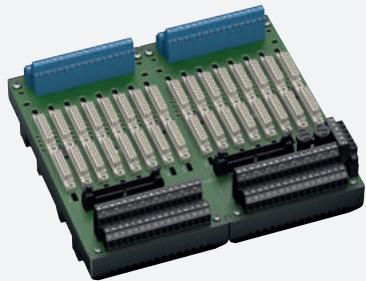


# Termination Board

## HiCTB16-SCT-44C-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: screw terminals, black



### 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.

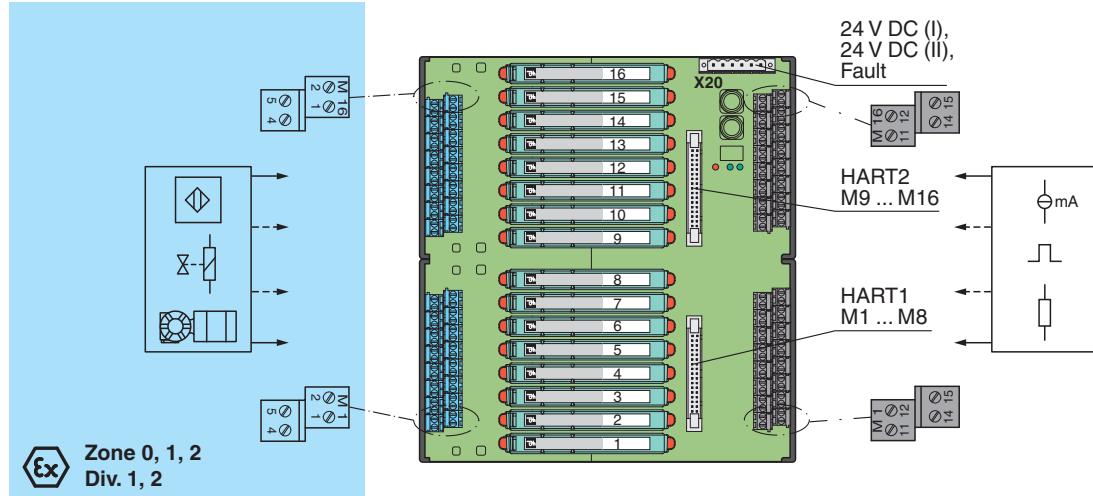
The termination board features fixed screw terminals for the field side connection and for the control side connection along with a HART cordset for interconnection to a separate HART Communication Board.

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 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

Release date: 2024-02-27 Date of issue: 2024-02-27 Filename: 260436\_eng.pdf

#### 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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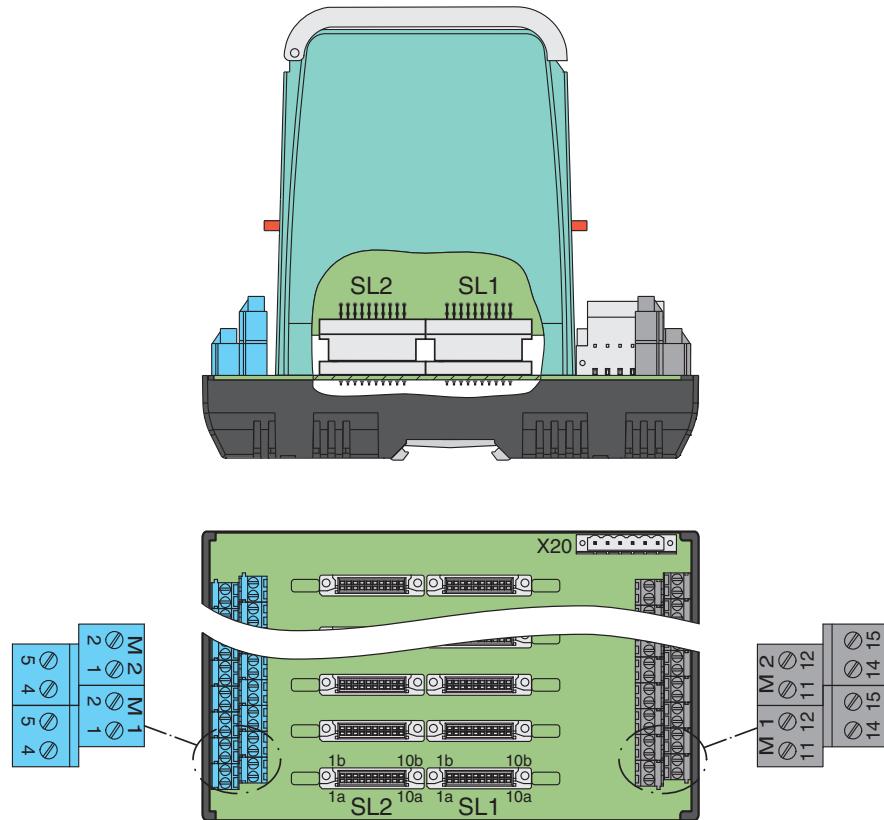
## Technical Data

Supply	Redundancy available. The supply for the isolators is decoupled, monitored and fused.
<b>Fault indication output</b>	
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
<b>Indicators/settings</b>	
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
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations)
<b>Conformity</b>	
Electromagnetic compatibility	NE 21:2017 For further information see system description.
Degree of protection	IEC 60529:2001
<b>Ambient conditions</b>	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)
<b>Mechanical specifications</b>	
Degree of protection	IP20
Connection	
Field side	explosion hazardous area: 4 screw terminals per module , blue
Control side	non-explosion hazardous area: 4 screw terminals per module , black
Supply	pluggable screw terminals , black
Fault output	pluggable screw terminals , black
Core cross section	screw terminals: 0.25 ... 1.5 mm <sup>2</sup> (24 ... 12 AWG)
Material	housing: polycarbonate, 10 % glass fiber reinforced
Mass	approx. 860 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
Height	200 mm
Width	216 mm
Depth	163 mm
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>	
EU-type examination certificate	CESI 06 ATEX 022
Marking	Ex II (1)G [Ex ia Ga] IIC Ex II (1)D [Ex ia Da] IIIC Ex I (M1) [Ex ia Ma] I
Non-hazardous area	
Maximum safe voltage	250 V (Attention! U <sub>m</sub> is no rated voltage.)
Certificate	DEMKO 18 ATEX 2116 X
Marking	Ex 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
<b>International approvals</b>	
UL approval	E106378
Control drawing	116-0327

## Technical Data

IECEx approval	
IECEx certificate	IECEx CES 06.0003 IECEx UL 18.0111 X
IECEx 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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Connection



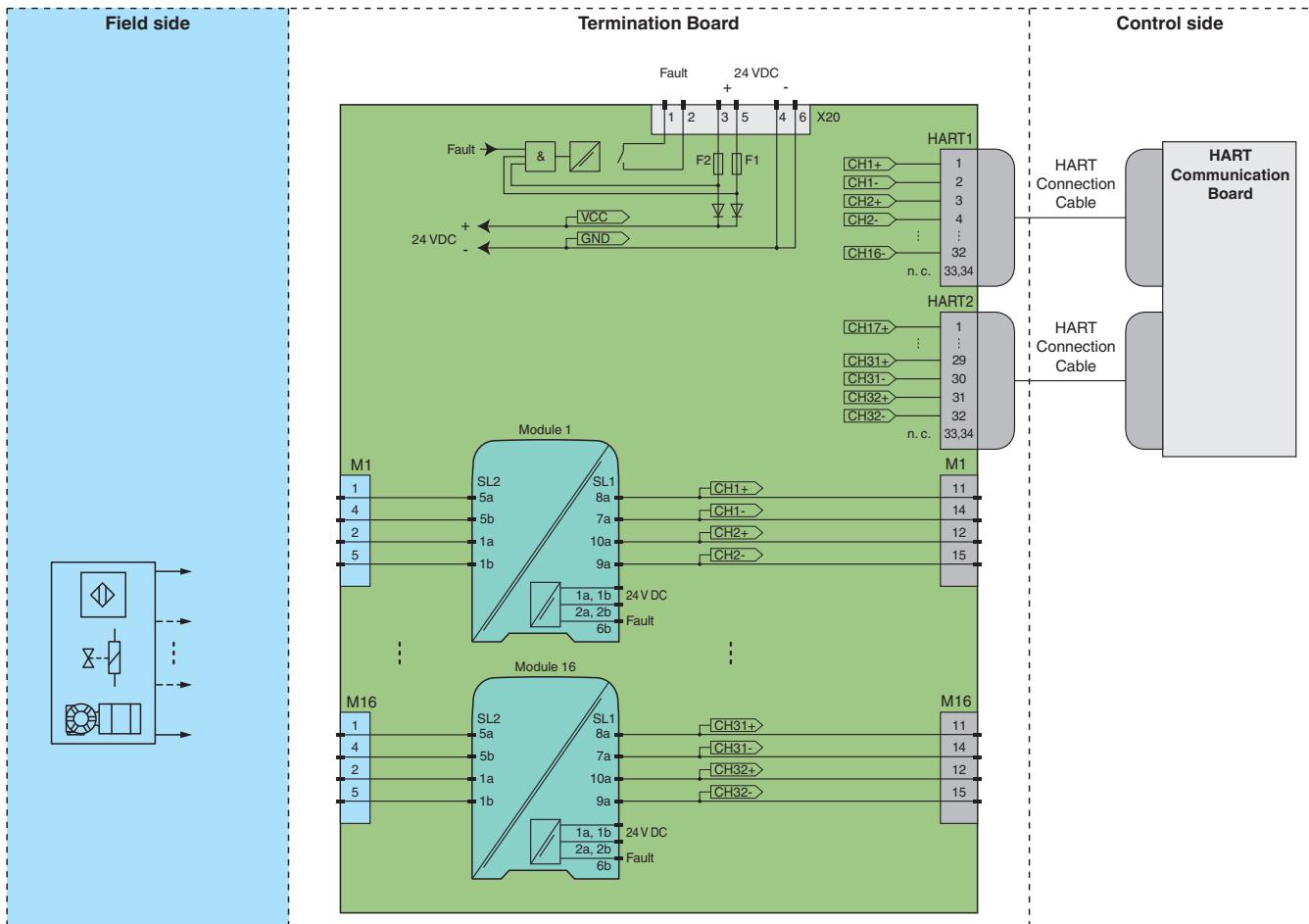
Insert the isolated barrier on the Termination Board. This closes the signal circuit between field side and control side. Connect field devices and controller to the terminals or connecting plugs of the Termination Board. For pin assignment between terminals, connecting plugs and connectors SL1/SL2,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