

Cabinet Heaters



**Over
91.5% NET
Efficient!**

- Ideal for industrial and commercial applications
- Large range of heat outputs and burner options
- Easy installation with a factory fitted bolt-on burner
- Durable long life stainless steel combustion chamber
- Design flexibility - floor standing, horizontal mounting or external site installation options
- Energy saving optimising control provided as standard



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Technical Data PGP ECA (Power Gas) & POP ECA (Pressure Jet Oil) Ranges

Natural Gas (G20) & LPG Propane (G31) Data

Model		15	20	30	40	50	60	70	80	100
Maximum Heater Input	[kW]	55.5	73.3	93.2	129.9	162.0	208.0	242.0	275.2	348.5
Gross	[Btu/h] x [1000]	189.4	250.1	318.0	443.2	552.7	709.7	825.7	939.0	1189.1
Maximum Heat Output	[kW]	47.4	61.2	78.4	110.2	134.5	177.7	205.3	230.4	293.4
	[Btu/h] x [1000]	161.7	208.8	267.5	376.0	458.9	606.3	700.5	694.0	1001.1
Reduced Gross Input*	[kW]	38.9	51.3	65.2	90.9	113.4	145.6	169.4	192.6	244.0
	[Btu/h] x [1000]	132.7	175.0	222.5	310.1	386.9	496.8	578.0	657.2	832.6
Reduced Output*	[kW]	33	43	55	77	94	124	144	161	205
	[Btu/h] x [1000]	113	146	187	263	321	425	490	550	701
Maximum Gas Rate	[m ³ /h]	5.3	7.0	8.9	12.4	15.4	19.8	23.1	26.2	33.2
Natural (G20)	[ft ³ /h]	187	247	314	438	546	701	816	928	1175
Minimum Gas Rate	[m ³ /h]	3.8	5.0	6.3	8.8	11.0	14.2	16.5	18.7	23.7
Natural (G20)	[ft ³ /h]	134	177	225	313	390	501	583	663	840
Maximum Gas Rate	[m ³ /h]	2.09	2.76	3.51	4.89	6.10	7.83	9.11	10.36	13.12
LPG Propane (G31)	[kg/h]**	3.87	5.11	6.49	9.05	11.29	14.49	16.86	19.18	24.29
Minimum Gas Rate	[m ³ /h]	1.46	1.93	2.46	3.42	4.27	5.48	6.38	7.25	9.18
LPG Propane (G31)	[kg/h]**	2.71	3.58	4.55	6.34	7.90	10.15	11.80	13.42	17.00
Inlet Pressure		20	20	20	20	20	20	20	20	20
Natural Gas (G20)	[mbar]				(Minimum: 17; Maximum: 25)					
Inlet Pressure		37	37	37	37	37	37	37	37	37
LPG Propane Gas (G31)	[mbar]				(Minimum: 25; Maximum: 45)					
Gas Connection	[ISO 7-R]	¾	¾	¾	¾	1 ¼	1 ¼	1 ¼	1 ¼	1 ¼

*High/Low and Modulating Burners Only.
 ** For litres per hour, multiply: [kg/h] x 1.97

**Oil Data (Class D Fuel Oil)
 (Class C2 fuel oil version available as option)**

Model		15	20	30	40	50	60	70	80	100
Heat Input	[kW]	55.5	73.3	93.2	129.9	162.0	208.0	242.0	275.2	348.5
	[Btu/h] x [1000]	189.4	250.1	318.0	443.2	552.7	709.7	825.7	939.0	1189.1
Heat Output	[kW]	47.4	61.2	78.4	110.2	134.5	177.7	205.3	230.4	293.4
	[Btu/h] x [1000]	161.7	208.8	267.5	376.0	458.9	606.3	700.5	694.0	1001.1
Consumption	[L/h]	4.92	6.80	8.71	12.08	15.60	18.74	22.34	25.47	32.80
	UK[gal/h]	1.08	1.50	1.92	2.66	3.43	4.12	4.91	5.60	7.21
Oil Pump Connections	[ISO 7-Rc]	¾	¾	¾	¾	¾	¾	¾	¾	¾

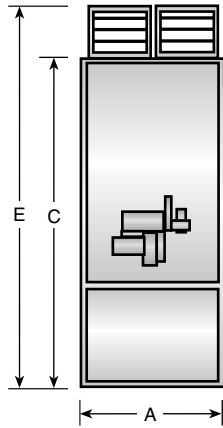
General Data

Model		15	20	30	40	50	60	70	80	100
Electrical Supply*		230 V/50 Hz/1 Ø				400 V/50 Hz/3 Ø				
Main Fan Motor Type		DD	DD	DD	DD	DD	BD	BD	BD	BD
Motor Size	[kW]	0.75	0.75	0.75	2.2	2.2	1.5	2.2	2.2	4.0
Start Current	[A]	24	24	28	21	21	10.2	30	30	35
Run Current	[A]	5.3	5.3	6.3	6.2	6.2	3.5	5.1	5.1	9.6
Airflow	[m ³ /h]	3400	3400	5100	6800	8500	11050	12450	12450	17330
Free Blowing	[ft ³ /min]	2000	2000	3000	4000	5000	6500	7500	7500	10200

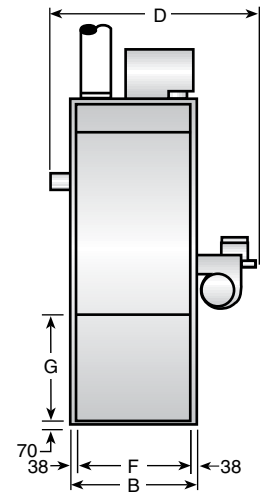
DD = Direct Drive BD = Belt Drive

*Models 40 & 50 are available with 230 V, 1 Ø electrical supply as an extra cost option.

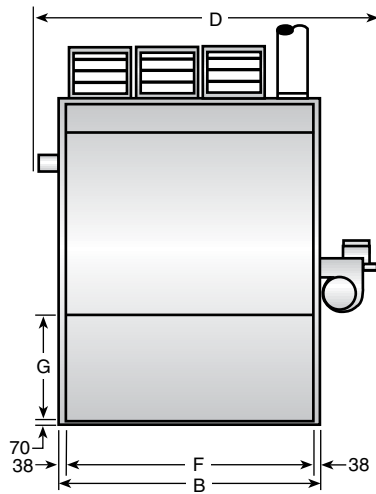
Dimension Data
PGP ECA & POP ECA
 All dimensions shown in mm.



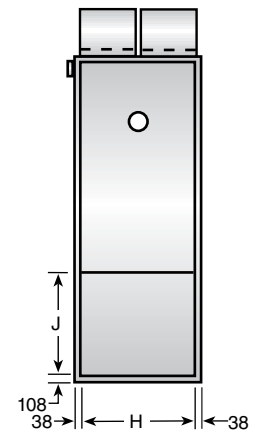
Front View All Models



Side View Models 15-50



Side View Models 60-100



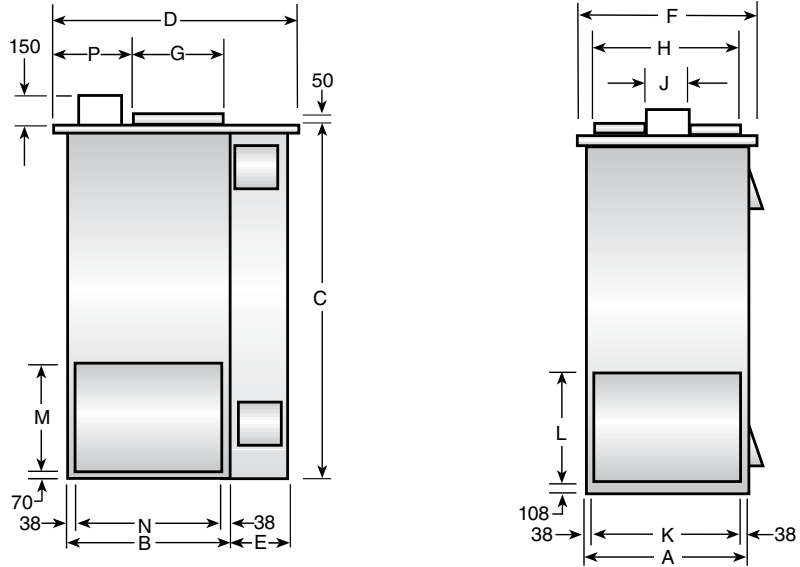
Rear View All Models

Model		15/20	30	40	50	60/70/80	100	
'A' Width	[mm]	724	724	857	857	1016	1016	
'B' Depth Cabinet Only	[mm]	857	857	857	1016	1676	1994	
'C' Height Cabinet Only	[mm]	1740	1740	1930	1930	1930	1930	
'D' Depth Overall	[mm]	1306	1306	1348	1507	2388	2706	
'E' Height Incl. Heads	[mm]	1988	2058	2235	2235	2235	2235	
'F' Left/Right Hand Air Inlet Spigot - Depth	[mm]	781	781	781	940	1600	1918	
'G' Left/Right Hand Air Inlet Spigot - Height	[mm]	457	457	560	560	560	560	
'H' Rear Air Inlet Spigot-Depth	[mm]	648	648	781	781	n/d	n/d	
'J' Rear Air Inlet Spigot -Height	[mm]	361	361	446	446	n/d	n/d	
Weight	[kg]	200	200	245	270	440	530	
Flue Diameter*	[mm]	178	178	178	178	229	229	
Heater Clearances to Combustibles		To Side of Heater		To Rear of Heater		To Front of Heater		For Air Distribution
	[mm]	600		600		2000		4000

Note: Horizontal Cabinet heaters are designed to lie on their left hand side, as standard.
 *All heaters must be connected to a suitable flue system.

Dimension Data External Heaters

All dimensions shown in mm.



Model		15/20/30	40	50	60/70/80	100
'A' Width	[mm]	724	857	857	1016	1016
'B' Depth Cabinet Only	[mm]	857	857	1016	1676	1994
'C' Height Cabinet Only	[mm]	1740	1930	1930	1930	1930
'D' Depth Overall	[mm]	1396	1498	1657	2483	2800
'E' External Heater Housing	[mm]	373	474	474	639	639
'F' Width Overall	[mm]	840	973	973	1132	1132
'G' Air Outlet Spigot Depth	[mm]	476	476	610	1238	1524
'H' Air Outlet Spigot Width	[mm]	648	781	781	940	940
'J' Flue Spigot Diameter	[mm]	203	203	203	254	254
'K' Rear Return/ Fresh Air Inlet - Width	[mm]	648	781	781	n/d	n/d
'L' Rear Return/ Fresh Air Inlet - Height	[mm]	369	469	469	n/d	n/d
'M' Left/Right Hand Return Fresh Air Inlet - Height	[mm]	457	560	560	560	560
'N' Left/Right Hand Return Fresh Air Inlet - Width	[mm]	781	781	940	1600	1918
'P' Rear of Heater To Air Outlet Spigot*	[mm]	401	401	426	96	96

*For models 60 - 100, the circular flue spigot is at the front of the heater with the rectangular air outlet spigot at the rear.

NOTE: RADIANT SERVICES™ external cabinet heaters are designed to be sited externally, with heat ducted into the building. These models are fitted with a special metal rain drip cover and all cabinet joints are silicone sealed to help ensure that the heaters are weatherproof.

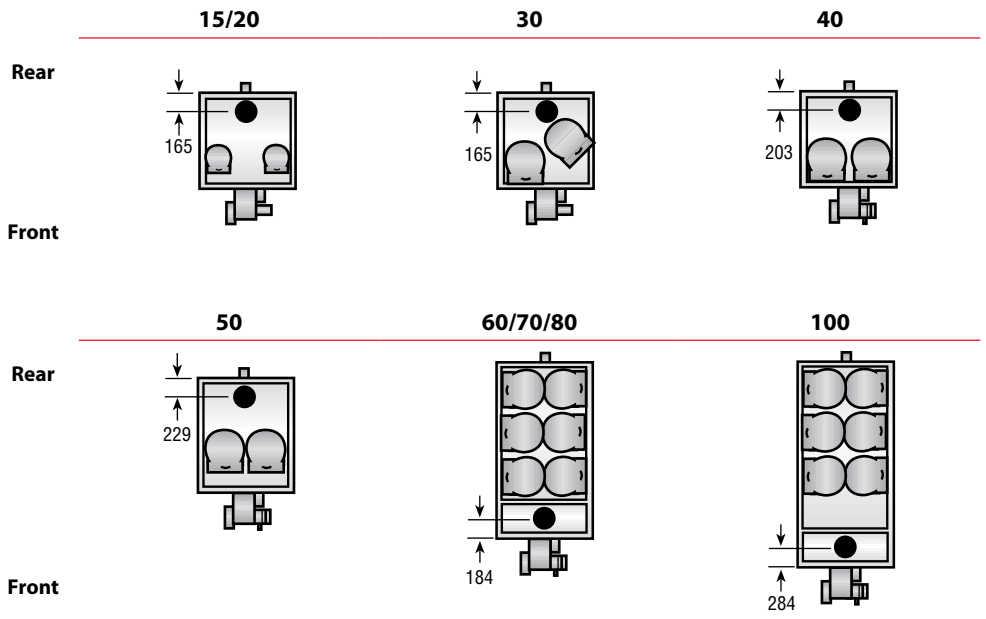


Air Outlet & Flue Arrangements

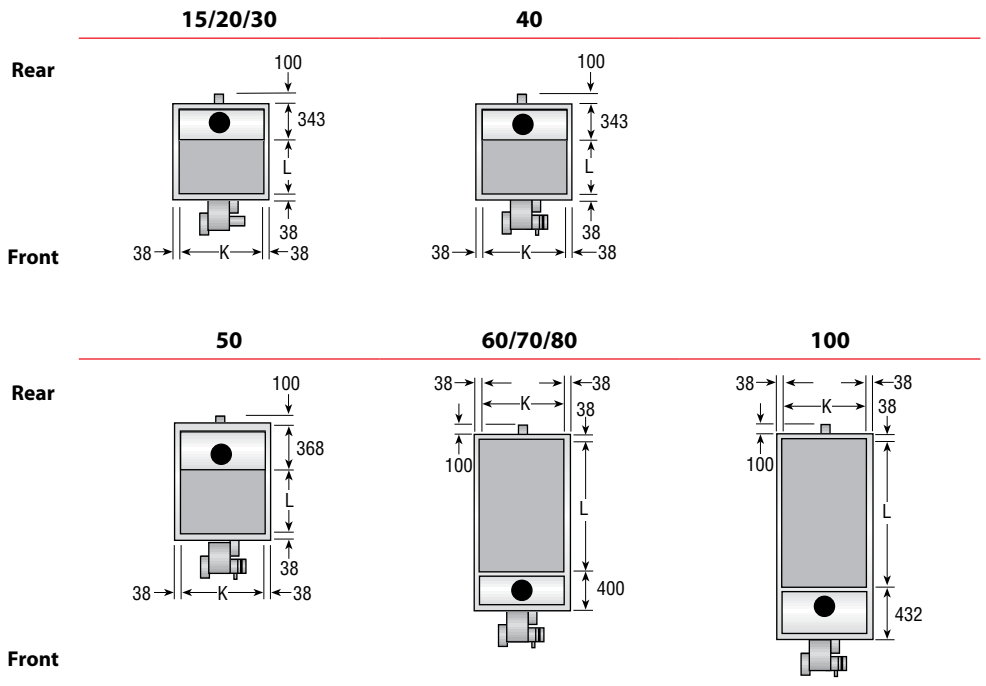
All dimensions shown in mm.

Vertical and Horizontal Heaters -Free Blowing

Vertical and Horizontal Heaters -Air Outlet Spigots



NOTE: Models 15 and 20 are fitted with 9 inch diameter discharge heads as standard. Models 30 to 100 are fitted with 14 inch diameter discharge heads as standard.



Outlet Spigot Dimensions

Model	15/20/30	40	50	60/70/80	100	
K – Spigot Width	[mm]	648	781	781	940	940
L – Spigot Depth	[mm]	476	476	610	1238	1524

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Controls Each heater is supplied with the RADIANT SERVICES™ NRG Control. This will require on-site wiring.

Burner Options RADIANT SERVICES™ cabinet heaters are fitted with On/Off burners as standard. High/Low burners are available as an option on all models, and a fully modulating burner is available as an option on all Natural Gas and LPG fired models. Oil models are class D fuel oil as standard. Burner can be set to operate on other oils such as kerosine upon request.

Inlet & Outlet Ducts Where there is a need for the heater to be connected to fresh air or air from an adjacent area, for its intake of distribution air, inlet duct connections can be provided.

NOTE: When employing an inlet duct arrangement, there must be adequate provision for the supply of combustion air.

Please contact Radiant Services Limited for advice. As standard, each heater is supplied with the specified number of discharge heads for warm air distribution. If a heater is to be attached to ducting for warm air distribution, then an outlet duct spigot can be provided. In these instances, advice should be sought to help ensure that proposed duct systems are compatible with the heater.

Oil Connection Kit For oil fired heaters, an oil line connection kit comprising: gate valve, spring operated fire valve, oil filter and connecting nipples are supplied for installation on site.

IMPORTANT NOTICE

The equipment described in this Data Sheet is suitable for most commercial and industrial heating applications. However, in certain environments, particularly where there is a chlorinated atmosphere (e.g. near degreasing plant or other solvent processes), or a particularly dusty atmosphere, specialist advice should be sought at the design stage. Please consult Radiant Services Limited. Radiant Services Limited reserves the right to alter product specification details without notice.

Installation Code and Annual Inspections:

All installation and service of RADIANT SERVICES™ equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by Radiant Services Limited and conform to all requirements set forth in the RADIANT SERVICES™ manuals and all applicable governmental authorities pertaining to the installation, service and operation of the equipment. To help facilitate optimum performance and safety, Radiant Services Limited recommends that a qualified contractor conduct, at a minimum, annual inspections of your RADIANT SERVICES™ equipment and perform service where necessary, using only replacement parts sold and supplied by Radiant Services Limited.

Further Information:

Applications, engineering and detailed guidance on systems design, installation and equipment performance is available through RADIANT SERVICES™ representatives. Please contact us for any further information you may require, including the Installation, Commissioning, Operation and Service Manual.

These products are not for residential use.

This document is intended to assist licensed professionals in the exercise of their professional judgment.