

DUCT HEATERS



Duct heaters are heat transferring devices which are an assembly of heating elements mounted in a frame or duct. Preferably used for non-pressurized air-heating systems, there are three types of duct heaters available: open coil, tubular or finned tubular heating elements that are either flanged or inserted in the duct. The individual elements are removable through the housing of the assembly, which eliminates the need to pull the complete heater from the ductwork. This reduces downtime costs because the heating elements can be replaced individually. Being the most easily adaptable heating solution, they are easily installed in applications requiring a wide range of temperature versus air flow combinations and offer greater reliability, energy efficiency, quicker response time and reduced infiltration from the air stream. Duct heaters can be equipped with a temperature control system and wired in various power configurations.

OPTIONS

Sheath Material	Steel, Copper, Stainless Steel, INCOLOY
Watt Density	Up to 40 W/in ²
Wattage	Up to 2 MW
Controls	SSR/ SCR/ Digitally Controlled
Diameter of Tube	0.260, 0.315, 0.375, 0.430, 0.475
Voltage	120, 240, 300, 480, 600
Sheath Length	11 – 240 inches
Process temperatures	-29 to 650 ° C

FEATURES & BENEFITS

Terminal Enclosures

In addition to the standard, general purpose terminal enclosure, the following optional terminal enclosures are available to meet specific application requirements:

- Moisture resistant
- Explosion resistant
- High-temperature stand-off enclosures

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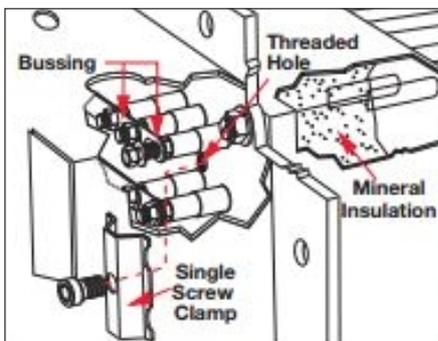
Control

Type J or K thermocouples, inserted in the thermowell, accurately sense element sheath temperature for over-temperature conditions. Using a thermocouple requires an appropriate temperature and power controller.

Field replaceable heating elements

Permits easy service and reduces downtime. Element change out is made simple by a single screw clamp.

Rigid stainless steel support



Prevents element sagging or deformation in various mounting positions

FAVORABLE FEATURES

- Provide great mechanical strength
- Not prone to moisture and dust
- Quite easy to mount
- Durable and easy maintenance
- Rugged construction eliminates hazard of electric shock
- Reinforced frame allows for minimum vibration and elevated temperatures
- Typically used for outdoor applications or in environments that are too harsh for open coil elements

APPLICATIONS

- Heating of platens and molds
- Air dryers
- Load Banks – Resistive
- Industrial Ovens
- Industrial Cabinets
- Preheating
- Reheating
- Laboratory Testing

OPTIONS

Tubular duct heaters offer a number of options

- Digital controls, Contactors, Relays, SCRs available for the most accurate temperature readings
- Disconnecting switches, airflow switches to help control unexpected pressure drops
- Fuse blocks and optional fuses available for low resistance and cool operations.
- Manual reset limit thermal cutout is used to prevent excessive temperatures with this the terminal housing

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