Allen-Bradley 800T-H2A

Allen-Bradley 800T-H2A Selector Switch Instruction Manual

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the Allen-Bradley 800T-H2A Selector Switch. Please read this manual thoroughly before attempting to install or operate the device. Retain this manual for future reference.

2. Safety Information

Always adhere to the following safety precautions to prevent personal injury or damage to the equipment.

- **Disconnect Power:** Ensure all power is disconnected and locked out before installing, wiring, or performing maintenance on the switch.
- **Qualified Personnel:** Installation and maintenance should only be performed by qualified electrical personnel familiar with local electrical codes and safety standards.
- **Proper Tools:** Use appropriate tools for installation and wiring to avoid damage to the switch or injury.
- **Environmental Conditions:** Do not expose the switch to conditions beyond its specified environmental ratings.

3. Product Overview

The Allen-Bradley 800T-H2A is a robust 2-position maintained selector switch designed for industrial control applications. It features a standard knob actuator and is rated for NEMA Type 4 and 13 environments, providing protection against dust, water, and oil.

3.1 Key Features

- 2-Position Maintained Operation
- Standard Knob Actuator
- NEMA Type 4, 13 Environmental Rating
- Screw Terminal Connections

- Durable Metal Contact Material

3.2 Components

The 800T-H2A selector switch consists of an actuator head, a mounting adapter, and contact blocks. The actuator head determines the switching action, while the contact blocks provide the electrical switching functionality.

Figure 1: Allen-Bradley 800T-H2A Selector Switch with Packaging. This image displays the Allen-Bradley 800T-H2A selector switch alongside its packaging. The packaging indicates 'BULLETIN 800T', 'SELECTOR SWITCH', 'TYPE 4, 13', '2 POSITION', 'MAINTAINED', 'BLACK', and 'STD. KNOB'. The switch itself is visible, featuring screw terminals for wiring.

Figure 2: Top View of Allen-Bradley 800T-H2A Selector Switch. This image provides a top-down view of the Allen-Bradley 800T-H2A selector switch. It clearly shows the circular actuator mechanism at the top, designed for a standard knob, and the four screw terminals at the base for electrical connections.

4. Setup and Installation

4.1 Mounting

1. Select a suitable panel location that meets the specified cutout dimensions for the 800T series.
2. Insert the switch body through the panel cutout.
3. Secure the switch using the provided mounting nut, ensuring it is tightened to the recommended torque to maintain environmental sealing.

4.2 Wiring

1. Ensure all power is disconnected before wiring.
2. Identify the Normally Open (NO) and Normally Closed (NC) terminals on the contact blocks.
3. Connect appropriate gauge wires to the screw terminals. Strip wire insulation to the recommended length.
4. Tighten the screw terminals securely to prevent loose connections, which can cause overheating or intermittent operation.
5. Verify all connections against your control circuit diagram.

5. Operating Instructions

The 800T-H2A is a 2-position maintained selector switch. This means the switch will remain in the position it is moved to until manually changed.

- To change the switch position, grasp the standard knob actuator and rotate it to the desired position.

- The switch will hold its position, activating or deactivating the connected circuit(s) according to the contact block configuration (Normally Open or Normally Closed).

6. Maintenance

Regular maintenance ensures optimal performance and longevity of the selector switch.

- **Inspection:** Periodically inspect the switch for any signs of physical damage, wear, or loose connections.
- **Cleaning:** Clean the exterior of the switch with a soft, damp cloth. Avoid using harsh chemicals or abrasive materials that could damage the finish or seals.
- **Environmental Seals:** Ensure the environmental seals (NEMA Type 4, 13) are intact and not compromised.
- **Terminal Tightness:** Re-check the tightness of all wiring terminals annually or as part of a routine maintenance schedule.

7. Troubleshooting

If the selector switch is not functioning as expected, consider the following common issues:

- **No Circuit Activation:**
  - *Check Power:* Verify that power is supplied to the circuit.
  - *Check Wiring:* Ensure all connections are secure and correctly wired to the NO/NC terminals.
  - *Check Contact Blocks:* Inspect contact blocks for damage or excessive wear.
- **Intermittent Operation:**
  - *Loose Connections:* Re-tighten all screw terminals.
  - *Environmental Contamination:* Ensure the switch is protected from excessive dust or moisture if the NEMA rating is compromised.
- **Stiff Actuator:**
  - *Foreign Material:* Check for any foreign material obstructing the actuator mechanism.
  - *Wear:* If the switch is old, internal wear might be causing stiffness. Replacement may be necessary.

8. Technical Specifications

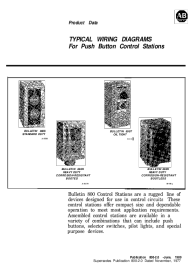
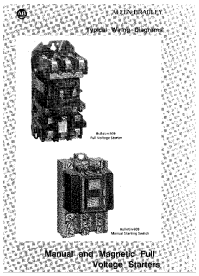
Specification	Detail
Brand	Allen-Bradley
Model Number	800T-H2A
Operation Mode	Manual
Positions	2-Position, Maintained
Actuator Type	Standard Knob (Hinge Lever in some documentation)

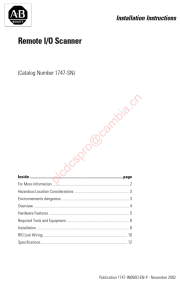
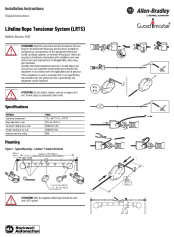
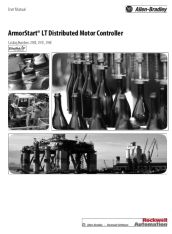
Specification	Detail
Contact Type	Normally Closed, Normally Open
Circuit Type	2-way
Connector Type	Screw Terminals
Mounting Type	Panel Mount
Contact Material	Metal
International Protection Rating	IP54 (Equivalent to NEMA Type 4, 13)
Product Dimensions (L x W x H)	6 x 6 x 6 inches
Item Weight	4.8 ounces
UPC Number	10781180625319

9. Warranty and Support

For information regarding warranty, technical support, or service for your Allen-Bradley 800T-H2A Selector Switch, please contact your authorized Allen-Bradley distributor or visit the official Rockwell Automation website. Specific warranty terms may vary by region and purchase agreement.

Related Documents - 800T-H2A

	Allen-Bradley Bulletin 800 Control Stations: Typical Wiring Diagrams and Selection Guide Comprehensive guide to Allen-Bradley Bulletin 800 series push button control stations, featuring typical wiring diagrams, contact selection, pilot light selection, and circuit explanations for industrial control applications.
	Allen-Bradley Wiring Diagrams: Manual and Magnetic Motor Starters (Bulletins 600, 609, 505, 520) Comprehensive guide to Allen-Bradley's manual and magnetic motor starters, including detailed wiring diagrams, symbol explanations, and operational descriptions for Bulletins 600, 609, 505, and 520. Covers applications from basic starting to complex sequence and reversing controls.

	[Kinetix 5700 System Mounting Toolkit Installation Guide] This document provides installation instructions for the Kinetix 5700 System Mounting Toolkit, including how to use the drill-hole guide for various module widths.
	[Allen-Bradley 1747-SN Remote I/O Scanner Installation Instructions] This document provides installation instructions for the Allen-Bradley 1747-SN Remote I/O Scanner. It covers product overview, hardware features, installation procedures, RIO link wiring, hazardous location considerations, and technical specifications.
	[Lifeline Rope Tensioner System (LRTS) Installation Instructions] Detailed installation instructions for the Allen-Bradley Lifeline Rope Tensioner System (LRTS) model 440E. Covers safety precautions, technical specifications, mounting procedures, maintenance guidelines, and component dimensions. Essential reading for proper setup and operation of this industrial safety equipment.
	[Rockwell Automation ArmorStart LT Distributed Motor Controller User Manual] This user manual provides comprehensive details on the Rockwell Automation ArmorStart LT Distributed Motor Controller, covering its features, installation, wiring, commissioning, and programmable parameters for models 290E, 291E, and 294E with EtherNet/IP and DeviceNet communication options.