TROVE™
Access & Power Integration

Altronix/Trove3 Mercury Kits

Models Include:

T3MK7516V
16 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove3 enclosure with TM3 Altronix/Mercury backplane
- One (1) AL1024XB2V - Power Supply/Charger
- One (1) AL1012XB220 - Power Supply/Charger
- Two (2) ACM8 - Fuse Protected Access Power Controllers
- One (1) PD8UL - Fuse Protected Power Distribution Module
- One (1) Rocker Switch Bracket with Two (2) Rocker Switches

T3MK7716V
16 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove3 enclosure with TM3 Altronix/Mercury backplane
- Two (2) AL1024XB2V - Power Supply/Chargers
- Two (2) ACM8 - Fuse Protected Access Power Controllers
- Two (2) PD8UL - Fuse Protected Power Distribution Modules
- One (1) Rocker Switch Bracket with Two (2) Rocker Switches

T3MK7516DV
16 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove3 enclosure with TM3 Altronix/Mercury backplane
- One (1) AL1024XB2V - Power Supply/Charger
- One (1) AL1012XB220 - Power Supply/Charger
- Two (2) ACM8CB - PTC Protected Access Power Controllers
- One (1) PD8ULCB - PTC Protected Power Distribution Module
- One (1) Rocker Switch Bracket with Two (2) Rocker Switches

T3MK7716DV
16 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove3 enclosure with TM3 Altronix/Mercury backplane
- Two (2) AL1024XB2V - Power Supply/Chargers
- Two (2) ACM8CB - PTC Protected Access Power Controllers
- Two (2) PD8ULCB - PTC Protected Power Distribution Modules
- One (1) Rocker Switch Bracket with Two (2) Rocker Switches

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

Installation Guide

CE

Altronix®
More than just power.™

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Altronix Trove Mercury kits are pre-assembled and consist of Trove3M3 enclosure/backplane 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	220VAC 60Hz Input Current (A)	Power Supply Board Input Fuse Rating	Power Supply Board Battery Fuse Rating	Nominal DC Output Voltage		Maximum Supply Current for Main and Aux. Outputs on Power Supply board and ACM8(CB) Access Power Controller's outputs	Fail-Safe/Fail-Secure or Dry Form "C" Outputs	Current Per ACM8(CB) Output (A)	ACM8(CB) Board Input Fuse Rating	ACM8 Board Output Fuse Rating	ACM8CB Board Output PTC Rating	PD8UL Board Output Fuse Rating	PD8ULCB Board Output Fuse Rating
				Power Supply 1 Output Range (VDC)	Power Supply 2 Output Range (VDC)								
T3MK7516V	4.8	5A/250V	15A/32V	20.17-26.4	9.7-13.2	12VDC @ 9.3A 24VDC @ 9.2A	16	2.5	10A/250V	3.5A/250V	–	3.5A/250V	–
T3MK7516DV	4.8	5A/250V	15A/32V	20.17-26.4	9.7-13.2	12VDC @ 9.3A 24VDC @ 9.2A	16	2.5	10A/250V	–	2.5A	–	2.5A
T3MK7716V	5.4	5A/250V	15A/32V	20.17-26.4	20.17-26.4	24VDC @ 9.2A	16	2.5	10A/250V	3.5A/250V	–	3.5A/250V	–
T3MK7716DV	5.4	5A/250V	15A/32V	20.17-26.4	20.17-26.4	24VDC @ 9.2A	16	2.5	10A/250V	–	2.5A	–	2.5A

Hardware and Accessories:
- Two (2) tamper switches (Altronix Model TS112 or equivalent).
- Cam lock.
- Battery leads.

Mechanical:
- 16 Gauge enclosure with ample knockouts for convenient access.
- Enclosure Dimensions (H x W x D): 36.12" x 30.125" x 7.06" (917.5mm x 768.1mm x 179.3mm).

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.
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 switches (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.
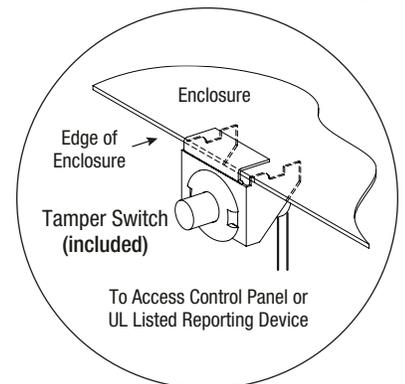**Keep power-limited wiring separate from non power-limited wiring (115VAC 60Hz Input, Battery Wires). Minimum 0.25" spacing must be provided.**
CAUTION: Do not touch exposed metal parts. Shut branch circuit power before installing or servicing equipment. There are no user serviceable parts inside.
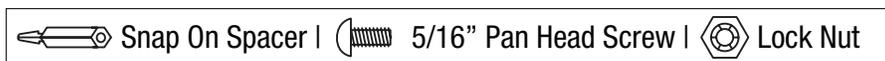**Refer installation and servicing to qualified service personnel.**
5. Measure voltage before connecting devices. This helps avoiding potential damage.
6. Mount Mercury boards to backplane, refer to *pg. 3, 4.*
7. Refer to the *XBV Power Supply/Charger Installation Guide* for AL1024XB2V and AL1012XB220 and corresponding *Sub-Assembly Installation Guides* for PD8UL(CB) and ACM8(CB) for further installation instructions.
8. Position Mercury access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 2-3, pg. 3-4).*
9. Mount backplane to enclosure with hardware.

Fig. 1

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

Hardware:

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

T3MK7516V and T3MK7516DV: Configuration of Mercury Boards:

1. Fasten snap on spacers onto metal pems configuration (A) (B) 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:

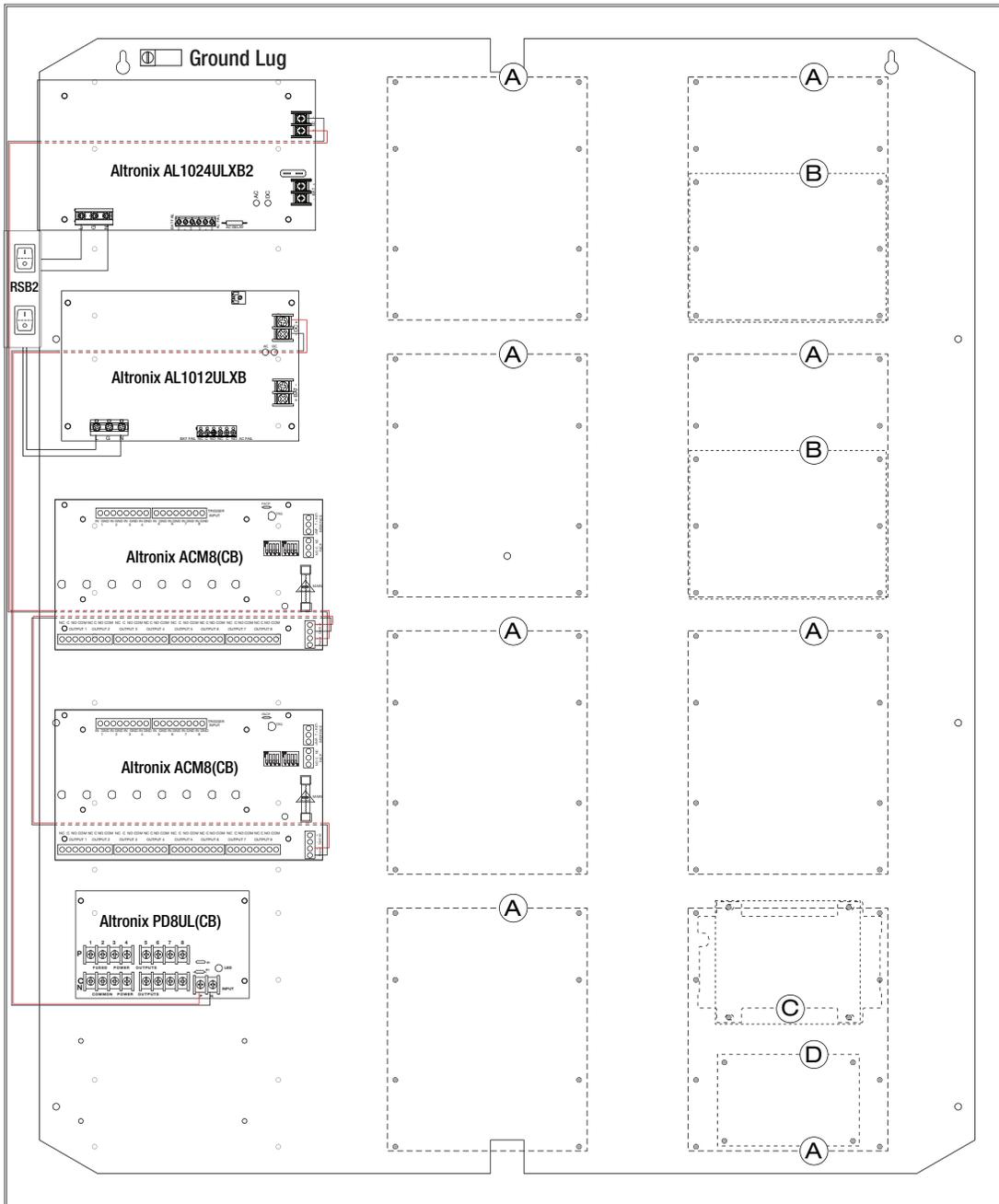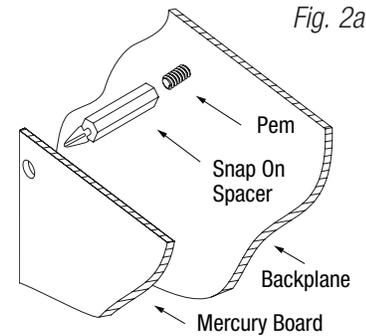| Mercury Access Controller	Pem Mounting
EP1502, MR52, MR16IN, MR16OUT	Ⓐ
EP2500, MUX8	Ⓑ
EP1501, MR51e	Ⓒ
MR52	Ⓓ

Fig. 2

Fig. 2a

T3MK7716V and T3MK7716DV: Configuration of Mercury Boards on TM3:

1. Fasten snap on spacers onto metal pems configuration (A) (B) 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	Ⓐ
EP2500, MUX8	Ⓑ
EP1501, MR51e	Ⓒ
MR52	Ⓓ
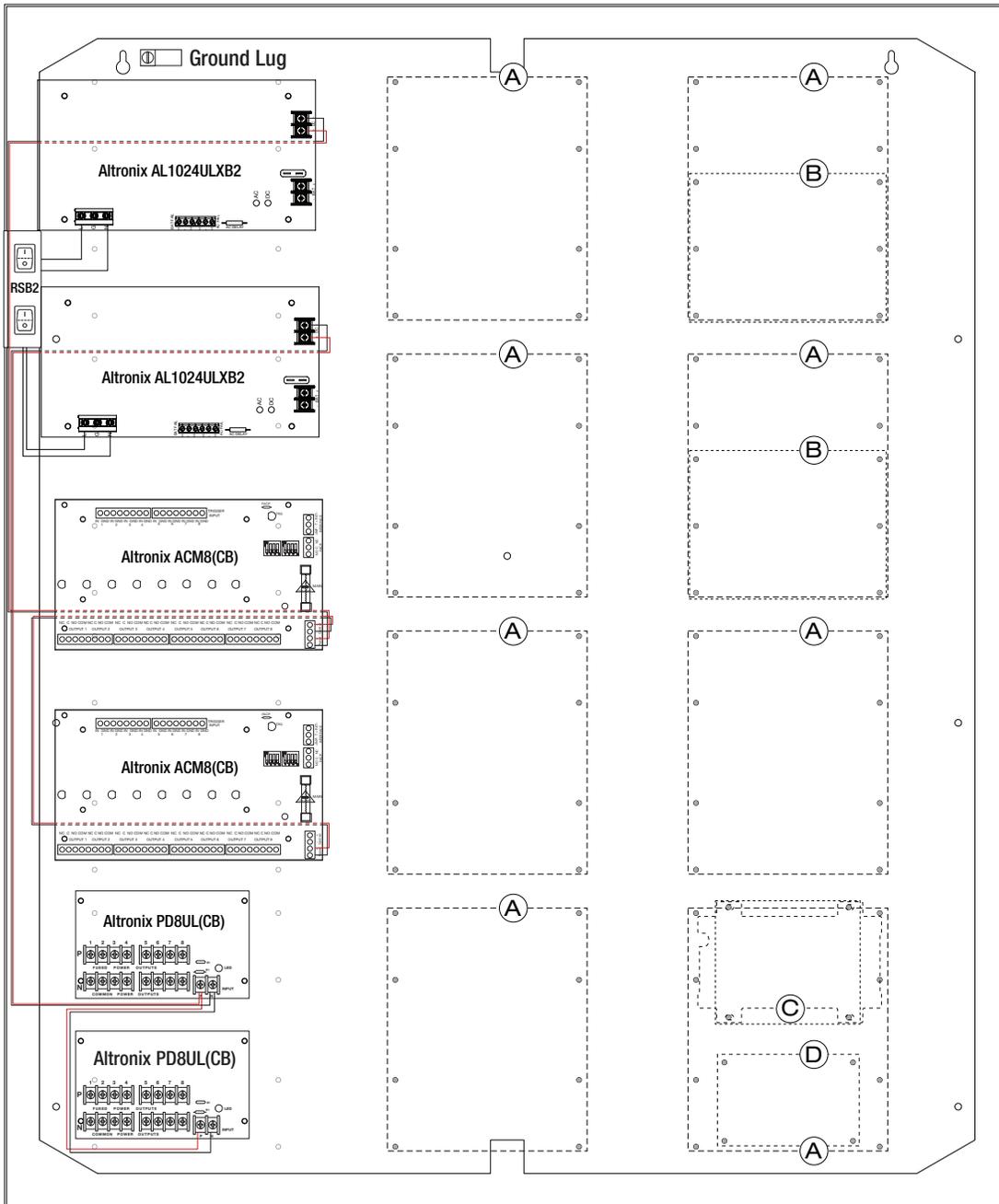
Fig. 3

Fig. 3a
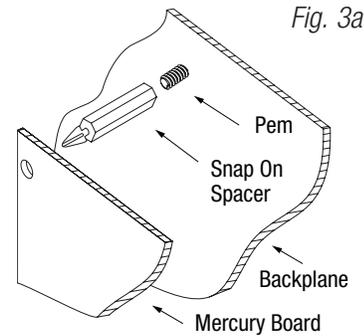
Notes:

Notes:

TM3 Dimensions
34" x 28" x 0.3125" (863.6mm x 711.2mm x 7.9mm)

28" (711.2mm)

2.5" (63.5mm)

0.45" (11.4mm)

⌀ 0.156"
(⌀ 3.96mm)

34" (863.6mm)

25" (635mm)

13.5" (342.9mm)

2" (50.8mm)

1.0" (25.4mm)

1.0" (25.4mm)

13.5"
(342.9mm)

13.5"
(342.9mm)
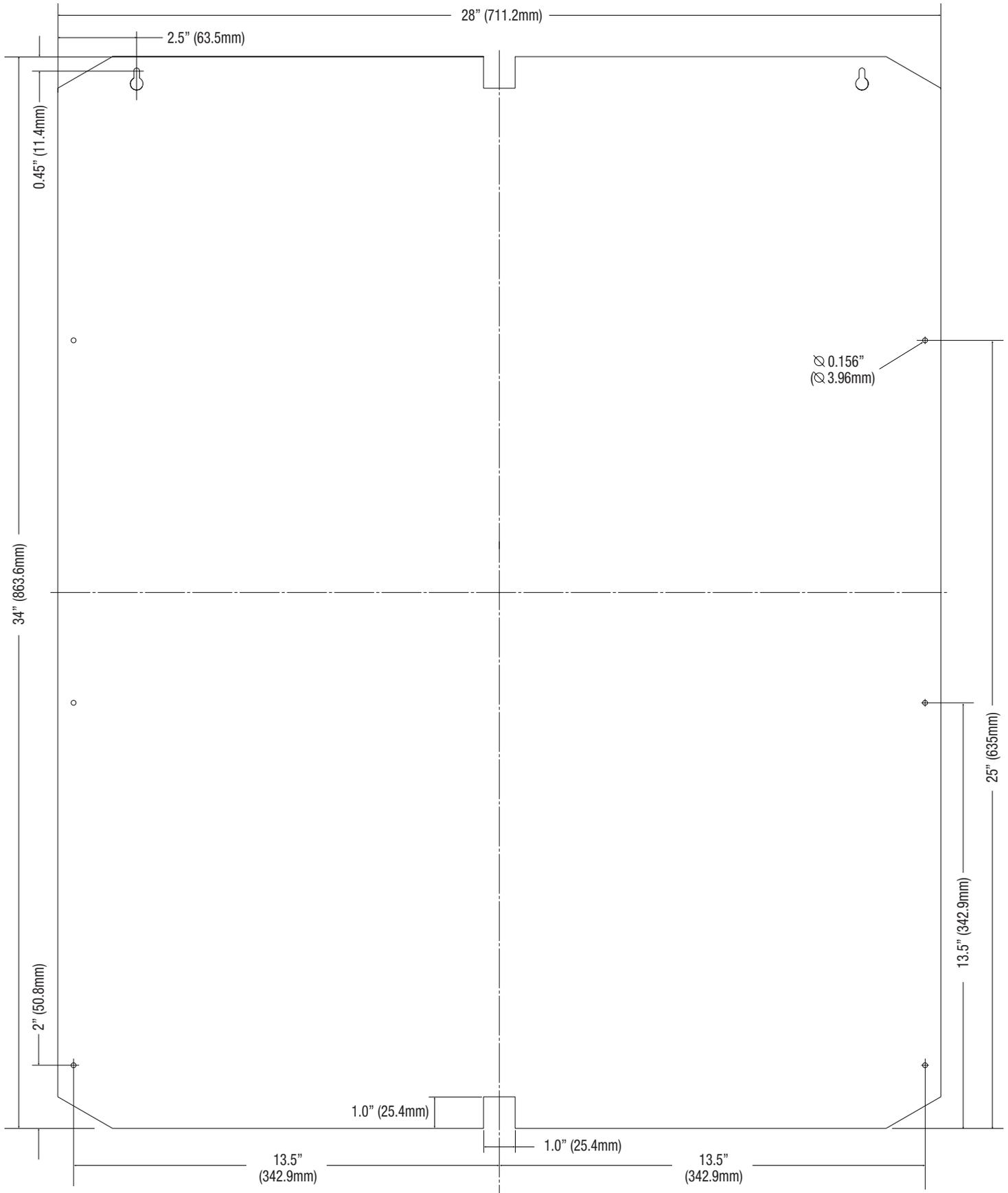
Trove3 Enclosure Dimensions (H x W x D approximate):

36.12" x 30.125" x 7.06" (917.5mm x 768.1mm x 179.3mm)

Top view dimensions:

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

Left side view:

2.00" (50.8mm)
1.25" (31.8mm)
1" Conduit
3/4" Conduit
10.75" (273.1mm)
10.62" (269.8mm)
10.75" (273.1mm)
G
G

Main (back) panel:

1.07" (27.2mm)
30.12" (768.1mm)
14.01" (355.9mm) — 14.01" (355.9mm)
1.10" (27.9mm)
33.63" (854.2mm)

Right side view:

2" (50.8mm)
1" Conduit
3/4" Conduit
10.75" (273.1mm)
10.62" (269.8mm)
10.75" (273.1mm)
36.12" (917.5mm)
1.25" (31.8mm)
7.06" (179.3mm)

Bottom view:

3/4" Conduit
1" Conduit
1.25" (31.8mm)
2" (50.8mm) — 8.75" (222.3mm) — 8.62" (219mm) — 8.75" (222.3mm)

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