

REZNOR®

Our Technology. Your Comfort



FSE

Gas & Oil Fired Floorstanding Heaters

Warm air heaters

Radiant heating ~ Air curtains ~ Controls ~ Heating & ventilation units ~ De-stratification fans





FSE Cabinet Heaters

The FSE range of cabinet heaters combine innovative design with proven heat exchanger technology to provide a high efficiency cost effective and durable range.

The units may be specified for either free blowing applications or for use with ductwork.

- > Gas fired cabinet heaters are suitable for use with Natural Gas (G20), most units can also be specified for Propane (G31)
- > Oil fired cabinet heaters are suitable for use with Class D gas oil (35 sec), most units can also be specified for Kerosene (28 sec oil). Oil fired cabinets are supplied complete with factory fitted fire valve and oil filter

Vertical freestanding models are available from 40kW to 300kW.

Two stage burners are fitted as standard along with a Smartcom Multizone control panel.

Options

- > Inlet air filter

Specification

Cabinet

Cabinets are constructed using a penta-post frame with profiles in aluminised steel and galvansied pre-painted panels to form a rigid and durable casework. Panels for the heating section are provided with internal insulation along with inner heat shields manufactured from aluminised steel.

Electric Motors

All electric motors comply with EC motor directive 2005/32/EC.

Heat Exchanger

Inversion combustion chamber with two pass heat exchanger assembly provides improved thermal efficiency with extended life expectancy. The stainless steel combustion chamber is combined with a high efficiency flat tube heat exchanger to achieve combustion efficiencies of up to 94% (ncv). The complete assembly is mounted to allow for thermal expansion, thereby avoiding undue thermal stress and premature heat exchanger failure.

Burner

Gas fired units are supplied with a fitted high/low fully automatic forced draught burner complete with full safety controls to EN676. Heaters are CE certified.

Oil fired units are also supplied with a loose high/low fully automatic burner including safety controls. Fire valve and oil filter are fitted to the heater casing. An additional external fire valve may be required in accordance with BS 410:Part2:1978.

Technical Data									
		40	60	75	100	145	175	225	300
Nominal heat output	kW	39	54	69	95	144	171	212	300
Temperature rise	°C	33	33	33	34	39	36	33	36
Gas Fired									
Gas Consumption Nat gas G20	m ³ /h	4.6	6.3	8.0	11.1	16.7	20.0	24.8	34.7
Gas Consumption propane G31	m ³ /h	1.2	1.7	2.3	2.9	4.3	7.7	9.6	13.4
Minimum inlet pressure Nat gas G20	mbar	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Minimum inlet pressure propane G31	mbar	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0
Gas Connection ²	Rc	¾"	¾"	¾"	¾"	1"	1"	1¼"	1¼"
Oil Fired									
Oil Consumption (35sec) ³	l/h	4.23	5.84	7.40	10.33	15.55	18.62	23.05	32.29
Oil Connection ²	Rc	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
Air Handling Data									
Airflow	m ³ /h	3,500	4,800	6,300	8,300	10,900	14,000	19,000	25,000
Throw ¹ (Nozzle outlet)	m								
Static pressure (Ducted)	Pa	80	150	150	150	150	150	150	150
Main fan motor	kW	0.4	1.1	1.5	2.2	3.0	2 x 1.1	2 x 2.2	2 x 5.5
Full load current	A	4.6	2.5	3.3	4.6	6.2	5.0	9.2	12.4
General Data									
Electrical Supply		240v		415v 3 Phase N & E					
Nominal flue diameter	mmø	130	150	150	180	180	205	205	305
Noise level at fan inlet grille	dB(A)	74	77	82	80	86	77	83	83
Noise level @ 5m	dB(A)	49	52	57	55	61	52	58	58
Net weight	kg	165	245	265	335	370	510	580	720

1 Throw is dependent on building height, room temperature and nozzle settings.

2 Gas/oil lines must be adequately sized and reduced at appliance as required

3 28sec oil (Kerosene) available up to model 100

Air Distribution

Centrifugal fan(s) circulate large air volumes evenly across the full heat exchanger surface for enhanced life expectancy. Fans on model 40 are direct drive with a single phase motor, whilst all other models have a belt driven blower with three phase motor and v-belt drive.

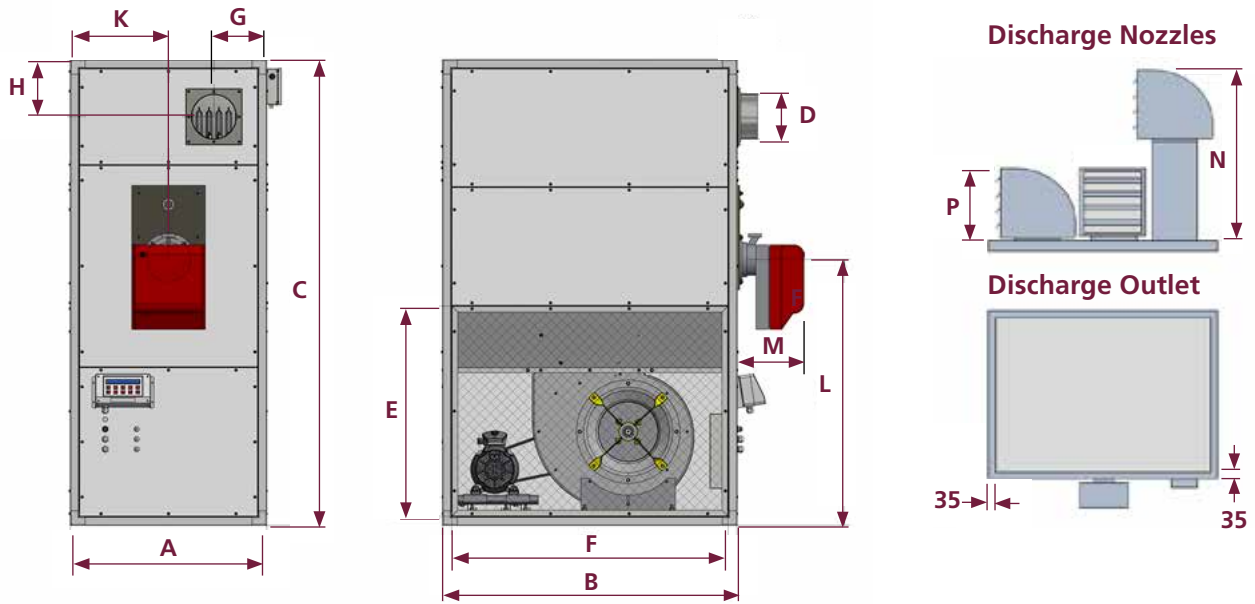
Free blowing heaters are supplied with (loose) long throw discharge nozzles complete with horizontal louvres and can be rotated through 360°. Models 85-300 are

supplied with a raised rear nozzle (one per three nozzle heater and two per four nozzle heater).

Ductwork can be fitted directly to the top of those heaters requiring ducted discharge.



Dimensional Details



Dimensions		40	60	75	100	145	175	225	300
A	Unit width	600	650	650	800	800	1000	1000	1250
B	Unit depth	770	950	950	1200	1200	1500	1500	1800
C	Unit height	1500	1650	1650	1900	1900	2150	2150	2350
D	mmø (nominal)	130	150	150	180	180	205	205	305
E		485	590	590	860	860	790	790	900
F		700	880	880	1130	1130	1430	1430	1730
G		300	175	175	215	215	235	235	275
H		190	235	235	235	235	250	250	270
K		300	325	325	400	400	500	500	625
L		900	905	905	1085	1085	1255	1255	1315
M	Gas	276	252	252	280	280	301	508	508
	Oil	196	202	202	228	228	247	468	468
N		685	-	660	685	895	815	895	895
P		-	300	330	360	360	410	460	460

1. Heaters with 3 or 4 nozzles are supplied with extended head on the rear nozzle(s). For applications with restricted headroom, units may be specified with all nozzles at standard height.

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