Manuals+
Q & A | Deep Search | Upload

Schneider Electric HDL36125

Schneider Electric PowerPacT H Frame Circuit Breaker HDL36125 User Manual

1. Introduction

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Schneider Electric PowerPacT H-Frame Circuit Breaker, model HDL36125. This device is designed to protect electrical systems from damage caused by overloads and short circuits. It features a thermal-magnetic trip unit, a 125 Amp current rating, and a 3-pole configuration. Please read this manual thoroughly before proceeding with any installation or operation.

2. Safety Information

WARNING: Electrical shock hazard. Only qualified personnel should install, operate, service, and maintain this equipment. Failure to follow these instructions can result in death or serious injury.

- Always disconnect power before working on or near the circuit breaker.
- Use appropriate personal protective equipment (PPE).
- Ensure all local and national electrical codes are followed.
- Do not operate the circuit breaker if it appears damaged.

3. Product Features

The PowerPacT H-Frame Circuit Breaker HDL36125 incorporates several key features for reliable electrical system protection:

- **Robust Circuit Protection:** Designed to protect electrical systems from overloads and short circuits.
- **Thermal-Magnetic Protection:** Provides thermal protection against overload conditions and instantaneous protection against short circuits.
- **Manual Trip Function:** Features an integral push-to-trip button for manual circuit breaker operation.
- **Dual-Break Rotating Contacts:** Reduces peak current during short circuit faults.
- **Lugs on Line and Load Sides:** Facilitates easy cable connections.
- **Compliance:** Complies with UL, CSA, NOM, and IEC standards, and is CE marked.

4. Setup and Installation

Installation of the PowerPacT H-Frame Circuit Breaker should only be performed by qualified electricians in accordance with all applicable electrical codes and standards.

4.1 Mounting

The HDL36125 circuit breaker is available in unit mount and I-Line constructions. Ensure the chosen mounting type is compatible with your electrical panel or enclosure.

4.2 Wiring Connections

This circuit breaker is equipped with lugs on both the line and load sides. Connect the incoming power supply to the line side lugs and the outgoing circuit to the load side lugs. Ensure all connections are secure and torqued to the manufacturer's specifications to prevent loose connections and overheating.

Figure 1: Top-down view of the circuit breaker showing the three poles and connection lugs.

Figure 2: Angled view of the circuit breaker, illustrating the main body and trip unit.

Figure 3: Side view of the circuit breaker, detailing its profile and potential mounting points.

5. Operating Instructions

5.1 Turning On/Off

- To turn the circuit breaker ON, push the handle firmly to the "ON" position.
- To turn the circuit breaker OFF, push the handle firmly to the "OFF" position.

5.2 Manual Trip Function

The circuit breaker includes an integral push-to-trip button located on the cover. Pressing this button will manually trip the circuit breaker, moving the handle to the "TRIPPED" position. This function is typically used for testing or emergency shutdown.

5.3 Automatic Tripping

The thermal-magnetic trip unit will automatically trip the circuit breaker in response to:

- **Overload:** A sustained current exceeding the breaker's 125 Amp rating (thermal protection).
- **Short Circuit:** A sudden, high-magnitude current flow (magnetic protection).

When the circuit breaker trips automatically, the handle will move to an intermediate "TRIPPED" position. To reset a tripped breaker, first move the handle fully to the "OFF" position, then to the "ON" position.

6. Maintenance

Regular maintenance helps ensure the longevity and proper functioning of your circuit breaker. All maintenance should be performed by qualified personnel with power disconnected.

- **Visual Inspection:** Periodically inspect the circuit breaker for any signs of physical damage, discoloration, or loose connections.
- **Cleaning:** Keep the circuit breaker free from dust and debris. Use a dry, non-abrasive cloth for cleaning. Do not use liquids or solvents.
- **Connection Checks:** Verify that all lug connections remain tight and secure. Refer to installation torque specifications.
- **Function Test:** Periodically test the manual trip function to ensure it operates correctly.

7. Troubleshooting

If the circuit breaker trips frequently or fails to operate as expected, consider the following:

- **Frequent Tripping:** This often indicates an overload or a short circuit in the protected circuit. Investigate the connected load for excessive current draw or wiring faults.
- **Breaker Will Not Reset:** If the breaker immediately trips after being reset, a persistent fault (overload or short circuit) is likely present. Do not force the breaker ON. Identify and correct the fault before attempting to reset.
- **No Power to Circuit:** If the breaker is in the "ON" position but there is no power, check for loose connections, damaged wiring, or issues upstream in the electrical system.
- **Physical Damage:** If the circuit breaker shows signs of burning, melting, or other physical damage, it must be replaced immediately by qualified personnel.

For issues that cannot be resolved, contact a qualified electrician or Schneider Electric technical support.

8. Specifications

Specification	Value
Brand	Schneider Electric
Model Number	HDL36125
Current Rating	125 Amps
Number of Poles	3
Voltage Rating	600 VAC
Breaking Capacity	14kA at 600VAC
Continuous Current Rating	80%
Circuit Breaker Type	Thermal-Magnetic, Standard
Mounting Type	Lugs
Product Dimensions (D x W x H)	3.39"D x 4.09"W x 6.42"H
Item Weight	5 pounds
Material	Copper
UPC	785901955849
Certifications	UL, CSA, NOM, IEC, CE marked

9. Warranty Information

The Schneider Electric PowerPacT H-Frame Circuit Breaker HDL36125 is covered by an 18-month warranty. For detailed warranty terms and conditions, please refer to the official Schneider Electric warranty documentation or contact Schneider Electric customer support.

10. Support

For technical assistance, product inquiries, or support regarding your PowerPacT H-Frame Circuit Breaker, please contact Schneider Electric directly.

- **Schneider Electric Official Website:** www.se.com
- Refer to the website for local contact information and support resources.