TROVE™ PLUS
Access & Power Integration

Altronix/Mercury Wired Rack Kits

Models Include:

T1RM3CK1
4 Door Kit with Fused Outputs
Accommodates one (1) Intelligent Dual Reader Controller and one (1) Dual Reader Interface Module.

Fully assembled kit includes:
- Trove1R rack enclosure with TM1R Altronix/Mercury backplane
- One (1) eFlow6NB - Power Supply/Charger
- One (1) ACM4 - Fused Access Power Controller
- One (1) PDS8 - Dual Input Fused Power Distribution Module
- One (1) VR6 - Voltage Regulator
- Wire harnesses and management

T1RM3CK1D
4 Door Kit with PTC Outputs
Accommodates one (1) Intelligent Dual Reader Controller and one (1) Dual Reader Interface Module.

Fully assembled kit includes:
- Trove1R rack enclosure with TM1R Altronix/Mercury backplane
- One (1) eFlow6NB - Power Supply/Charger
- One (1) ACM4CB - PTC Access Power Controller
- One (1) PDS8CB - Dual Input PTC Power Distribution Module
- One (1) VR6 - Voltage Regulator
- Wire harnesses and management

All components of these Trove kits are UL Listed sub-assemblies.
Please refer to the included corresponding Sub-Assembly Installation Guides for further information.

Installation Guide

CE

Rev. 072423

Altronix®
More than just power.™

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Altronix Trove Mercury wired rack kits are pre-assembled and consist of Trove rack enclosure/backplane with factory installed Altronix power supply/charger and sub-assemblies. They also accommodate a variety of Mercury modules for up to four doors in a single enclosure.

Configuration Chart:

| Altronix Model Number	120VAC 60Hz P/S 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, PDS8(CB) Power Distribution Module and ACM4(CB) Access Power Controller's outputs (A)	Current Per ACM4(CB) Output (A)	ACM4(CB) Board Input Fuse Rating	ACM4(CB) Board Output Fuse (PTC) Rating	Fail-Safe/Fail-Secure or Dry Form "C" Outputs	PDS8(CB) Board Input Fuse (PTC) Rating	PDS8(CB) Board Output Fuse (PTC) Rating
				[DC]	[Aux]							
				24VDC Output Range (V)	24VDC Output Range (V)							
T1RM3CK1	3.5	5A/ 250V	10A/ 32V	20.28-26.4	20.28-26.4	24VDC @ 5.6A	2.5	10A/ 250V	3A/ 32V	4	10A/ 32V	3A/ 32V
T1RM3CK1D							2.0	10A/ 250V	2.5A	4	9A	2.5A

Installation Instructions for T1RM3CK1(D):

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. These products are for indoor use only and must be installed within the protected premises.

Note: First assemble and Install Z Bracket Wire Management Accesory
*(refer to Z Bracket Installation pg. 3)*

1. Remove backplane from enclosure prior to installing into rack cabinet (do not discard hardware).
2. In order to mount included UL Listed tamper switch (Altronix Model TS112 or equivalent) turn the enclosure upside down. Punch out the knockout in designated location, on the back of the unit, from outside of the drawer *(Fig. 1, pg. 2)*. Insert the tamper switch into the knockout from outside of the drawer with the button facing outwards and spaded connectors inside the drawer.
   Connect tamper switch wiring to the Access Control Panel input or the appropriate UL Listed reporting device. To activate alarm signal open the rack drawer.
3. Slide the rack enclosure into an open 2U location in the four post rack cabinet.
4. Utilizing proper fasteners attach front ears to the rack rails.
5. Attach the rear of the adjustable slides to the rear rails of the rack cabinet with the proper fasteners.
6. Secure the rack cover *(Fig. 2a, pg. 2)* and rack drawer to earth ground *(Fig. 2b, pg. 2)*.

Fig. 1
Back of the drawer, viewed from outside.
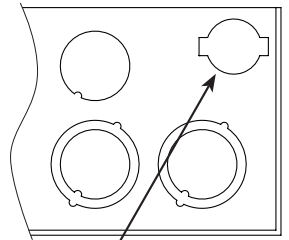
Tamper Switch mounting location

Fig. 2

Fig. 2b

Fig. 2a
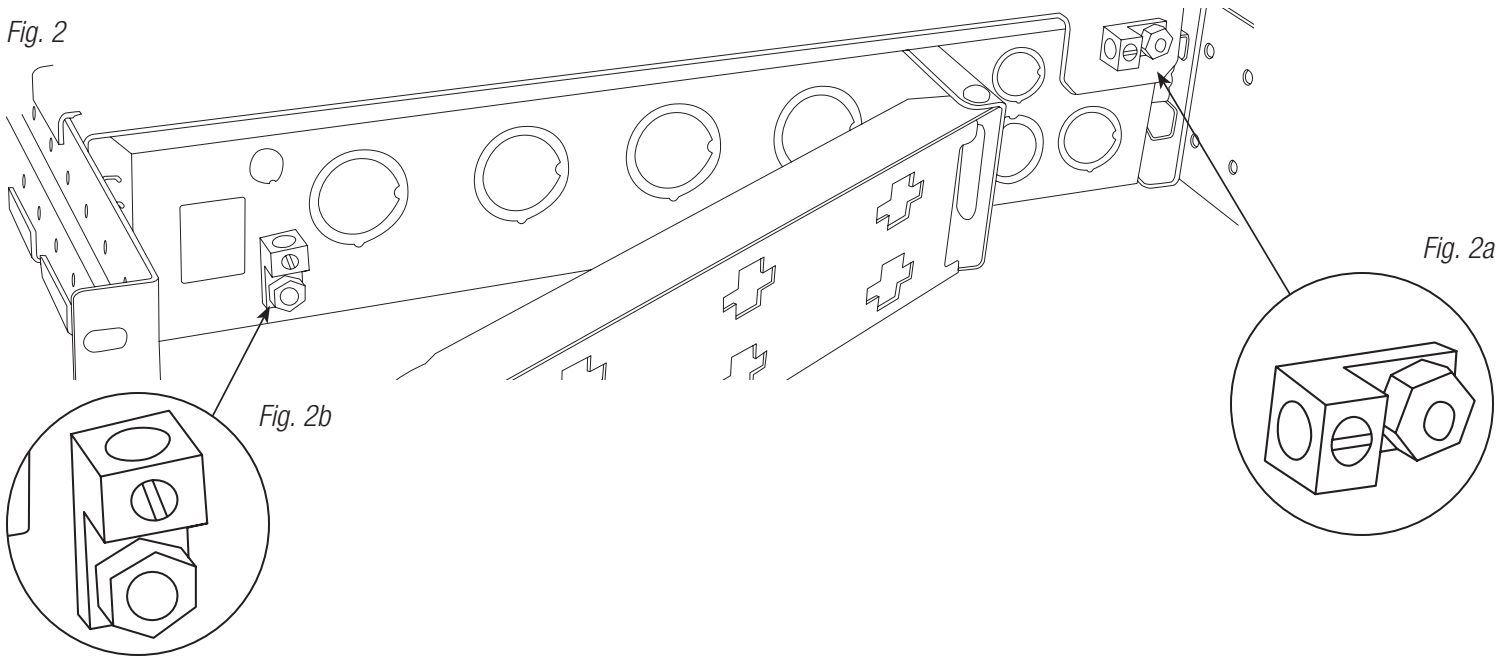
7. Make sure that all internal cofigurations (wiring, voltage selection, switch settings, etc.) are complete before mounting backplane back into enclosure.
8. Refer to the *eFlow Power Supply/Charger Installation Guide* for eFlow6NB and corresponding sub-assembly Installation Guides for the following models: ACM4(CB), PDS8(CB), VR6 for further instructions.

Assembling and Attaching Z Bracket Wire Management Accessory (included):

Altronix Trove Rack enclosures include Z Bracket, a convenient and reliable wire management accessory.

Fig. 3

Hardware (included):

Ten (10) bolts and   eight (8) lock nuts.

1. Carefully unpack Z Bracket. Do not discard hardware (included) *(Fig. 3, pg. 3)*.
2. Attach arms to each other using bolts and lock nuts *(Fig. 3a, pg. 3)*.
3. Attach the hinge brackets to the ends of arms using bolts and nuts positioning them as shown on *(Fig. 3b, pg. 3)*.
4. Make sure that all nuts are tightened.
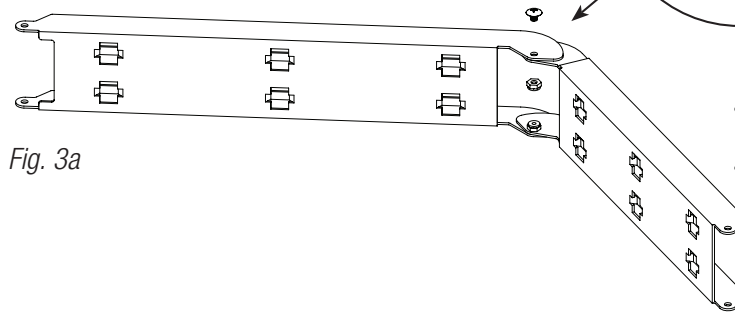
Two (2)
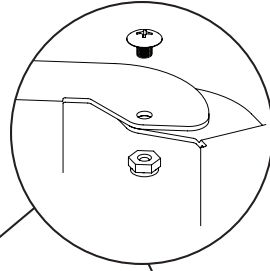
Fig. 3a
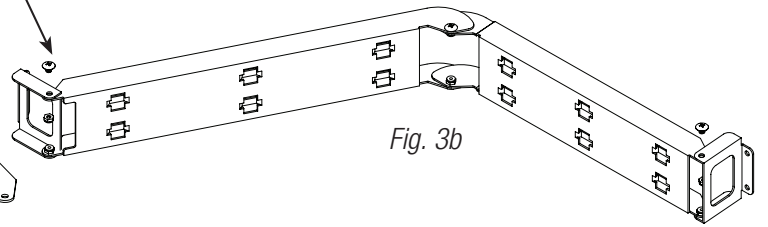
Fig. 3b

5. Attach the hinge bracket on the longer side of Z Bracket to the adjustable slide using bolts and lock nuts (included) *(Fig. 4, 4a, pg. 3)*.
6. Attach the hinge bracket on the shorter side of Z Bracket to the rear of the rack enclosure using bolts (included).
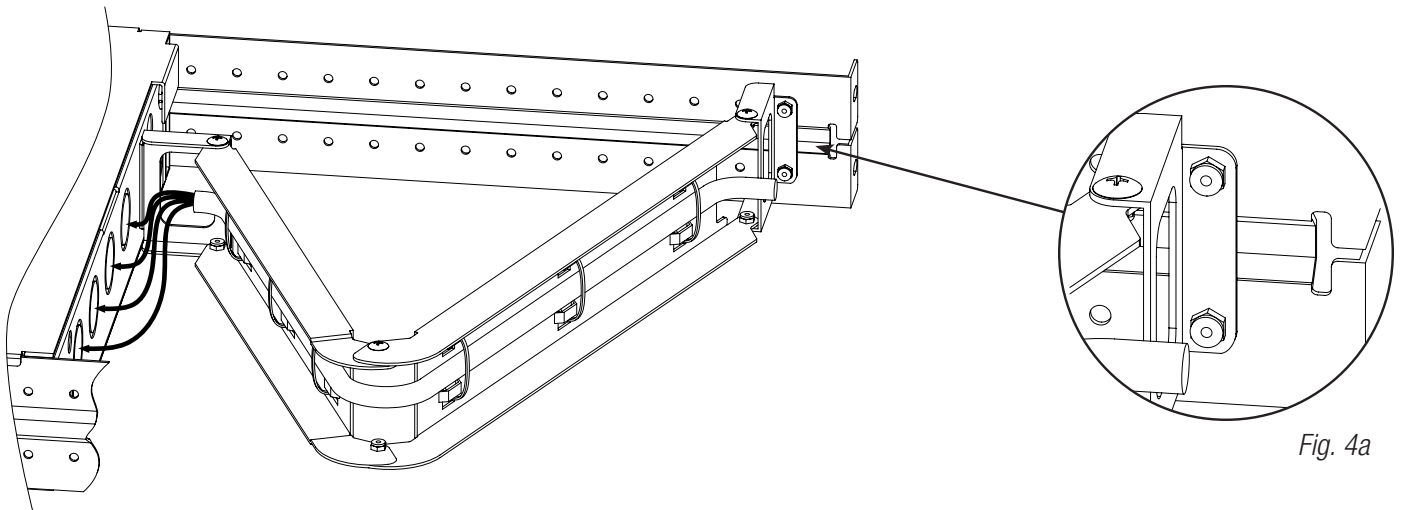
Fig. 4

Fig. 4a

T1RM3CK1(D): Configuration of Mercury Boards:

1. Position access controller module over corresponding spacers and depress onto snap on spacers *(Fig. 5, pg. 4)*.
2. Mount backplane to enclosure with hardware.

Access Controller Position Chart for the Following Models:

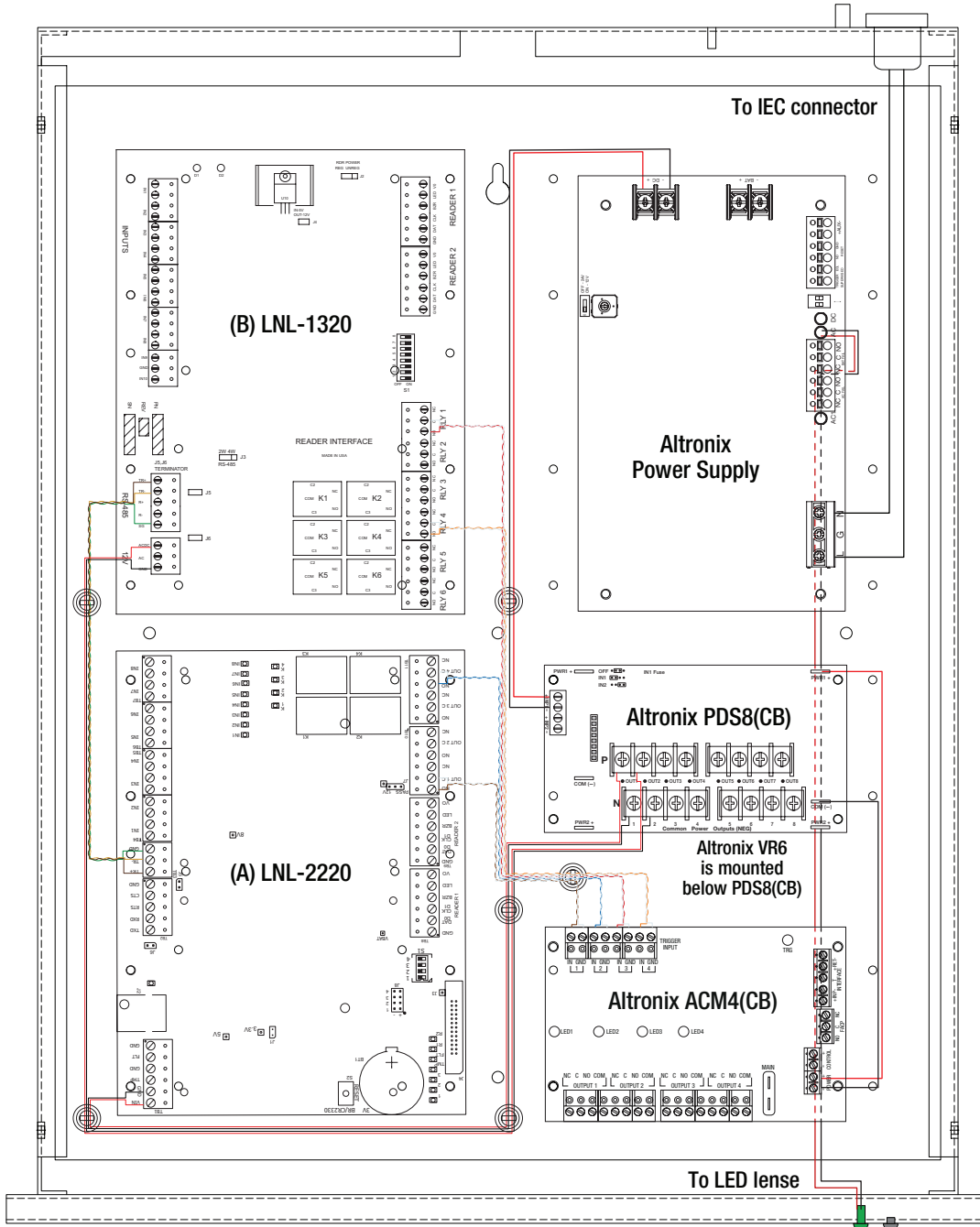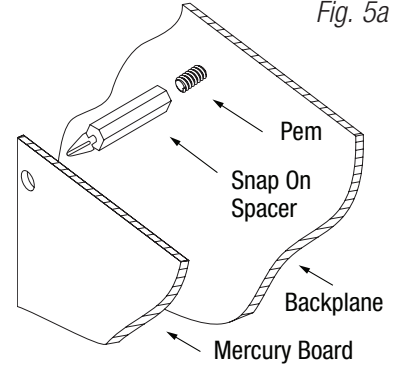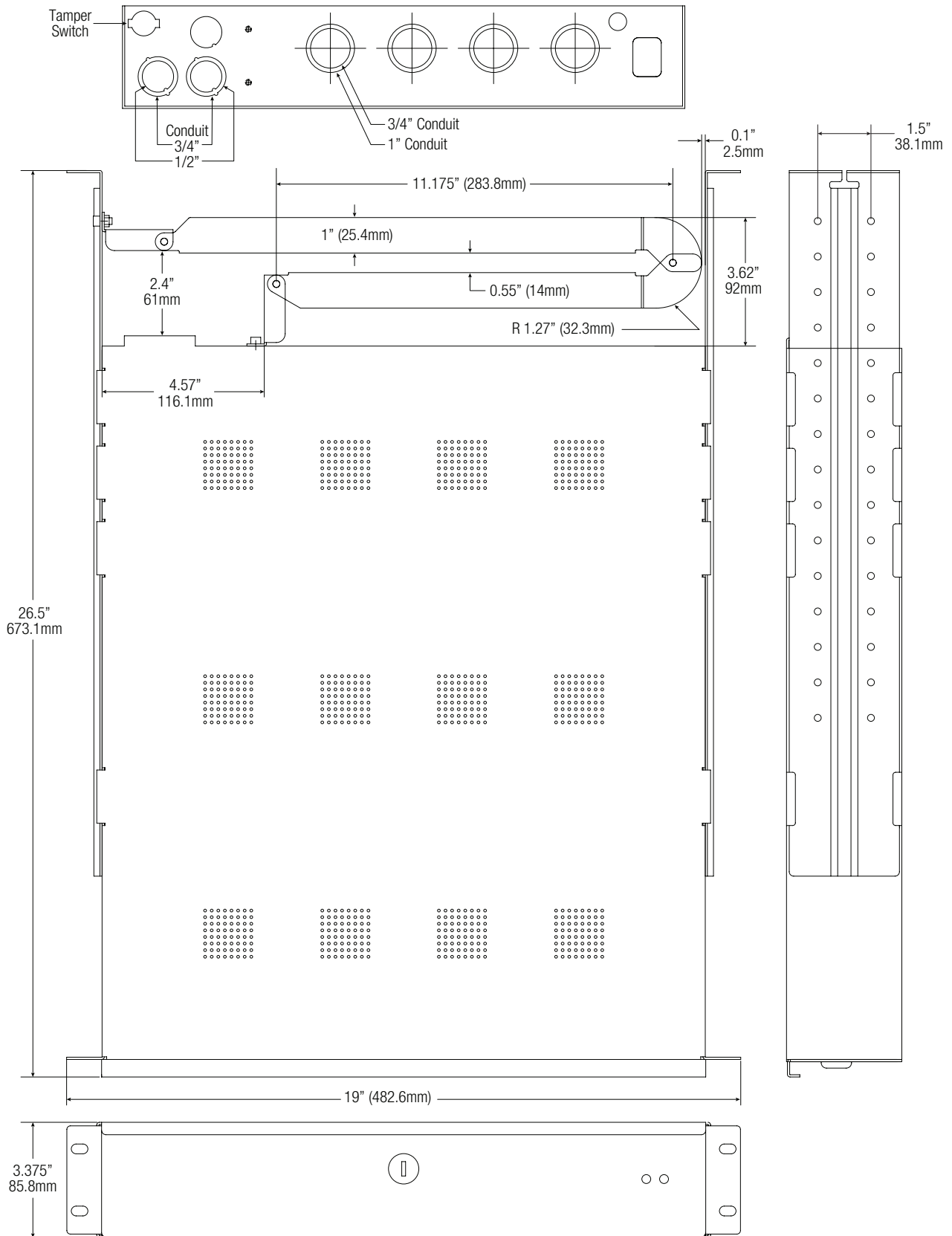| LenelS2 / Mercury Access Controller	Pem Mounting
LNL-2220 / LP1502	Ⓐ
LNL-1320 / MR52	Ⓑ

Fig. 5

Fig. 5a

Notes:

Notes:

Notes:

Trove1R Enclosure Dimensions (H x W x D approximate):

3.375" x 19.0" x 26.5" (85.8mm x 482.6mm x 673.1mm). Shown with Z Bracket attached

Tamper Switch

Conduit
3/4"
1/2"

3/4" Conduit
1" Conduit

0.1"
2.5mm

1.5"
38.1mm

11.175" (283.8mm)

1" (25.4mm)

2.4"
61mm

0.55" (14mm)

3.62"
92mm

R 1.27" (32.3mm)

4.57"
116.1mm

26.5"
673.1mm

19" (482.6mm)

3.375"
85.8mm

G24W

MEMBER

T1RM3CK1(D) Series Installation Guide