

Mars 61347

Mars 61347 Contactor Instruction Manual

Model: 61347

INTRODUCTION

This instruction manual provides essential information for the safe and effective installation, operation, and maintenance of the Mars 61347 Contactor. Please read this manual thoroughly before attempting any procedures to ensure proper functionality and to prevent potential hazards.

SAFETY INFORMATION

WARNING: Electrical shock hazard. Installation and servicing should only be performed by qualified personnel. Disconnect all power before installing or servicing this device.

- Always ensure the main power supply is disconnected before working with electrical components.
- Follow all local and national electrical codes and regulations.
- Use appropriate personal protective equipment (PPE) such as insulated gloves and safety glasses.
- Verify correct voltage and current ratings before connecting the contactor.
- Do not operate the contactor if it appears damaged.

PRODUCT OVERVIEW

The Mars 61347 is a 2-pole, 30-amp electrical contactor designed for switching electrical loads in various applications. It operates on a 208-240V coil voltage and features Quick Connect (QC) and Screw Clamp (SC) terminals for versatile wiring options.



Image: Mars 61347 2-Pole 30A Contactor. This image displays the front view of the Mars 61347 contactor, showing its compact design and terminal connections.

INSTALLATION AND SETUP

Proper installation is crucial for the safe and reliable operation of the contactor. If you are not a qualified electrician, do not attempt installation.

1. **Power Disconnection:** Ensure all power to the circuit where the contactor will be installed is completely disconnected at the main breaker or fuse box. Verify with a voltage tester.
2. **Mounting:** Securely mount the contactor in a suitable enclosure or panel using appropriate fasteners. Ensure adequate ventilation and clearance from other components.
3. **Wiring - Coil Connections:** Connect the 208-240V control voltage to the coil terminals (typically marked A1 and A2). Use Quick Connect (QC) or Screw Clamp (SC) terminals as appropriate for your wiring.
4. **Wiring - Load Connections:** Connect the incoming line voltage to the input power terminals (typically marked L1, L2). Connect the load (e.g., motor, heater) to the output load terminals (typically marked T1, T2). Ensure all connections are tight and secure.
5. **Verification:** Double-check all wiring connections against the wiring diagram of your system. Ensure no bare wires are exposed and that all terminals are properly insulated.
6. **Power Restoration:** Once installation is complete and verified, restore power to the circuit.

OPERATION

The Mars 61347 Contactor functions as an electrically controlled switch. When the appropriate control voltage (208-240V) is applied to its coil, an electromagnetic field is generated, which pulls the contacts together, closing the circuit and allowing power to flow to the connected load. When the control voltage is removed, the electromagnetic field collapses, and springs separate the contacts, opening the circuit and disconnecting power to the load.

This contactor is typically used in HVAC systems, motor control, lighting circuits, and other applications requiring remote or automatic switching of high-current electrical loads.

MAINTENANCE

Regular inspection and maintenance can extend the life of your contactor and ensure safe operation. Always disconnect power before performing any maintenance.

- **Visual Inspection:** Periodically inspect the contactor for signs of wear, damage, discoloration, or

loose connections. Check for any burning smells or unusual noises during operation.

- **Terminal Tightness:** Ensure all terminal screws are tight. Loose connections can cause overheating and arcing.
- **Contact Condition:** If accessible and safe to do so, inspect the contacts for excessive pitting or carbon buildup. Severely pitted contacts may indicate the need for replacement.
- **Cleaning:** Keep the contactor free from dust, dirt, and debris. Use a dry, non-conductive brush or compressed air for cleaning.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Contactors does not engage (no click sound)	No control voltage to coil, incorrect coil voltage, open circuit in coil, faulty coil.	Check control circuit for power. Verify coil voltage matches specifications. Test coil for continuity. Replace contactor if coil is faulty.
Contactors hums loudly or chatters	Low control voltage, mechanical obstruction, damaged shading coil, loose mounting.	Check control voltage. Inspect for obstructions. Tighten mounting screws. Replace contactor if shading coil is damaged.
Contactors contacts are welded or stuck closed	Overcurrent, short circuit, excessive arcing, worn contacts.	Identify and correct overcurrent/short circuit condition. Replace contactor.
Overheating	Loose connections, excessive current, poor ventilation, incorrect application.	Tighten all connections. Verify load current is within contactor ratings. Ensure proper airflow. Confirm contactor is suitable for the application.

SPECIFICATIONS

Model Number: 61347

Manufacturer: MARS - Motors & Armatures, Inc.

Poles: 2P

Amperage: 30A

Coil Voltage: 208-240V

Terminal Type: Quick Connect (QC) & Screw Clamp (SC)

Package Dimensions: 10.16 x 7.62 x 5.08 cm (4 x 3 x 2 inches)

Weight: 294.84 g (0.65 lbs)

WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact the seller or manufacturer directly. Mars - Motors & Armatures, Inc. typically provides warranty details for their products.

If you require technical support or have questions regarding the installation or operation of your Mars 61347 Contactor, please contact your authorized distributor or the manufacturer's customer service department.

