

# POWRMATIC®

Delivering complete climate control solutions worldwide

Range of high velocity heated gas fired and ambient electric industrial and commercial door air curtains providing comfort and/or heat to eliminate drafts and ingress of air borne particles.

**The Door Curtain Range from Powrmatic.**

## Door Curtains

Ambient Gas Fired & Electric Baratherm  
Gas Fired Options / Electric



# Door Curtains Ambient Gas F



## Product Benefits



**REDUCES BUILDING  
ENERGY COSTS**



**PREVENT  
HEAT LOSS**



**ADAPTABLE  
INSTALLATION**



**IMPROVES  
WORKFORCE COMFORT**



**REDUCE INGRESS OF  
AIR BOURNE CONTAMINANTS  
AND INSECTS**

Powrmatic's range of ambient and heated electric/gas fired door curtain range are designed provide an effective solution to energy loss and draughts adjacent to loading doors.

Powrmatic Gas Fired Air Curtains units are fitted with centrifugal fans that force the air out through the downward facing exit slot that has directional louvres fitted. Horizontal high level mounted Baratherm has the additional advantage of recycling stratified warm air back to occupancy level to help break up any layer of cold air that has entered the building

Door curtains provides a solution; it produces a targeted high velocity air stream across the door to significantly reduce the amount of warm air escaping and cold air entering.

### Models Available

#### Ambient:

- BAR3/16a
- BAR4/21a

#### Heated:

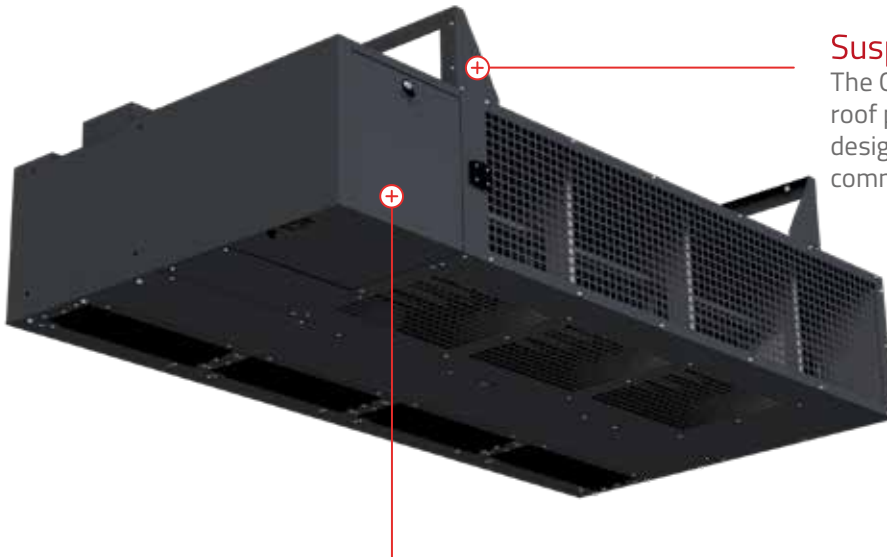
- BAR3/GFAC
- BAR4/GFAC

## Effective High Velocity Flexible

The Door Curtain Range  
from Powrmatic.



## Product Features (GFAC)



### Suspension

The GFAC unit is designed to be suspended from suitable roof points or alternatively to be mounted on purpose designed brackets and are intended primarily for commercial or industrial premises.

### In-shot Burners

Multi in-shot burners 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.

### Construction

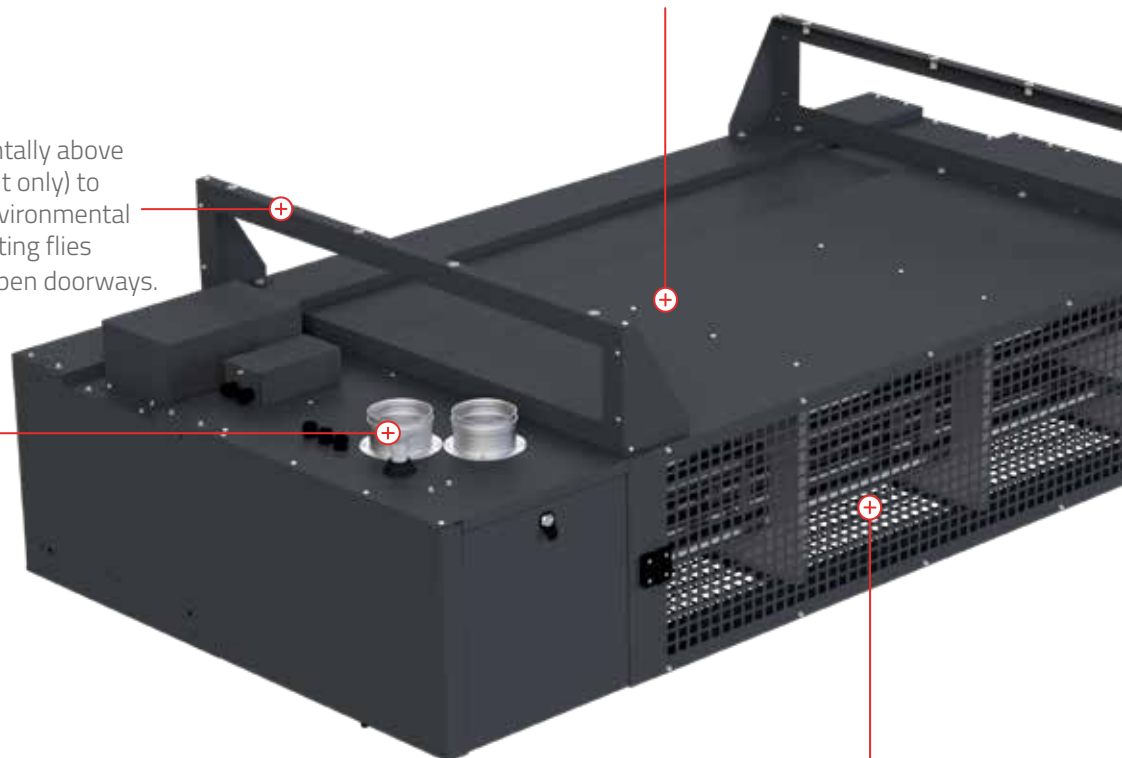
Constructed from epoxy powder coated steel, housing a specifically designed low inertia fan deck to ensure long life and lowest energy usage. Paint finish is RAL 7015 which is stove hardened to compliment Powrmatic Warm air and Radiant ranges, other BS and RAL colours available as an option, additional cost on request.

### Installation Flexibility

The GFAC can be installed horizontally above the doorway or vertically (Ambient only) to one side. They can be used for environmental separation on cold stores, preventing flies entering food factories through open doorways.

### Flue Options

Suitable for single wall or balanced flue installations



### Heat Exchanger Options

A two pass tubular assembly manufactured from aluminised steel formed, swaged, and expanded without recourse to stress induced welding, AISI 409 and 316 grade stainless steel options available

Approvals **CE**

All GFAC units are CE approved.

# Technical Specification

## GFAC

Output (nominal)	High Fire (max)	kW	36.5	54.0
	Low Fire (min)	kW	24.2	40.4
Input (nett CV)	High Fire (max)	kW	40.0	58.9
	Low Fire (min)	kW	27.2	44.0
Airflow Volume	High Speed	m <sup>3</sup> /h	8100	10800
	Med Speed	m <sup>3</sup> /h	4500	6000
	Low Speed	m <sup>3</sup> /h	3000	4000
Electrics	Supply	V/ph/Hz	230V 50Hz 1Ph	
	Start	amp	21.0	28.0
	Run	amp	12.0	16.0
Fuel	Connection	BSP/Rc	¾"	
	Nominal Inlet Pressure	mbar	20.0	
	Consumption	m <sup>3</sup> /h	4.23	6.2
Mounting Height	Min	m	2.5	2.5
Overall Dims	Height	mm	466*	466*
	Width	mm	1750	2250
	Depth	mm	1150	1150
Install Clearance	Top	mm	200	
	Front (air inlet)	mm	1000	
	Sides	mm	25	
	Rear	mm	n/a	
Flue	Diameter	mm Ø	100	
	Max Length	Flue Only	7m + 2x90° Elbows	
Combustion Air Spigot		mm Ø	100	
Qty of fans			3	4
Noise Levels		dB(A)	72	72
Nett Weight		kg	170	220
<b>Model</b>			<b>GFAC1750</b>	<b>GFAC2250</b>

### Notes:

Fuel Consumption and input figures based upon nett calorific values as follows: -

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

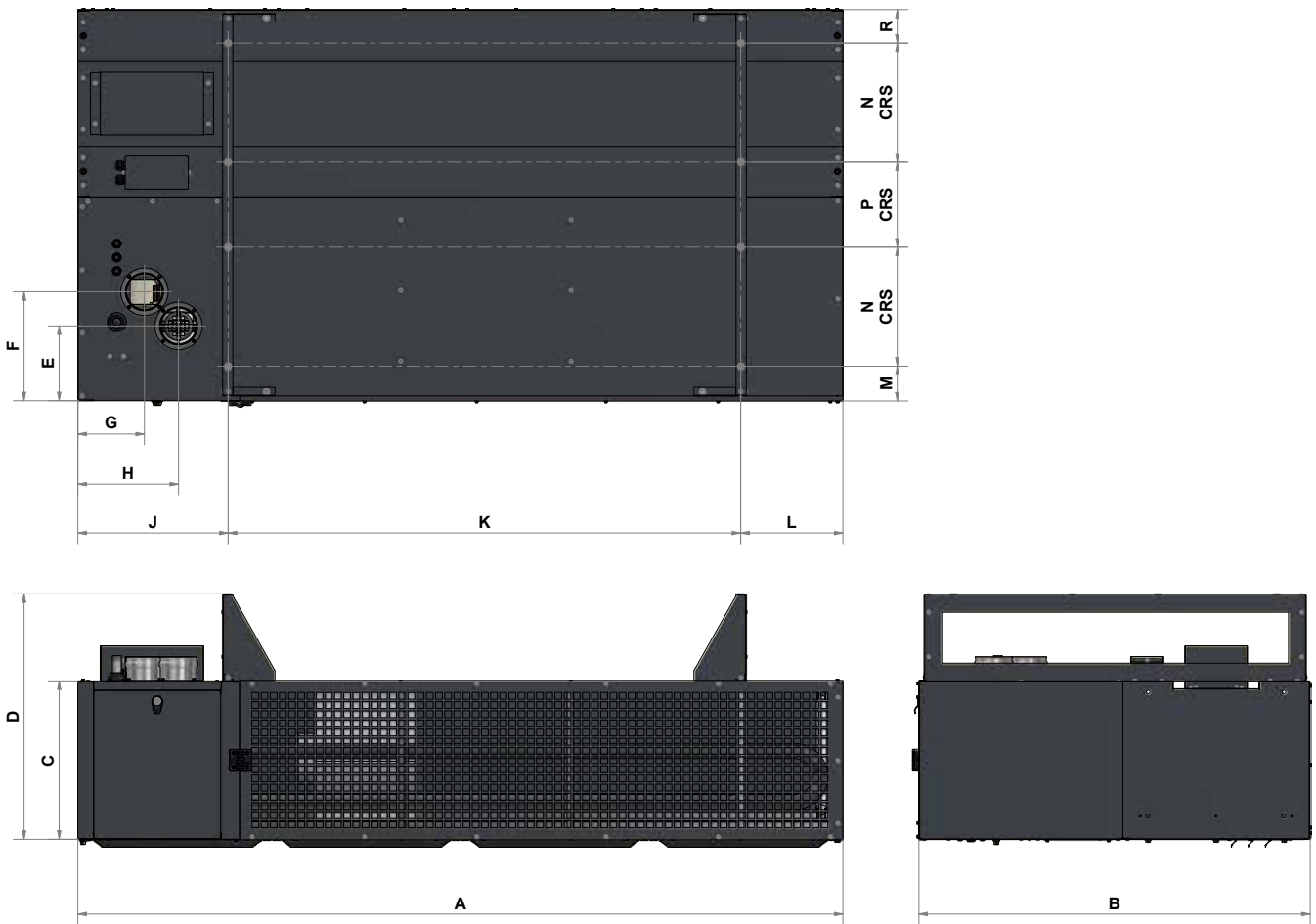
- Gas fired air curtains have efficiency levels which meet with the minimum heater efficiency requirements of UK Part L Building Regulations.
- Standard heaters configured as High/Low.
- Air handling data is assessed at room ambient conditions
- Noise levels are measured 5m from appliance in a free field.

- Motor kW, run and start amps apply to standard electrical supply as stated. For optional data contact sales office.
- It is the responsibility of the installing contractor to ensure that any

- Motor kW, run and start amps apply to standard electrical supply as stated. For optional data contact sales office.
- It is the responsibility of the installing contractor to ensure that any additional ducting is correctly sized and balanced when installing units.
- \* Not including bracketry

# Dimensions

GFAC

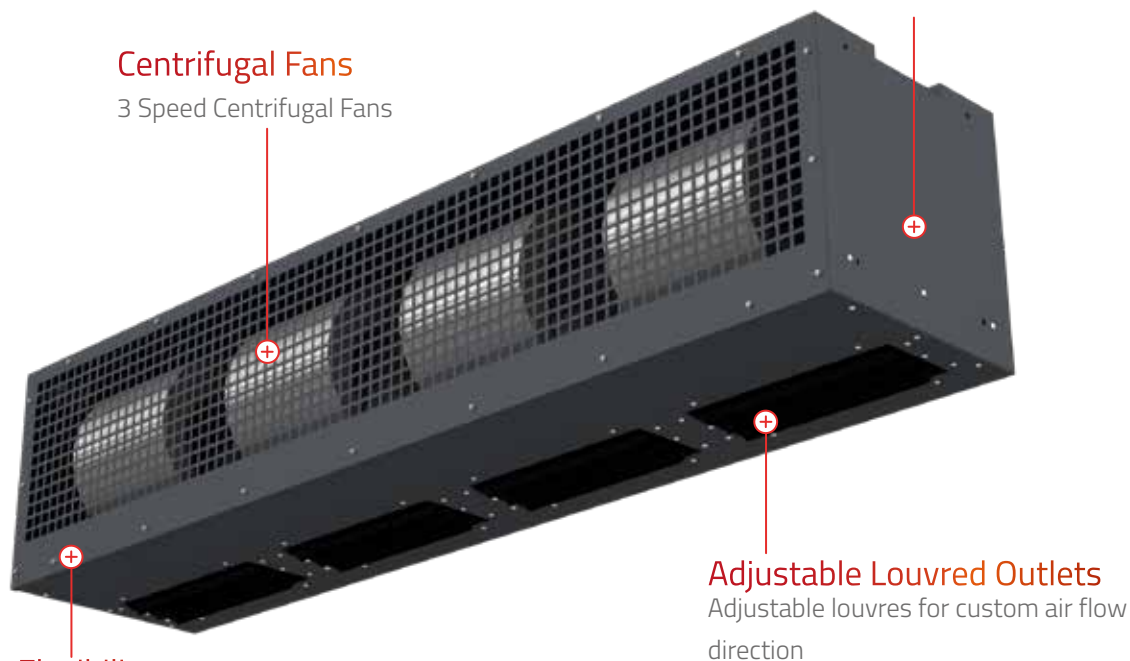


Model	1750	2250
A	mm 1750	2250
B	mm 1150	1150
C	mm 466	
D	mm 720	
E	mm 127	220
F	mm 269	320
G	mm 228.5	196
H	mm 228.5	296
J	mm 442	
K	mm 1007.4	1507.5
L	mm 300.5	
M	mm 102	
N	mm 350	
P	mm 250	
R	mm 98	

## Product Features (Electric)

### Construction

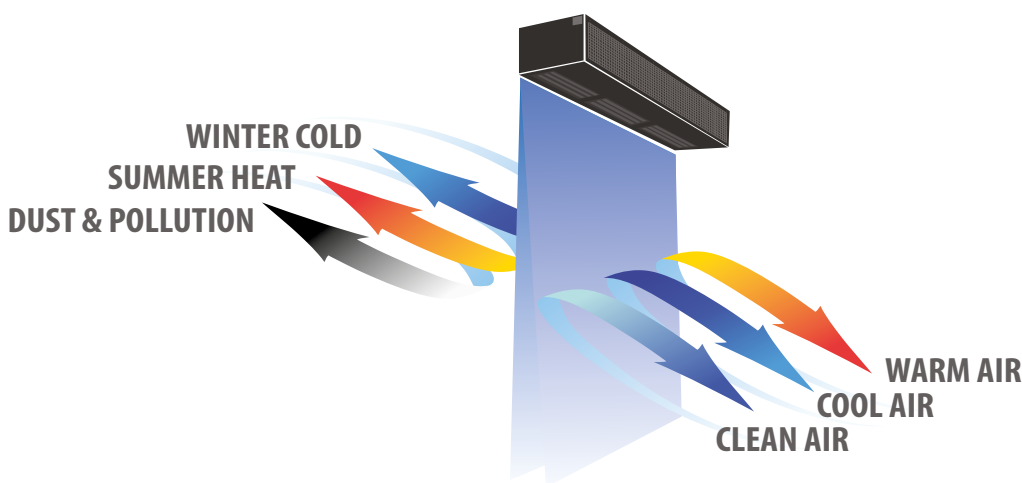
Constructed from epoxy powder coated steel, housing a specifically designed low inertia fan deck to ensure long life and lowest energy usage. Paint finish is RAL 7015 which is stove hardened to compliment Powmatic Warm air and Radiant ranges, other BS and RAL colours available as an option, additional cost on request.



### Installation Flexibility

The Ambient Baratherm can be installed horizontally above the doorway or vertically (Ambient only) to one side. They can be used for environmental separation on cold stores, preventing flies entering food factories through open doorways.

**Approvals**   
All Baratherms are CE approved.



### How Door Curtains Work?

When doors are opened, warm, heated air exits the building through the top of the opening whilst cold air enters through the lower part. The results are large amounts of heat being lost, draughts and the formation of colder air layers at low level, resulting in an unhappy workforce.

The cold air layer at occupancy level can be difficult to penetrate due to its different density to the warm air from space heater units.

# Electric Baratherm Door Curtain

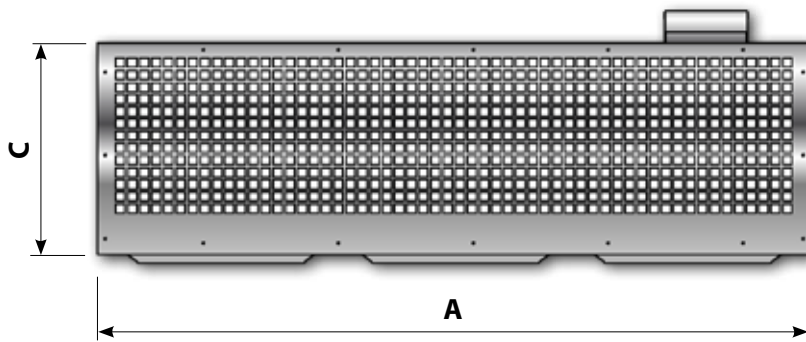
## Technical Specification

Baratherm

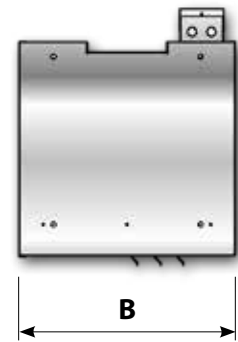
Average Outlet Velocity		m/s	15.3	15.3
Airflow Volume	High Speed	m <sup>3</sup> /h	8100	10800
	Med Speed	m <sup>3</sup> /h	4500	6000
	Low Speed	m <sup>3</sup> /h	3000	4000
Electrics	Supply	V/ph/Hz	230V 50Hz 1Ph	
	Start	amp	30.0	40.0
	Run	amp	12.0	16.0
Mounting Height	Min	m	2.5 - 5.0	2.5 - 5.0
Overall Dims	Height	mm	470	470
	Width	mm	1750	2250
	Depth	mm	470	470

## Dimensions

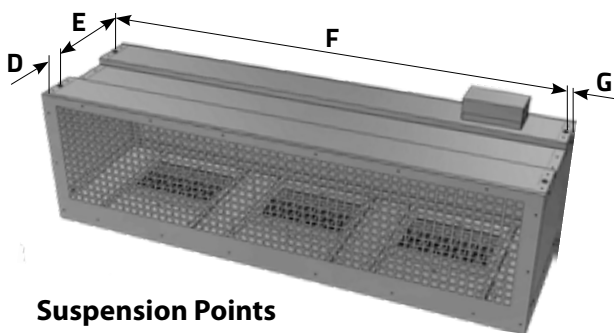
Baratherm



Front View



End View



Suspension Points

Model	Dimensions (mm)						
	A	B	C	D	E	F	G
BAR3/16A	1750	550	466	76	400	16	1718
BAR4/21A	2250	550	466	76	400	16	2218

# About Us

Powrmatic design, develop and deliver HVAC solutions worldwide across a wide range of commercial and industrial applications creating comfortable and safe environments, differentiated through innovation, integrity, compliance and service.

Our specialised HVAC divisions:

## Heating

Industrial and commercial warm air and radiant space heating solutions manufactured to achieve efficient performance, compliance and reliability for every application in partnership with the HVAC trade.

## Ventilation

Custom designed highly efficient, cost-effective smoke, natural and powered ventilators manufactured to meet project requirements of building operators, architects, specifiers and contractors.

## Air Conditioning

Worldwide distributors of innovative wall mounted heat pumps air conditioner technology providing efficient comfort cooling and heating all year round.

## Engineered Products

Bespoke heating and ventilation solutions designed to serve individual customers specific project requirements. In addition our OEM products provide partner AHU manufacturers with high quality energy efficient gas fired heat exchangers.

## Contact Us

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#keepingthenationwarm

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