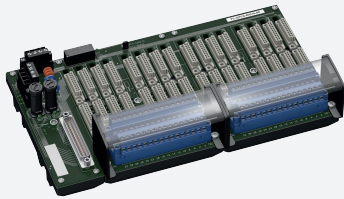


Termination Board

FC-GPCS-RIO16-PF

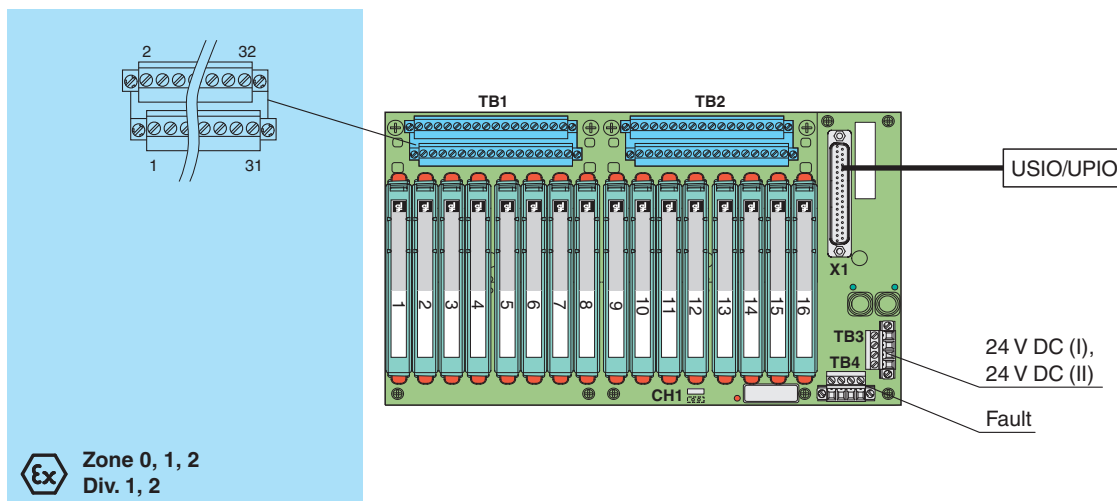


- System board for Honeywell Universal Safety IO
- System board for Honeywell Universal Process IO
- For 16-channel cards USIO and UPIO
- For 16 modules
- Recommended modules: HiC2831R2 (DI), HiC2853R2 (DI), HiC2871 (DO), HiC2025 (AI), HiC2031 (AO)
- Recommended system cable: CAB-HON-**-S37C32-MX-01000
- 24 V DC supply
- Hazardous area: pluggable screw terminals, blue
- Non-hazardous area: Sub-D connector (male), 37-pin



The function of the termination board and the connector pin assignment is 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 isolators is available for the system as a volt-free contact.
 It is possible to transfer a fault signal to channel 1 of the card via the loop-in function.
 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.

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
Ripple	≤ 10 %
Fusing	4 A
Power dissipation	≤ 500 mW , without modules
Reverse polarity protection	yes

Redundancy

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
 www.pepperl-fuchs.com

USA: +1 330 486 0002
 pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
 pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
 pa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

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
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 Error Status (fault indication), red LED - LED lits: 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 (L x W x H) , height 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.)
Certificate		DEMKO 18 ATEX 2116 X
Marking		Ⓔ 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
Control drawing		116-0327
IECEEx approval		
IECEEx certificate		IECEEx CES 06.0003 IECEEx UL 18.0111 X

Release date: 2021-05-04 Date of issue: 2021-05-04 Filename: 232114_eng.pdf

Technical Data

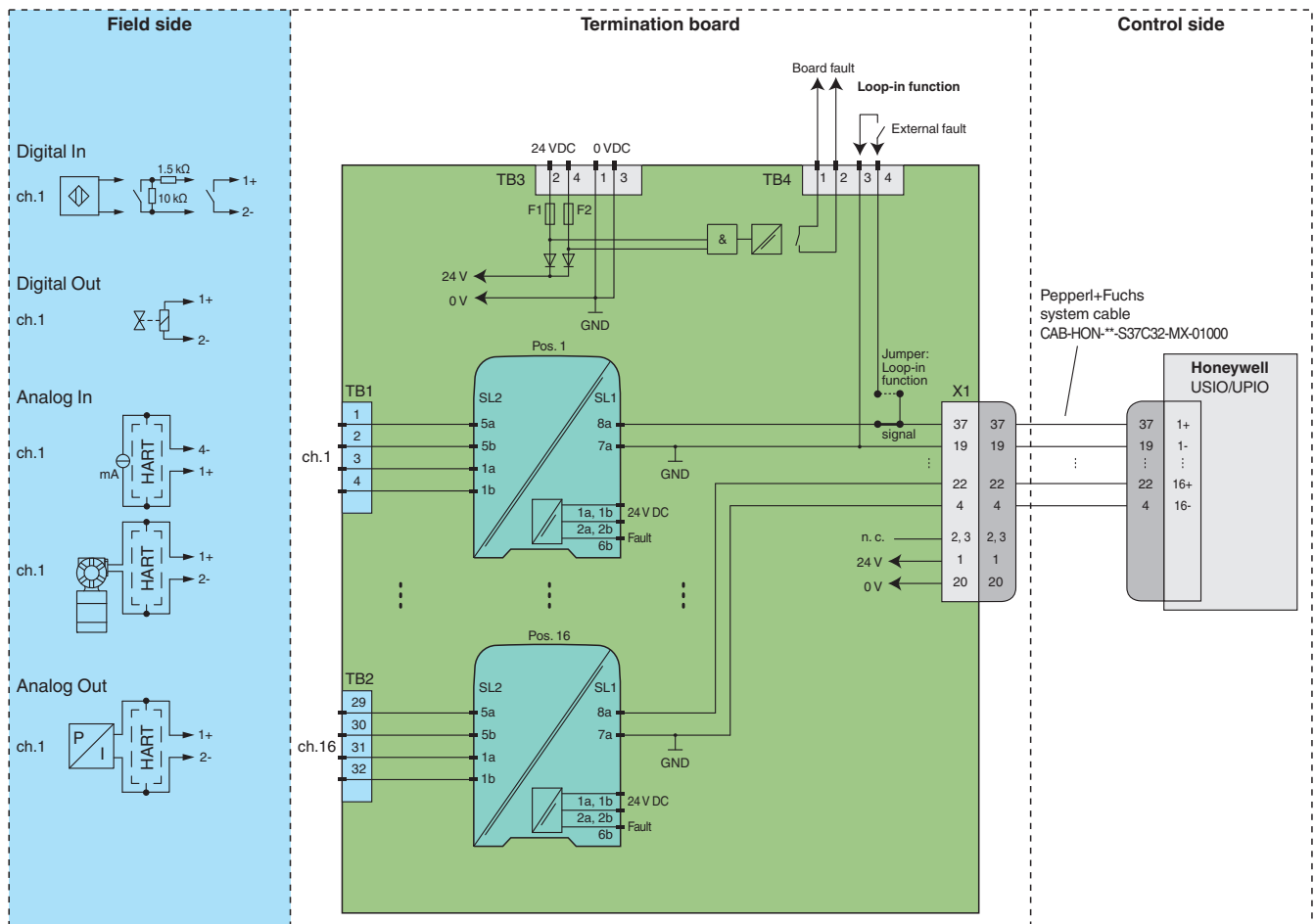
IECEEx marking		[Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I Ex ec nC IIC T4 Gc
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .
Accessories		
Designation		provided accessory: Label Carrier HiALC-HI*TF-SET-1**

Accessories

	CAB-HON-**-S37C32-MX-01000	Cordset, 37-pin Sub-D socket to 37-pin Honeywell system socket, PVC cable
	HiALC-HICTF-SET-114	Label carrier for HiC termination boards

Application

Typical loop



Module switch settings

Type (AI)	DIP switch	Position
HiC2025 (current sink)	S1	OFF
	S2	ON
	S3	OFF
	S4	OFF

Type (DI)	DIP switch	Position
HiC2831R2	S1	II
	S2	II
	S3	no function
	S4	no function

Type (AO)	
HiC2031	not available

Connection Assignment

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	37
		2	5b		
		3	1a	7a	19
		4	1b		
2	2	5	5a	8a	36
		6	5b		
		7	1a	7a	18
		8	1b		

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

3	3	9	5a	8a	35
		10	5b		
		11	1a		
		12	1b		
4	4	13	5a	8a	34
		14	5b		
		15	1a		
		16	1b		
5	5	17	5a	8a	33
		18	5b		
		19	1a		
		20	1b		
6	6	21	5a	8a	32
		22	5b		
		23	1a		
		24	1b		
7	7	25	5a	8a	31
		26	5b		
		27	1a		
		28	1b		
8	8	29	5a	8a	30
		30	5b		
		31	1a		
		32	1b		

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	29
		2	5b		
		3	1a	7a	11
		4	1b		
10	10	5	5a	8a	28
		6	5b		
		7	1a	7a	10
		8	1b		
11	11	9	5a	8a	27
		10	5b		
		11	1a	7a	9
		12	1b		
12	12	13	5a	8a	26
		14	5b		
		15	1a	7a	8
		16	1b		
13	13	17	5a	8a	25
		18	5b		
		19	1a	7a	7
		20	1b		
14	14	21	5a	8a	24
		22	5b		
		23	1a	7a	6
		24	1b		
15	15	25	5a	8a	23
		26	5b		
		27	1a	7a	5
		28	1b		
16	16	29	5a	8a	22
		30	5b		
		31	1a	7a	4
		32	1b		

Termination Board pin out			
Power supply	TB3	1	Supply I -
		2	Supply I +
		3	Supply II -
		4	Supply II +
Fault	TB4	1	Board fault
		2	
		3	External fault
		4	

Module pin-out (SL1): module 1 ... 16	
V _{cc}	2a
	2b
GND	1a
	1b
	7a
FAULT	6b