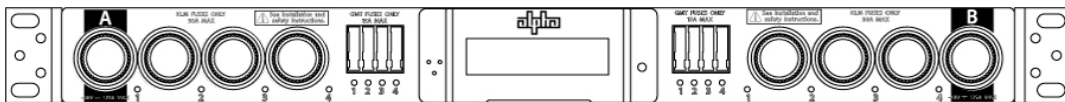




an EnerSys® company

GMT 125 Series™ / KLM 125 Series™ 1RU Fuse Panel For Telecom Broadband Technical Manual

Effective: March 2021



Safety Notes

Alpha Technologies Services, Inc. considers customer safety and satisfaction its most important priority. To reduce the risk of injury or death and to ensure continual safe operation of this product, certain information is presented differently in this manual. Alpha® tries to adhere to ANSI Z535 and encourages special attention and care to information presented in the following manner:



WARNING! GENERAL HAZARD

GENERAL HAZARD WARNING provides safety information to PREVENT INJURY OR DEATH to the technician or user.



WARNING! ELECTRICAL HAZARD

ELECTRICAL HAZARD WARNING provides electrical safety information to PREVENT INJURY OR DEATH to the technician or user.



WARNING! FUMES HAZARD

FUMES HAZARD WARNING provides fumes safety information to PREVENT INJURY OR DEATH to the technician or user.



WARNING! FIRE HAZARD

FIRE HAZARD WARNING provides flammability safety information to PREVENT INJURY OR DEATH to the technician or user.

There may be multiple warnings associated with the call out. Example:



WARNING! ELECTRICAL & FIRE HAZARD

This WARNING provides safety information for both Electrical AND Fire Hazards



CAUTION!

CAUTION provides safety information intended to PREVENT DAMAGE to material or equipment.



NOTICE:

NOTICE provides additional information to help complete a specific task or procedure.

ATTENTION:

ATTENTION provides specific regulatory/code requirements that may affect the placement of equipment and /or installation procedures.

The following sections contain important safety information that must be followed during the installation and maintenance of the equipment. Read all of the instructions before installing or operating the equipment, and save this manual for future reference.

GMT 125 Series™ / KLM 125 Series™

1RU Fuse Panel For Telecom Broadband

Technical Manual

C048-742-30 R04, Rev. B

Effective: March 2021

© 2021 by Alpha Technologies Services, Inc.

Disclaimer

Images contained in this manual are for illustrative purposes only. These images may not match your installation. Operator is cautioned to review the drawings and illustrations contained in this manual before proceeding. If there are questions regarding the safe operation of this powering system, please contact Alpha Technologies Services, Inc. or your nearest Alpha representative.

Alpha® shall not be held liable for any damage or injury involving its enclosures, power supplies, generators, batteries or other hardware if used or operated in any manner or subject to any condition not consistent with its intended purpose or is installed or operated in an unapproved manner or improperly maintained.

Contact Information

Sales information and customer service in USA

(7AM to 5PM, Pacific Time):

1 800 322 5742

Complete Technical Support in USA

(7AM to 5PM, Pacific Time or 24/7 emergency support):

1 800 863 3364

Sales information and Technical Support in Canada:

1 888 462 7487

Website:

www.alpha.com

Table of Contents

1.0 Purpose and Applicability	5
1.1 Product Model	5
2.0 Theory of Operation	5
2.1 Introduction	5
2.1.1 GMT 125 Series	5
2.1.2 KLM 125 Series	5
2.2 Features	6
3.0 Unpacking and Inspection	6
3.1 Package Contents	6
4.0 Installation	7
4.1 Installation Preparation	7
4.1.1 Elevated Operating Ambient Temperature	7
4.1.2 Reduced Air Flow	7
4.1.3 Mechanical Loading	7
4.1.4 Circuit Overloading	7
4.1.5 Reliable Earthing	7
4.1.6 Disconnect Device	7
4.2 Mounting	8
4.2.1 Lacing Bar	8
4.2.2 Optional Rear Rack Support Kit	9
4.3 Chassis Ground	10
4.4 Input Connections	11
4.5 Output Connections	12
4.5.1 Terminal Block Output Versions	12
4.5.2 Connectorized Output Versions	13
4.6 Installing Fuses	13
4.7 Alarm Installation	13
4.8 Installation Checklist	14
5.0 Operation	15
5.1 Meter Module	15
5.1.1 Contrast Adjustment	15
5.1.2 Home Screen	15
5.1.3 Calibration and Settings	16
5.1.3.1 Reset Inventory	16
5.1.3.2 Bus Voltage Offset	16
5.1.3.3 Bus Voltage Gain	16
5.1.3.4 Bus Current Offset	16
5.1.3.5 Bus Current Gain	16
5.1.3.6 Audible Alarm	16
6.0 Product Specifications	17
7.0 Models and Accessories	18
Appendix A: Mechanical Drawings	21
A.1 Front View	21
A.2 Rear View	22
A.3 Top View	23
A.4 Side View	24

1.0 Purpose and Applicability

The purpose of this document is to detail the installation and operation instructions for the Alpha® GMT 125 Series™ fuse panel and KLM 125 Series™ fuse panel.

1.1 Product Model

This document applies to the following models of the GMT 125 Series fuse panel and KLM 125 Series fuse panel products:

Table 1. GMT 125 Series Fuse Panel Configurations

PART NUMBER	DESCRIPTION	INPUTS	OUTPUTS	MONITORING
C016-1871-10	GMT 125 Series Fuse Panel, -48VDC, 10A/10B GMT Fuse Positions	Dual-Input	Terminal Block	LED Indicators
C016-1875-10	GMT 125 Series Fuse Panel, -48VDC, 10A/10B GMT Fuse Positions	Dual-Input	Terminal Block	Meter Module
C016-1873-10	GMT 125 Series Fuse Panel, -48VDC, 10A/10B GMT Fuse Positions	Dual-Input	Connectorized	LED Indicators
C016-1877-10	GMT 125 Series Fuse Panel, -48VDC, 10A/10B GMT Fuse Positions	Dual-Input	Connectorized	Meter Module

Table 2. KLM 125 Series Fuse Panel Configurations

PART NUMBER	DESCRIPTION	INPUTS	OUTPUTS	MONITORING
C016-1846-10	KLM 125 Series Fuse Panel, -48VDC, 4A/4B KLM Fuse Positions, 4A/4B GMT Fuse Positions	Dual-Input	Terminal Block	LED Indicators
C016-1847-10	KLM 125 Series Fuse Panel, -48VDC, 4A/4B KLM Fuse Positions, 4A/4B GMT Fuse Positions	Dual-Input	Terminal Block	Meter Module
C016-1848-10	KLM 125 Series Fuse Panel, -48VDC, 4A/4B KLM Fuse Positions, 4A/4B GMT Fuse Positions	Dual-Input	Connectorized	LED Indicators
C016-1849-10	KLM 125 Series Fuse Panel, -48VDC, 4A/4B KLM Fuse Positions, 4A/4B GMT Fuse Positions	Dual-Input	Connectorized	Meter Module

2.0 Theory of Operation

2.1 Introduction

2.1.1 GMT 125 Series

The GMT 125 Series product family consists of a dual-input 10A/10B GMT fuse position, 1RU panel with optional connectorized outputs and meter module. GMT fuses are available for this panel in ratings starting with 1/64 ampere up to 20 ampere rating.

2.1.2 KLM 125 Series

The KLM 125 Series product family consists of a dual-input 4A/4B GMT and 4A/4B KLM fuse position, 1RU panel with optional connectorized outputs and meter module.

The bus rating is 125 amperes max per bus. GMT fuses are available for this panel in ratings starting with 1/64 ampere up to 15 ampere rating. KLM fuses are available for this panel in ratings starting with 1 ampere up to 30 ampere rating.

2.2 Features

GMT 125 Series

- GMT fuse positions: 20; each available up to 20A max

KLM 125 Series

- GMT fuse positions: 8; each available up to 15A max
- KLM fuse positions: 8; each available up to 30A max

All Models

- Rack mounting: 19 in. or 23 in. via reversible rack mount ears
- Mounting offset: Front-flush, mid-mount forward, mid-mount rearward
- LED indicators (panels with standard bezel)
- Advanced LCD display (panels with meter module)
- Alarm contacts: Form C dry contacts
- Rear panel modular jack connections for alarm outputs
- Fuse distribution output terminals: set screw terminals support 10-22 AWG wires terminated with a narrow ring or spade lug (0.25 in. max width)
- Optional positive latching connectorized output connections

3.0 Unpacking and Inspection

The GMT 125 Series/KLM 125 Series fuse panel was carefully packaged at the factory to withstand the normal rigors of shipping. However, you should carefully inspect the box and contents to confirm that no damage has occurred in transit. Most shipping carriers require notification of shipping damage within twenty-four hours of delivery, and it is the responsibility of the recipient to inspect the shipment immediately upon receipt.

3.1 Package Contents

Included with your product are the following items:

- GMT 125 Series/KLM 125 Series fuse panel
- Mounting hardware kit with necessary screws and washers
- Cable lacing bar (models with connectorized outputs only)

4.0 Installation

4.1 Installation Preparation

When selecting an installation location, ensure that all of the following conditions are met before proceeding.

4.1.1 Elevated Operating Ambient Temperature

If you install the panel in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, take care to install the equipment in an environment compatible with the maximum ambient temperature (TMA) specified in Section 6.

4.1.2 Reduced Air Flow

Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

4.1.3 Mechanical Loading

Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

4.1.4 Circuit Overloading

Give consideration to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Use appropriate consideration for equipment nameplate ratings when addressing this concern.

4.1.5 Reliable Earthing

Maintain reliable earthing of rack-mounted equipment. Pay particular attention to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

4.1.6 Disconnect Device

A readily accessible disconnect device must be incorporated in the building installation wiring.

4.2 Mounting

✓ **NOTICE:**

THIS PRODUCT MUST BE INSTALLED WITHIN A RESTRICTED ACCESS LOCATION WHERE ACCESS IS THROUGH THE USE OF A TOOL, LOCK AND KEY, OR OTHER MEANS OF SECURITY, AND IS CONTROLLED BY THE AUTHORITY RESPONSIBLE FOR THE LOCATION. THIS PRODUCT MUST BE INSTALLED AND MAINTAINED ONLY BY QUALIFIED TECHNICIANS.

- Step 1.** Select the equipment rack location for installation of the fuse panel. Orient the rack mount ears appropriately for either 19 in. or 23 in. rack and select either the front-flush mount, mid-mount forward, or mid-mount rearward position to install the mounting ears (see Figure 1).
- Step 2.** Attach the mounting ears with included 10-32 hardware (see Figure 2). Depending on the attachment point selected, the panel will either be front-flush, mid-mount forward, or mid-mount rearward in the rack.
- Step 3.** Secure panel to equipment rack by tightening the included 12-24 hardware into the mounting ears.

4.2.1 Lacing Bar (Connectorized Output Models Only)

GMT 125 Series/KLM 125 Series product models with connectorized outputs include an output cable lacing bar for clean cable management. This lacing bar does not come preinstalled from the factory.

- Step 1.** Attach the output cable lacing bar by tightening the two 10-32 Phillips® head screws into the threaded holes located on the rear of the panel (see Figure 3).

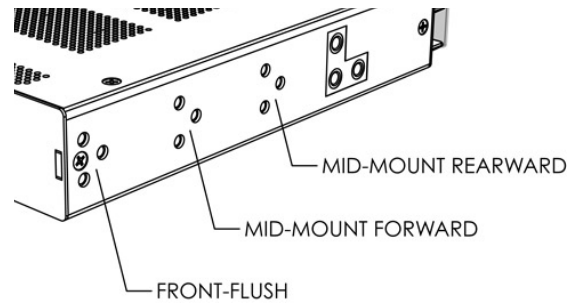


Figure 1. Mounting ear positions

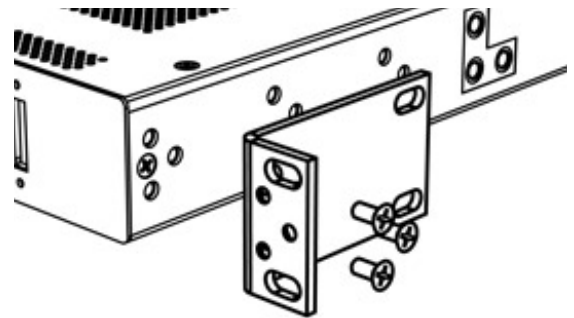


Figure 2. Mounting ears (front-flush position shown)

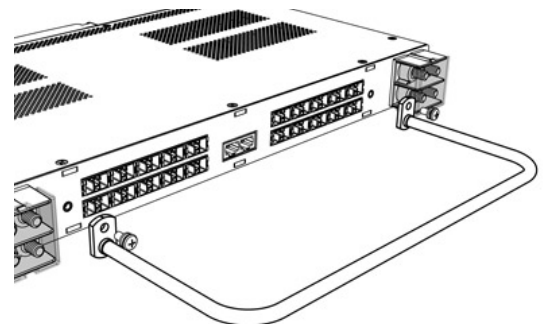


Figure 3. Lacing bar (connectorized models only)

4.2.2 Optional Rear Rack Support Kit

(C750-278-10 Kit; For Connectorized Output Models Only)

An optional rear rack support kit is available for GMT 125 Series/ KLM 125 Series product models with connectorized output configurations. This kit provides additional support to the rear of the panel by attaching to the rear of the equipment rack. The adjustable rails and lacing bar allow for flexible and clean cable management.

NOTE: This kit can not be used in combination with the standard cable lacing bar that is included with connectorized fuse panels.

- Step 1.** Insert the cable lacing pole into the adjustment blocks, then tighten the black phillips-head screws (see Figure 4).
- Step 2.** Insert the two straight panel extension poles into the bottom holes of the adjustment blocks (see Figure 5).
- Step 3.** Insert the two rear rack mounting poles into the top holes of the adjustment blocks (see Figure 6).
- Step 4.** Secure the base of the two straight panel extension poles from Step 2 to the threaded holes found on the rear of the fuse panel chassis by tightening the hex-head hardware (see Figure 7).
- Step 5.** Secure the rear rack mount ears to the equipment rack by tightening the 1/4 in. Phillips head screws (see Figure 8).
- Step 6.** Secure the cable lacing bar into place by tightening the thumbscrews found on the top of the adjustment blocks (see Figure 9).

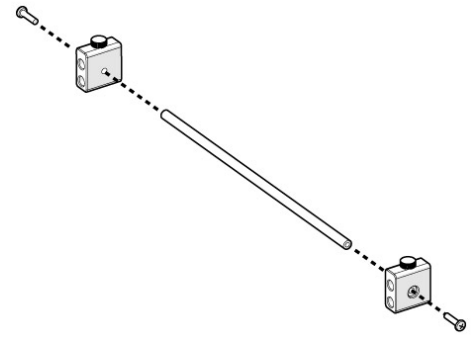


Figure 4. Cable lacing bar

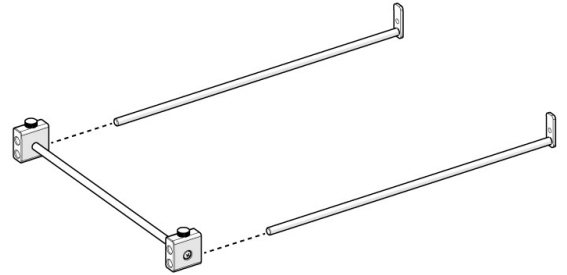


Figure 5. Panel extension poles

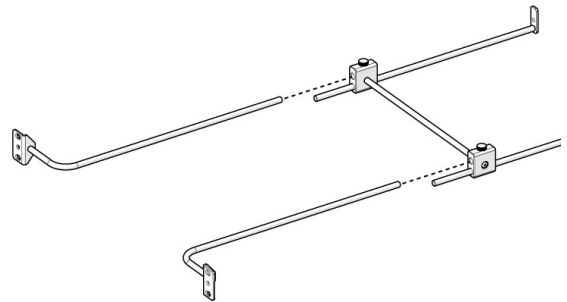


Figure 6. Rear rack mounting poles

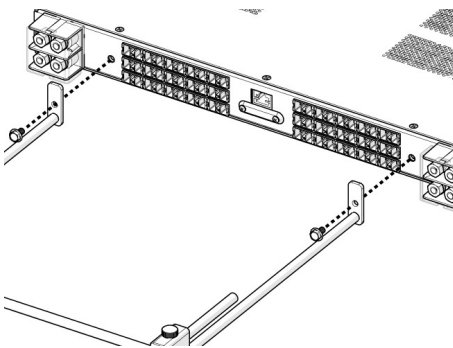


Figure 7. Mount to chassis

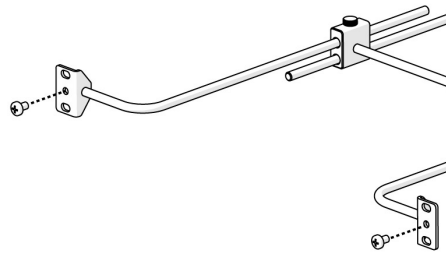


Figure 8. Rear rack mount ears

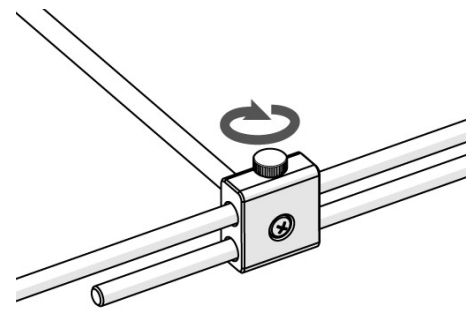


Figure 9. Thumbscrew

4.3 Chassis Ground



CAUTION!

DO NOT ENERGIZE THE PANEL BEFORE CHASSIS GROUND IS CONNECTED.

The chassis ground is located in the side of the panel. A two hole lug landing position is provided. See table below for termination information. A minimum of #6 AWG chassis ground cable is required.

IMPORTANT: Grounding hardware not included. A properly-sized grounding conductor must be installed per NEC (250.122).

Table 3. Chassis Ground Termination Specifications

TERMINATION TYPE	HOLE/STUD SIZE	CENTER TO CENTER	RECOMMENDED TORQUE VALUE
Threaded Insert	1/4 in.	5/8 in.	5.83 ft·lbs

Step 1. Secure the ground cable to the chassis by tightening 1/4 in. hardware (see Figure 10).

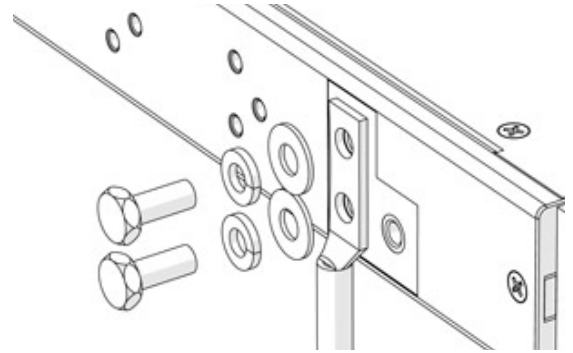


Figure 10. Chassis Ground

4.4 Input Connections



WARNING! ELECTRICAL HAZARD

INPUTS MUST BE PROTECTED BY A LISTED CIRCUIT BREAKER OR BRANCH RATED FUSE. THE CIRCUIT BREAKER OR FUSE MUST BE RATED 125A MAX. MULTIPLE POWER SOURCES ARE PRESENT, ENSURE ALL INPUT POWER FEEDS ARE NOT ENERGIZED BEFORE INSTALLING THEM. ELECTRICAL INSTALLATION SHOULD ONLY BE PERFORMED BY QUALIFIED PERSONNEL WITH PROPER TOOLS AND PROTECTIVE SAFETY EQUIPMENT.



NOTICE:

MAKE SURE THAT ALL FEEDER CABLES HAVE HEAT SHRINK APPLIED PRIOR TO TERMINATION, AND THAT NO-OXIDE COMPOUND IS APPLIED TO ALL COPPER-TO-COPPER CONNECTIONS. REFER TO SECTION 7 FOR COMPRESSION LUG SPECIFICATIONS, TOOLING, AND ORDERING INFORMATION.

Table 4. Input Termination Specifications

TERMINATION TYPE	HOLE/STUD SIZE	CENTER TO CENTER	RECOMMENDED TORQUE VALUE
Threaded Stud	1/4 in.	5/8 in.	4.17 ft·lbs

- Step 1.** Remove the plastic input safety covers by pulling away from panel (see Figure 11).
- Step 2.** Install the return cables/lugs to the return input studs located on the rear of the panel (see Figure 12). Ensure all that hardware is tightened.
- Step 3.** Install the hot input cables/lugs to the hot input studs located on the rear of the panel (see Figure 13). Ensure that all hardware is tightened.
- Step 4.** Reinstall the input safety covers from Step 1.



WARNING! ELECTRICAL HAZARD

FAILURE TO REINSTALL THE INPUT SAFETY COVERS WILL CREATE AN ELECTRICAL HAZARD.

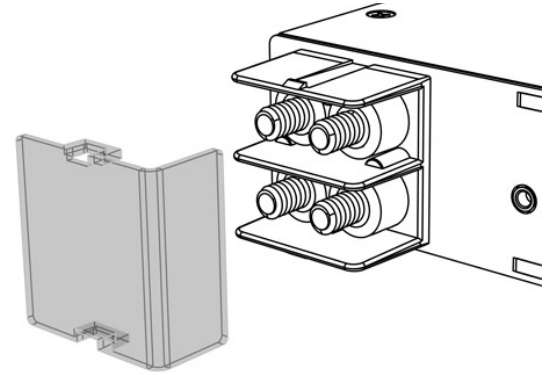


Figure 11. Input Safety Covers

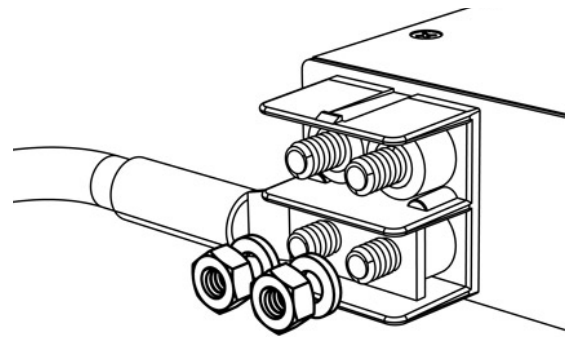


Figure 12. Return Input Landing

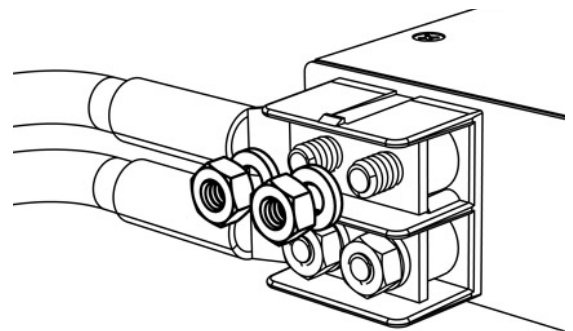


Figure 13. Hot Input Landing

4.5 Output Connections



CAUTION!

DO NOT PERFORM THIS STEP ON CIRCUITS WITH FUSES INSTALLED. ENSURE NO POWER IS PRESENT ON THE CIRCUIT BEING WIRED BEFORE PROCEEDING. MAKE SURE THAT ALL CABLES HAVE INSULATED TERMINALS OR HEAT SHRINK APPLIED PRIOR TO TERMINATION, AND THAT NO-OXIDE COMPOUND IS APPLIED TO ALL COPPER-TO-COPPER CONNECTIONS.



NOTICE:

REFER TO SECTION 7 FOR TERMINAL SPECIFICATION, TOOLING, AND ORDERING INFORMATION.

4.5.1 Terminal Block Output Versions

Table 5. Output Termination Specifications

TERMINATION TYPE	HOLE/STUD SIZE	CENTER TO CENTER	RECOMMENDED TORQUE VALUE
Screw Terminal	M3 (#6)	1/4 in.	5 in-lbs

Refer to the front of the panel for the channel mapping card. On the rear of the panel, locate the “stair-step” terminal block for the fused outputs. Note that each output terminal is numbered from right to left to correspond with the fuse holder on the front panel. The bottom terminals in the terminal block are connected to the return bus bar for each input bus. The top row of terminals are the fused outputs for each fuse holder as numbered.

- Step 1.** Connect the wires to the equipment loads to be fed by the panel fused outputs to these terminal block connections. The RTN (+) wire connects to the bottom terminal (see Figure 14) and the HOT (-) wire connects to the top terminal (see Figure 15) for each fuse position.
- Step 2.** Use appropriate crimp spade or ring lugs on the wires that will be connected to the terminal block fused outputs. Ensure no stray wire strands short out to adjacent terminals, and route the wires in an organized fashion with cable ties or lacing twine down the equipment rack to the equipment loads.
- Step 3.** Attach the included output safety cover by snapping it onto the pre-tightened mounting screws (see Figure 16).



WARNING! ELECTRICAL HAZARD

FAILURE TO REINSTALL THE INPUT SAFETY COVERS WILL CREATE AN ELECTRICAL HAZARD.

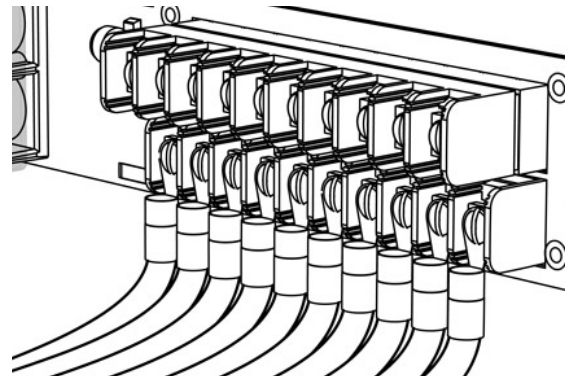


Figure 14. RTN output wires

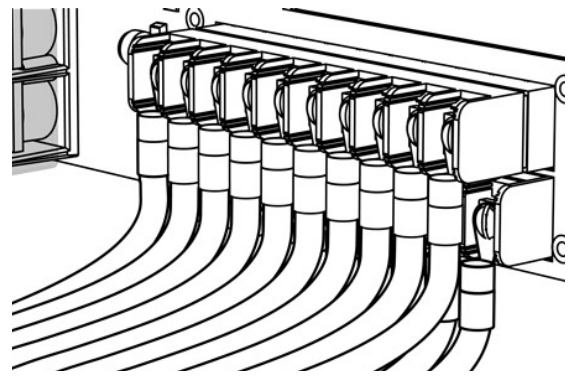


Figure 15. HOT output wires

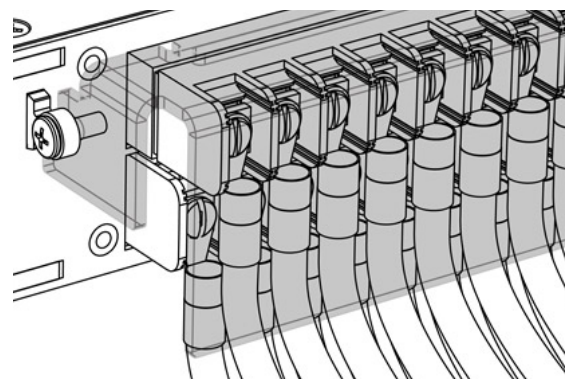


Figure 16. Output safety cover

4.5.2 Connectorized Output Versions

There are 20 positive latching DC connector positions for the output circuits found on the GMT 125 Series fuse panel (10 per side) and there are 16 positive latching DC connector positions for the output circuits found on the KLM 125 Series fuse panel (8 per side). Cable whips are available in a variety of lengths and wire gauges (see Section 7). Refer to the front of the panel for the channel mapping card for circuit mapping information.

Step 1. Insert the DC connectors into the outputs until they click. The connectors are keyed to ensure correct polarity (see Figure 17).

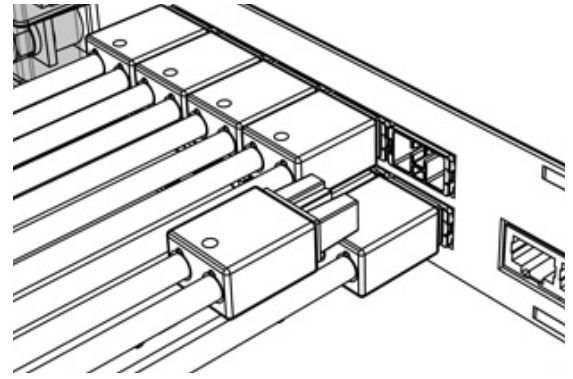


Figure 17. Connectorized output cables

4.6 Installing Fuses



NOTICE:

USE BUSSMANN® GMT TYPE FUSES ONLY. FUSES MUST CARRY A 450A INTERRUPT RATING.

Step 1. Ensure that connected loads are in the off position, then insert a fuse of sufficient ampacity into the position to be fed. Turn on the connected load.

4.7 Alarm Installation



NOTICE:

WHEN DAISY CHAINING, THE ALARM MUST BE MONITORED NORMALLY OPEN.

The GMT 125 Series/KLM 125 Series fuse panel has Form-C dry alarm contacts for remote alarm monitoring. If alarm monitoring is required, (2) 8p8c (RJ-45) modular jacks are provided for alarm connections. The (2) jacks support easy daisy chaining of panels.

The 8p8c modular jacks are located on the center rear of the panel. Refer to mechanical drawings found in Appendix A for more details.

Step 1. Plug in a UTP cable with a TIA/EIA T568B termination into the alarm jack (see Figure 18). Refer to Table 6 for termination pinout information.

Step 2. Connect the cable to the site alarm monitoring system.

Step 3. If daisy chaining is required, connect a UTP cable with TIA/EIA T568B termination into the second jack and connect the other end to the next panel in the chain. Repeat this process until all panels are connected.

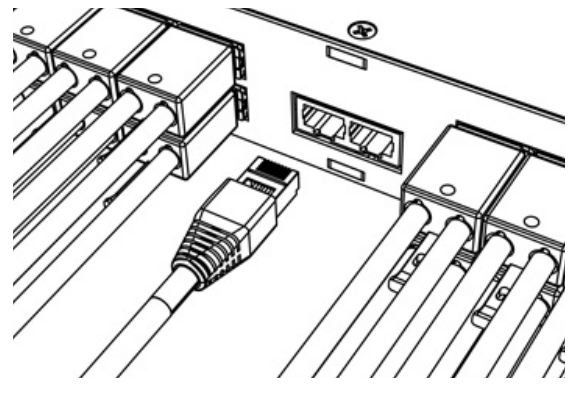


Figure 18. Alarm jacks

Table 6. Alarm Contact Pinout

PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8
Major COM	Major NC	Major NO	Reserved	Reserved	Reserved	Reserved	Reserved

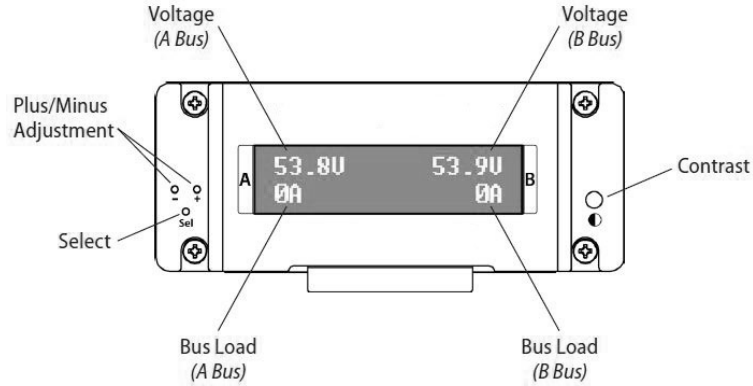
4.8 Installation Checklist

- Rack mount ears configured for 19/23 in.
 - Ears mounted to panel and rack securely
- Input power cables/lug and return cables/lugs securely bolted/
connected to rear of panel
- Heat shrink installed on cables
- Fused outputs wired with correct polarity, crimp lugs, wire lacing,
or cable tie routing to equipment loads
- Output connections secured
- Fuses sized as required for each load
- All safety covers attached

5.0 Operation

5.1 Meter Module

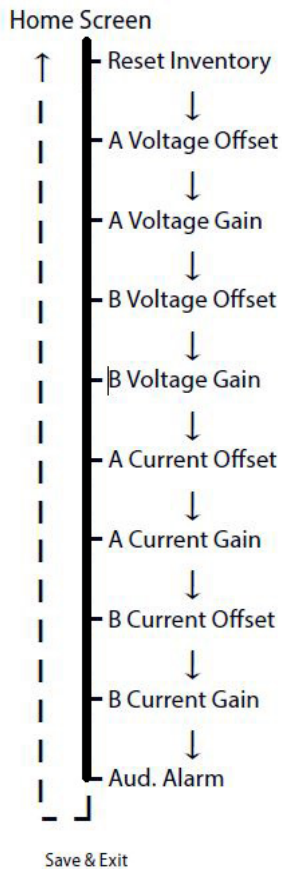
The GMT 125 Series/KLM 125 Series fuse panel is available with an optional meter module for monitoring of voltage, current, and alarms.



5.1.1 Contrast Adjustment

The screen contrast can be adjusted by inserting a #00 screwdriver into the recessed contrast button (view meter module illustration above for button locations).

5.1.2 Home Screen



5.1.3 Calibration and Settings

To enter the Calibration and Settings Menu, press the Select (Sel) button. To advance through each item on the menu, press the Select (Sel) button. NOTE: Any changes are not saved until you have advanced back to the Home Screen.

5.1.3.1 Reset Inventory

For panels with KLM fuse positions, the meter module keeps track of KLM fuse inventory in order to report fuse status. Any installed KLM fuses are detected and added to the inventory automatically. When a fuse is removed, however, the inventory must be reset to clear the fuse fail alarm. Press the (+) button to reset the KLM fuse inventory. The meter will return to the Home Screen immediately, skipping the calibration screens. Press Sel to advance to the next setting.

```
Reset Inventory?  
- NO      + YES
```

5.1.3.2 Bus Voltage Offset

A and B bus voltage offset can be adjusted by pressing the (+) or (-) buttons. The measured bus voltage is shown in hundredths of volts along with the applied offset. Press Sel to advance to the next setting.

```
A Voltage Offset  
5387      002
```

5.1.3.3 Bus Voltage Gain

A and B bus voltage gain can be adjusted by pressing the (+) or (-) buttons. The measured voltage is shown in hundredths of volts along with the applied gain. Press Sel to advance to the next setting.

```
A Voltage Gain  
5387      004
```

5.1.3.4 Bus Current Offset

A and B bus current offset can be adjusted by pressing the (+) or (-) buttons. The measured load is shown in tenths of amps along with the applied offset. Press Sel to advance to the next setting.

```
A Current Offset  
0002      -021
```

5.1.3.5 Bus Current Gain

A and B bus current gain can be adjusted by pressing the (+) or (-) buttons. The measured load is shown in tenths of amps along with the applied gain. Press Sel to advance to the next setting.

```
A Current Gain  
0002      010
```

5.1.3.6 Audible Alarm

Audible alarm can be enabled (EN) or disabled (DIS) by pressing the (+) or (-) buttons. Press Sel to return to the Home Screen. NOTE: The audible alarm is disabled by default.

```
Aud. Alarm: DIS.  
+ to enable
```


6.0 Product Specifications

Table 7. GMT 125 Series Fuse Panel Specifications

ALL MODELS	
Type of Input	Dual Input (A/B)
Circuits	10 (10A/10B)
Input Voltage (+/- 0%)	-42 to -60V DC
Input Current	125A Max
Maximum Input Interruption Device	150A
Maximum Fuse Size	20A GMT
Maximum Per Circuit Current	20A
Maximum Continuous Load on 15-20A GMT Fuses	70% Fuse Rating
Maximum Continuous Load on <15A GMT Fuses	80% Fuse Rating
Max Operating Altitude	2000 m
Max Ambient Temperature	45° C
Width	17 in.
Height	1.75 in.
Depth (Not Including Lacing Bar Kits)	11 in.
Weight	8.5 lbs.
UL File Number	E473904
UL Standard	ANSI/UL 60950-1

Table 8. KLM 125 Series Fuse Panel Specifications

ALL MODELS	
Type of Input	Dual Input (A/B)
Circuits	16 (8A/8B)
Input Voltage (+/- 0%)	-42 to -60V DC
Input Current	125A Max
Maximum Input Interruption Device	150A
Maximum Fuse Size	30A KLM; 15A GMT
Maximum Per Circuit Current	30A KLM; 15A GMT
Maximum Continuous Load on 15-20A GMT Fuses	70% Fuse Rating
Maximum Continuous Load on <15A GMT Fuses	80% Fuse Rating
Max Operating Altitude	2000 m
Max Ambient Temperature	55° C
Width	17 in.
Height	1.75 in.
Depth (Not Including Lacing Bar Kits)	11.5 in.
Weight	8.5 lbs.
UL File Number	E473904
UL Standard	ANSI/UL 60950-1

7.0 Models and Accessories

Table 9. GMT 125 Series Fuse Panel Model Configurations

DESCRIPTION	PART NUMBER
GMT 125 Series Fuse Panel; 125A; 1RU; Dual Input; 10A/10B - 20A Max; LED Indicators; Terminal Block Outputs	C016-1871-10
GMT 125 Series Fuse Panel; 125A; 1RU; Dual Input; 10A/10B - 20A Max; Meter Module; Terminal Block Outputs	C016-1875-10
GMT 125 Series Fuse Panel; 125A; 1RU; Dual Input; 10A/10B - 20A Max; LED Indicators; Connectorized Outputs	C016-1873-10
GMT 125 Series Fuse Panel; 125A; 1RU; Dual Input; 10A/10B - 20A Max; Meter Module; Connectorized Outputs	C016-1877-10

Table 10. KLM 125 Series Fuse Panel Model Configurations

DESCRIPTION	PART NUMBER
KLM 125 Series Fuse Panel; 125A; 1RU; Dual Input; 4A/4B KLM Fuses; 4A/4B GMT Fuses; 30A Max KLM Fuse; 15A Max GMT Fuse; LED Indicators; Terminal Block Outputs	C016-1846-10
KLM 125 Series Fuse Panel; 125A; 1RU; Dual Input; 4A/4B KLM Fuses; 4A/4B GMT Fuses; 30A Max KLM Fuse; 15A Max GMT Fuse; Meter Module; Terminal Block Outputs	C016-1847-10
KLM 125 Series Fuse Panel; 125A; 1RU; Dual Input; 4A/4B KLM Fuses; 4A/4B GMT Fuses; 30A Max KLM Fuse; 15A Max GMT Fuse; LED Indicators; Connectorized Outputs	C016-1848-10
KLM 125 Series Fuse Panel; 125A; 1RU; Dual Input; 4A/4B KLM Fuses; 4A/4B GMT Fuses; 30A Max KLM Fuse; 15A Max GMT Fuse; Meter Module; Connectorized Outputs	C016-1849-10

Table 11. Accessories

DESCRIPTION	PART NUMBER
Rear Rack Mounting Kit; GMT 125	C750-278-10

Table 12. Supported Lugs for Input Connections

WIRE GAUGE SUPPORTED	ALPHA PART NUMBER	MANUFACTURER	MANUFACTURER PART NUMBER	CRIMP DIE REQUIRED
#2 AWG	C538-173-10	BURNDY®	YAV2CL2NT14FX	Burndy U2CRT, W2CVT, W2CRT, X2CRT
#2 AWG (90 degree)	C538-275-10	BURNDY®	YAV2CL2NT14FX90	Burndy U2CRT, W2CVT, W2CRT, X2CRT
1/0	C538-260-10	BURNDY®	YAZV252NT14FX	Burndy U25RT, W25VT, W25RT, X25RT
1/0 (90 degree)	C538-289-10	BURNDY®	YAV25L2NT14FX90	Burndy U25RT, W25VT, W25RT, X25RT

Table 13. Supported Lugs for Chassis Ground Connections

WIRE GAUGE SUPPORTED	ALPHA PART NUMBER	MANUFACTURER	MANUFACTURER PART NUMBER	CRIMP DIE REQUIRED
#6 AWG	C538-094-10	BURNDY®	YAZV6C2TC14FX	Burndy U5CRT, W5CRT, W5CVT, X5CRT, Y1MRTC

Table 14. Supported GMT Fuses

DESCRIPTION	PART NUMBER
GMT Fuse ¼A; 60VDC; violet flag	C460-014-10
GMT Fuse ½A; 60VDC; reg flag	C460-042-10
GMT Fuse 1A; 60VDC; gray flag	C460-013-10
GMT Fuse 2A; 60VDC; orange flag	C460-026-10
GMT Fuse 3A; 60VDC; blue flag	C460-027-10
GMT Fuse 4A; 60VDC; white/brown flag	C460-028-10

DESCRIPTION	PART NUMBER
GMT Fuse 5A; 60VDC; green flag	C460-009-10
GMT Fuse 7.5A; 60VDC; black/white flag	C460-012-10
GMT Fuse 10A; 60VDC; red/white flag	C460-010-10
GMT Fuse 15A; 60VDC; red/blue flag	C460-011-10
GMT Fuse 20A; 60VDC; green/white flag	C460-041-10*

*Not applicable for KLM 125 Series models

Table 15. Supported KLM Fuses

DESCRIPTION	PART NUMBER
KLM Fuse 1A; 600VDC	C460-089-10
KLM Fuse 2A; 600VDC	C460-088-10
KLM Fuse 3A; 600VDC	C460-087-10
KLM Fuse 5A; 600VDC	C460-085-10
KLM Fuse 7A; 600VDC	C460-086-10
KLM Fuse 10A; 600VDC	C460-082-10
KLM Fuse 15A; 600VDC	C460-084-10
KLM Fuse 20A; 600VDC	C460-081-10
KLM Fuse 25A; 600VDC	C460-083-10
KLM Fuse 30A; 600VDC	C460-080-10

Table 16. Connectorized Cable Assemblies (For Connectorized Models Only)

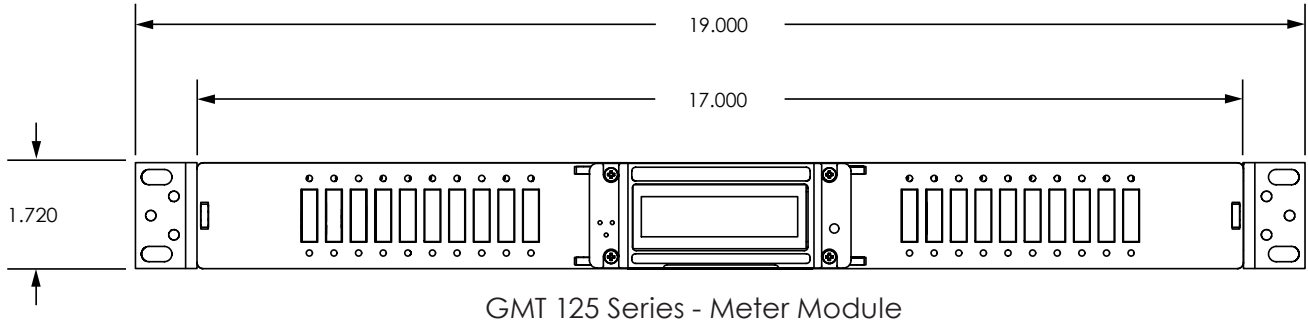
AWG	LENGTH	COLOR	PART NUMBER
#10	7'	Red/Black	C745-420-10
		Blue/Black	C745-422-10
		Red/Red Tracer	C745-437-10
		Blue/Blue Tracer	C745-433-10
	12'	Red/Black	C745-290-10
		Blue/Black	C745-424-10
		Red/Red Tracer	C745-438-10
		Blue/Blue Tracer	C745-434-10
#12	7'	Red/Black	C745-421-10
		Blue/Black	C745-425-10
		Red/Red Tracer	C745-298-10
		Blue/Blue Tracer	C745-299-10
	12'	Red/Black	C745-293-10
		Blue/Black	C745-294-10
		Red/Red Tracer	C745-197-10
		Blue/Blue Tracer	C745-198-10
#14	7'	Red/Black	C745-436-10
		Blue/Black	C745-427-10
		Red/Red Tracer	C745-432-10
		Blue/Blue Tracer	C745-435-10
	12'	Red/Black	C745-296-10
		Blue/Black	C745-429-10
		Red/Red Tracer	C745-227-10
		Blue/Blue Tracer	C745-228-10

Table 17. Output Terminals (For Terminal Block Models Only)

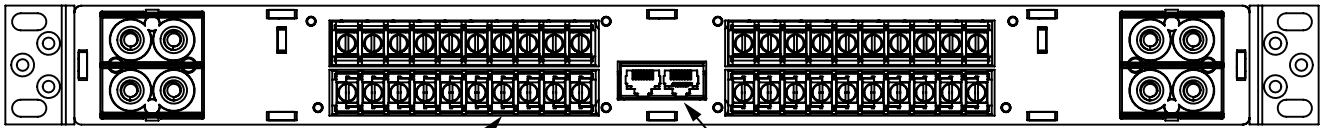
WIRE GAUGE SUPPORTED; TERMINAL TYPE	ALPHA PART NUMBER	MANUFACTURER	MANUFACTURER PART NUMBER	CRIMP DIE REQUIRED
#16-14 AWG; Ring Terminal	C538-068-10	TE CONNECTIVITY®	34158	TE Connectivity 58433-3 with Die Assembly 58423-1
#10-12 AWG Ring Terminal	C538-280-10	TE CONNECTIVITY®	329697	TE Connectivity 169400 with Die Assembly 169404
#16-14 AWG; Spade Terminal	C538-038-10	TE CONNECTIVITY®	52955	TE Connectivity 58433-3 with Die Assembly 58423-1
#12-10 AWG; Spade Terminal	C538-119-10	TE CONNECTIVITY®	52961	TE Connectivity 58433-3 with Die Assembly 58423-1

Appendix A: Mechanical Drawings

A.1 Front View



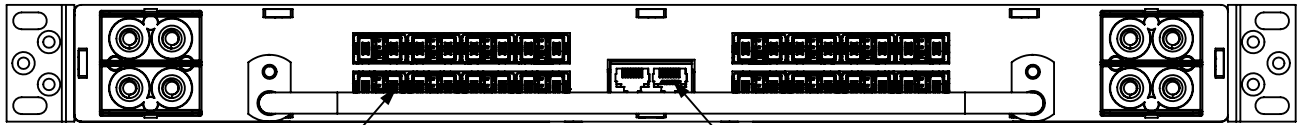
A.2 Rear View



OUTPUT TERMINATION BLOCK
TOP: HOT (-)
BOTTOM: RETURN (+)

ALARM PORTS
FORM C DRY CONTACTS

Models with Terminal Block Output Configuration

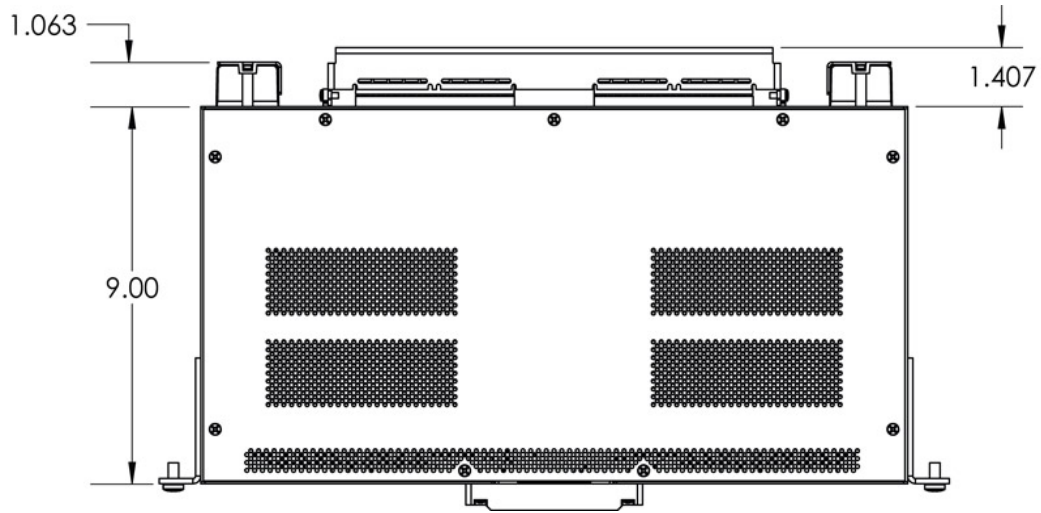


OUTPUT CONNECTIONS

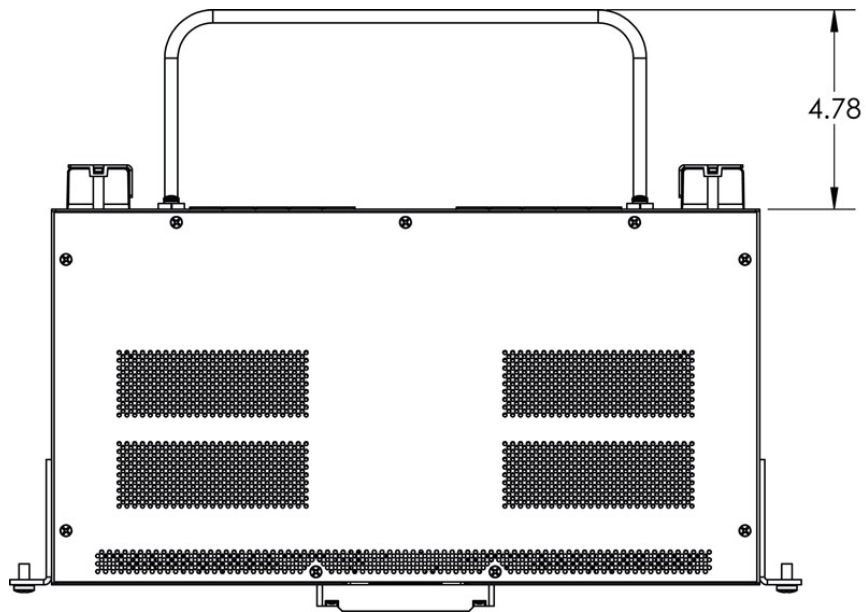
ALARM PORTS
FORM C DRY CONTACTS

Models with Connectorized Output Configuration

A.3 Top View



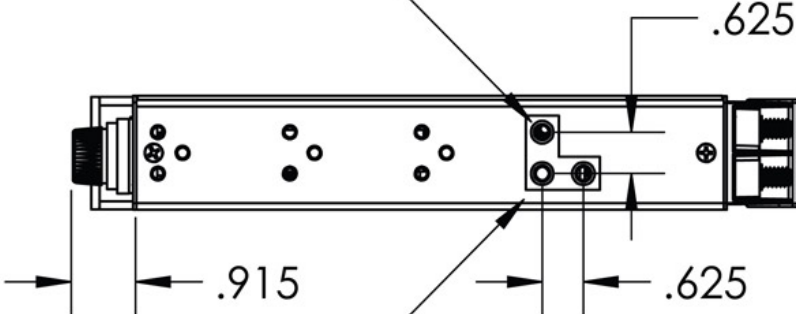
Models with Terminal Block Output Configuration



Models with Connectorized Output Configuration
(Output Cable Lacing Bar Shown)

A.4 Side View

1/4" x 20 THREADED HOLES



CHASSIS GROUND



an EnerSys® company

Alpha Technologies Services, Inc. | 3767 Alpha Way, Bellingham, WA 98226, USA

Tel.: Toll Free North America: +1 800 322 5742 | Outside US: +1 360 647 2360 | Technical Support: +1 800 863 3364

For more information visit our website at: www.alpha.com

© 2021 Alpha Technologies Services, Inc. All Rights Reserved. Trademarks and logos are the property of Alpha Technologies Services, Inc. and its affiliates unless otherwise noted. Subject to revisions without prior notice. E.&O.E.

Phillips® is a registered trademark of Phillips Screw Company.
BUSSMANN® is the registered trademark of Cooper Technologies Company.
BURNDY® is the registered trademark of Hubbell Incorporated.

TE CONNECTIVITY® is the registered trademark of Tyco International Services GmbH.



an EnerSys® company

C048-742-30 R04, Rev. B (03/2021)