# **DIAGRAMS**

FIG 1

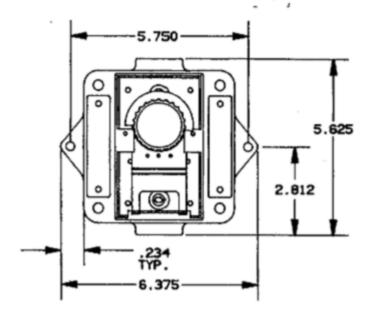
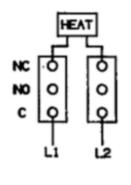
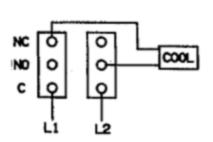


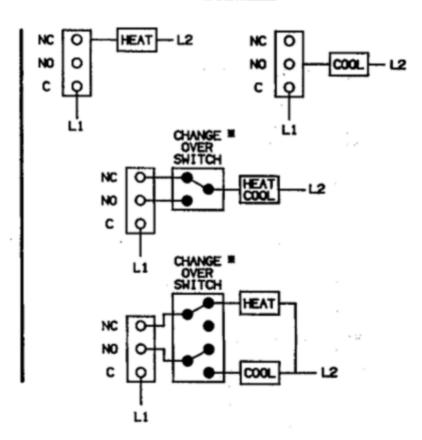
FIG 2
TYPICAL WIRING DIAGRAMS



EP-ETD-8S







\* TO BE PROVIDED BY INSTALLER

485 INDUSTRIAL PARK ROAD, PINEY FLATS, TN 37686

# COLUMBUS ELECTRIC MANUFACTURING

# OPERATION & INSTALLATION MANUAL

EP-ETD-8D EP-ETD-88

DPDT HEAT/COOL SPDT HEAT/COOL

### EXPLOSION PROOF THERMOSTAT

The Columbus Electric Explosion Proof Thermostat is designed to control heating only, cooling only, heating and cool or ventilation systems in oil refineries, grain elevators, munition plants, hospital operating rooms and other hazardous locations.

The switch mechanism is enclosed in a  $1/2^{\circ}$  thick cast aluminum case which is dust proof and dust resistant. A reliable sensing element provides accurate response to temperature change and does not require leveling during installation.

The casing is tapped top and bottom for 3/4" conduit. a 1/2" adaptor is provided.

### SPECIFICATIONS

Electrical Rating: 22 Amp 125-277 VAC 3/4 HP at 125 VAC 1 1/2 HP 250/277 VAC

Dimensions: Approvals:

5.62" x 6.37" x 4.43" U.L. AND C.S.A. Closs I Groups C & D Closs II Groups E. F. & G

Differential: Heat: 2°F/Cool: 4°F

Temp Set Range: 50°F to 90°F

### INSTALLATION

### ALL WIRING MUST COMPLY WITH NFPA-70(NEC), LOCAL CODES AND ORDINANCES:

Locate the thermostat approximately five feet (5') above the floor in a location that will sense the overage temperature of the area to be controlled. Do not mount the thermostat adjacent to water pipes, in drafty areas, or other locations that would adversely affect the operation of the thermostat.

- Remove the cover of the thermostat and set it aside. Exercise care not to mar the
  mating surface or damage the temperature sensing/operating components. CAUTION:
  Marring of the mating surfaces of the enclosure could destroy the integrity of the
  seal causing an unsafe condition during operation of the thermostat.
- 2) Mount the thermostat base on the surface selected. See Fig. 1 for dimensions.
- 3) The base is tapped for 3/4" conduit: a 1/2" conduit adaptor and a 3/4" plug is provided. Two openings are provided. Unused openings must be properly plugged, with plugs provided, prior to applying power to the unit.
- 4. Connect the conduit to the mounted base and place the required wire into the base.
- 5) Connections are to be made to the switch terminals on the cover, see Fig. 2. The gover can then be installed to the base and securely fastened utilizing the four (4) mounting screws. Immediately prior to assembly, inspect the mating surfaces of the cover and enclosure. Do not connect if surfaces are uneven or gaps exist between the cover and enclosure. Install the four (4) cover screws to enclosure and TIGHTEN TO A MINIMUM OF 40 INCH POUNDS.
- 6) The installer must seal each conduit run within 18° of the thermostat enclosure. This seal must be a suitable listed hazardous location fitting.

#### **Product Details**

Featuring a reliable sensing element that provides accurate response to temperature change, this Columbus Electric hazardous location line volt mechanical thermostat is designed to control heating and cooling. This explosion proof model is suitable for use in grain elevators, hospital operating rooms, munitions plants, oil refineries, and other hazardous locations.

#### View Less

#### **Technical Specs**

- ItemHazardous Location Line Volt Mechanical Tstat
- Thermostat Switch TypeDPDT
- Thermostat Control Range50 Degrees to 90 Degrees F
- Thermostat Voltage120 to 277VAC
- Full Load Amps @ 120VAC15A
- Full Load Amps @ 240VAC4.5A
- Thermostat ProgrammableNo
- Remote Sensing CapabilityNo
- Thermostat Heating/CoolingHeating/Cooling
- Thermostat ItemLine Voltage Mechanical Thermostat
- Remote Sensing Bulb IncludedNo
- Switch ActionOpen/Close on Rise
- Number of Switches1
- Differential+/- 3 Degrees F
- Height5-1/2"
- Width6-3/8"
- Depth5-5/8"
- Temp. Sensitivity+/-4 Degrees F
- Sensor TypeBi-Metal Actuator

- ColorBlack and Gray
- Inductive Amps @ 120V4.5A
- Inductive Amps @ 208V4.5A
- Inductive Amps @ 240V4.5A
- Contact Rating Resistive @ 120V13.80A
- Contact Rating Resistive @ 240V10A
- Pilot Duty Contacts (VA)24 to 277VA
- StandardsCSA/UL Class I Groups C and D, Class II Groups E, F and G, NEMA Class 7 Division 1 Approved