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## 5.12 Digital Output 24V IOTA Models CC-TDOB01, CC-TDOB11

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**CAUTION**

When wiring the Digital Output 24V ensure that the **external power is not reversed** or the IOM will be damaged.

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The Series C Digital Output 24V IOTA board is represented by the following information and graphics.

To access the parts information for the:

- module
- IOTA
- terminal plug-in assembly, and
- fuses

associated with this board and module, refer to Digital Output 24V in the Recommended Spare Parts section.

### 5.12.1 Field wiring and module protection - Digital Output 24V module (CC-TDOB01, CC-TDOB11)

The Digital Output 24Volt Module provides a unique and highly functional output power protection method. When a short occurs in the field, the following occurs:

- the output circuits sense the over-current condition and shut down the output
- the shut down of the point places the mode of the point into Manual
- an Over-current Soft Failure is generated

This failure is maintained until the short circuit condition is repaired and the point is again supplying the proper current.

Only one channel is affected at a time. If multiple channels are affected, they are individually shut down. Any channels that do not have a short circuit condition are unaffected.

- Thermal protection alarm if short in field of  $> 0.5A$ .

### 5.12.2 IOTA board and connections - Digital Output 24V module (CC-TDOB01, CC-TDOB11)

Series C 24V Digital Output 9 inch, non-redundant IOTA is displayed.

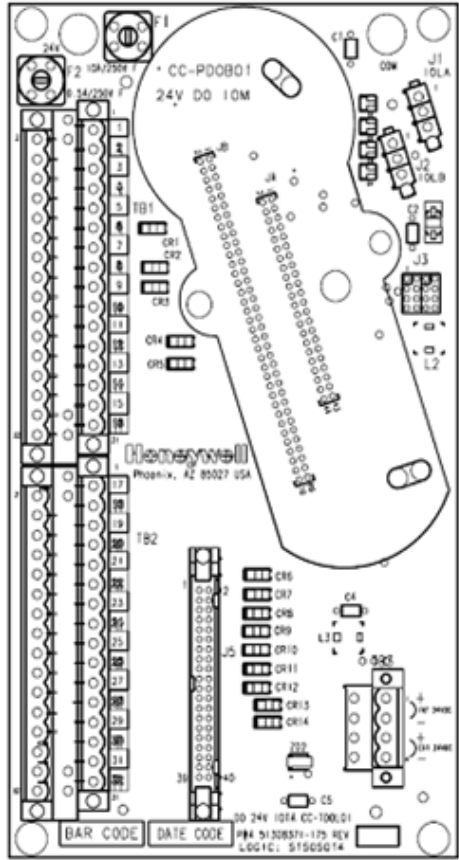


Figure 51: Series C 24V Digital Output 9 inch, non-redundant IOTA

To properly wire your module to the Series C 24V Digital Output IOTA board with terminal blocks 1 (TB1) and 2 (TB2), use the following table.

Table 52: 24V DO 9 inch, non-redundant - terminal block 1

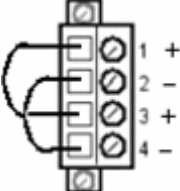
Terminal block 1		
Channel	Return screw	Power screw
Channel 1	2	1
Channel 2	4	3
Channel 3	6	5
Channel 4	8	7
Channel 5	10	9
Channel 6	12	11
Channel 7	14	13
Channel 8	16	15
Channel 9	18	17
Channel 10	20	19
Channel 11	22	21
Channel 12	24	23
Channel 13	26	25

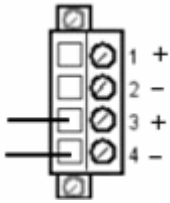
Terminal block 1		
Channel	Return screw	Power screw
Channel 14	28	27
Channel 15	30	29
Channel 16	32	31

Table 53: 24V DO 9 inch, non-redundant - terminal block 2

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

Table 54: 24V DO 9 inch, non-redundant - terminal block 3

Terminal block 3	
<b>Internal</b>	Used with Honeywell's provided 24v power supply
Screw 1 - internal 24V	
Screw 2 - internal return	
Screw 3 - external 24V	
Screw 4 - external return	
<b>External</b>	Used with customer's provided 24v power supply

Terminal block 3	
Screw 1 - internal 24V	
Screw 2 - internal return	
Screw 3 - external 24V	
Screw 4 - external return	

**CAUTION**  
 When wiring the Digital Output 24V ensure that the external power is not reversed or the IOM will be damaged.

Series C 24V Digital Output 9 inch, non-redundant IOTA and field wiring connection is displayed

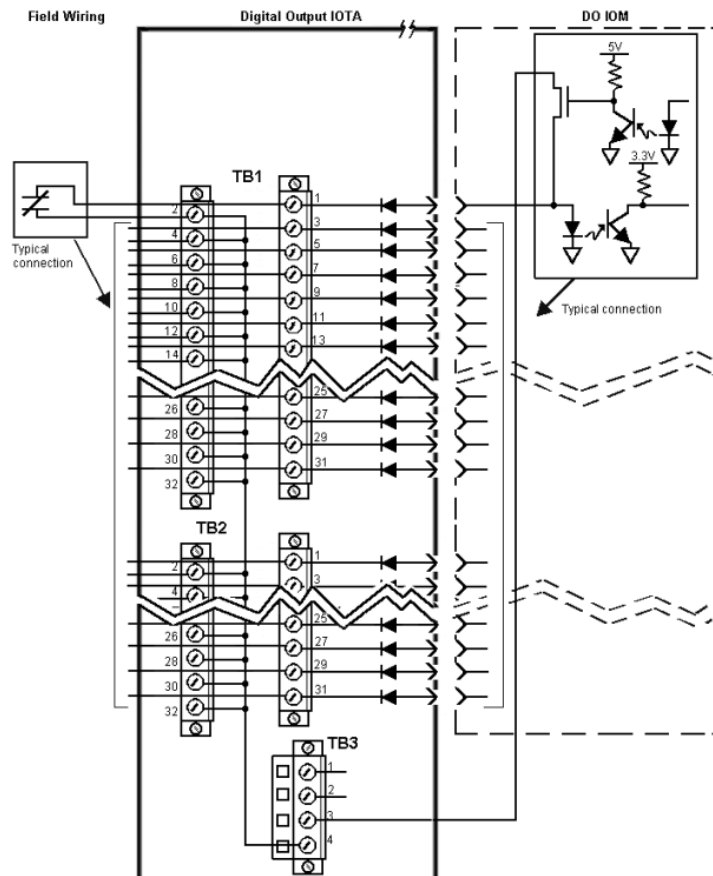


Figure 52: Series C 24V Digital Output 9 inch, non-redundant IOTA and field wiring connections

Series C 24V Digital Output 12 inch, redundant IOTA is displayed

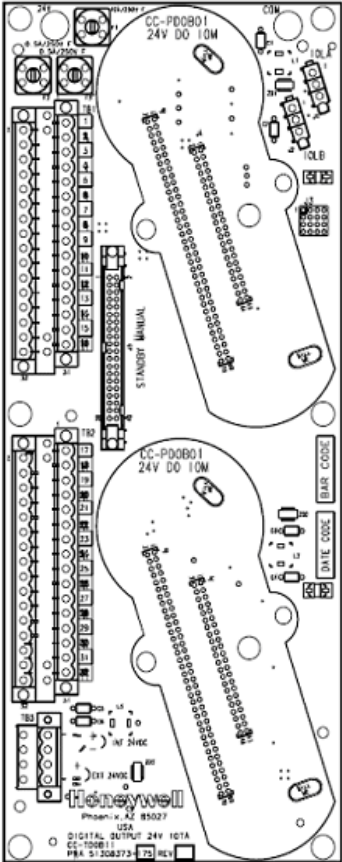


Figure 53: Series C 24V Digital Output 12 inch, redundant IOTA