



Manuals.plus /

› SIEMENS /

› Siemens ED43B100 Type ED4 100 Amp 3 Pole Circuit Breaker Instruction Manual

## SIEMENS ED43B100

# Siemens ED43B100 Type ED4 100 Amp 3 Pole Circuit Breaker Instruction Manual

Model: ED43B100

## 1. INTRODUCTION

---

This manual provides essential information for the safe and effective installation, operation, and maintenance of your Siemens ED43B100 Type ED4 100 Amp 3 Pole Circuit Breaker. The ED Frame Sentron Series Circuit Breakers are designed for use in individual enclosures, switchboards, and panelboards, offering complete overload and short circuit protection. Please read this manual thoroughly before proceeding with any installation or operation.

## 2. SAFETY INFORMATION

---

**WARNING:** Electrical shock hazard. Installation and servicing of this equipment should only be performed by qualified personnel. Failure to follow these instructions can result in serious injury or death.

- Always disconnect power at the main service panel before working on electrical equipment.
- Use appropriate personal protective equipment (PPE) such as insulated gloves and safety glasses.
- Ensure all wiring connections are secure and comply with local and national electrical codes.
- Do not operate the circuit breaker if it appears damaged.
- This device is designed for specific voltage and amperage ratings. Do not exceed these limits.

## 3. PRODUCT OVERVIEW

---

The Siemens ED43B100 is a 3-pole, 100 Amp, 480 Volt rated circuit breaker from the ED Frame Sentron Series. It features a thermal magnetic trip mechanism, providing both time-delay thermal protection against overloads and instantaneous magnetic protection against short circuits. This breaker is designed for reliable performance in demanding electrical distribution applications.



Figure 1: Siemens ED43B100 Circuit Breaker. This image shows the front view of the black circuit breaker with its specifications clearly visible on the label.

### Key Features:

- ED Frame Sentron Circuit Breaker
- 480 Volt Rated
- 100 Amp Capacity
- 3 Pole Configuration

- Thermal Magnetic Trip
- Country of Origin: Mexico

## 4. INSTALLATION INSTRUCTIONS

---

The ED43B100 circuit breaker is designed for panel mount installation. Follow these general steps for installation. Refer to your specific panelboard or enclosure documentation for detailed instructions.

1. **Preparation:** Ensure all power to the panelboard or enclosure is OFF and verified with a voltage tester.
  2. **Mounting:** Securely mount the circuit breaker into the designated slot within the panelboard. Ensure proper alignment and engagement with the bus bar system.
  3. **Wiring - Load Side:** Connect the load side conductors to the terminals provided on the circuit breaker. The ED frame breakers are provided with load side lugs. Tighten connections to the manufacturer's specified torque values.
  4. **Wiring - Line Side (if applicable):** Line side lugs are not included with the ED43B100 and must be added in the field if required.
    - For 15-25 Amp circuit breakers, use catalog number SA1E025.
    - For 30-100 Amp breakers, use catalog number LN1E100.
    - For 110 and 125 Amp, use TA1E6125.
    - The CCE125 is the compression type lug for use on all ED frame breakers.
- **Verification:** Double-check all connections for tightness and correct polarity. Ensure no bare wires are exposed.
  - **Enclosure Closure:** Close and secure the panelboard or enclosure cover.
  - **Power Restoration:** Carefully restore power to the panelboard.

## 5. OPERATING INSTRUCTIONS

---

The Siemens ED43B100 circuit breaker operates with a simple ON/OFF mechanism and provides visual indication of its status.

- **ON Position:** Push the handle fully to the 'ON' position to allow current flow.
- **OFF Position:** Push the handle fully to the 'OFF' position to interrupt current flow.
- **TRIPPED Position:** If an overload or short circuit occurs, the breaker will automatically move to a central 'TRIPPED' position. To reset a tripped breaker, first move the handle fully to the 'OFF' position, then push it to the 'ON' position. If the breaker immediately trips again, do not force it; investigate the cause of the trip.

## 6. MAINTENANCE

---

Circuit breakers generally require minimal maintenance. However, periodic inspection is recommended to ensure continued safe operation.

- **Visual Inspection:** Annually inspect the circuit breaker for any signs of physical damage, discoloration, or loose connections.
- **Cleaning:** Keep the area around the circuit breaker clean and free of dust and debris. Use a dry, non-abrasive cloth for cleaning.
- **Testing:** While not typically required for residential or light commercial applications, specialized testing may be performed by qualified electricians for critical installations.
- **Replacement:** If the circuit breaker shows signs of damage, frequently trips without an apparent cause, or fails to operate correctly, it should be replaced by a qualified electrician.

## 7. TROUBLESHOOTING

---

If your Siemens ED43B100 circuit breaker trips, follow these steps:

- Identify Tripped Breaker:** Locate the circuit breaker with its handle in the 'TRIPPED' (middle) position.
- Disconnect Load:** Unplug or turn off all appliances and lights on the affected circuit.
- Reset Breaker:** Firmly push the breaker handle to the 'OFF' position, then to the 'ON' position.
- Restore Load Gradually:** If the breaker holds, plug in or turn on appliances one by one to identify the faulty device or overloaded circuit.
- Persistent Tripping:** If the breaker trips immediately after resetting, or trips frequently, there may be a short circuit or a persistent overload. Do not attempt to repeatedly reset the breaker. Contact a qualified electrician for diagnosis and repair.

## 8. SPECIFICATIONS

---

Specification	Detail
Manufacturer	Siemens -HI
Part Number	ED43B100
Item Weight	2 pounds
Product Dimensions	7.4 x 5.6 x 3.8 inches
Item Model Number	ED43B100
Size	6x4x3
Color	Black
Style/Pattern	Sentron Series
Voltage	480 Volts
Amperage Capacity	100 Amps
Item Package Quantity	1
Number Of Pieces	1
Capacity Description	65kA 240V 50/60Hz   18kA 480V 50/60Hz
Mounting Type	Panel Mount
Switch Style	Rocker switch
Included Components	SIEED43B100

## 9. WARRANTY AND SUPPORT

---

**Warranty:** This Siemens ED43B100 circuit breaker comes with a **1-year manufacturer warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

**Customer Support:** For technical assistance, warranty claims, or further information, please contact Siemens customer support. Refer to the official Siemens website or your product packaging for the most current contact details.

**Online Resources:** For additional product information, safety data sheets, or updated manuals, visit the official Siemens website or the Siemens store on Amazon: Visit the SIEMENS Store

