CI/SfB

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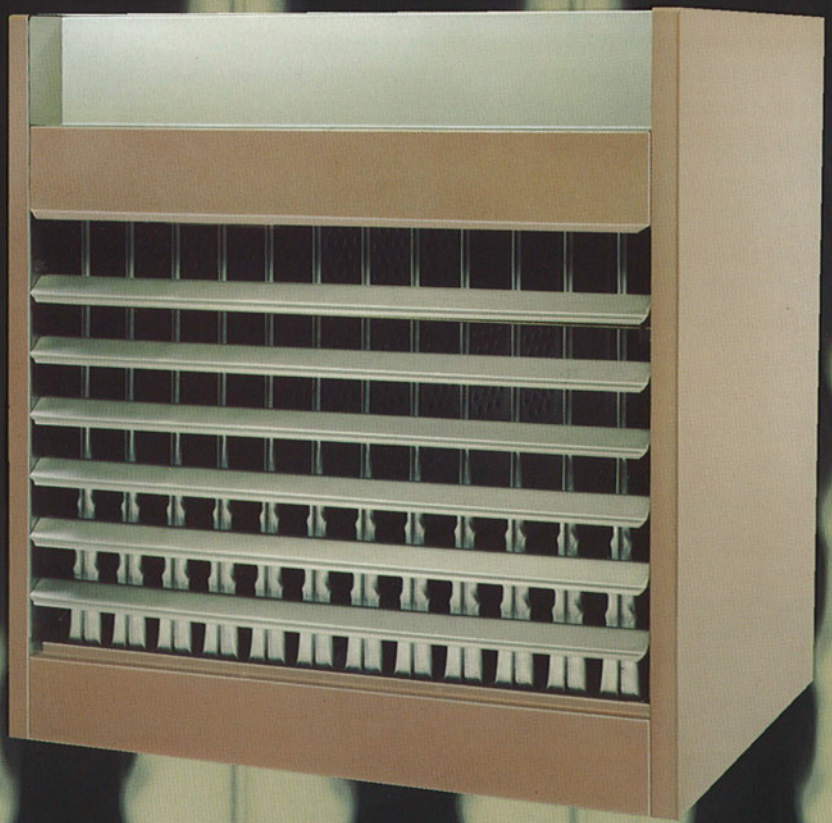
AMBI-RAD

CENTURION

Gas Fired Unit Heaters



LLOYD'S REGISTER QUALITY COMPANY ISO9001

NATIONAL ACCREDITATION OF CERTIFICATION BODIES

CENTURION *Gas Fired Unit Heaters*

CE

Centurion = 0063/94
Centurion FE = 63AP7425

CENTURION (UF)

The Ambi-Rad Centurion range is a new generation of gas-fired air heating products. 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.

- Lower running costs
  - high efficiency
  - high airflow for minimal stratification
- Lower installed costs
  - lightweight, simple four point suspension
  - eliminates or reduces the requirements for destratification fans
- Ease of maintenance
  - drop-down burner access
  - proven reliability of components

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

CENTURION FE (UFE)

The Centurion FE 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 combustion air to the burners and permits the use of a sealed flue products collection chamber. The sealed units eliminate unnecessary loss of heated room air through the open flue, thus providing significant energy savings.
This combination of energy saving features, generally allows the additional costs of the higher specification units to be recovered within the initial year of operation.
Furthermore, roof penetrations can be avoided as the Centurion FE can be flued using a simple through the wall terminal.

Retail Development

Engineering Workshop

Warehousing & Storage

AMBI-RAD

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 temperatures below 5°C/40°F 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.
The Centurion axial fan range eliminates the need to use centrifugal fan units in high mounting, free blowing applications, as the low resistance heater exchanger maximises airflow without increasing noise levels.

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. A limit switch shuts the heater down in the event of insufficient airflow through the unit or any other cause of over-heating.

Controls
Designed for fully automatic operation, the units may be used with time clocks, thermostats, frost stats or with a remote control panel. During summer periods the fans may be used for air circulation by use of an optional remote heat/vent switch. For winter economy an air recirculation kit option 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 300mm is required underneath the heaters, for ease of service greater clearance is preferred. 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.
A gas isolation valve must be fitted adjacent to each unit, the gas supply must be turned off during maintenance periods, care should be taken to isolate the unit from any vibrations and units must be level.
ALWAYS ENSURE ADEQUATE COMBUSTION AIR IS PROVIDED IN COMPLIANCE WITH BS 5440 AND/OR BS 6230 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.

ENERGY SAVING FEATURES
(STANDARD ON ALL UNITS)
- ENHANCED EFFICIENCY: LOWER FUEL COSTS
- LONGER AIR THROWS: IMPROVED DISTRIBUTION
- HIGH AIRFLOW: REDUCED STRATIFICATION

STANDARD FEATURES
- SUITABLE FOR NATURAL GAS
- ALUMINISED STEEL HEAT EXCHANGER
- HORIZONTAL LOUVRES

FE UNITS ONLY
- AUTO SPARK IGNITION
- FAN ASSISTED FLUE

OPTIONAL FEATURES FACTORY FITTED
- UNIT SUITABLE FOR PROPANE GAS
- STAINLESS STEEL HEAT EXCHANGER
- "ECONOMY" RELAY

OPTIONAL ITEMS FOR ON SITE FITTING
- DOWNTURN NOZZLES
- POWER FLUE VENTERS
- VERTICAL LOUVRES

Model		25	50	75	100	125	165	200	250	300	400
Nominal Output	kW	5.9	11.7	17.6	23.4	29.3	38.7	46.9	58.6	70.3	93.8
	Btu/h	20,000	40,000	60,000	80,000	100,000	132,000	160,000	200,000	240,000	320,000
Gas Rate	m^3/h	0.69	1.38	2.06	2.75	3.44	4.54	5.50	6.87	8.25	11.0
	ft^3/h	24.3	48.5	72.8	97.1	121.4	160.2	194.2	242.7	291.3	388.3
Gas Connection	BSP in	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
Nominal Flue Dia. UF	mm	100	100	125	150	175	200	200	250	250	250
UFE	mm	100	100	100	100	125	125	125	125	150	150
Airflow	m^3/h	572	1145	1886	2516	3272	4151	5033	6293	7589	10066
	ft^3/min	337	673	1111	1481	1926	2444	2963	3704	4444	5926
Motor Rating UF	kW	0.10	0.10	0.11	0.22	0.24	0.27	0.29	0.35	0.45	0.58
UFE	kW	0.15	0.15	0.17	0.28	0.31	0.34	0.37	0.43	0.53	0.67
Running Amps UF		0.45	0.45	0.50	1.00	1.05	1.10	1.20	1.80	2.00	2.50
UFE		0.75	0.75	0.80	1.30	1.35	1.40	1.60	2.20	2.40	2.90
Mounting Height	m	2.5-3.0	2.5-3.0	2.5-3.0	2.5-3.0	2.5-3.0	2.5-3.5	2.5-3.5	2.5-3.5	3.0-5.0	3.0-5.0
Throw	m	9	12	16	19	23	25	26	31	35	40
Approx. Weight (Net)	kg	33	36	40	44	58	68	77	93	100	125

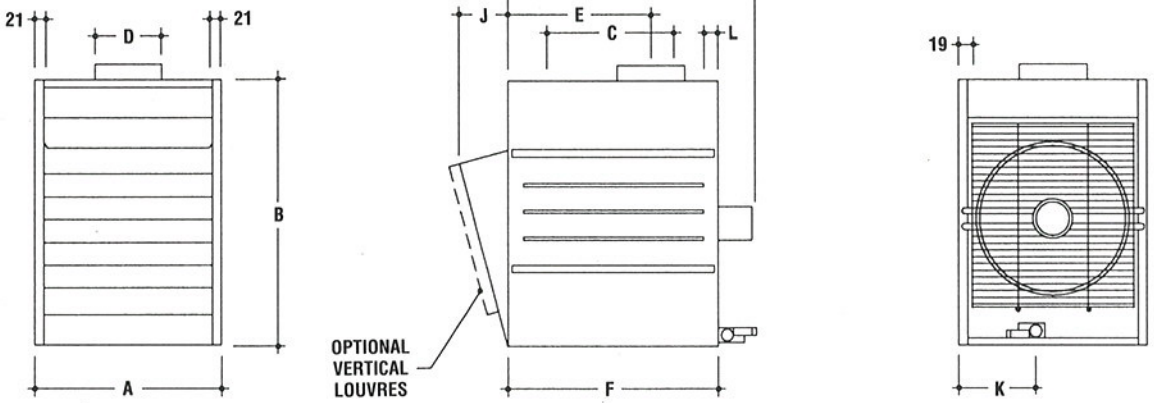
CLEARANCE DATA

Top	Bottom	Sides	Rear	Front of Draught Hood	Flue
152mm	610mm	460mm	610mm	Models 25/125-1830mm. Models 165/250-2440mm Models 300/400-3050mm	152mm

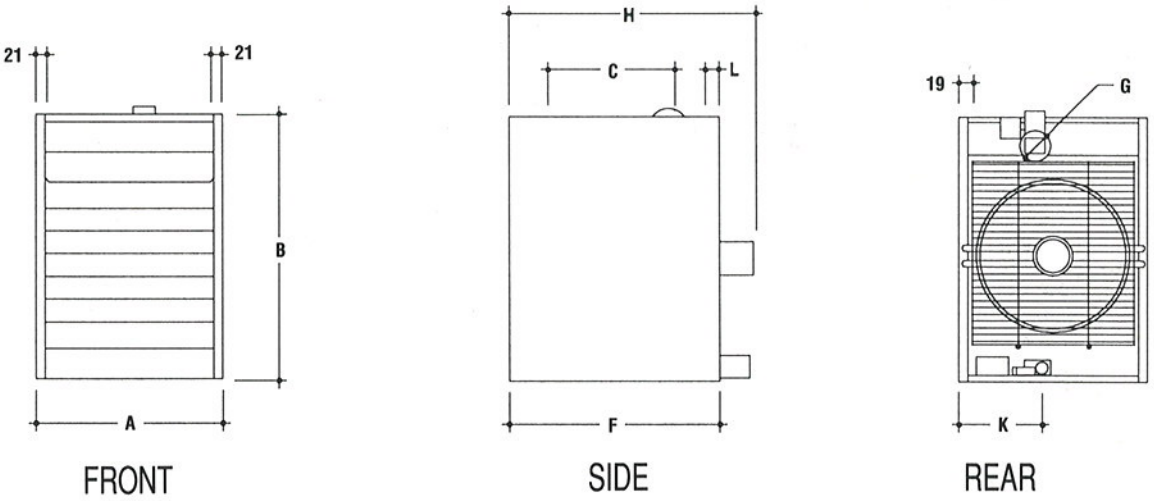
† Maximum inlet pressure 35 mbar. Minimum inlet pressure 17.5 mbar.

DIMENSIONAL DATA

CENTURION (UF)



CENTURION FE (UFE)



DIMENSIONS (mm)

Model	25	50	75	100	125	165	200	250	300	400
A Width	344	344	395	446	592	516	592	732	732	941
B Height	737	737	737	737	737	990	990	990	990	990
C Suspension Points	367	367	367	367	367	495	495	495	495	495
D Flue Diameter (Internal)	102	102	127	153	178	203	203	254	254	254
E Front to Flue Centre	451	451	451	451	436	543	543	543	543	543
F Cabinet Length	689	689	689	689	689	802	802	802	802	802
G Venter Outlet Diameter (UFE)	104	104	104	104	129	129	129	129	155	155
H Overall Length	687	687	687	794	794	911	911	937	937	937
J Nozzle Projection										180
K Gas Connection (not supply line size)	261	261	267	328	366	363	366	314	314	330
L Electrical Supply Inlet	57	57	57	57	57	57	57	57	57	57

Due to continuous product innovation, AMBI-RAD reserve the right to change product specification without due notice.

AMBI-RAD®

Energy Efficient Heating Systems

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