

AIR HEATERS

AR RANGE



AR RANGE APPLICATION

The AR range of air heater is suitable for industrial process heating applications or for building service applications where a higher specification of design is required. The duct is manufactured from galvanised steel sheet and steel angle painted with high temperature paint. Duct dimensions are to suit your requirements. Stainless steel ducts are also available, please contact our Technical Department.

The enclosure is rated to IP55 and is manufactured from galvanised steel or stainless steel sheet.

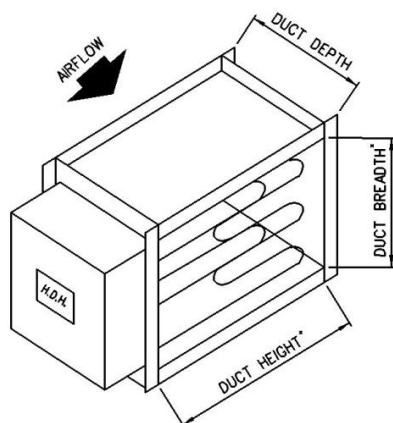
Maximum kW loadings depend on application and are available in single phase up to 6kW and three phase up to 300kW. For higher kW loadings we would normally suggest multiple AR heaters.

STANDARD RANGE

The standard AR range of air heaters is fitted with high quality Nic alloy 800 elements with an average watts density of 3.4 W/cm^2 (22 W/in^2).

It is our experience that each installation requires specific duct dimensions which should be specified in your enquiry.

LIST No.	kW Load @ 240/415V	No. OF CIRCUITS	DUCT SIZE (HEIGHT x BREADTH)
AR101	6	1	Please Specify When Ordering
AR102	9	1	Please Specify When Ordering
AR103	12	2	Please Specify When Ordering
AR104	18	2	Please Specify When Ordering
AR105	24	2	Please Specify When Ordering
AR106	36	4	Please Specify When Ordering
AR107	48	4	Please Specify When Ordering
AR108	60	4	Please Specify When Ordering
AR109	72	4	Please Specify When Ordering
AR110	90	6	Please Specify When Ordering



MOUNTING

Heaters are suitable for mounting on square or rectangular ducts. For round ducts, adapter sections can be supplied.

'Stab-in' type heaters, that do not come with a duct, can be supplied. The heater element plate or enclosure fits directly onto an opening in the duct.

As standard, the duct flanges are 40mm wide and are normally left undrilled to be drilled on site, however, if dimensions are supplied the flanges can be supplied drilled.

Note: It is recommended that the enclosure is mounted at the side of the duct rather than on top, as this will reduce heat penetration into the enclosure.

TEMPERATURE CONTROL

All standard models are supplied with an adjustable over temperature cut-out thermostat, with a range of $0-320^{\circ}\text{C}$, rated at 16 Amps.

Alternative thermostat ranges are available. PT100 (RTD) and thermocouple sensors are also available. Please contact our Technical Department.

Where the current consumed exceeds the thermostat rating, the heater must be wired through a contactor switch. A contactor switch must be fitted on all three phase supplies.

Control panels can be supplied incorporating all necessary controls. Please refer to our TC range.

OPERATING TEMPERATURE

Standard models have a maximum operating temperature of 90°C .

Non-standard models are available with terminal enclosures "stood off" or with insulation to allow for higher operating temperatures. For higher operating temperatures please contact our Technical Department.

VOLTAGE

Three phase heaters from our standard range are suitable for all 400/415 volts, 3 or 4 wire supplies.

Non-standard models can be supplied designed to suit operating voltages from 110V to 690V AC or DC. Please contact our Technical Department.

CONSTRUCTION

Heaters are manufactured generally to BS7797.

Elements are crimped into ferrules (glands) and the assembly is bolted to the enclosure. Individual elements can therefore be replaced, once the heater has been removed from the duct.

The duct is manufactured from galvanised mild steel sheet and mild steel angle painted with high temperature paint.

The terminal enclosure is rated to IP55 and is constructed from galvanised mild steel sheet.

COMMON VARIATIONS

Please contact our Technical Department for further details.

- Various operating voltages, single phase, three phase star or delta.
- Higher operating temperatures up to 400°C .
- Various thermostat ranges or PT100 (RTD) or thermocouples.
- Air flow switch.
- Supplied complete with fan.
- Stab-in heater only
- Totally sealed duct.