



# NetSure™

Circuit Breaker Assembly

Installation Manual (Section 5930), Revision C

Specification Number: 520406

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## ADMONISHMENTS USED IN THIS DOCUMENT



**DANGER!** Warns of a hazard the reader *will* be exposed to that will *likely* result in death or serious injury if not avoided. (ANSI, OSHA)



**WARNING!** Warns of a potential hazard the reader *may* be exposed to that *could* result in death or serious injury if not avoided. This admonition is not used for situations that pose a risk only to equipment, software, data, or service. (ANSI)



**CAUTION!** Warns of a potential hazard the reader *may* be exposed to that *could* result in minor or moderate injury if not avoided. (ANSI, OSHA) This admonition is not used for situations that pose a risk only to equipment, data, or service, even if such use appears to be permitted in some of the applicable standards. (OSHA)



**ALERT!** Alerts the reader to an action that *must be avoided* in order to protect equipment, software, data, or service. (ISO)



**ALERT!** Alerts the reader to an action that *must be performed* in order to prevent equipment damage, software corruption, data loss, or service interruption. (ISO)



**FIRE SAFETY!** Informs the reader of fire safety information, reminders, precautions, or policies, or of the locations of fire-fighting and fire-safety equipment. (ISO)



**SAFETY!** Informs the reader of general safety information, reminders, precautions, or policies not related to a particular source of hazard or to fire safety. (ISO, ANSI, OSHA)

# IMPORTANT SAFETY INSTRUCTIONS

## Safety Admonishments Definitions

Definitions of the safety admonishments used in this document are listed under “Admonishments Used in this Document” on page 4.

## General Safety



**DANGER!** YOU MUST FOLLOW APPROVED SAFETY PROCEDURES.

Performing the following procedures may expose you to hazards. These procedures should be performed by qualified technicians familiar with the hazards associated with this type of equipment. These hazards may include shock, energy, and/or burns. To avoid these hazards:

- a) The tasks should be performed in the order indicated.
- b) Remove watches, rings, and other metal objects.
- c) Prior to contacting any uninsulated surface or termination, use a voltmeter to verify that no voltage or the expected voltage is present. Check for voltage with both AC and DC voltmeters prior to making contact.
- d) Wear eye protection.
- e) Use certified and well maintained insulated tools. Use double insulated tools appropriately rated for the work to be performed.

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## DESCRIPTION

Part No. 520406 is a Circuit Breaker Assembly that accepts up to two (2) separately ordered GJ-type circuit breakers. The assembly will accept a third circuit breaker if an accessory Circuit Breaker Mounting Kit is ordered and installed. This Circuit Breaker Assembly is designed for wall mounting. Furnished brackets permit mounting in either a 19" or 23" relay rack. See *Dimensions* for mounting details. See **Table 1** for a list of available circuit breakers.

 **NOTE!** *Input Return and Load Return wiring is external to this assembly, and must be furnished by the customer.*

This panel is UL Listed as a DC Power Distribution Center for Communication Equipment. In addition, this unit meets the requirements of CSA 22.2, No. 225 and is tested and Certified by UL ("c UL") as a Custom Built Power Distribution Center for Communications Equipment.

## ACCESSORIES

### GJ-Type Circuit Breakers

Order circuit breakers from the following table per job requirements.

**Table 1:**

Ampere Rating	Number of Mounting Positions	Part Number	Part Number
		<u>Electrical/ Mechanical Trip</u> <sup>1</sup>	<u>Electrical Trip</u> <sup>2</sup>
100	1	256621700	256621300
125	1	256621600	256621400
150	1	256621800	256622400
175	1	256621900	256622500
200	1	256622200	256622600
225	1	256622900	256622700
250	1	256623500	256623400

Circuit Breaker Alarm Operation:

1. Provides an alarm during an electrical or manual trip condition.
2. Provides an alarm during an electrical trip condition only.

### Circuit Breaker Mounting Kit

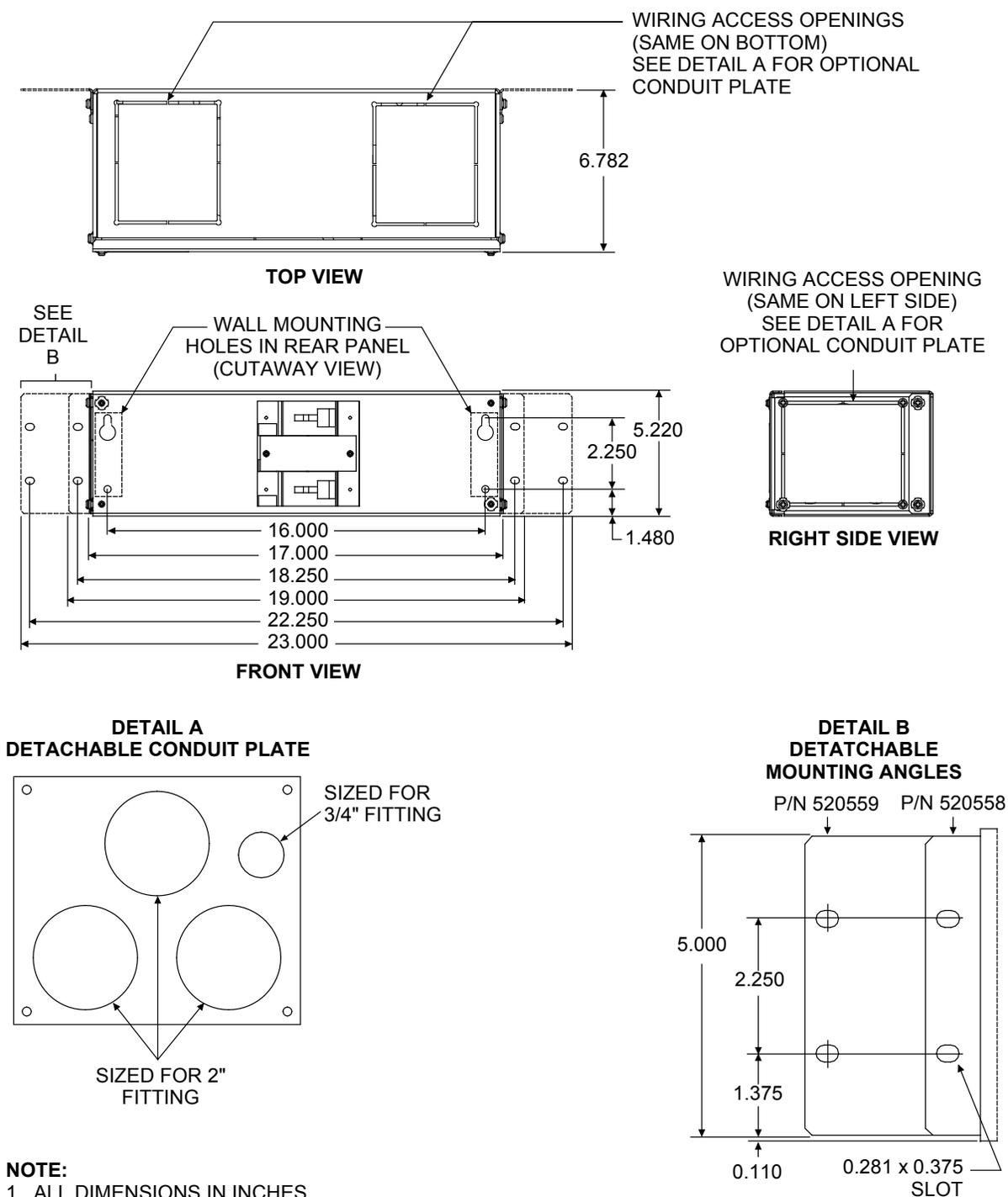
Provides components needed to mount a third circuit breaker in the panel. Order kit Part No. 520635.

 **NOTE!** *Do not order for first two circuit breakers.*

# DIMENSIONS

Refer to **Figure 1** for overall and mounting dimensions.

**Figure 1:**



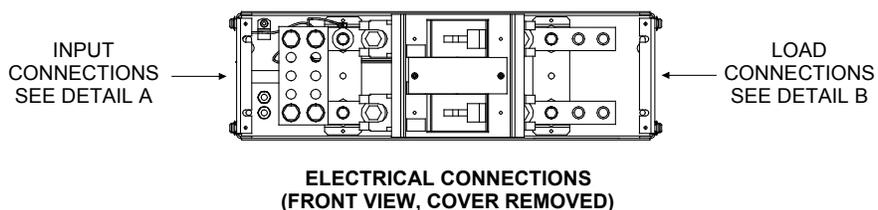
**NOTE:**  
1. ALL DIMENSIONS IN INCHES.

# INSTALLER'S CONNECTIONS

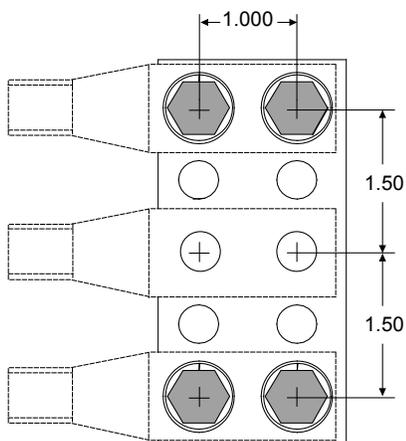
See wiring diagram T520406 and schematic diagram SD520406 for all electrical connections. Input and output wiring can enter the assembly through rectangular openings in the top, bottom, or side panels per site requirements. First, remove the appropriate cutouts. For applications not requiring conduit, after the cutouts are removed, a furnished piece of edge guard should be cut to length and installed on all edges of each opening. For applications that require conduit, two furnished conduit plates can be installed in the appropriate openings, using supplied hardware.

Refer to **Figure 2** for lug mounting details. Lugs must be supplied by the installer. Lug mounting hardware must be supplied by the installer, except for factory furnished hardware at the locations shown in **Figure 2**. Two 3/8-16 x 1-1/4" bolts are required for each lug. Recommended torque is 180 inch pounds when a Belleville washer is used, or 300 inch pounds when a standard lock washer is used.

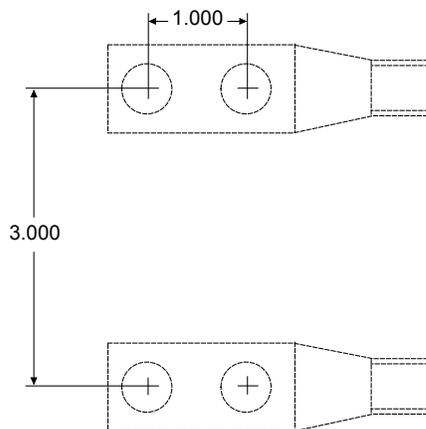
**Figure 2:**



**DETAIL A  
INPUT LUG MOUNTING DIMENSIONS**



**DETAIL B  
LOAD LUG MOUNTING DIMENSIONS**



**NOTES**

1. CUSTOMER TO PROVIDE LUGS. ALL LUGS TO HAVE CLEARANCE HOLES FOR 3/8" DIA. BOLTS.
2. CUSTOMER TO PROVIDE LUG MOUNTING HARDWARE EXCEPT AT LOCATIONS SHOWN SHADED.
3. DIMENSIONS ARE IN INCHES.

