Allen-Bradley 1397 150HP AC Line Disconnect

Cat. Nos. 1397-DS125
1397-DS150

What This Option Provides

When installed, the AC line disconnect is designed to provide branch circuit disconnect switch requirements.

Where This Option Is Used

Each 150HP AC Line Disconnect is sized to a 1397 drive as detailed below.

Catalog Number	230V Drive Rating HP	(kW)	460V Drive Rating HP	(kW)
1397-DS125	40-60	(30-45)	75-125	(56-93)
1397-DS150	75	(56)	150	(112)

What These Instructions Contain

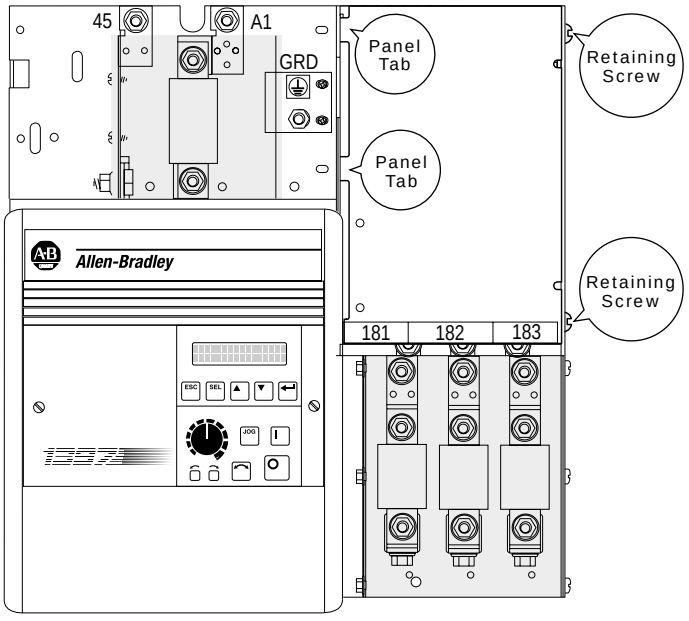
These instructions and any accompanying instructions contain the necessary information to install a 1397 150HP AC Line Disconnect.

Installation

ATTENTION: Electric Shock can cause injury or death. Remove all power before working on this product.

The drive is at line voltage when connected to incoming AC power. Before proceeding with any installation or troubleshooting activity, disconnect lockout and tag all incoming power to the drive. Verify with a voltmeter than no voltage exists at terminals L1, L2 and L3 on the drive input power terminal block.

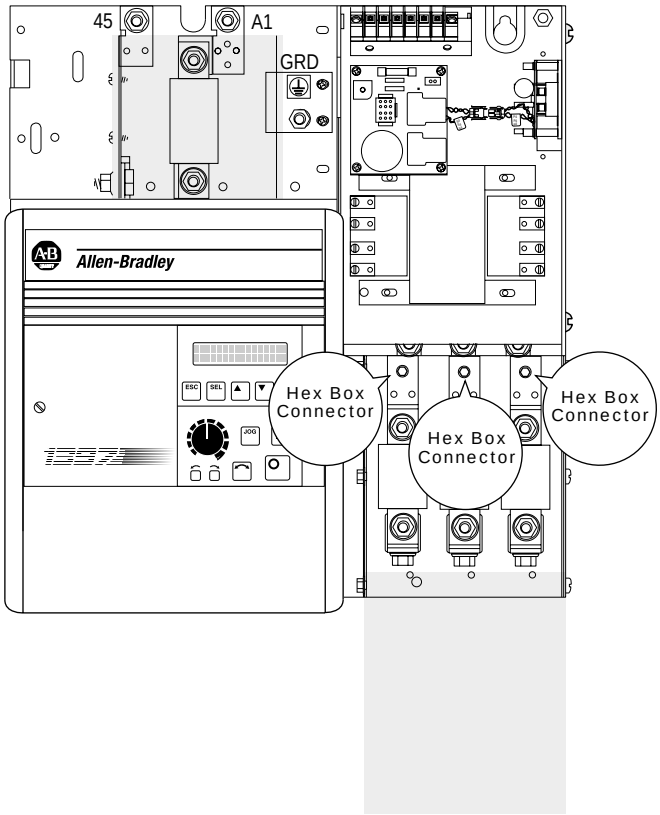
❒ **1** Remove and lockout all incoming power to the drive. Disconnect the incoming power lines from the drive by removing the wire binding screws on the box connectors at terminals 181, 182 & 183.



❒ **2** Loosen the (2) auxiliary panel cover retaining screws. To lift out the auxiliary panel, loosen the screws only enough to allow the panel tabs to slide out.

Installation
(continued)

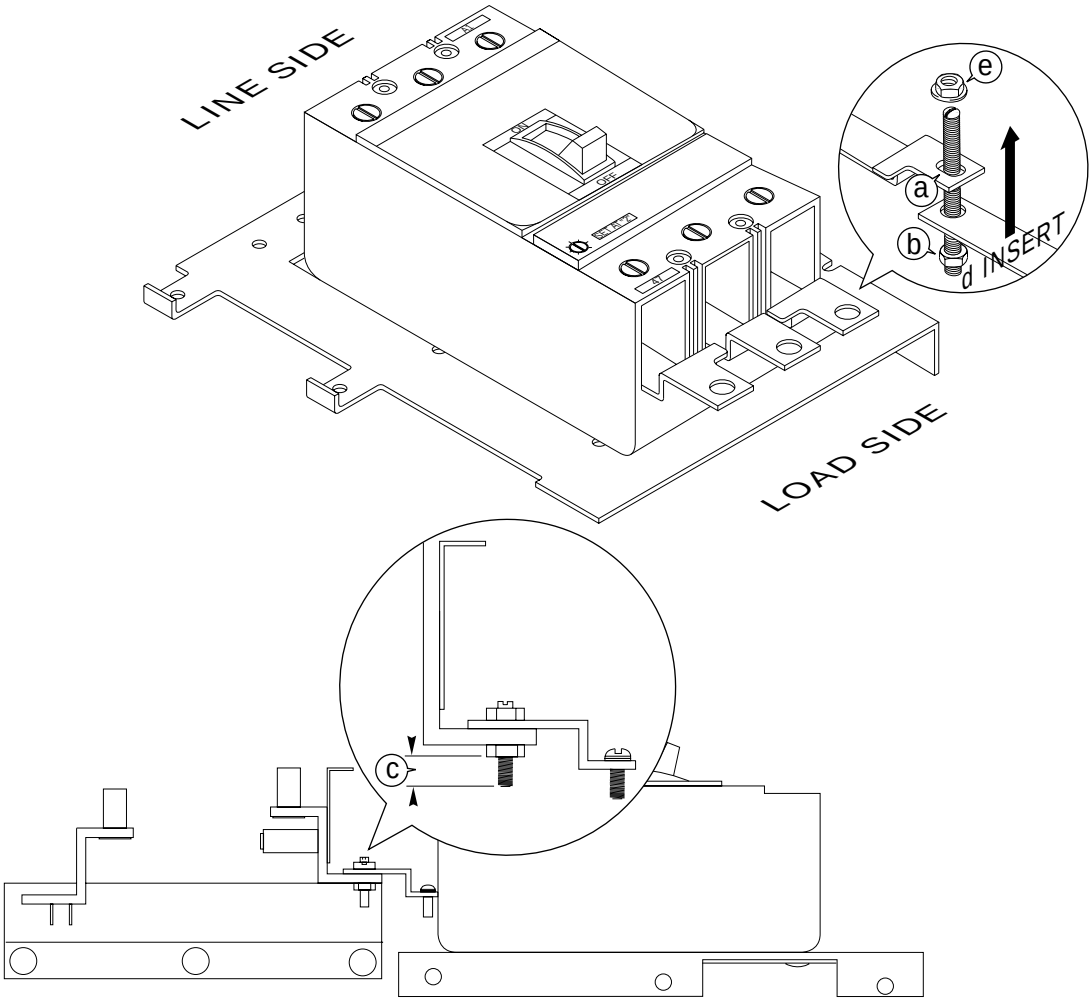
❒ **3** Remove the hex box connectors at terminals 181, 182 & 183. Insert a hex wrench from the front through the holes from the discarded wire binding screws, and turn the fasteners clockwise. Use a 5/32" wrench for 250A disconnects, or a 7/32" wrench for 400A disconnects. Place your hand behind the box connectors to catch the fasteners. Discard the box connectors.



Installation
(continued)

❒ **4** Install the bus bars on terminals 181, 182 & 183 using the M8 fasteners with 250A kits or M10 fasteners with 400A kits.

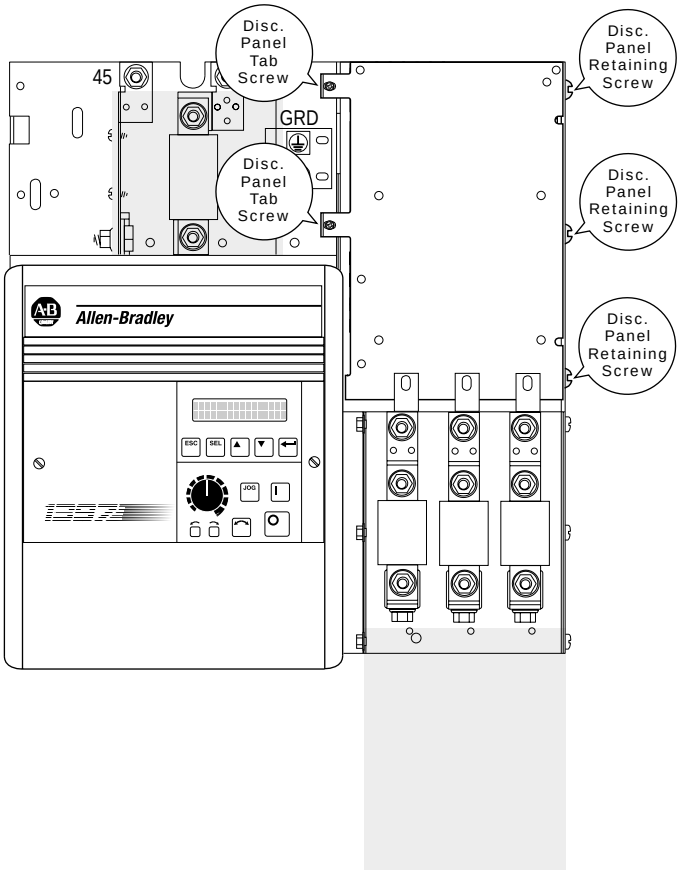
- **a** Place the bus bar's smaller, oval hole on the terminal.
- **b** Screw the nut to the bottom (non-socket) end of the screw.
- **c** Leave approximately 5mm (0.20 In.) of thread below the nut on M8 fasteners, or 8mm (0.31 In.) on M10s.
- **d** Insert the set screw from the back of the terminal through the bus bar.
- **e** Screw the nut washer to the top (hex socket end) of the set screw. Finger tighten, making sure the back nut and the screw do not turn.



Installation
(continued)

❒ **5** Install the disconnect panel in the front of the auxiliary chassis enclosure in place of the auxiliary panel cover removed in Step 2.

- The (2) disconnect panel tab screws go through the holes in the panel tabs to lock the panel in place.
- The (3) M6 disconnect panel retaining screws attach the disconnect panel to the auxiliary chassis.



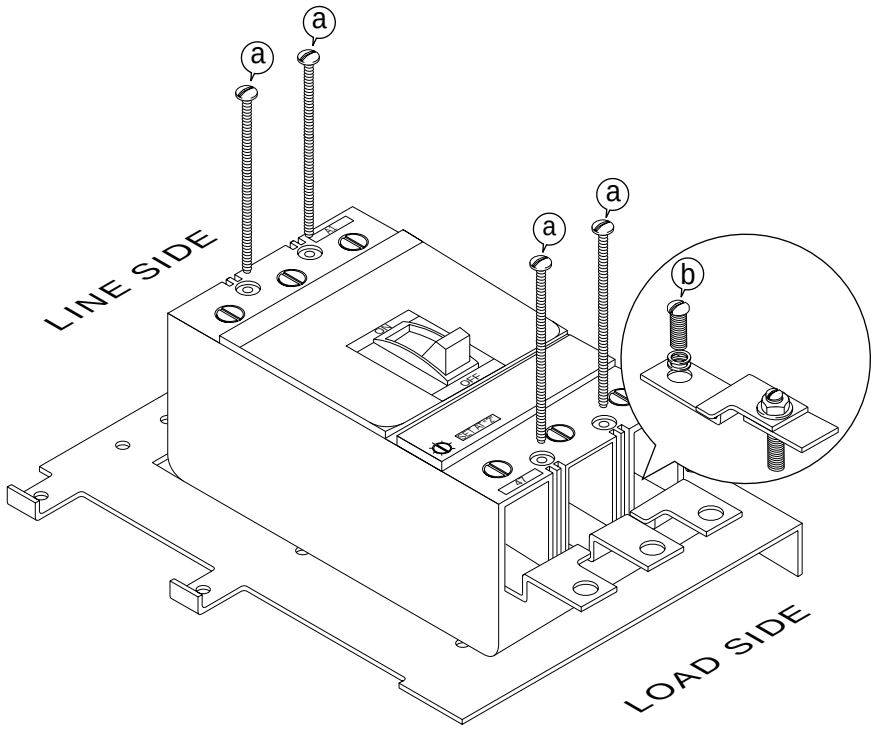
Installation
(continued)

❒ **6** **a** Mount the AC line disconnect to the disconnect panel using the (4) M5 fasteners included with 250A kits, or the (4) M6 fasteners included with 400A kits.

b Connect the bus bars installed in Step 3 to the disconnect's load terminals using 1/4" fasteners with 250A kits or 3/8" fasteners with 400A kits.

Torque all fasteners on the bus bars to the following values. Use a hex wrench and an open end wrench to tighten the M8 or M10 fasteners.

Fastener Size	Maximum Torque	Hex Wrench Size
1/4"	7.46 N-m (66 lb.-in.)	—
3/8"	26.66 N-m (236lb.-in.)	—
M8	11.29 N-m (100lb.-in.)	4mm
M10	22.59 N-m (200lb.-in.)	5mm

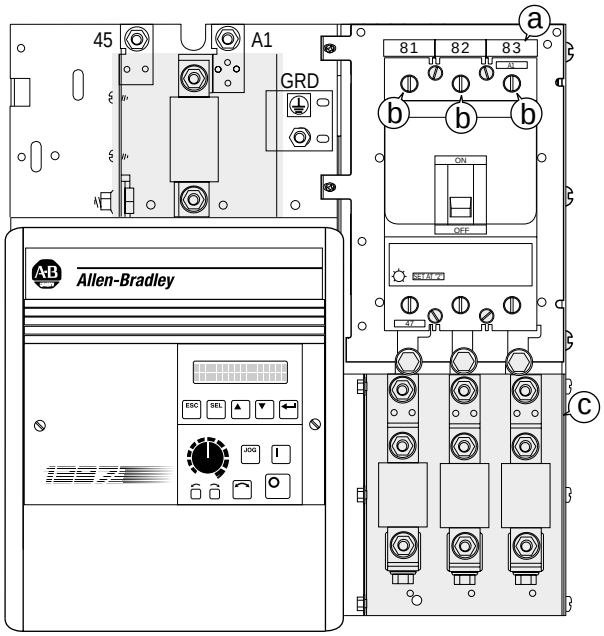


Installation
(continued)

❒ 7 **a** Apply the label to the top front of the AC line disconnect

b Connect the incoming AC power lines to the line side of the AC line disconnect using the built-in box connectors. Torque the screws to 28.24 N-m (250 lb.-in.) for 250A disconnects, and 33.89 N-m (300 lb.-in.) for 400A disconnects.

c Flip the line fuse cover up and press it against the hook and loop fastener to hold it in position over the fuses.



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