



Honeywell

Fail Safe Control Hardware Manual

Revision 02

PM.MAN.8048

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Total Plant



Key coding

Plug-and-play modules

Table 3 below shows the key coding of plug-and-play FSC modules (with type number 10xxx/2/x).

Table 3 Key coding of plug-and-play I/O modules

Module type	Module code		Module type	Rack code	
	Holes			Large pins	
10100/2/1	A5	A7	10100/2/1	A5	A7
10101/2/1	A5	C5	10101/2/1	A5	C5
10101/2/2	A5	C9	10101/2/2	A5	C9
10101/2/3	A5	C13	10101/2/3	A5	C13
10102/2/1	A5	C17	10102/2/1	A5	C17
10104/2/1	A5	C21	10104/2/1	A5	C21
10105/2/1	A5	C25	10105/2/1	A5	C25
10201/2/1	A9	C9	10201/2/1	A9	C9
10205/2/1	A9	C5	10205/2/1	A9	C5
10206/2/1	A9	C13	10206/2/1	A9	C13
10208/2/1	A9	C17	10208/2/1	A9	C17
10209/2/1	A9	C21	10209/2/1	A9	C21
10213/2/2	A9	C25	10213/2/2	A9	C25
10213/2/3	A9	C29	10213/2/3	A9	C29
10215/2/1	A13	C5	10215/2/1	A13	C5
10216/2/1	A13	C9	10216/2/1	A13	C9
10216/2/3	A13	C13	10216/2/3	A13	C13
10302/2/1	A5	A9	10302/2/1	A5	A9
10310/2/1	A5	A11	10310/2/1	A5	A11
10311/2/1	A5	A13	10311/2/1	A5	A13



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10104/2/1

Digital input module (24 Vdc, 16 channels)

Description

The digital input module 10104/2/1 has sixteen 24 Vdc digital input channels. The inputs are not tested, which means that they may **not** be used for fail-safe applications.

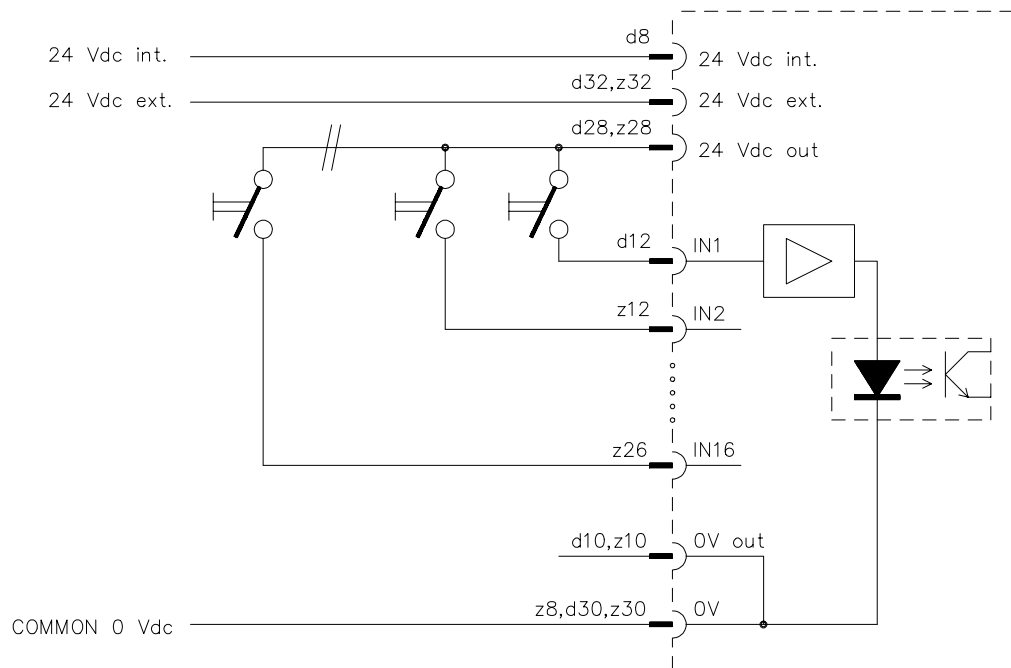
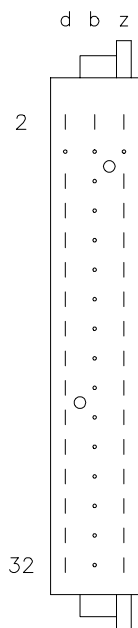


Figure 1 Schematic diagram for connection of inputs to the 10104/2/1 module

Pin allocation

The back view and pin allocation of the 10104/2/1 module connector are as follows:



d2		b2	GND	z2	5 Vdc
d4	—			z4	—
d6				z6	
d8	Supply 24 Vdc int.			z8	Supply 0 Vdc
d10	0 Vdc out			z10	0 Vdc out
d12	IN 1			z12	IN 2
d14	IN 3			z14	IN 4
d16	IN 5			z16	IN 6
d18	IN 7			z18	IN 8
d20	IN 9			z20	IN 10
d22	IN 11			z22	IN 12
d24	IN 13			z24	IN 14
d26	IN 15			z26	IN 16
d28	24 Vdc ext. out			z28	24 Vdc ext. out
d30	Supply 0 Vdc			z30	Supply 0 Vdc
d32	Supply 24 Vdc ext.			z32	Supply 24 Vdc ext.

Connection examples

The figures below show a number of connection examples for the digital input module 10104/2/1.

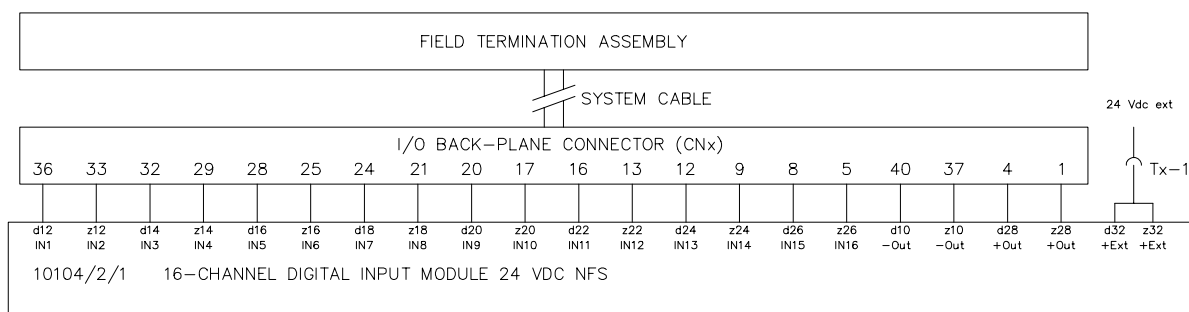


Figure 2 Connection example of 10104/2/1 module to FTA for both non-redundant and redundant I/O configurations

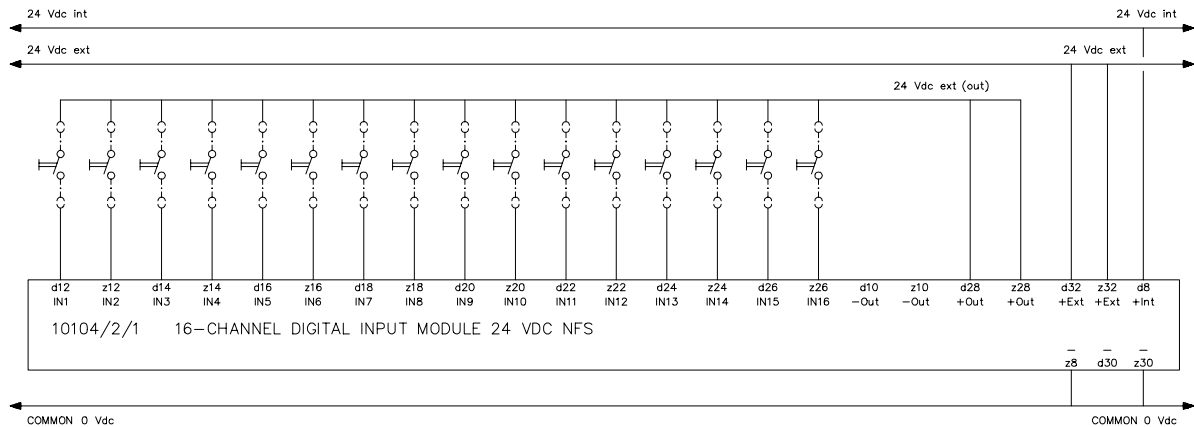


Figure 3 I/O connection example of 10104/2/1 module for non-redundant I/O configurations

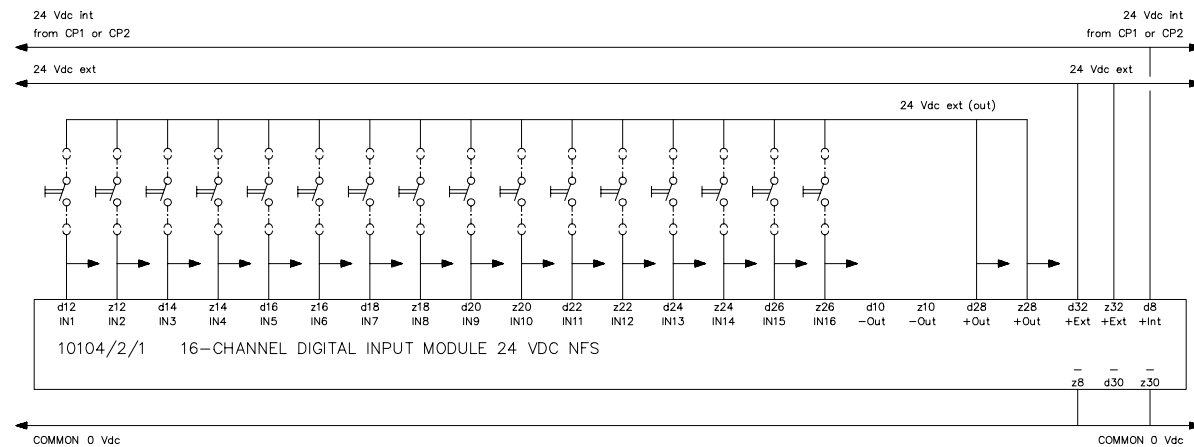


Figure 4 I/O connection example of 10104/2/1 module for redundant I/O configurations

Technical data

The 10104/2/1 module has the following specifications:

General	Type number:	10104/2/1 12700
	Approvals:	CE, TÜV, UL
	Software versions:	≥ 3.00
	Space requirements:	4 TE, 3 HE (= 4 HP, 3U)
Power	Power requirements:	5 Vdc 1 mA 24 Vdc int. 35 mA 24 Vdc ext. 100 mA (input currents)
	Ripple content (on 5 Vdc):	< 0.5 Vp-p (0-360 Hz)
Input	Number of input channels:	16
	Maximum input voltage:	36 Vdc
	Input current:	7 mA at 24 Vdc
	Input HIGH:	> 15 Vdc
	Input LOW:	< 9 Vdc (I < 2 mA)
	Input delay:	typically 10 ms
Key coding	(See 'Key coding' data sheet)	
	Module connector code:	
	– holes	A5, C21
	Rack connector code:	
	– large pins	A5, C21

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