

# Explosion Proof Double Pole Double Throw Thermostat - C1D1 - C2D1 -Mercury Free -Corrosion Resistant Instruction Manual

## General

The thermostat is designed to control heating only, cooling only, heating and cooling or ventilation systems in oil refineries, grain elevators, munitions plants, hospital operating rooms and other hazardous locations.

The switching mechanism is enclosed in a 1/2" 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" adapter is included.

## WARNING

HAZARD OF ELECTRIC SHOCK. Disconnect all power before starting. All installations must be effectively grounded in accordance with the National Electrical Code to eliminate shock hazard.

Users should install adequate controls and safety devices with their electric heating equipment. Where the consequences of failure may be severe, back-up controls are essential. Although the safety of the installation is responsibility of the user, Chromalox will be glad to assist in making equipment recommendations.

A disconnect device and circuit breaker should be provided in the end installation. The installation and proximity for the disconnect device must satisfy the electrical Authority having jurisdiction for the installation. Branch circuit protection should be set for 40 amps or lower.

In all cases where the symbol is used on the product, consult the documentation to find out the nature of the potential hazard and any actions to be taken.

Turn off power before removing junction box cover at all times.

## Installation

ALL WIRING MUST COMPLY WITH NFPA-70 (NEC), LOCAL AND STATE CODES.

Locate the thermostat approximately five feet (5') above the floor in a location that will best sense the average 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.

1. Remove the thermostat cover assembly from the base by removing the four corner screws. Set the cover assembly aside. **CAUTION: Marring of the mating surfaces of the enclosure could destroy the integrity of the seal causing unsafe conditions during thermostat operation.**
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 adapter and a 3/4" plug is provided. Two threaded openings are provided for wiring. Unused openings must be properly plugged with the plug provided prior to applying power to the unit.
4. Connect the conduit to the mounted base and pull the required wires into the base.
5. Connections are to be made to the switch terminals on the rear of the cover assembly. See Fig. 2. The cover assembly can then be attached to the base using the four mounting screws. **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 suitable, listed hazardous location fitting.

**Specifications**

Type	Temperature Range	Voltage	Max. Amps	Dimensions	Weight lbs (kg.)
DPDT	50° to 90°F (10° to 32°C)	12-277V	22 Amp	5.5"H x 6.375"W x 5.625"D (140mm x 162mm x 143mm)	5 lbs (2.3 kg)

