CI/SfB 56.83 X

AMBIRAD

ENERGY EFFICIENT HEATING SYSTEMS

UCA

Conventionally flued heaters

An Ambi-Rad Group company

Introduction

Further extending the capabilities of the Ambi-Rad range of warm air solutions the new economy range of UCA unit heaters delivers low cost reliable heating.

Designed for use in a wide range of commercial and industrial applications such as workshops, garages, production facilities and warehouses, Ambi-Rad UCA heaters are equipped with axial flow fans, a Piezo ignition pilot system and horizontal louvres painted in a contrasting colour fitted on the air discharge. Vertical louvres may be added as an optional extra. Units are suspended or mounted on wall brackets so that they do not occupy valuable floor space.

UCA benefits

- Easy installation and maintenance.
- Low cost.

Features

- Conventional flue.
- Axial fan for free blowing applications.
- Suitable for natural gas (G20).
- Aluminised steel heat exchanger.
- Piezo ignition system.
- Horizontal louvres.

Options

- Vertical louvres.
- Downturn nozzles (30º and 60º).
- Suitable for propane gas.
- Air recirculation thermostat.
- Wall mounting brackets.

Specification

Heat exchanger

The all welded venturi tube exchanger is designed for extended operational life and has an unrivalled track record for durability.

Burners

Corrosion resistant aluminised steel burners with stainless steel ribbons are mounted in a slide out burner tray. The burner tray withdraws from the right hand side of the heater (when facing the air discharge).

Air handling

Direct drive axial flow fans fitted with single phase 230V motors provide quiet and effective air distribution. Two fans are fitted on models 75 and 95. An optional 'economy thermostat' may be fitted to heaters fitted at high level to recirculate warm air back down to working level during periods when the burners are switched off.

Downturn nozzles are available to deflect the airflow and are recommended for units fitted at higher mounting heights.

Horizontal discharge louvres are fitted as standard. Additional vertical louvres may be fitted as an option.

The fan operation is controlled by an integral fan thermostat. This delays start up until the heat exchanger has reached operating temperature and continues to run the fan after the burner has switched off until all the useful heat has been dissipated.

Cabinets

The cabinets are manufactured from corrosion resistant steel and all internal components exposed to products of combustion are manufactured from aluminised steel. Contrasting black powder coated louvres are fitted to the air discharge.

Safety

To ensure safe automatic operation each unit is fitted with a multi-function gas control valve and thermoelectric flame monitoring safety control. To protect against insufficient airflow a limit thermostat is fitted and shuts down the heater in the event of overheating. An additional higher limit thermostat is fitted for dual safety control.

Controls

Remote control panels are available to simplify on site wiring and provide optimum fuel economy. The panels are complete with digital time control, day and night temperature settings and a 'fan only' switch to provide summer air movement.

Installation

Installation must be carried out by a suitably qualified installer in accordance with the installation instructions provided and current codes of practice. Incorrect installation will invalidate the warranty.

Heaters must be installed in accordance with BS 6230 paying particular attention to the requirements for combustion air.

Units may be suspended or base mounted on suitable non-combustible supports. Four suspension brackets are fitted on each unit to accept M10 fixings.

Units must not be installed in atmospheres containing highly flammable or explosive vapours, combustible dusts, halogenated hydrocarbons or chlorinated vapours or in areas subject to excess draught.

Electrical

A permanent single phase supply is required to each unit, to ensure correct fan operation this supply should not be switched off except for maintenance.

Units must be wired in accordance with the wiring diagrams provided and current electrical standards.

Technical data

Model		UCA25	UCA30	UCA35	UCA45	UCA55	UCA75	UCA95
Nominal heat output	kW	24	28	34	41	51	70	93
Airflow	m^3/h	1700	2400	3700	3700	4200	5600	7900
Temperature rise	°C	41	33	27	32	35	36	34
Throw[1]	m	17	20	28	28	28	32	38
Gas consumption*								
Natural gas G20	m^3/h	2.89	3.33	4.13	4.97	6.17	8.49	11.33
Propane G31	kg/h	2.16	2.49	3.09	3.72	4.62	6.35	8.48
Gas connection[2]	Rc	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Nominal flue diameter	mm	130	153	181	181	202	202	252
Fan motor(s) rating	kW	0.075	0.12	0.12	0.12	0.12	0.24	0.24
Total electrical rating	kW	0.11	0.15	0.23	0.23	0.23	0.31	0.51
Sound pressure level @ 5m								
Free field	dB(A)	44	44	47	47	47	48	51
Typical installation	dB(A)	51	51	54	54	54	55	58
Recommended mounting height[3]	m	2.0-2.5	2.0-2.5	2.25-2.75	2.25-2.75	2.5-3.0	2.5-3.0	2.5-3.0
Approximate weight	kg	72	84	100	100	116	145	183

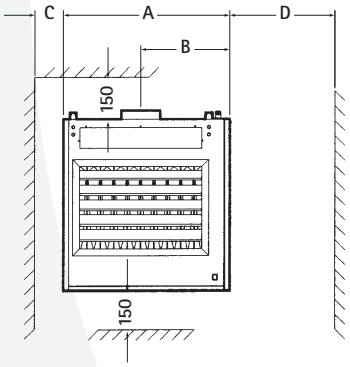
[1] Throw depends on height of building, mounting height of heater, room temperature and louvre settings.

[2] Not supply line size.

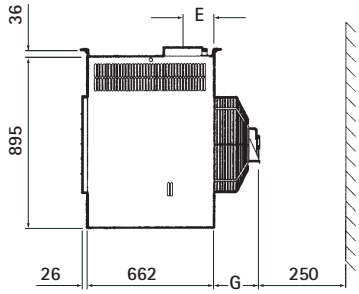
[3] To underside of heater.

* Natural gas G20 minimum inlet pressure 17.5 mbar, maximum inlet pressure 50 mbar. Propane G31 minimum inlet pressure 37 mbar, maximum inlet pressure 50 mbar.

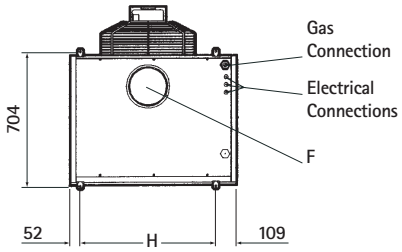
Dimensions



Front View



Side View



Top View

Model	UCA25	UCA30	UCA35	UCA45	UCA55	UCA75	UCA95
A Cabinet width	520	590	730	730	870	1080	1360
B Access side to flue centre	290	325	395	395	465	570	710
C Side clearance non control side	150	150	150	150	150	300	300
D Access side clearance	550	620	750	750	900	1100	1400
E Cabinet back to flue outlet	127	137	151	151	162	162	169
F Flue spigot diameter	130	153	181	181	202	202	252
G Depth axial fan	218	249	278	278	318	249	318
H Suspension centres	359	429	569	569	709	919	1199

All dimensions are in millimetres.

The complete warm air range

- Tcore – third generation technically advanced room sealed unit heaters that deliver the highest levels of energy efficiency and performance.
- EnviroAir unit heaters – for applications that require a centrifugal fan for increased airflow duty. Units may be either room sealed complete with a fan assisted flue or conventionally flued. All room sealed unit heaters provide high seasonal efficiencies and reduced running costs compared to conventional open flued units.
- Oil fired unit heaters – for applications where a natural gas supply may not be present.
- Centurion freestanding gas and oil fired cabinet heaters.
- UPA – energy efficient power vented unit heaters.

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