5.10 Digital Input 24V IOTA Models CC-TDIL01, CC-TDIL11

The Series C Digital Input 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 Input 24V in the Recommended Spare Parts section.

5.10.1 Field wiring and module protection - Digital Input 24V module (CC-TDIL01, CC-TDIL11)

Field wiring is protected by an internal protection circuit which:

- Allows for internal or external DI sense power (field selectable using jumper block TB3)
- Permits short circuit protection of input for field short circuits. Protection suitable for Division 2 non-incendive / Zone 2 non-arcing.
- Allows each signal to be shorted in the field with no damage to module or board. Other channels on the same IOM are not affected.
- Field drive current is limited. Short circuit of input allowed.

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

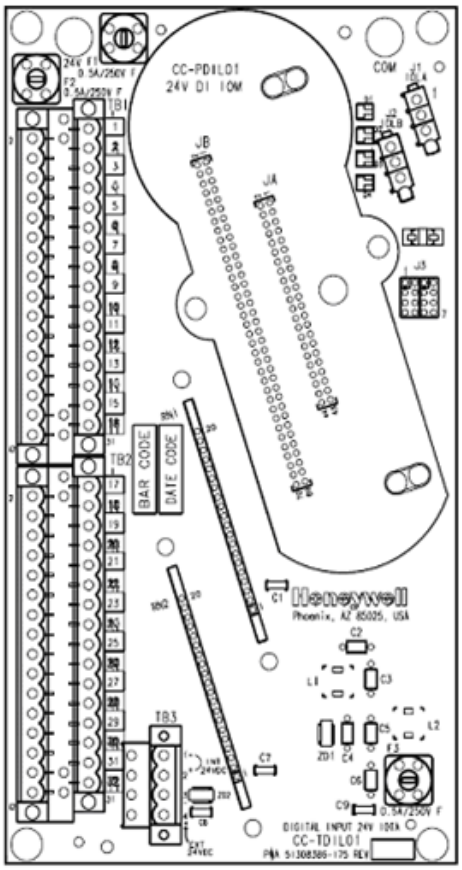

Figure 42: Series C 24V Digital Input 9 inch, non-redundant IOTA

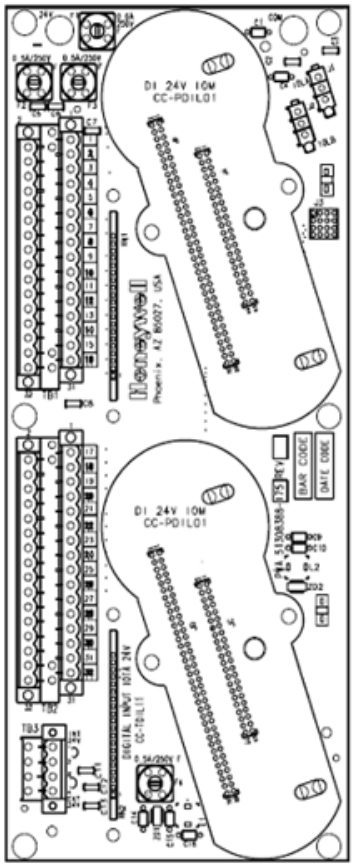

Figure 44: Series C 24V Digital Input 12 inch, redundant IOTA

5.10.2 Using DI 24V module (CC-TDIL01, CC-TDIL11) channels to report system alarms

You must include digital input channels in the control strategy to generate and report alarms based on their PVs. A typical strategy consists of a Control Module that contains the DI channel blocks where each PV (output) is connected to a PVFL input of a FLAGARRAY block configured for alarming.

The normal condition of the alarm input is ON.

Refer to the Control Building Guide for the following topics

- Creating and saving a control module
- Creating an instance of a basic function block
- Configuring alarms

Prerequisites

- You have installed and configured Series C 24V digital input I/O modules and associated IOTAs.
- You have alarm cables 51202343-001 (12-foot long) to connect power supply alarm contacts to 24V dc digital inputs on the IOM.

To connect the Power System alarm cable for RAM Charger Assembly 51199932-100

1. Plug the connection end of the alarm cable into the alarm connection on top of the power supply.
2. Connect the twisted pair wires to the terminal block 1 on the DI 24V IOTA in the following configuration. The associated alarm pins are also displayed.