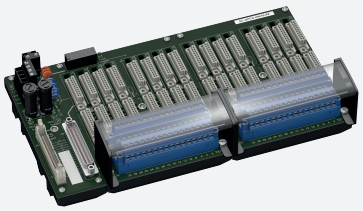
Termination Board

SC-GPCS-UNI16-PF



- System board for Honeywell Experion PKS, Series C
- For 16-channel AI card CC-TAIX01/11
- For 16-channel AO card CC-TAOX01/11
- For 32-channel DI card CC-TDIL01/11
- For 32-channel DO card CC-TDOB01/11
- For 16 modules
- Recommended modules: HiC2025(A) (AI), HiC2031 (AO), HiC2821 (DI), HiC2871 (DO)
- Recommended system cable: CAB-HON-**-S37C32-MX-01000
- 24 V DC supply
- Hazardous area: pluggable screw terminals, blue
- Non-hazardous area: Sub-D connector (male), 37-pin

Function

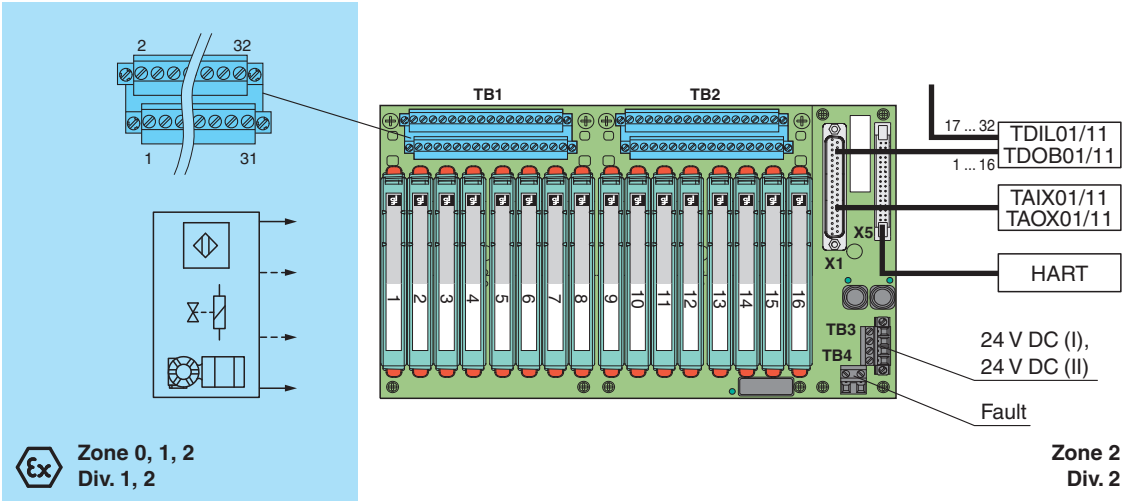
The function of the termination board and the connector pin assignment are exactly fitted to the requirements of the Honeywell system.
The signal is output to the process control system via the system connector.
Information about a missing supply voltage of the isolated barriers is available for the system as a volt-free contact.
Wiring faults from the field side will be reported via the same relay contact, if this function is supported by the isolators.
The termination board has a robust plastic housing.
The termination board is mounted in the switch cabinet on a 35 mm DIN mounting rail according to EN 60175.

Application

Honeywell card CC-TDIL01/11 and CC-TDOB01/11:

- Termination board 1 and cable 1: channel 1 ... 16
- Termination board 2 and cable 2: channel 17 ... 32

Connection



Technical Data

Supply		
Connection		TB3: terminals 2, 4(+); 1, 3(-)
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

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Technical Data

Ripple	≤ 10 %
Fusing	4 A , in each case for 16 modules
Power dissipation	≤ 500 mW , without modules
Reverse polarity protection	yes
Redundancy	
Supply	Redundancy available. The supply for the isolators is decoupled, monitored and fused.
Fault indication output	
Connection	TB4: 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 Supply1 (power supply termination board), green LED LED Supply2 (power supply termination board), green LED LED Fault Status (fault indication), green LED - LED lits: no module fault/no 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: pluggable screw terminals , blue
Control side	non-explosion hazardous area: 37-pin Sub-D connector
Supply	pluggable screw terminals , black
Fault output	pluggable screw terminals , black
Core cross section	screw terminals: 0.25 ... 2.5 mm² (24 ... 12 AWG)
Material	housing: polycarbonate
Mass	approx. 825 g
Dimensions	273 x 155 x 153 mm (10.7 x 6.1 x 6.0 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	⟨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_m 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 , EN 60079-15:2010 , EN 50303:2000
International approvals	
UL approval	E106378

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Technical Data

Control drawing		116-0327
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 www.pepperl-fuchs.com.

Accessories

	**HiATB01-HART-2X16**	HART Communication Board
	**HiDMux2700**	HART Multiplexer Master
	**CAB-HON-**-S37C32-MX-01000**	Cordset, 37-pin Sub-D socket to 37-pin Honeywell system socket, PVC cable
	**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-HiCTF-SET-114**	Label carrier for HiC termination boards

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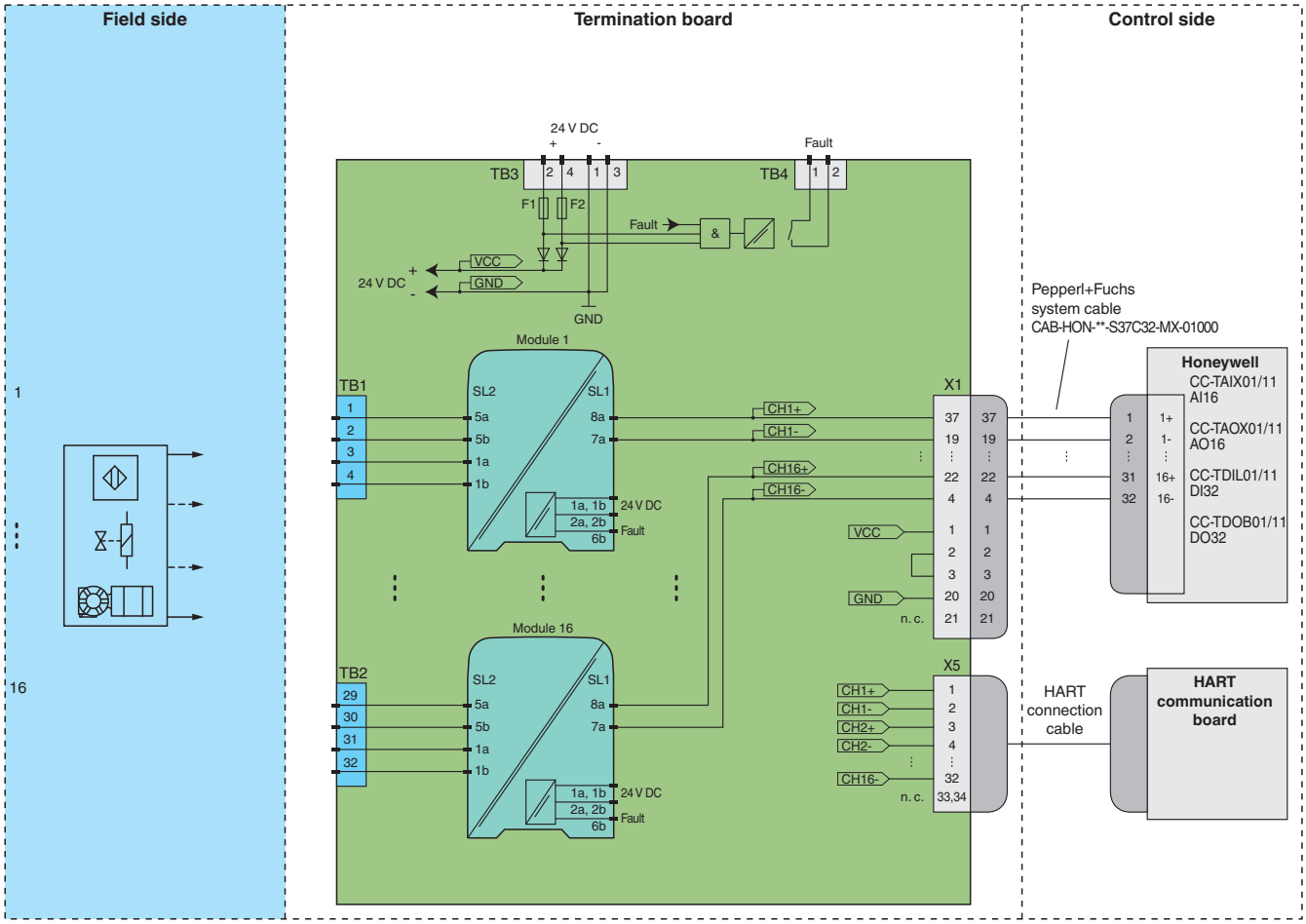
Application

Typical circuit



Module switch settings

Type (AI)	DIP switch	Position
HiC2025, HiC2025A (current sink 4 mA ... 20 mA)	S1	OFF
	S2	ON
	S3	OFF
	S4	OFF

Type (DI)	DIP switch	Position
HiC2821 • Mode of operation: close - energized open - de-energized • Input line fault detection: enabled	S1	II
	S2	I
	S3	no function
	S4	no function

Type (AO)	
HiC2031	not available

Type (DO)	
HiC2871	not available

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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