## **Tubular Industrial Process**



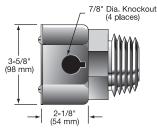
#### **Screw Plug Immersion Heaters**

### **Alternate NEMA 1 Housing**

Type 3N

(for no thermostat)

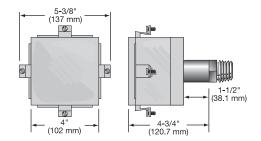
for 1", 1-1/4", 2" and 2-1/2" Screw Plug Heaters



### Alternate NEMA 4 Housing **TYPE 4T**

(for a single pole thermostat)

for 1" and 1-1/4" Screw Plug Heaters

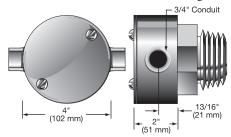


# Alternate NEMA 4 Housing

**TYPE 4N** 

(for no thermostat)

for 1", 1-1/4", 2" and 2-1/2" Screw Plug Heaters

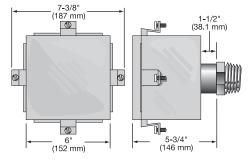


## Alternate NEMA 4 Housing

**TYPE 5T** 

(for a single or double pole thermostat)

for 2" and 2-1/2" Screw Plug Heaters



## Wiring Diagrams — Screw Plug Heaters with Two Elements





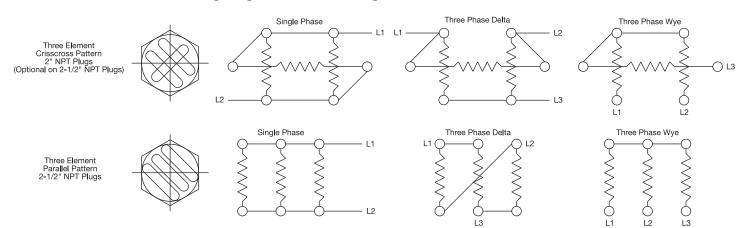
Single-Phase-Series Connection Element Voltage Equals One Half-Line Voltage



Single-Phase - Parallel Connection Element Voltage Full Line Voltage

Note: Dual-Voltage heaters are factory wired for the higher voltage (series connection) unless otherwise specified. Easily rewired for lower voltage operation (parallel connection).

#### Wiring Diagrams — Screw Plug Heaters with Three Elements



**NOTE:** Standard screw plug immersion heaters with three elements, factory wired for three-phase delta, can be rewired for single-phase operation with no wattage change. Wattage can be reduced to one-third of the designed wattage by switching from three-phase delta to wye connection.



Heaters wired for three-phase wye should not be changed to single-phase or three-phase delta connection, since this will increase wattage and watt density on the elements by three times the original designed wattage, causing premature heater failure.