TROVE™

Access & Power Integration

# Altronix Trove2/Mercury Kits

## Models Include:

### T2MK34
4 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane
- (1) AL600ULXB - Power Supply/Charger
- (1) ACM4 - Fused Access Power Controller
- (1) VR6 - Voltage Regulator
- (1) PDS8 - Dual Input Fused Power Distribution Module

### T2MK38
8 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane
- (1) AL600ULXB - Power Supply/Charger
- (1) ACM8 - Fused Access Power Controller
- (1) VR6 - Voltage Regulator
- (1) PDS8 - Dual Input Fused Power Distribution Module

### T2MK78
8 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane
- (1) AL1024ULXB2 - Power Supply/Charger
- (1) ACM8 - Fused Access Power Controller
- (1) VR6 - Voltage Regulator
- (1) PDS8 - Dual Input Fused Power Distribution Module

### T2MK7516
16 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane and TMV2 door backplane
- (1) AL1024ULXB2 - Power Supply/Charger
- (1) AL1012ULXB - Power Supply/Charger
- (2) ACM8 - Fused Access Power Controllers
- (1) PD16W - Fused Power Distribution Module

### T2MK7716
16 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane and TMV2 door backplane
- (2) AL1024ULXB2 - Power Supply/Chargers
- (2) ACM8 - Fused Access Power Controllers
- (1) VR6 - Voltage Regulator
- (1) PDS8 - Dual Input Fused Power Distribution Module

### T2MK34D
4 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane
- (1) AL600ULXB - Power Supply/Charger
- (1) ACM4CB - PTC Access Power Controller
- (1) VR6 - Voltage Regulator
- (1) PDS8CB - Dual Input PTC Power Distribution Module

### T2MK38D
8 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane
- (1) AL600ULXB - Power Supply/Charger
- (1) ACM8CB - PTC Access Power Controller
- (1) VR6 - Voltage Regulator
- (1) PDS8CB - Dual Input PTC Power Distribution Module

### T2MK78D
8 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane
- (1) AL1024ULXB2 - Power Supply/Charger
- (1) ACM8CB - PTC Access Power Controller
- (1) VR6 - Voltage Regulator
- (1) PDS8CB - Dual Input PTC Power Distribution Module

### T2MK7516D
16 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane and TMV2 door backplane
- (1) AL1024ULXB2 - Power Supply/Charger
- (1) AL1012ULXB - Power Supply/Charger
- (2) ACM8CB - PTC Access Power Controllers
- (1) PD16WCB - PTC Power Distribution Module

### T2MK7716D
16 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove2 enclosure with TM2 Altronix/Mercury backplane and TMV2 door backplane
- (2) AL1024ULXB2 - Power Supply/Chargers
- (2) ACM8CB - PTC Access Power Controllers
- (1) VR6 - Voltage Regulator
- (1) PDS8CB - Dual Input PTC Power Distribution Module

# Installation Guide

Altronix®

**More than just power.™**

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**Rev. TMKL073024**

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

## Overview:

Altronix Trove Mercury kits are pre-assembled and consist of Trove2M2 enclosure with factory installed Altronix power supply/charger(s) and sub-assemblies. These kits also accommodate various combinations of Mercury boards for up to sixteen (16) doors in a single enclosure.

## Configuration Chart:

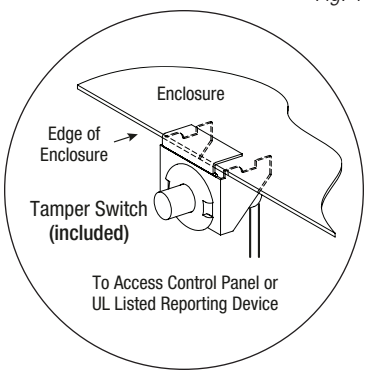
| Altronix Model Number | 115VAC 60Hz Input Current (A) | Power Supply Board Input Fuse Rating | Power Supply Board Battery Fuse Rating | Output Voltage Options | | Maximum Supply Current for Main and Aux. Outputs on Power Supply board and ACM4(CB)/ ACM8(CB) Access Power Controller's outputs | Fail-Safe/Fail-Secure Outputs | Current Per ACM4(CB)/ACM8(CB) Output (A) | ACM4(CB)/ACM8(CB) Board Input Fuse (PTC) Rating | ACM4(CB)/ACM8(CB) Board Output Fuse (PTC) Rating | PDS8(CB) Board Input Fuse (PTC) Rating | PDS8(CB) Board Output Fuse (PTC) Rating | PD16W(CB) Board Output Fuse (PTC) Rating |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Power Supply 1 | Power Supply 2 | | | | | | | | |
| **T2MK34** | 3.5 | 5A/ 250V | N/A | 12VDC/5.7A or 24VDC/5.5A | – | 24VDC @ 5.7A | 4 | 2.5 | 10A/ 32V | 3A/ 32V | 10A/ 250V | 3A/ 32V | – |
| **T2MK34D** | | | | | | | | 2.0 | 9A | 2.5A | 9A | 2.5A | – |
| **T2MK38** | 3.5 | 5A/ 250V | N/A | 12VDC/5.7A or 24VDC/5.5A | – | 24VDC @ 5.7A | 8 | 2.5 | 10A/ 250V | 3.5A/ 250V | 10A/ 250V | 3A/ 32V | – |
| **T2MK38D** | | | | | | | | 2.0 | 10A/ 250V | 2.5A | 9A | 2.5A | – |
| **T2MK78** | 4.2 | 5A/ 250V | 15A/ 32V | 24VDC/9.5A | – | 24VDC @ 9.5A | 8 | 2.5 | 10A/ 250V | 3.5A/ 250V | 10A/ 250V | 3A/ 32V | – |
| **T2MK78D** | | | | | | | | 2.0 | 10A/ 250V | 2.5A | 9A | 2.5A | – |
| **T2MK7516** | 6.8 | 5A/ 250V | 15A/ 32V | 12VDC/9.5A | 24VDC/9.5A | 24VDC @ 9.5A | 16 | 2.5 | 10A/ 250V | 3.5A/ 250V | – | – | 3.5A/ 250V |
| **T2MK7516D** | | | | | | | | 2.0 | 10A/ 250V | 2.5A | – | – | 2.5A |
| **T2MK7716** | 8.4 | 5A/ 250V | 15A/ 32V | 24VDC/9.5A | 24VDC/9.5A | 24VDC @ 9.5A | 16 | 2.5 | 10A/ 250V | 3.5A/ 250V | 10A/ 250V | 3A/ 32V | – |
| **T2MK7716D** | | | | | | | | 2.0 | 10A/ 250V | 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(s) from enclosure. Do not discard hardware.
2. Mark and predrill holes in the wall to line up with the top three keyholes in the enclosure. Install three upper fasteners and screws in the wall with the screw heads protruding. Place the enclosure's upper keyholes over the 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 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. Connect unswitched AC power (115VAC 60Hz) to terminals marked [L, N]. Use 14 AWG or larger for all power connections. Secure green wire lead to earth ground. Green "AC" LED on power supply board will turn on. This light can be seen through the LED lens on the door of the enclosure.
   **Keep power-limited wiring separate from non power-limited wiring (115VAC 60Hz Input, Battery Wires). Minimum 0.25" spacing must be provided.**
   **CAUTION: Do not touch exposed metal parts. Shut branch circuit power before installing or servicing equipment. There are no user serviceable parts inside. Refer installation and servicing to qualified service personnel.**
5. Measure voltage before connecting devices. This helps avoiding potential damage.
6. Refer to the *ULXB Power Supply/Charger Installation Guide* for AL600ULXB, AL1012ULXB and AL1024ULXB2 and *Sub-Assembly Installation Guide* for the following models: ACM4(CB), ACM8(CB), PDS8(CB), PD16W(CB), VR6 for further installation instructions.
7. Fasten snap on spacers onto metal pems configuration of backplane depending on the Mercury access controller *(Fig. 2-5, pg. 3-6)*.
8. Position Mercury access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 2-5, pg. 3-6)*.
9. Mount backplane to enclosure with hardware.

*Fig. 1*




## Hardware:

Snap On Spacer | 5/16" Pan Head Screw | Lock Nut

## T2MK34(D) and T2MK38(D) Configuration of Mercury Boards:

1. Fasten snap on spacers onto metal pems configuration (A), (B), (C) or (D) of backplane depending on the access controller *(Fig. 2, pg. 3)*.
2. Position access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 2a, pg. 3)*.
3. Mount backplane to enclosure with hardware.

## Access Controller Position Chart for the Following Models:

| Mercury Access Controller | Pem Mounting |
|---|---|
| EP1502, MR52, MR16IN, MR16OUT | (A) |
| EP2500, MUX8 | (B) |
| EP1501, MR51e | (C) |
| MR50 | (D) |

*Fig. 2*

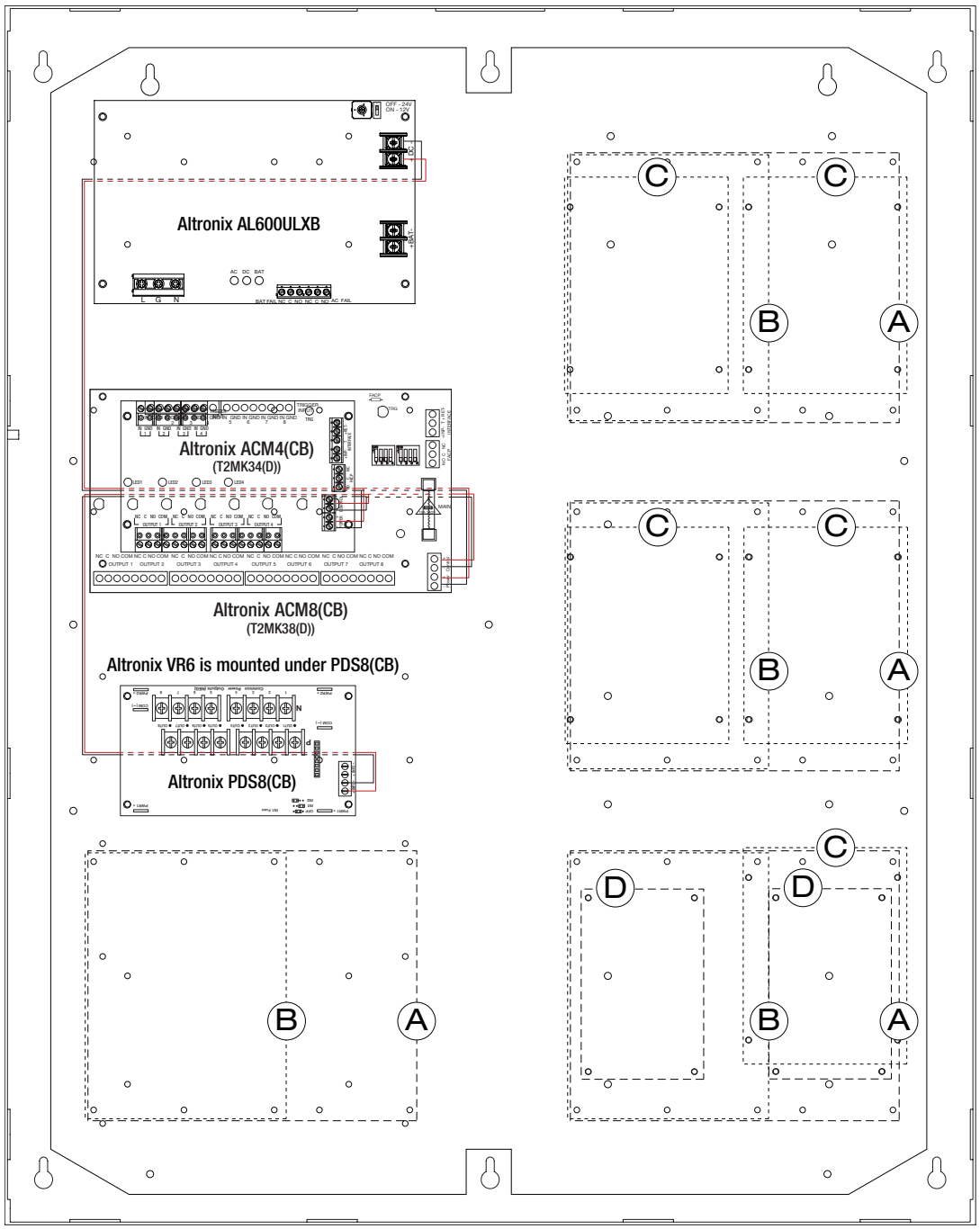
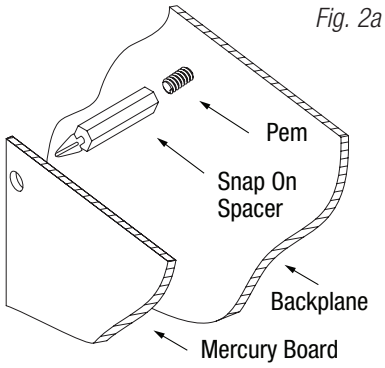



*Fig. 2a*



## T2MK78(D): Configuration of Mercury Boards:

1. Fasten snap on spacers onto metal pems configuration (A), (B), (C) or (D) of backplane depending on the access controller *(Fig. 3, pg. 4)*.
2. Position access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 3a, pg. 4)*.
3. Mount backplane to enclosure with hardware.

## Access Controller Position Chart for the Following Models:

| Mercury Access Controller | Pem Mounting |
|---|---|
| EP1502, MR52, MR16IN, MR16OUT | A |
| EP2500, MUX8 | B |
| EP1501, MR51e | C |
| MR50 | D |

*Fig. 3*

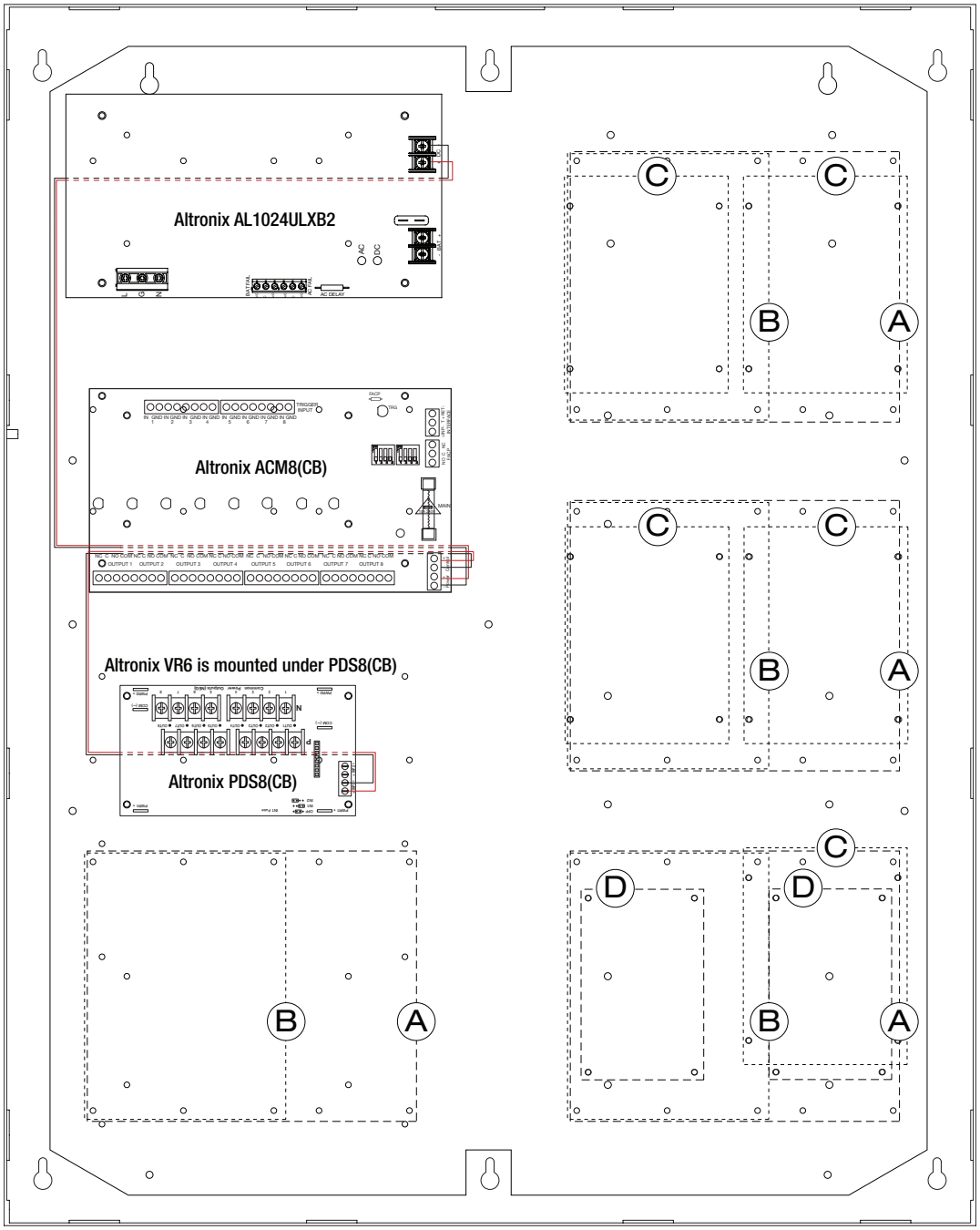
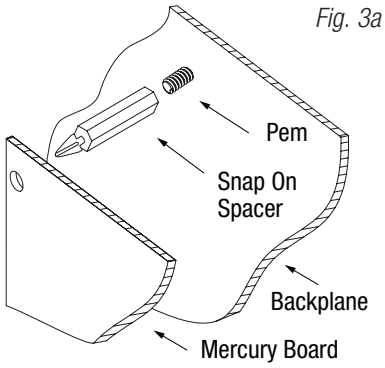



*Fig. 3a*



## T2MK7516(D): Configuration of Mercury Boards:

1. Fasten snap on spacers onto metal pems configuration (A), (B), (C) or (D) of backplane depending on the access controller *(Fig. 4, pg. 5)*.
2. Position access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 4a, pg. 5)*.
3. Mount backplane to enclosure with hardware.

## Access Controller Position Chart for the Following Models:

| Mercury Access Controller | Pem Mounting |
|---|---|
| EP1502, MR52, MR16IN, MR16OUT | A |
| EP2500, MUX8 | B |
| EP1501, MR51e | C |
| MR50 | D |

*Fig. 4*

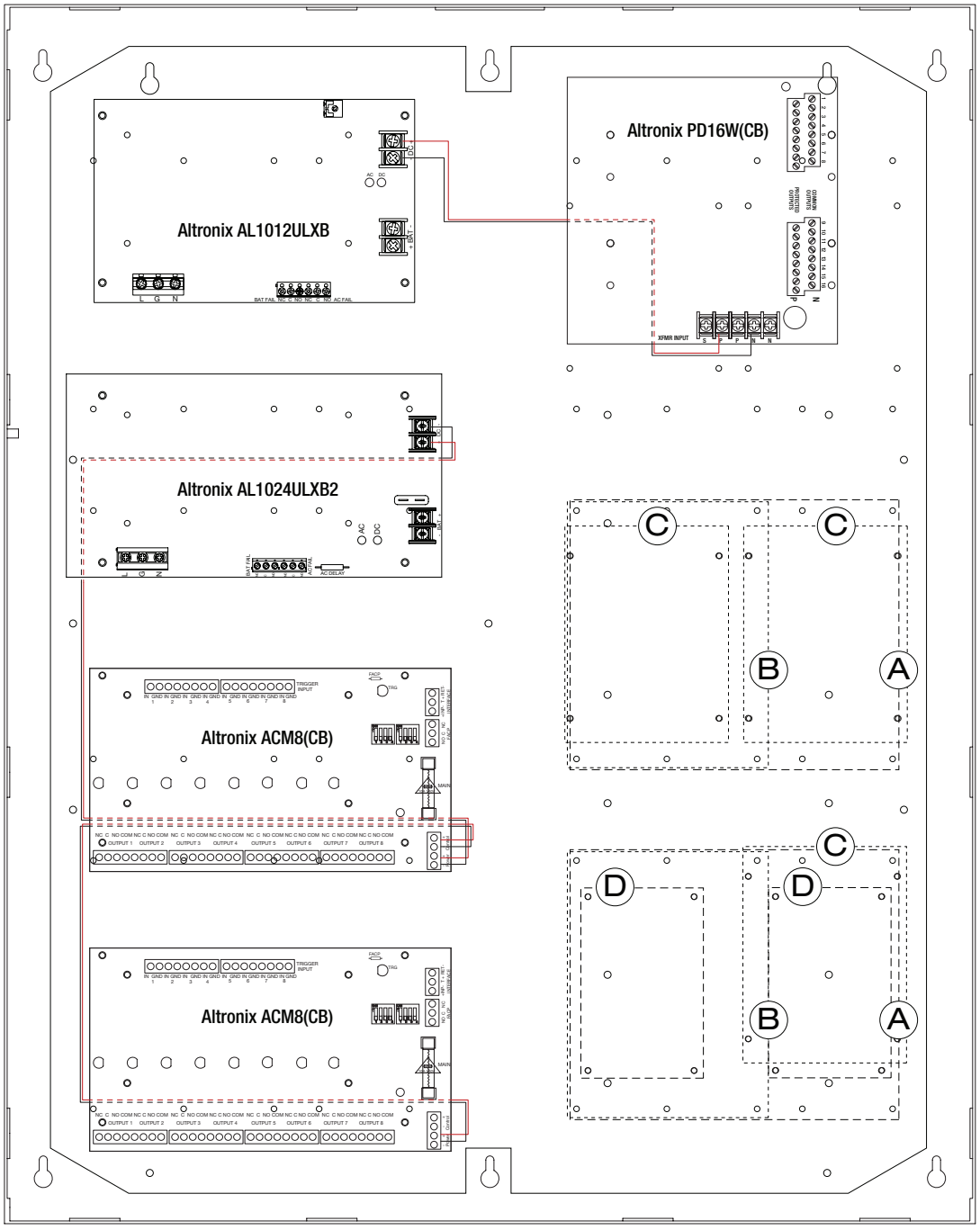
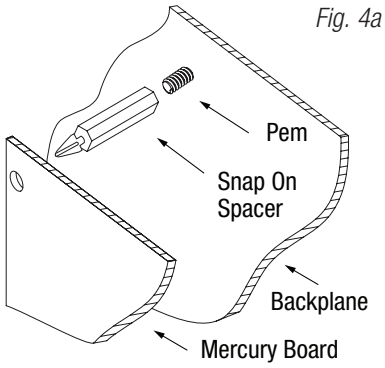



*Fig. 4a*



## T2MK7716(D): Configuration of Mercury Boards:

1. Fasten snap on spacers onto metal pems configuration (A), (B), (C) or (D) of backplane depending on the access controller *(Fig. 5, pg. 6)*.
2. Position access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 5a, pg. 6)*.
3. Mount backplane to enclosure with hardware.

## Access Controller Position Chart for the Following Models:

| Mercury Access Controller | Pem Mounting |
|---|---|
| EP1502, MR52, MR16IN, MR16OUT | A |
| EP2500, MUX8 | B |
| EP1501, MR51e | C |
| MR50 | D |

*Fig. 5*

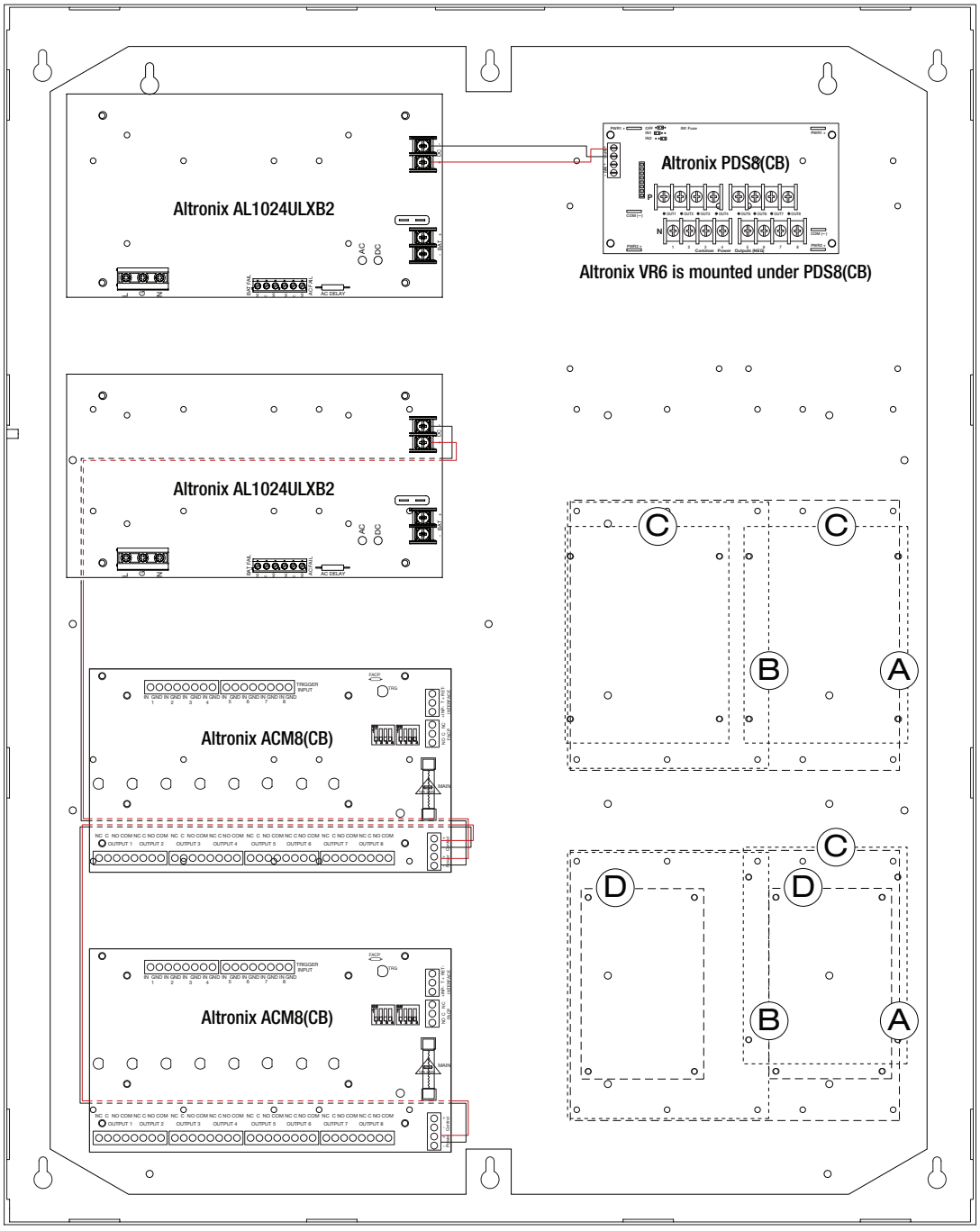
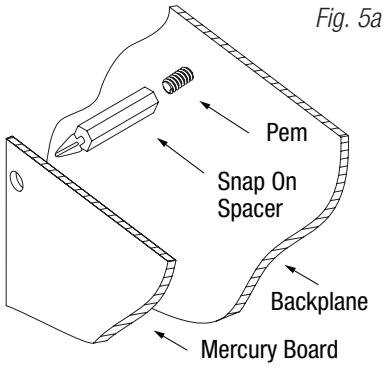



*Fig. 5a*



## TMV2 (T2MK7516(D) and T2MK7716(D)):

TMV2 accommodates a variety of Mercury boards with or without Altronix sub-assemblies for access systems.

## Configuration of Mercury and/or Altronix Boards

**Mercury Access Controllers:**

1. Fasten spacers onto metal pems configuration (A) (B) of backplane depending on the access controller *(Fig. 6, pg. 7)*.
2. Position access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 6a, pg. 7)*.
3. Mount backplane to enclosure with hardware.

**Altronix Sub-Assemblies and/or Adapters:**

1. Fasten spacers to pems which match the hole pattern (C) for Altronix Sub-Assemblies *(Fig. 6, 6a, pg. 7)*.
2. Mount boards to spacers utilizing pan head screws provided with the product *(Fig. 6, pg. 7)*.

## Access Controller Position Chart for the Following Models:

| Mercury | |
|---|---|
| **Access Controller** | **Pem Mounting** |
| EP1502, MR52, MR16IN, MR16OUT | (A) |
| EP2500, MUX8 | (B) |
| **Altronix** | |
| **Sub-Assembly or Adapter** | **Pem Mounting** |
| ACM4(CB), MOM5, PD4UL(CB), PD8UL(CB), PDS8(CB), VR6, GB1 (Genetec Synergis Cloud Link adapter plate) | (C) |

*Fig. 6*

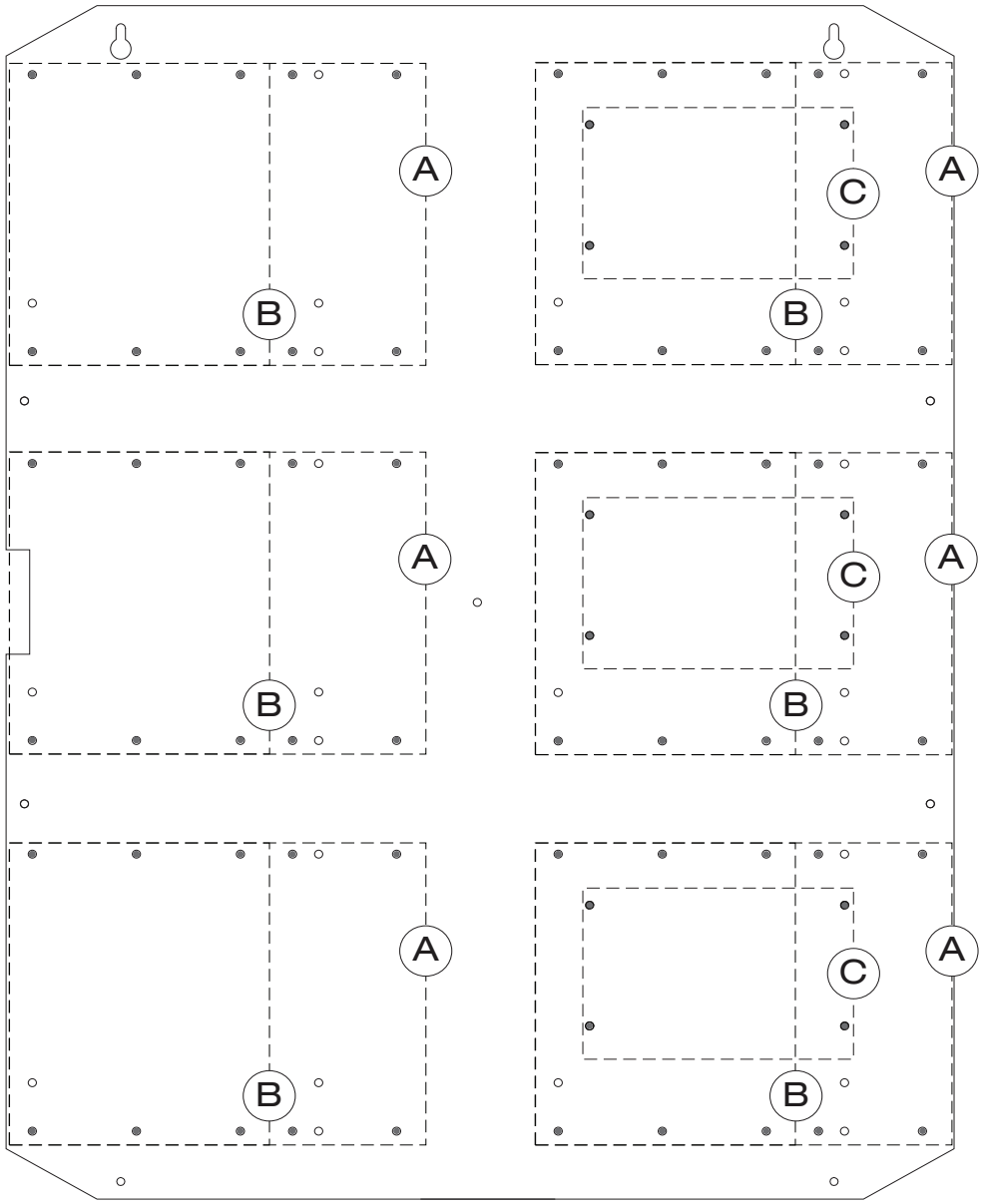
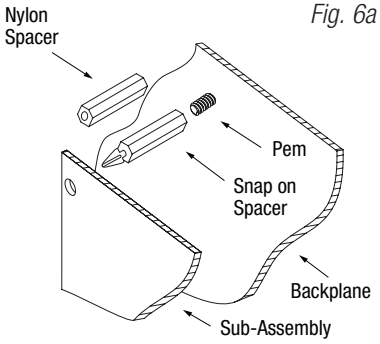
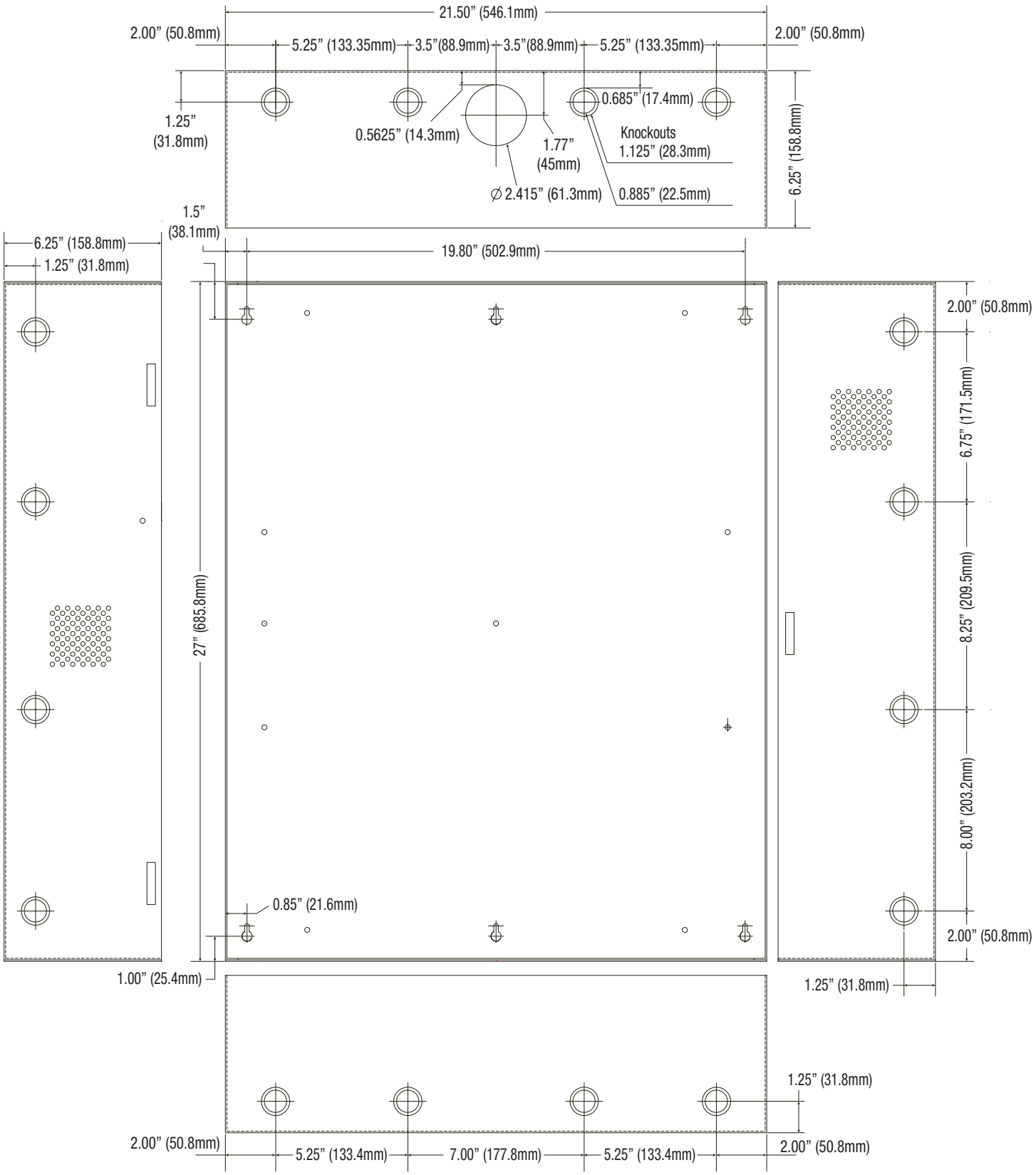



*Fig. 6a*



## **Enclosure Dimensions** (H x W x D approximate)**:**

27.25” x 21.5” x 6.5” (692.2mm x 552.5mm x 165.1mm)