

31 Coombe Rd Extraction Information and Specification

Report Prepared by Colin Smith of Kent Commercial Kitchens LTD

Canopy

It is proposed that one wall type canopy island mounted(extract only) with full length extract plenums fitted with stainless steel baffle type grease filters will be provided in the kitchen. The canopy is to be constructed from grade 304 satin finish stainless steel with all joints and seams welded and/or liquid tight. Removable stainless steel grease collecting drawers are to be provided within the apron of the filter housing. The canopy is to be fitted with welded hanging cleats to each corner and pre-drilled to accept M10 drop rods. The anticipated total ventilation rates have been calculated using the thermal convection method as per the attached sheet below

Extract rate of 0.59m³s or 2124m³h

The canopy is to conform fully to the standards and specifications of HVCA Specification for Kitchen Ventilation Systems DW172. The grease filters are to comply with the requirements of LPS 1263. Extract System It is proposed that the kitchen will be served by a single 400 max fan compac extract fan additional attenuation along with an acoustic louvre is required as per the attached Sound Licensing noise report. The fan will be located internally, the proposed extract fan will be suspended on AV mounts fixed to the ceiling within the shop. Having used the EMAQ Guidance on the Control of Odour For Commercial Kitchen Exhaust Systems it has been deemed that there is a very high level of odour control needed.

Odour Control

The proposal is to go for a multi-layer of odour as follows-

1. Extechnology UVC unit rated at 1.5m³s
2. RydAir 2500 ESP unit rated at 0.69m³s
3. Jasun carbon filters DCS240824 rated at 0.117 each cell at 0.1s residency the required residency required is 0.4s for very high level of odour control this will require 21 individual cells as follows- $0.59 / 0.117 = 5.04$ cells at 0.1s so $4 \times 5.04 = 20.16$ cells 0.4s residency.

All odour control items will be hung from the ceiling and will be fitted AV mounts to stop transmission through the building.

Pressure Loss

Total pressure loss in Pa is as follows

1. Canopy Baffle Filters 60Pa
2. Ductwork 65Pa
3. UVC no Pa
4. ESP 80 Pa
5. Carbon Blocks 120Pa

Total pressure loss of 325Pa when clean

It is predicted that the total pressure loss when dirty will be a maximum of 40% increase with the correct maintenance schedules. Total loss when dirty 455Pa

The specified fan is capable of 0.78m³s at 500Pa.

Please see below for all the documents noted within this report.

Maintenance and System Cleaning

1. The canopy baffle filters will be cleaned a minimum of once a week in a dishwasher.
2. The UVC light bulbs will need replacing after 12000 hrs use.
3. The ESP cells will need exchanging between 2-4 week intervals depending of the level of trade.
4. Carbon blocks will need to be changed yearly but should be inspected monthly for the first year to determine this.
5. Ductwork should be cleaned to TR19 and a minimum of yearly intervals.

Any questions relating to this document please contact colin Smith on 07808599883.

Appendix 3: Risk Assessment for Odour

Odour control must be designed to prevent odour nuisance in a given situation. The following score methodology is suggested as a means of determining odour control requirements using a simple risk assessment approach. The odour control requirements considered here are consistent with the performance requirements listed in this report.

Impact Risk	Odour Control Requirement	Significance Score*
Low to Medium	Low level odour control	Less than 20
High	High level odour control	20 to 35
Very high	Very high level odour control	more than 35

* based on the sum of contributions from dispersion, proximity of receptors, size of kitchen and cooking type:

Criteria	Score	Score	Details	
Dispersion	Very poor	20	γ	Low level discharge, discharge into courtyard or restriction on stack.
	Poor	15		Not low level but below eaves, or discharge at below 10 m/s.
	Moderate	10		Discharging 1m above eaves at 10 -15 m/s.
	Good	5		Discharging 1m above ridge at 15 m/s.
Proximity of receptors	Close	10	γ	Closest sensitive receptor less than 20m from kitchen discharge.
	Medium	5		Closest sensitive receptor between 20 and 100m from kitchen discharge.
	Far	1		Closest sensitive receptor more than 100m from kitchen discharge ¹ .
Size of kitchen	Large	5	Y	More than 100 covers or large sized take away.
	Medium	3		Between 30 and 100 covers or medium sized take away.
	Small	1		Less than 30 covers or small take away
Cooking type (odour and grease loading)	Very high	10	γ	Pub (high level of fried food), fried chicken, burgers or fish & chips. <i>Turkish, Middle Eastern or any premises cooking with solid fuel</i>
	High	7		Vietnamese, Thai, Indian, <i>Japanese, Chinese, steakhouse</i>
	Medium	4		<i>Cantonese, Italian, French, Pizza (gas fired),</i>
	Low	1		Most pubs (<i>no fried food, mainly reheating and sandwiches etc</i>), <i>Tea rooms</i> ¹

Note 1: A planner may take a pragmatic view when assessing whether certain low risk kitchens require any odour abatement to be fitted. In reaching this decision the Planner may consider the nature of the food being cooked and/or the size of kitchen and/or its location.

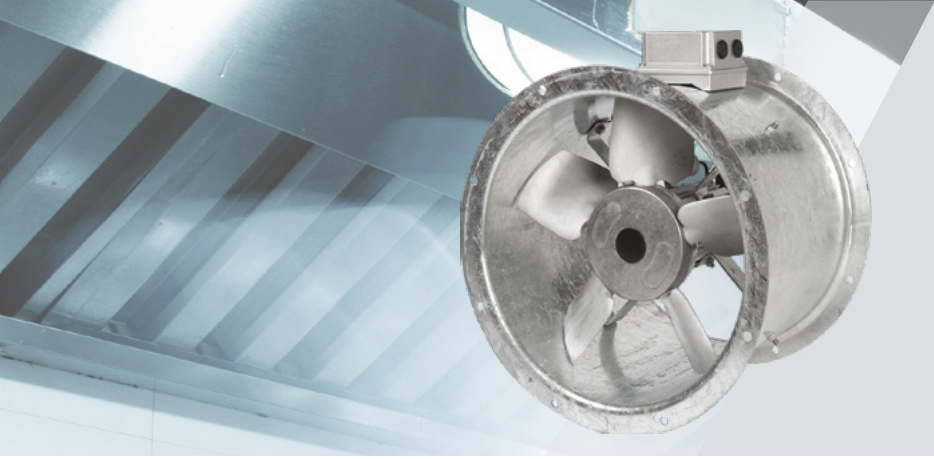
Total Assessed at 38 very high level of odour control needed

WOODS

MAXFAN COMPAC CATALOGUE



Application Support: Kitchen Supply / Extract Fans



JM AEROFOIL

The highest air volumes/performance in its class suitable for low to medium pressures, 2 pole and 2 stage variants available for high pressures. Suitable for both internal and external installation as standard, manufactured using mild steel and hot dipped galvanised finish to give high resistance to corrosion, suitable for speed control for on demand ventilation, easy installation & maintenance.

PLATE FANS

Our JM Platemounted fan features an aluminium adjustable fixed pitch impeller manufactured for greater performance. Available in sizes 315 to 1000mm in diameter it is suitable where low pressures and high air volumes are required.

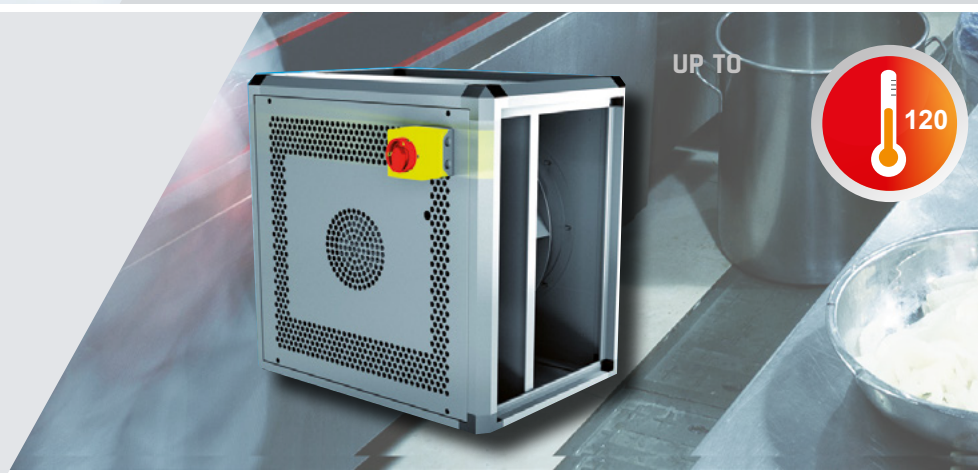


MAXFAN²

Our high pressure Maxfan is suitable for both Internal and external Installation, manufactured using mild steel and hot dipped galvanised finish to give high resistance to corrosion, suitable for speed control, easy Installation & maintenance.

ESTOC TARGE

The Estoc Targe is available in the same range of sizes as the ePowerBox, and covers duties up to 5.8³/s flow rate and 1450Pa. Available in both AC or EC in 230v single phase or 400v three phase dependant on unit size.



EXTRACT AND SUPPLY SOLUTIONS OPTIMISING VENTILATION FOR COMMERCIAL KITCHEN APPLICATIONS

Whether your requirement is for a small takeaway shop or a large restaurant Woods have the solution within our extensive portfolio of supply & extract fans. We understand the importance of ventilation systems for a safe and comfortable kitchen environment which is why our solutions incorporate a variety of features including **removal of day to day smells, smoke extract, high temperature operation, fully speed controllable, option with the motor located out of air stream.** All with a robust and reliable construction.

UP TO



JM BIFURCATED

High quality fan designed to withstand continuous hot temperatures and with a protected motor that does not get exposed to any particles within the airstream. The bifurcated fan can withstand continuous temperatures of 200°C, ideal for solid fuel cooking applications. Available in both 230V single phase and 400V three phase dependant on unit size.

KATANA EC

Our highly adaptable kitchen extract and supply box unit offering an efficient performance and highly reliable robust construction. Available in six standard sizes covering a flow range up to 3.3 m³/s and system pressures up to 877Pa.



MAXFAN COMPAC

The Maxfan Compac has been designed for kitchen canopy systems fan offers you high performance, full inverter control, operating temperature up to 80°C dependant on fan size, easy installation & maintenance, compact robust lightweight design. Available in a range of sizes from 315 - 630mm.

ePOWERBOX

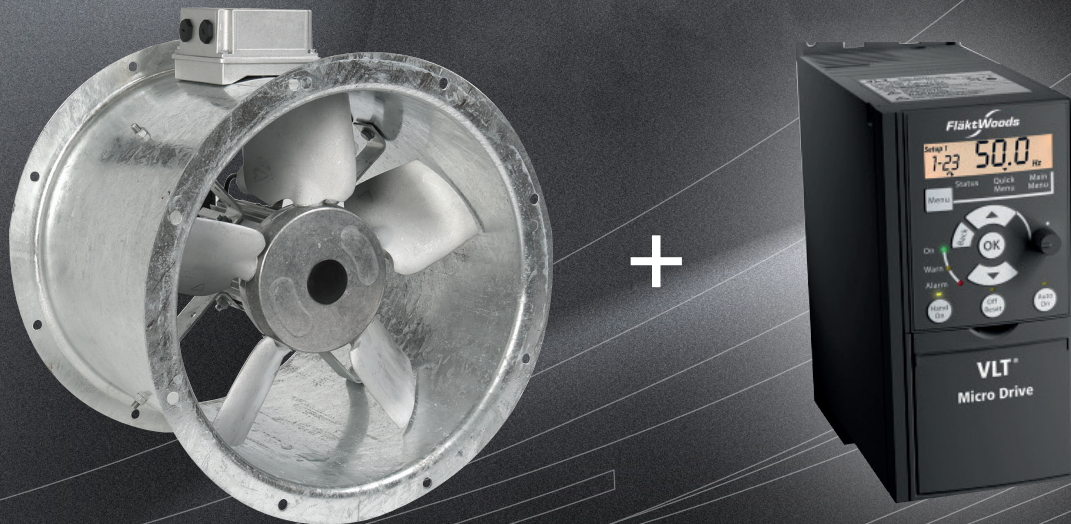
Suitable for medium to higher air flow volumes against high pressures in ventilation systems, speed is 100% infinitely variable, low noise levels with acoustic insulation, manufactured using galvanised sheet steel. Can be installed in axial orientation or any 90° discharge.



INTRODUCING THE MAXFAN COMPAC THE NEW MAXFAN COMPAC DESIGNED FOR THE KITCHEN CANOPY MARKET OFFERING HIGH PRESSURE & PERFORMANCE, WITH QUALITY YOU CAN TRUST.....

The MaXfan Compac reinforces the high quality products that Fläkt Woods has provided over the years. The MaXfan Compac fan offers you; High Performance, Full Inverter Control, Operating temperature up to 80°C*, Easy Installation & Maintenance, Comparable noise levels, Compact robust lightweight design, DW172 Compliance and is available in stock for next day delivery.

The MaXfan Compac has been developed with our customers in mind, looking after you is our priority. Fläkt Woods incorporates the Woods Range of Distribution fans, your number 1 supplier of ventilation equipment in the UK.



THE PERFECT COMBINATION

*dependent on the fan size, please refer to the specific fan technical page



HIGH PERFORMANCE CASED AXIAL MAXFAN COMPAC

PRODUCT FACTS

- Volumes up to 4.9m³/s
- Static Pressures up to 900 Pa (Non-stalling characteristic)
- Fans tested to ISO5801 and BS848
- High efficiency energy saving IE2 motor
- Low breakout noise levels
- Motor protection and terminal block IP55 (DW172 & Defra Compliant)
- Ambient temperatures up to 80°C (dependent on size)
- Overheat protection as standard
- Compact robust light weight construction
- Galvanised casing for high corrosion resistance
- Full inverter control and flexibility

ELECTRICAL SUPPLY

230v/50Hz/1 Ph (3 Ph Motor) - L Type

TEMPERATURE RANGE

Suitable for temperatures up to 80°C*

*dependent on the fan size, please refer to the specific fan technical page.

SIZES

315, 355, 400, 450, 500, 560 and 630 mm

IMPELLERS

A unique high efficiency aerofoil section blade with a smoothed hub and clamp plate offers a high efficiency solution.

The Fläkt Woods impellers are all high pressure die cast to offer thin aerofoil sections for low generation of noise. Every cast aluminium component is X-ray examined using Real Time Radiography inspection prior to assembly. The maximum pitch angles shown allow for speed control by frequency inverter.

MOTORS

All motors are totally enclosed air stream rated with class F insulation. Constructed from aluminium or cast iron as standard with special pad mounted fixings. Although this product incorporates a three phase electric motor, by using a matched inverter solution it is suitable for use with a single phase electrical supply on site. In addition, using a frequency inverter allows the speed to be turned down to 20% of maximum speed. Suitable for horizontal or vertical shaft operation. Supplied IP55, with removable drain plugs.

Sealed for life bearings lubricated with wide temperature range grease. The complete range of motors are fitted with Thermistor DHP as standard. Motors are IE2 efficiency class as standard.



CASING

The MaXfan Compac is available with a galvanised casing, complete with an externally mounted pre-wired electrical terminal box. Casings are spun from sheet steel with integral pre-drilled and radiused inlet flanges. The galvanised finish gives a high resistance to corrosion and is ideal for external as well as internal use.

PRODUCT CODE

40 MaXfan Compac

- 40 - denotes the fan impeller diameter in centimetres



Mounting Feet



Rubber AV's



Flexible Connector & Clips



0-10v Potentiometer



Silencer B1D/B2D Standard & Melinex



Matching Flange



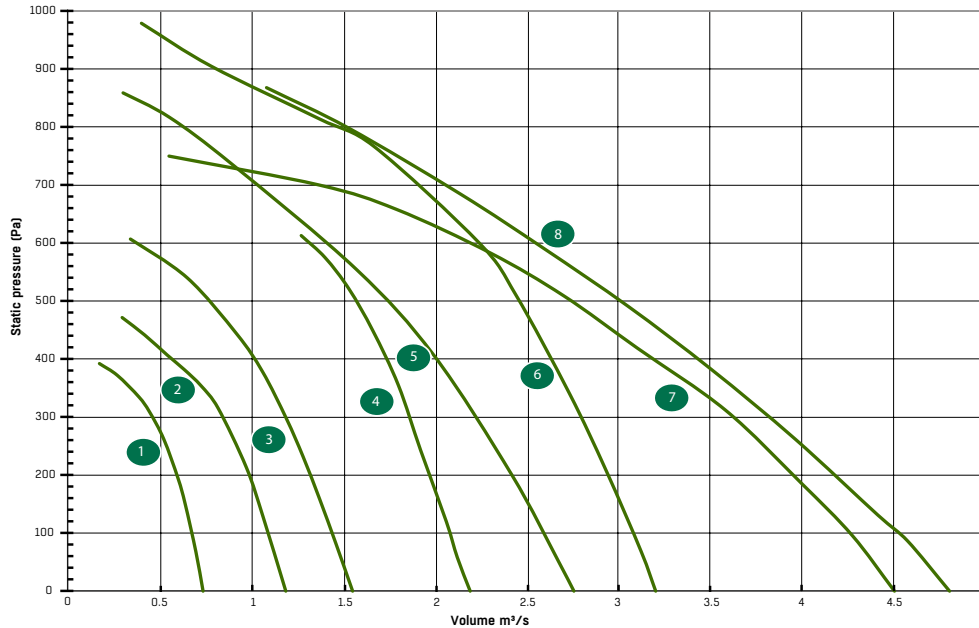
Damper



Acoustic Jacket

MAXFAN COMPAC PRODUCT PERFORMANCE & ELECTRICAL DATA

220-240V/50HZ/1 ϕ L TYPE PERFORMANCE CHART



PERFORMANCE TABLE

Ref	Part Number	Fan Description	m ³ /s @ Pa (Static)											
			0	50	100	200	300	400	500	600	700	800	900	
1	EJ313266	31 MaXfan Compac	0.74	0.71	0.68	0.59	0.46							
2	EJ353266	35 MaXfan Compac	1.19	1.14	1.09	0.99	0.85	0.57						
3	EJ413456	40 MaXfan Compac	1.55	1.49	1.44	1.31	1.18	1.02	0.78	0.41				
4	EJ463266	45 MaXfan Compac	2.19	2.14	2.07	1.98	1.87	1.74	1.58	1.33	0.89	0.6	0.35	
5	EJ513255	50 SC MaXfan Compac	2.77	2.67	2.59	2.42	2.23	1.99	1.72	1.4	1.04	0.61		
6	EJ513266	50 MaXfan Compac	3.21	3.15	3.09	2.97	2.78	2.64	2.47	2.25	2.00	1.48	0.81	
7	EJ563236	56 MaXfan Compac	4.54	4.4	4.22	3.96	3.62	3.24	2.78	2.25	1.33			
8	EJ623236	63 MaXfan Compac	4.87	4.66	4.52	4.19	3.81	3.44	3.00	2.51	2.1	1.53	0.79	

PRODUCT AND ELECTRICAL TABLE

Ref	Part Number	Fan Description	Temperature (°C)	Frame	kW	Max Input Amps	FLC (A)	SC (A)	Phase	Voltage	Inverter Model	Wiring Diagram	Breakout Sound Level dB(A) @ 3m	Fan Weight (kg)	Casing Length (mm)
1	EJ313266	31 MaXfan Compac	80	80	0.9	11.6	3.3	18.7	1	230	4.2	CD3042	45	33	375
2	EJ353266	35 MaXfan Compac	80	80	0.9	11.6	3.3	18.7	1	230	4.2	CD3042	45	33	375
3	EJ413456	40 MaXfan Compac	80	80	1.32	18.7	5.1	25.5	1	230	6.8	CD3042	40	35	375
4	EJ463266	45 MaXfan Compac	55	80	1.32	18.7	5.1	25.5	1	230	6.8	CD3042	43	37	375
5	EJ513255	50 SC MaXfan Compac	65	80	1.73	18.7	6.3	35.5	1	230	6.8	CD3042	49	32	375
6	EJ513266	50 MaXfan Compac	65	90	2.64	26.4	9.4	52.8	1	230	9.6	CD3042	48	51	520
7	EJ563236	56 MaXfan Compac	70	90	2.64	26.4	9.4	52.8	1	230	9.6	CD3042	48	55	520
8	EJ623236	63 MaXfan Compac	55	90	2.64	26.4	9.4	52.8	1	230	9.6	CD3042	50	61	520

For ErP efficiency ratings and grades please refer to our Fan Selector for more information. For speed controllers please see pages 250-297.

Sound pressure levels quoted are at the inlet, and are average dBA at 3m distance over a sphere at the mid point at the highest angle given, under free field conditions. These are presented for comparative purposes only.

Products in **bold** are available from our UK Distributors on next day delivery, if ordered by 4pm. Please call to confirm availability on 01206 222 580.



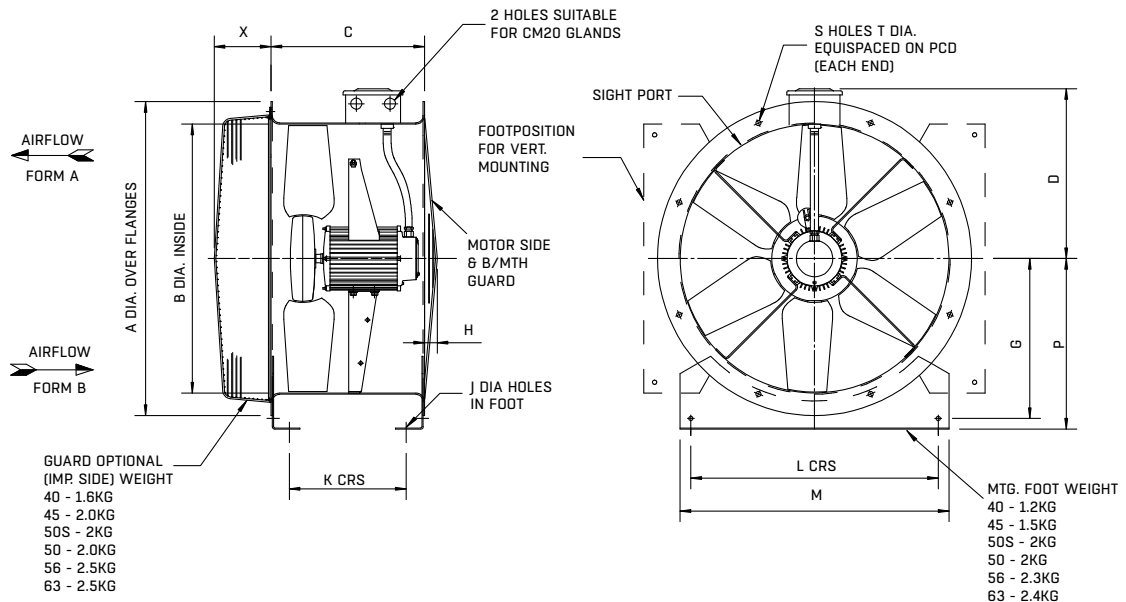


SOUND DATA - MAXFAN COMPAC

Fan Description	Ps Sound data at	Pa Static		Sound Spectrum (Hz)								Overall	
				63	125	250	500	1k	2k	4k	8k	Lw*	LpA @ 3m**
31 MaXfan Compac	0.53 m3/s	252	Inlet*	81	79	80	82	80	76	71	66	88	63
31 MaXfan Compac	0.53 m3/s	252	Outlet*	83	80	81	82	80	77	72	67	89	64
31 MaXfan Compac	0.53 m3/s	252	Breakout*	73	68	64	66	61	53	51	47	75	45
35 MaXfan Compac	0.84 m3/s	302	Inlet*	82	80	84	83	80	77	73	69	89	65
35 MaXfan Compac	0.84 m3/s	302	Outlet*	83	80	85	84	81	78	74	69	90	65
35 MaXfan Compac	0.84 m3/s	302	Breakout*	74	68	68	67	60	54	53	51	76	47
40 MaXfan Compac	1.32 m3/s	200	Inlet*	75	76	82	79	78	77	74	70	86	63
40 MaXfan Compac	1.32 m3/s	200	Outlet*	77	77	85	80	79	77	75	71	88	64
40 MaXfan Compac	1.32 m3/s	200	Breakout*	67	62	65	59	53	48	50	48	70	40
45 MaXfan Compac	1.86 m3/s	300	Inlet*	78	81	88	82	80	80	78	75	91	66
45 MaXfan Compac	1.86 m3/s	300	Outlet*	79	81	88	82	81	80	79	77	91	67
45 MaXfan Compac	1.86 m3/s	300	Breakout*	69	63	66	59	56	52	57	53	72	43
50 SC MaXfan Compac	2 m3/s	400	Inlet*	81	82	89	85	87	87	83	79	95	72
50 SC MaXfan Compac	2 m3/s	400	Outlet*	81	82	91	86	87	87	85	81	96	73
50 SC MaXfan Compac	2 m3/s	400	Breakout*	71	64	69	63	62	59	63	57	75	49
50 MaXfan Compac	2.63 m3/s	400	Inlet*	83	79	87	88	86	85	81	78	94	71
50 MaXfan Compac	2.63 m3/s	400	Outlet*	85	79	90	89	86	86	81	79	95	72
50 MaXfan Compac	2.63 m3/s	400	Breakout*	75	61	68	66	61	58	59	55	77	48
56 MaXfan Compac	3.22 m3/s	400	Inlet*	86	93	88	90	88	85	79	77	97	72
56 MaXfan Compac	3.22 m3/s	400	Outlet*	87	95	89	90	88	85	80	79	98	72
56 MaXfan Compac	3.22 m3/s	400	Breakout*	77	74	63	65	63	58	61	55	79	48
63 MaXfan Compac	3.4 m3/s	400	Inlet*	85	95	93	91	87	84	83	81	99	72
63 MaXfan Compac	3.4 m3/s	400	Outlet*	86	98	94	91	87	85	84	83	100	73
63 MaXfan Compac	3.4 m3/s	400	Breakout*	76	77	68	66	62	58	65	59	80	50

*Lw dB re 10⁻¹² W**dBA re 2x10⁻⁵ Pa

DRAWING - MAXFAN COMPAC



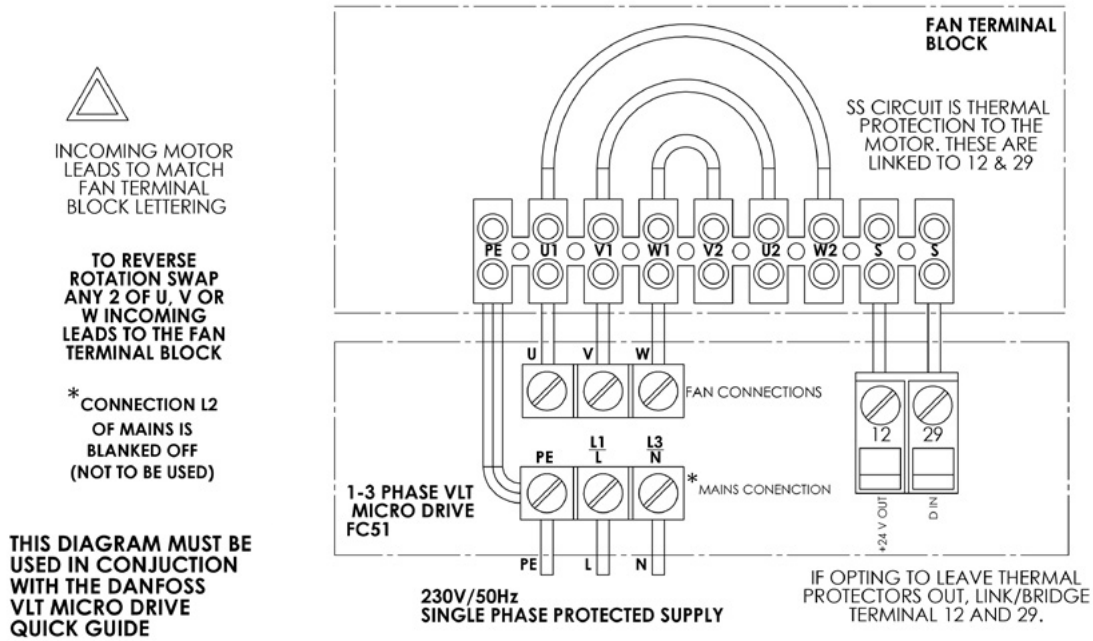
Product Code	Motor Frame	A	B	C	D	G	H	J	K	L	M	P	S	T	x	Weight (kg)
31 Maxfan Compac	80	395	315	375	229	200	30	10	285	265	315	200	8	10	137	33
35 Maxfan Compac	80	435	355	375	249	225	30	10	285	305	355	225	8	10	137	33
40 Maxfan Compac	80	480	400	375	279	225	30	10	290	350	400	250	8	12	137	35
45 Maxfan Compac	80	530	450	375	306	255	30	10	290	400	450	280	8	12	137	37
50 SC Maxfan Compac	80	594	500	375	338	290	30	10	290	450	500	315	12	12	137	32
50 Maxfan Compac	90	594	500	520	338	290	30	10	290	450	500	315	12	12	137	51
56 Maxfan Compac	90L	654	560	520	368	330	50	10	434	510	560	355	12	12	137	55
63 Maxfan Compac	90S	724	630	520	403	375	50	10	434	580	630	400	12	12	137	61



WIRING DIAGRAMS - MAXFAN COMPAC

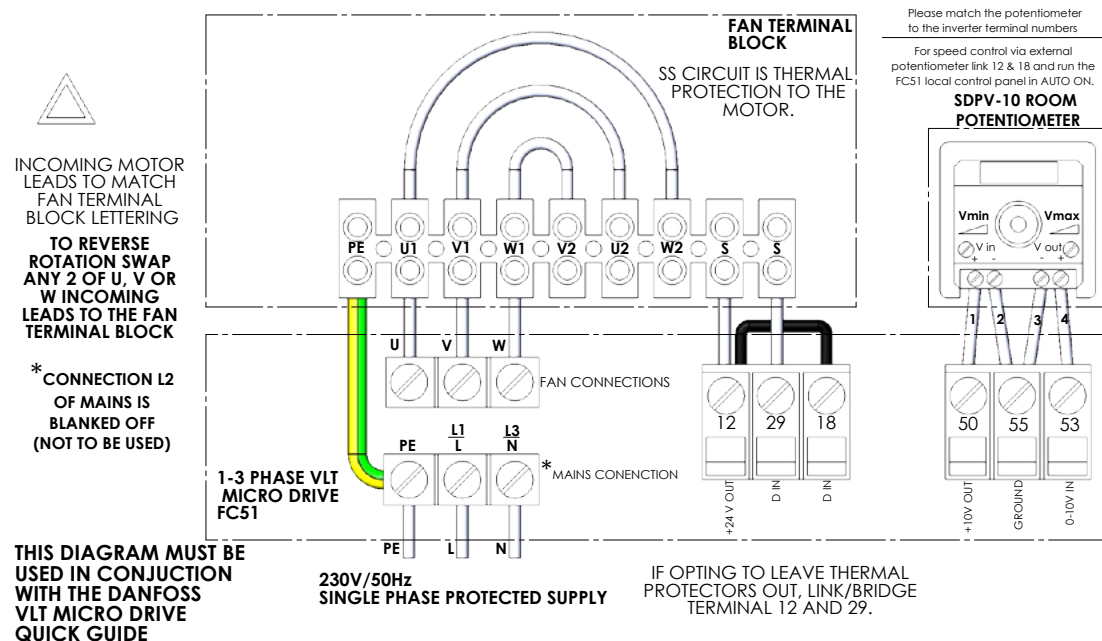
CD3042 - MAXFAN COMPAC

Mode - On hand (Speed controlled via the up and down arrows on key pad)



CD3043 - MAXFAN COMPAC INCLUDING POTENTIOMETER

Mode - Auto (Speed controlled via 0-10 volt potentiometer)



The Maxfan Compac can also be fitted using a remote switch connected between 12 & 18

INVERTER SINGLE TO THREE PHASE

FEATURES & BENEFITS

- 1 Ph 200-240VAC to 3 Ph 200-240 VAC electrical supply
- Pre-Programmed for easy installation
- Max shielded cable length 25m
- Asynch motor speed control
- Ultra compact & light making it easy to install
- Simple to use Alpha-numeric display
- Included fitted potentiometer for manual speed adjustment
- Connectable as Modbus RTU offering control flexibility
- Built in RFI filter minimising interference
- Built-in brake functions with built in DC and AC brake functions
- 2xAI, 1xAO & 1xRO / RS485 connection options
- BMS enable/disable
- Maximum operating ambient 50°C
- Coated PCB standard for harsh environments
- High energy efficiency

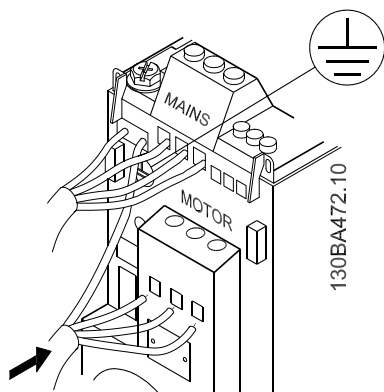
DESCRIPTION

Our inverter is a frequency converter with unsurpassed reliability, user-friendliness, condensed functionality, and extremely easy to commission. Terminal numbers are named in the same manner as in the rest of the family, making installation easy.

It converts a single phase 200-240 VAC input into a three phase output to allow the MaXfan Compac product to use a high efficiency 3Ph, 230V motor.

A safety isolator/switch disconnecter should be installed on the mains side of the drive to ensure that the mains supply can be isolated for maintenance.

Please see the image below, illustrating the connections on the bottom of the inverter drive.

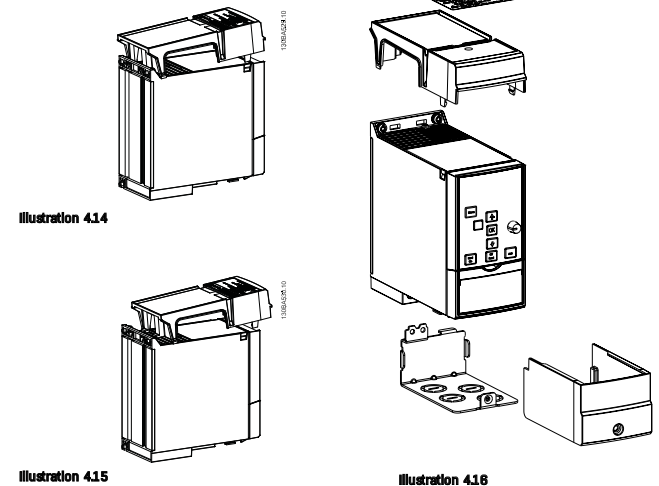


RANGE

There are three matched inverters that are specifically designed to use with our MaXfan Compac fan range. Details are shown below.

Part Number	Inverter Model	Ph.	V	Amps	kW	Enc.
PK901092	4.2	1-3	200-240V	4.2	0.75	M1
PK901090	6.8	1-3	200-240V	6.8	1.5	M2
PK901091	9.6	1-3	200-240V	9.6	2.2	M3

Step 1
Fit top cover on frequency converter.

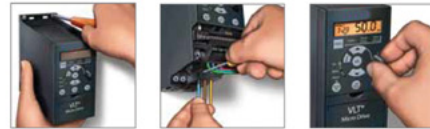




INVERTER - QUICK INSTALLATION GUIDE

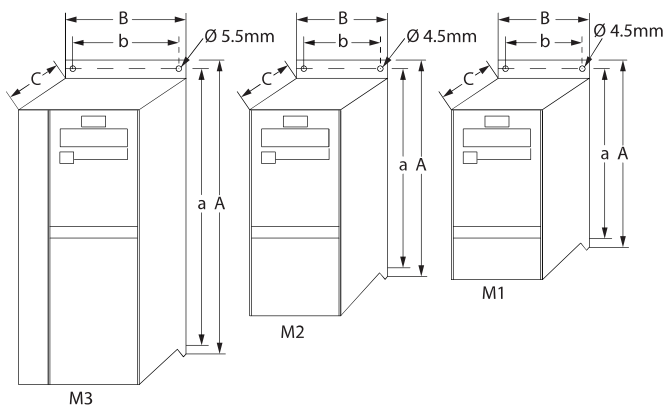


Ready - Steady - Go!
 Connect motor and power cables, turn the control knob,
 and watch the motor speed change.



RoHS compliant
 The VLT® Micro Drive does not contain lead,
 cadmium, hexavalent chrome, mercury,
 or flame retardant PBB and PBDE.

INVERTER - TECHNICAL & DRAWING DETAILS



Part Number	Inverter Model	Enc.	Ph.	V	Amps	kW	Power [kW]	Height [mm] A (incl. conversion kit)	Width [mm]		Depth [mm] C	Max. Weight kg
							1x200-240 V		B	b		
PK901092	4.2	M1	1-3	200-240V	4.2	0.75	0.75	219.3	70	55	148	1.1
PK901090	6.8	M2	1-3	200-240V	6.8	1.5	1.5	245.6	78	59	144	1.6
PK901091	9.6	M3	1-3	200-240V	9.6	2.2	2.2	297.5	95	69	210	3

WE BRING **BETTER AIR**[™] TO LIFE

Flakt Woods' new Woods range offers over 100 years of experience in ventilation within the UK. The Woods brand formerly Woods of Colchester is one of the most if not THE most recognised name within the UK and the world with regard to ventilation. Since our formation in 1909 we have been a pioneer in ventilation and are a name you can trust and rely on.

Within our Woods range you can buy quality products manufactured at our state of the art manufacturing facilities in Colchester and around the world. Choose from an extensive range of products that are stocked and available next day (if ordered by 4pm) and speak to an expert team that will work around the clock to assist you.

Email

woodsuk@flaktgroup.com

Website

www.flaktwoods.co.uk/woods

Twitter

@Woods_Fans_UK

» To learn more about our offering and get in contact with your nearest sales representative please visit www.flaktwoods.co.uk/woods

AIR MOVEMENT - FANS CENTRE OF EXCELLENCE

Axial Way, Colchester, Essex. CO4 5ZD Tel: +44 (0)1206 222555

WWW.FLAKTWOODS.CO.UK/WOODS

MAXFAN COMPAC | 20180716





Ecovent UNIT

Controlling Kitchen Extract Emissions

- ✦ Low capital and maintenance cost
- ✦ Dramatically reduces grease and odour within a kitchen extract environment
- ✦ Reduces duct cleaning requirement
- ✦ Helps to prolong life of extract fan motors and belts
- ✦ Tested to BSEN 13725:2003
- ✦ 250 successful installations throughout the UK

Easy Maintenance

- ✦ "Smart control" offers status display
- ✦ Simple design protects the UV tube
- ✦ Reliable quartz bulb lasts 12,000 hours
- ✦ Safety interlocks prevent UV exposure

Installation

- ✦ Quick and easy installation
- ✦ Small design promotes flexibility in installation
- ✦ Fits onto all canopy types
- ✦ Fits onto an extract duct
- ✦ No noise
- ✦ Stainless steel construction
- ✦ No pressure drop



Product Description

Product Market	International
Approvals/Listing	CEETL Sanitation
UV Wavelength	185nm and 254nm
Efficiency	Up to 75% Grease Control Up to 85% Odour Control
General	Units can be joined together to increase volume or efficiency



Dimensions & Weight

Length	253.5mm
Depth	313.8mm
Height	558.3mm
Unit Weight	13.61kg

Operating Conditions

MAX Operating Temp.	37.8°c
Air volume	1.5 C/M/S

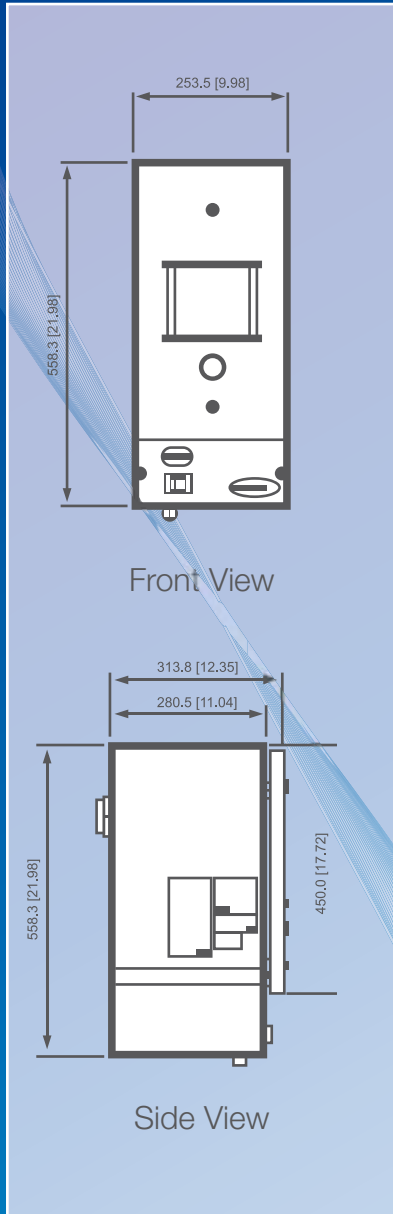
Electrical

Product Market	International
Voltage	230VAC
Phase	1
Cycle/Hertz	50Hz
Amp Draw	0.6 Amp
UV Lamp Type a	Single 135Watt Quartz - 12,000 hour life

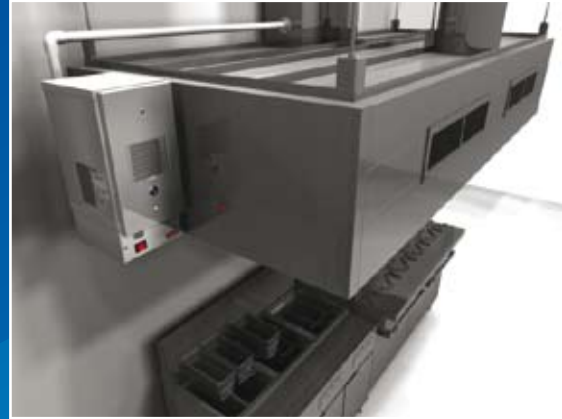


Ecovent UNIT

Dimensions



Installation Options



Ecovent on canopy hood



Ecovent on shelf hood



Ecovent on Extract duct



RY2500

Electrostatic Air Cleaner (Without Blower)



Industrial grade electrostatic air cleaner for collection of dry and wet particulates like dust, oil mist, grease cooking fumes etc.

Typical application include Commercial kitchen exhaust, factories, workshops, CNC machine shops etc



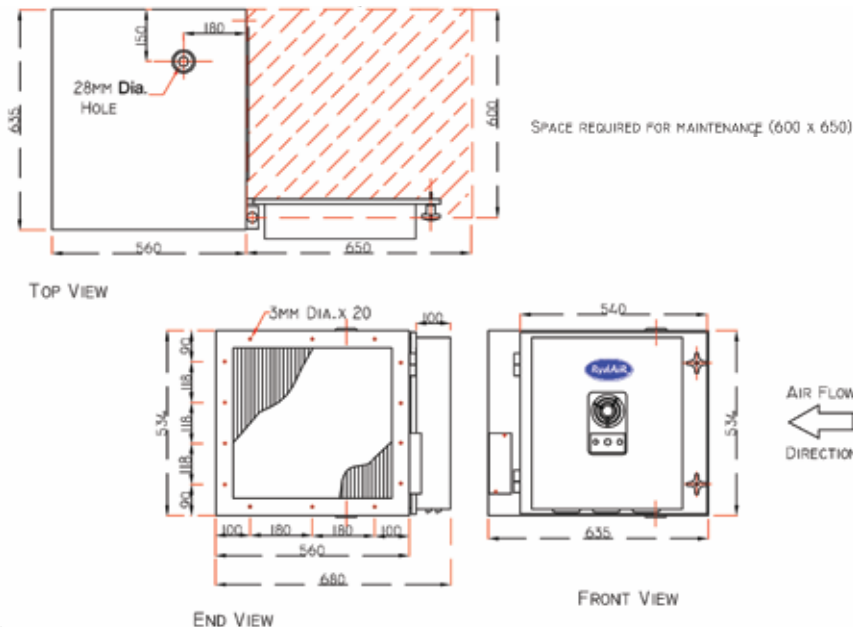
SPECIFICATIONS

Unit	H : 534mm, W : 680mm, L : 635mm
Cabinet	1.2mm Electro Galvanized Steel
Finishing	Powder Coated, Dark Blue
Weight	55 Kg
Air Volume (Max)	2500 CMH / 1500 CFM / 695 L / Sec
Air Flow	Left to Right, Right to Left
Static Pressure Req'd	80 Pascal
Operating Voltage	220 Vac +/- 10%, 50 Hz (Single phase)
Features	Short circuit, arc protection and auto power restore for Power Pack
Efficiency	Up to 95% ASHRAE 52.1, meets NIOSH 5026 Oil Mist Test (National Institute for Occupational Safety and Health)
Particle Size	Collects particles as small as 0.01 microns
Controls	Auto cut-off switch when door is opened. Indicator lights for fault, normal or wash function

Cell	H : 480mm, W : 550mm, L : 340mm Weight : 15 Kg Ionizing voltage : 12 KVdc Collector voltage : 6 KVdc Comprising 9 ionizing wires & 25 collection plates. Face Area is 0.264 sqm. Effective collection area is 5.98 sqm
Power consumption	50 Watts max
Pre-filter	Aluminum mesh, washable
Installation	Ceiling suspended, wall or frame mounted
Remote Monitoring	Built in Building Management Control System (BMS) Terminals provided.
Options	Fitted with 1 UVC Ozone Lamp, downstream from the Collection Cell (RY2500-UVC03)

UVC Ozone Lamp Specifications:	
Length	415mm, U Shaped Lamp High Output Type.
Wattage	65 Watts
No of Lamps	1
LampLife	9000 Hours
Application	Odour Abatement

DIMENSIONS





Sitesafe Discarb Units

General Description

Standard Discarb multipanel carbon units have been in circulation for over 30 years and there are many tens of thousand of units in service today. These filters are very heavy and nearly always installed in situations with very poor access.

With the new appreciation of risk which we have in the 21st Century it has become apparent that these units represent a real danger to health and potentially offer risk in the work place when a filter change is required.

The new Sitesafe Discarb cells provide exactly the same filter performance with a set of filters which will retrofit exactly for an existing full size cell.

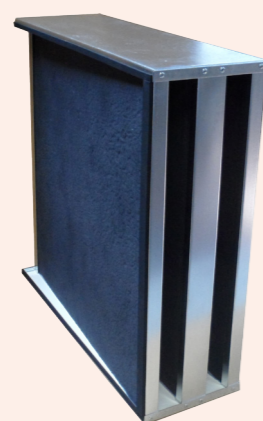
Will require two people plus lifting gear to carry and install



Discarb DC242424

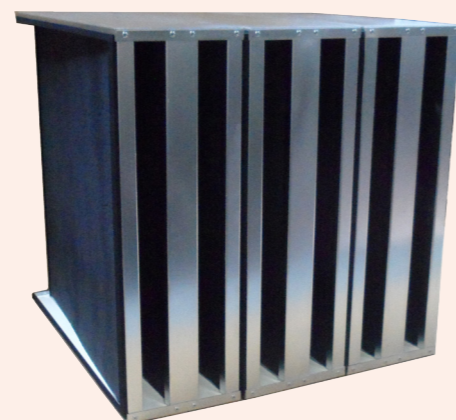
Size 594x594x597
Gross Weight 68.2Kg
Carbon Weight 50kg
Rated Airflow 3800m³/hr*
Pressure Drop 120Pa

Safe for one person to carry, no special lifting gear required.



Sitesafe DCS240824

Size 594x196x597
Gross Weight 17.95Kg
Carbon Weight 16.6kg
Rated Airflow 1266m³/hr*
Pressure Drop 120Pa



Sitesafe 3xDCS240824

Size 594x594x597
Gross Weight 53.85Kg
Carbon Weight 50kg
Rated Airflow 3800m³/hr*
Pressure Drop 120Pa

Standard Sizes

SiteSafe Reference	SiteSafe Cells Needed	Retrofit Discarb	Nominal Size (Inches)	Height (mm)	Width (mm)	Depth (mm)	Weight of Carbon (Kg)	Cell Weight (Kg)	Capacity m ³ /hr
DCS080624	-	-	8 x 6 x 24	196	149	597	4.1	5.45	320
DCS120618	-	-	12 x 6 x 18	292	146	451	4.5	5.85	340
DCS120824	-	-	12 x 8 x 24	296	196	597	6.5	7.85	495
DCS180912	2	DC181812	18 x 9 x 12	445	220	297	6.5	7.85	495
DCS240612	2	DC241212	24 x 6 x 12	594	146	297	6.5	7.85	990
DCS240812	3	DC242412	24 x 8 x 12	594	196	297	8.4	9.7	633
DCS180918	2	DC181818	18 x 9 x 18	445	220	451	9.5	10.85	722
DCS240618	2	DC241218	24 x 6 x 18	594	146	451	9	10.35	685
DCS240818	3	DC242418	24 x 8 x 18	594	196	451	12	13.35	915
DCS180924	2	DC181824	18 x 9 x 24	445	220	597	12.5	13.85	950
DCS240624	2	DC241224	24 x 6 x 24	594	146	597	12.5	13.85	950
DCS240824	3	DC242424	24 x 8 x 24	594	196	597	16.6	17.95	1266

The above capacities are based on a 0.1 second dwell time. Please refer to the table below for the recommended minimum dwell times required for different applications and scale up accordingly. It should be noted that filtration performance will be improved by increasing the dwell times applied. The appropriate suffix should be added to the part number to specify the required grade e.g. DCS240824-AC

Application	Recommended Dwell Time	Grade	Suffix
Cooking - Low Odour, Tea Shop, Canteens	0.1 to 0.2 Seconds	Carbon grade Enhanced for improved performance for light catering odours	-ACO
Cooking - Moderate Odour. Pizza, Steak House, French, Italian, Pubs, Chinese, Japanese, Cantonese	0.2 to 0.4 Seconds	Enhanced Carbon grade suitable for many applications 65% Minimum CTC	-AC
Cooking High Odour, Indian, Thai, Vietnamese, Kebab	0.4-0.6 Seconds	Enhanced Carbon grade suitable for many applications 65% Minimum CTC	-AC
Cooking Very High Odour. Fried Chicken, Pubs with large fried food turnover, Fish and Chip Shops, Fast Food / Burgers	0.4-0.8 Seconds	Enhanced Carbon grade suitable for many applications 65% Minimum CTC	-AC
Reduction of Kerosene Exhaust fumes	0.1 to 0.2 Seconds	General Purpose Activated Carbon	-ACS
Reduction of Ozone	0.1 to 0.2 Seconds	General Purpose Activated Carbon	-ACS
Reduction of Diesel Fumes, including H ₂ S, SO ₂ , NOX, HCl	0.2 Seconds	Carbon Museum,Archive, Café Directive: SO2 SOX NO2 NOX Removal	-ACU
Museum and Archives	0.2 Seconds	Carbon Museum,Archive, Café Directive: SO2 SOX NO2 NOX Removal	-ACU
Mortuary / formaldehyde reduction	0.4 Seconds	Mortuary Grade, formaldehyde Removal	-ACMO

The cooking odour classes above are as classified by DEFRA in **Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems, PB10527**