

Mars 83915

MARS- 83915 60A Non-Fused A/C Disconnect

USER INSTRUCTION MANUAL

Introduction

This manual provides essential information for the safe installation, operation, and maintenance of the Mars 83915 60A Non-Fused A/C Disconnect with Internal Surge Protector. This unit is designed for outdoor use with a NEMA 3R enclosure and is rated for 240V, 60A applications. Please read this manual thoroughly before installation and retain it for future reference.

Important Safety Information

WARNING: To reduce the risk of electrical shock or burns, always turn off power at the main service panel before working inside this equipment. Installation should only be performed by a qualified electrician in accordance with all local and national electrical codes.

- This device is rated for 240V, 60A. Ensure your application matches these specifications.
- Continuous load current should not exceed 80% of the rating of fuses employed in circuits.
- Use only 90-degree C or 75-degree C conductors on all field-installed line and load terminals.
- When connecting aluminum wire in dual lugs, remove oxide film and protect with oxide inhibiting compound.
- Suitable for use on a circuit capable of delivering not more than 10,000 amperes RMS symmetrical, 240 volts AC max, when protected by a fuse or circuit breaker rated 60 amps maximum.
- The unit is a non-fused disconnect.

Product Features

- Voltage/Amp Rating: 240V / 60A
- Dimensions (HxWxD): 8.66 x 5.12 x 2.25 inches
- Single Phase 240V, 10,000 rated, with internal surge protection
- Rainproof, NEMA 3R Enclosure for outdoor use
- Non-fused design

Setup and Installation

This A/C disconnect unit is designed for outdoor installation. Ensure the mounting surface is stable and level. Refer to the diagram below for component identification and wiring connections.



Figure 1: Mars 83915 A/C Disconnect with the side cover open, revealing the internal non-fused disconnect switch, surge protector, and wiring instructions label. The label provides details on model number, voltage, current ratings, and lug tightening torque.

Wiring Instructions:

1. **Power Disconnection:** Before beginning any work, ensure all power to the circuit is OFF at the main service panel. Verify with a voltage tester.
2. **Mounting:** Securely mount the disconnect box to a suitable outdoor surface using appropriate fasteners.
3. **Conduit Connection:** Connect appropriate electrical conduit to the knockouts provided on the enclosure.
4. **Wiring:**
 - Route the incoming power supply wires (line) to the designated line terminals.
 - Route the outgoing load wires (to A/C unit) to the designated load terminals.
 - Connect the ground wire to the ground lug.
 - Refer to the internal label for specific lug tightening torque values and wire range data.
 - Use CU/AL wire as specified. If using aluminum wire, apply oxide inhibiting compound and remove oxide film

from dual lugs.

5. **Close and Secure:** Once all connections are made and verified, close the cover and secure it.
6. **Restore Power:** Restore power at the main service panel.

Operating Instructions

The Mars 83915 is a non-fused A/C disconnect. Its primary function is to provide a local means of disconnecting power to an air conditioning unit for maintenance or emergency purposes.

- **To Disconnect Power:** Open the side cover of the unit. Locate the ON/OFF switch handle. Move the handle to the "OFF" position. This will interrupt the power supply to the connected A/C unit.
- **To Restore Power:** Ensure all work on the A/C unit is complete and safe. Move the switch handle to the "ON" position. Close the side cover securely.

The internal surge protector provides protection against transient voltage surges. No user interaction is required for its operation.

Maintenance

The Mars 83915 A/C Disconnect is designed for minimal maintenance. However, periodic inspection is recommended to ensure continued safe operation.

- **Annual Inspection:** Annually, or more frequently in harsh environments, visually inspect the enclosure for any signs of damage, corrosion, or rust. While the unit features a NEMA 3R rainproof enclosure, environmental factors can still affect its longevity.
- **Cleanliness:** Keep the exterior of the unit clean and free from debris. Do not use abrasive cleaners.
- **Connections:** With power OFF at the main service panel, periodically check the tightness of all electrical connections inside the box. Loose connections can lead to overheating and potential hazards.
- **Surge Protector:** The internal surge protector is maintenance-free. If you suspect it has been compromised by a significant surge, consult a qualified electrician for inspection and potential replacement of the unit.

Troubleshooting

If you experience issues with your A/C disconnect, consider the following common troubleshooting steps. Always ensure power is OFF at the main service panel before inspecting the unit.

- **No Power to A/C Unit:**
 - Check if the disconnect switch is in the "ON" position.
 - Verify that the main circuit breaker for the A/C unit at your electrical panel is not tripped.
 - Inspect wiring connections inside the disconnect box for looseness or damage (with power OFF).
- **Visible Damage/Corrosion:** If the enclosure or internal components show significant damage or corrosion, the unit may need to be replaced. Consult a qualified electrician.
- **Frequent Power Interruptions:** If the A/C unit frequently loses power and it's not due to the disconnect switch being OFF, there might be an issue with the A/C unit itself or the upstream electrical supply. Consult an HVAC technician or electrician.

For issues not resolved by these steps, or if you are unsure, contact a qualified electrician.

Specifications

Attribute	Value
Brand	Mars
Model Number	83915
Product Dimensions (HxWxD)	8.66"L x 5.12"W x 2.25"H
AC Adapter Current	60 Amps
Material	Metal
Number Of Circuits	20
Phase Type	Single Phase
Item Weight	3.78 pounds
Enclosure Type	NEMA 3R (Rainproof)
Surge Protection	Internal, 10,000 rated
Date First Available	July 26, 2019

Limited Warranty

Mars products are manufactured to high-quality standards. For specific warranty details regarding your 83915 A/C Disconnect, please refer to the warranty information provided at the time of purchase or contact Mars customer support. This warranty typically covers defects in materials and workmanship under normal use and service.

Customer Support

For technical assistance, questions about installation, or troubleshooting beyond the scope of this manual, please contact Mars customer support. Have your product model number (83915) and purchase information ready when you call. *Please note:* Installation and servicing of electrical equipment should only be performed by qualified personnel.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question