

Termination Board

HiCTB16-UNI-D16SFR-SP-SP

- For 16 modules
- 24 V DC supply
- Supported signal types: DI/DO/AI/TI/AO
- Module supply fused separately
- Hazardous area: spring terminals, blue
- Non-hazardous area: spring terminals, black



Function

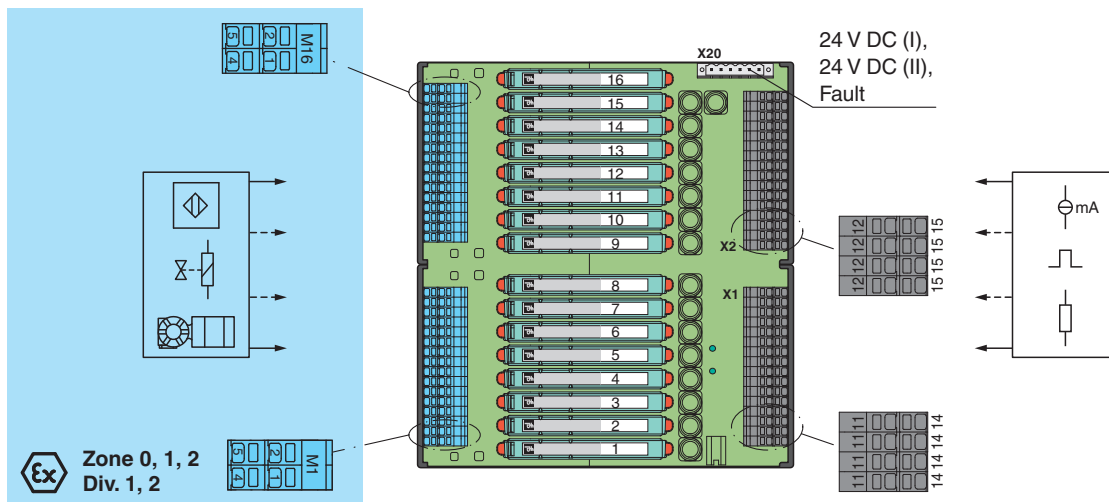
The termination board has 16 plug-in slots for isolators. Any isolator can be inserted into any slot, enabling a mixture of I/O types on one termination board.

The termination board features fixed spring terminals for the field side connection and for the control side connection.

The termination board has a fault bus (Fault) that is available at the redundant terminals. Power supply faults and module faults are indicated via this fault bus. The fault signals of several termination boards can be connected together and can be monitored by an optional fault indication board. The fault signals are then available to the control system as a volt-free contact.

The termination board is supplied with a robust plastic housing. This design permits the fast and reliable installation on 35 mm DIN mounting rail according to EN 60715 in the switch 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	250 mA per module
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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Fault indication output

Connection	fault bus (Fault) : X20: terminals 1, 2
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

Output type	volt-free contact
Switch behaviour	fault bus (Fault) - no fault: relay contact of the fault indication board closed - power supply fault: relay contact of the fault indication board open - module fault: relay contact of the fault indication board open
Contact loading	fault bus (Fault) : 30 V DC , 1 A , see fault indication board
Indicators/settings	
Display elements	LED Supply1 (power supply termination board), green LED LED Supply2 (power supply termination board), green LED
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: spring terminals , blue
Control side	non-explosion hazardous area: spring terminals , black
Supply	pluggable screw terminals , black
Fault output	pluggable screw terminals , black
Core cross section	screw terminals: 0.25 ... 1.5 mm ² (24 ... 16 AWG)
Material	housing: polycarbonate, 10 % glass fiber reinforced
Mass	approx. 810 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 .

Accessories

	HiATB01-FAULT-01	Fault Indication Board
	HiALC-HiCTB-SET-108	Label carrier for HiC termination boards

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Application

In case of using the capable type of module (e. g. switch amplifier HiC2821 or switch amplifier HiC2851 for SIL3 applications) one field circuit can be splitted into two galvanic isolated process signals.

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