

Duct Heater/Stab-In Heater Technical Information



Introduction

Duct heaters are used to heat air (or other non-flammable gas) within a duct system to a desired temperature. Typically, these heaters are rod elements connected to a terminal box housed within a section of duct, usually, circular, square or rectangular shaped, that can be fitted into place. Stab-In Heaters are used when a section of duct cannot be fully removed. They are rod elements in a terminal box without the duct section so can be inserted into a hole cut in the ductwork.

Options

We can make the ductwork of the heaters from the following materials:

- Galvanised Steel
- Stainless Steel 304
- Stainless Steel 316

We can make the heating elements from the following materials:

- Incoloy 600, 800, 825
- Mild Steel
- Stainless Steel 304, 316, and 321
- Copper
- Titanium
- Teflon

Features and options for our duct heaters:

- ATEX flameproof Duct Heaters
- Flanges (undrilled, drilled, mez type)
- Pressure Sensors
- Temperature Sensors
- Integral Thyristor Control
- Powder Coating
- Mesh Wire
- Additional Control Panels
- Silencers
- Staged/Stepped
- Lifting Lugs
- Earth Bolts

Technical Specifications

- Temp Classification (e.g. T3 up to 200°C max)
- Temperature control $\pm 1^\circ\text{C}$
- Ideal air velocity 2.0m/s (minimum 1.5m/s)
- Circular Heater Diameter 100-710mm
- Circular Heater Power 200W-63kW
- >15kW Rectangular Design with circular connections
- Square/Rectangular/Stab-In Length 300-2000mm
- Square/Rectangular/Stab-In Power 500W-2000kW
- Manual and Automatic Reset Cut-out supplied as standard

Applications

Duct heaters have a myriad of uses. But the majority are used in:

- Primary Room Heating (Central or Zone)
- Supplemental Room Heating (Heat Pumps)
- Air Tempering (Outside Air)
- Preheating (Make-Up Air)
- Reheating (Overcooling applications)
- Curing Ovens

Ordering Procedure

Specify the following parameters:

- Cross-section of Duct
- Restrictions on Length
- Airflow
- Supply Voltage
- kW Rating
- Air On/Air Off Temperature
- Integral Controls
- Safe or Hazardous Area
- Application

Ideally please provide a sketch or drawing.