

Finder 34.51.7.024.0010

Finder 34.51.7.024.0010 Plug-in/Board Relay User Manual

Model: 34.51.7.024.0010 | Brand: Finder

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of the Finder 34.51.7.024.0010 Plug-in/Board Relay. Please read this manual thoroughly before installation and operation to ensure proper functionality and to prevent damage or injury. Keep this manual for future reference.

Product Overview

The Finder 34.51.7.024.0010 is a narrow 6A relay designed for both socket and PCB mount applications. It features AgNi contact material and a 24V DC coil. This electromechanical relay is suitable for various industrial electrical control systems.

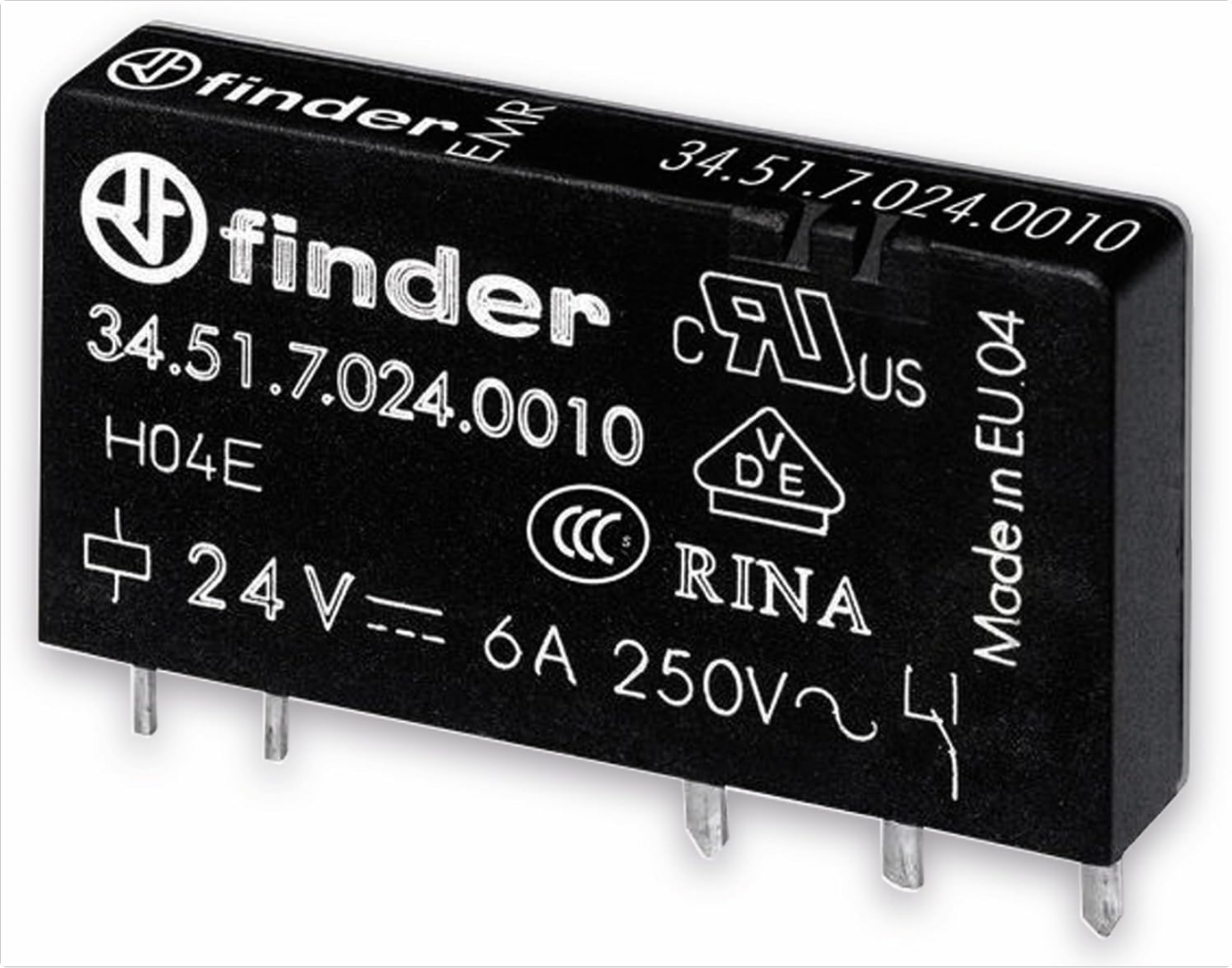


Figure 1: Finder 34.51.7.024.0010 Plug-in/Board Relay. This image shows the compact black relay with its model number, voltage, current ratings, and various certifications printed on its surface, along with its connection pins at the bottom.

2. SAFETY INFORMATION

- Always disconnect power before installing, servicing, or removing the relay.
- Installation should only be performed by qualified personnel.
- Ensure the relay's specifications match the application requirements (voltage, current, contact material).
- Do not exceed the specified voltage and current ratings.
- Protect the relay from moisture, dust, and extreme temperatures.

3. SPECIFICATIONS

Table 1: Technical Specifications

Parameter	Value
Model Number	34.51.7.024.0010
Contact Configuration	SPDT (Single Pole Double Throw)
Contact Material	Silver Nickel (AgNi)
Rated Current	6 Amps

Parameter	Value
Rated Voltage (Contacts)	250 V AC
Coil Voltage	24 V DC
Coil Power	0.17 W
Coil Resistance	3350 ohms
Dielectric Strength (Coil-Contacts)	6 kV (1.2/50μs)
Air and Creepage Distance	8 mm
Mounting Type	Plug-in / PCB Mount
Dimensions (L x W x H)	1.1 x 0.2 x 0.59 inches (approx.)
Weight	0.28 ounces (approx.)

4. SETUP AND INSTALLATION

This relay is designed for either direct PCB mounting or insertion into a compatible relay socket. Ensure the power supply is disconnected before proceeding with installation.

4.1 PCB Mounting

1. Identify the correct pin orientation on the Printed Circuit Board (PCB).
2. Carefully align the relay pins with the corresponding holes on the PCB.
3. Gently press the relay into place until it sits flush with the PCB surface.
4. Solder the pins to the PCB using appropriate soldering techniques, ensuring good electrical contact and no short circuits.

4.2 Socket Mounting

1. Ensure the relay socket is securely mounted and wired according to your application's schematic.
2. Align the relay pins with the receptacles in the socket. The relay is typically keyed to prevent incorrect insertion.
3. Apply gentle, even pressure to insert the relay fully into the socket. Do not force the relay.
4. Verify that all pins are properly seated in the socket.

4.3 Wiring Connections

Refer to the application's wiring diagram for specific connections. The relay features a 24V DC coil and SPDT contacts. Ensure correct polarity for the DC coil. The contact terminals are rated for 6A at 250V AC.

- **Coil Connections:** Connect the 24V DC power supply to the coil terminals. Observe polarity.
- **Contact Connections:** Connect the load circuit to the common (COM), normally open (NO), and normally closed (NC) contacts as required by your application.

5. OPERATING INSTRUCTIONS

Once properly installed and wired, the relay operates by energizing its coil. When the 24V DC coil is energized, the internal contacts switch state. When the coil is de-energized, the contacts return to their original state.

5.1 Basic Operation

1. Apply 24V DC to the coil terminals. The relay will actuate, and the common contact will switch from the Normally Closed (NC) position to the Normally Open (NO) position.
2. Remove the 24V DC from the coil terminals. The relay will de-actuate, and the common contact will return to the Normally Closed (NC) position.

5.2 Load Considerations

Ensure that the connected load does not exceed the relay's contact ratings (6A, 250V AC). Overloading the contacts can lead to premature failure, arcing, and potential safety hazards. For inductive loads, consider using arc suppression circuits to prolong contact life.

6. MAINTENANCE

The Finder 34.51.7.024.0010 relay is generally maintenance-free under normal operating conditions. However, periodic inspection is recommended to ensure optimal performance and longevity.

- **Visual Inspection:** Periodically check the relay for any signs of physical damage, discoloration, or excessive heat.
- **Connection Integrity:** Ensure all electrical connections are secure and free from corrosion.
- **Environmental Conditions:** Verify that the operating environment remains within the specified temperature and humidity ranges, and free from excessive dust or corrosive gases.
- **Cleaning:** If necessary, gently clean the exterior of the relay with a dry, soft cloth. Do not use solvents or abrasive cleaners.

If any issues are observed, refer to the Troubleshooting section or contact technical support.

7. TROUBLESHOOTING

This section provides guidance for common issues encountered with the relay. Always disconnect power before performing any troubleshooting steps.

Table 2: Troubleshooting Guide

Problem	Possible Cause	Solution
Relay does not actuate when coil is energized.	◦ No power to coil. ◦ Incorrect coil voltage (not 24V DC). ◦ Incorrect coil polarity. ◦ Damaged coil. ◦ Loose connections.	◦ Check 24V DC power supply. ◦ Verify coil voltage. ◦ Correct coil polarity. ◦ Replace relay if coil is damaged. ◦ Secure all connections.
Relay contacts do not switch or switch intermittently.	◦ Overloaded contacts. ◦ Worn or pitted contacts. ◦ Coil voltage fluctuations. ◦ Damaged internal mechanism.	◦ Reduce load or use a higher-rated relay. ◦ Replace relay. ◦ Ensure stable 24V DC supply. ◦ Replace relay.

Problem	Possible Cause	Solution
Relay overheats.	◦ Excessive ambient temperature. ◦ Overloaded contacts. ◦ Incorrect coil voltage (too high).	◦ Improve ventilation or reduce ambient temperature. ◦ Reduce load or use a higher-rated relay. ◦ Verify coil voltage is 24V DC.

8. DISPOSAL

At the end of its service life, dispose of the relay according to local environmental regulations. This product contains electronic components and should not be disposed of with general household waste.

9. WARRANTY AND SUPPORT

9.1 Warranty Information

Specific warranty details for Finder products are typically provided at the point of purchase or can be found on the official Finder website. Please retain your proof of purchase for warranty claims. The warranty generally covers defects in materials and workmanship under normal use.

9.2 Technical Support

For technical assistance, product inquiries, or support regarding the Finder 34.51.7.024.0010 relay, please contact your authorized Finder distributor or visit the official Finder website for contact information.

Finder Official Website: www.findernet.com

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

Anonymous

Email

you@example.com

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