TROVE™

Access & Power Integration

Altronix/Mercury Kits

Models Include:

T1MK1F4
4 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove1 enclosure with TM1 Altronix/Mercury backplane
- One (1) eFlow4NB - Power Supply/Charger
- One (1) VR6 - Voltage Regulator
- One (1) ACM4 - Fused Access Power Controller

T1MK1F4Q
4 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove1 enclosure with TM1 Altronix/Mercury backplane
- One (1) eFlow4NB - Power Supply/Charger
- One (1) LINQ2 - Network Communication Module
- One (1) VR6 - Voltage Regulator
- One (1) ACM4 - Fused Access Power Controller

T1MK1F4S
4 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove1 enclosure with TM1 Altronix/Mercury backplane
- One (1) eFlow4NB - Power Supply/Charger
- One (1) VR6 - Voltage Regulator
- One (1) ACM4 - Fused Access Power Controller
- One (1) PDS8 - Dual Input Fused Power Distribution Module

T1MK1F4SQ
4 Door Kit with Fused Outputs

Fully assembled kit includes:
- Trove1 enclosure with TM1 Altronix/Mercury backplane
- One (1) eFlow4NB - Power Supply/Charger
- One (1) LINQ2 - Network Communication Module
- One (1) VR6 - Voltage Regulator
- One (1) ACM4 - Fused Access Power Controller
- One (1) PDS8 - Dual Input Fused Power Distribution Module

T1MK1F4D
4 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove1 enclosure with TM1 Altronix/Mercury backplane
- One (1) eFlow4NB - Power Supply/Charger
- One (1) VR6 - Voltage Regulator
- One (1) ACM4CB - PTC Access Power Controller

T1MK1F4DQ
4 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove1 enclosure with TM1 Altronix/Mercury backplane
- One (1) eFlow4NB - Power Supply/Charger
- One (1) LINQ2 - Network Communication Module
- One (1) VR6 - Voltage Regulator
- One (1) ACM4CB - PTC Access Power Controller

T1MK1F4SD
4 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove1 enclosure with TM1 Altronix/Mercury backplane
- One (1) eFlow4NB - Power Supply/Charger
- One (1) VR6 - Voltage Regulator
- One (1) ACM4CB - PTC Access Power Controller
- One (1) PDS8CB - Dual Input PTC Power Distribution Module

T1MK1F4SDQ
4 Door Kit with PTC Outputs

Fully assembled kit includes:
- Trove1 enclosure with TM1 Altronix/Mercury backplane
- One (1) eFlow4NB - Power Supply/Charger
- One (1) LINQ2 - Network Communication Module
- One (1) VR6 - Voltage Regulator
- One (1) ACM4CB - PTC Access Power Controller
- One (1) PDS8CB - Dual Input PTC Power Distribution Module

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

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More than just power.™

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Rev. T1MK_081523

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Altronix Trove Mercury kits are pre-assembled and consist of Trove1M1 enclosure/backplane with factory installed Altronix power supply/charger and sub-assemblies. These kits also accommodate various combinations of Mercury boards for up to four (4) doors in a single enclosure.

Configuration Chart:

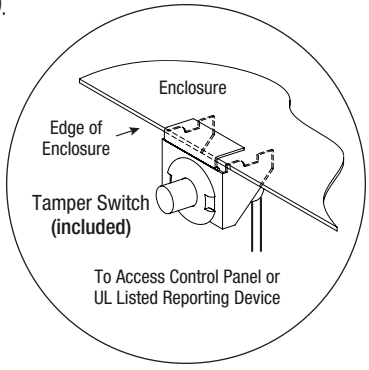
Altronix Model Number	Networkable	120VAC 60Hz Input Current (A)	Power Supply Board Input Fuse Rating	Power Supply Board Battery Fuse Rating	Nominal DC Output Voltage [DC] 24VDC Output Range (V)	Nominal DC Output Voltage [Aux] 24VDC Output Range (V)	Maximum Supply Current for Main and Aux. Outputs on Power Supply board and ACM4/ACM4CB Access Power Controller's outputs (A)	Fail-Safe/Fail-Secure Outputs	Current Per ACM4(CB) Output (A)	ACM4(CB) Board Input Fuse (PTC) Rating	ACM4(CB) Board Output Fuse (PTC) Rating	PDS8(CB) Board Input Fuse (PTC) Rating	PDS8(CB) Board Output Fuse (PTC) Rating
T1MK1F4	–	3.5	5A/ 250V	7.5A/ 32V	20.28-26.4	20.28-26.4	24VDC @ 3.6A	4	2.5	10A/ 32V	3A/ 32V	–	–
T1MK1F4Q	✓	3.5	5A/ 250V	7.5A/ 32V	20.28-26.4	20.28-26.4	24VDC @ 3.6A	4	2.5	10A/ 32V	3A/ 32V	–	–
T1MK1F4D	–	3.5	5A/ 250V	7.5A/ 32V	20.28-26.4	20.28-26.4	24VDC @ 3.6A	4	2.0	9A	2.5A	–	–
T1MK1F4DQ	✓	3.5	5A/ 250V	7.5A/ 32V	20.28-26.4	20.28-26.4	24VDC @ 3.6A	4	2.0	9A	2.5A	–	–
T1MK1F4S	–	3.5	5A/ 250V	7.5A/ 32V	20.28-26.4	20.28-26.4	24VDC @ 3.6A	4	2.5	10A/ 32V	3A/ 32V	10A/ 32V	3A/ 32V
T1MK1F4SQ	✓	3.5	5A/ 250V	7.5A/ 32V	20.28-26.4	20.28-26.4	24VDC @ 3.6A	4	2.5	10A/ 32V	3A/ 32V	10A/ 32V	3A/ 32V
T1MK1F4SD	–	3.5	5A/ 250V	7.5A/ 32V	20.28-26.4	20.28-26.4	24VDC @ 3.6A	4	2.0	9A	2.5A	9A	2.5A
T1MK1F4SDQ	✓	3.5	5A/ 250V	7.5A/ 32V	20.28-26.4	20.28-26.4	24VDC @ 3.6A	4	2.0	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.
2. Mark and predrill holes in the wall to line up with the top two (2) keyholes in the enclosure. Install two upper fasteners and screws in the wall with the screw heads protruding. Place the enclosure's upper keyholes over the two upper screws; level and secure. Mark the position of the lower two holes. Remove the enclosure. Drill the lower holes and install the two fasteners. Place the enclosure's upper keyholes over the three upper screws. Install the two lower screws and make sure to tighten all screws.
3. Mount included UL Listed tamper switch (Altronix Model T112 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 (120VAC 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 (120VAC 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. Position Mercury access controller modules over corresponding spacers and depress onto snap on spacers, *Fig. 2-5, pg. 3-6.*
7. Refer to the *eFlow Power Supply/Charger Installation Guide* for eFlow4NB, and corresponding Sub-Assembly Installation Guide for LINQ2, ACM4(CB), PDS8(CB) and VR6 for further installation instructions.
8. Mount backplane to enclosure with hardware.

Fig. 1



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

T1MK1F4 and T1MK1F4D: 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, LP1502, MR52, MR16IN, MR16OUT	(A)
EP1501, LP1501, MR51e, MR62e	(B)
MR50	(C)
EP2500, LP2500, MUX8	(D)

Fig. 2

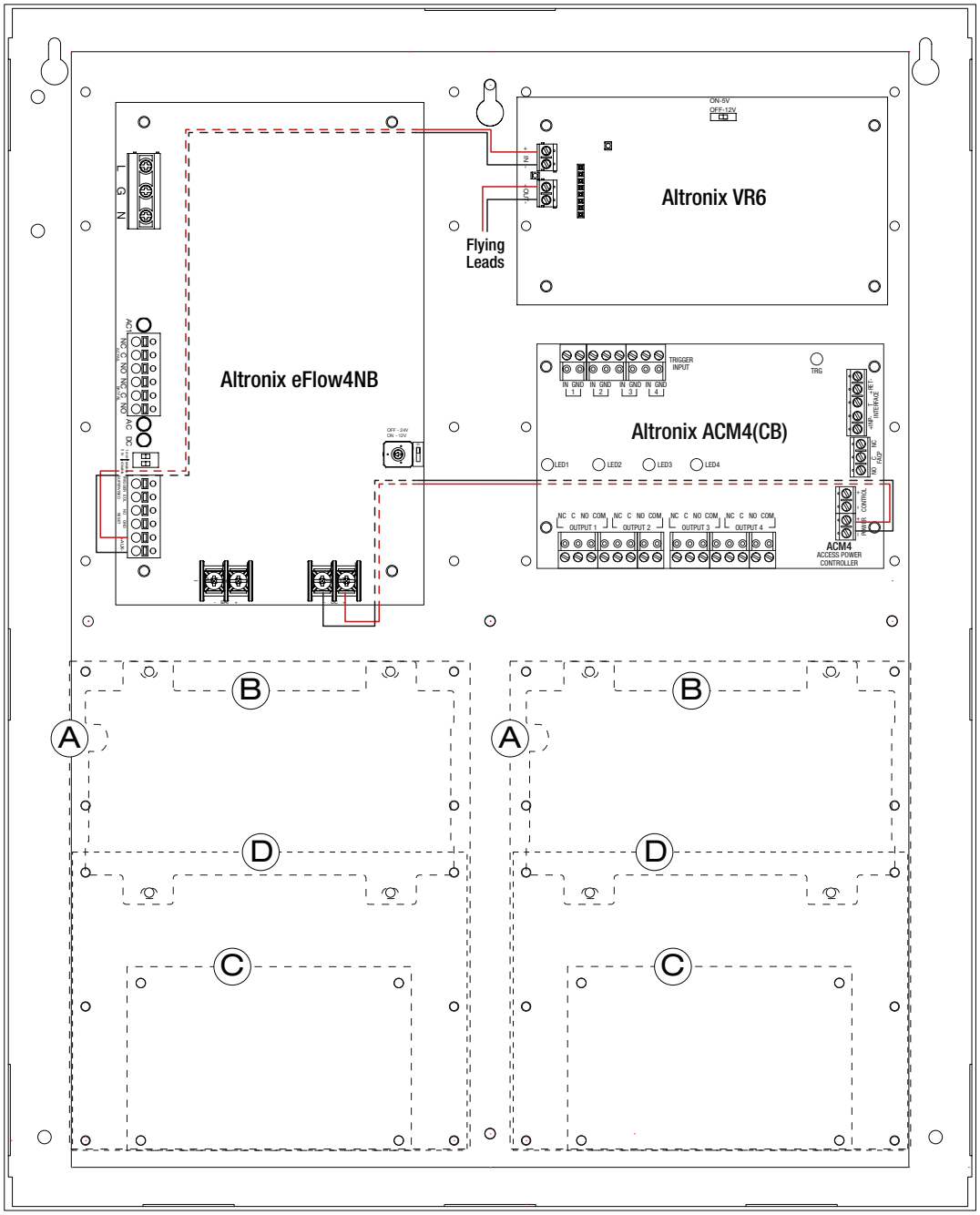
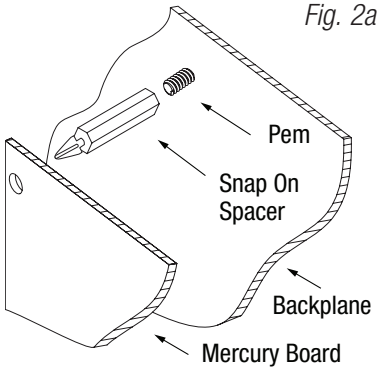


Fig. 2a



T1MK1F4Q and T1MK1F4DQ: 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, LP1502, MR52, MR16IN, MR16OUT	(A)
EP1501, LP1501, MR51e, MR62e	(B)
MR50	(C)
EP2500, LP2500, MUX8	(D)

Fig. 3

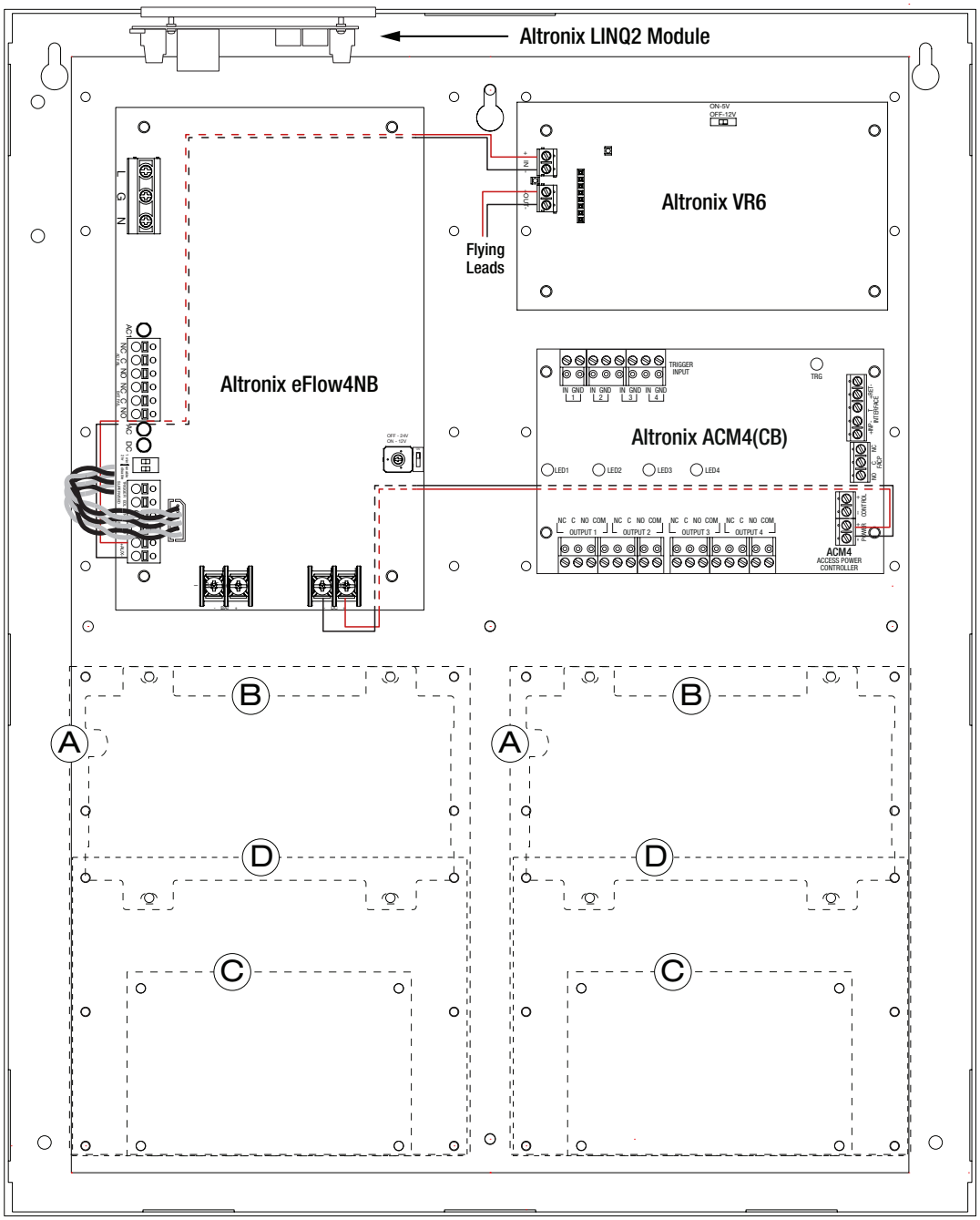
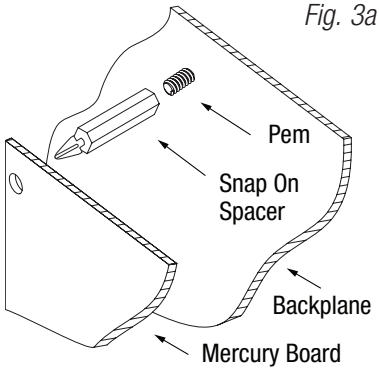


Fig. 3a



T1MK1F4S and T1MK1F4SD: 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, LP1502, MR52, MR16IN, MR16OUT	(A)
EP1501, LP1501, MR51e, MR62e	(B)
MR50	(C)
EP2500, LP2500, MUX8	(D)

Fig. 4

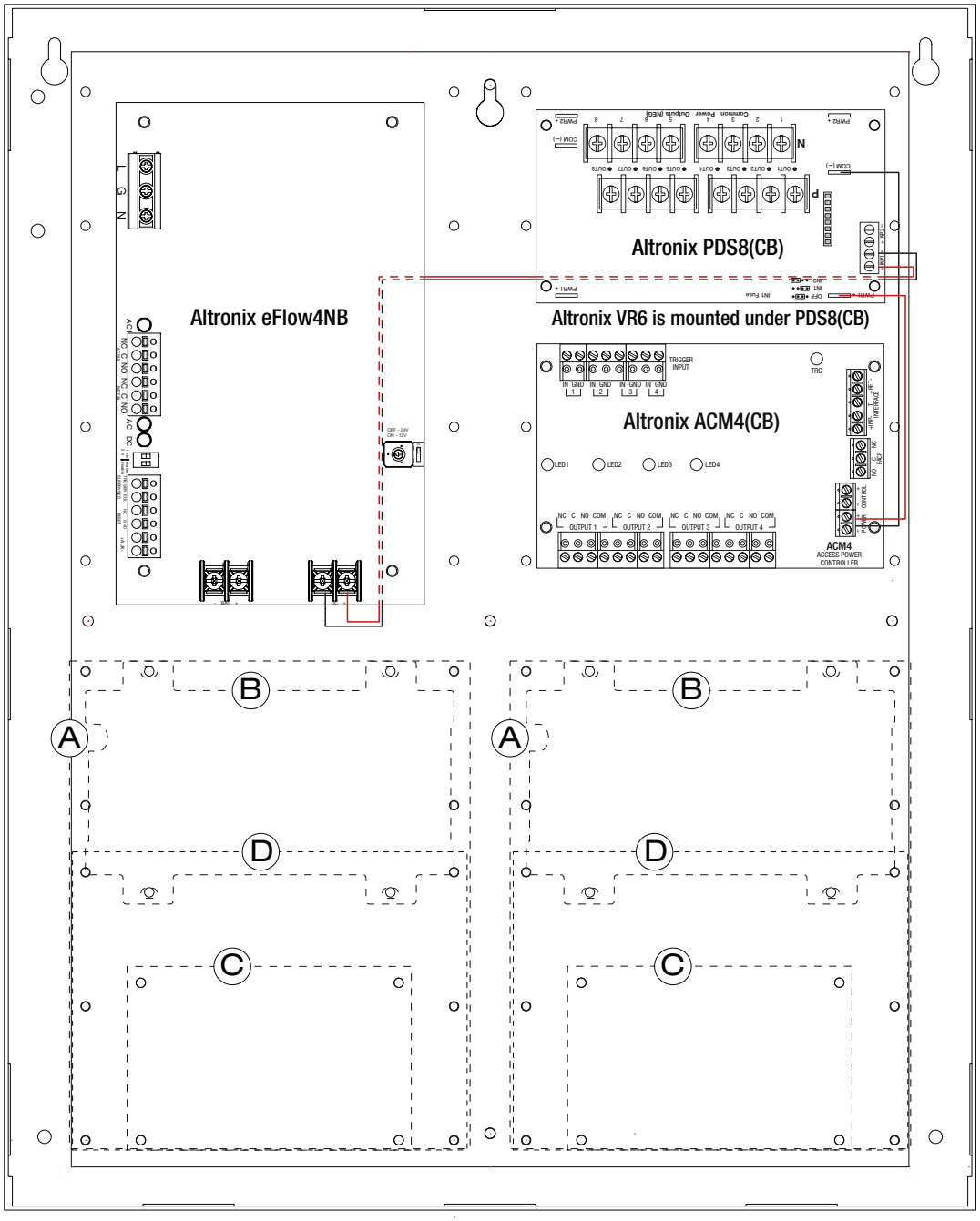
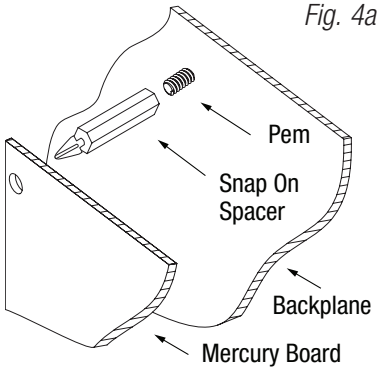


Fig. 4a



T1MK1F4SQ and T1MK1F4SDQ: 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, LP1502, MR52, MR16IN, MR16OUT	(A)
EP1501, LP1501, MR51e, MR62e	(B)
MR50	(C)
EP2500, LP2500, MUX8	(D)

Fig. 5

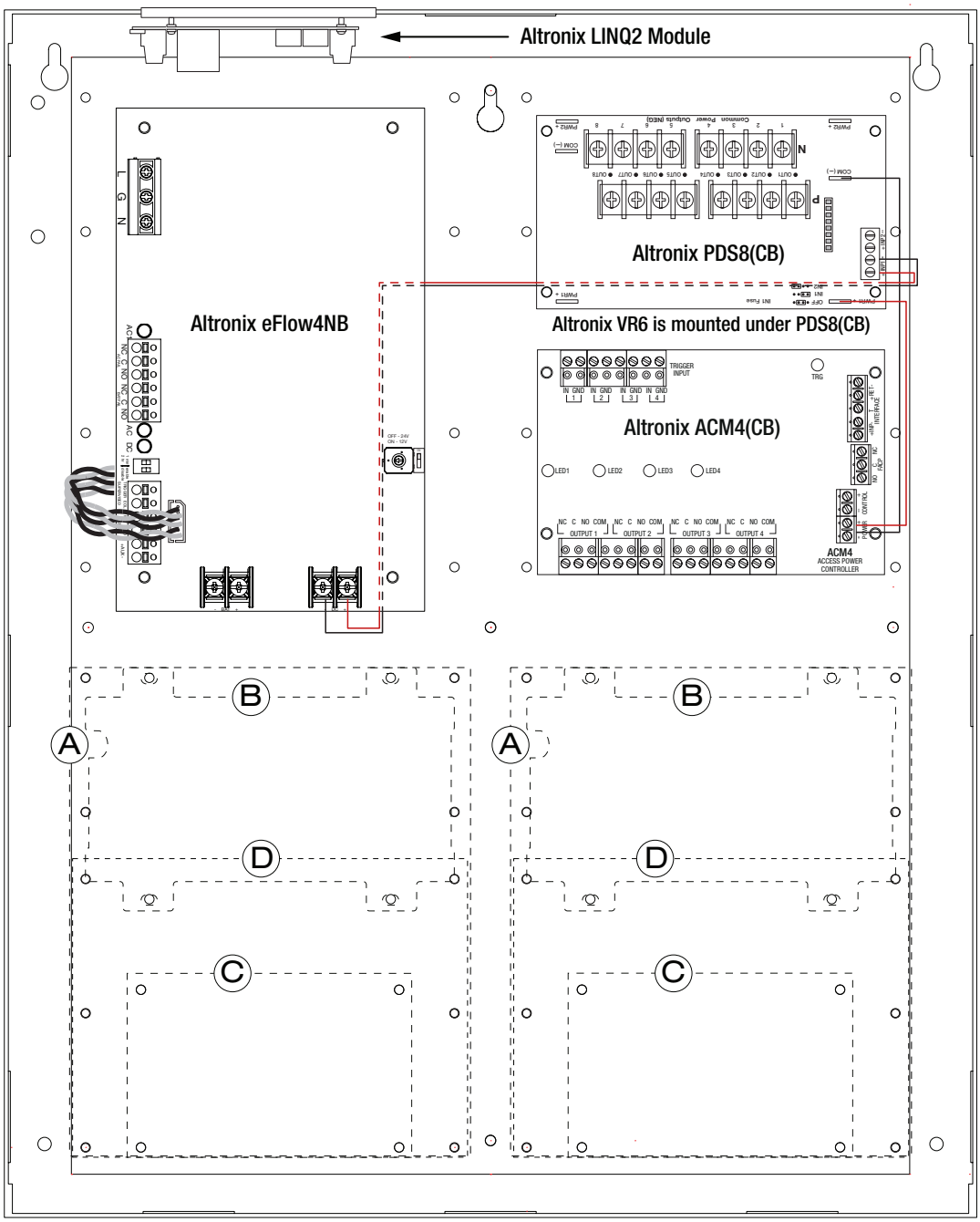
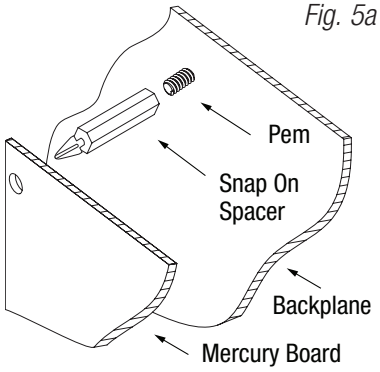


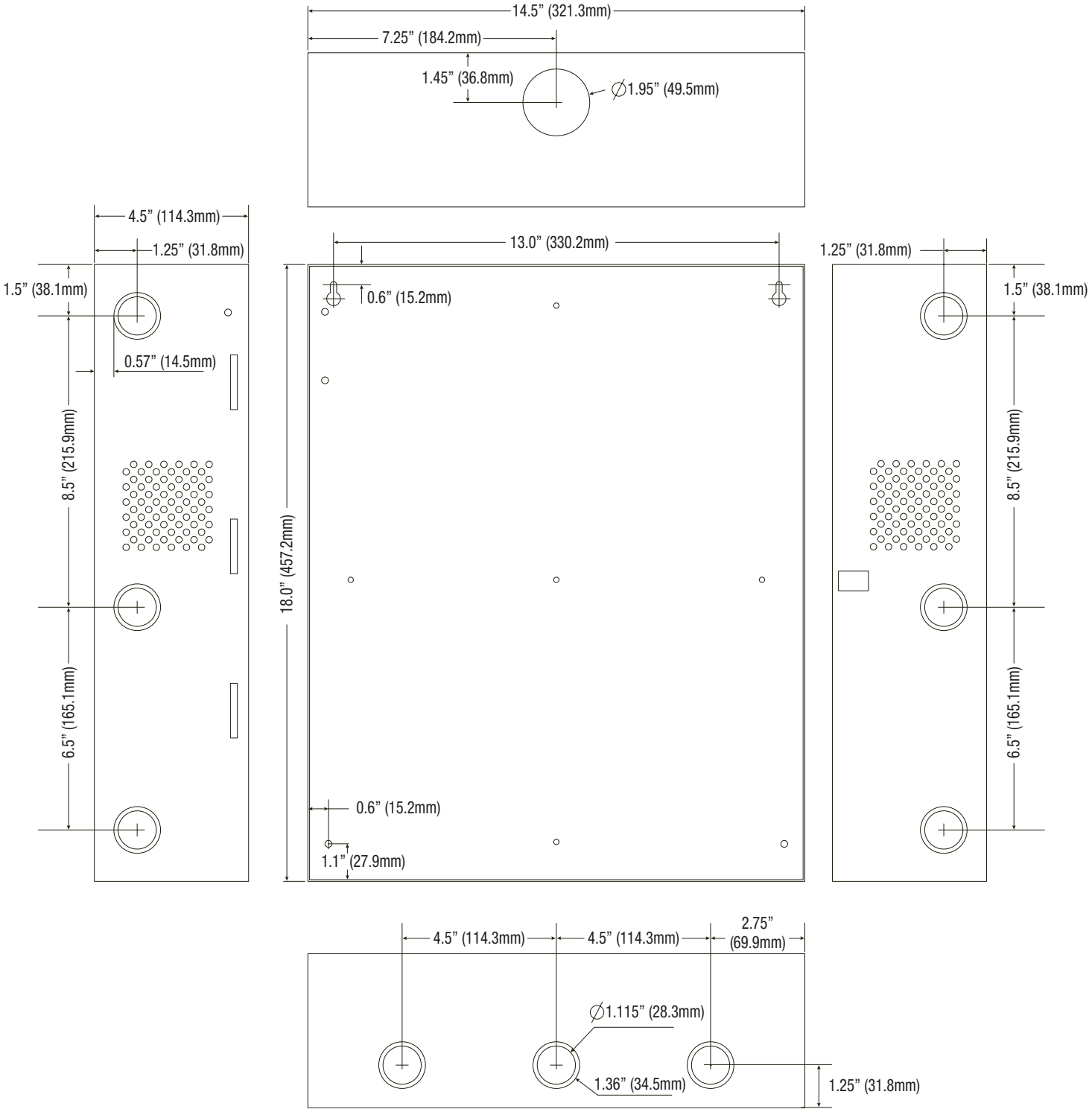
Fig. 5a



Notes:

Trove1 Enclosure Dimensions (H x W x D approximate)**:**

18” x 14.5” x 4.625” (457mm x 368mm x 118mm)



Altronix is not responsible for any typographical errors. Product specifications are subject to change without notice.

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