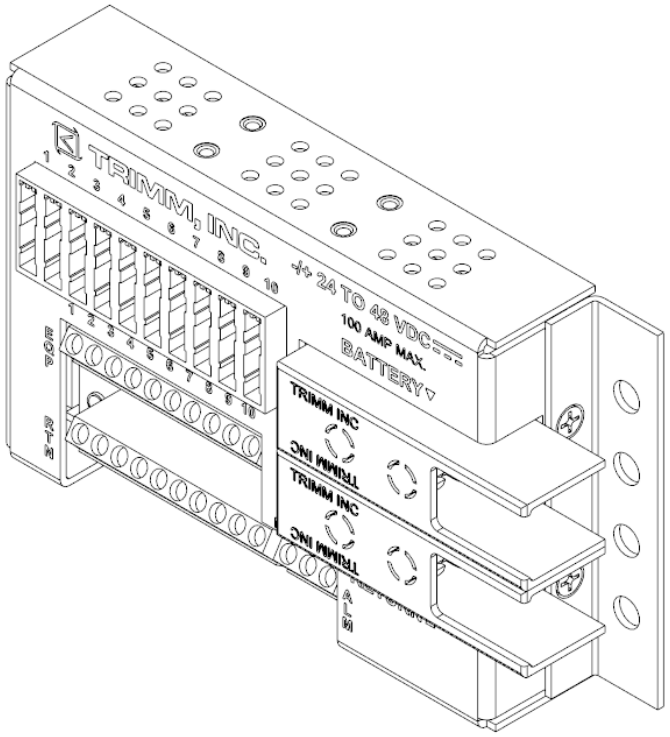
Total Front Access Wall Mount Fuse Panel Installation Guide

Document INS-7473121031

This manual covers the following part numbers-
7473121031



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Section 1- General Information

1.1 - Product Description

Trimm, Inc.'s Total Front Access Wall Mount Power Distribution Panel is designed for wall mount applications where rack space is not available. The total front access design places all input/output connections and fuses on the front of the panel. This panel offers 10 GMT type fuse positions of from .18 to 15 Amps per position. Alarm status is displayed locally via the integrated fuse indicator with relay contacts for remote fuse fail indication. This product is suitable for central office locations, network telecommunication facilities, data centers, and outside plant enclosures. These fuse panels may be installed in GR-3108 Class 3 environments[1].

[1]*Salt fog exposure requirements were not evaluated with these products.*

1.2 - Inspection

Inspect the panel for any noticeable defects, missing parts (See "What's Included" below), or shipping damage. Please notify Trimm, Inc. if any problems are found at 1-800-298-7466. No products may be returned to Trimm, Inc. without the proper Return Material Authorization (RMA) number.

1.3 - What's Included

This unit should be packaged with the following items. Please notify Trimm, Inc. if any of these items are not included so a replacement can be sent out right away.

- Front access fuse panel (verify part number from sticker on rear of unit.)
- Installation instruction packet

Section 2 – Before You Begin

⚠ WARNING

- This panel should be installed in a restricted access area by qualified service personnel only.
- All connections/methods should meet all national/local electrical codes as well as company specific methods or procedures. Failure to do so may result in damage to the equipment, and or personal injury.
- A readily accessible disconnect device must be incorporated into the supply wiring for this product. This disconnect device must be capable of interrupting the maximum available fault current determined by analysis for your system.

2.1 - Tools Required For Installation

The following tools are needed to install this product.

- Multimeter
- Torque wrench with 7/16 socket
- Small slotted torque screw driver (1/8" wide max)
- Suitable crimp tooling for the input terminals
- Cable ties or lacing cord
- Wire cutter/stripper
- Fasteners for wall mounting (not included with panel)

2.2 - Input Bus Amperage Rating (GMT Panel)

This product was designed to be used at its input bus amperage rating of 100 Amps, fed by a 2 AWG wire and protected by a 125 Amp over current device.

2.3 - Fuse Sizing Information

The fuse manufacturer recommends that GMT fuses rated 8 to 15 Amps be continuously operated at no more than 70% of their current rating. All other fuse types/amperages shall be continuously operated at no more than 80% of their current rating.

2.4 - Fuse Replacement Information

The correct fuses may be ordered from the table at the end of this document. See section 7.

2.5 - Wiring Temperature Information

The wiring for this product should be rated 90° C or better.

Wiring protected by GMT fuses shall be at least one size larger than the minimum required wire based on the National Electric Code, NFPA 70 ampacity tables.

2.6 - General Notes on Terminal Connections

- Bare conductors should be coated with appropriate antioxidant compound before crimp connections are made.
- Use appropriate shrink tubing over un-insulated terminal barrels.
- Ensure that the mating surface of both the terminals and their connection point are clean and free of paint.
- Appropriate antioxidant should be applied to the mating surfaces of all connections.
- Use only listed terminals and crimp tooling when making connections.

2.7 - Terminal Information

The following terminals or suitable equivalents may be used for connection to this product. This recommendation is based on the panel's bus amperage rating.

7473111031 Suggested Field Wiring Terminals (Code wire)						
Connection	Manufacturer†	Manf. Part Number	Wire Gauge	Stud Size	Hole Spacing	Max. Width
Input (GMT fuse type)	Panduit	LCD2-14A	2 AWG	1/4"	5/8"	.625"
Output (GMT fuse type)	Set Screw (Non required)					
Remote Alarm	Set Screw (Non required)					
† The above list is only a suggestion. Equivalent terminals may be used provided they are listed and crimped with the appropriately listed crimp tooling.						

Section 3 – Wall Mounting

3.1 - Wall Mounting

Secure the panel to the desired mounting surface using the 4 holes provided in the mounting bracket. The mounting bracket can be placed in multiple positions depending on your mounting requirements.

3.2 - Additional Wall Mounting Instructions

If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the unit's maximum operating temperature. Mounting of the equipment should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Section 4 – Input and Grounding Cabling

⚠ WARNING

Before installation, verify that the input power disconnect device is turned “OFF”

4.1 - Chassis Grounding (Earthing)

This product is suitable for use in either a Common or Isolated (CBN or IBN) Bonding Network. This panel was designed to be grounded through the unit’s enclosure and mounting hardware. Ensure that this unit suitably grounded. Reliable Earthing of rack-mounted equipment should be maintained. (First On, Last Off).

4.2 - Input Wiring

Remove the input covers and locate the #1/4-20 locking nuts supplied with this panel. Crimp the battery and return wires to the proper terminals. Attach the wires to the panel using the supplied locking nuts. Torque the fasteners to 24 in-lbs.

4.3 - Power Verification Test

This test is to verify proper function of the panel prior to the connection of loads. Turn on the over current protection/disconnect device supplying power to the fuse panel. Use a multi meter to verify that voltage and polarity are correct at the input connection. Verify that continuity is present between C and NC power alarm contacts. Install a failed fuse if possible and verify that continuity is present between C and NO fuse alarm contacts.

Section 5 – Output and Alarm Cabling

⚠ WARNING

Before continuing installation, verify that the overcurrent protection/disconnect device is turned “OFF”

5.1 - Output Wiring

This panel accepts up to #12 AWG wire to feed into the equipment and return connections. Strip the wires approximately .260” (6.5mm). Loosen the screws for each position. Insert the wire into the corresponding position for both equipment and return connections. Torque the screw to 5 in-lbs. (.5 Nm).

5.2 - Alarm Wiring

The alarm connector accepts #12-22 AWG stranded/solid wire. Strip end of wire to .260” (6.5mm), insert into the corresponding positions of the alarm connector. Torque the screw to 5 in-lbs. (.5 Nm). Continuity is established at positions C and NC when there is no fuse failure. Continuity is established at positions C and NO when a fuse failure has occurred.

Section 6 – Final Installation

6.1 - Fuse Installation

Orientate and install the correct fuse into its position.

6.2 - Energizing the Panel

Once all steps have been completed above, and a final inspection of the installation has been completed, you may energize the fuse panel by switching the corresponding interrupt device to its “ON” position.

Section 7 – Accessories

GMT FUSES	
PART NUMBER	**FUSE AMPERAGE**
0300097000	18/100 AMP
0300097001	1/4 AMP
0300097016	3/8 AMP
0300097002	1/2 AMP
0600097065	65/100 AMP
0300097003	3/4 AMP
0300097004	1 AMP
0300097005	1-1/3 AMP
0300097006	1-1/2 AMP
0300097007	2 AMP
0300097008	3 AMP
0300097013	3-1/2 AMP
0300097012	4 AMP
0300097009	5 AMP
0300097011	7-1/2 AMP
0300097010	10 AMP
0300097014	12 AMP
0300097015	15 AMP
0300097100	DUMMY FUSE
0300097209	GMT/X FUSE COVER

Section 8 - Revision Record

Legend:	Type	R=Revision	A=Addition	D=Deletion
		T=Typo	N=New	V=Review

Revision	Date	Type	Section/Comments
A	04/08/09	N	New Document
B	01/18/11	R	Added GR-3108 language, updated grounding language.