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**INSTALLATION AND OPERATING INSTRUCTIONS
SERIES 140P ADJUSTABLE PRESSURE SWITCH
ENCLOSURE 3 (NEMA TYPE 1, 2, 4, & 13)**

NOT SUITABLE FOR USE IN COMBUSTIBLE OR FLAMMABLE ATMOSPHERES

NOTICE:

1. For industrial use only, not a consumer product.
2. This item should be installed, operated, and maintained by technical personnel knowledgeable in local and national electrical and mechanical codes.
3. Always use wrench flats provided.
4. Avoid excessive torque on any threaded connection.
5. When surface mounting is used, insure surface is flat.

! **WARNING:** Before proceeding, read and understand the following:

1. Hazardous electrical power may cause severe personal injury or death.
 - a. Do not make electrical connections while electrical power is on.
 - b. Check for multiple circuits.
 - c. Provide adequate electrical grounding.
2. Operation of this pressure switch may generate a spark, an explosion causing severe injury, death or property damage may result. Do not use this item in a flammable or combustible atmosphere.
3. Excessive pressure may rupture the pressure switch; severe injury, death or property damage may result. Do not subject this item to pressures in excess of nameplate listed proof pressure.

A. **Mounting:**

1. Units may be mounted in any position.
 - a. On a flat surface using the two #10-24 X 3.5" long screws provided.
 - b. Port mounted directly to process connection. See "Process Connection" (B).

B. **Process Connection** (See Warning 3):

1. Units are supplied with NPT ports suitable for connection into NPT taper threaded pipe systems.
 - a. Pipe joint sealing compound is preferred over teflon tape. However, either method of sealing is acceptable with proper care to avoid introducing sealing material into switch or plumbing.

C. Electrical Connections (See Warnings 1 and 2)

1. Entry for electrical conductors is provided by a 1/2-14 NPT female conduit hub. Connections are made to a barrier strip located within the unit.
 - a. Disconnect electrical power. Check for multiple circuits.
 - b. Remove cover.
 - c. Make electrical connections in accordance with “National Electrical Code” (NEC) and local code instructions.
 - d. Wiring schematic and terminals identification are provided above the terminal strip to enable proper electrical connections. Units with the Brad-Harrison connector option are wired as follows:
 1. “C” Form (SPDT)
 - White wire - Pin 1 - Common
 - Red wire - Pin 2 - Normally open
 - Orange wire - Pin 4 - Normally closed
 - Green wire - Pin 3 - Grounded
 - Black wire - Pin 5 - Not used
 2. “Z” Form (Double Break)
 - Black wire - Pin 5 - Normally open #1
 - White wire - Pin 1 - Normally open #2
 - Red wire - Pin 2 - Normally closed #1
 - Orange wire - Pin 4 - Normally closed #2
 - Green wire - Pin 3 - Grounded

NOTE: Install mating plug carefully to insure proper mating. Torque hand tight only.

- e. Units with neon lamp option. Connect lamp leads as noted below:
 1. “C” Form (SPDT) - To terminals Com 1 & NC 1
 2. “CC” Form (DPDT) - To terminals Com 1 & NC 1
 3. “Z” Form (Double Break) - To terminals NC 1 & NC 2

NOTE: Lamp is not lit when media pressure is below unit set point and lights when pressure exceeds set points.

- f. Grounding: Proper grounding must be accomplished by use of green ground screw provided.
- g. Replace cover.
- h. Conduit connection: Install conduit. Conduit drainage provisions should be provided.

D. Adjustment (See Warnings 1 and 2):

1. Pressure settings are internally adjustable.
 - a. Electrical power may remain on.
 - b. Remove cover. Using an open-end or socket wrench on the hex adjustment nut rotate:
 1. Clockwise to increase settings.
 2. Counterclockwise to decrease settings.

NOTE: When range scale is provided, read increasing set point at bottom of adjustment nut washer.
 - c. Replace cover.