TROVE™

Access & Power Integration

Altronix/Rhombus Kits

Models Include:

T1CRK3F4

4 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove1 Enclosure with TDR1 Backplane
- One (1) eFlow6NB - Power Supply/Charger
- One (1) VR6 - Voltage Regulator
- One (1) ACM4 - Fused Access Power Controller
- One (1) PDS8 - Dual Input Fused Power Distribution Module

T1CRK3F4D

4 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove1 Enclosure with TDR1 Backplane
- One (1) eFlow6NB - Power Supply/Charger
- One (1) VR6 - Voltage Regulator
- One (1) ACM4CB - PTC Access Power Controller
- One (1) PDS8CB - Dual Input PTC Power Distribution Module

T2CRK7F8S

8 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove2 enclosure with TDR2 backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACMS8 - Dual Input Fused Access Power Controller
- One (1) VR10 - Voltage Regulator
- One (1) PDS8 - Dual Input Fused Power Distribution Module

T2CRK7F8SD

8 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove2 enclosure with TDR2 backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) ACMS8CB - Dual Input PTC Access Power Controller
- One (1) VR10 - Voltage Regulator
- One (1) PDS8CB - Dual Input PTC Power Distribution Module

T2CRK75F12

12 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove2 enclosure with TDR2 backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) eFlow102NB - Power Supply/Charger
- One (1) ACMS12 - Dual Input Fused Access Power Controller
- One (1) PDS16 - Dual Input Fused Power Distribution Module

T2CRK75F12D

12 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove2 enclosure with TDR2 backplane
- One (1) eFlow104NB - Power Supply/Charger
- One (1) eFlow102NB - Power Supply/Charger
- One (1) ACMS12CB - Dual Input PTC Access Power Controller
- One (1) PDS16CB - Dual Input PTC Power Distribution Module

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

Installation Guide

CE

Altronix®

More than just power.™

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Rev. TCRK_070125

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Trove Rhombus kits are pre-assembled and consists of Trove enclosures/backplanes with factory installed Altronix sub-assemblies. These kits also accommodate Rhombus DC20 for up to twelve (12) doors in a single enclosure.

Configuration Chart:

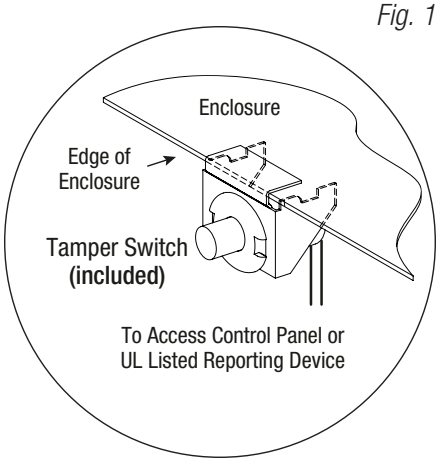
Altronix Model Number	120VAC 60Hz Input Current (A)	Power Supply Board Input Fuse Rating	Power Supply Board Battery Fuse Rating	Nominal DC Output Voltage				Maximum Supply Current for Main and Aux. Outputs on Power Supply board and Access Power Controller's outputs	Fail-Safe/Fail-Secure or Dry Form "C" Outputs	Current Per Access Power Controller's output (A)	Access Power Controller's Input Fuse (PTC) Rating	Access Power Controller's Output Fuse (PTC) Rating	Power Distribution Module's Input Fuse (PTC) Rating	Power Distribution Module's Output Fuse (PTC) Rating
				Power Supply 1		Power Supply 2								
				[DC]	[Aux]	[DC]	[Aux]							
				Output Range (VDC)	Output Range (VDC)	Output Range (VDC)	Output Range (VDC)							
T1CRK3F4	3.5	5A/ 250V	105A/ 32V	20.17-26.4	20.28-26.4	–	–	24VDC @ 6.6A	4	2.5	10A/ 32V	3A/ 32V	10A/ 32V	3A/ 32V
T1CRK3F4D						–	–				9A	2.5A	9A	2.5A
T2CRK7F8S	4.5	6.3A/ 250V	15A/ 32V	20.17-26.4	20.28-26.4	–	–	24VDC @ 9.4A	8	2.5	15A/ 32V	3A/ 32V	10A/ 32V	3A/ 32V
T2CRK7F8SD						–	–				9A	2.5A	9A	2.5A
T2CRK75F12	8	6.3A/ 250V 5A/ 250V	15A/ 32V	20.17-26.4	20.28-26.4	9.7-13.2	10.03-13.2	24VDC @ 9.6A 124VDC @ 9.4A	16	2.5	15A/ 32V	3A/ 32V	10A/ 32V	3A/ 32V
T2CRK75F12D											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/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 two/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. 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. Mount Rhombus access controller modules onto backplane, refer to *pg. 3-5*.
7. After mounting Rhombus modules, attach backplane back to the enclosure using included 5/8" metal spaces and screws.
8. Refer to the *eFlow Power Supply/Charger Installation Guide* for eFlow6NB, eFlow102NB and eFlow104NB and corresponding *Sub-Assembly Installation Guides* for ACM4(CB), ACMS8(CB), ACMS12(CB), PDS8(CB), PDS16(CB) and VR10 for further installation instructions.

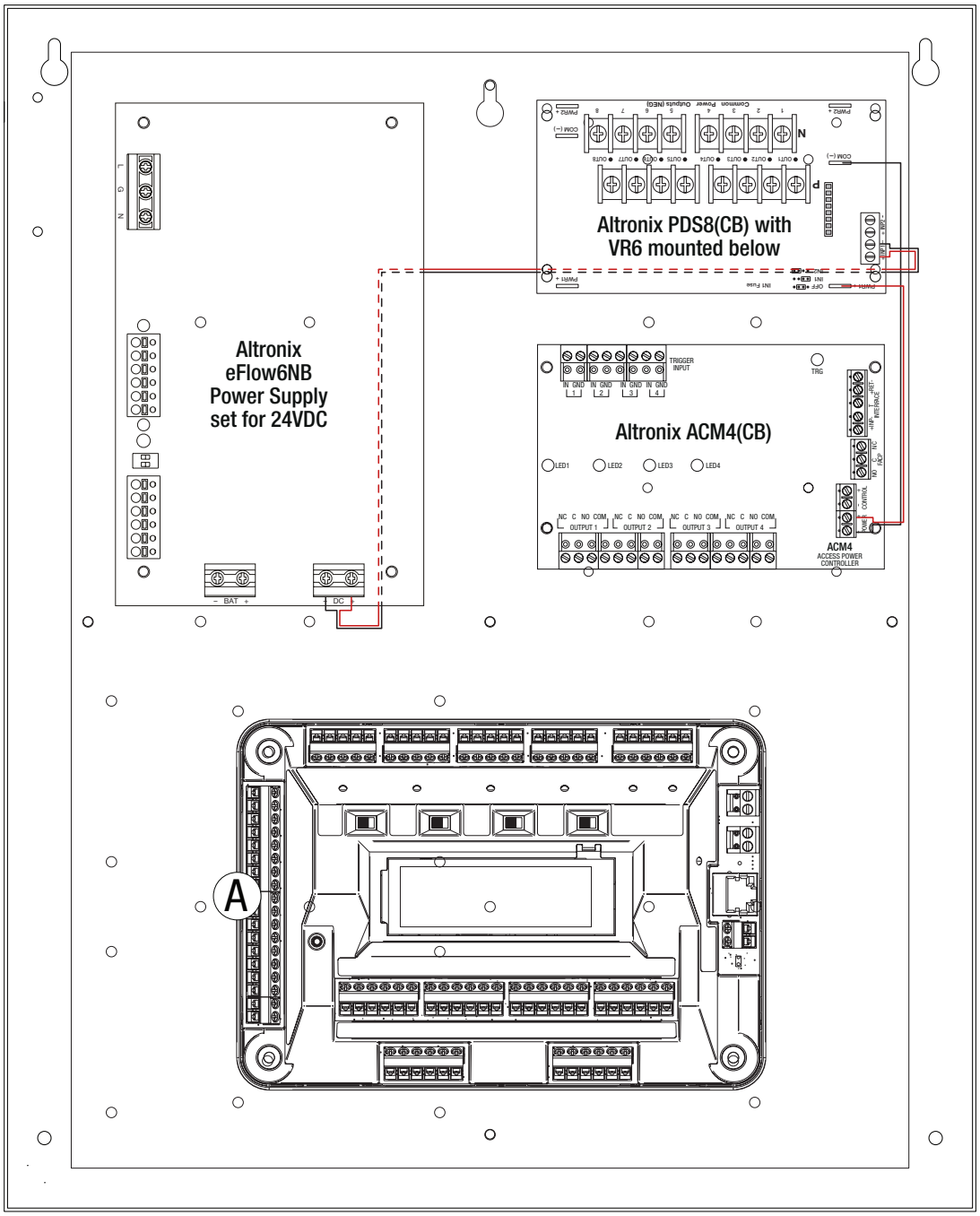
Fig. 1



T1CRK3F4(D): Installation Instructions for Rhombus DC20 Access Controllers on TDR1:

1. Insert screw (provided) into hole configuration (A) for Rhombus DC20 from the backside of backplane *(Fig. 2a, pg. 3)*. Screw 1" nylon spacer onto screw, repeat for additional three (3) board mounting holes.
2. Mount boards to spacers utilizing 5/8" pan head screws (provided) *(Fig. 2, pg. 3)*.
3. Fasten TDR1 backplane to Trove1 enclosure utilizing lock nuts (provided by Altronix).

Fig. 2



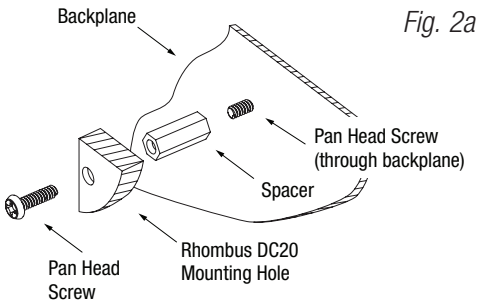
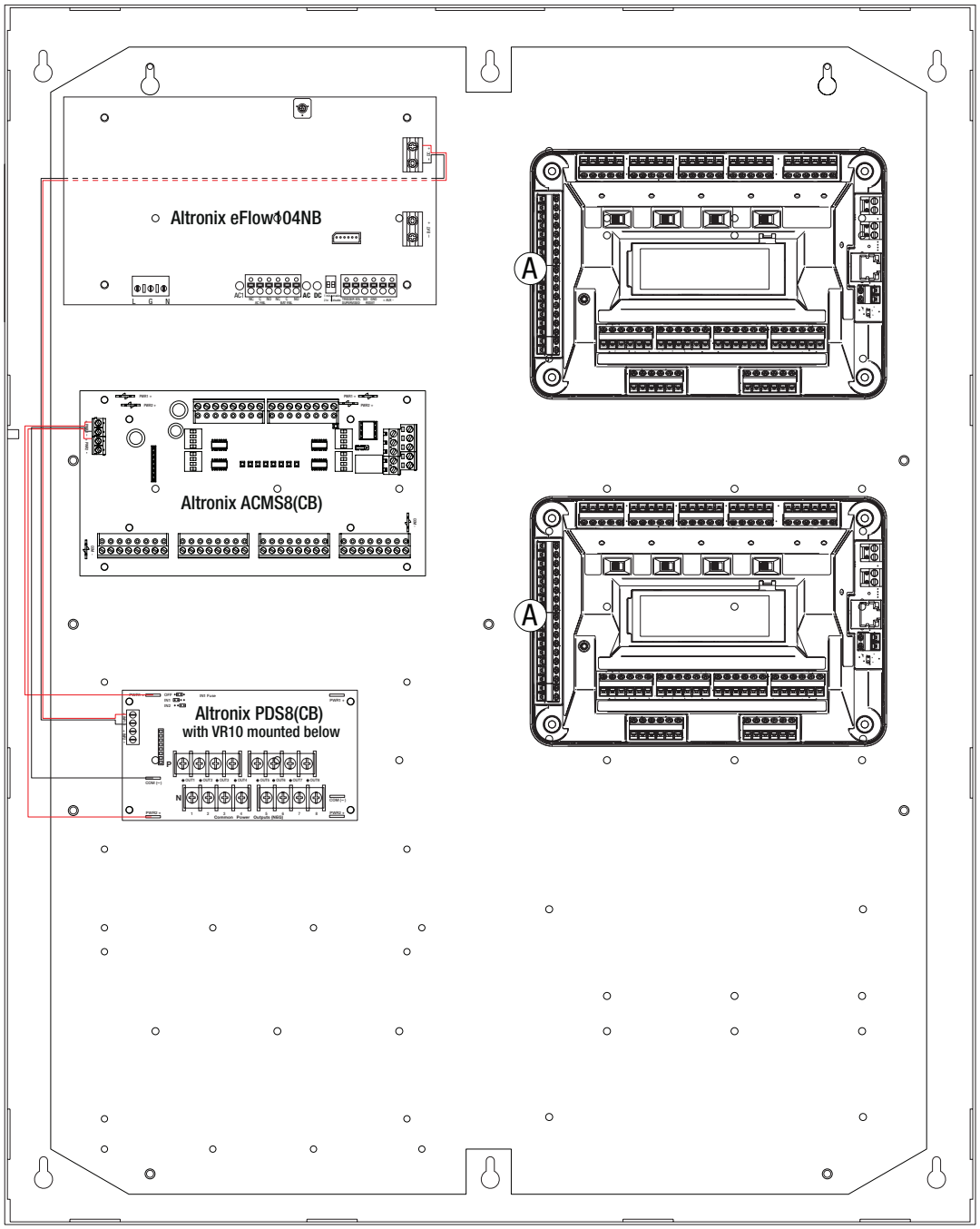


Fig. 2a

T2CRK7F8S(D): Installation Instructions for Rhombus DC20 Access Controllers on TDR2:

1. Insert screw (provided) into hole configuration (A) for Rhombus DC20 from the backside of backplane *(Fig. 3a, pg. 4)*. Screw 1" nylon spacer onto screw, repeat for additional three (3) board mounting holes.
2. Mount boards to spacers utilizing 5/8" pan head screws (provided) *(Fig. 3, pg. 4)*.
3. Fasten TDR2 backplane to Trove2 enclosure utilizing lock nuts (provided by Altronix).

Fig. 3



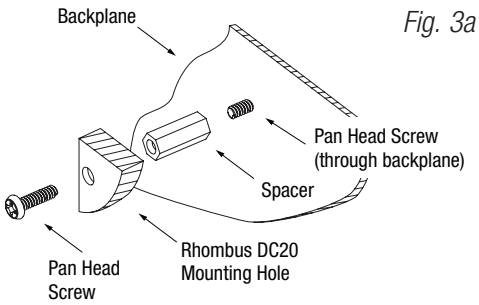
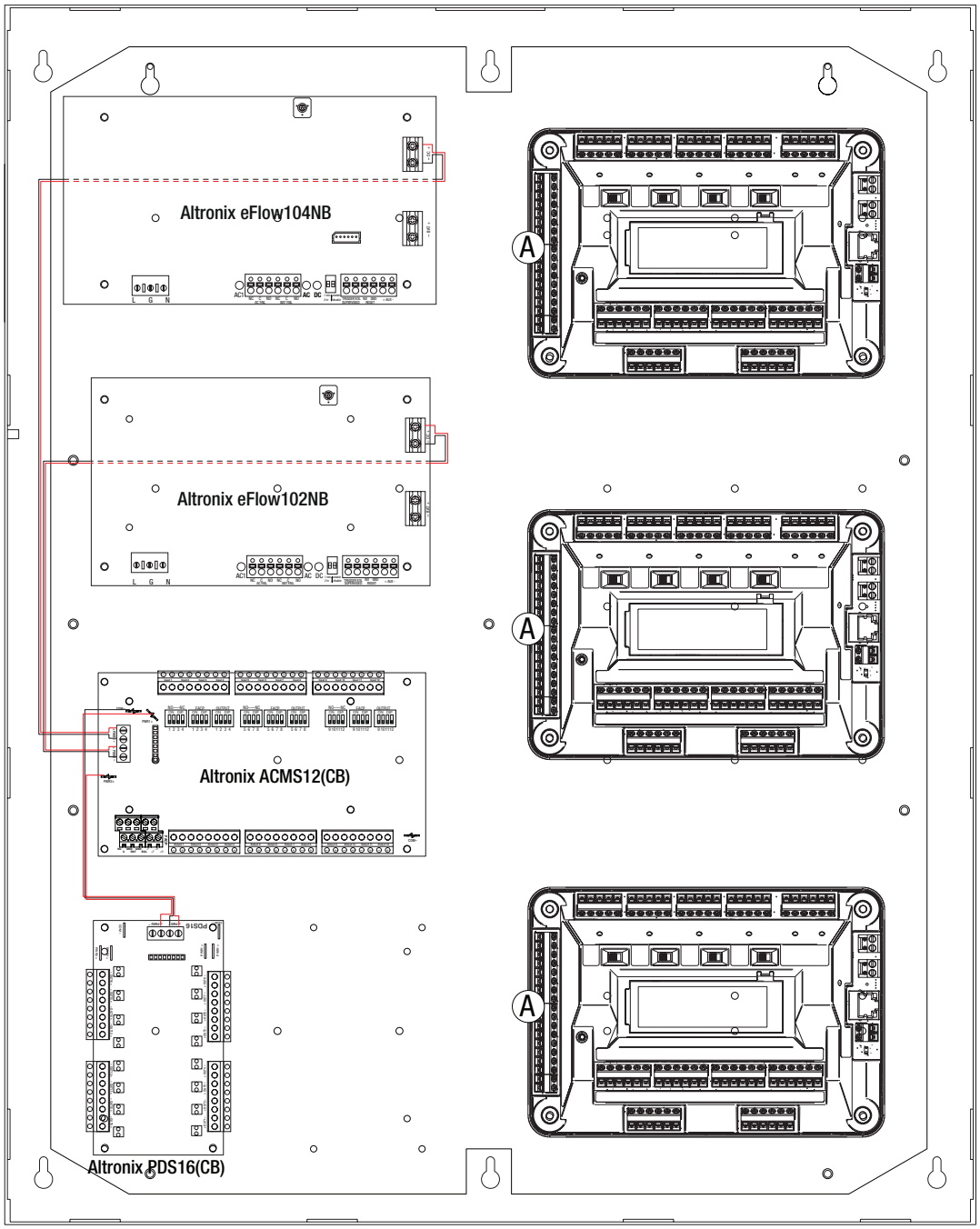


Fig. 3a

T2CRK75F12(D): Installation Instructions for Rhombus DC20 Access Controllers on TDR2:

1. Insert screw (provided) into hole configuration (A) for Rhombus DC20 from the backside of backplane *(Fig. 4a, pg. 5)*. Screw 1" nylon spacer onto screw, repeat for additional three (3) board mounting holes.
2. Mount boards to spacers utilizing 5/8" pan head screws (provided) *(Fig. 4, pg. 5)*.
3. Fasten TDR2 backplane to Trove2 enclosure utilizing lock nuts (provided by Altronix).

Fig. 4



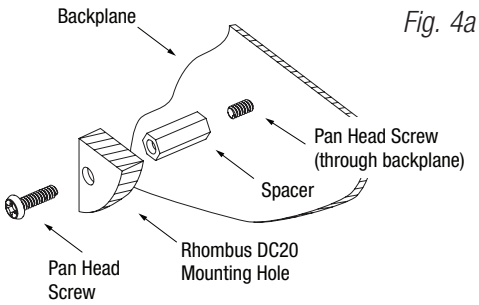
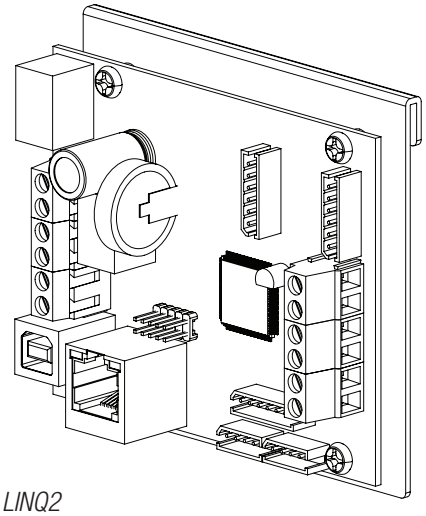


Fig. 4a

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



LINQ2

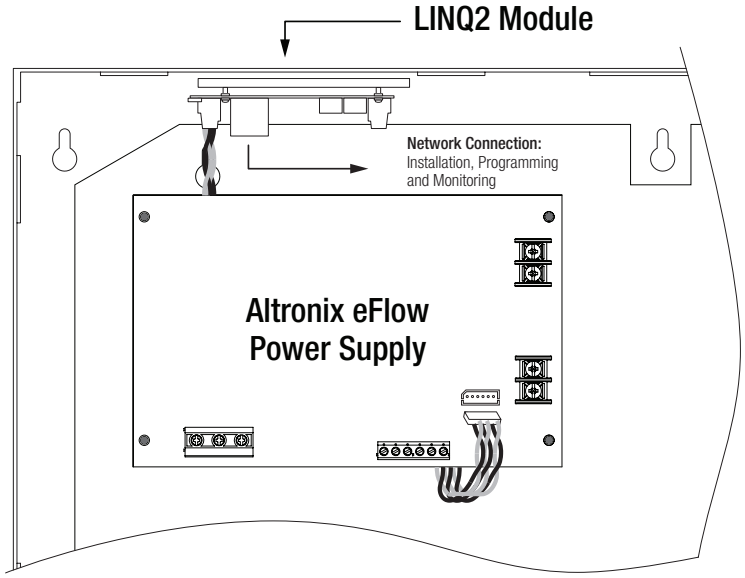
LINQ2 - Network Communication Module

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:

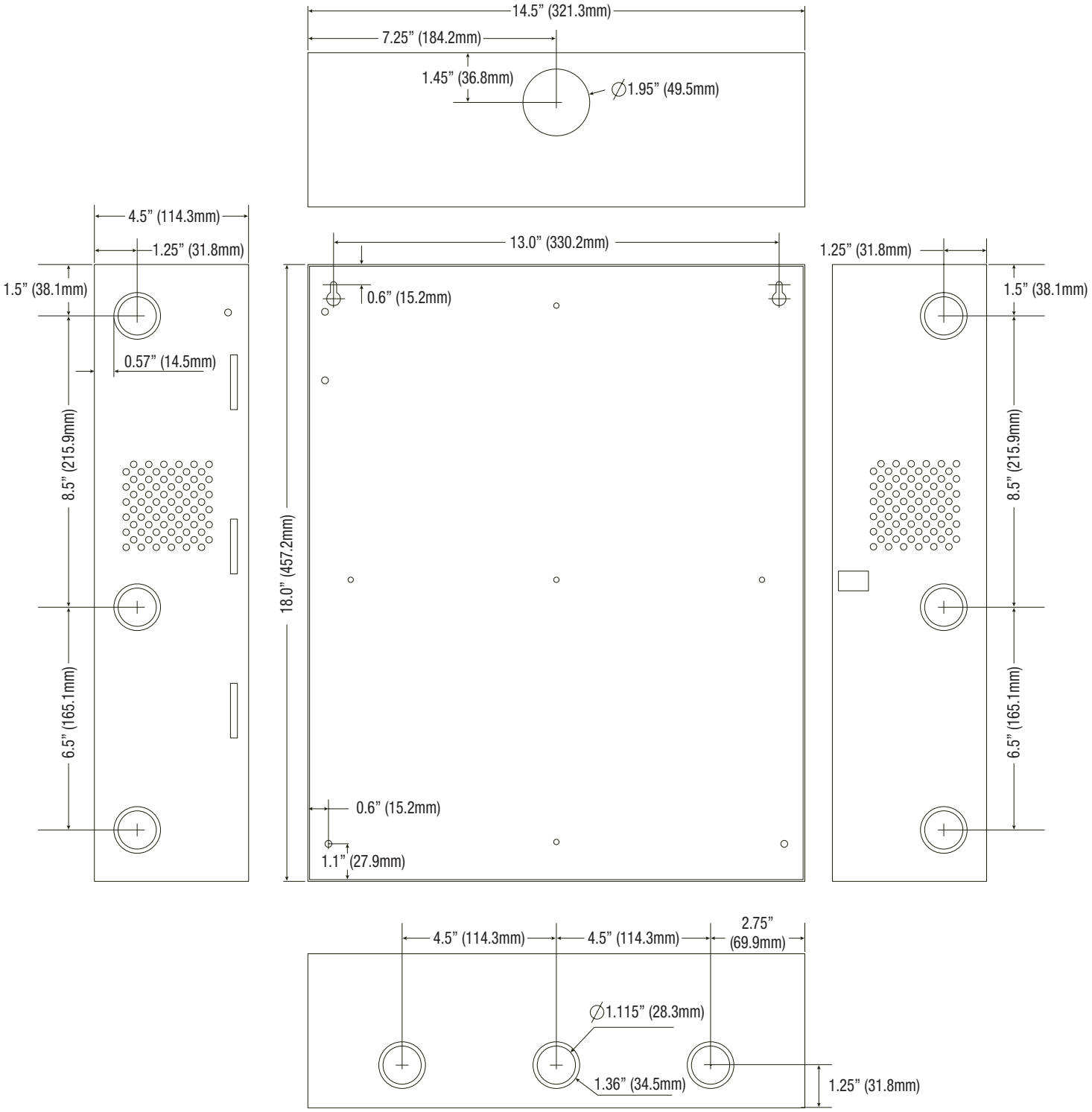
- UL Listed in the U.S. and Canada.
- Local or remote control of up to (2) two Altronix eFlow power output(s) via LAN and/or WAN.
- Monitor real time diagnostics: DC output voltage, output current, AC & battery status/service, input trigger state change, output state change and unit temperature.
- Access 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.

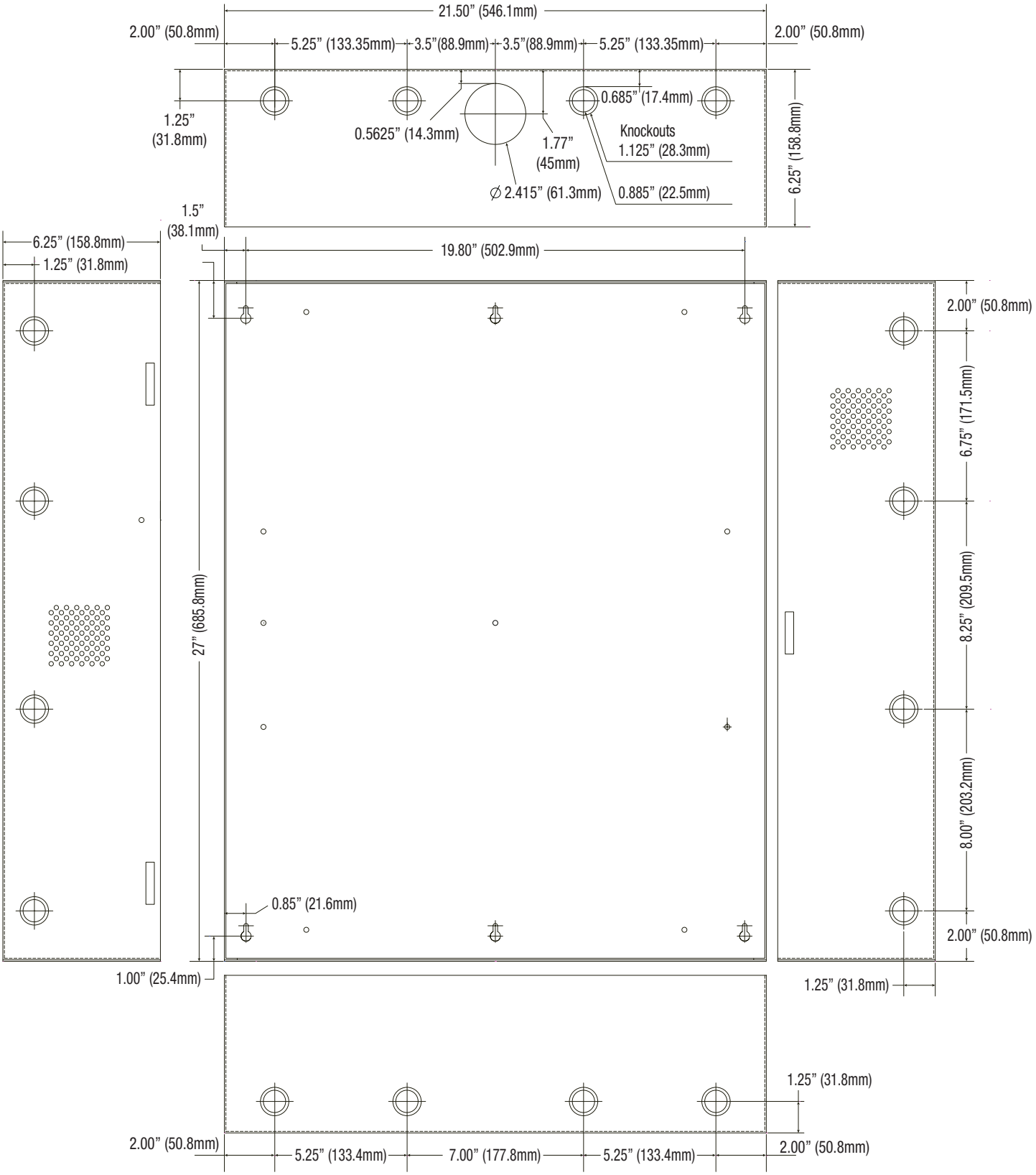
LINQ2 Mounts Inside any Trove Enclosure



T1CRK3F4(D) Enclosure Dimensions (H x W x D approximate)**:**

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



T2CRK7F8S(D) and T2CRK75F12(D) Enclosure Dimensions (H x W x D):

27.25” x 21.75” x 6.5” (692.15mm x 552.5mm x 165.1mm)