

ABB OS30FAJ12

ABB OS30FAJ12 Disconnect Switch User Manual

Model: OS30FAJ12

1. INTRODUCTION

This manual provides essential information for the safe and effective use of the ABB OS30FAJ12 Disconnect Switch. This device is designed for industrial applications, rated for 600 VAC, 3 horsepower, 30 Amperes, and features 3 poles. Please read this manual thoroughly before installation or operation to ensure proper functionality and safety.



Figure 1: Main view of the ABB OS30FAJ12 Disconnect Switch with a fuse puller inserted, showing its compact design and robust construction.

2. SAFETY INFORMATION

WARNING: Risk of electric shock. Only qualified personnel should install, operate, or service this equipment.

- Always disconnect power before working on the switch or connected circuits.
- Ensure proper grounding and bonding according to local electrical codes.
- Use appropriate personal protective equipment (PPE), including insulated gloves and eye protection.
- Do not operate the switch if it is damaged or if any components are missing.
- Verify voltage and current ratings before connecting to any circuit.

3. SETUP AND INSTALLATION

The ABB OS30FAJ12 Disconnect Switch is designed for panel mounting. Follow these steps for proper installation:

1. **Mounting:** Securely mount the disconnect switch to a stable surface or within an electrical enclosure using appropriate fasteners.
2. **Wiring:** Connect the incoming power supply to the designated input terminals and the load to the output terminals. Ensure all connections are tight and secure. The terminal type is screw, and the recommended terminal torque is 17 LB.IN.
3. **Fuse Installation:** This switch requires Class J fuses. Insert three 30A Class J fuses into the designated fuse holders. Ensure fuses are correctly seated.



Figure 2: Side view of the disconnect switch, displaying the product label with model number OS30FAJ12, voltage ratings (600 VAC), horsepower ratings, and terminal torque specifications. This label provides critical information for correct wiring and application.



Figure 3: Detailed view of the fuse compartments, showing "Class J" and "Max. 30A" labels, and recommendations for "Bussmann LOW-PEAK" fuses. This highlights the specific fuse type required for safe operation.

4. OPERATING INSTRUCTIONS

The ABB OS30FAJ12 Disconnect Switch operates in an OFF-NONE-ON mode. It is designed for general purpose switch applications.

- **Turning On:** To engage the circuit, move the operating handle to the "ON" position.
- **Turning Off:** To disconnect the circuit, move the operating handle to the "OFF" position.
- **Fuse Replacement:** If a fuse blows, first ensure the switch is in the "OFF" position and the circuit is de-energized. Use a fuse puller tool to safely remove the blown fuse and replace it with a new 30A Class J fuse.



Figure 4: Close-up of the fuse puller tool, showing its design for safe and easy removal and insertion of fuses. This tool is essential for maintenance and fuse replacement.



Figure 5: Top-down view of the disconnect switch with the fuse puller engaged, demonstrating how the tool interacts with the fuse slots for removal or insertion. This illustrates the practical application of the fuse puller.

5. MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your ABB OS30FAJ12 Disconnect Switch.

- **Periodic Inspection:** Annually inspect the switch for any signs of physical damage, loose connections, or discoloration due to overheating.
- **Cleaning:** Keep the switch free from dust and debris. Use a dry, non-abrasive cloth for cleaning. Do not use liquid cleaners.
- **Terminal Check:** Periodically check terminal screws for tightness, especially after initial installation and during routine maintenance.

6. TROUBLESHOOTING

If you encounter issues with your disconnect switch, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Switch does not turn on.	No incoming power; Blown fuse; Loose wiring.	Check main power supply; Inspect and replace fuses; Verify all wiring connections are secure.
Switch feels hot during operation.	Overload; Loose connections.	Reduce load; Check and tighten all terminal connections. If problem persists, consult a qualified electrician.
Fuses blow frequently.	Overcurrent; Short circuit; Incorrect fuse rating.	Investigate the connected load for overcurrent conditions; Check for short circuits in the wiring; Ensure correct 30A Class J fuses are used.

7. SPECIFICATIONS

Feature	Detail
Model Number	OS30FAJ12
Brand	ABB
Current Rating	30 Amps
Operating Voltage	600 Volts AC
Poles	3
Horsepower Rating	3 hp
Operation Mode	OFF-NONE-ON
Contact Type	Normally Open
Connector Type	Screws
Terminal Type	Screw
Circuit Type	1-way

Feature	Detail
Actuator Type	Push Button
Contact Material	Copper
Max. Fuse Size	30A (Class J)
Terminal Torque	17 LB.IN.
Wire Compatibility	18-8 AWG 75°C Copper stranded only
Package Dimensions	9 x 5 x 5 inches
Item Weight	1.69 Pounds
Date First Available	March 29, 2016

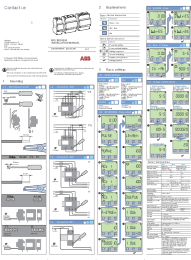
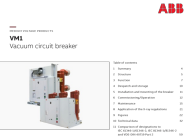
8. WARRANTY AND SUPPORT

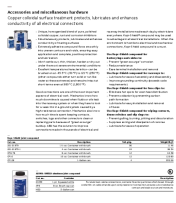



For information regarding product warranty, technical support, or service, please contact ABB customer service or visit the official ABB website. Keep your purchase receipt as proof of purchase.

ABB Customer Service: Please refer to the contact information provided on the ABB official website or product packaging.

Online Resources: For additional documentation, FAQs, and support, visit the [ABB Store on Amazon](#) or the main ABB website.

Related Documents - OS30FAJ12

	<p>ABB B21/B23/B24 Installation Manual</p> <p>This installation manual from ABB provides detailed instructions for the B21, B23, and B24 series energy meters. It covers essential aspects such as mounting procedures, electrical connections for different models, basic settings configuration, and comprehensive technical specifications.</p>
	<p>ABB VM1 Vacuum Circuit Breaker Instruction Manual</p> <p>Comprehensive instruction manual for the ABB VM1 vacuum circuit breaker, detailing its structure, function, installation, operation, maintenance, and technical specifications for medium voltage electrical systems.</p>

	<p>ABB Electrical Connector Accessories & Hardware Guide</p> <p>Comprehensive guide to ABB's COLOR-KEYED COMPRESSION CONNECTOR SYSTEMS accessories, featuring Kopr-Shield compounds, Belleville and Dragon Tooth washers, hex bolts, nuts, sealants, lubricants, duct seal, and wire brushes for electrical connections.</p>
	<p>ABB MS165-20 Manual Motor Starter: Technical Specifications, Features, and Accessories</p> <p>Detailed technical specifications, features, dimensions, electrical ratings, and accessories for the ABB MS165-20 Manual Motor Starter. This device offers reliable motor protection against overload and phase failure, with a compact 55mm width and trip class 10.</p>
	<p>ABB EZGround, Furseweld, Blackburn Grounding Systems Catalog</p> <p>Discover ABB's comprehensive range of EZGround, Furseweld, and Blackburn grounding systems. This catalog covers compression connectors, clamps, ground rods, exothermic welding, and essential accessories for reliable electrical grounding solutions.</p>
	<p>ABB Ability™ Smart Sensor Gateway Installation Guide with Huawei E8372</p> <p>Step-by-step instructions for installing and configuring the ABB Ability™ Smart Sensor Gateway using a Huawei E8372 USB WiFi modem. Learn how to connect, set up network parameters, and verify gateway status.</p>