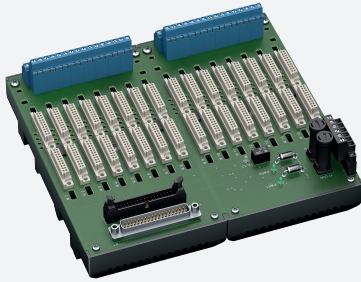


Termination Board

HiCTB16-SDC-24C-SC-RA



- For 16 modules
- 24 V DC supply
- Supported signal types: DI/DO/AI/TI/AO/UIO
- Hazardous area: screw terminals, blue
- Non-hazardous area: Sub-D connector (male), 37-pin



Function

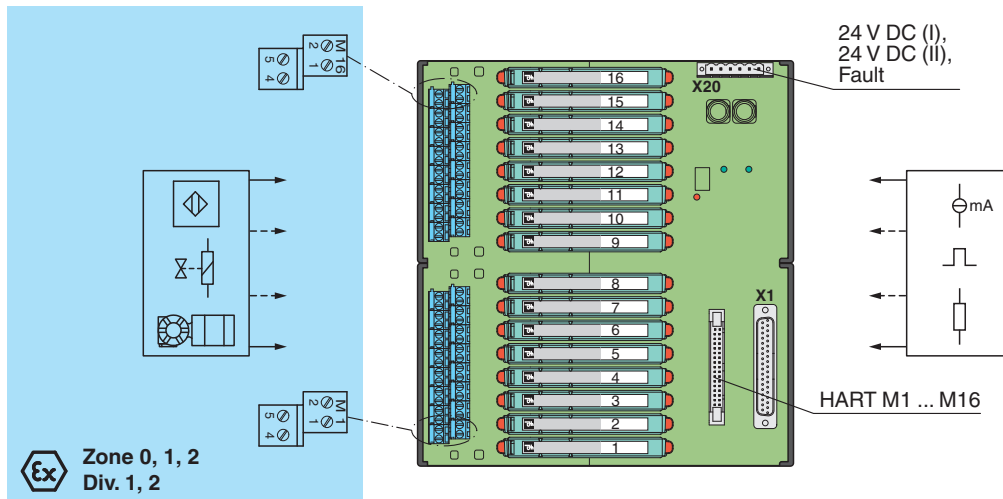
The termination board has 16 plugin slots for isolators. Any isolator can be inserted into any slot, enabling a mixture of I/O types on one termination board.

The termination board features fixed screw terminals for the field side connection and a 37-pin Sub- D connector for the control side connection along with a HART cordset for interconnection to a separate HART Communication Board.

Information about missing supply voltage of the isolators is available for the system as volt-free contact at the redundant power supply terminals. Wiring errors from field side will be reported via the same relay contact, if this function supported by the the isolators.

The termination board is supplied with a robust 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.

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

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

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: 1 37-pin Sub-D connector
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. 725 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.)
Certificate		DEMKO 18 ATEX 2116 X
Marking		Ⓔ 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 60079-7:2015+A1:2018 , EN 60079-11:2012 , IEC 60079-15:2017 , EN 50303:2000
International approvals		
UL approval		E106378
Control drawing		116-0327
IECEX approval		
IECEX certificate		IECEX CES 06.0003 IECEX UL 18.0111 X

Release date: 2023-02-20 Date of issue: 2023-02-20 Filename: 260437_eng.pdf

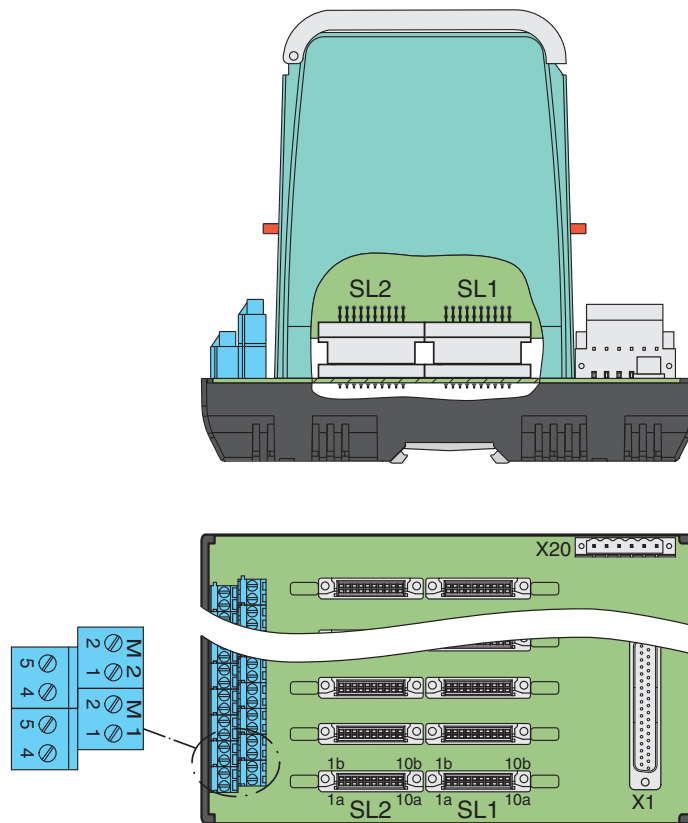
Technical Data

IECEEx marking	[Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I Ex ec nC IIC T4 Gc
General information	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .

Accessories

	HiATB01-HART-2X16	HART Communication Board
	HiDMux2700	HART Multiplexer Master
	H-CJC-Pt100	Resistance thermometer for cold junction compensation for H-System termination boards
	HiACA-UNI-FLK34-FLK34-0M5	HART Connection Cable, length: 0,5 m
	HiACA-UNI-FLK34-FLK34-1M0	HART Connection Cable, length: 1 m
	HiACA-UNI-FLK34-FLK34-2M0	HART Connection Cable, length: 2 m
	HiACA-UNI-FLK34-FLK34-3M0	HART Connection Cable, length: 3 m
	HiACA-UNI-FLK34-FLK34-6M0	HART Connection Cable, length: 6 m
	HiALC-HiCTB-SET-108	Label carrier for HiC termination boards

Connection



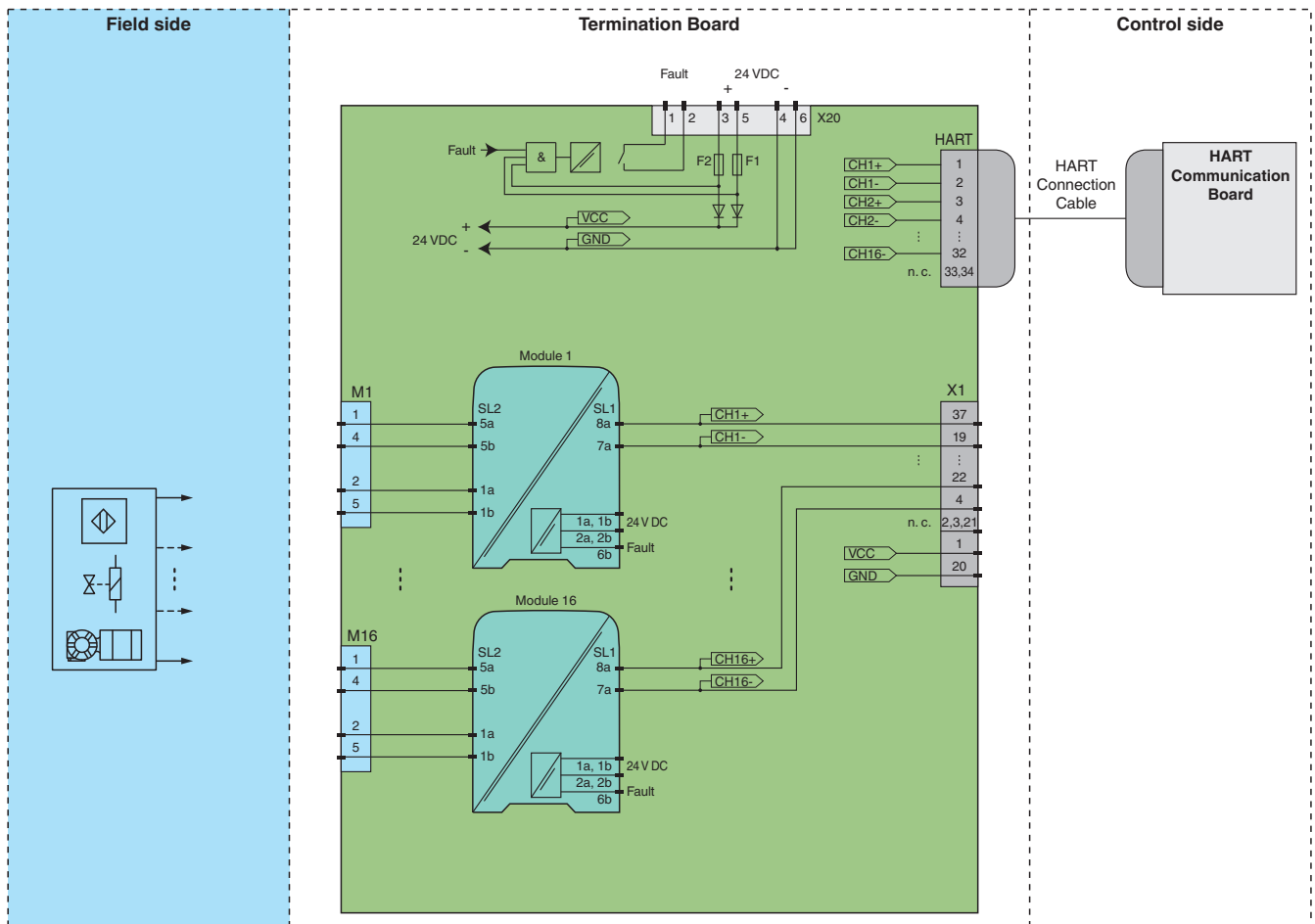
Insert the isolated barrier on the Termination Board. This closes the signal circuit between field side and control side. Connect field devices and controller to the terminals or connecting plugs of the Termination Board. For pin assignment between terminals, connecting plugs and connectors SL1/SL2, see drawing "Connection diagram" or the corresponding pin-out table on www.pepperl-fuchs.com.



For exact pin assignment for fieldside and control side, see the documentation of the isolated barrier.

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.