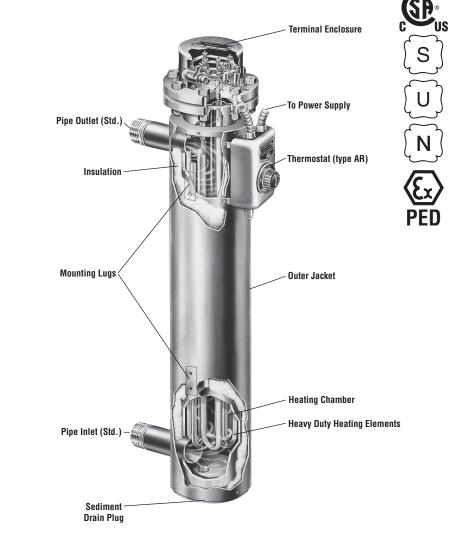
## Circulation

# **Circulation Heaters**

## **Features**

### **Basic Construction**

- Kilowatt Ratings from 0.5 kW (500 W) to Over 500 kW (500,000 W)
- · Voltage Ratings to 600V
- Pressure Ratings to 5000 psig (345 bar)
- Temperatures to 1500°F (815°C)
- · Pipe Chambers 1 48" NPS
- Quality Heating Elements in Screw Plugs or Flanges for Ease of Replacement
- Sheath Materials include Copper, Steel, Stainless, INCOLOY® and INCONEL® to Suit Most Operating or Corrosive Environments
- Vessel Materials include Carbon Steel, 304 or 316 Stainless Steel, Non Ferrous Alloys and High Temperature Plastics
- Terminal Enclosures for General Purpose, Moisture Resistant and Explosion Proof Applications
- Thermocouples and RTD Sensors for Process and Overtemperature Control
- Wide Range of Mechanical and Solid State Electronic Controls including Temperature Controllers
- Contactor or SCR Power Panels for Close Temperature Control (see Controls Section)
- Vertical or Horizontal Mounting with Mounting Lugs or Saddle Supports
- Available with High Temperature Standoffs and Internal Element Baffles
- Custom Designed Skid Mounting, Multiple Chambers and Integral Control Panels
- ASME Certification Section I, III, IV or VIII, Division 1 or PED
- UL, CSA, ATEX and Other Third Party Approval, Listing or Certification Available on Many Models



### **Basic Construction**

**Terminal Enclosures** — E1 General Purpose, sheet metal, painted with red enamel, E2 Moisture Resistant/Explosion Proof, E4 Moisture Resistant.

**Controls** — Some catalog units are provided with a thermostat mounted on the heater.

**Mounting** — Small units supported by inlet and outlet piping; larger units provided with mounting lugs for support.

**Outer Jacket** — Constructed of heavy gauge painted steel sleeving which contains high temperature thermal insulation to reduce heat losses from heating chamber.

**Heating Chamber** — Pipe chambers (150 Lb welded construction, standard) have a flanged or threaded end to receive heater assembly and are closed at the opposite end. Larger

units have drain connections to allow sludge removal. Inlet and outlet nozzles are provided for circulation of fluid or gas through heater chamber. Chamber material available in Steel, Galvanized Steel or Stainless Steel depending on the application.

**Heating Elements** — Flange or screw plug mounted tubular type heating elements offered in Stainless Steel, Copper, Steel or INCOLOY® sheath to suit corrosive resistance requirements.

Wiring Connections — All Etirex circulation heaters are provided with internal wiring and power connections that are sized in accordance with wiring tables in the National Electrical Code and International Electric Code. For safe operation of the heaters, all external wiring should also be in accordance with local codes.

