

# Installation & Maintenance Manual

#### WARNING

- 1. Only suitably trained personnel shall carry out installation in accordance with applicable code of practice.
- 2. To avoid serious or fatal personal injury or major property damage, read and follow all the instructions in this manual.
- 3. Hazardous voltage, disconnect all power before servicing equipment.
- 4. Do not exceed the electrical rating stated on label.
- 5. Conduit plugs supplied are for transit purpose only, remove them and install conduit or plugs suitable for protection required.
- 6. Save this instruction.
- 7. To maintain the NEMA rating, the use of proper wiring methods per NEC and local codes is required.

Hazardous areas: Non-incendive Class I, Div 2, Groups A, B, C, D; Class II, Div 2 Groups F, G only with proximity switches Type N1, N3, 1J, 1C, 1D;

THE FOLLOWING STATEMENTS MUST BE RESPECTED FOR HAZARDOUS AREA APPLICATIONS
A. WARNING-EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.
B. WARNING-EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON- HAZARDOUS.

C. ALL WIRING OF THESE DEVICES MUST BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 501.10(B) FOR CLASS I, DIVISION 2.

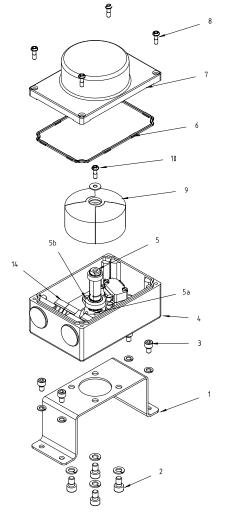
### **INSTALLATION**

- 1. Attach proper mounting bracket (1) to the switch box housing (4) using four M6x8 socket head cap screws (2) provided.
- 2. Align switch box shaft (5) to top of actuator shaft and engage it.
- 3. Attach bracket to actuator using hardware provided (finger tight only).
- 4. By actuating the package, the switch and actuator will self-align.
- 5. Tighten bracket to top of actuator.

## **SWITCH ADJUSTMENT**

- 1. Loosen switch box cover screws (8) and remove cover (7).
- 2. Remove indicator screw (11) and remove indicator (9). WARNING: Hold indicator (9) tightly when loosening and tightening screw (11). Do not rotate indicator (9) when engaged on retainer, this will damage the splines.
- 3. Rotate actuator clockwise.
- 4. Push down top cam (5b) and turn until switch is activated and then release. Engage cam (5b) back onto the splined retainer.

  Spring will maintain cam engagement.
- 5. Rotate actuator counter-clockwise.
- 6. Lift up bottom cam (5a) and turn until switch is activated and then release. Engage cam (5a) back onto the splined retainer. Spring will maintain cam engagement.
- 7. Set indicator (9) to match valve position
- 8. Hand grip indicator (9) and tighten screw (11).
- 9. Place cover (2) on switch box and tighten. Take care to ensure that cover gasket seal (6) is properly located in seal groove







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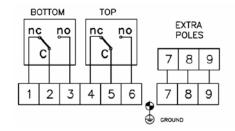
## **ELECTRICAL WIRING**

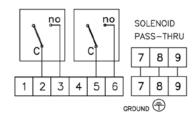
- 1. Remove switch box cover (7) and indicator (9). (See switch adjustment sections 1 and 2).
- 2. Remove protection plugs from conduit entries and install conduit or plugs suitable for type of protection required.
- 3. Engage wires in terminal strip (10) using a small screwdriver (1/8" blade).

FOR WIRING DIAGRAM, REFER TO THE LABEL INSIDE OF THE HOUSING.

A MAX OF THREE SWITCHES IS PROVIDED. ONLY A MAX OF TWO OUTPUTS CAN WORK SIMULTANEOUSLY; EACH OF THE OUTPUTS CAN BE CHARGED WITH FOLLOWING RATING, WHERE THE SUM SHOULD NOT EXCEED A MAXIMUM TOTAL OUTPUT 5 A:

FOR ELECTRICAL RATINGS OF THE SWITCHES, REFER TO THE LABEL ON THE OUTSIDE OF THE HOUSING.





SW2

SW1

Wiring Schematic for Type 0A, 0C, & 1D, N1, N3

Wiring Schematic for Types 1J & 1A, 1C

A-T Controls product, when properly selected, is designed to perform its intended function safely during its useful life. However, the purchaser or user of A-T Controls products should be aware that A-T Controls products might be used in numerous applications under a wide variety of industrial service conditions. Although A-T Controls can provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser / user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of A-T Controls products. The user should read and understand the installation operation maintenance (IOM) instructions included with the product, and train its employees and contractors in the safe use of A-T Controls products in connection with the specific application.

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes only. Because A-T Controls is continually improving and upgrading its product design, the specifications, dimensions and information contained in this literature are subject to change without notice. Should any question arise concerning these specifications, the purchaser/user should contact A-T Controls.

For product specifications go to <a href="http://download.a-tcontrols.com/">http://download.a-tcontrols.com/</a>

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