

Electrodepot 934063

Electrodepot 63A 4-Pole Contactor (Model 934063) User Manual

For Heating and Lighting Applications

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Electrodepot 63A 4-Pole Contactor, Model 934063. This device is an electrically held modular contactor designed for controlling heating and lighting loads in various applications. Please read this manual thoroughly before installation and operation.

2. SAFETY INFORMATION

WARNING: Electrical shock hazard. Installation and servicing should only be performed by qualified personnel. Disconnect all power before working on the contactor or connected equipment.

- Ensure the power supply matches the contactor's coil voltage (120VAC).
- Do not exceed the specified current and voltage ratings.
- Proper grounding and wiring practices must be followed according to local electrical codes.
- Protect the device from moisture, dust, and extreme temperatures outside the specified operating range.

3. PRODUCT OVERVIEW AND FEATURES

The Electrodepot Model 934063 is a robust 4-pole contactor with a 63A resistive load rating, suitable for various industrial and commercial applications. Key features include:

- **Rated Current:** 63A for resistive loads, 40A for ballast, 32A AC1, 40A AC3.
- **Main Contacts:** Four (4) Normally Open (N.O.) main power contacts.
- **Auxiliary Contacts:** One (1) Normally Open (N.O.) and one (1) Normally Closed (N.C.) auxiliary contact, rated 5A Class 2, pilot duty.
- **Coil Voltage:** 120VAC.
- **Coil Power:** Inrush 62VA, Sealed 12VA.
- **Status Indicator:** Integrated Power ON indicator for visual operational status.
- **Mounting:** Designed for DIN rail mounting.

- **Efficiency:** Energy-saving low power drain, contributing to reduced energy consumption.
- **Operation:** No humming coil, ensuring low noise operation.
- **Compliance:** CE approved (61095 standard).

4. INSTALLATION AND SETUP

The contactor is designed for easy installation on a standard DIN rail. Ensure adequate space for ventilation and wiring.

4.1 Mounting

1. Ensure all power to the installation area is disconnected.
2. Align the contactor's DIN rail clip with the DIN rail.
3. Press firmly until the contactor snaps securely onto the rail.

4.2 Wiring Connections

Refer to the product image below for terminal identification. Connect wiring according to the provided wiring diagram and local electrical codes.



Figure 1: Electrodepot 63A 4-Pole Contactor. This image displays the physical layout of the contactor, showing the main power terminals (1, 3, 5, 7 at the top; 2, 4, 6, 8 at the bottom), the coil terminals (A1, A2), and the auxiliary contact terminals (11, 12, 23, 24). The red indicator light is also visible.

- **Coil Connections (A1, A2):** Connect the 120VAC control voltage to terminals A1 and A2.
- **Main Power Connections (1, 3, 5, 7 and 2, 4, 6, 8):** Connect the incoming power lines to terminals 1, 3, 5, 7 and the outgoing load lines to terminals 2, 4, 6, 8. These are Normally Open contacts.
- **Auxiliary Connections (11, 12, 23, 24):** Terminals 11-12 are Normally Closed (NC), and 23-24 are Normally Open (NO). Use these for control circuits or status indication.

Wiring Specifications:

- Solid Conductor: Maximum 25 mm², Max torque 0.6 Nm.
- Stranding Conductor: Maximum 16 mm², Max torque 0.6 Nm.

5. WIRING DIAGRAM

The following diagram illustrates the internal connections and contact configuration of the Electrodepot 63A 4-

Pole Contactor.

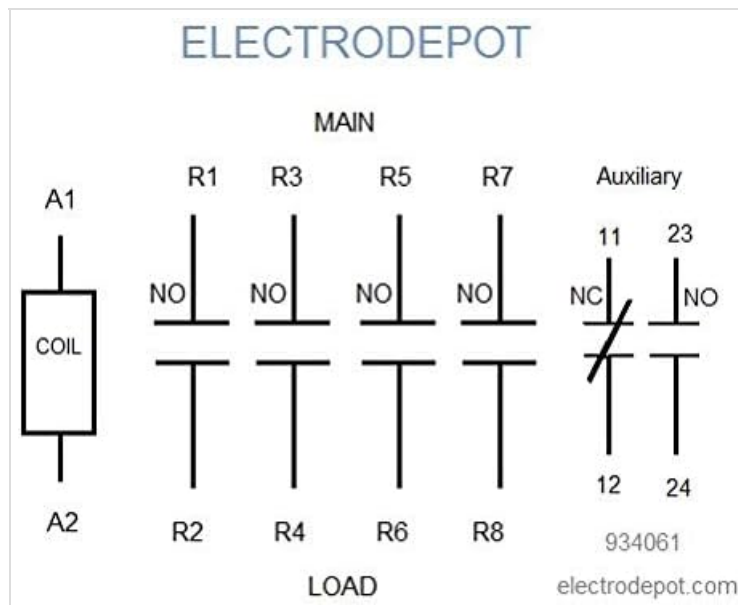


Figure 2: Wiring Diagram. This schematic shows the coil (A1-A2), the four main Normally Open (NO) contacts (R1-R2, R3-R4, R5-R6, R7-R8), and the auxiliary contacts (11-12 Normally Closed, 23-24 Normally Open). This diagram is crucial for understanding the electrical connections.

The diagram shows:

- The coil, energized by A1 and A2.
- Four sets of main contacts (R1-R8) which are Normally Open (NO). When the coil is energized, these contacts close, allowing power to flow to the load.
- One set of auxiliary contacts (11-12) which are Normally Closed (NC). These contacts open when the coil is energized.
- One set of auxiliary contacts (23-24) which are Normally Open (NO). These contacts close when the coil is energized.

6. OPERATION

The contactor operates by energizing its coil. When 120VAC is applied to terminals A1 and A2:

- The coil creates an electromagnetic field.
- This field pulls the armature, causing the main Normally Open (NO) contacts (1-2, 3-4, 5-6, 7-8) to close, connecting the power supply to the load.
- Simultaneously, the auxiliary Normally Open (NO) contacts (23-24) close, and the auxiliary Normally Closed (NC) contacts (11-12) open.
- The integrated red status indicator will illuminate, signifying that the coil is energized and the main contacts are closed.

When power to the coil (A1, A2) is removed, the electromagnetic field collapses, and the contacts return to their original state (main NO contacts open, auxiliary NO contacts open, auxiliary NC contacts close).

7. MAINTENANCE

The Electrodepot 63A 4-Pole Contactor is designed for reliable, long-term operation with minimal maintenance. However, periodic inspection is recommended.

- **Visual Inspection:** Regularly check for any signs of physical damage, discoloration, or loose

connections.

- **Cleaning:** Ensure the contactor is free from dust and debris. Use a dry, soft cloth for cleaning. Do not use solvents or abrasive cleaners.
- **Terminal Tightness:** Periodically verify that all terminal screws are securely tightened to the specified torque (0.6 Nm). Loose connections can lead to overheating and component failure.

Always disconnect power before performing any maintenance.

8. TROUBLESHOOTING

If the contactor is not functioning as expected, consider the following basic troubleshooting steps:

- **Contactor Does Not Energize:**
 - Check if 120VAC is present at coil terminals A1 and A2.
 - Verify control circuit wiring for breaks or loose connections.
 - Ensure the coil is not damaged (though rare, a damaged coil would prevent energization).
- **Main Contacts Do Not Close (No Power to Load):**
 - Confirm the coil is energized (check for indicator light).
 - Inspect main power wiring for continuity and secure connections.
 - Ensure the load is not drawing excessive current, which could indicate a fault in the load circuit.
- **Contactor Makes Humming Noise:**
 - While this model is designed for low noise, excessive humming might indicate an issue with the coil voltage (too low) or mechanical obstruction.
 - Check for proper coil voltage.

For issues not resolved by these steps, consult a qualified electrician or contact Electrodepot support.

9. SPECIFICATIONS

Parameter	Value
Model Number	934063
Rated Current (Resistive Load)	63 A
Rated Current (Ballast)	40 A
Rated Current (AC1)	32 A
Rated Current (AC3)	40 A
Main Contacts	4-Pole, Normally Open (N.O.)
Auxiliary Contacts	1 N.O. / 1 N.C. (5A Class 2)
Coil Voltage	120 VAC
Coil Inrush Power	62 VA
Coil Sealed Power	12 VA

Parameter	Value
IEC AC Rate (AC-1)	20 kW @ 500V
IEC AC Rate (AC-3)	15 kW @ 500V
Operating Temperature	-30°C to +70°C (-22°F to +158°F)
Solid Conductor Size (Max)	25 mm ²
Stranding Conductor Size (Max)	16 mm ²
Max Torque for Terminals	0.6 Nm
Electric Strength	4 kV
Max Switching Capacity	600 switch/hr
Mounting Type	DIN Rail
Dimensions (Approx.)	2.2 x 3.3 x 2.5 inches
Weight	0.88 lb (0.42 kg)
Approvals	CE (61095)

10. WARRANTY AND SUPPORT

For information regarding product warranty, technical support, or service, please refer to the Electrodepot official website or contact your authorized dealer. Keep your purchase receipt as proof of purchase.