TW155 / TW255 SERIES WASH DOWN THERMOSTATS

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INSTALLATION INSTRUCTIONS

APPLICATION

The TW155 and TW255 thermostats are intended for use in wash down and mildly corrosive atmospheres for control of heating or cooling equipment.

The TW155 and TW255 are designed for use as operating or regulating controls only. Where control failure could result in personal injury or loss of property, an approved backup temperature limit control or an advisory alarm system should be used to warn of control failure.

MODELDESCRIPTIONMODELDESCRIPTIONTW155(A)HEAT or COOL SPDTCTW155BHEAT WITH CORDTW255(A)HEAT or COOL DPDTCTW155CCOOL WITH CORD

TW255D 2 STAGE HEAT ONE STAGE COOL TW155E HEAT or COOL WITH REMOTE SENSOR Models HTW255 and HTW255 are the same as the above models except they have a limited temperature adjustment range.

The TW series thermostats utilize a two piece molded plastic enclosure with all exposed metal hardware being stainless steel. the thermostat, adjusting knob and sensing coil are attached to the enclosure cover, allowing the box to be mounted and the wiring to be connected with out damaging the control. Wiring will be at the bottom of the enclosure.

ELECTRICAL RATINGS (CORDED MODELS)

22 AMP @ 125/<u>250</u>/277 Vac 13 AMP @ 125 Vac 3/4 HP @ 125 Vac 58.8 L.R.A. @ 125 Vac 1 1/2 HP @ <u>250</u>/277 Vac 9.8 F.L.A. @ 125 Vac

** CAUTION **

Installation must be performed by an experienced, qualified service person Always disconnect power supply before performing any work. Wire nut or otherwise insulate any unused conductors.

All wiring must conform to state and local codes.

SAFETY INFORMATION

- 1. Disconnect all power before installing or servicing.
- 2. Be certain that the electrical load that is to be controled does not exceed the thermostat rating.
- 3. This thermostat is intended for permanent installation and must be installed in accordance with the National Electric Code (NEC) and all state and local codes.
- 4. Use copper conductors only.
- 5. This thermostat is rated for wash down applications, and is not to be used in potentially explosive or flammable atmospheres.
- 6. The TW155 and TW255 thermostats are designed to prevent the entry of dust and water inside the enclosure. If any part of this assembly is cracked or broken do not install, use or operate as this could result in personal injury and/or property damage.

INSTALLATION

- 1. Locate the thermostat 4 to 6 FT. above the floor, where it will be exposed to an average temperature of the controlled space. Do not mount near windows, doors or direct sunlight.
- 2. Remove the thermostat cover. Position the box with the wiring hole oriented as desired. Fasten the box to the wall with 4 screws through the mounting holes.
- 3. The thermostat may be installed using conduit, flexible cable or other code approved wiring methods. All fittings and materials used in the installation should be approved for the application and should be installed in accordance with their instructions.
 CAUTION The conduit hub, cord seal or other device used for connection should be UL Listed and marked NEMA 4X. The conduit hub is to be installed into the conduit before installing into the enclosure.
- 4. A drip loop should be used to prevent water or other fluids from entering the thermostat housing. The cable or conduit connections to the enclosure must be water and dust tight. Even though this thermostat is sealed, an improper wiring seal could cause water or dust to enter the enclosure, resulting in possible personal injury, property damage and also voids the warranty.
- 5. Complete the wiring by attaching the thermostat leads in accordance to the applicable wiring diagram using wire nuts (not provided). A green ground wire is provided to attach the line and equipment ground to the thermostat assembly. After the connections are made, all wires should be pushed back into the box.
- 6. The thermostat cover should now be attached to the box using the four screws provided. Do not use any other screws. The cover assembly uses a resilient gasket and must be tightened securely to compress the gasket and provide a watertight seal. Do not over tighten.

OPERATION

After installation and wiring, check the operation in the following manner.

- 1. Adjust the thermostat set point to about 10 degrees below room temperature.
- 2. Restore power.
- 3. Slowly adjust the thermostat to raise the set point. When the control setting reaches the temperature of the room, the heater should start.

Since the thermostat may be affected by the installers hands, allow the necessary amount of time after handling before performing the operation check.

The TW Series thermostats are factory calibrated and require no field adjustments. Changing the calibration will void the warranty. The coiled sensor should be kept clean of dirt and other foreign material. Do not bend or damage the coiled sensor as this will affect the operation of the unit.

