

**Features**

- System board for Honeywell Safety Manager
- For 16-channel AI card SAI-1620m
- For 16 modules
- Recommended module: HiC2025 (AI)
- 24 V DC supply
- Hazardous area: pluggable screw terminals, blue
- Non-hazardous area: SiC plug, 20-pin

**Assembly**

**Function**

Termination Boards are made to carry isolated barriers and provide terminal connection for wiring. The termination board and the isolated barriers build the connection between field and system level.

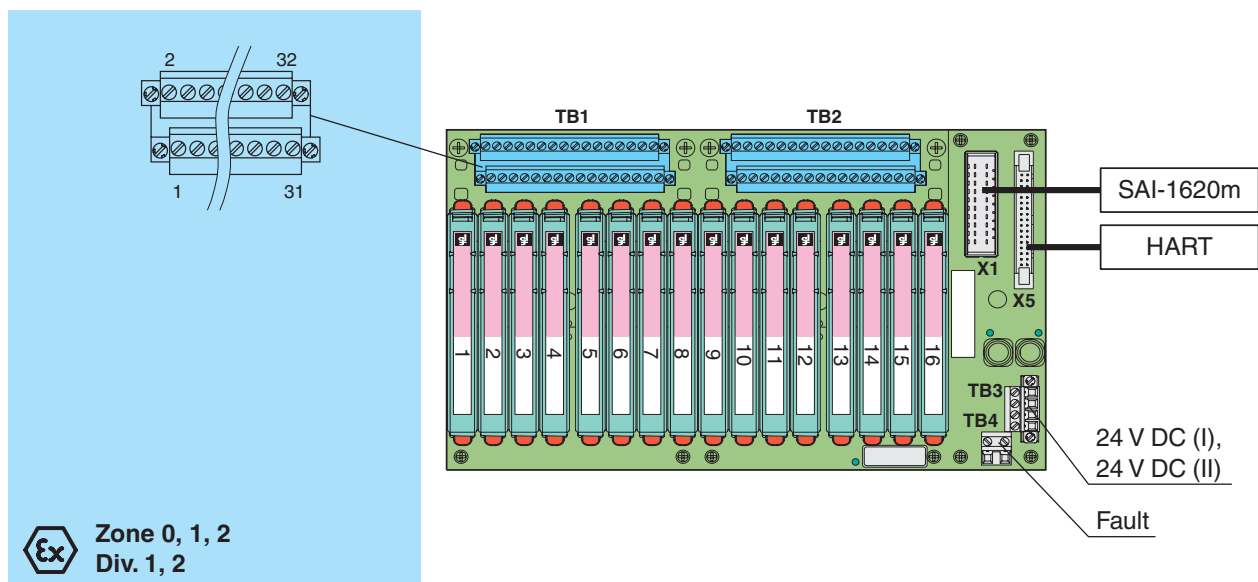
System connectors are syntonized to the requirements of the I/O cards used in the particular automation system. They ensure fast and fail-safe connection.

Information about missing supply voltage of the interface modules is available for the system as potential free relay contact. Wiring errors from field will be reported if the interface module supports this function.

The Termination Boards are supplied with a robust glass fibre reinforced plastic housing as standard. This design permits the fast and reliable installation in the switch cabinet.



**Connection**



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|  |   |
|--|---|
| <b>Supply</b>  |   |
| Connection   | terminal block TB3 (1-, 2+; 3-, 4+)   |
| 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   |
| Power dissipation  | ≤ 500 mW , without modules  |
| Reverse polarity protection                                    | yes   |
| <b>Redundancy</b>  |   |
| Supply   | Redundancy available. The supply for the isolators is decoupled, monitored and fused.   |
| <b>Fault indication output</b>                                 |   |
| Output type  | volt-free contact   |
| Contact loading  | 30 V DC , 1 A   |
| <b>Indicators/settings</b>                                     |   |
| Display elements   | LEDs PWR ON (power supply)<br>- LED power supply I, green LED<br>- LED power supply II, green LED<br>LED Fault (fault indication), green LED        |
| <b>Directive conformity</b>                                    |   |
| Electromagnetic compatibility<br>Directive 2014/30/EU          | EN 61326-1:2013 (industrial locations)  |
| <b>Conformity</b>  |   |
| Electromagnetic compatibility                                  | NE 21:2017<br>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: pluggable screw terminals , blue  |
| Control side   | non-explosion hazardous area: SiC plug, 20-pin  |
| Supply   | pluggable screw terminals , black   |
| Fault output   | pluggable screw terminals , black   |
| Core cross-section   | screw terminals: 0.25 ... 2.5 mm <sup>2</sup> (24 ... 12 AWG)   |
| Material   | housing: polycarbonate  |
| Mass   | approx. 825 g   |
| Dimensions   | 273 x 155 x 153 mm (L x W x H) , height including module assembly   |
| 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  | ⊕ II (1)G [Ex ia Ga] IIC<br>⊕ II (1)D [Ex ia Da] IIIC<br>⊕ I (M1) [Ex ia Ma] I  |
| Non-hazardous area   |   |
| Maximum safe voltage   | 250 V (Attention! U <sub>m</sub> 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 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 50303:2000   |
| <b>International approvals</b>                                 |   |
| UL approval  |   |
| Control drawing  | 116-0327  |
| IECEX approval   |   |
| IECEX certificate  | IECEX CES 06.0003   |
| IECEX marking  | [Ex ia Ga] IIC<br>[Ex ia Da] IIIC<br>[Ex ia Ma] I   |
| <b>General information</b>                                     |   |
| Supplementary information                                      | Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com. |
| <b>Accessories</b>   |   |

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|                    |  |
|--------------------|--|
| <p>Designation</p> | <p>provided accessory: Label Carrier HiALC-HI*TF-SET-1**<br/>                     optional accessories:<br/>                     - HART communication board HiATB01-HART-2X16<br/>                     - HART multiplexer master HiDMux2700<br/>                     - HART connection cable HiACA-UNI-FLK34-*M*</p> |
|--------------------|--|

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**Pin-out Table**

| Termination Board field side |         |                 | Modules                     |                                   | Termination Board control side |
|------------------------------|---------|-----------------|-----------------------------|-----------------------------------|--------------------------------|
| Module                       | Channel | IS Terminal TB1 | IS terminals SL2 field side | Non-IS terminals SL1 control side | System connector X1            |
| 1                            | 1       | 1               | 5a                          | 8a                                | A9                             |
|                              |         | 2               | 5b                          |                                   |                                |
|                              |         | 3               | 1a                          | 7a                                | GND                            |
|                              |         | 4               | 1b                          |                                   |                                |
| 2                            | 2       | 5               | 5a                          | 8a                                | B9                             |
|                              |         | 6               | 5b                          |                                   |                                |
|                              |         | 7               | 1a                          | 7a                                | GND                            |
|                              |         | 8               | 1b                          |                                   |                                |
| 3                            | 3       | 9               | 5a                          | 8a                                | A8                             |
|                              |         | 10              | 5b                          |                                   |                                |
|                              |         | 11              | 1a                          | 7a                                | GND                            |
|                              |         | 12              | 1b                          |                                   |                                |
| 4                            | 4       | 13              | 5a                          | 8a                                | B8                             |
|                              |         | 14              | 5b                          |                                   |                                |
|                              |         | 15              | 1a                          | 7a                                | GND                            |
|                              |         | 16              | 1b                          |                                   |                                |
| 5                            | 5       | 17              | 5a                          | 8a                                | A7                             |
|                              |         | 18              | 5b                          |                                   |                                |
|                              |         | 19              | 1a                          | 7a                                | GND                            |
|                              |         | 20              | 1b                          |                                   |                                |
| 6                            | 6       | 21              | 5a                          | 8a                                | B7                             |
|                              |         | 22              | 5b                          |                                   |                                |
|                              |         | 23              | 1a                          | 7a                                | GND                            |
|                              |         | 24              | 1b                          |                                   |                                |
| 7                            | 7       | 25              | 5a                          | 8a                                | A6                             |
|                              |         | 26              | 5b                          |                                   |                                |
|                              |         | 27              | 1a                          | 7a                                | GND                            |
|                              |         | 28              | 1b                          |                                   |                                |
| 8                            | 8       | 29              | 5a                          | 8a                                | B6                             |
|                              |         | 30              | 5b                          |                                   |                                |
|                              |         | 31              | 1a                          | 7a                                | GND                            |
|                              |         | 32              | 1b                          |                                   |                                |

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**Pin-out Table**

| Termination Board field side |         |                 | Modules                     |                                   | Termination Board control side |
|------------------------------|---------|-----------------|-----------------------------|-----------------------------------|--------------------------------|
| Module                       | Channel | IS Terminal TB2 | IS terminals SL2 field side | Non-IS terminals SL1 control side | System connector X1            |
| 9                            | 9       | 1               | 5a                          | 8a                                | A5                             |
|                              |         | 2               | 5b                          |                                   |                                |
|                              |         | 3               | 1a                          | 7a                                | GND                            |
|                              |         | 4               | 1b                          |                                   |                                |
| 10                           | 10      | 5               | 5a                          | 8a                                | B5                             |
|                              |         | 6               | 5b                          |                                   |                                |
|                              |         | 7               | 1a                          | 7a                                | GND                            |
|                              |         | 8               | 1b                          |                                   |                                |
| 11                           | 11      | 9               | 5a                          | 8a                                | A4                             |
|                              |         | 10              | 5b                          |                                   |                                |
|                              |         | 11              | 1a                          | 7a                                | GND                            |
|                              |         | 12              | 1b                          |                                   |                                |
| 12                           | 12      | 13              | 5a                          | 8a                                | B4                             |
|                              |         | 14              | 5b                          |                                   |                                |
|                              |         | 15              | 1a                          | 7a                                | GND                            |
|                              |         | 16              | 1b                          |                                   |                                |
| 13                           | 13      | 17              | 5a                          | 8a                                | A3                             |
|                              |         | 18              | 5b                          |                                   |                                |
|                              |         | 19              | 1a                          | 7a                                | GND                            |
|                              |         | 20              | 1b                          |                                   |                                |
| 14                           | 14      | 21              | 5a                          | 8a                                | B3                             |
|                              |         | 22              | 5b                          |                                   |                                |
|                              |         | 23              | 1a                          | 7a                                | GND                            |
|                              |         | 24              | 1b                          |                                   |                                |
| 15                           | 15      | 25              | 5a                          | 8a                                | A2                             |
|                              |         | 26              | 5b                          |                                   |                                |
|                              |         | 27              | 1a                          | 7a                                | GND                            |
|                              |         | 28              | 1b                          |                                   |                                |
| 16                           | 16      | 29              | 5a                          | 8a                                | B2                             |
|                              |         | 30              | 5b                          |                                   |                                |
|                              |         | 31              | 1a                          | 7a                                | GND                            |
|                              |         | 32              | 1b                          |                                   |                                |

| Termination Board pin out         |     |   |             |
|-----------------------------------|-----|---|-------------|
| Power supply                      | TB3 | 1 | Supply I -  |
|                                   |     | 2 | Supply I +  |
|                                   |     | 3 | Supply II - |
|                                   |     | 4 | Supply II + |
| Volt-free fault indication output | TB4 | 1 | Fault       |
|                                   |     | 2 |             |

| Module pin-out (SL1): module 1 ... 16 |    |
|---------------------------------------|----|
| V <sub>cc</sub>                       | 2a |
|                                       | 2b |
| GND                                   | 1a |
|                                       | 1b |
| FAULT                                 | 6b |

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