Amseco ODC-59A

Amseco ODC-59A Overhead Door Switch User Manual

Model: ODC-59A | Brand: Amseco

Introduction

The Amseco ODC-59A is a robust overhead door contact switch designed for reliable security and monitoring applications. This device features a 2-inch operating gap, a 24-inch stainless steel armored cable, an adjustable aluminum L-bracket, and a hermetically sealed reed switch. It is UL and ULC listed, ensuring compliance with safety and performance standards. This manual provides essential information for the proper installation, operation, and maintenance of your ODC-59A switch.

Image: Amseco ODC-59A Overhead Door Switch, showing the main switch unit and magnet assembly.

Safety Information

- **Electrical Safety:** Always disconnect power to the circuit before installing or servicing the switch to prevent electrical shock.
- **Professional Installation:** Installation should be performed by qualified personnel familiar with electrical systems and security devices.
- **Cable Protection:** Ensure the armored cable is routed and secured to prevent damage or entanglement with moving parts of the door.
- **Environmental Considerations:** Install the switch in an environment free from excessive moisture, dust, or extreme temperatures that could affect its performance.

Product Overview and Components

The ODC-59A consists of two primary components: the switch unit and the magnet unit. These units work together to detect the open or closed state of an overhead door.

- **Switch Unit:** Enclosed in a low-profile die-cast housing, this unit contains the hermetically sealed reed switch and is connected to the 24-inch stainless steel armored cable for wiring.
- **Magnet Unit:** This component is mounted on an adjustable aluminum L-bracket. When brought within the operating gap of the switch unit, it activates the reed switch.
- **Armored Cable:** A 24-inch stainless steel armored cable provides durable and protected wiring connections from the switch unit to your control panel or monitoring device.

Image: Close-up of the Amseco ODC-59A switch unit, showing its die-cast housing and armored cable connection.

Image: The magnet component of the Amseco ODC-59A, mounted on its adjustable L-bracket.

Specifications

Feature	Specification
Operating Gap	2 inches (maximum)
Current Rating	59 Amps
Contact Type	Normally Open (NO)
Connector Type	Screw Terminal
Cable Length	24 inches (stainless steel armored)
Switch Dimensions (L x W x H)	3.7" W x 1.57" H x 0.4" D (approximate, based on product description)
Overall Product Dimensions (L x W x H)	8.7 x 4.9 x 1 inches
Item Weight	8 ounces

Feature	Specification
Material	Aluminum, Stainless Steel, Copper, Brass
Certifications	UL Listed, ULC Listed

Installation and Setup

Proper installation is crucial for the reliable operation of the ODC-59A switch. Follow these steps carefully:

1. **Determine Mounting Location:** Identify a suitable location on your overhead door and the adjacent frame or wall where the switch unit and magnet can be mounted. The magnet should align with the switch unit when the door is closed, and separate when the door opens.
2. **Mount the Switch Unit:** Secure the low-profile die-cast switch unit to the stationary part of the door frame or wall using appropriate fasteners (not included). Ensure it is firmly attached and will not interfere with door movement.
3. **Mount the Magnet Unit:** Attach the magnet, which is pre-mounted on an adjustable L-bracket, to the moving part of the overhead door. Position it so that when the door is closed, the magnet is directly opposite the switch unit. The adjustable L-bracket allows for fine-tuning of the magnet's position.
4. **Adjust Operating Gap:** Ensure the gap between the switch unit and the magnet unit is within the specified 2-inch operating range when the door is closed. Adjust the L-bracket as needed to achieve optimal alignment and gap distance.
5. **Wire the Switch:** Connect the two wires from the 24-inch stainless steel armored cable to the screw terminals of your security system's input or control panel. Refer to your security system's manual for specific wiring instructions. The ODC-59A is a **Normally Open (NO)** contact, meaning the circuit is open when the magnet is away from the switch (door open) and closes when the magnet is near the switch (door closed).
6. **Secure Cable:** Route and secure the armored cable along the door frame or wall to prevent it from being pinched, cut, or damaged by the moving door or other objects. Use cable clips or conduit as necessary.
7. **Test Operation:** After installation, test the switch by opening and closing the overhead door multiple times to ensure reliable activation and deactivation of your connected system.

Image: Detail of the Amseco ODC-59A showing the wiring terminals, typically screw terminals for connection.

Operation

The Amseco ODC-59A operates based on magnetic proximity. When the overhead door is closed, the magnet unit is in close proximity (within 2 inches) to the switch unit. This causes the hermetically sealed reed switch inside the switch unit to close, completing the circuit. When the overhead door opens, the magnet moves away from the switch unit, causing the reed switch to open and break the circuit. This change in circuit state is detected by your connected security system or control panel, indicating the door's status.

As a **Normally Open (NO)** contact, the switch will be open (no continuity) when the door is open and the magnet is separated. It

will close (continuity) when the door is closed and the magnet is near the switch.

Maintenance

The ODC-59A is designed for minimal maintenance. However, periodic checks can ensure continued reliable performance:

- **Visual Inspection:** Annually inspect the switch unit, magnet, L-bracket, and armored cable for any signs of physical damage, corrosion, or wear.
- **Alignment Check:** Verify that the switch and magnet remain properly aligned and that the operating gap is still within 2 inches when the door is closed. Adjust the L-bracket if necessary.
- **Wiring Integrity:** Check the armored cable and its connections for any fraying, cuts, or loose terminals. Ensure all connections are secure.
- **Cleaning:** Keep the switch and magnet surfaces clean from dirt, dust, or debris that might accumulate and potentially interfere with operation. Use a soft, dry cloth for cleaning.

Troubleshooting

If you experience issues with your ODC-59A switch, consider the following troubleshooting steps:

- **Switch Not Activating/Deactivating:**
  - **Check Alignment:** Ensure the magnet and switch unit are perfectly aligned when the door is closed.
  - **Verify Gap:** Confirm that the distance between the magnet and switch is no more than 2 inches when the door is closed. Adjust the L-bracket if the gap is too wide.
  - **Inspect Wiring:** Check for loose or incorrect wiring connections at both the switch and the control panel.
  - **Test Continuity:** If possible, use a multimeter to test the continuity of the switch directly. When the magnet is near, the switch should show continuity (closed circuit). When the magnet is away, it should show no continuity (open circuit).
- **Intermittent Operation:**
  - **Secure Mounting:** Ensure both the switch and magnet are securely mounted and do not shift during door operation.
  - **Cable Damage:** Inspect the armored cable for any signs of damage that could cause intermittent connections.
  - **Environmental Factors:** Rule out any external interference or debris affecting the magnetic field or physical movement.
- **Incorrect Contact State Indication:**
  - **Understand NO vs. NC:** Remember the ODC-59A is a Normally Open (NO) contact. If your system expects a Normally Closed (NC) contact, you may need to adjust your system's programming or use a different type of switch.

Certifications

The Amseco ODC-59A Overhead Door Switch is certified by recognized safety organizations:

- **UL Listed:** Underwriters Laboratories (UL) certification ensures the product meets specific safety standards.
- **ULC Listed:** Underwriters Laboratories of Canada (ULC) certification ensures compliance with Canadian safety standards.

Image: UL and ULC certification logos, indicating compliance with safety standards.

Warranty and Support

For specific warranty information, please refer to the documentation provided at the time of purchase or contact your reseller. Amseco products are typically covered by a manufacturer's warranty against defects in materials and workmanship.
For technical assistance, product inquiries, or support, please contact Amseco customer service or visit the official Amseco website. When contacting support, please have your product model (ODC-59A) and any relevant purchase details available.