TROVE™

Access & Power Integration

Altronix/HID VertX® Kits

Models Include:

T1VK34

4 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove1 enclosure with TV1 Altronix/HID VertX® backplane
- One (1) AL600ULXB - Power Supply/Charger
- One (1) VR6 - Voltage Regulator
- One (1) PDS8 - Dual Input Fused Power Distribution Module

T1VK34D

4 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove1 enclosure with TV1 Altronix/HID VertX® backplane
- One (1) AL600ULXB - Power Supply/Charger
- One (1) VR6 - Voltage Regulator
- One (1) PDS8CB - Dual Input PTC Power Distribution Module

T2VK78

8 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove2 enclosure with TV2 Altronix/HID VertX® backplane
- One (1) AL1024ULXB2 - Power Supply/Charger
- One (1) ACM8 - Fused Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8 - Dual Input Fused Power Distribution Module

T2VK78D

8 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove2 enclosure with TV2 Altronix/HID VertX® backplane
- One (1) AL1024ULXB2 - Power Supply/Charger
- One (1) ACM8CB - PTC Access Power Controller
- One (1) VR6 - Voltage Regulator
- One (1) PDS8CB - Dual Input PTC Power Distribution Module

T3VK7520

20 Door Kit with Fused Outputs

Fully assembled kit includes:

- Trove3 enclosure with TV3 Altronix/HID VertX® backplane
- One (1) AL1024ULXB2 - Power Supply/Charger
- One (1) AL1012ULXB - Power Supply/Charger
- Two (2) ACM8 - Fused Access Power Controllers
- One (1) ACM4 - Fused Access Power Controller
- One (1) PD8UL - Fused Power Distribution Module
- One (1) RSB2 - Rocker Switch Bracket with Two (2) Switches (Not evaluated by UL)

T3VK7520D

20 Door Kit with PTC Outputs

Fully assembled kit includes:

- Trove3 enclosure with TV3 Altronix/HID VertX® backplane
- One (1) AL1024ULXB2 - Power Supply/Charger
- One (1) AL1012ULXB - Power Supply/Charger
- Two (2) ACM8CB - PTC Access Power Controllers
- One (1) ACM4CB - PTC Access Power Controller
- One (1) PD8ULCB - PTC Power Distribution Module
- One (1) RSB2 - Rocker Switch Bracket with Two (2) Switches (Not evaluated by UL)

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

Altronix®

More than just power.™

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Rev. TVLK_091522

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Altronix Trove HID VertX® kits are pre-assembled and consist of Trove enclosures/backplanes with factory installed Altronix power supply/chargers and sub-assemblies. All kits accommodate a variety of HID VertX® modules for up to four (T1VK34), eight (T2VK78) or twenty (T3VK7520) doors in a single enclosure.

Configuration Chart:

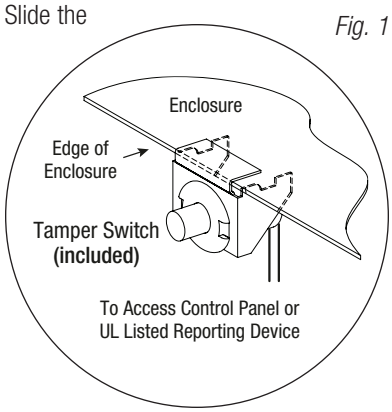
<table>
<tr><th>Altronix Model Number</th><th>115VAC 60Hz Input Current (A)</th><th>Power Supply Board Input Fuse Rating</th><th>Power Supply Board Battery Fuse Rating</th><th>Maximum Supply Current for Main Output on Power Supply board and ACM4(CB/ACM8(CB) Access Power Controllers' outputs</th><th>Nominal DC Output Voltage Range (VDC)</th><th>Fail-Safe/Fail-Secure or Dry Form "C" Outputs</th><th>Additional Fused (PTC) Outputs</th><th>ACM4(CB)/ACM8(CB) Board Input Fuse Rating</th><th>ACM8 Board Output Fuse Rating</th><th>ACM8CB Board Output PTC Rating</th><th>ACM4 Board Output Fuse Rating</th><th>ACM4CB Board Output PTC Rating</th><th>PDS8 Board Input Fuse Rating</th><th>PDS8 Board Output Fuse Rating</th><th>PDS8CB Board Input PTC Rating</th><th>PDS8CB Board Output PTC Rating</th><th>PD8UL Board Output Fuse Rating</th><th>PD8ULCB Board Output PTC Rating</th></tr>
<tr><td>T1VK34</td><td rowspan="2">3.5</td><td rowspan="5">5A/ 250V</td><td rowspan="2">–</td><td rowspan="2">24VDC @ 5.7A</td><td rowspan="2">20.17-26.4</td><td rowspan="2">–</td><td rowspan="2">8</td><td rowspan="2">–</td><td rowspan="2">–</td><td rowspan="2">–</td><td rowspan="2">–</td><td rowspan="2">–</td><td>10A/ 32V</td><td>3A/ 32V</td><td>–</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>T1VK34D</td><td>–</td><td>–</td><td>9A</td><td>2.5A</td><td>–</td><td>–</td></tr>
<tr><td>T2VK78</td><td rowspan="2">4.5</td><td rowspan="2">15A/ 32V</td><td rowspan="2">24VDC @ 9.7A</td><td rowspan="2">20.17-26.4</td><td rowspan="2">8</td><td rowspan="2">8</td><td rowspan="2">10A/ 250V</td><td>3.5A/ 250V</td><td>–</td><td rowspan="2">–</td><td rowspan="2">–</td><td>10A/ 32V</td><td>3A/ 32V</td><td>–</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td>T2VK78D</td><td>–</td><td>2.5A</td><td>–</td><td>–</td><td>9A</td><td>2.5A</td><td>–</td><td>–</td></tr>
<tr><td>T3VK7520</td><td rowspan="3">6.9</td><td rowspan="3">15A/ 32V</td><td>24VDC @ 9.1A</td><td>20.17-26.4</td><td rowspan="3">20</td><td rowspan="3">8</td><td rowspan="3">10A/ 250V</td><td>3.5A/ 250V</td><td>–</td><td>3A/ 32V</td><td>–</td><td rowspan="3">–</td><td rowspan="3">–</td><td rowspan="3">–</td><td rowspan="3">–</td><td>3.5A/ 250V</td><td>–</td></tr>
<tr><td>12VDC @ 10A</td><td>9.7-13.2</td><td rowspan="2">–</td><td rowspan="2">2.5A</td><td rowspan="2"></td><td rowspan="2">2.5A</td><td rowspan="2">–</td><td rowspan="2">2.5A</td></tr>
<tr><td>T3VK7520D</td><td>24VDC @ 9.1A</td><td>20.17-26.4</td></tr>
<tr><td></td><td></td><td></td><td>12VDC @ 10A</td><td>9.7-13.2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Installation Instructions for Trove1, Trove2, Trove3:

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 two/three holes. Remove the enclosure. Drill the lower holes and install the two/three fasteners. Place the enclosure's upper keyholes over the upper screws. Install the two/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. Mount HID VertX® modules to backplane(s), refer to *pages 3, 4, 5*.
5. Refer to the *ULXB Power Supply/Charger Installation Guide* for AL600ULXB, AL1012ULXB, AL1024ULXB2 and corresponding *Sub-Assembly Installation Guides* for ACM4(CB), ACM8(CB), PDS8(CB), VR6 and PD8UL(CB) for further installation instructions.

Fig. 1



Hardware:

Nylon Spacer | 7/8" Pan Head Screw | Lock Nut

T1VK34(D): Installation Instructions for HID VertX® Access Controllers

1. Fasten spacers (provided) onto metal pems configuration (A) of backplane *(Fig. 2, pg. 3)*.
2. Mount HID VertX® modules to spacers utilizing 7/8" pan head screws (provided) *(Fig. 2a, pg. 3)*.
3. Fasten backplane to Trove1 enclosure utilizing hardware (provided).

HID VertX® Access Controller Position Chart for the Following Models:

Sub-Assembly	Pem Mounting
V100, V200, V300, V1000, V2000	(A)

Fig. 2

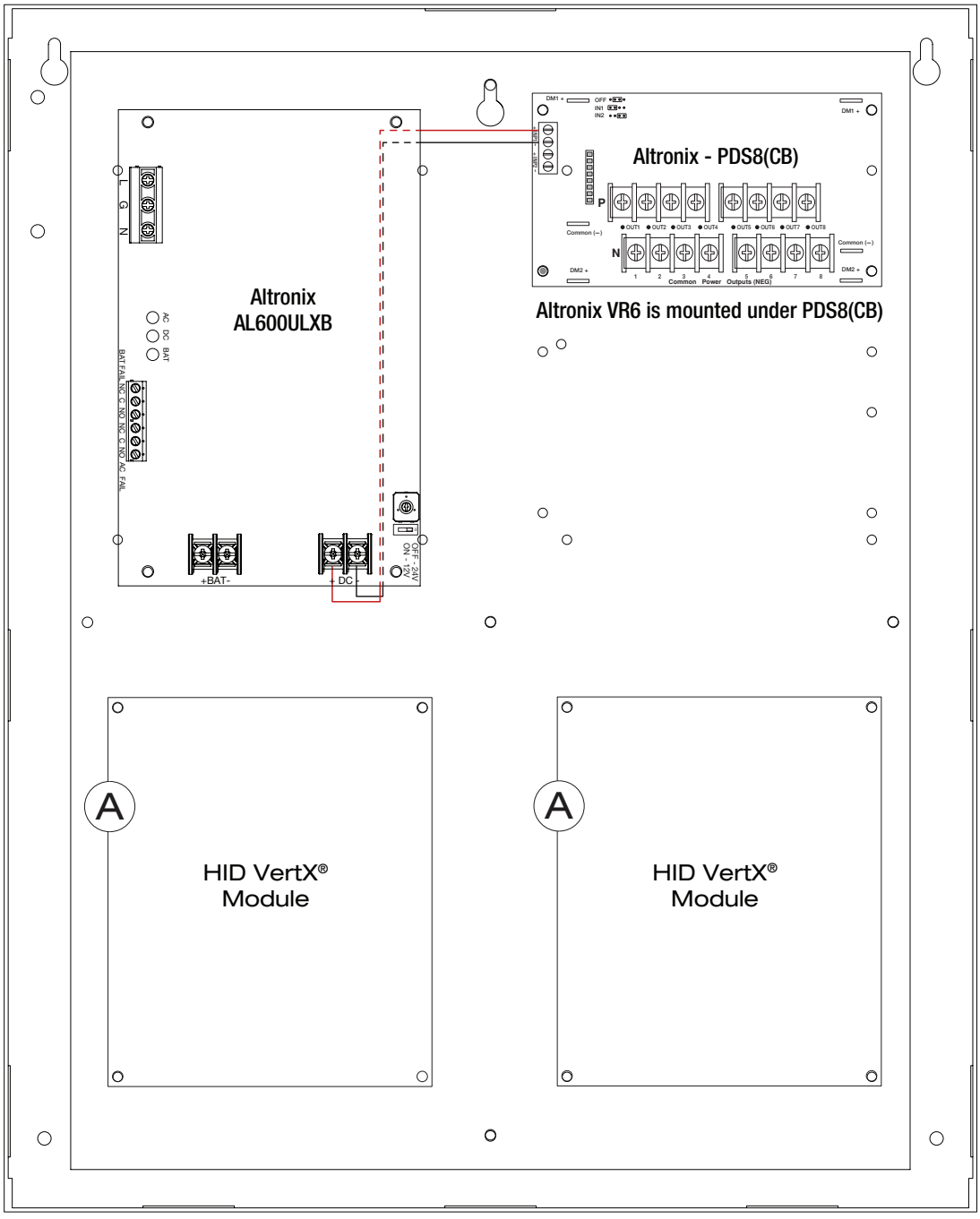
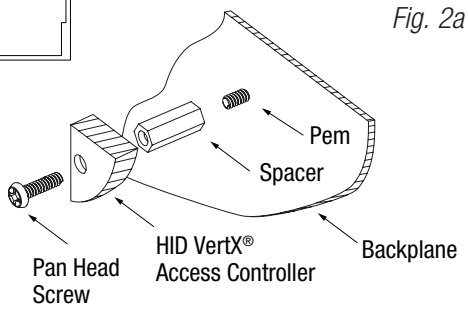


Fig. 2a



T2VK78: Installation Instructions for HID VertX® Access Controllers

1. Fasten spacers (provided) onto metal pems configuration (A) of backplane *(Fig. 3, pg. 4)*.
2. Mount HID VertX® modules to spacers utilizing 7/8" pan head screws (provided) *(Fig. 3a, pg. 4)*.
3. Fasten backplane to Trove2 enclosure utilizing hardware (provided).

HID VertX® Access Controller Position Chart for the Following Models:

Sub-Assembly	Pem Mounting
V100, V200, V300, V1000, V2000	(A)

Fig. 3

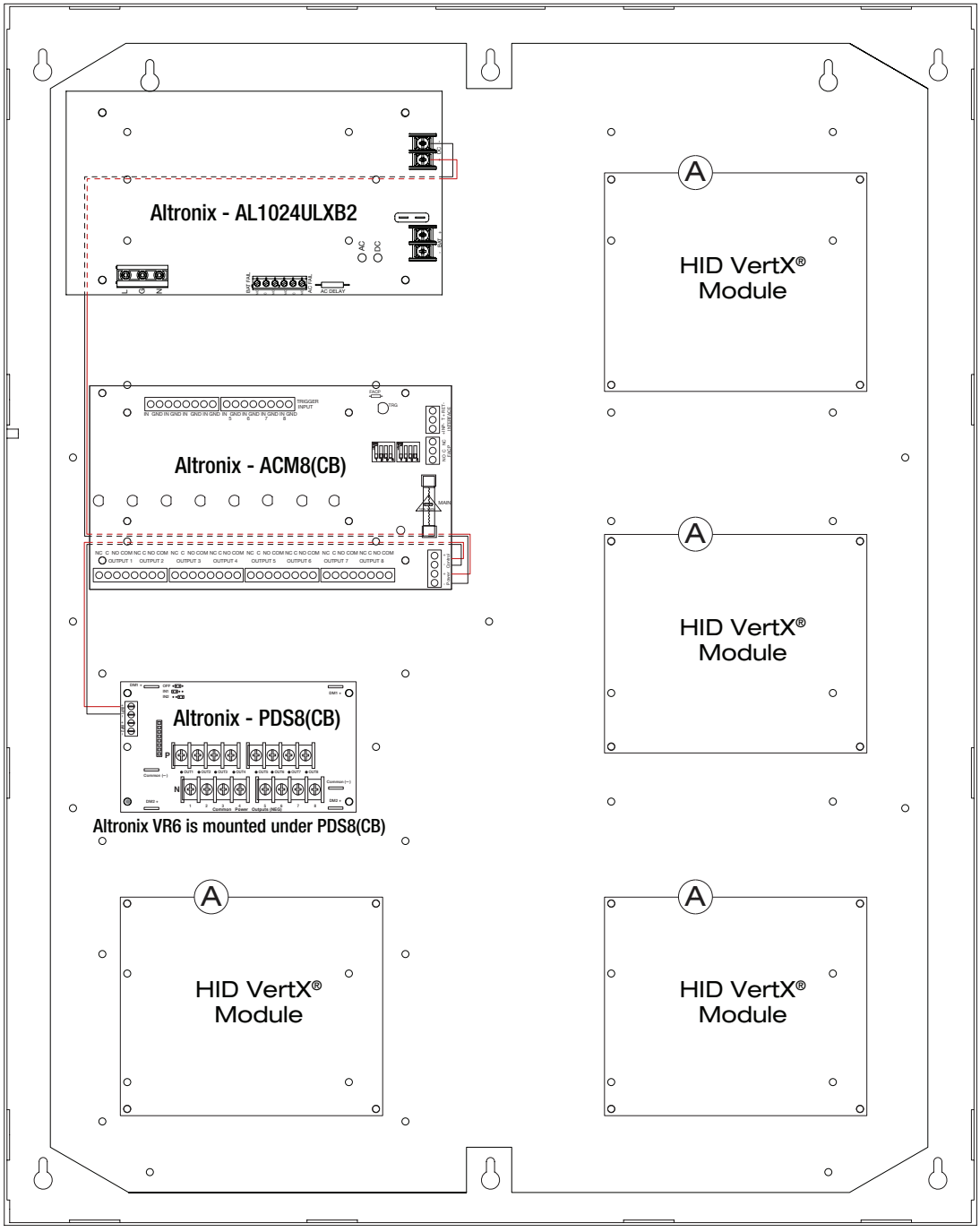
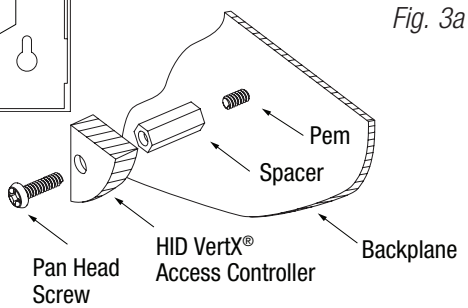


Fig. 3a



T3VK7520: Installation Instructions for HID VertX® Access Controllers

1. Fasten spacers (provided) onto metal pems configuration (A) of backplane *(Fig. 4, pg. 5)*.
2. Mount HID VertX® modules to spacers utilizing 7/8" pan head screws (provided) *(Fig. 4a, pg. 5)*.
3. Fasten backplane to Trove3 enclosure utilizing hardware (provided).

HID VertX® Access Controller Position Chart for the Following Models:

Sub-Assembly	Pem Mounting
V100, V200, V300, V1000, V2000	(A)

Fig. 4

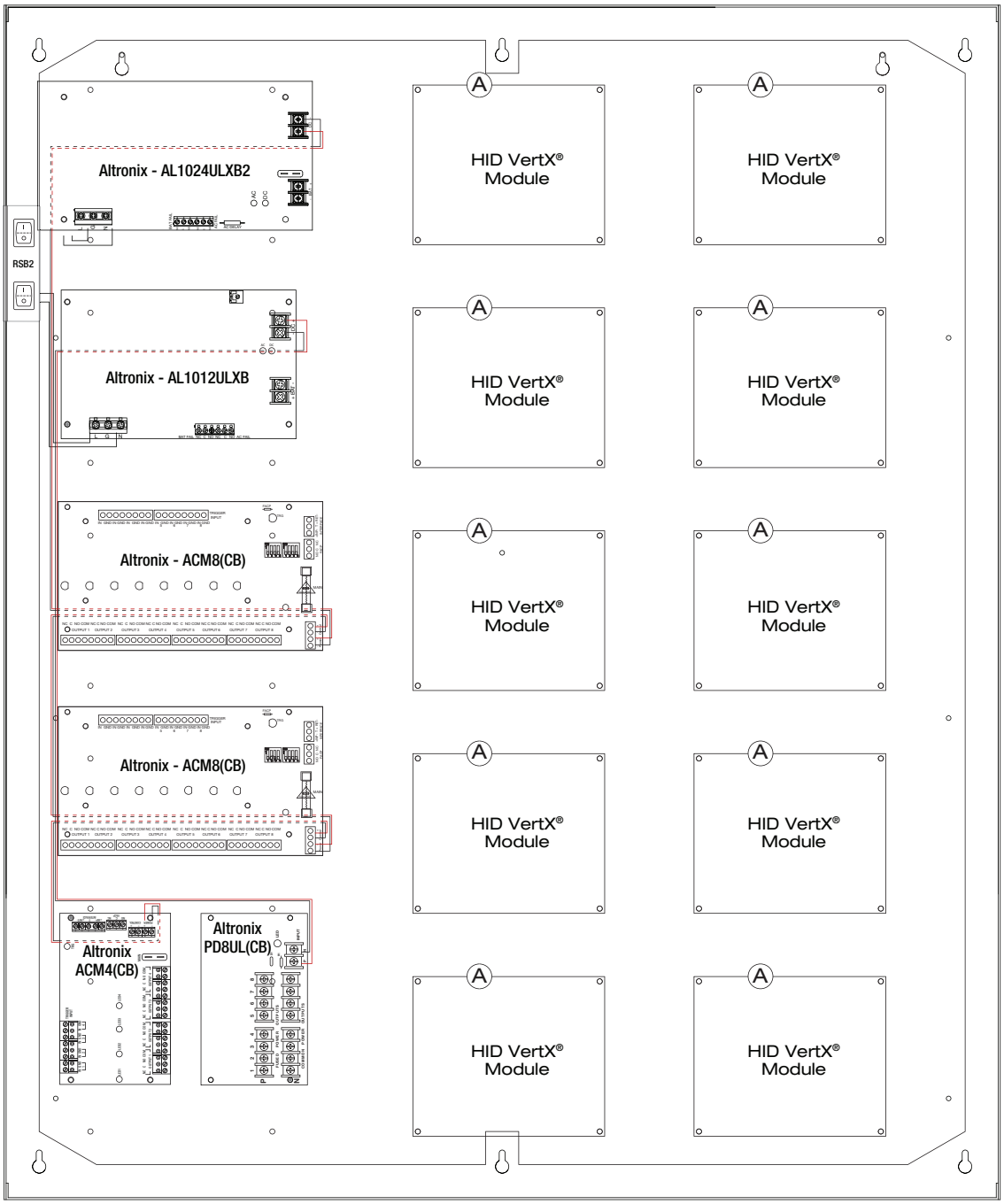
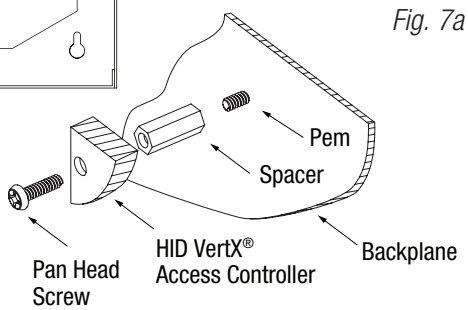
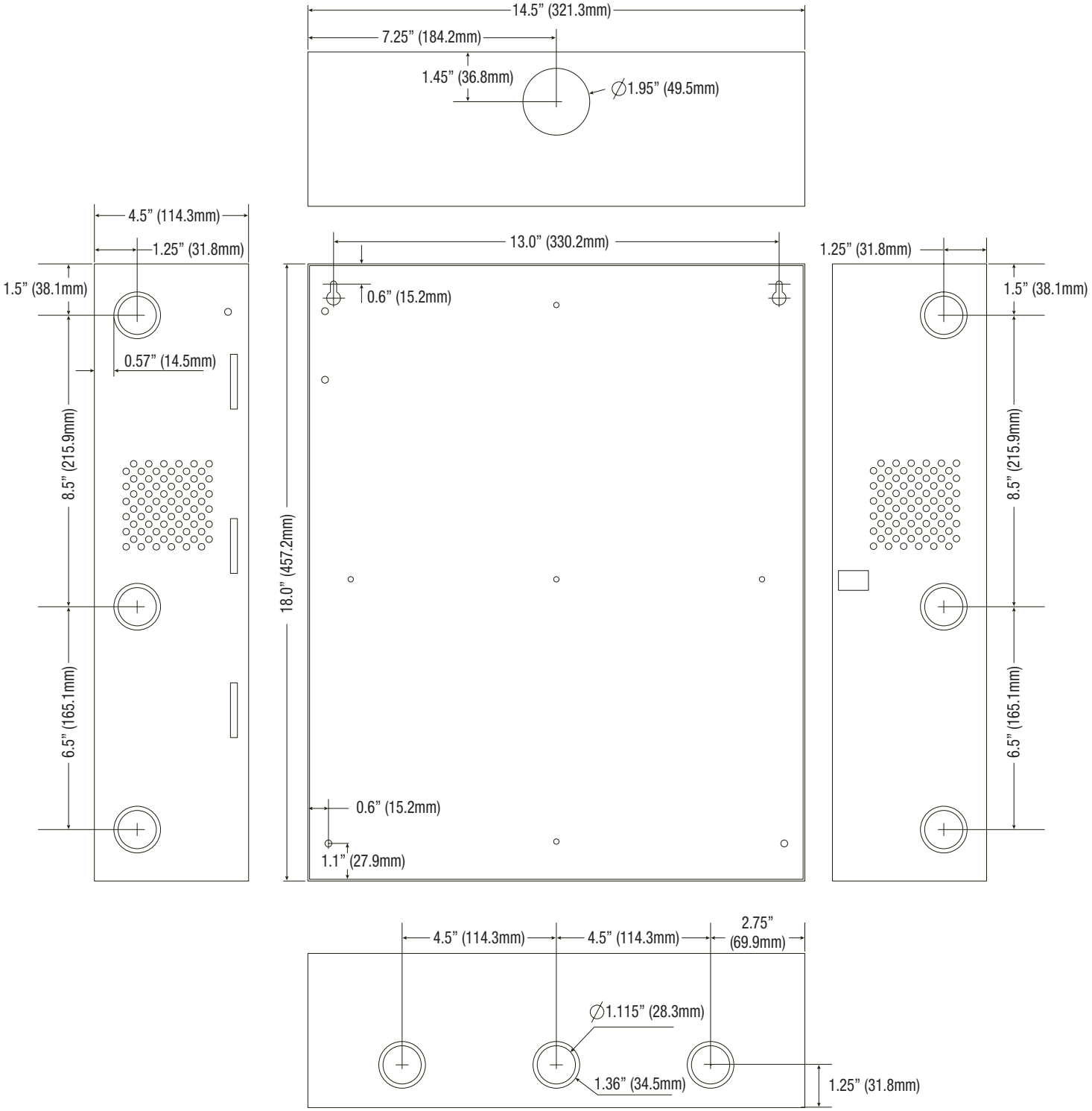


Fig. 7a



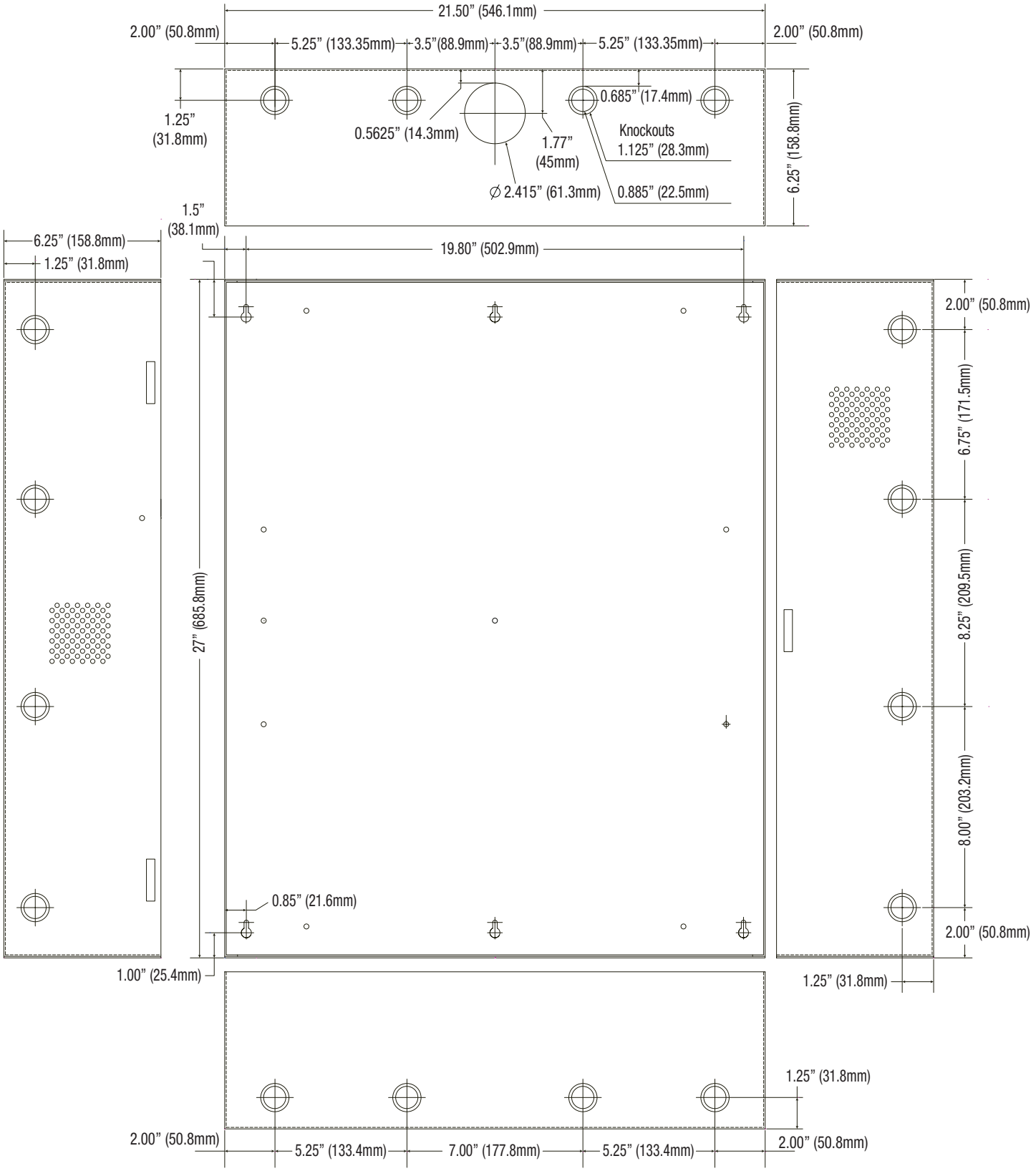
T1VK34 and T1VK34D (Trove1) Enclosure Dimensions (H x W x D approximate)**:**

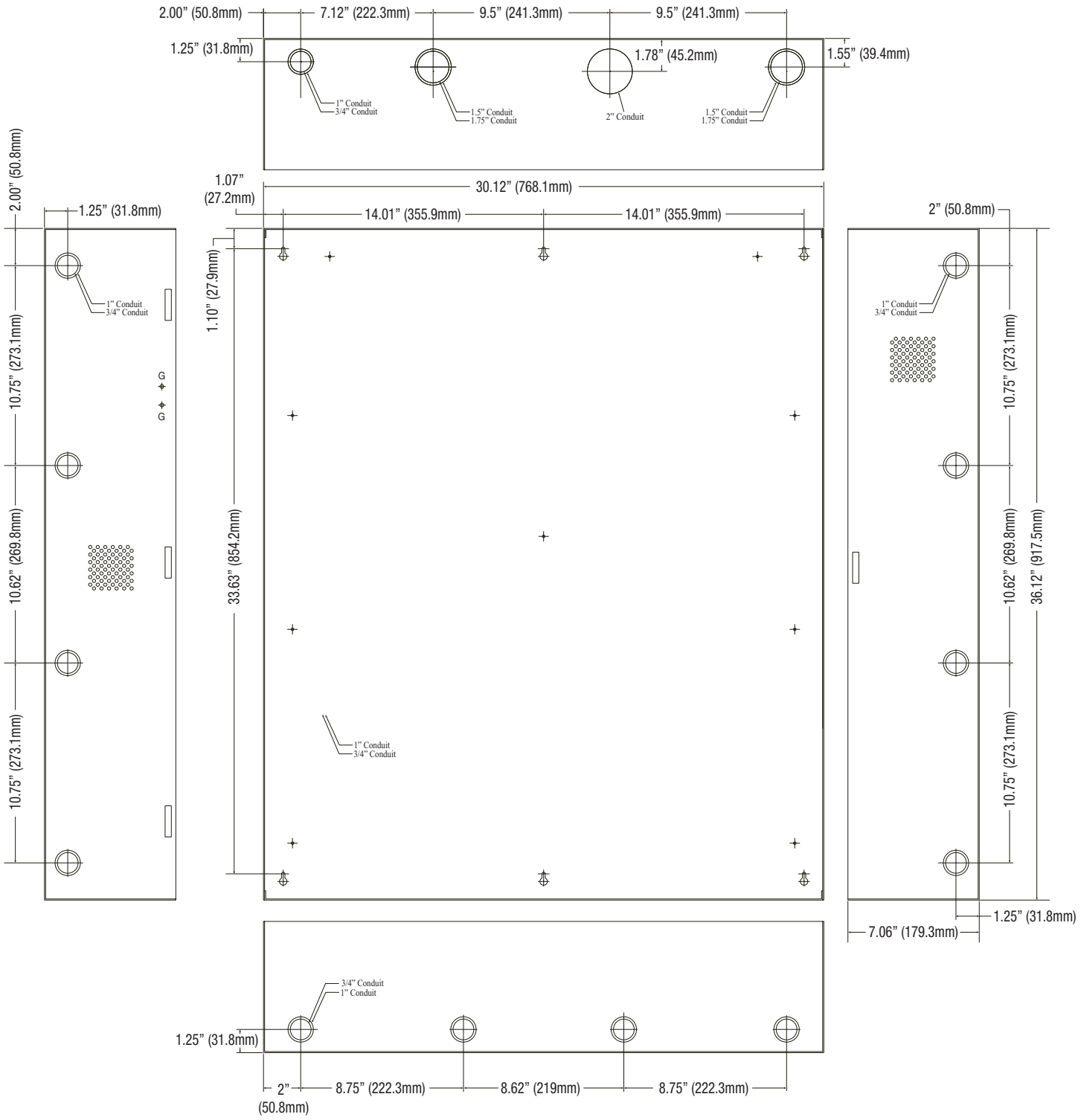
18” x 14.5” x 4.625” (457mm x 368mm x 118mm)



T2VK78 and T2VK78D (Trove2) Enclosure Dimensions (H x W x D approximate)**:**

27.25” x 21.75” x 6.5” (692.15mm x 546.1mm x 165.1mm)



T3VK7520 and T3VK7520D (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)