

## MARS PS80-02-F1253

# MARS 43349 Klixon PS80-02-F1253 SPST/NO Pressure Switch User Manual

Brand: MARS | Model: PS80-02-F1253

### INTRODUCTION

This manual provides essential instructions for the safe and effective installation, operation, and maintenance of your MARS 43349 Klixon PS80-02-F1253 SPST/NO Pressure Switch. Please read this manual thoroughly before use and retain it for future reference.

The MARS 43349 Klixon PS80-02-F1253 is a Single Pole, Single Throw (SPST) Normally Open (NO) pressure switch designed for various industrial electrical applications. It features a quick connect terminal for ease of installation.

### SAFETY INFORMATION

**WARNING:** Electrical components can cause injury or death. Installation and servicing should only be performed by qualified personnel. Always disconnect power before installing, servicing, or removing the switch.

- Ensure all local and national electrical codes are followed.
- Verify the power supply matches the switch's specifications.
- Do not operate the switch if it appears damaged.
- Wear appropriate personal protective equipment (PPE).

### SETUP AND INSTALLATION

The MARS 43349 Klixon PS80-02-F1253 pressure switch is designed for straightforward installation using its quick connect terminals.

1. **Disconnect Power:** Ensure all power to the system is completely disconnected at the main circuit breaker or fuse box.
2. **Mounting:** Securely mount the pressure switch in the desired location. Ensure it is positioned to accurately sense the pressure it is intended to monitor.
3. **Electrical Connection:**
  - Identify the two wires extending from the switch. These are the contacts for the SPST (Single

Pole, Single Throw) circuit.

- Connect these wires to the control circuit using appropriate quick connect terminals. Ensure connections are secure and insulated.
  - As a Normally Open (NO) switch, the circuit will be open (no current flow) when the pressure is below the set point, and will close (allow current flow) when the pressure reaches or exceeds the set point.
4. **Pressure Connection:** Connect the pressure port of the switch to the system where pressure is to be monitored. Use appropriate fittings and ensure a leak-free seal.
  5. **Verify Installation:** Double-check all connections, both electrical and pressure, to ensure they are correct and secure.
  6. **Restore Power:** Once installation is complete and verified, restore power to the system.



*Image 1: Front view of the MARS 43349 Klixon PS80-02-F1253 pressure switch, showing the brass pressure port, black body, and two blue electrical wires with stripped ends for quick connection.*



Image 2: The MARS 43349 Klixon PS80-02-F1253 pressure switch resting on a surface, with its original packaging box visible in the background. The switch features a brass fitting and blue wires.

## OPERATING INSTRUCTIONS

The MARS 43349 Klixon PS80-02-F1253 operates as a simple ON-OFF switch based on pressure. It is a Normally Open (NO) device.

- **Normally Open (NO):** In its default state (when the sensed pressure is below the switch's set point), the electrical contacts are open, meaning no current flows through the switch.
- **Activation:** When the pressure applied to the switch's port reaches or exceeds its factory-set activation point, the internal mechanism closes the electrical contacts. This completes the circuit, allowing current to flow.
- **Deactivation:** When the pressure drops below the switch's deactivation point (typically slightly lower than the activation point due to hysteresis), the contacts will open again, breaking the circuit.
- **Operation Mode:** The switch functions as an ON-OFF device, providing a clear signal based on pressure thresholds.

## MAINTENANCE

The MARS 43349 Klixon PS80-02-F1253 pressure switch is designed for durability and typically requires minimal maintenance. However, periodic checks can ensure optimal performance and longevity.

- **Visual Inspection:** Regularly inspect the switch for any signs of physical damage, corrosion, or loose connections.
- **Cleanliness:** Keep the switch and its connections free from dust, dirt, and moisture. Use a dry, soft cloth for cleaning. Do not use abrasive cleaners or solvents.
- **Connection Integrity:** Periodically check that all electrical and pressure connections remain tight

and secure.

- **Environmental Conditions:** Ensure the switch operates within its specified environmental limits (temperature, humidity) to prevent premature failure.

*Note: This switch is a sealed unit and is not user-serviceable. Do not attempt to disassemble the switch.*

## TROUBLESHOOTING

If the pressure switch is not functioning as expected, consider the following common issues and solutions:

Problem	Possible Cause	Solution
Switch does not activate at correct pressure.	Incorrect pressure connection; faulty switch; pressure outside operating range.	Verify pressure connection and system pressure. Test switch continuity with a multimeter. Replace if faulty.
Switch does not deactivate.	Pressure not dropping sufficiently; faulty switch; contacts stuck.	Ensure system pressure drops below deactivation point. Test switch continuity. Replace if faulty.
No electrical signal.	No power to circuit; loose electrical connections; faulty switch.	Check power supply. Secure all quick connect terminals. Test switch continuity. Replace if faulty.
Intermittent operation.	Loose connections; fluctuating pressure; internal switch issue.	Inspect all connections. Monitor system pressure stability. Replace switch if problem persists.

If troubleshooting steps do not resolve the issue, contact a qualified technician or the product supplier for assistance.

## SPECIFICATIONS

- **Brand:** MARS
- **Model:** PS80-02-F1253
- **Part Number:** 43349
- **Operation Mode:** ON-OFF
- **Contact Type:** Normally Open (NO)
- **Connector Type:** Quick Connect
- **Terminal:** SPST (Single Pole, Single Throw)
- **Insulation Resistance:** 100 Megaohms
- **Unit Count:** 1.0 Count
- **ASIN:** B0071N4INE
- **UPC:** 685744433491
- **Date First Available:** January 25, 2012

## WARRANTY INFORMATION

Specific warranty details for the MARS 43349 Klixon PS80-02-F1253 pressure switch are not provided in this manual. Please refer to the product packaging, your point of purchase, or the official MARS website for






current warranty terms and conditions.

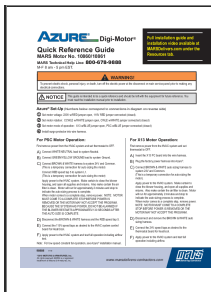
## SUPPORT AND CONTACT

For technical assistance, product inquiries, or support, please contact your authorized MARS distributor or the retailer from whom you purchased this product. Specific contact information is not available in this document.

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## Related Documents - PS80-02-F1253

	<p><a href="#">MARS 24 (MW) Water-to-Water Series: Installation, Operation &amp; Maintenance Manual</a></p> <p>Comprehensive guide for the MARS 24 (MW) Water-to-Water Series, covering installation, operation, and maintenance procedures for commercial applications. Includes model nomenclature, safety warnings, refrigerant system servicing, physical data, and troubleshooting.</p>
	<p><a href="#">MARS SGF80S120D5S1A Single-Stage Multi-Position Gas Furnace Parts List</a></p> <p>Official parts list for the MARS SGF80S120D5S1A Single-Stage Multi-Position Gas Furnace. This document details components, part names, and quantities for the SE Series 80% AFUE furnace.</p>
	<p><a href="#">Manual de Instalación e Instrucciones del Controlador Cableado MARS 7800-500</a></p> <p>Guía detallada de instalación y operación para el controlador cableado MARS modelo 7800-500. Cubre precauciones de seguridad, pasos de instalación, características y funciones.</p>
	<p><a href="#">MARS Portable Room Air Conditioner PS-81B PS-101B: Installation, Operation &amp; Maintenance Manual</a></p> <p>Detailed guide for MARS Portable Room Air Conditioner models PS-81B and PS-101B, covering installation, operation, maintenance, safety, troubleshooting, and warranty. Learn how to set up and use your unit effectively.</p>
	<p><a href="#">Manuel du propriétaire MARS Comfort-Aire Déshumidificateur portable Séries BHD-H / BHDP-H</a></p> <p>Guide d'utilisation et d'entretien pour le déshumidificateur portable MARS Comfort-Aire, séries BHD-H et BHDP-H. Inclut les consignes de sécurité, le panneau de commande, l'identification des pièces, l'utilisation, la maintenance et le dépannage.</p>



[MARS Azure Digi-Motor 10860/10861 Quick Reference Guide](#)

Quick reference guide for installing and setting up the MARS Azure Digi-Motor models 10860 and 10861. Provides instructions for PSC and X13 motor operation, wiring, voltage and rotation setup, and auto-sizing procedures.