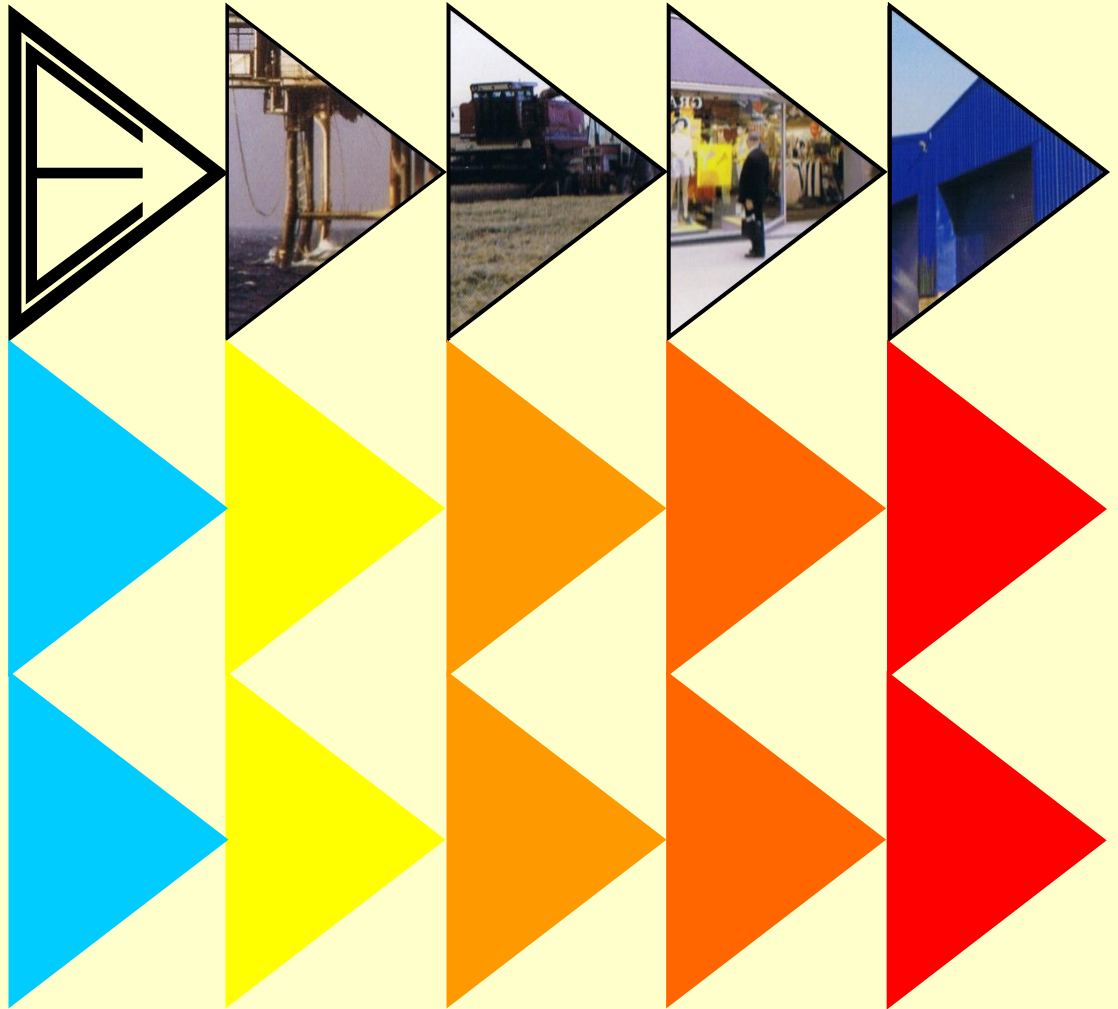


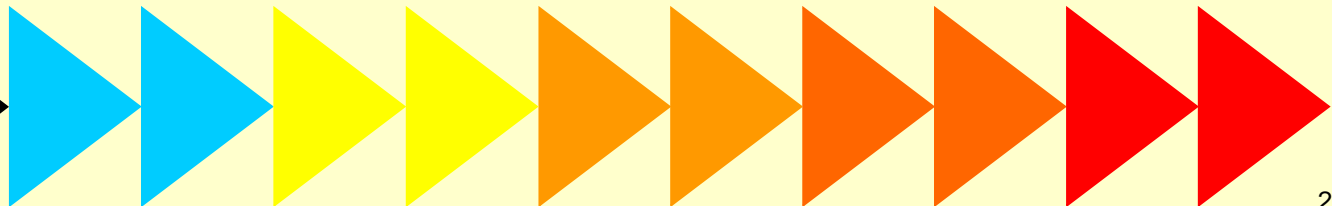
DUCTAIR
ELECTRICS LTD.



Electric Air Heater Manufacturer

Table of Contents

- 3 About Us
- 4 Designed to meet your requirements
- 5 Quality Assurance
- 6 Test Procedures
- 7 Sheathed Elements
- 8 Flange Mounted Units
- 10 Plate Mounted Units
- 12 Circular Spigot Connected Units
- 14 'Stand Off' Terminal Box Units
- 17 Contact Us



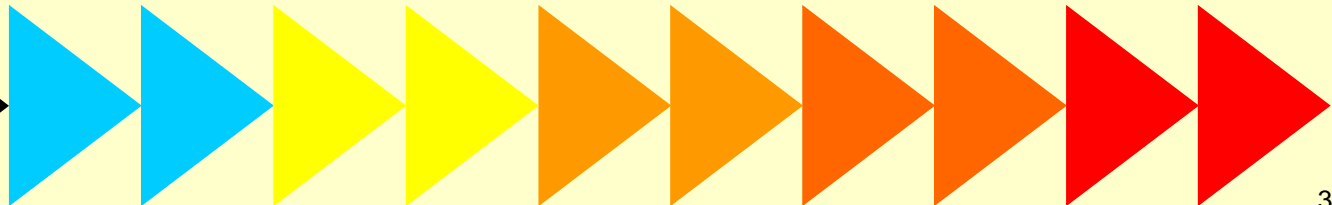
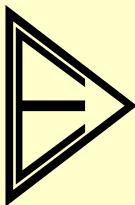
About Us

Established in 1963, and have almost 50 years experience in the design and manufacture of industrial electric heating equipment.

We manufacture heaters for a wide variety of applications, and we will design and quote to your specifications.

Our units are used for heating, frost protection and load banks. They can be installed in duct systems, air handling units and process ovens. Applications include shops, offices, hotels, warehouses, computer rooms, hospitals, nuclear power plants, off shore oil platforms and drying ovens.

We also supply heating elements, either straight or formed into the shape/size that you require. We stock elements from 24" to 120" long over a range of loadings from 500W to 4000W.



Designed to Meet Your Requirements

We design and specify every heater to meet your requirements, and this flexibility means that you don't have to compromise.

We can offer 1.5mm galvanised steel or 1.5mm stainless steel flange mounted, plate mounted or spigot connected units.

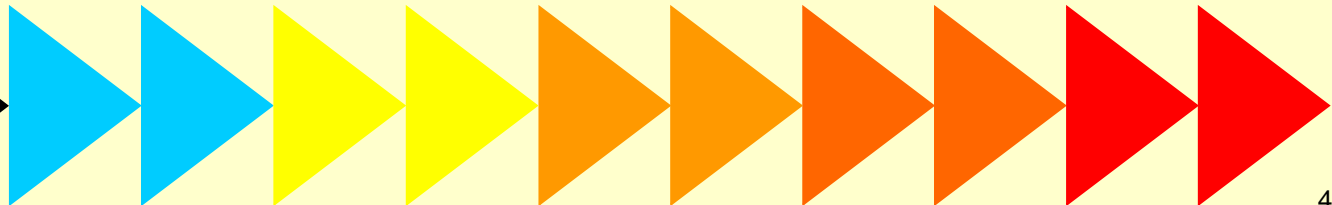
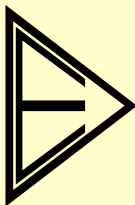
We use stainless steel sheathed elements which are selected based on the required size, temperature rise, number of electrical stages and air volume to provide optimal element distribution across the duct area.

The slotted element supports are designed to allow for the expansion of the elements

Every heater is fitted with a high temperature safety cut-out to isolate the heater in the event of over heating as a result of an airflow failure. We can provide manual or auto reset options based on your requirements.



DUCTAIR
ELECTRICS LTD.



Quality Assurance

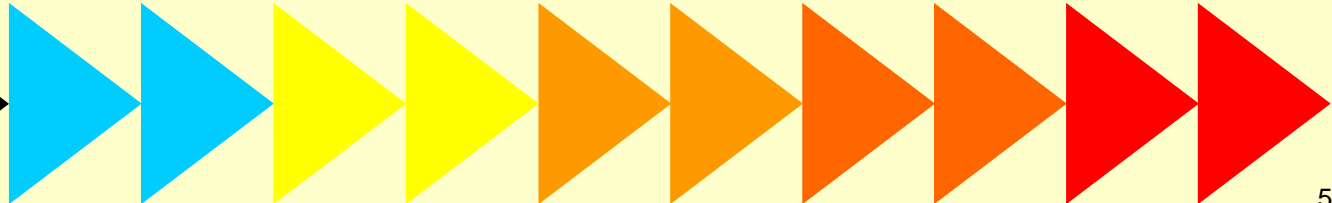
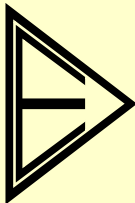
Certified drawings are provided for your approval prior to manufacturing, which ensures we make the heater you expect to receive.

All of our heaters are fully tested to ensure accuracy and electrical safety.

Every heater is supplied with an Operating & Maintenance Manual, which includes a terminal layout diagram, certificate of conformity and test certificate.



DUCTAIR
ELECTRICS LTD.



Test Procedures

Electrical Loading

Electrical resistance is measured from live to neutral for all of the stages. The loading[†] is then calculated using ohms law, $W = V^2/R^{\dagger\dagger}$.

[†] The manufacturers tolerance for sheathed elements is $\pm 7\%$ on loading

^{††} The resistance of the elements alters slightly between hot and cold, so a correction factor of 0.98 is applied

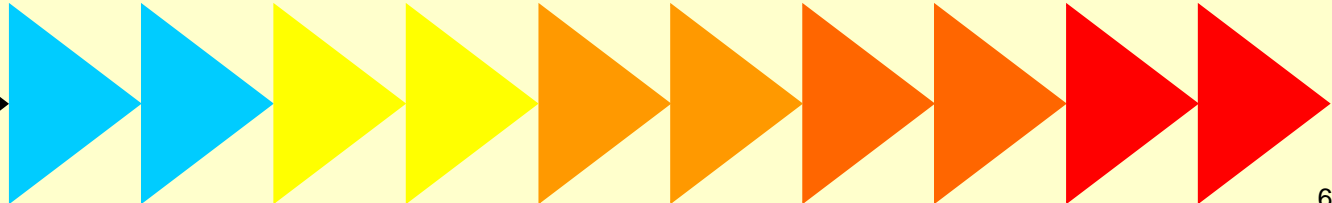
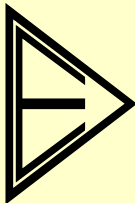
High Voltage or 'Flash' Testing

Consists of applying 1250V A.C between the termination and the casing and recording the earth leakage current, expressed in mA. This should not exceed 1mA per kW.

Insulation Resistance

Consists of applying 500V DC between the terminations and the casing and recording the resistance between the live and the earth, expressed in M Ω .

This should be greater than 1M Ω .



Sheathed Elements

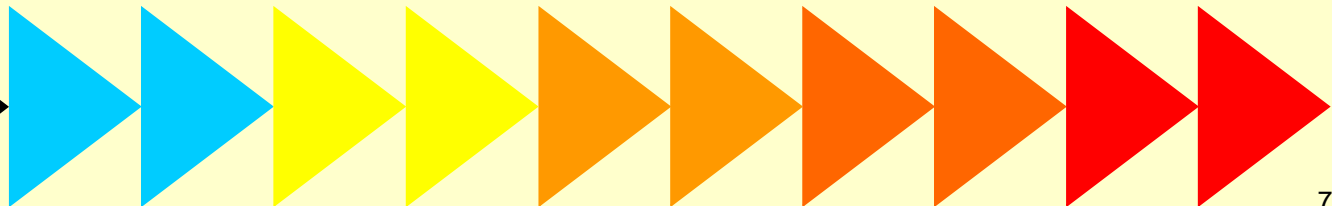
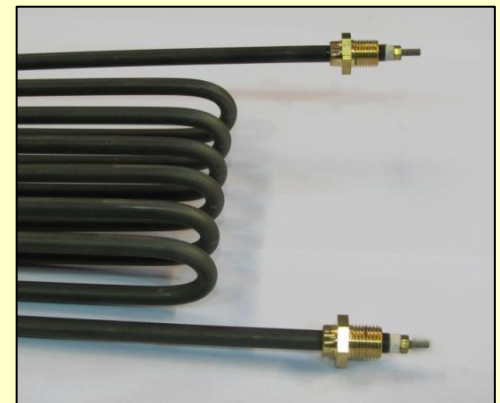
The elements consist of an 8mm dia. stainless steel tube housing a nickel/chrome resistance wire, which is insulated using compacted magnesium oxide powder.

The magnesium oxide insulation takes up moisture over time, so the ends are sealed with silicone rubber and a ceramic end insulator .

The elements can be supplied straight or formed into the shape/size that you require.

We stock elements from 24" to 120" long over a range of loadings from 500W to 4000W.

Formed elements have a 1/4" BSP brass crimp fitting on the ends to allow fixing into your metalwork, alternatively we can supply 1/4" BSP compression fittings. There are 4BA threaded terminations at each end.

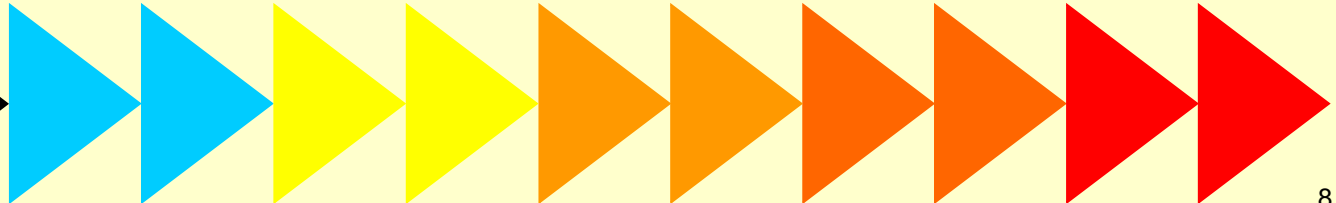
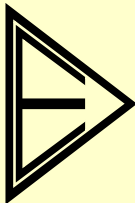


Flange Mounted Units

- Designed for use as a flange mounted duct heater or as a cassette to fit inside air handling units
- Integral formed flange
- Element support designed to allow for element expansion
- Supplied with high temperature safety cut-out and terminations ready for wiring to your controls



DUCTAIR
ELECTRICS LTD.



Flange Mounted Units

Specified and manufactured to your requirements

Typically -

- 1.5mm Galvanised steel construction
- IP30 Terminal box
- Element surface temperature below 380°C (Black heat)
- Manual reset high temperature safety cut-out
- Terminations ready for wiring to your controls

Alternative Options

- 1.5mm Stainless steel construction
- IP54 Terminal box
- Auto reset high temperature safety cut-out

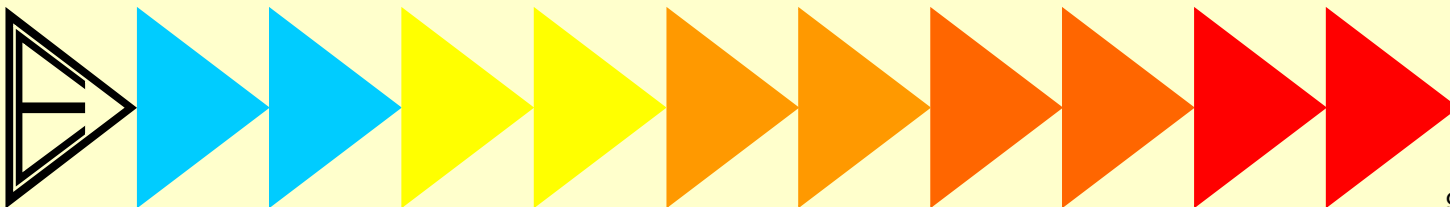
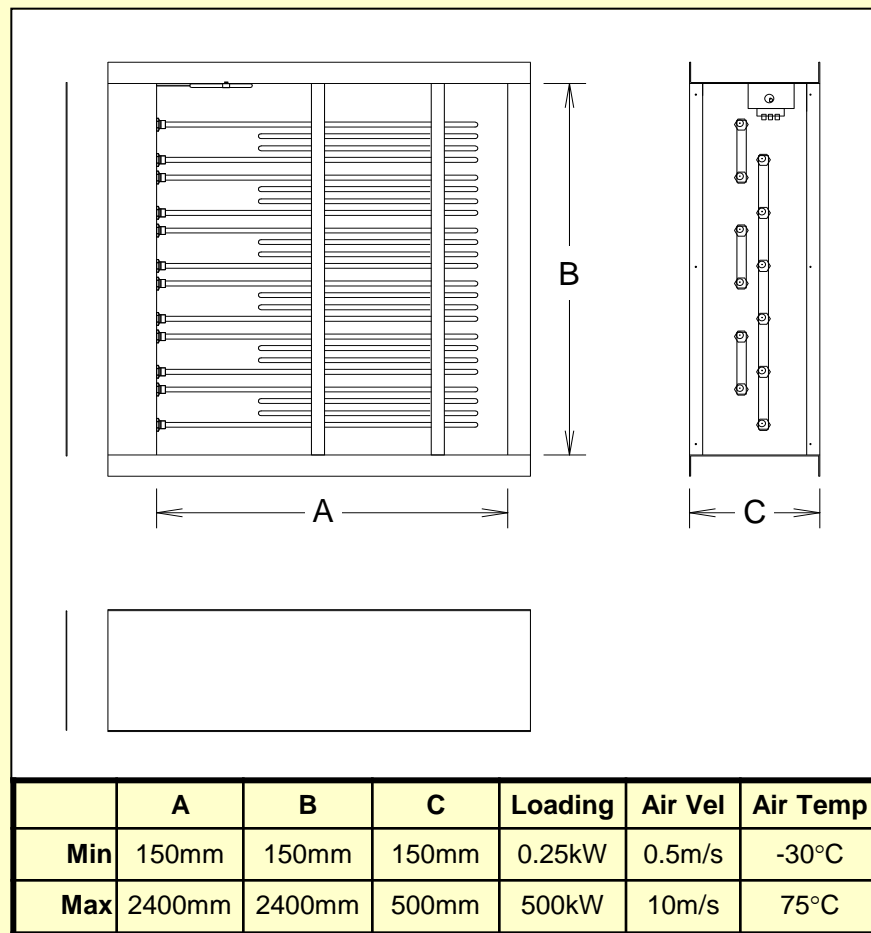


Plate Mounted Units

- Designed for quick and easy installation into new or existing duct systems and air handling units
- No additional flanging costs
- Easily removed for servicing or repair
- Element support designed to allow for element expansion
- Supplied with high temperature safety cut-out and terminations ready for wiring to your controls

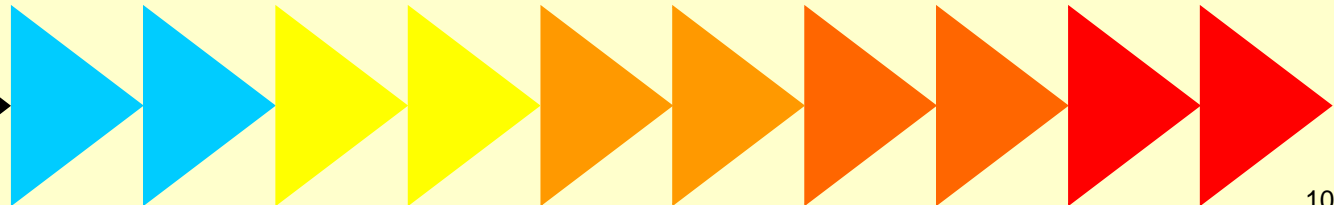
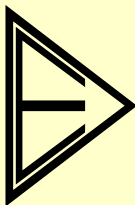


Plate Mounted Units

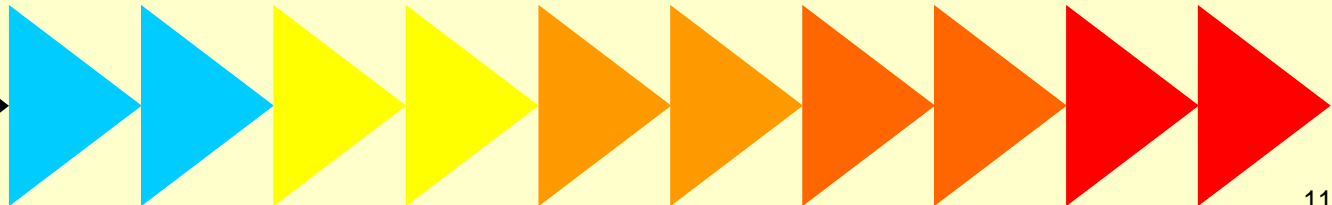
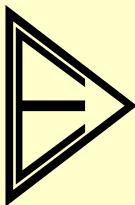
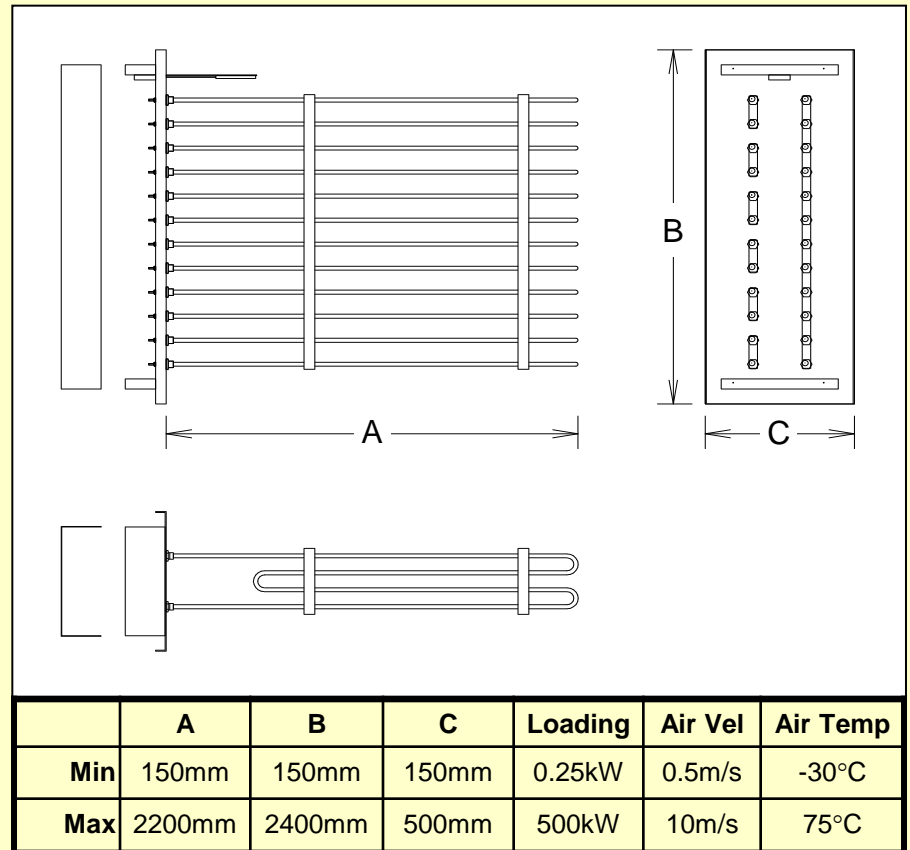
Specified and manufactured to your requirements

Typically -

- 1.5mm Galvanised steel construction
- IP30 Terminal box
- Element surface temperature below 380°C (Black heat)
- Manual reset high temperature safety cut-out
- Terminations ready for wiring to your controls

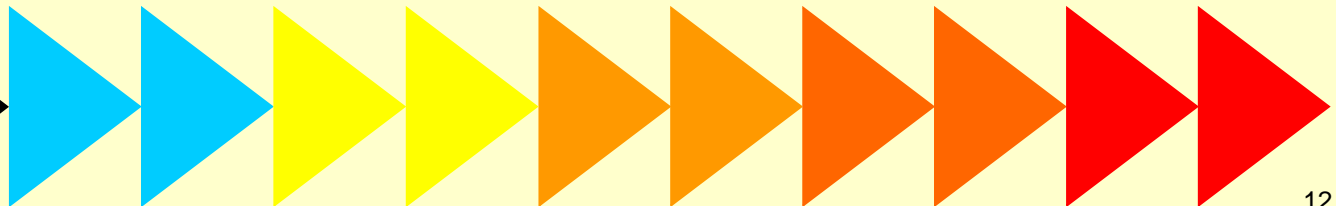
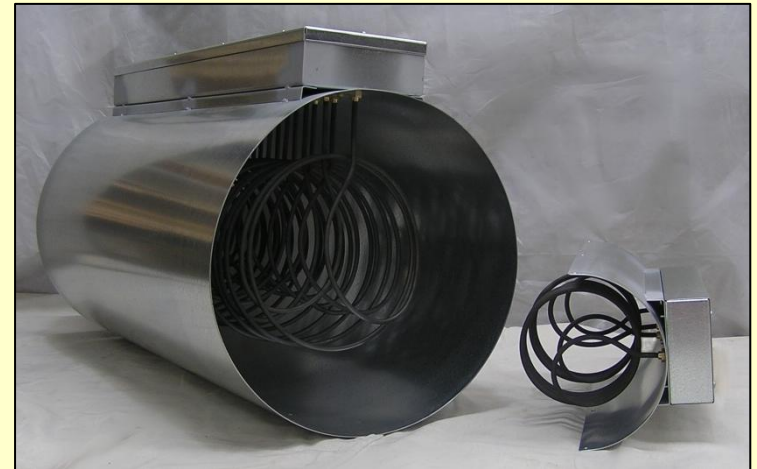
Alternative Options

- 1.5mm Stainless steel construction
- IP54 Terminal box
- Auto reset high temperature safety cut-out



Circular Spigot Connected Units

- Designed for quick and easy installation into rigid or flexible circular duct systems
- No additional flanging costs
- Supplied with high temperature safety cut-out and terminations ready for wiring to your controls



Circular Spigot Connected Units

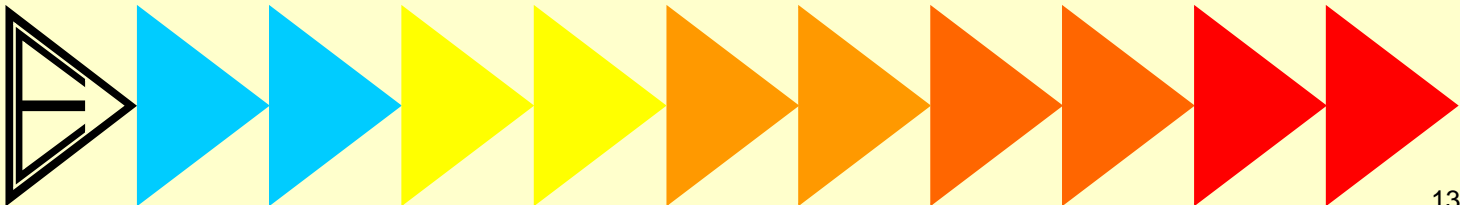
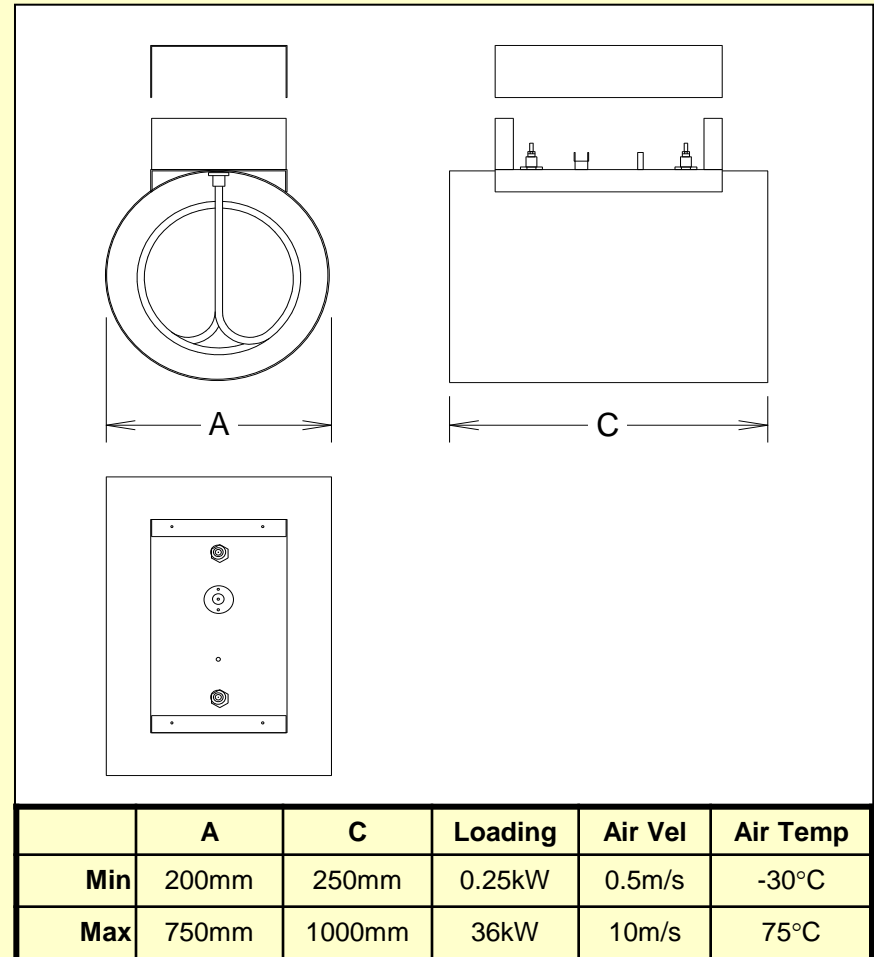
Specified and manufactured to your requirements

Typically -

- 1.5mm Galvanised steel construction
- IP30 Terminal box
- Element surface temperature below 380°C (Black heat)
- Manual reset high temperature safety cut-out
- Terminations ready for wiring to your controls

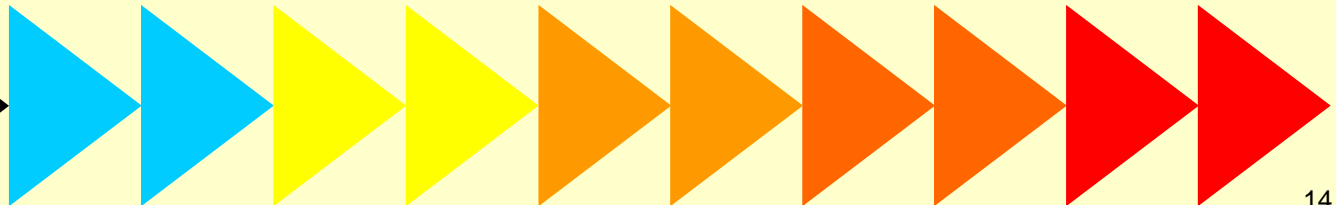
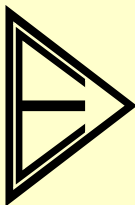
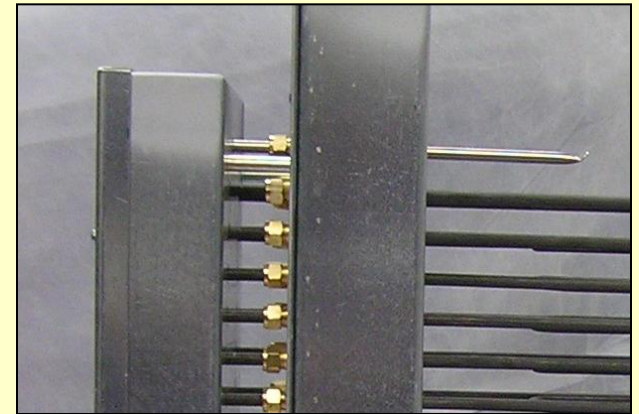
Alternative Options

- 1.5mm Stainless steel construction
- IP54 Terminal box
- Auto reset high temperature safety cut-out



'Stand Off' Terminal Box Units

- Designed for process oven applications where higher air temperatures are required
- 'Stand off' terminal box to minimise heat transfer
- Can be either Plate Mounted or Flange Mounted
- Mounting plate can be insulated to match duct insulation
- Element support designed to allow for element expansion
- Supplied with high temperature safety cut-out and terminations ready for wiring to your controls



'Stand Off' Terminal Box Plate Mounted Units

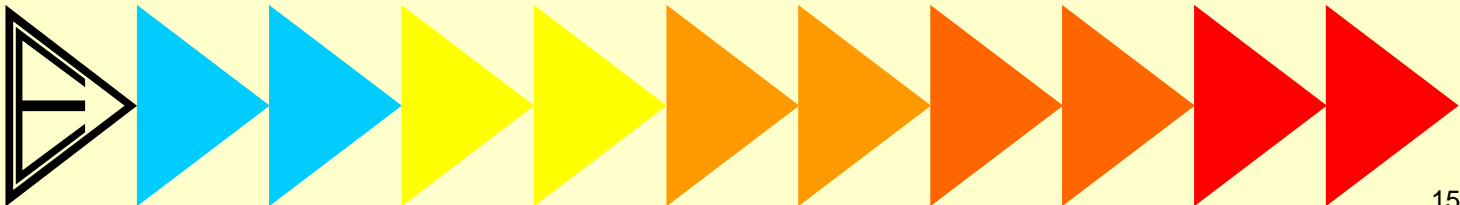
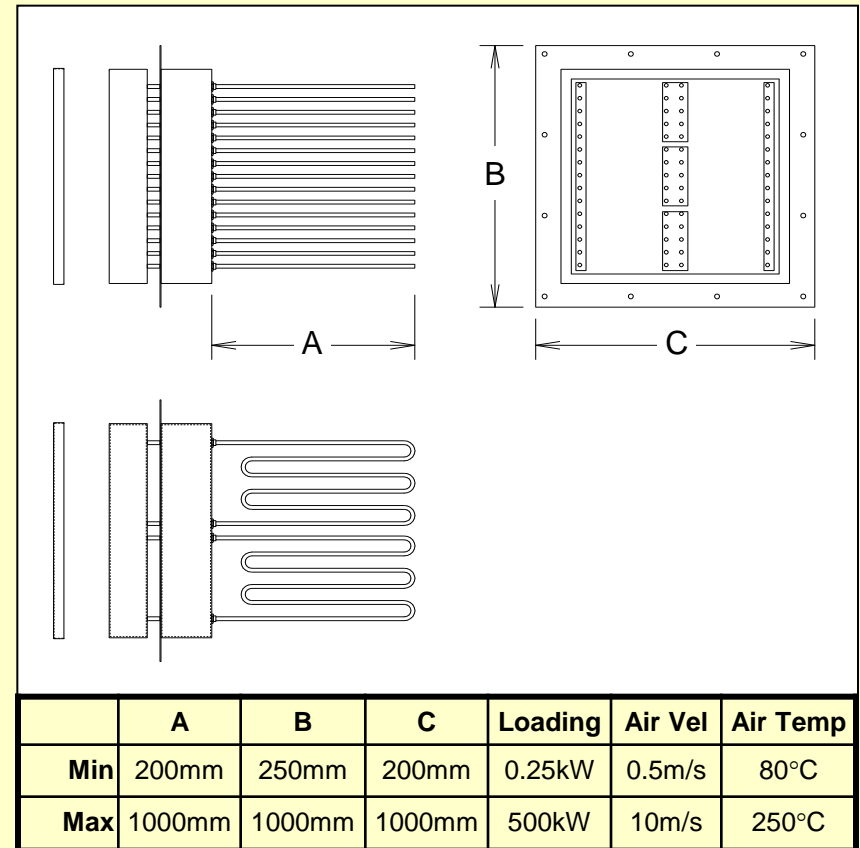
Specified and manufactured to your requirements

Typically -

- 1.5mm Galvanised steel construction
- IP30 Terminal box
- Manual reset high temperature safety cut-out
- Terminations ready for wiring to your controls

Alternative Options

- 1.5mm Stainless steel construction
- IP54 Terminal box
- Auto reset high temperature safety cut-out



'Stand Off' Terminal Box Duct Mounted Units

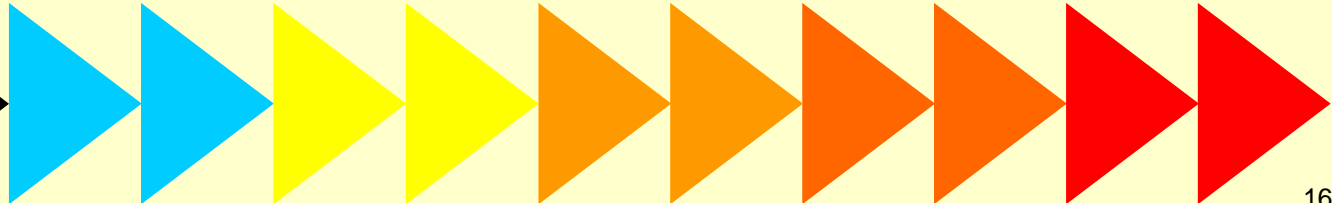
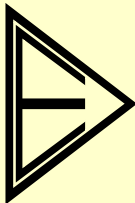
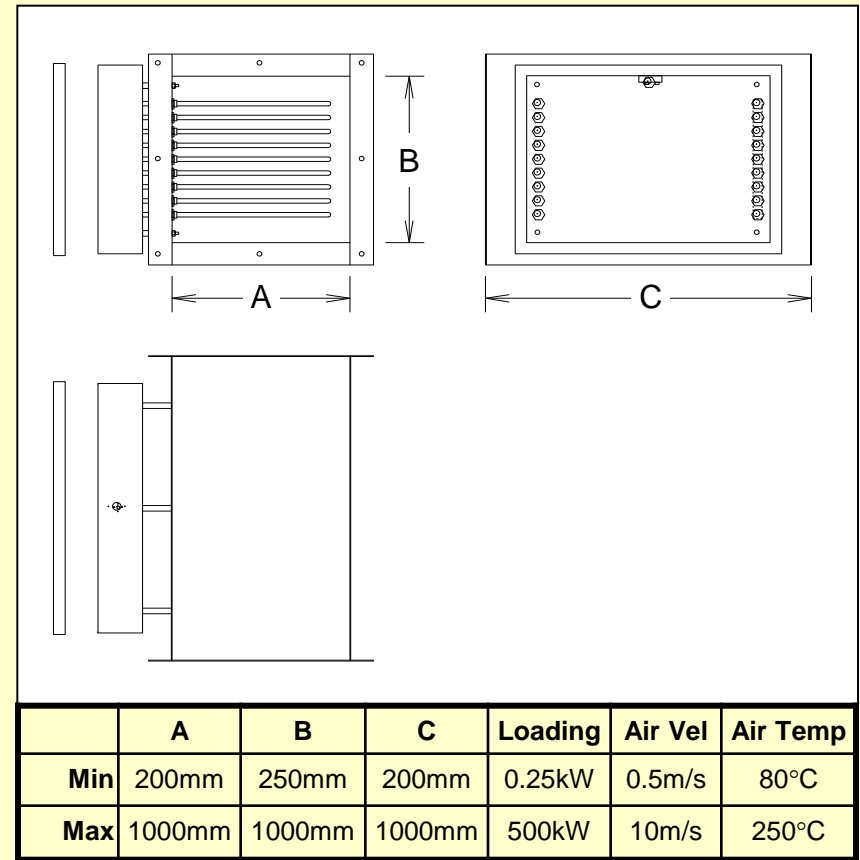
Specified and manufactured to your requirements

Typically -

- 1.5mm Galvanised steel construction
- IP30 Terminal box
- Manual reset high temperature safety cut-out
- Terminations ready for wiring to your controls

Alternative Options

- 1.5mm Stainless steel construction
- IP54 Terminal box
- Auto reset high temperature safety cut-out



Contact Us

Address

Ductair Electrics Limited.
Unit 10E,
Maybrook Business Park,
Maybrook Road,
Minworth,
West Midlands,
B76 1AL.

Website

www.ductairelectrics.co.uk

Email

ductairelectrics@btconnect.com

Phone

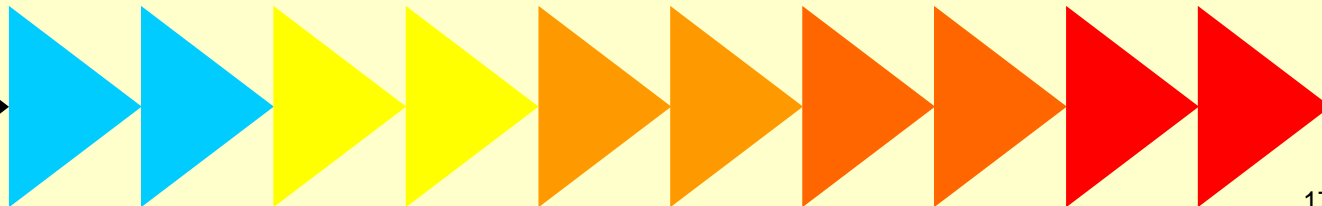
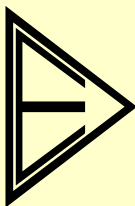
0121 351 5742

Fax

0121 313 1018



DUCTAIR
ELECTRICS LTD.



DUCTAIR
ELECTRICS LTD.

