

Veris Industries H748

Veris H748 Current Switch and SPDT Relay User Manual

Model: H748

1. PRODUCT OVERVIEW

The Veris H748 is a combined current switch and Single-Pole Double-Throw (SPDT) relay designed for efficient control and monitoring in automation systems. This device integrates two functions into a single unit, optimizing space and simplifying installation for applications involving fans, pumps, and other electrical loads.



Figure 1: Veris H748 Current Switch and SPDT Relay. This image displays the compact black housing of the H748 unit, featuring a central current sensing aperture and terminal blocks for wiring connections.

Key Features:

- Combines a current switch and relay into a single package, reducing installation space.
- Allows independent operation of the current switch and relay functions.
- Facilitates start/stop control and status monitoring with one integrated device.
- Ideal solution for automation installers seeking streamlined control of fans and pumps.

2. SAFETY INFORMATION

WARNING: Risk of Electric Shock. Installation and servicing should be performed by qualified personnel only.

- Always disconnect power to the circuit before installing or servicing the device.
- Ensure all wiring complies with local and national electrical codes.
- Do not exceed the specified voltage and current ratings of the device.
- **Important: Do not use the LED status indicators as the sole evidence of applied voltage. Always verify power status with appropriate test equipment.**
- Protect the device from moisture and extreme temperatures outside its operating range.

3. INSTALLATION

Proper installation is crucial for the safe and reliable operation of the Veris H748. Refer to the wiring diagrams provided with the product packaging for specific connection details.

Mounting:

The H748 is designed for secure mounting within an electrical enclosure. Use appropriate fasteners through the mounting tabs to firmly attach the device to a stable surface.

Wiring:

1. Ensure all power is disconnected before beginning wiring.
2. Route the monitored conductor through the sensing aperture of the H748.
3. Connect the relay control wires to the terminal block. The maximum wire size for the terminal block is 14 AWG.
4. Tighten terminal block screws to a nominal torque of 4 in-lbs (0.45 N-m) to ensure secure connections.
5. Verify all connections are correct and secure before restoring power.

The sensor power for the current switch is induced from the monitored conductor, eliminating the need for a separate power supply for the sensing function.

4. OPERATION

The Veris H748 operates by monitoring the current in a conductor and providing a relay output based on a setpoint. The current switch and the SPDT relay operate independently, offering flexible control options.

Current Switch Function:

The current switch detects the presence or absence of current flow in the monitored conductor. When the current exceeds a user-adjustable setpoint, the switch changes state, providing a signal for status monitoring or control logic.

SPDT Relay Function:

The integrated SPDT relay provides a contact closure for controlling external devices. This relay can be wired for normally open (N.O.) or normally closed (N.C.) operation, depending on the application requirements. It can be used for start/stop control of equipment such as motors or pumps.

The H748's design allows for both current status monitoring and direct equipment control using a single device, simplifying system design and reducing component count.

5. MAINTENANCE

The Veris H748 is designed for long-term, reliable operation with minimal maintenance. Regular inspection is recommended to ensure optimal performance.

- **Periodic Inspection:** Visually inspect the device and its wiring connections periodically for any signs of damage, wear, or loose connections.
- **Cleaning:** If necessary, gently clean the exterior of the device with a dry, soft cloth. Do not use abrasive cleaners or solvents.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges to prevent premature failure.

No user-serviceable parts are inside the device. Do not attempt to open or repair the unit.

6. TROUBLESHOOTING

If the Veris H748 is not functioning as expected, consider the following troubleshooting steps:

- **No Output/Incorrect Status:**
 - Verify that power is supplied to the monitored conductor.
 - Check all wiring connections for proper termination and tightness.
 - Ensure the monitored current is within the operating range and above the setpoint (if adjustable).
- **Intermittent Operation:**
 - Inspect for loose wiring connections or damaged insulation.
 - Check for environmental factors such as excessive vibration or temperature fluctuations.
- **Device Not Responding:**
 - Confirm that the device is correctly installed and wired according to the instructions.
 - If the issue persists after checking all connections and power, contact Veris Industries technical support.

7. SPECIFICATIONS

Parameter	Value
Model Number	H748
Sensor Power	Induced from monitored conductor
Insulation Class	600VAC RMS
Frequency Range	50/60Hz
Temperature Range	-15° to 60°C (5° to 140°F)
Humidity Range	10-90% RH non-condensing
Hysteresis	10% Typical
Terminal Block Max Wire Size	14 AWG

Parameter	Value
Terminal Block Torque (nominal)	4 in-lbs (0.45 N-m)
Agency Approvals	UL 508 open device listing
Item Weight	4.8 ounces

8. WARRANTY AND SUPPORT

Veris Industries products are manufactured to high-quality standards and are backed by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation included with your product or visit the official Veris Industries website.

For technical support, product inquiries, or to access additional resources, please visit the [Veris Industries Store on Amazon](#) or their official corporate website.