# TROVE™
## Access & Power Integration

# Altronix/Honeywell ProWatch/WinPak Kits

## Models Include:

### T2HWK7F8
8 Door Kit with Fused Outputs
Fully assembled kit includes:
- Trove2 enclosure with THW2 Altronix/Honeywell backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACM8 - Fused Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8 - Dual Input Fused Power Distribution Module

### T3HWK7F12
12 Door Kit with Fused Outputs
Fully assembled kit includes:
- Trove3 enclosure with THW3 Altronix/Honeywell backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACM8 - Fused Access Power Controller
- One (1) ACM4 - Fused Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8 - Dual Input Fused Power Distribution Module
- One (1) RSB1 - Rocker Switch Bracket with One (1) Rocker Switch

### T3HWK75F16
16 Door Kit with Fused Outputs
Fully assembled kit includes:
- Trove3 enclosure with THW3 Altronix/Honeywell backplane
  and THWD2 Honeywell door backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) eFlow102NB - Power Supply/Charger
- Two (2) ACM8 - Fused Access Power Controllers
- One (1) PD8UL - Fused Power Distribution Module
- One (1) RSB2 - Rocker Switch Bracket with Two (2) Rocker Switches

### T3HWK77F24S
24 Door Kit with Fused Outputs
Fully assembled kit includes:
- Trove3 enclosure with THW3 Altronix/Honeywell backplane
  and THWD2 Honeywell door backplane
- Two (2) eFlow104NB - Power Supply/Chargers
- Two (2) VR10 - Voltage Reglators
- Two (2) ACMS12 - Dual Input Fused Access Power Controllers
- Two (2) PDS16 - Dual Input Fused Power Distribution Modules
- One (1) RSB2 - Rocker Switch Bracket with Two (2) Rocker Switches

### T2HWK7F8D
8 Door Kit with PTC Outputs
Fully assembled kit includes:
- Trove2 enclosure with THW2 Altronix/Honeywell backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACM8CB - PTC Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8CB - Dual Input PTC Power Distribution Module

### T3HWK7F12D
12 Door Kit with PTC Outputs
Fully assembled kit includes:
- Trove3 enclosure with THW3 Altronix/Honeywell backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACM8CB - PTC Access Power Controller
- One (1) ACM4CB - PTC Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8CB - Dual Input PTC Power Distribution Module
- One (1) RSB1 - Rocker Switch Bracket with One (1) Rocker Switch

### T3HWK75F16D
16 Door Kit with PTC Outputs
Fully assembled kit includes:
- Trove3 enclosure with THW3 Altronix/Honeywell backplane
  and THWD2 Honeywell door backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) eFlow102NB - Power Supply/Charger
- Two (2) ACM8CB - PTC Access Power Controllers
- One (1) PD8ULCB - PTC Power Distribution Module
- One (1) RSB2 - Rocker Switch Bracket with Two (2) Rocker Switches

### T3HWK77F24SD
24 Door Kit with PTC Outputs
Fully assembled kit includes:
- Trove3 enclosure with THW3 Altronix/Honeywell backplane
  and THWD2 Honeywell door backplane
- Two (2) eFlow104NB - Power Supply/Chargers
- Two (2) VR10 - Voltage Reglators
- Two (2) ACMS12CB - Dual Input PTC Access Power Controllers
- Two (2) PDS16CB - Dual Input PTC Power Distribution Modules
- One (1) RSB2 - Rocker Switch Bracket with Two (2) Rocker Switches

Please refer to the included corresponding Sub-Assembly Installation Guides for further information.

## Installation Guide



### More than just power.™

**Rev. THWK_011824**

Installing Company: _____  Service Rep. Name: _____

Address: _____  Phone #: _____

## Overview:

Altronix Trove Honeywell kits are pre-assembled and consist of Trove enclosures/backplanes with factory installed Altronix power supply/chargers and sub-assemblies. All kits accommodate a variety of Honeywell modules for up to eight (T2HWK7F8(D)), twelve (T3HWK7F12(D)), sixteen (T3HWK75F16(D)) or twenty-four (T3HWK77F24S(D)) doors in a single enclosure.
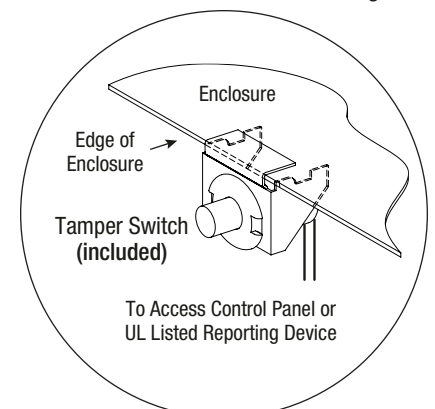
## Configuration Chart:

| Altronix Model Number | Power Supply Board Input Fuse Rating | Power Supply Board Battery Fuse Rating | 120VAC 60Hz Input Current (A) | Maximum Supply Current for Main and Aux. Outputs on Power Supply board and Access Power Controllers' outputs | Nominal DC Output Voltage [DC] Output Range (VDC) | Nominal DC Output Voltage [Aux] Output Range (VDC) | Fail-Safe/Fail-Secure Outputs | Additional Fused (PTC) Outputs | ACM4(CB), ACM8(CB) or ACMS12(CB) Board Input Fuse (PTC) Rating | ACM4(CB), ACM8(CB) or ACMS12(CB) Board Output Fuse (PTC) Rating | PDS8(CB) or PDS16(CB) Board Input Fuse (PTC) Rating | PDS8(CB) or PDS16(CB) Board Output Fuse(PTC) Rating | PD8UL(CB) Board Output Fuse (PTC) Rating |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T2HWK7F8 | 6.3A/250V | 15A/32V | 4.5 | 24VDC @ 9.7A | 20.17-26.4 | 20.28-26.4 | 8 | 8 | 10A/250V | 3.5A/250V | 10A/32V | 3A/32V | – |
| T2HWK7F8D | | | | | | | | | | 2.5A | 9A | 2.5A | – |
| T3HWK7F12 | 6.3A/250V | 15A/32V | 4.5 | 24VDC @ 9.7A | 20.17-26.4 | 20.28-26.4 | 12 | 8 | ACM8(CB): 10A/250V ACM4(CB): 10A/32V | 3.5A/250V | 10A/32V | 3A/32V | – |
| T3HWK7F12D | | | | | | | | | | 2.5A | 9A | 2.5A | – |
| T3HWK75F16 | eFlow104NB 6.3A/250V | 15A/32V | 7.5 | 24VDC @ 9.4A | 20.17-26.4 | 20.28-26.4 | 16 | 8 | 10A/250V | 3.5A/250V | – | – | 3.5A/250V |
| T3HWK75F16D | eFlow102NB 5A/250V | | | 12VDC @ 10A | 9.7-13.2 | 10.03-13.2 | | | | 2.5A | | | 2.5A |
| T3HWK77F24S | 6.3A/250V | 15A/32V | 9.0 | 24VDC @ 9.7A | 20.17-26.4 | 20.28-26.4 | 24 | 32 | 15A/32V | 3A/32V | 15A/32V | 3A/32V | – |
| T3HWK77F24SD | | | | | | | | | | 9A | 2.5A | 9A | 2.5A | – |

## Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Product is intended for indoor use only.

1.  Remove backplane from enclosure. Do not discard hardware.
    **If your application requires a raised backplane, re-mount it using metal spacers and screws (provided).**
2.  Mark and predrill holes in the wall to line up with the top two/three keyholes in the enclosure. Install two/three upper fasteners and screws in the wall with the screw heads protruding. Place the enclosure's upper keyholes over the two/three upper screws; level and secure. Mark the position of the lower three holes. Remove the enclosure. Drill the lower holes and install the three fasteners. Place the enclosure's upper keyholes over the two/three upper screws. Install the three lower screws and make sure to tighten all screws.
3.  Mount included UL Listed tamper switch (Altronix Model TS112 or equivalent) in desired location, opposite hinge. Slide the tamper switch bracket onto the edge of the enclosure approximately 2" from the right side *(Fig. 1, pg. 2)*.
    Connect tamper switch wiring to the Access Control Panel input or the appropriate UL Listed reporting device. To activate alarm signal open the door of the enclosure.
4.  Mount Honeywell modules to backplane(s), refer to *pages 3 - 7*.
5.  Refer to the *eFlow Power Supply/Charger Installation Guide* for eFlow104NB, eFlow102NB and corresponding *Sub-Assembly Installation Guides* for ACM4(CB), ACM8(CB), ACMS12(CB), VR6, VR10, PDS8(CB), PDS16(CB), and PD8UL(CB) for further installation instructions.

*Fig. 1*



Enclosure
Edge of Enclosure
Tamper Switch **(included)**
To Access Control Panel or UL Listed Reporting Device

## Hardware:
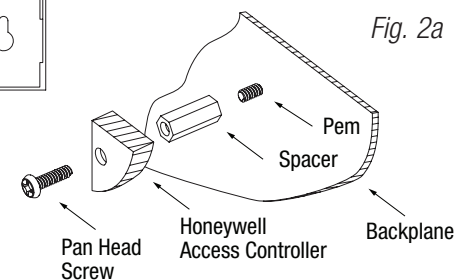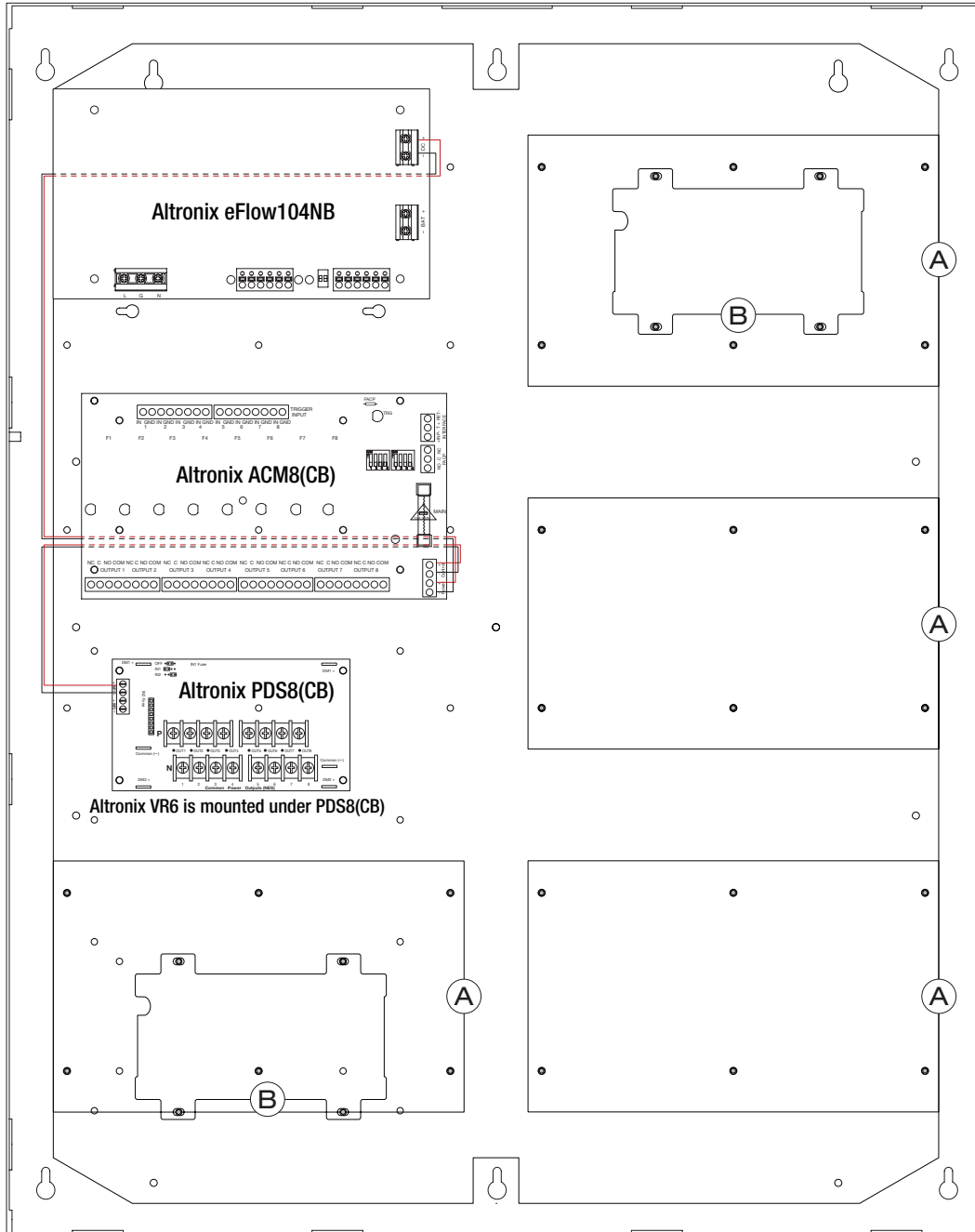
⬡ Nylon Spacer | 🖋 5/16" Pan Head Screw | ⬡ Lock Nut

# T2HWK7F8(D): Installation Instructions for Honeywell Access Controllers

1. Fasten spacers (provided) into pem configuration (A) or (B) of backplane *(Fig. 2, pg. 3)*.
2. Mount boards to spacers utilizing 5/16" pan head screws (provided) *(Fig. 2a, pg. 3)*.
3. Mount backplane to enclosure with hardware.

## Honeywell ProWatch/WinPak Access Controller Position Chart for the Following Models:

| Honeywell Board | Pem Mounting |
|---|---|
| 3200 Series or WIN-PAK Series | Ⓐ |
| PW6K1ICE or PW6K1R1E | Ⓑ |

*Fig. 2*



*Fig. 2a*

# T3HWK7F12(D): Installation Instructions for Honeywell Access Controllers

1. Fasten standoffs (provided) into pem configuration (A) or (B) of backplane *(Fig. 3, pg. 4)*.
2. Mount boards to standoffs utilizing 5/16" pan head screws (provided) *(Fig. 3a, pg. 4)*.
3. Mount backplane to enclosure with hardware.

## Honeywell ProWatch/WinPak Access Controller Position Chart for the Following Models:

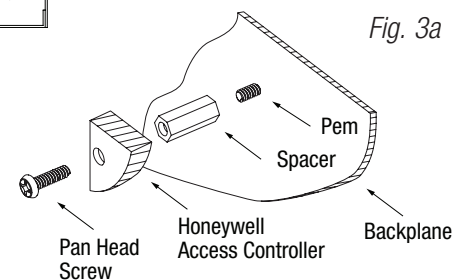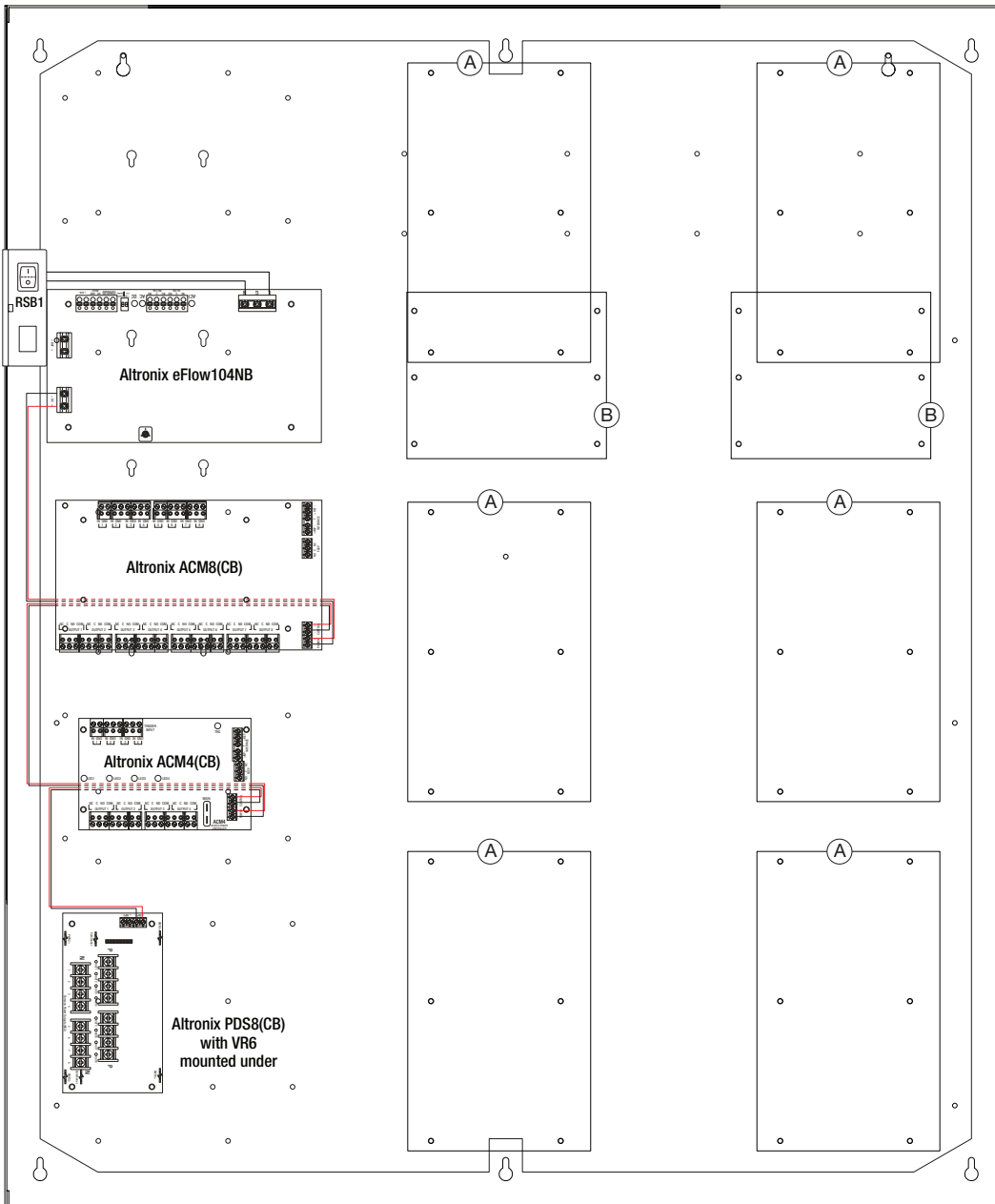| Honeywell Board | Pem Mounting |
|---|:---:|
| 3200 Series or WIN-PAK Series | A |
| PRO22MX8 | B |

*Fig. 3*



*Fig. 3a*

## T3HWK75F16(D): Installation Instructions for Honeywell Access Controllers

1. Fasten spacers (provided) into pem configuration (A) or (B) of backplane *(Fig. 4, pg. 5)*.
2. Mount boards to spacers utilizing 5/16" pan head screws (provided) *(Fig. 4a, pg. 5)*.
3. Mount backplane to enclosure with hardware.

## Honeywell ProWatch/WinPak Access Controller Position Chart for the Following Models:

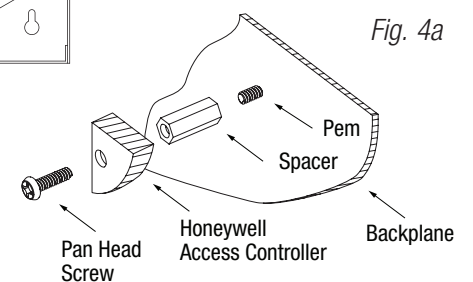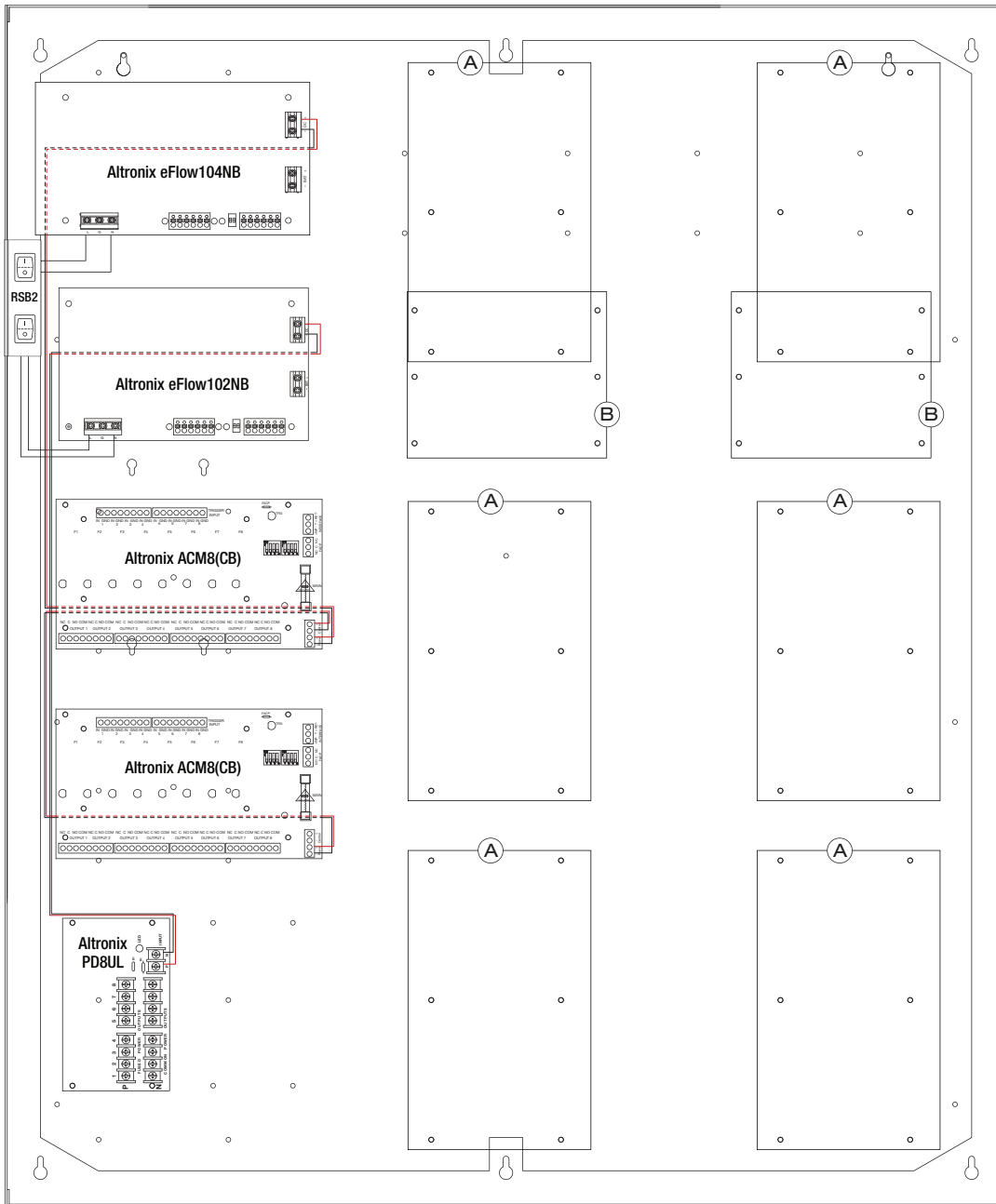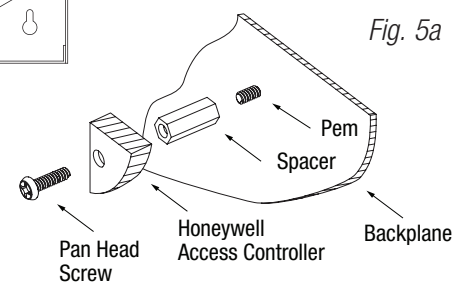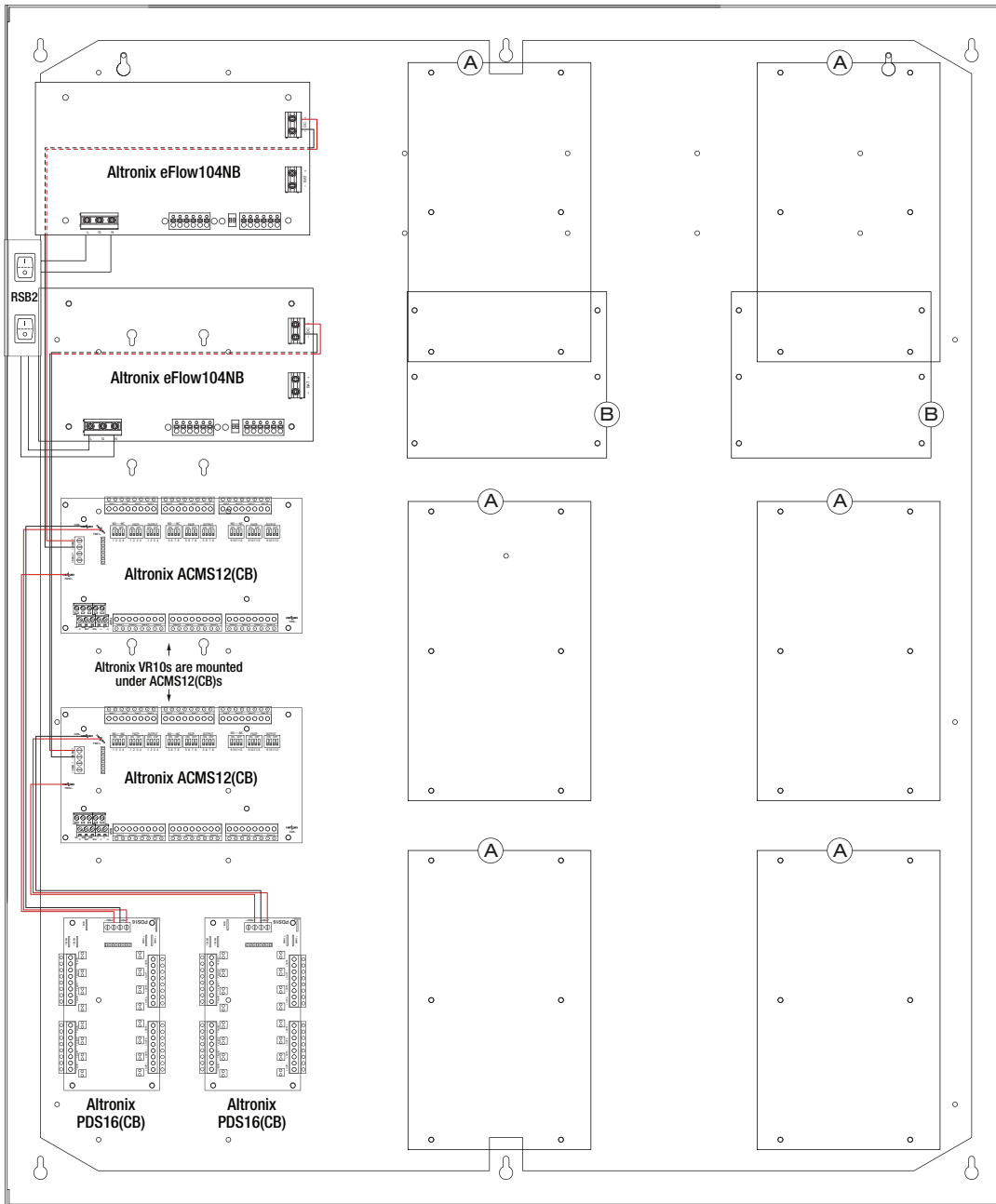| Honeywell Board | Pem Mounting |
|---|---|
| 3200 Series or WIN-PAK Series | (A) |
| PRO22MX8 | (B) |

*Fig. 4*



*Fig. 4a*

## T3HWK77F24S(D): Installation Instructions for Honeywell Access Controllers

1. Fasten spacers (provided) into pem configuration (A) or (B) of backplane *(Fig. 5, pg. 6)*.
2. Mount boards to spacers utilizing 5/16" pan head screws (provided) *(Fig. 5a, pg. 6)*.
3. Mount backplane to enclosure with hardware.

## Honeywell ProWatch/WinPak Access Controller Position Chart for the Following Models:

| Honeywell Board | Pem Mounting |
|---|:---:|
| 3200 Series or WIN-PAK Series | (A) |
| PRO22MX8 | (B) |

*Fig. 5*



*Fig. 5a*

Trove Honeywell Kits Installation Guide

# T3HWK75F16(D) and T3HWK77F24S(D):
## THWD2 (Door Backplane) Configuration of Honeywell ProWatch/WinPak Boards:
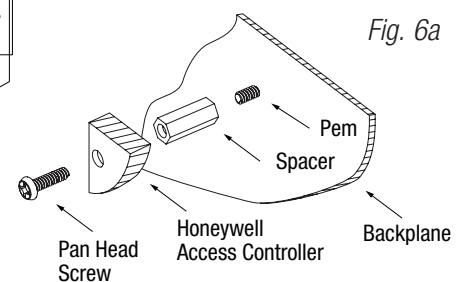
**Honeywell ProWatch/WinPak Access Controllers:**
1. Fasten spacers (provided) into pem configuration (A) or (B) of backplane *(Fig. 6, pg. 7)*.
2. Mount boards to spacers utilizing 5/16" pan head screws (provided) *(Fig. 6a, pg. 7)*.
3. Mount backplane to enclosure with hardware.

## Honeywell ProWatch/WinPak Access Controller Position Chart for the Following Models:

| Honeywell Board | Pem Mounting |
|---|---|
| 3200 Series or WIN-PAK Series | (A) |
| PRO22MX8 | (B) |

*Fig. 6*



*Fig. 6a*

Pem Spacer

Pan Head Screw

Honeywell Access Controller

Backplane

# eFlow Power Supply/Chargers can be Controlled and Monitored while Reporting Power/Diagnostics from Anywhere over the Network...
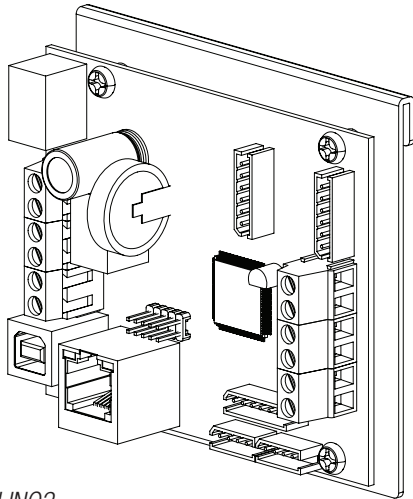
LINQ™

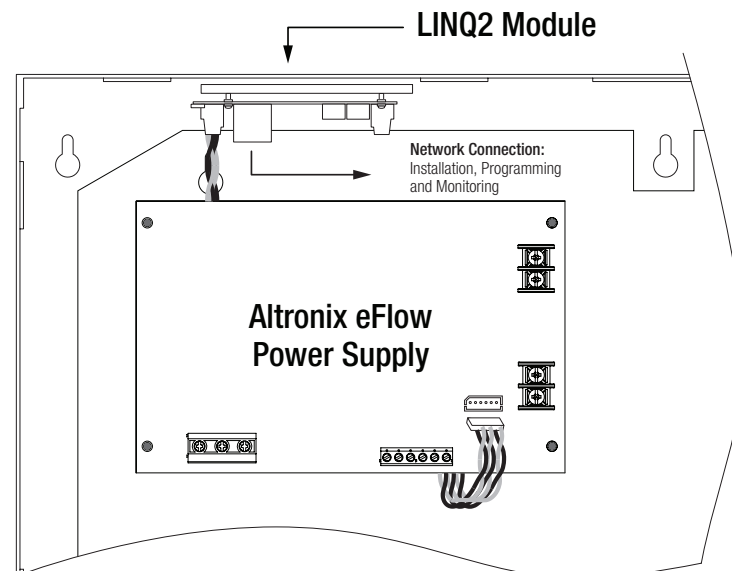*LINQ2*

## LINQ2 - Network Communication Module

LINQ2 provides remote IP access to real-time data from eFlow power supply/chargers to help keep systems up and running at optimal levels. It facilitates fast and easy installation and set-up, minimizes system downtime, and eliminates unnecessary service calls, which helps reduce Total Cost of Ownership (TCO) - as well as creating a new source of Recurring Monthly Revenue (RMR).

## Features:

- UL Listed in the U.S. and Canada.
- Local or remote control of up to (2) two Altronix eFlow power output(s) via LAN and/or WAN.
- Monitor real time diagnostics: DC output voltage, output current, AC & battery status/service, input trigger state change, output state change and unit temperature.
- Access control and user managment: Restrict read/write, Restrict users to specific resources
- Two (2) integral network controlled Form "C" Relays.
- Three (3) programmable input triggers: Control relays and power supplies via external hardware sources.
- Email and Windows Dashboard notifications
- Event log tracks history.
- Secure Socket Layer (SSL).
- Programmable via USB or web browser - includes operating software and 6 ft. USB cable.

## LINQ2 Mounts Inside any Trove Enclosure

LINQ2 Module

Network Connection:
Installation, Programming
and Monitoring

Altronix eFlow
Power Supply

**Notes:**

# Notes:

## T2HWK7F8(D) (Trove2) Enclosure Dimensions (H x W x D approximate):
27.25" x 21.75" x 6.5" (692.2mm x 552.5mm x 165.1mm)

21.50" (546.1mm)

2.00" (50.8mm)

5.25" (133.35mm)    3.5"(88.9mm)    3.5"(88.9mm)    5.25" (133.35mm)

2.00" (50.8mm)

1.25"
(31.8mm)

0.5625" (14.3mm)

0.685" (17.4mm)

Knockouts
1.125" (28.3mm)

1.77"
(45mm)

6.25" (158.8mm)

⌀ 2.415" (61.3mm)    0.885" (22.5mm)

1.5"
(38.1mm)

6.25" (158.8mm)

1.25" (31.8mm)

19.80" (502.9mm)

2.00" (50.8mm)

6.75" (171.5mm)

27" (685.8mm)

8.25" (209.5mm)

8.00" (203.2mm)

0.85" (21.6mm)

2.00" (50.8mm)

1.00" (25.4mm)

1.25" (31.8mm)

1.25" (31.8mm)

2.00" (50.8mm)

5.25" (133.4mm)    7.00" (177.8mm)    5.25" (133.4mm)

2.00" (50.8mm)

# T3HWK7F12(D), T3HWK75F16(D) and T3HWK77F24S(D)
## (Trove3) Enclosure Dimensions (H x W x D approximate):
36.12" x 30.125" x 7.06" (917.5mm x 768.1mm x 179.3mm)

2.00" (50.8mm)  7.12" (222.3mm)  9.5" (241.3mm)  9.5" (241.3mm)

1.25" (31.8mm)  1.78" (45.2mm)  1.55" (39.4mm)

1" Conduit  1.25" Conduit  1.5" Conduit
3/4" Conduit  1.5" Conduit  2" Conduit  1.25" Conduit

1.07" (27.2mm)  30.12" (768.1mm)

14.01" (355.9mm)  14.01" (355.9mm)

2.00" (50.8mm)

1.25" (31.8mm)  1.10" (27.9mm)  2" (50.8mm)

1" Conduit  1" Conduit
3/4" Conduit  3/4" Conduit

10.75" (273.1mm)

G  G

33.63" (854.2mm)

10.62" (269.8mm)  10.75" (273.1mm)  10.62" (269.8mm)  36.12" (917.5mm)

10.75" (273.1mm)  10.75" (273.1mm)

1.25" (31.8mm)

7.06" (179.3mm)

3/4" Conduit
1" Conduit

1.25" (31.8mm)

2"  8.75" (222.3mm)  8.62" (219mm)  8.75" (222.3mm)
(50.8mm)

MEMBER