

## 'ISE' Range of EEx'e' Certified Electric Duct Air Heaters

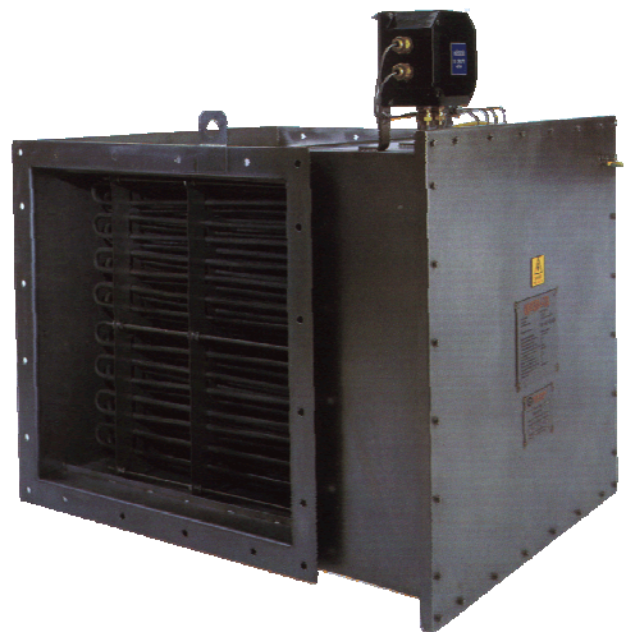
The 'ISE' type electric heaters comprise a range of certified EEx 'e' Air Duct Heaters, custom built to meet client specifications and suitable for use in Zone 1 Hazardous Areas.

### FEATURES

- Certified to meet the ATEX Directive 94/9/EC.
- A range of EEx'e' Gas Group II, increased safety certified duct air heaters.
- Temperature classifications T2 to T6.
- Certified to CENELEC EN50014 & 50019. Standards Australia AS2380.1 & 2380.2.
- Elements are Certified EEx 'e' for use in Zone 1 Hazardous Areas.
- Elements are individually replaceable on site without the need for special tools.
- Termination box is certified weatherproof to IP66 & IP67.
- Anti-condensation heater fitted if required.
- Various types of over-temperature cut-outs available, e.g. Thermostats, RTD's or Thermocouples.

### TYPICAL APPLICATIONS

- Air Handling Units
- HVAC Duct Heating
- Furnace Heating
- Space Heating
- Drying Ovens



<b>Terminal Box</b>	<b>Lightweight construction, manufactured from either Carbon Steel (corrosion protected) or 316L Stainless Steel throughout.</b>
<b>Elements</b>	<b>Manufactured from 80/20 NiCr resistance wire with high purity Compacted Magnesium Oxide powder sheathed with corrosion/erosion resistant tube e.g.:</b> <ul style="list-style-type: none"><li>▪ Incoloy 800/825</li><li>▪ 316/316L Stainless Steel</li><li>▪ 321 Stainless Steel</li><li>▪ Titanium</li><li>▪ Inconel 600/625</li></ul>
<b>Special Features</b>	<b>Where a hazardous gas is present within the duct, the elements are supplied certified EEx'e' for use in a Zone 1 Area.</b>
<b>Thermal Protection</b>	<b>Generally over temperature protective devices are installed as follows:</b> <b>Where elements are NOT in a Hazardous Area: -</b> <ul style="list-style-type: none"><li>▪ 1 thermal cut-out per heating stage, sensing element surface temperature;</li><li>▪ 1 thermal cut-out, sensing air temperature.</li></ul> <b>Where elements ARE in a Hazardous Area: -</b> <ul style="list-style-type: none"><li>▪ 3 thermal cut-outs (1 per phase), per heating stage sensing element surface temperature;</li><li>▪ 1 thermal cut-out sensing air temperature.</li></ul> <b>Note: The air temperature sensor is not required if the terminal box is thermally spaced from the duct.</b>
<b>Supports</b>	<b>Elements are supported in a baffle assembly to prevent flow-induced vibration.</b>
<b>Element Fittings</b>	<b>Elements are sealed into the mounting flange by either Brass or Stainless Steel bushings to facilitate individual replacement of elements.</b>
<b>Voltage</b>	<b>Suitable for voltages up to 690v.</b>
<b>Duct Construction</b>	<b>Manufactured from either Stainless Steel or Pre-Galvanised Sheet Steel to suit the specific working environment. The element-mounted flange is designed to enable removal of the heater bundle without disturbing the remaining ductwork.</b>