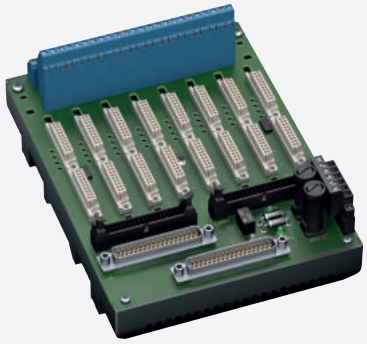


# Termination Board

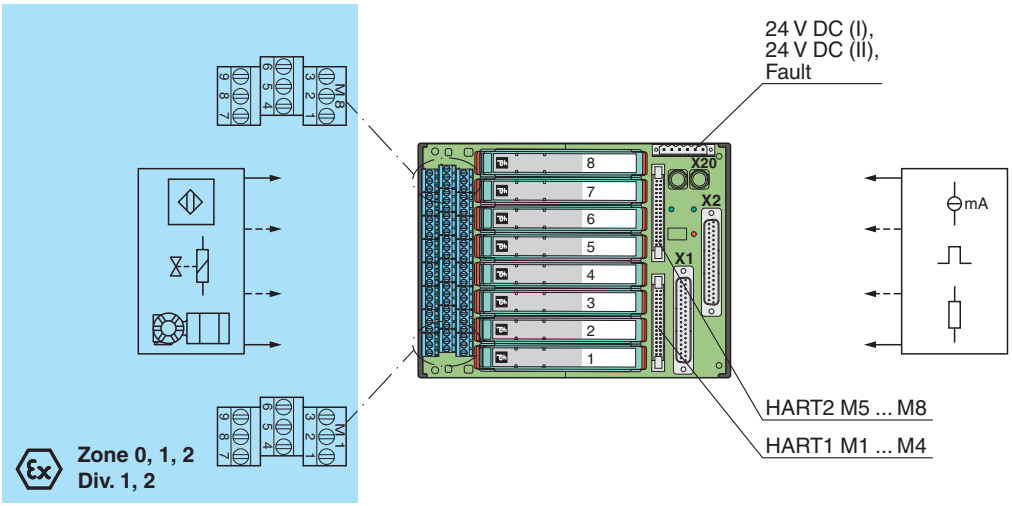
## HiDTB08-SDC-89C-SC-RA

- For 8 modules
- 24 V DC supply
- Supported signal types: DI/DO/AI/TI/AO
- Hazardous area: screw terminals, blue
- Non-hazardous area: Sub-D connector (male), 37-pin

## Function

The termination board has 8 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 37-pin Sub- D connectors 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 | | 2 A , in each case for 8 modules |
| Power dissipation | | ≤ 500 mW , without modules |
| Reverse polarity protection | | yes |
| **Redundancy** | | |

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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<br>power supply fault: relay contact open<br>module fault: relay contact open |
| Contact loading | 30 V DC, 1 A |
| **Indicators/settings** | |
| Display elements | LED PWR1 (termination board power supply), green LED<br>LED PWR2 (termination board power supply), green LED<br>LED FAULT (fault indication), red LED<br>- LED lits: module fault<br>- 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<br>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: 9 screw terminals per module , blue |
| Control side | non-explosion hazardous area: 2 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. 600 g |
| Dimensions | 150 x 200 x 163 mm (5.9 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 11 ATEX 062 |
| Marking | ⟨Ex⟩ II (1)G [Ex ia Ga] IIC<br>⟨Ex⟩ II (1)D [Ex ia Da] IIIC<br>⟨Ex⟩ 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** | |
| CSA approval | |
| Control drawing | see control drawing of correspoding modules |
| IECEx approval | |
| IECEx certificate | IECEx CES 11.0022 |
| IECEx marking | [Ex ia Ga] IIC<br>[Ex ia Da] IIIC<br>[Ex ia Ma] I |
| **General information** | |

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## Technical Data

| | | |
|---|---|---|
| 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-SC-8** | 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-HiDTB-SET-150** | Label carrier for HiD termination boards |

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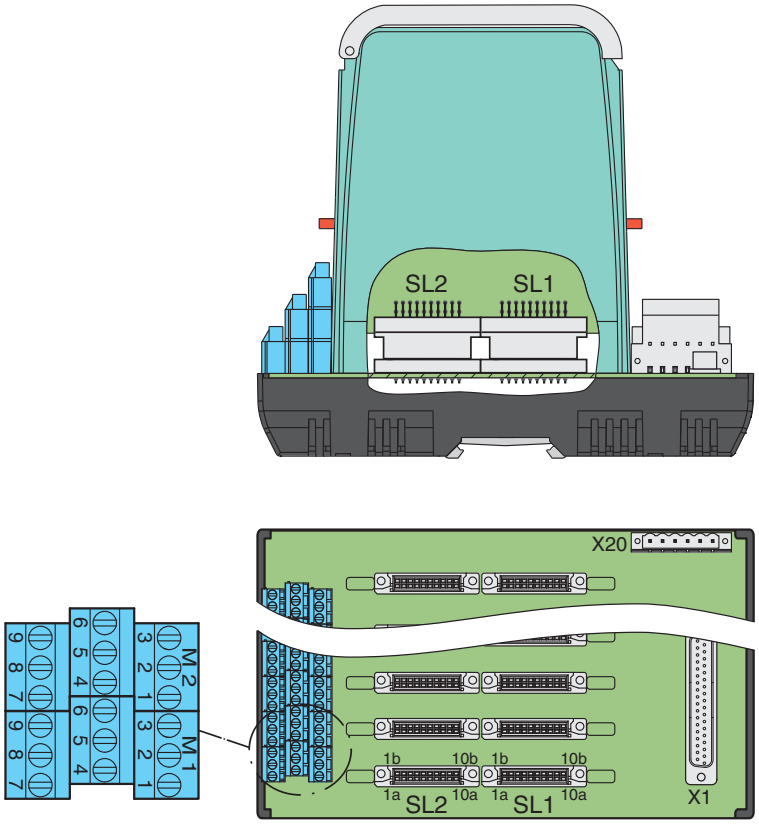
## Connection




*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

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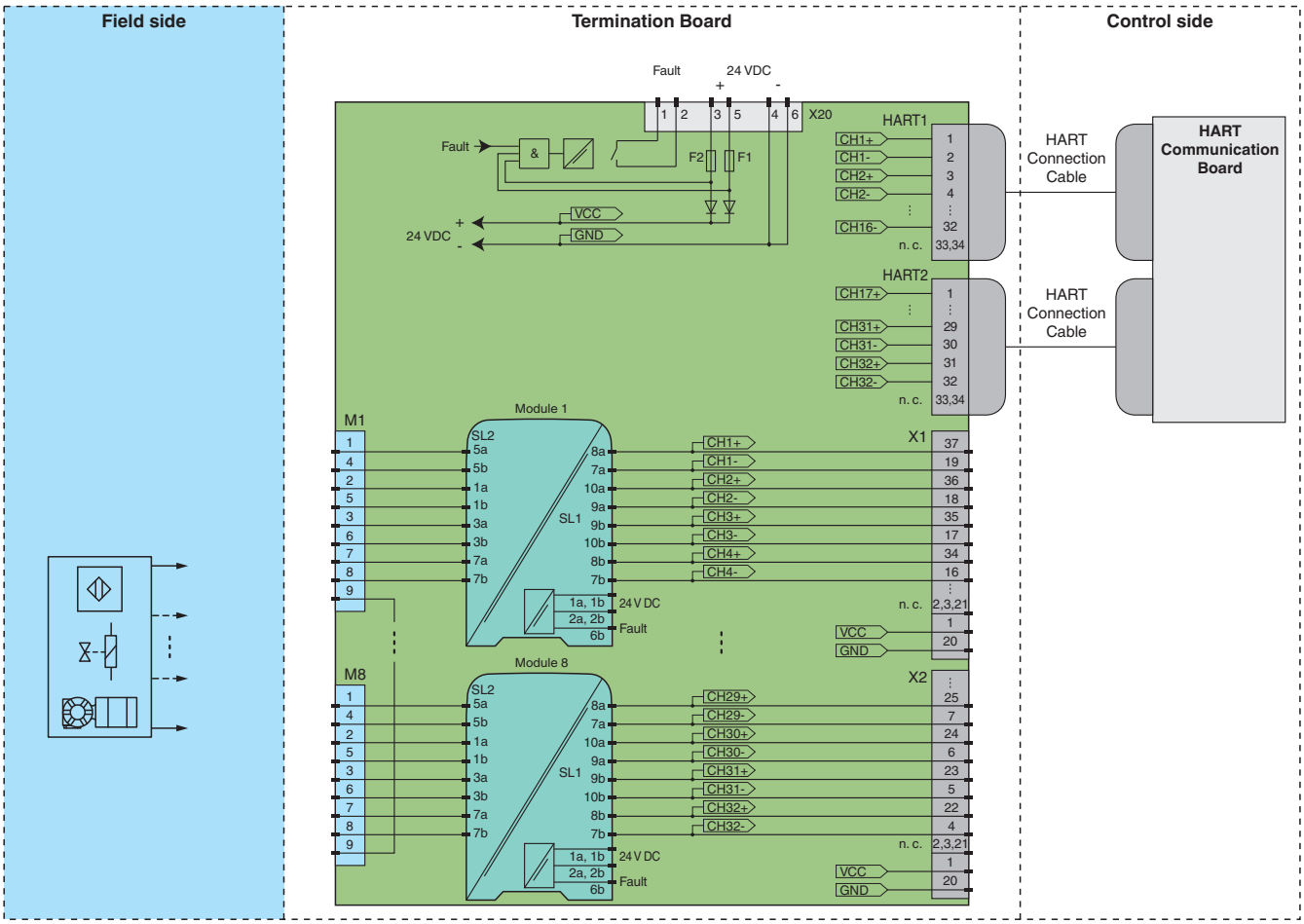


*For exact pin assignment for connection to field side and control side, see the documentation of the isolated barrier.*

*The pin-out configuration has to be observed. For information see corresponding pin-out table on www.pepperl-fuchs.com.*

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