

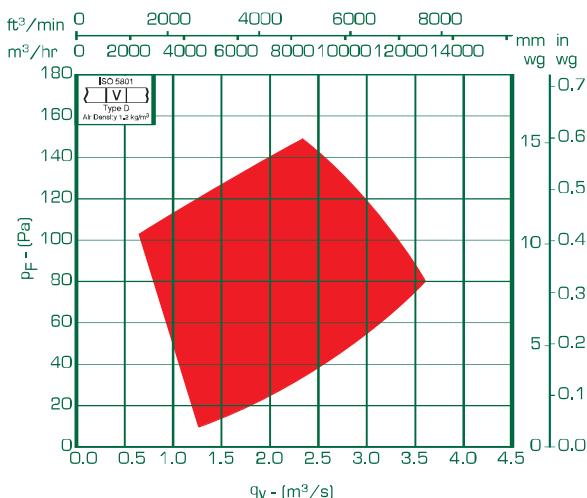
Ventilation-Flaktwoods 56 JM

# Aerofoil fan 56JM - 63JM

# Section 5.1

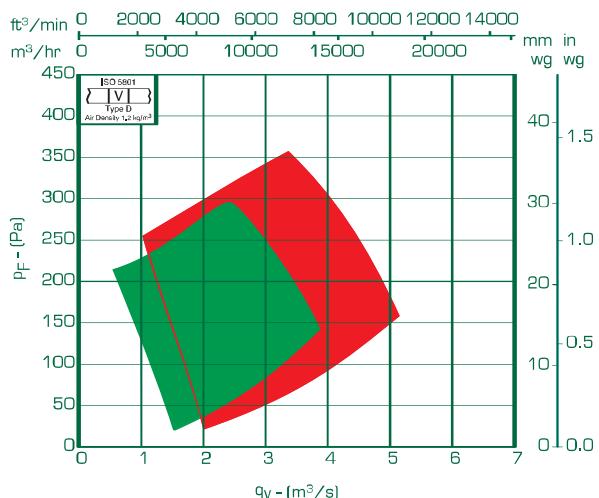
## 6 Pole

63JM/20/6/6/...



## 4 Pole

56JM/20/4/6/... 63JM/20/4/6/...



Product Code	Speed rev/min	m³/s at Pa (Static)									
		0	50	100	150	200	250	300	400	500	600
56JM/16/4/5/24	1420	3.05	2.82	2.55	2.22	1.82					
56JM/16/4/5/32	1420	3.73	3.42	3.23	2.80	2.38					
56JM/20/4/6/36	1420	4.05	3.82	3.60	3.21	2.90					
56JM/20/2/6/24	2910	6.30	6.20	6.10	6.05	5.90	5.85	5.70	5.46	5.20	4.35
63JM/20/6/6/22	900	2.51	2.2	1.75							
63JM/20/6/6/34	900	3.55	3.10	2.50							
63JM/20/4/6/18	1420	3.45	3.30	3.10	2.90	2.65	2.25				
63JM/20/4/6/32	1420	5.30	5.10	4.81	4.55	4.15	3.82				

† For graphical data of 56JM 2 Pole see page 125

## Electrical Data

Product Code	Speed rev/min	Motor	220-240V/50Hz/1φ							Sound Level dBA
			Product Number	Pitch Angle (°)	Motor Rating (kW)	Full Load Current (at 230V) (A)	Starting Current (at 230V) (A)	Wiring Diagram Ref	Speed Controller	
									Elec-tronic	Trans-former
56JM/16/4/5/...	1420	CT5	JL571453	18-20	0.52	3.9	7.8	CD1705	ME1.6	57
<b>56JM/16/4/5/...</b>	<b>1420</b>	<b>CT9</b>	<b>DX571456</b>	<b>26-32</b>	<b>0.97</b>	<b>6.7</b>	<b>13.5</b>	<b>CD1705</b>	<b>ME1.6</b>	<b>58</b>
56JM/20/4/6/...	1420	CT9	DX571459	26-28	0.97	6.7	13.5	CD1705	ME1.6	58
63JM/20/6/6/...	900	CT5	JL641651	16-20	0.29	2.3	4.1	CD1705	N/A	49
63JM/20/6/6/...	900	CT9	JL641652	26-30	0.53	0.38	6.8	CD1705	ME1.6	52
63JM/20/4/6/...	1420	CT9	DX641453	14-16	0.97	6.7	13.5	CD1705	ME1.6	61

Product Code	Speed rev/min	Motor	380-420V/50Hz/3φ							Sound Level dBA
			Product Number	Pitch Angle (°)	Motor Rating (kW)	Full Load Current (at 400V) (A)	Starting Current (at 400V) (A)	Wiring Diagram Ref	Speed Controller	
									Elec-tronic	Trans-former
56JM/16/4/5/...	1420	CT5	JL591452	16-24	0.54	1.8	4.9	CD1343	ME3.2D	57
56JM/16/4/5/...	1420	CT9	DX591453	24-28	0.83	2.30	8.6	CD1343	N/A	58
56JM/20/4/6/...	1420	CT9	DX591458	28-32	1.15	3.2	11	CD1343	ME3.2D	61
56JM/20/2/6/...	2910	PM112	EX591201	8-24	6.2	11.64	100	CD1343	N/A	73
63JM/20/6/6/...	900	CT5	JL661651	16-20	0.3	1.02	2.35	CD1559	ME3.2D	49
63JM/20/6/6/...	900	CT9	JL661652	26-30	0.5	1.5	4.5	CD1559	ME3.2D	50
63JM/20/4/6/...	1420	CT9	DX661453	18-20	1.15	3.2	11	CD1559	ME3.2D	61
<b>63JM/20/4/6/...</b>	<b>1420</b>	<b>F22</b>	<b>DX661454</b>	<b>24-32</b>	<b>2.1</b>	<b>5</b>	<b>27</b>	<b>CD1343</b>	<b>N/A</b>	<b>61</b>

Sound pressure levels quoted are average dBA at 3m distance over a sphere, under free field conditions and are presented for comparative purposes only.

**Fans that include BT or CT motors can be continuously operated at temperatures up to 70°C.**

When these fans are operating in excess of 50°C they should be run at full speed only.

For Short cased fans please omit the prefix from the product number and state S-type on enquiries/orders.  
Product numbers shown are for Long cased fans.

Express Range	- These products are available from our UK Express Distributor on same day delivery from the date of order.
Standard Service	- Please consult your local distributor for availability maximum 15 days.

**EXPRESS**  
**RANGE**

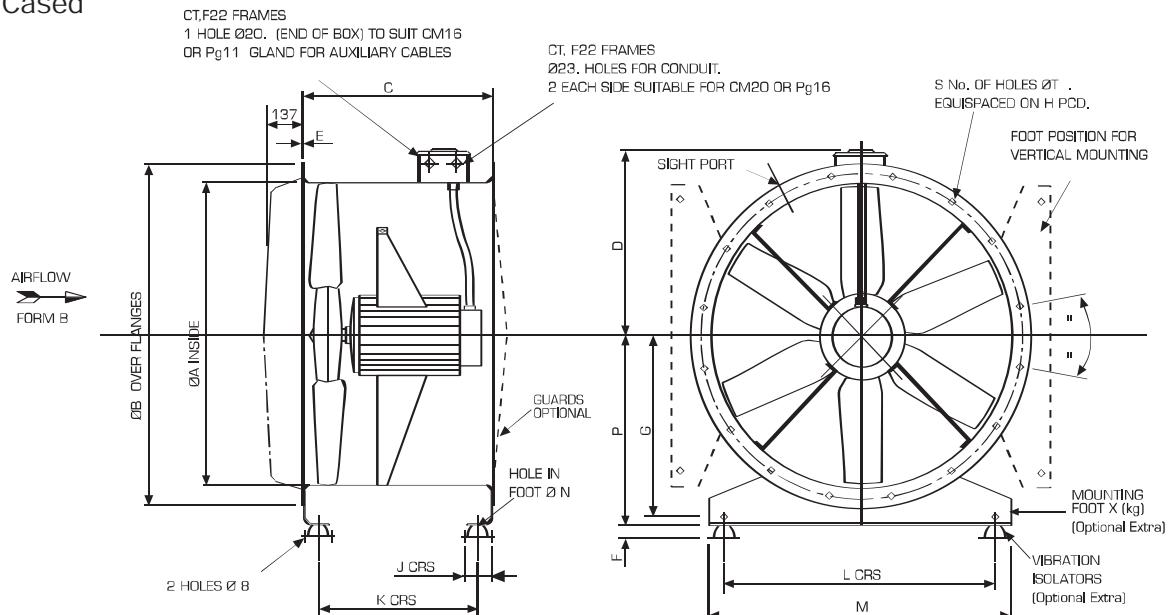
[www.flaktwoods.com/express](http://www.flaktwoods.com/express)

# Aerofoil fan 56JM - 63JM

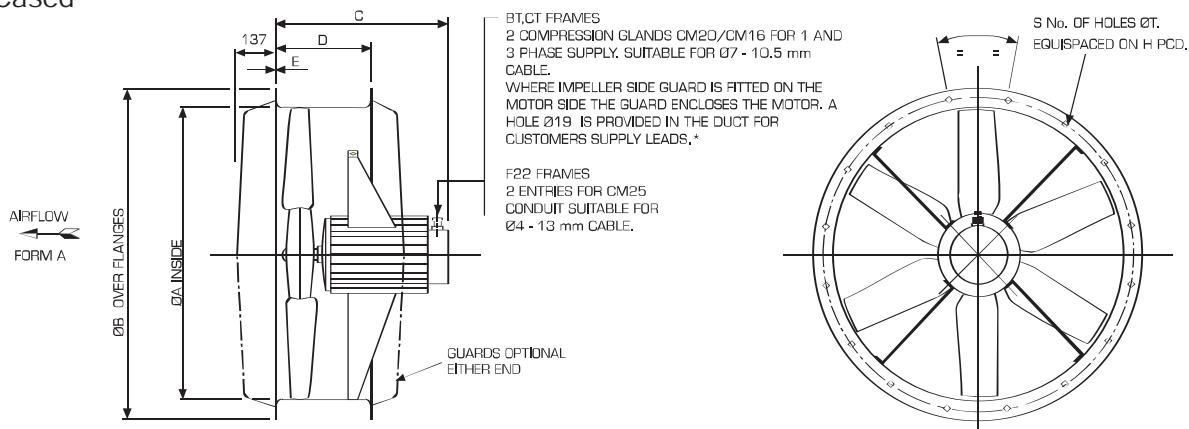
## Section 5.1

### Dimensions

#### Long Cased



#### Short Cased



Product Code	Motor Range	A	B	C	D	E	F	G	H	J	K	L	M	N	P	S	T	U	X	Max. Fan Weight (kg)
Long Cased																				
56JM	CT	560	654	375	368	2.5	25	330	620	66	280	510	560	10	355	12	12	-	2.3	38
56JM	F22	560	654	520	368	3	25	330	620	66	424	510	560	10	355	12	12	-	2.3	62
63JM	CT	630	724	375	403	3	25	375	690	66	289	580	630	10	400	12	12	-	2.4	52
63JM	F22/PM112	630	724	520	403	3	25	375	690	66	434	580	630	10	400	12	12	-	2.4	83
Short Cased																				
56JM	CT5	560	654	308	225	2.5	-	-	620	-	-	-	-	-	-	12	12	-	-	22
56JM	CT9	560	654	348	225	2.5	-	-	620	-	-	-	-	-	-	12	12	-	-	26
56JM	PM112	560	654	392	225	3	-	-	620	-	-	-	-	-	-	12	12	-	-	52
63JM	CT5	630	724	308	225	3	-	-	690	-	-	-	-	-	-	12	12	-	-	36
63JM	CT9	630	724	348	225	3	-	-	690	-	-	-	-	-	-	12	12	-	-	40
63JM	F22	630	724	444	225	3	-	-	690	-	-	-	-	-	-	12	12	-	-	56

All dimensions shown in mm.

For a full range of accessories including silencers, speed controllers and mountings, please refer to section 5.10 or 9.1 (which shows all accessories).

Wiring diagram references can be found in section 9.2.

Please refer to our Fläkt Woods inverter & speed control warranty clause on page 226.

## CARBON FILTER INFORMATION

# Unpleasant Smells? Hazardous Fumes? Activated Carbon Provides The Solution

Activated carbon has for many years been used to reduce airborne odours and contaminants. Its use has expanded considerably, improving conditions in line with environmental awareness.

## Applications

Carbon is commonly used to control extract emissions from kitchens, factories or chemical processes, but is equally effective on supply air odours. Beneficial for building locations adjacent to sewage works, rubbish tips, airports or car parks thereby improving the quality of life and safety for occupants.



## Carbon Types

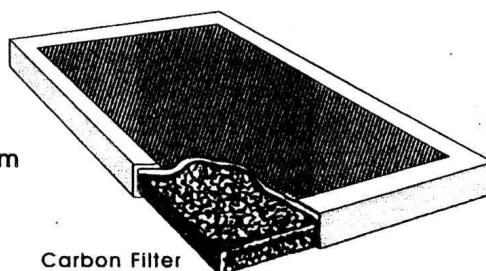
The absorption ability of activated carbon is due to the enormous surface area to volume ratio of the material. (Typically 1000 sq metres per gram).

Grades of carbon equivalent to 203c and 207c are available from stock. Special carbon can also be provided to suit specific requirements.

Sometimes it helps to impregnate the carbon with catalysts or reactants specific to the contamination. These agents are spread over the entire area producing a huge reaction interface.

## Bonding

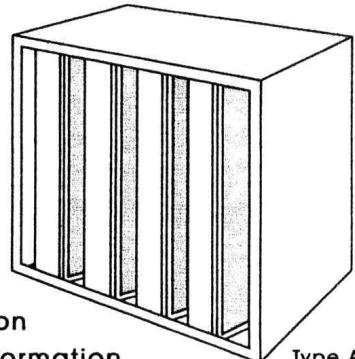
Ace Filtration activated carbon filters are manufactured from graded carbon



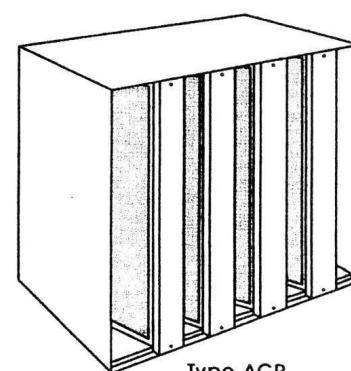
granules chemically bonded to form uniform biscuit panels. This provides even air resistance across the face of the panel preventing settlement and air bypass. Panels are cloth covered, making them clean to handle.

## Carbon Filters

Carbon panels, ACD filters or ACR filters are available in standard and non standard sizes. ACD denotes a disposable filter, containing carbon panels in deep 'Vee' formation,

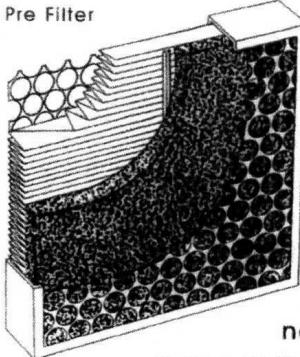


and bonded within a galvanised sheet steel case.



ACR denotes a filter case containing replaceable framed carbon panels in a deep 'Vee' formation.

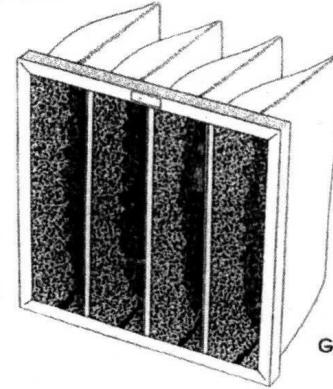
Pre Filter



#### Pre Filters

Carbon removes odours by physical absorption. Accumulation of dirt or grease on the carbon face will cause blinding of its open pore structure and reduce the performance.

It is essential to provide a pre filter to protect the carbon. This would normally be a G4 bag as a minimum, but if space is limited we suggest a carbon pre filter type ASPC. This is a 75mm thick panel comprising of a 2" pleat element plus a 1" synthetic pad.



G4 Bag Filter

#### Kitchen Extract

In kitchen extract applications where grease is present, a grease filter must be fitted before the pre filter. All pre filters should be checked and replaced if necessary. Every effort should be made to prevent grease and smoke particles from reaching the carbon filter. The carbon filter should be fitted as far as possible from the extract inlet. This helps to cool the air and hence improve the performance.

#### Process Extract

Refer to Absorption Ability data on separate sheet.

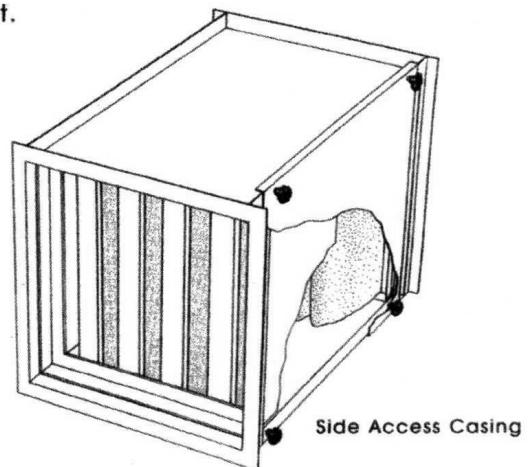
#### Side Access Casings

Casings to house ACD filters are available for single or multiple filter applications. Slides for pre filters are included as standard.

Construction is of galvanised sheet steel, with angle supports and flanges each end.

Jacking bolts are provided to ensure the carbon filters seal positively and prevent air bypass.

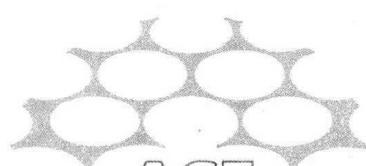
Type ACR do not require casings since they can be incorporated into ductwork using slip joints.



Side Access Casing

#### How to Order

Tell us the flow rate, the application and any size limitations. Ace Filtration can quickly select a suitable filter either from our standard range, or design a special to suit your needs. Special delivery times are no longer than standard filters.



**ACE  
FILTRATION**  
**ACE FILTRATION LIMITED**

Airflow Works, Seymour Road  
Northfleet, Kent DA11 7BW

Tel: 01474 325666 Fax: 01474 333132  
Email: [sales@acefiltration.co.uk](mailto:sales@acefiltration.co.uk)  
Web: [www.acefiltration.co.uk](http://www.acefiltration.co.uk)

The Company, in keeping with its policy of continual product improvement,  
reserves the right to change specifications without notice.

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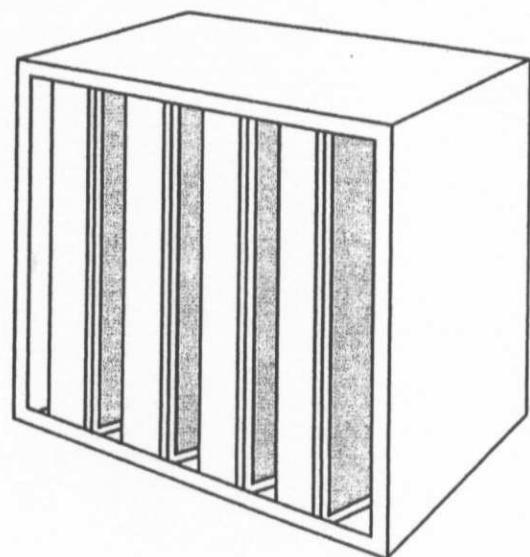
Produced in England by Eden River Press Ltd.

# Type ACD Activated Carbon Filters (Disposable)

Type ACD carbon filters manufactured by Ace Filtration are self contained units which are completely disposable. They comprise of chemically bonded carbon panels permanently sealed within a galvanised steel casing.

Grades of carbon equivalent to 203c and 207c are available from stock. Special carbons can be provided to suit specific requirements.

The filters can be manufactured to any reasonable size to suit existing ductwork or air handling units. Sizes and carbon weights can also be adjusted to suit existing installations or other units on the market.



## Technical Data

### Standard Duty

Nominal size inches	Actual size mm	Air volume		Air resistance		Carbon weight kg.	Approx. total weight kg.
		c.f.m.	m <sup>3</sup> /s	Ins. w.g.	Pa		
24 x 24 x 24	597 x 597 x 597	1725	0.81	0.16	40	38	68
24 x 24 x 18	597 x 597 x 451	1300	0.61	0.16	40	29	51
24 x 24 x 12	597 x 597 x 298	860	0.40	0.16	40	19	34
18 x 18 x 24	451 x 451 x 597	860	0.40	0.16	40	19	34
18 x 18 x 18	451 x 451 x 451	650	0.31	0.16	40	14	25
18 x 18 x 12	451 x 451 x 298	435	0.20	0.16	40	10	17
12 x 12 x 24	298 x 298 x 597	460	0.22	0.16	40	10	17
12 x 12 x 18	298 x 298 x 451	325	0.15	0.16	40	7	13
12 x 12 x 12	298 x 298 x 298	215	0.10	0.16	40	5	9

### Extra Duty

Nominal size inches	Actual size mm	Air volume		Air resistance		Carbon weight kg.	Approx. total weight kg.
		c.f.m.	m <sup>3</sup> /s	Ins. w.g.	Pa		
24 x 24 x 24	597 x 597 x 597	2250	1.06	0.30	75	50	80
24 x 24 x 18	597 x 597 x 451	1700	0.80	0.30	75	38	60
24 x 24 x 12	597 x 597 x 298	1130	0.53	0.30	75	25	40
18 x 18 x 24	451 x 451 x 597	1150	0.54	0.30	75	25	40
18 x 18 x 18	451 x 451 x 451	860	0.40	0.30	75	19	30
18 x 18 x 12	451 x 451 x 298	570	0.27	0.30	75	13	20
12 x 12 x 24	298 x 298 x 597	565	0.27	0.30	75	13	20
12 x 12 x 18	298 x 298 x 451	425	0.20	0.30	75	10	16
12 x 12 x 12	298 x 298 x 298	280	0.13	0.30	75	6	10

All the above data is based on 0.1 seconds contact time (dwell time)

## SILENCER INFORMATION

# Cased Accessories

## Section 5.10

### JM – Cylindrical Silencers

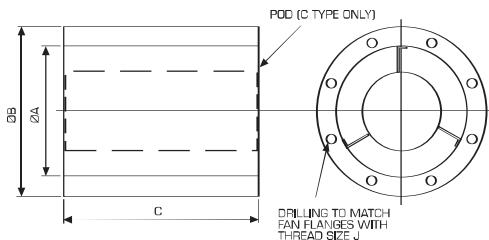
#### Acoustic Performance B Type (without Pod)

Bore Dia. mm (D)	Length	Acoustic Performance (dB) – Octave Band Mid Frequency – Hz							
		63	125	250	500	1K	2K	4K	8K
315	1D	1	2	4	9	11	10	9	7
355	1D	1	2	4	10	12	10	9	7
400	1D	2	3	5	10	13	11	9	8
450	1D	2	3	6	12	13	11	10	6
500	1D	2	3	6	13	14	10	10	5
560	1D	2	4	7	14	14	19	10	7
630	1D	2	5	7	15	13	8	9	8
710	1D	3	5	7	15	13	9	9	8
800	1D	3	5	8	16	12	9	9	8
900	1D	3	5	10	17	13	11	10	8
1000	1D	4	5	11	16	11	10	8	9

#### Acoustic Performance C Type (with Pod)

Bore Dia. mm (D)	Length	Acoustic Performance (dB) – Octave Band Mid Frequency – Hz							
		63	125	250	500	1K	2K	4K	8K
315	1D	2	5	5	9	18	20	18	15
355	1D	2	5	6	9	18	22	19	16
400	1D	2	6	6	10	19	24	20	17
450	1D	2	4	7	13	20	23	22	17
500	1D	2	3	8	16	21	22	21	17
560	1D	3	5	8	16	20	18	19	15
630	1D	3	5	8	15	19	16	14	12
710	1D	3	5	8	15	19	15	14	12
800	1D	4	5	8	16	19	15	14	13
900	1D	4	5	9	17	19	15	14	13
1000	1D	5	5	11	18	19	15	14	13

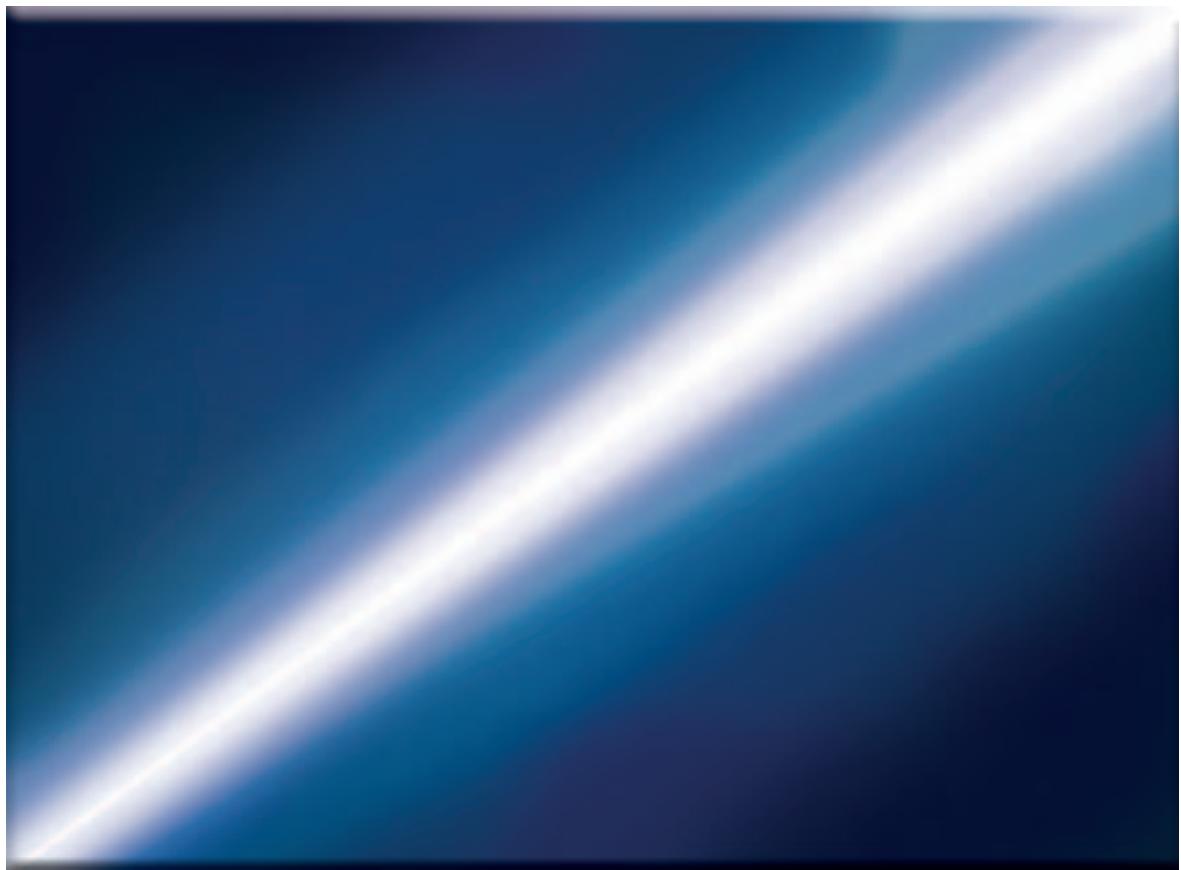
#### Silencer



The above silencers give the following approximate dBA reductions:  
 B Type 1 diameter length – 7 to 10 dBA    C Type 1 diameter length – 12 to 15 dBA.  
 For full acoustic details and resistance to airflow for type C see publication SPO1.

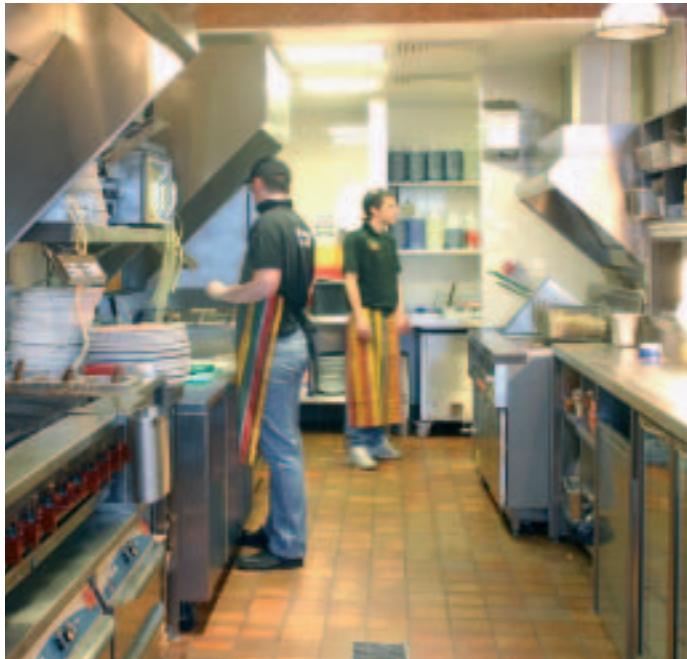
Suitable for fan OA	Product Numbers		B	C	J	Weight (kg)	
	B Type	C Type (Pod Kit)				B Type	C Type
315	DS211401	DA415792	415	315	M8	1D	13
355	DS221401	DA415793	455	355	M8	12	15
400	DS241401	DA415794	500	400	M10	15	18
450	DS251401	DA415795	600	450	M10	20	24
500	DS271401	DA415796	650	500	M10	25	29
560	DS281401	DA415797	710	560	M10	30	35
630	DS301401	DA415798	780	630	M10	35	42
710	DS311401	DA415799	860	710	M10	44	53
800	331401	416212	1000	800	M10	55	66
900	341401	416213	1100	900	M12	70	84
1000	351401	416214	1200	1000	M12	82	100

# UV-C Odour Control Technology



# Purified Air Systems...

...market leaders in odour control for the food service industry



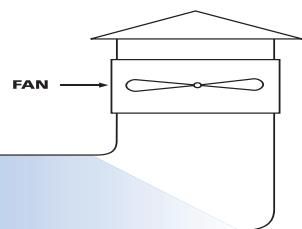
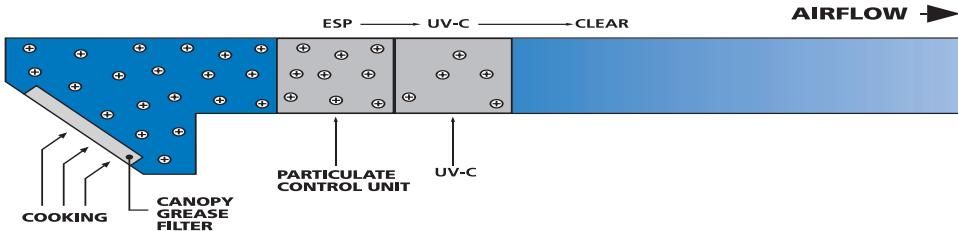
The emission of cooking odours from commercial kitchens is becoming an increasingly important environmental issue, as well as having a significant influence on the granting of planning permission for new restaurants. UVC Technology from Purified Air uses UV-C (ultra-violet light) to eliminate cooking odours and alter the make up of grease to a better-managed compound.

## How UV-C Technology Works

UV-C technology is based on the synergy, which occurs when ozone and ultra-violet light are combined and the Purified Air modular system features six to eighteen high output UV-C lamps. These lamps act to oxidise odours and grease permanently destroying and altering the compounds. Some of the lamps are designed to produce UV light at 185nm, which converts ozone from the oxygen present in the air. Ozone is a highly reactive oxidant which interacts with most contaminates and allergens it

encounters rendering them harmless, and at the same time removes odours. The remaining lamps in the system combine to produce UV light at 254nm, the most efficient UV-C wave length, which converts the ozone to hydroxyl free radicals. Purified Air's UV-C odour control system also features a photo catalytic liner, which enhances the production of hydroxyl free radicals. Free radicals are natural air cleansing agents and are strong oxidants. They are significantly more powerful than plain ozone.

© GREASE, SMOKE AND ODOUR



## Safety

Band C ultra-violet light is the most powerful of the three bands, so to ensure the safety of customer's employees the UV-C technology is secured behind locked panels. The system has also been engineered to shut down automatically when the panel is unlocked. However, since the lamps typically have a life of twelve months and with the system able to operate even if one lamp fails at optimum efficiency it is unlikely that, apart from routine servicing by experienced engineers, the system will ever need to be opened. As an option Purified Air's UV-C system can also be fitted with a self-diagnostic module, which constantly monitors the unit to ensure no installation or component failure



## Electrostatic Precipitator (ESP)

UV-C technology cannot remove smoke, and for those instances where a lot of smoke is produced at the kitchen extract due to the cooking style, for example char-grilling. Then Purified Air recommends that the UV-C system be used in conjunction with a filtration system such as their Electrostatic Precipitator (ESP).

Purified Air's highly efficient ESP range cleans the kitchen extract emissions of both smoke and grease and can

remove particulate down to sub-micron (0.01 micro) size. Filter efficiency of 98% is attained during a single pass through the ESP, based on the charging of particles. These particles are then trapped on the earthed plates in the collector cell with larger particulate in the air stream removed by the pre-filter. Lastly the air stream passes through an after-filter to prevent re-entrainment and provide good air distribution.

## Main Features

- **High efficiency UV-C technology**
- **No cooking odours**
- **Grease altered to better managed compound**
- **Robust, compact construction**
- **Twelve month lamp life**
- **Minimum maintenance**
- **High security - UV-C lamps locked behind panels**
- **Optional self-diagnostic system**



This unit's tried and tested UV-C technology allows for the siting of commercial kitchens in locations such as residential areas and shopping centres, where previously planning permission would not have been granted.

After extensive research and development Purified Air devised the best combination of lamps at different wave lengths, which when combined with the photo catalytic liner provides the most effective odour control.

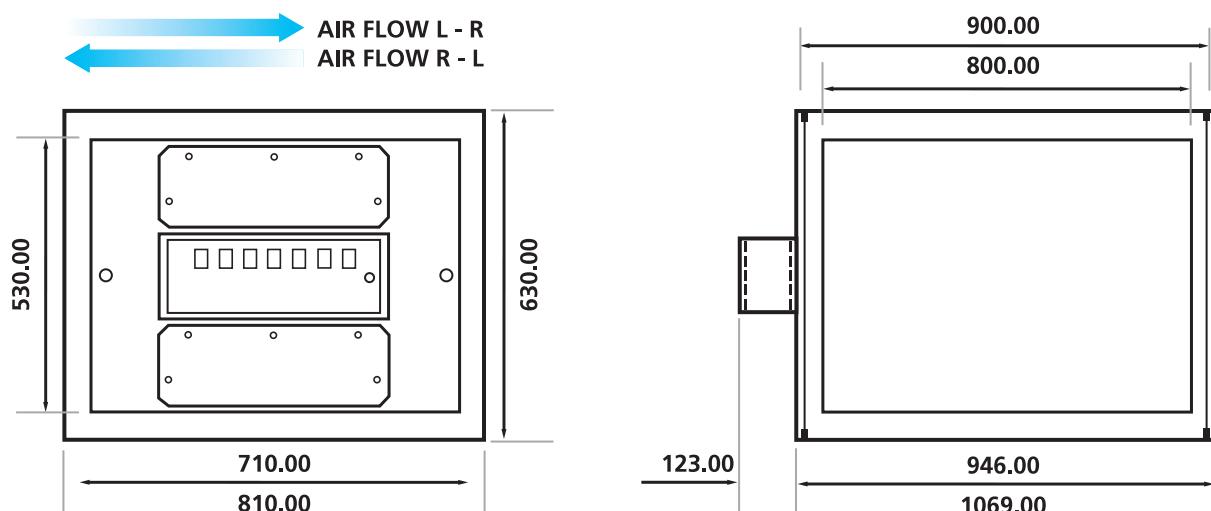
# Technical Specifications



Six ESP and Three UV-C modules installed as an integrated system.



The Purified Air system modular is designed to be able to incorporate up to three racks of six lamps. The unit can be stacked as with our ESP range to accommodate higher airflows.



■ Electrical Supply	220/240v 50Hz 1ph
■ Power Consumption	500W (Per rack of Six lamps)
■ Weight Unit	105 Kg.

■ Weight Per Rack	16 Kg.
■ Min/Max Working Temperature	4/56°C
■ Maximum Relative Humidity	75%



**purifiedair**<sup>®</sup>  
providing a better environment

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[www.purifiedair.co.uk](http://www.purifiedair.co.uk)



JAN 2004

# Electrostatic Precipitator



## Manual Clean & Autowash System

# the ESP solution to grease and smoke pollution...

## **Local Legislation**

Local Legislation requires increasingly that the amount of grease and smoke in kitchen exhaust fumes is reduced to lessen the nuisance of smells to the neighbourhood. Our ESP system gives the restaurant a clean, non-polluting image, while complying with local legislation.

## **Fire Risk Reduction**

Grease build up in the ducting is significantly reduced with an ESP. This reduces the risk of fire in the ducts and fire spreading from the source to different parts of the building.

## **Efficiency**

The ESP system is a very efficient means for removing particles and it can remove particles down to sub-micron size (0,01). When installed correctly, the unit can achieve an efficiency up to 98%.

## **Pre and After Filters and Oil Drain**

Each unit is provided with standard mesh filters designed to protect the electrostatic filter section (Mesh filters are not provided with Autowash). We can also provide specialist oil demisters and other pre filters for different applications. The units are all fitted with a drip tray and an oil drain point to allow collected waste grease and oil to be drained away.

## **Installations**

The ESP is installed inline in the ducting. The unit should be located as close as possible to the extraction hood to reduce grease build up within the ducting. This reduces the need for regular duct cleaning. If space is limited in the kitchen then the unit(s) can also be installed outside, upstream of the extraction fan. Several ESP units, stacked as modules, can be used as a central filter installation with a virtually unlimited capacity.

## **Pressure Loss**

The ESP is characterised by a remarkably low pressure drop (120-190 Pa). The advantage is that existing extract fans often do not need to be replaced.

## **Maintenance**

Only regular cleaning of the filters, ioniser and collector cells with warm water and detergent is needed. Purified Air offer a cleaning and maintenance service operating on an exchange system. This is a cost effective service available in the UK direct from the manufacturer and in other selected countries via our agents. Taking out a maintenance contract ensures that your system is in full working condition at all times. This assumes an appropriate maintenance frequency and professional cleaning. The maintenance of the ducting and any other filter present in the ducting can be reduced (lower frequency) because of the effectiveness of the ESP. **Please also see optional Autowash system.**

## **The Electrostatic Precipitator is suitable for the removal of all grease and odour emissions from commercial kitchens**



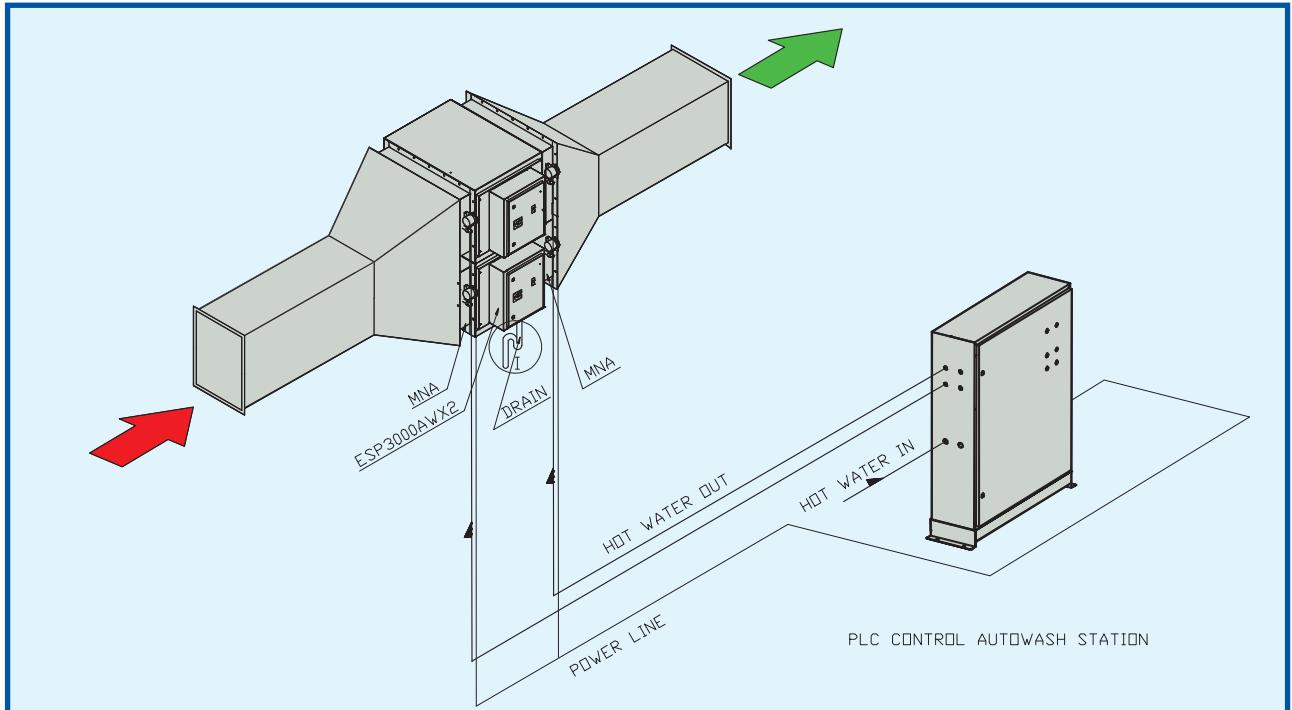
*Any amount of grease and smoke can be eliminated. Purified Air has the complete solution for any kitchen or cooking method. The ESP system is supplemented by a number of other technologies manufactured by Purified Air designed to combat cooking odours, these systems comprise of UV-C, electronic and chemical neutralising and specially designed media and micro porous filters.*

## **Solving kitchen emission problems**

Kitchen fume problems are not exclusively about the nuisance of grease or exclusively about odours. Both problems need to be solved 'at source'. The ESP system is the second stage of a sacrificial system, the first being the canopy filters and the third being methods for gaseous or odour control. The ESP is part of a family of products designed to eliminate grease, smoke and odour problems from commercial kitchens. The duct-installed ESP systems trap the smaller grease particles and other contaminants that pass the grease filters in the cooker hood.

# AUTOWASH option...

The Autowash system has been designed as a cost efficient alternative to the manual wash type. The process is designed to operate a daily program to ensure that the electrostatic components remain in a clean and serviceable condition. As the program operates daily not only are there significant savings with maintenance costs but as the components are in a near new condition the performance of the electrostatic filter will always be at optimum. As components become dirty during normal use the filtration efficiency reduces as the dirt on the collectors builds up to form insulation, this affect will be minimised with the Autowash process. It should be noted that the Autowash system will still require some periodical manual maintenance.



The design uses minimal, energy, water and detergent so the overall process is cost-efficient. The system is designed to operate during the period when the kitchen is closed. The wash cycle is controlled via a PLC module and has several stages as follows:

1. The ESP system and the main extract fan are switched off.
2. First detergent cycle.
3. First rinse cycle.
4. Second detergent cycle.
5. Second rinse cycle.
6. Drying stage using the main extract fan.
7. Finally the extract system and the ESP are reactivated so that they are ready to switch on for the next day of operation.

The ESP module has been redesigned so that all 2011 generation models onwards can incorporate the Autowash option. Any new generation unit can be converted to an Autowash system you simply need to add the MNA (motorised nozzle attachment) to each flange of the ESP. The flanges are pre drilled to mate up. Once this is done the unit is simply connected to an Autowash cabinet.

## The Principle of Electrostatic Precipitators

The ESP units are used to clean the **airstream** of grease and hydrocarbons (smoke) in kitchen exhaust systems. They are highly efficient and can remove particulate down to sub-micron (0.01micron) size. The filter efficiency of up to 98% is attained during a single pass through the ESP, based on the charging of particles by an ionisation section which are then trapped on the earth plates in the collector cell. Larger particulate in the airstream can be removed by the pre-filter and lastly an after filter can prevent any re-entrainment of agglomerated grease on the collector and aids good air distribution.

# The Autowash Modular System



ESP 1500 AW



ESP 3000 AW



ESP 4500 AW



AUTOWASH CABINET



INTERIOR OF AUTOWASH CABINET

# The ESP Modular System



ESP 3000 E

All units can be used individually or combined for greater air flows.



ESP 1500 E



Two ESP 3000 E in modular format



ESP 4500 E

## Construction

ESP air cleaners are precision engineered to current industrial standards.

The case is of galvanised construction, spot welded and fitted with heavy duty hinges and bolt-on door equipped with compression locks.

Industrial neoprene seals fitted all round.

The ESP range of units are designed so that the direction of airflow can be easily altered from left to right or right to left. A simple operation using basic tools And changing the legend sticker which can be carried out in about fifteen minutes.

## Efficiency Achievable

Particulate Micron	Efficiency
0.01	up to 98%
0.1	up to 97%
10.0	up to 98%

Efficiency can vary with different particulate and air volumes.

## Maintenance

ESP air cleaners require only routine maintenance as all filter components are cleanable by means of steam, detergent, or pressure jet.\*

Autowash models are largely self cleaning but do still need periodic manual maintenance.

\*excluding media filters where used.

## Filter Technology

### 1 Pre-filter

Eurovent Class 9

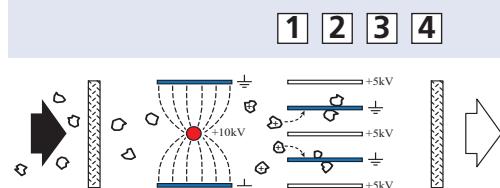
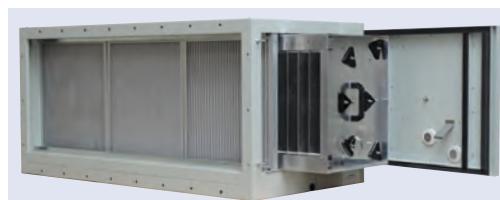
### 2 Ionisation section

### 3 Collector section

Eurovent class 9  
Filter surface 15m<sup>2</sup>  
per collector  
(ESP 1500E 15m<sup>2</sup>,  
ESP 3000E 30m<sup>2</sup>,  
ESP 4500 45m<sup>2</sup>)

### 4 Final filter

Eurovent Class 9



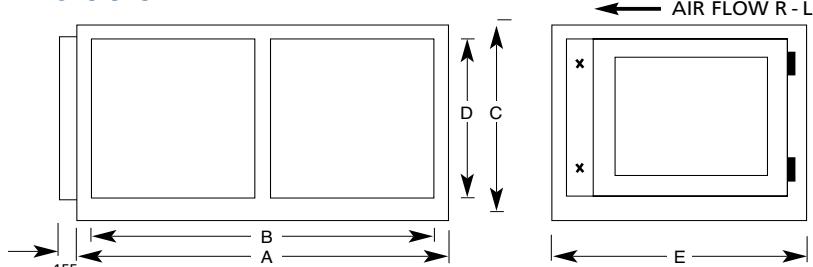
## Standards

The ESP Units comply with current IEE, CE and other European standards, including the Health and Safety at Work Act. Rated to IP 53.

## Controls

A separate enclosure houses the HT supply, and operation indicators. We can also offer remote control of the system and integrated plc fault reading which will text or send an e-mail if a fault is detected. Please discuss additional control systems when ordering or planning a project!

## Dimensions



ESP 1500	E	AW	ESP 3000	E	AW	ESP 4500	E	AW
A - Width	450mm	450mm	A - Width	900mm	900mm	A - Width	1350mm	1350mm
B - Width	350mm	350mm	B - Width	800mm	800mm	B - Width	1250mm	1250mm
C - Height	630mm	630mm	C - Height	630mm	630mm	C - Height	630mm	630mm
D - Height	485mm	485mm	D - Height	485mm	485mm	D - Height	485mm	485mm
E - Depth	660mm	860mm	E - Depth	660mm	860mm	E - Depth	660mm	860mm

AW STATION.....	78kg
AIR VOLUME MAX.....	2500m <sup>3</sup> /h 1500cfm
ELECTRICAL SUPPLY.....	220/240V 50Hz 1ph
POWER CONSUMPTION.....	30W
WEIGHT .....	E = 55kg, AW = 68kg
MIN/MAX WORKING TEMP.....	4/56°C
MAX RELATIVE HUMIDITY .....	75%

78kg	5000m <sup>3</sup> /h 3000cfm	7500m <sup>3</sup> /h 4500cfm
2500m <sup>3</sup> /h 1500cfm	220/240V 50Hz 1ph	220/240V
220/240V 50Hz 1ph	50W	50W
30W	E = 85kg, AW = 100kg	E = 118kg, AW = 138kg
E = 55kg, AW = 68kg	4/56°C	4/56°C
4/56°C	75%	75%

Installation of grease smoke and odour equipment must be made on the negative side of the fan and the systems must be switched via an interlock to ensure they are only operational when the extract fan is operational. If there is ductwork inside the premises on the positive side of the fan please ensure that it is completely sealed so as not to let fumes or odour control compounds back into the premises. In certain instances some equipment can be installed on the positive side of the fan but please discuss this with our technical department and ask them to provide a design statement to confirm that it can be done.

**purifiedair**<sup>®</sup>  
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