

(3056-0016) Mini Expansion Board • Installation instructions

ADANGER

Make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

CAUTION

All electrical work — including the installation of the control panel, and all related hardware — must be performed by a certified electrician and conform to all local and applicable national codes.

NOTICE

Sensors must be connected using the existing 12 VDC circuit in the iDock controller. DO NOT add a seperate source or use an external source.

Expansion Boards

Expansion boards are used in the iDock controller to add I/O capacity for optional equipment: MyQ Dock Managment sensors, loading dock lights, overhead door controls and etc. The Mini Expansion board (B) is used in iDock configurations that may not have the space required for the standard expansion board (A), shown in **Figure 1**. The Mini Expansion board is an input only module that allows the connection of MyQ Dock management sensors to provide analytics of loading dock operations.

Installation Instructions

1. Before attempting the installation, review the wiring diagram for the iDock controller per the original equipment order, and the wiring instructions included with this kit. **See page 2.**

Note: iDock wiring information is available from Systems, LLC. Locate the drawing number inside the iDock Controller and contact Technical Services using the information below. The schematic in this kit shows the connections required to add additional sensors to an existing iDock control panel without an expansion board. This is not a standalone schematic and is only to be used for the installation of the Mini Expansion Retro Kit.

2. Remove or reposition DIN rail end stops (A) above existing terminal board. **Page 2 Figure 3.**

Installation Instructions - Continued

- 3. Remove white sticker (B) covering the expansion board slot (C) in the terminal board (D) or (E) as shown in **Figure 3 on page 2**.
- 4. Insert Mini Expansion (F) board into the expansion board slot (C) as shown in **Figure 3 on page 2.**

Note: Do not apply excessive force to terminals on Mini Expansion board. The expansion unit should easily connect with the terminal board.

5. End stops removed in step 2 should not contact the Mini Expansion board.

Electrical Connections

- 1. Secure wires to Mini Expansion board following all applicable local and national codes.
- 2. Review wiring diagram on page 2 of these instructions.

Mini Expansion Board Terminals: (Input Only)

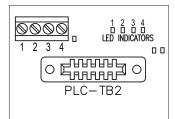
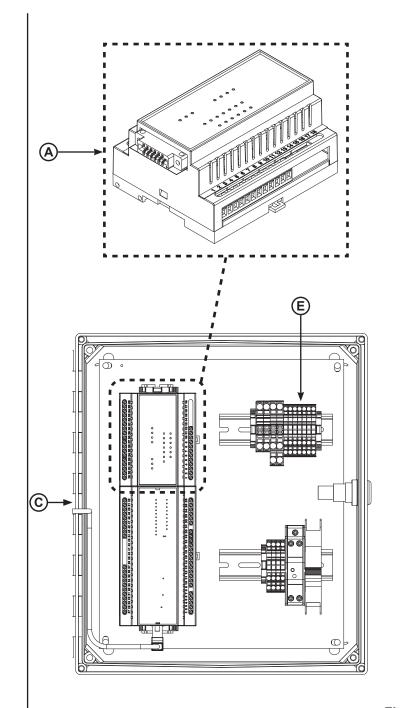


Figure 2

- 3. Connect Brown sensor wires to +12 VDC using terminal block 20 or an open +12 VDC terminal on the PLC. **See drawing on page 2.**
- 4. Connect Blue sensor wires to 0 VDC using terminal block 21 or an open 0 VDC terminal on the PLC. **See drawing on page 2.**
- 5. Connect signal wires per the list below. See Figure 2.
- Terminal 1. Wire #34 (Fluid Level Sensor)
- Terminal 2. Wire #35 (Vehicle Present Sensor)
- Terminal 3. Wire #36 (Forklift Activity Sensor)
- Terminal 4. Wire #37 (Ext. Equipment Interlock)

Note: For questions on external interlock wiring, please contact the equipment manufacturer.



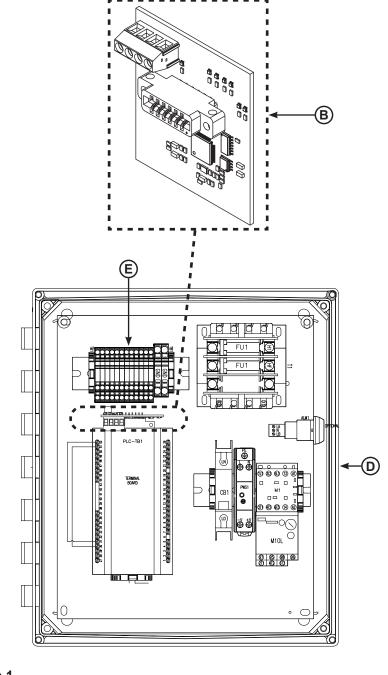


Figure 1

A — Expansion Board

B — Mini Expansion Board

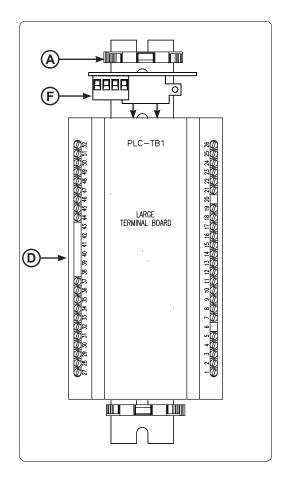
E — Terminal Blocks

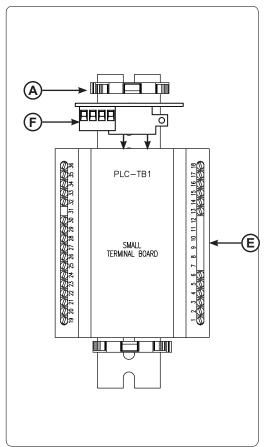
C — iDock Controller (With Standard Expansion Board)

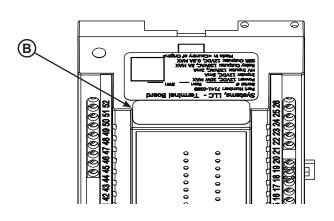
D — iDock Controller (With Mini Expansion Board)

Instructions continued on page 2.

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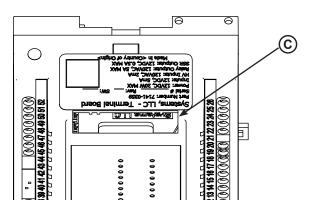


Figure 3

A—DIN Rail End Stops

C—Expansion Board Slot (on Terminal Board)

E—Small Terminal Board

B— Terminal Board Sticker

D—Large Terminal Board

F—Mini Expansion Board

12 VDC CIRCUIT FROM EXISTING IDOCK PANEL SEE NOTE B. +12VDC OV 20 j OPTIONAL — EXTERNAL EQUIPMENT INTERLOCKING CLOSED WHEN SYSTEMS EQUIPMENT IS ALLOWED TO OPERATE. OPEN WHEN SYSTEMS EQUIPMENT IS NOT ALLOWED TO OPERATE. SEE OPTIONS AND FEATURES DECAL TO KNOW WHAT EQUIPMENT IS AFFECTED OPTIONAL FORK LIFT ACTIVITY SENSOR 36 OPTIONAL — FORK LIFT ACTIVITY SENSOR CLOSED WHEN SENSOR BEAM NOT BROKEN OPEN WHEN SENSOR BEAM BROKEN <u>BL</u>U OPTIONAL VEHICLE PRESENT SENSOR 35 OPTIONAL — VEHICLE PRESENT SENSOR CLOSED WHEN VEHICLE DETECTED BELOW SENSOR OPEN WHEN VEHICLE NOT DETECTED BELOW SENSOR 34 OPTIONAL — OIL LEVEL SENSOR CLOSED WHEN OIL LEVEL IS ABOVE SENSOR OPEN WHEN OIL LEVEL IS BELOW SENSOR NOTE: METAL COOKPOT = WHT PLASTIC RESERVOIR = BLK 1 2 3 4 LED INDICATORS 0000 1 2 3 4 PLC-TB2 ALTERNATE WIRING - VEHICLE PRESENT SENSOR BRN 12 V GRY LGC SEL BLK OUT A | GRN ______ | Optional - Vehicle present sensor | Closed when vehicle detected below sensor | Open when vehicle not detected below sensor _wht_tst in