

**VPC** Cabinet Heaters VPC UF Upright Freeblowing / VPC UD Upright Ducted Heat Outputs from 30kW - 130kW



# **Product Overview**

## **Benefits**

### **Installer Friendly**

- Low Level Flue Discharge Option (No Roof Work)
- Room Sealed or Fan Assisted Flue
- Interchangeable Top or Side Flue/Combustion Air Spigot Positions
- Plain Side Panel Provides Greater Flexibility in Location
- Extended Heads
- · Factory Fitted Controls

### **Caring For The Environment**

• High Efficiency

### **Peace Of Mind**

- · More Than Fifty Years Experience in Warm Air
- Extensive Combustion Chamber/Heat Exchanger Warranty

**Configuration** Powrmatic VPC gas-fired cabinet heaters are vertical in configuration and, dependent upon model, can be specified to provide on/off, high/low or modulated heat outputs.

**Efficiencies** Fuel usage and emissions are a key consideration within the VPC design with all heaters having low NOx characteristics.

**Cabinet** Frame and panel construction, complete with a separate burner compartment accessed via a full width door and finished with hardwearing epoxy powder coat stove baked paint.

**Heat Exchanger** Four pass tubular assembly manufactured from aluminised steel formed, swaged and expanded without recourse to stress inducing welding. 409 and 316 grade stainless steel options available.

**Burners** Multi burner in-shot carefully matched to each tube assembly and manifolded to a common gas valve and ignition system, itself complete with flame monitoring and safety controls and supplied ready for use with Natural Gas (G20).

Alternative LPG propane (G31) firing available to order.

**Air Movement** Via dynamically balanced and resiliently mounted direct drive centrifugal fan sets. Freeblowing heaters are equipped with heads providing rotational and lateral jet direction and, where applicable, are of extended height. Heaters arranged for ducted applications are provided with an outlet spigot for the onward connection of ductwork.

**Controls** Heaters are supplied ready for automatic operation and are complete with safety and comfort controls. As standard heaters will be provided with high temperature limit protection as well as a digital time switch, mechanical day temperature and night set-back thermostats.

Alternatively heaters may be specified with an optimised entry code protected control which includes a digital time switch, electronic day thermostat and frost protection thermostats. Remote temperature sensor option available.

For installer convenience heaters controls are factory fitted as standard but remote stations available as an option.

All heaters have the ability to provide 'fan only' summer air movement.

**Approvals** All Powrmatic heaters are type tested to meet the stringent requirements of both the Gas Directive and CE accreditation.

# Duties

## **VPC UF / VPC UD**

	Model			30	52	80	110	130		
Dutput			kW	30	52	80	110	130		
	Vo	lume	m³/s	0.87	1.59	2.34	2.96	3.63		
	Heads		No.	3	3	4	4	4		
Airflow	Throw		m	12.0	22.0	21.0	26.0	27.0		
	<b>F</b> O'	Standard	Pa	150	200	225	150	200		
	Fall Static	Uprated	Pa	N/A						
	Cumple	Standard	V/PH/Hz	230/1/50 415/3/50						
	Supply	Optional	V/PH/Hz		415/3/50	230/	230/1/50			
Electrics		Motor	kW	0.37	0.55	1.80	2 x 0.55	2 x 1.1		
	Standard Fan	Start	amp	7.4	8.7	32.8	18.5	22.0		
		Run	amp	3.3	5.4	15.0	103.0	7.8		
	Connection		BSP/Rc	3⁄4						
	Minimum Inlet Pressure	Nat Gas	mbar	17.5						
Fuel		LPG	mbar	37.0						
	Consumption	Nat Gas	m³/h	3.45	5.98	9.19	12.64	15.52		
		LPG	m³/h	1.33	2.31	3.55	4.89	5.78		
Overall Dimensions	UF Upright Freeblowing	Height	mm	2184	2640	2804	2715	2997		
		Width	mm	750	750	750	750	750		
		Depth	mm	1108	1108	1412	1767	1767		
		Front	mm	1000	1000	1000	1000	1000		
Installation Clearances	UF Upright Freeblowing	Blank Side	mm	150	150	150	150	150		
		Louvred Side	mm	1000	1000	1000	1000	1000		
		Rear	mm	500	500	500	500	500		
Flue	Diameter		mm ø	100	100	130	130	130		
	Maximum	Flue Only	m	12						
	Length	Room Sealed	m	6						
Combustion Air Spigot	mm ø	100	100	130	130	130				
Noise Level			dB(A)	55.6	63.6	71.6	67.6	69.6		
Nett Weight			kg	178	248	305	362	410		

#### Notes –

Fuel consumption and output figures based upon nett calorific values as follows

Natural gas (G20) nett CV 34.02 MJ/m<sup>3</sup>

Propane (G31) nett CV 95.65 MJ/m<sup>3</sup>

Air handling data is assessed at room ambient conditions

Throw figures provide the distance to the point where the terminal velocity degrades to 0.25 m/s

Overall vertical heater height include heads or extended heads where appropriate

Standard height heads can be specified where site height is restricted

Blank and louvred lower side panels are interchangeable

Noise levels are applicable to standard UF models and are measured 5m from appliance and in free field conditions

Motor kW, run and start amps apply to standard electrical supply as stated. For optional data contact sales office

Flue and combustion air maximum runs for guidance purposes only. Please refer to installation instructions for detailed information

Connection of combustion air duct is not required for 'flue only'applications

Installer guidance notes on rear page

## **VPC UF Upright Freeblowing / UD Upright Ducted**



MODEL	A	В	C	D	E	F	G	Н	J	J1	K	L	M	Head Plan
VPC 30	1108	750	1676	100	265	1378	142	237	304	508	256	657	650	0
VPC 52	1108	750	2132	100	265	1756	142	237	304	508	256	657	650	2
VPC 80	1412	750	2132	130	265	1756	220	237	340	672	308	960	650	
VPC 110	1767	750	2043	130	265	1667	220	237	340	672	308	1315	650	3
VPC 130	1767	750	2209	130	265	1835	220	237	400	788	358	1315	650	

HEAD PLAN 2



HEAD PLAN 3



# Dimensions

### Side/Rear Inlet Spigots

**Filters** 

### Dampers







MODEL	30	52	80	110	130
L	657	657	960	1315	1315
N	757	757	1060	1415	1415

# Installer Guide

**General** The following notes are provided as a help, however installers and operators should fully acquaint themselves with the more detailed guidance provided in the relevant installation manual. For copies of such manuals please consult our technical department or visit our website www.powrmatic.co.uk

**Standards** All Powrmatic VPC heaters must be installed, commissioned and operated with due regard to relevant Codes of Practice, the possible requirements of Local Authorities, Fire Officers and insurers as well as the installation manual.

**Position & Location** Heaters should be installed on a level non-combustible base.

Consideration should also be given to flue routes and points of exit, gas, electrical and where applicable control connections, the throw characteristics of the heater, issues of public access and in the instance of remote temperature sensors the position need to be representative of the zone temperature to which they refer.

Heaters should not be installed in hazardous areas or areas where there is a foreseeable risk of flammable or corrosion inducing particles, gases or vapours being drawn into the combustion air or main fan circuits.

Areas where special consideration or advice may be required could include but is not limited to  $\ \ -$ 

- · where de-greasing solvents are present, even in minute concentrations
- · where paint spraying is carried out
- · where styrenes or other laminating products are used
- · where airborne silicone is present
- · where petrol engined vehicles are stored or maintained
- · where dust is present (ie wood working or joinery shops)
- · where high levels of extract persist

Installation in such areas may be possible under specific conditions. Please consult our technical department for further information.

### Plant Room or Enclosure Locations Specific

requirements exist where heaters are to be installed within plant rooms or enclosures. Such requirements cover the provision of positive ductwork connections as well as ventilation for combustion air and general plant room or enclosure ventilation. It is recommended that you consult with the Powrmatic technical department or the installation manual prior to installation.



Hort Bridge Ilminster Somerset TA19 9PS United Kingdom Tel: +44 (0)1460 53535 Fax: +44 (0)1460 52341 Email info@powrmatic.co.uk www.powrmatic.co.uk

### Combustion Air & General Ventilation Where a heater is

installed in room sealed mode (ie where both the flue exit and combustion air and positively connected to atmosphere) then there is no specific requirement for combustion air ventilation. However, depending upon location, provision for general ventilation may still be a necessity. If the heater is installed in flue only mode and directly within the heated space and where that heated space has a natural ventilation rate greater than 0.5 air changes per hour then combustion air and general heater ventilation is probably not required. If the heated space has a natural ventilation rate of less than 0.5 air changes per hour then either natural ventilator openings or mechanical ventilation will be required. Please consult the installation manual for further details.

**Installation Clearances** Particular clearances may be necessary for the correct and safe function of the heater as well as for maintenance purposes. Such clearances are confirmed in the relevant installation manual.

**Flue** Powrmatic VPC heaters can be installed in either room sealed or flue only mode. Each heater requires a separate flue and/or combustion air intake system of the appropriate size and type. Installers are reminded that type approval has been granted for these appliances on the basis that they are fitted with Powrmatic VPC flue systems. Maximum lengths apply and should be strictly observed.

Systems may be installed in either the horizontal or vertical plane. In either case the number of bends kept to a minimum and regard must be given to the reduction in permissible length with the addition of each bend. The flue must be adequately supported and terminated with the approved terminal assembly, with due regard to the point of exit and it's proximity to any windows, doors or ventilation intakes etc.

**Pipework** Care should be taken when sizing pipework to ensure that minimum gas inlet pressures are not compromised under dynamic load conditions. Isolating valves and service unions should be provided for each heater and pipework installed with due regard for relevant standards and Codes of Practice.

#### Guarantee

Powrmatic heaters are provided with a comprehensive guarantee covering both the heater and the heat exchanger. All guarantees are subject to terms and conditions.





Powrmatic pursues a policy of continuous improvement in both design and performance of its products and therefore reserves the right to change, amend or vary specifications without notice. Whilst the details contained herein are believed to be correct they do not form the basis of any contract and interested parties should contact the Company to confirm whether any material alterations have been made since publication of this brochure.











