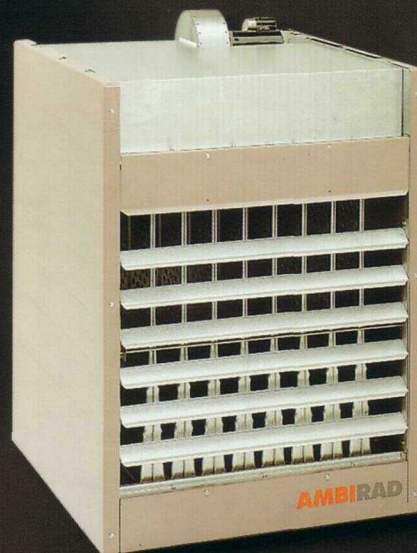


# AMBIRAD

ENERGY EFFICIENT HEATING SYSTEMS



## CENTURION

GAS FIRED UNIT HEATERS



### Centurion UF

The Ambi-Rad Centurion range is designed to enhance energy efficiency, provide simple low cost installation and to facilitate ease of maintenance. The units offer considerable benefits at the most competitive cost.

### Centurion UFE

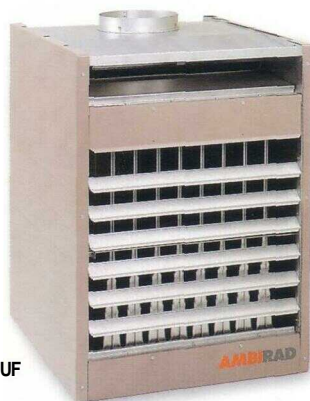
The Centurion UFE provides additional fuel economy by incorporating an integral powered flue and automatic spark ignition as standard features. The power venter ensures an accurately metered supply of room air to the burners and permits the use of a smaller flue. The power vented flue eliminates the unnecessary loss of heated air associated with open flues, thus providing significant energy savings.

The patented, new low resistance heat exchanger allows more than 20% additional airflow without any increase in fan speed or electrical consumption.

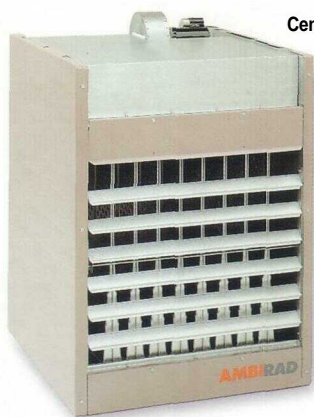
Furthermore, roof penetrations can be avoided as the rear flue outlet on the Centurion UFE allows the use of a simple through the wall terminal.

This combination of energy saving features and reduced installation costs, generally allows the additional costs of the higher specification units to be recovered within the initial year of operation.

Centurion UF



Centurion UFE



### Features

- n Energy saving
  - o Enhanced efficiency lower running costs
  - o Longer air throw: improved distribution
  - o High airflow: reduced stratification
- n Standard features
  - o Suitable for natural gas
  - o Aluminised steel heat exchanger
  - o Horizontal louvres
  - o Dual limit switches
- n UF only
  - o Piezo ignition
- n UFE units only
  - o Auto spark ignition
  - o Fan assisted flue
- n Optional factory fitted
  - o Unit suitable for propane gas
  - o Air recirculation thermostat
- n Optional items for on site fitting
  - o Downturn nozzles (30° & 60°)
  - o Power flue venters (UF only)
  - o Vertical louvres

### Benefits

- n Lower running costs
  - o High efficiency
  - o High airflow for minimal stratification
- n Reduces the requirements for destratification fans
- n Ease of maintenance
  - o Drop-down burner access
  - o Proven reliability of components

### Specification

#### Heat exchanger

The high efficiency heat exchanger is designed for extended operational life. Aluminised steel burners with stainless steel inserts provide maximum efficiency and a carry over lighting system ensures quiet reliable ignition. For inlet temperature below 5°C stainless steel heat exchangers are recommended.

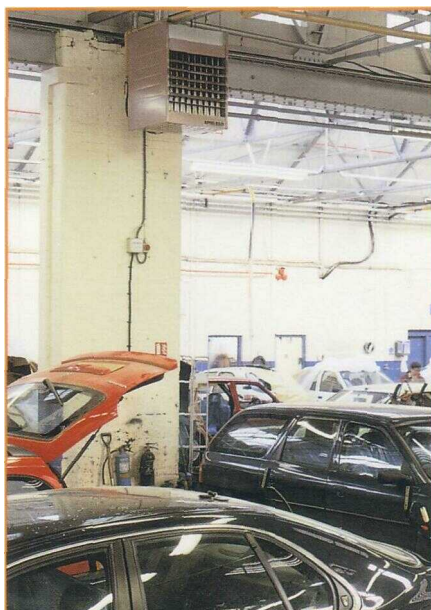
#### Air handling

High volume fans provide improved air throws and reduced stratification. An optional range of discharge nozzles are available to direct air from 20 to 90 degrees for downward discharge.

Downflow nozzles should be used when heaters are installed above minimum mounting heights.

#### Cabinets

Cabinets are stove enamelled and aluminised steel finished. All components coming into contact with the products of combustion are manufactured from aluminised steel.



## Safety

Each heater is fitted with a multi-functional safety control. The fan operation is controlled from an integral fan stat which delays the fan operation to avoid blowing cold air. For maximum economy the fan continues to run after the burner switches off until the heat in the heat exchanger has been dissipated into the space. In the event of insufficient air flow through the unit, a limit switch shuts off the heater. For increased safety dual limit switches are fitted.

## Controls

Designed for fully automatic operation, the units may be used with Ambi-Rad remote control panels. The panels provide time control, day and night temperature settings and the facility to operate the fans for summer air circulation. A remote reset facility for heaters fitted with automatic ignition is also included on the panels. For winter economy an air recirculation thermostat (optional) operates the fans to redistribute high level warm air back down to the working zone.

## Installation

Units are designed for suspended applications and a minimum clearance distance of 600mm is required underneath the heaters.

Installation should be carried out by a competent CORGI registered installer in accordance with the installation instructions provided and current codes of practice. Incorrect installation will invalidate the warranty.

Whilst the units are suitable for most industrial and commercial applications, they must not be installed in atmospheres containing highly flammable vapours, combustible dust, halogenated hydrocarbons or chlorinated vapours. Special units using separated combustion and/or special grade stainless steel heat exchangers or remotely sited units will be required for such applications,

*Always ensure adequate combustion air is provided in compliance with BS5440 and/or BS6230 dependent on heat output of the installation.*

## Electrical

Units must be wired in accordance with the wiring diagrams provided and the current edition of electrical standards. The main electrical supply to the unit should not be isolated except for maintenance.



## Specification and technical data

Model		50	75	100	125	165	200	250	300	400
Nominal output	kW	11.7	17.6	23.4	29.3	38.7	46.9	58.6	70.3	93.8
	Btu/h	40,000	60,000	80,000	100,000	132,000	160,000	200,000	240,000	320,000
Gas rate <sup>†</sup>	m <sup>3</sup> /h	1.38	2.06	2.75	3.44	4.54	5.50	6.87	8.25	11.0
	ft <sup>3</sup> /h	48.5	72.8	97.1	121.4	160.2	194.2	242.7	291.3	388.3
Gas connection	BSP in	1½	1½	1½	1½	1½	1½	1½	¾	¾
Nominal flue diameter	UF	100	125	150	175	200	200	250	250	250
	UFE	100	100	100	125	125	125	125	150	150
Max flue length (UFE)*	m	12	12	15	15	15	15	15	15	15
Airflow	m <sup>3</sup> /h	1145	1886	2516	3272	4151	5033	6293	7589	10066
	ft <sup>3</sup> /min	673	1111	1481	1926	2444	2963	3704	4444	5926
Motor rating	UF	0.10	0.11	0.22	0.24	0.27	0.29	0.35	0.45	0.58
	UFE	0.15	0.17	0.28	0.31	0.34	0.37	0.43	0.53	0.67
Running amps	UF	0.45	0.50	1.00	1.05	1.10	1.20	1.80	2.00	2.50
	UFE	0.75	0.80	1.30	1.35	1.40	1.60	2.20	2.40	2.90
Mounting height*	m	2.3-2.7	7	2.3-2.7	2.5-3.0	2.5-3.0	2.5-3.0	2.5-3.5	3.0-4.0	3.0-5.0
Throw	m	10	13	17	21	25	26	29	32	38
Approx weight (net)	kg	36	40	44	58	68	77	93	100	125

<sup>†</sup> Maximum inlet pressure 30 mbar. Minimum inlet pressure 17.5 mbar.

\* Use lower mounting height unless a downturn nozzle is fitted. Throw depends on height of building, mounting height of heater, room temperature and louver setting.

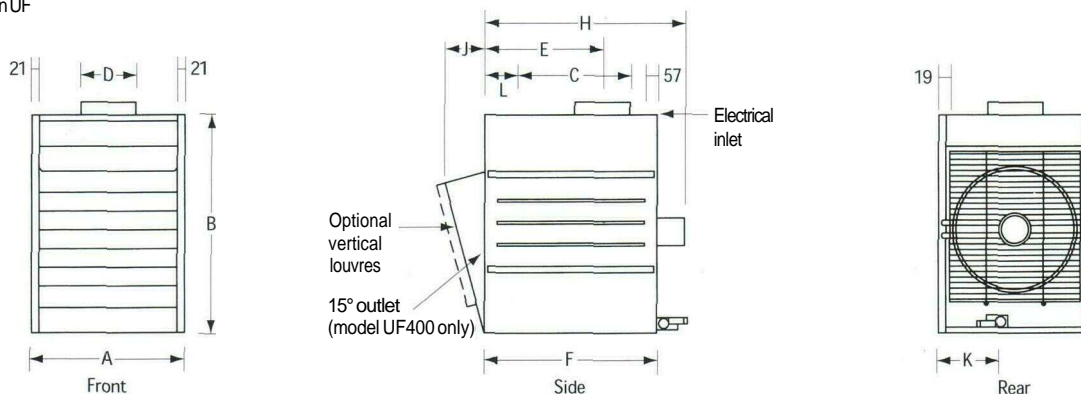
• Reduce flue length by 3m for each 90° bend.



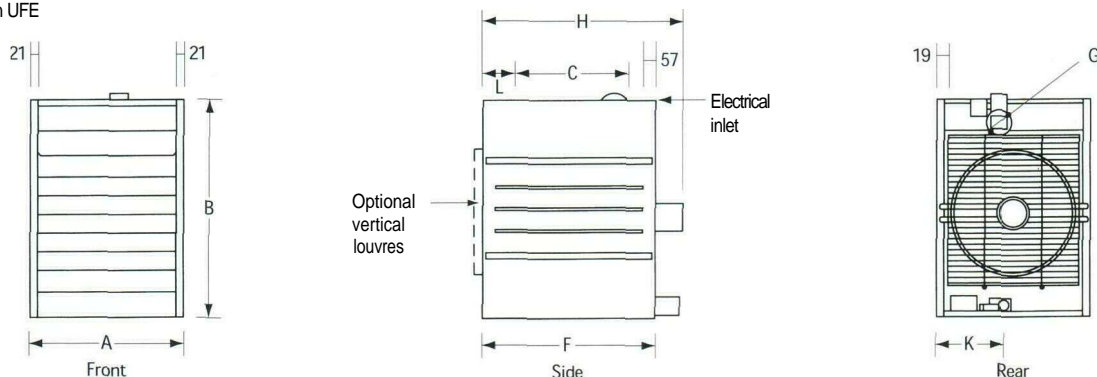
## Specification and technical data continued

### Dimensions

Centurion UF



Centurion UFE



Model	50	75	100	125	165	200	250	300	400
A Width	344	395	446	592	516	592	732	732	941
B Height	737	737	737	737	990	990	990	990	990
C Suspension points	367	367	367	367	495	495	495	495	495
D Flue diameter (internal)	102	127	153	178	203	203	254	254	254
E Front to flue centre	451	451	451	436	543	543	543	543	543
F Cabinet length	687	687	687	687	802	802	802	802	802
G Venter outlet diameter (UFE)	104	104	104	129	129	129	129	155	155
H Overall length	687	687	794	794	911	911	937	937	937
J 15° outlet									180
K Inlet location	261	267	328	366	363	366	314	314	330
L Front to bracket centre	148	148	148	148	124	124	124	124	124

All distances are in millimetres.

### Clearance

Top	Bottom	Sides	Rear	Front of draught hood	Flue
152	610	460	610	Models 25/125-1830 Models 165/250-2440 Models 300/400-3050	152

All distances are in millimetres.



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Due to continuous product innovation, Ambi-Rad reserves the right to change product specification without due notice.

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