

Square D SI-400

Instruction Manual

SQUARE D SL400 CIRCUIT BREAKER SUBFEED LUG KIT

Model: SL-400

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Square D SL400 Circuit Breaker Subfeed Lug Kit. It is designed for qualified personnel familiar with electrical systems and safety procedures. Please read this manual thoroughly before attempting any installation or maintenance.

2. SAFETY INFORMATION

WARNING / ADVERTENCIA / AVERTISSEMENT:

- Always de-energize the circuit and follow proper lockout/tagout procedures before installing, servicing, or inspecting this equipment. Failure to do so can result in serious injury or death.
- Installation and maintenance must be performed by qualified electrical personnel only.
- This device is suitable for use only on a circuit capable of delivering not more than the specified symmetrical amperes at the rated voltage.
- It must be protected by an LA or LH circuit breaker rated not more than 400 amperes. Refer to the markings on the panelboard or switchboard for applicable ratings.
- This product does not provide overcurrent protection. Additional overcurrent protective devices are required for the circuit.

CAUTION / PRECAUCIÓN / ATTENTION:

- Ensure all connections are tight and secure to prevent overheating and potential fire hazards.
- Do not modify the product in any way. Use only genuine Square D accessories and replacement parts.

3. PRODUCT OVERVIEW

The Square D SL400 Circuit Breaker Subfeed Lug Kit is designed as an I-LINE™ Plug-on Lug accessory for panelboards and distribution systems. It provides connection points for sub-feed circuits, allowing for efficient power distribution within an electrical panel. The kit is rated for 400 Amperes and is compatible with specific Square D LA or LH circuit breakers.



Figure 3.1: Square D SL400 Circuit Breaker Subfeed Lug Kit. This image displays the compact, dark gray unit with various warning labels and product information visible on its surface. Key details such as "SL 400 A", "I-LINE Plug-on Lugs", and voltage ratings are legible on the labels.

4. SETUP AND INSTALLATION

Installation of the SL400 Subfeed Lug Kit should only be performed by a qualified electrician in accordance with all local and national electrical codes.

4.1 Pre-Installation Steps

1. Verify that the power to the panelboard or switchboard is completely de-energized and locked out/tagged out.
2. Confirm that the SL400 kit is compatible with your specific Square D panelboard and circuit breaker type (LA or LH, up to 400A).
3. Inspect the kit for any signs of damage. Do not install damaged components.

4.2 Installation Procedure

1. Carefully position the SL400 lug kit onto the designated I-LINE™ bus bar section within the panelboard.
2. Ensure the plug-on connections are fully engaged and seated securely.
3. Connect the sub-feed conductors to the lugs. Ensure proper wire sizing and insulation stripping.
4. Tighten all lug screws to the torque specifications provided in the panelboard's instruction manual or on the device itself. Over-tightening or under-tightening can lead to connection issues.
5. Verify all connections are secure and free from debris.
6. Once installation is complete and verified, the panelboard can be re-energized following proper safety protocols.

5. OPERATING PRINCIPLES

The Square D SL400 Circuit Breaker Subfeed Lug Kit functions as a passive component within the electrical distribution system. Once properly installed, it provides a robust and reliable connection point for sub-feed circuits, allowing power to be distributed from the main circuit breaker to downstream loads. It does not have active operational controls or indicators. Its primary function is to facilitate safe and organized electrical connections.

6. MAINTENANCE

Regular maintenance is crucial for the longevity and safe operation of your electrical system. For the SL400 Subfeed Lug Kit, maintenance primarily involves periodic inspection.

- **Annual Inspection:** At least once a year, or more frequently in harsh environments, have a qualified electrician inspect the lug kit.
- **Visual Check:** With the power de-energized and locked out/tagged out, visually inspect the lugs and connections for any signs of discoloration, overheating, loose wires, or corrosion.
- **Tightness Check:** Periodically verify the tightness of all lug connections using a calibrated torque wrench to ensure they meet the manufacturer's specifications.
- **Cleaning:** If necessary, gently clean the surface of the lugs with a dry, lint-free cloth. Do not use solvents or abrasive cleaners. Ensure the area is free of dust and debris.
- **Damage:** If any damage is observed, the component should be replaced immediately by a qualified professional.

7. TROUBLESHOOTING

The SL400 Subfeed Lug Kit is a passive component and typically does not "fail" in the same way an active device might. Most issues related to lug kits stem from improper installation or external factors.

Symptom	Possible Cause	Recommended Action
Overheating at connection point	Loose connection, improper wire sizing, corrosion, excessive load.	De-energize circuit. Inspect and re-torque connections. Verify wire gauge is appropriate for load. Clean any corrosion. Consult a qualified electrician.

Symptom	Possible Cause	Recommended Action
Intermittent power to sub-feed	Loose connection, damaged conductor, issue with upstream breaker.	De-energize circuit. Check all connections. Inspect conductors for damage. Verify upstream circuit breaker operation. Consult a qualified electrician.
Physical damage to lugs	Impact, improper handling during installation.	De-energize circuit. The damaged lug kit must be replaced by a qualified electrician.

Important: Always ensure the circuit is de-energized and verified before attempting any troubleshooting steps. If you are unsure about any electrical procedure, contact a qualified and licensed electrician.

8. SPECIFICATIONS

Attribute	Value
Brand	Square D
Model Number	SL-400
Product Dimensions	9 x 6 x 9 inches
Item Weight	9 Pounds
Circuit Breaker Type	Standard (Subfeed Lug Kit)
Number of Poles	2
Rated Amperage	400 A
Voltage Ratings	240V~, 480V~, 600V~
Interrupting Capacity (KA)	65 KA (240V~), 35 kA (480V~), 25 KA (600V~)
UPC	785901009832
Manufacturer	SQUARE D

9. WARRANTY AND SUPPORT

For specific warranty information regarding your Square D SL400 Circuit Breaker Subfeed Lug Kit, please refer to the documentation provided with your purchase or visit the official Square D (Schneider Electric) website. For technical support, product inquiries, or assistance with troubleshooting beyond the scope of this manual, please contact Square D customer service directly.

Square D by Schneider Electric:

- Website: www.se.com/us/en/ (General Schneider Electric site, navigate to Square D products)
- Customer Support: Refer to the website for contact numbers and support options in your region.



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