Schneider Electric A9DA2616

Schneider Electric Acti9 iDD40T Residual Current Circuit Breaker Instruction Manual

Model: A9DA2616 | Brand: Schneider Electric

1. Introduction

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Schneider Electric Acti9 iDD40T Residual Current Circuit Breaker (RCBO). The Acti9 iDD40T is designed to protect against electrical shock by detecting earth leakage currents and disconnecting the circuit. Please read this manual thoroughly before installation and use.

2. Safety Information

WARNING: Electrical installation and maintenance should only be performed by qualified and authorized personnel. Failure to follow these instructions can result in serious injury or death.

- Always disconnect power at the main supply before working on electrical circuits.
- Ensure all local and national electrical codes and regulations are followed.
- Do not use the device if it appears damaged.
- The test button is for functional verification only and does not replace regular electrical safety checks.

3. Setup and Installation

The Acti9 iDD40T RCBO is designed for DIN rail mounting. Ensure adequate space for ventilation and wiring.

3.1. Mounting

1. Ensure the DIN rail is securely installed within the electrical enclosure.
2. Hook the top clip of the RCBO onto the DIN rail.
3. Press down firmly on the bottom of the RCBO until it clicks into place on the rail.

3.2. Wiring Connections

Refer to the diagram below for correct wiring. Ensure all connections are tight to prevent overheating and arcing.

Figure 1: Schneider Electric Acti9 iDD40T RCBO. This image shows the front view of the circuit breaker, highlighting the input and output terminals, the operating handle, and the 'Regular test' button. The 'N' terminal for neutral connection is visible at both the top and bottom.

- Connect the incoming phase (live) conductor to the top left terminal (marked 'L' or similar, typically not explicitly marked on this model but implied by standard wiring).
- Connect the incoming neutral conductor to the top right terminal (marked 'N').
- Connect the outgoing phase (live) conductor to the bottom left terminal.
- Connect the outgoing neutral conductor to the bottom right terminal (marked 'N').
- Ensure wire stripping length is appropriate for the terminals (e.g., 14mm as indicated on the device).
- Tighten terminal screws to the recommended torque (typically 2Nm, refer to device markings or manufacturer specifications).

4. Operating Instructions

4.1. Turning On/Off

- **To Turn On:** Push the operating handle upwards to the 'ON' position.
- **To Turn Off:** Push the operating handle downwards to the 'OFF' position.
- **Tripped State:** If the RCBO trips due to an overload, short circuit, or earth leakage, the handle will move to an intermediate position. To reset, first push the handle fully down to 'OFF', then push it up to 'ON'.

4.2. Test Button Function

The 'Regular test' button (marked 'T' or with a test symbol) is used to verify the proper functioning of the earth leakage detection mechanism.

1. Ensure the RCBO is in the 'ON' position and the circuit is live.
2. Press and hold the 'Regular test' button. The RCBO should immediately trip to the 'OFF' position.
3. Release the button.
4. Reset the RCBO by pushing the handle fully down to 'OFF', then up to 'ON'.
5. If the RCBO does not trip when the test button is pressed, it may be faulty and should be replaced immediately.

5. Maintenance

The Acti9 iDD40T RCBO requires minimal maintenance. Regular testing is the primary maintenance activity.

- **Regular Testing:** It is recommended to press the 'Regular test' button at least once every month to ensure the earth leakage protection function is operational.
- **Cleaning:** If necessary, gently wipe the exterior of the device with a dry, soft cloth. Do not use abrasive cleaners or solvents. Ensure power is disconnected before cleaning.
- **Inspection:** Periodically inspect the device for any signs of physical damage, discoloration, or loose connections. Address any issues promptly.

6. Troubleshooting

If you encounter issues with your Acti9 iDD40T RCBO, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
RCBO trips immediately after being reset.	Persistent earth leakage fault, short circuit, or overload in the protected circuit.	Disconnect all loads from the circuit. Reset the RCBO. If it holds, reconnect loads one by one to identify the faulty appliance or wiring. If it still trips with no loads, consult a qualified electrician.
RCBO does not trip when the 'Regular test' button is pressed.	Faulty RCBO internal mechanism.	The device is faulty and must be replaced by a qualified electrician. Do not attempt to repair.
RCBO trips intermittently.	Intermittent earth leakage, transient overloads, or sensitive equipment causing nuisance tripping.	Check for loose connections. Monitor appliances for intermittent faults. Consider if the circuit is overloaded. Consult a qualified electrician for further diagnosis.

7. Specifications

Technical specifications for the Schneider Electric Acti9 iDD40T RCBO (Model A9DA2616):

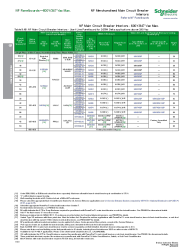
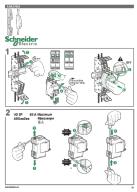
Feature	Detail
Model Number	A9DA2616
Type	Residual Current Circuit Breaker with Overcurrent Protection (RCBO)
Poles	1P+N (1 Pole + Neutral)
Rated Current (In)	16 A
Tripping Curve	C
Rated Residual Operating Current (IΔn)	30 mA
Residual Current Type	AC type
Rated Short-Circuit Breaking Capacity (Icn)	4500A/6kA (according to IEC 601009-2-1 and IEC 60947-2)
Rated Voltage (Ue)	230-240 V AC, 50 Hz
Mounting Type	DIN Rail
Width	8 steps of 9mm (72mm total width)
Dimensions (L x W x H)	7.3 x 3.6 x 8.5 cm
Weight	210 grams
Standards	IEC 601009-2-1, IEC 60947-2

8. Warranty and Support

For warranty information and technical support, please refer to the official Schneider Electric website or contact your local Schneider Electric representative. Keep your purchase receipt as proof of purchase.
Online Resources: www.se.com

Related Documents - A9DA2616

	Schneider Electric RESI9 RCBO End of Life Instructions and Disposal Guide Comprehensive guide for the end-of-life treatment and disposal of Schneider Electric RESI9 Residual Current Breakers with Overcurrent Protection (RCBOs), including disassembly risks and component information.

	[Schneider Electric NF Main Circuit Breaker Interiors - 600Y/347 Vac Max Panelboards] Detailed specifications for Schneider Electric NF Main Circuit Breaker Interiors, designed for 600Y/347 Vac Max panelboards. This datasheet covers NEMA 1 and water/dirt-resistant enclosures, including part numbers, ratings, and dimensions for I-Line panelboard applications.
	[Guide Utilisateur Disjoncteur Schneider A9P34706 iDT40N | 6A, 3P+N, Courbe D] Guide utilisateur détaillé du disjoncteur modulaire Schneider Electric A9P34706 iDT40N. Spécifications techniques, installation, applications, entretien et garantie.
	[Schneider Electric PowerPacT™ L-Frame Circuit Breaker Kit Installation Guide for NQ Panelboards] This instruction bulletin from Schneider Electric provides detailed steps for installing the NQMB6PPL kit, featuring PowerPacT™ L-Frame main and sub-feed circuit breakers, onto NQ panelboards. Includes kit contents, tools, and safety precautions.
	[Schneider Electric A9A27003 Mounting Plate Installation Guide] Detailed instructions for installing the Schneider Electric A9A27003 mounting plate accessory for circuit breakers. Includes steps for DIN rail mounting, assembly, and surface installation, with torque values and dimensions. Compliant with installation regulations.
	[Schneider Electric Acti9 Low Voltage Circuit Breakers Catalog] Explore the Schneider Electric Acti9 catalog for low voltage circuit breakers, featuring detailed technical specifications, product information, and part numbers for various circuit protection needs.