 x 200 x 163 mm (4.25 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	Ⓔx II (1)G [Ex ia Ga] IIC Ⓔx II (1)D [Ex ia Da] IIIC Ⓔx I (M1) [Ex ia Ma] I
Non-hazardous area	
Maximum safe voltage	250 V (Attention! U_m is no rated voltage.)
Certificate	PF 24 CERT 7370 X
Marking	Ⓔx II 3G Ex ec nC IIC T4 Gc
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

Release date: 2026-04-07 Date of issue: 2026-04-07 Filename: 319784_eng.pdf

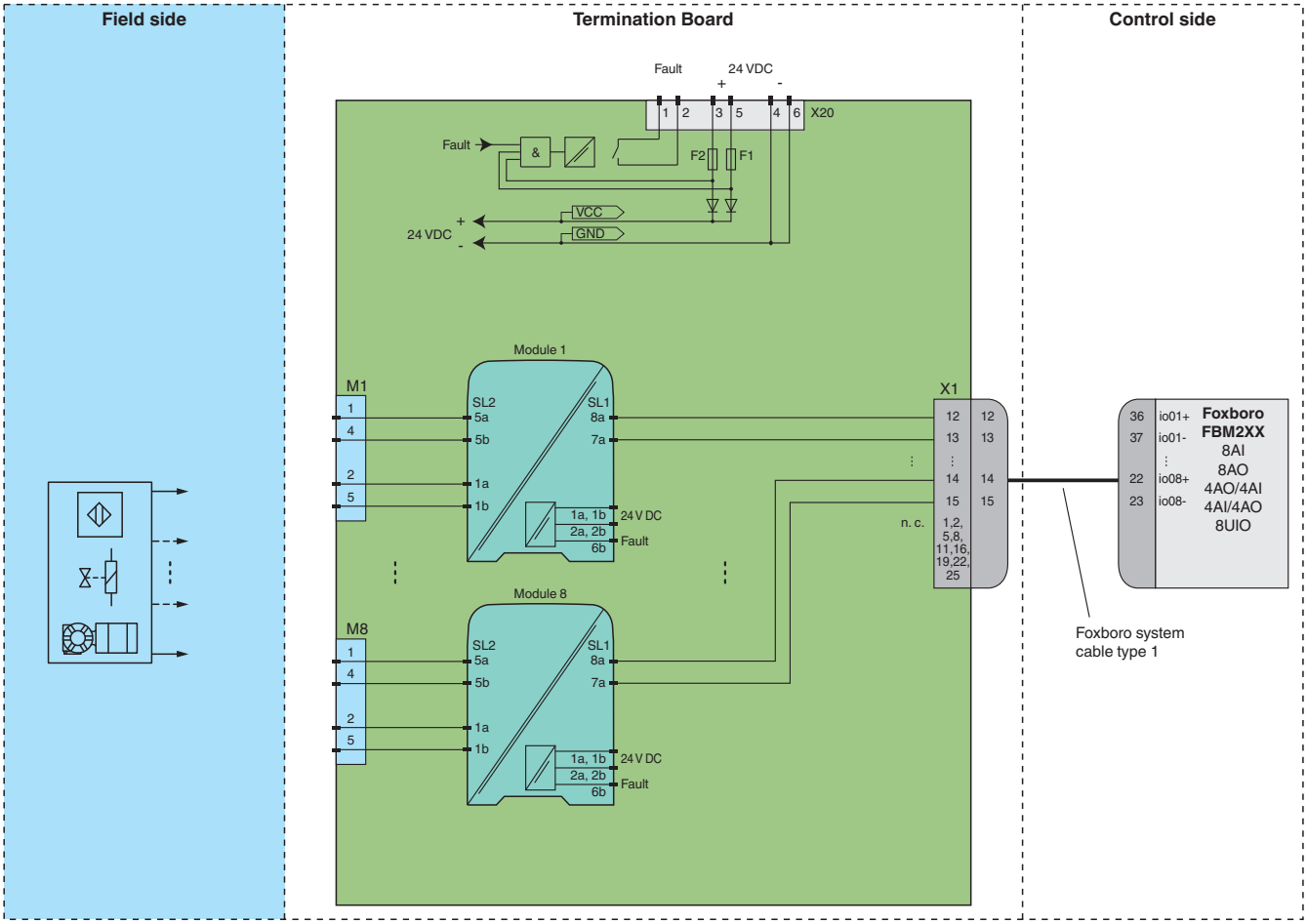
Technical Data

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.

Release date: 2026-04-07 Date of issue: 2026-04-07 Filename: 319784_eng.pdf

Application

Typical loop



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.

Possible card/module combinations

Card	Signal	Recommended modules
FBM201, FBM214, FBM214b, FBM216, FBM216b	8AI	HiC2025(A), HiC2025ES, HiC2081
FBM215, FBM218, FBM237	8AO	HiC2031
FBM204, FBM205	4AO/4AI	HiC2031 (module 1 to module 4) and HiC2025(A) (module 5 to module 8)
FBM244	4AI/4AO	HiC2025(A) (module 1 to module 4) and HiC2031 (module 5 to module 8)
FBM247, FBM248	8UIO	HiC2441, HiC2081, HiC2831R5, HiC2883

Release date: 2026-04-07 Date of issue: 2026-04-07 Filename: 319784_eng.pdf

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 (AO)	
HiC2031	not available

Type (UIO)	
HiC2441	not available

Type (TI)	DIP switch	Position
HiC2081 (current source)	S	I

Type (DI)	DIP switch	Position
HiC2831R5 • Mode of operation: inverted • Input line fault detection: enabled	S1	I
	S2	I
	S3	no function
	S4	no function

Type (DO)	DIP switch	Position
HiC2883 • Line fault detection: enabled • Mode of operation: bus powered with logic input • Minmum load: disabled	S1	I
	S2	II
	S3	II
	S4	no function

Release date: 2026-04-07 Date of issue: 2026-04-07 Filename: 319784_eng.pdf