

Colourfan[®] Extract

Colourfan[®] Extract
DUTIES UP TO
2.5 m³/s

HIGH EFFICIENCY SMALL VENTILATION UNITS

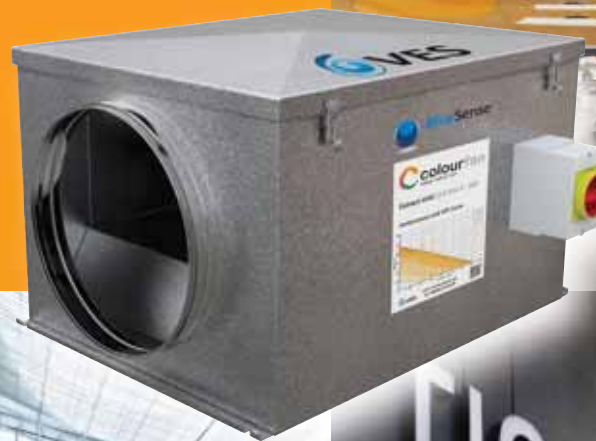
Wide range of models
for ceiling void, plantroom
and external locations

Low SFPs to achieve
L2 Building Regulations

Low energy / high
efficiency fans

Variety of control options to suit
unit requirements

All units suitable for
demand ventilation with
VES BlueSense controls package



Colourfan[®] Extract
DUTIES UP
TO 2.5 m³/s



Energy efficient, ErP compliant fans, robust case construction, low profile units, suitable for ceiling voids, plantrooms and roofs. Can be configured for top or bottom access.

Also available...

Colourfan[®]
Extract
Acoustic Units



The Colourfan Extract Acoustic high efficiency, low noise unit with duties up to 2.8 m³/s, low Specific Fan Power and low energy / high efficiency fans.

Colourfan[®]
Supply and
Supply Acoustic Units



Colourfan[®]
Twin and
Twin Acoustic Units



Colourfan[®] Extract
part of a complete range of innovative,
flexible products from the HVAC experts

Colourfan[®] Extract

Why choose VES

VES has been supplying products for the HVAC industry for over 40 years, and have the in-depth knowledge and resources to provide solutions to all ventilation related requirements. We are a substantial British manufacturing company with over 250 employees, several factories plus a regional base in the north of England, and sales engineers located throughout the UK.

Complete range of products

The product range encompasses all types of ventilation products, including those required for commercial, industrial, public and domestic buildings. The emphasis is on low energy products and sophisticated controls to meet Building Regulation requirements. The range extends from a small bathroom extract fan up to large bespoke air handling units. There are specialist heat recovery units; high temperature fans for kitchen hood extract; duct, wall, ceiling and roof units; low noise products, silencers and fitted controls.

High quality, flexible solutions

VES operates a quality assurance system to ISO 9001, monitored by the BSI. The air movement products are tested in-house to BS EN ISO 5801:2008, BS 848-1:2007 and submitted for external testing and approval when necessary. VES specialise in bespoke designs for ventilation units. Whatever the issue, be it space, noise or temperature, VES can provide a design solution to meet the requirements of the project.

Superior customer service

From the moment we receive your enquiry, to delivery and beyond; we have the people in place to give excellent customer service. The VES after sales service covers the whole of the UK and is among the best in the industry.

Experience and expertise

VES employs a range of experts in disciplines including: air movement, noise control, air conditioning, controls, electrics and product refurbishment, and we have key staff who have worked at VES for many years.

Manufactured in the UK

VES has over 12000m² of manufacturing and stores space, and has state of the art sheet metalworking equipment, plus a large powder coating plant. VES also has a substantial controls department, and makes components such as dampers and electric heaters in-house. This not only provides employment for local people, but also many suppliers around the UK.

Colourfan[®] Extract

Colourfan is a range of small air handling ventilation units from VES, including Supply, Extract and Twin Extract, designed around a single product platform, with unique and innovative benefits across the range. Installation and maintenance is simplified through quick change plug connectors and plug and play or pre-wired fitted controls.

Colourfan Extract units are the versatile solution for a range of applications. With energy efficient, ErP compliant fans, robust case construction, the low profile units are suitable for ceiling voids, plantrooms and roofs, the perfect complement to Colourfan Supply units.



Colourfan[®] Extract Features and Benefits

Energy Saving

Meet regulations, minimise noise and maximise performance.

Simple Installation and Maintenance

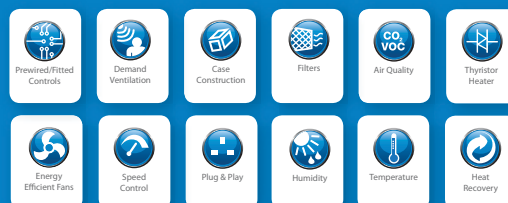
Simple connection and pre-installed features save on site costs and reduce lead times. Carefully designed maintenance features minimise downtime and total cost of ownership.

Versatile Options

Versatile location, handling and access options meet the widest range of project requirements.

Robust Construction

Excellent build quality ensures minimal noise breakout, low SFPs and air tight performance.



Energy Saving

Intelligent controls enhance performance whilst saving energy and money.



Energy Efficient
Energy efficient units with low SFPs to help achieve L2 Building Regulations. Units are fully tested to BS 848-1:2007 (airside performance) and DIN 45635-38 (acoustic performance).



Controls
BlueSense energy saving packages combine intelligent technologies with energy saving products, services and engineering expertise.



High Performance Fans
Low energy backward curved, single inlet fans for optimised performance.



Complete Ventilation Package
VES offer the expertise, products and services to provide a complete ventilation package including integrated controls and site assistance, providing peace of mind through reliable products and expert knowledge.



Easy Connections
Circular spigot connections are fitted with rubber gasket seals. Rectangular spigot connections are fitted with 30mm MEZ flange, avoiding the need for additional accessories.



Pre-wired Isolator
The unit can be pre-wired to a fitted external isolator to reduce onsite wiring requirements.



'Plug & Play' Fans
Fan motor assembly is internally anti-vibration isolated and fitted with a quick change plug connector for easy maintenance.



Multi Access
Plantroom units suitable for top and bottom access. External units suitable for top access only. Quick release lid fastenings.



Adjustable Mounting Feet
Weatherproof units are supplied with adjustable feet for uneven surfaces. Plantroom units can be supplied with optional feet.



Versatile Handings
Handings can be left or right hand side to suit site and/or installation requirements.



Low Profile
Units are low profile and ideal for ceiling void or roof space.



Excellent Construction
Rigid single skin galvanised sheet steel for sizes 0-6. Aluminium tubular frame and galvanised double skinned panels with mineral wool slab infill for sizes 7-9.



Powdercoat Options
External units are powder coated Signal Grey to RAL7004 as standard, with many other colours available.

BlueSense Energy Saving Package



Colourfan Unit with Integral Controls



Optional Integral Speed Controller



Optional Air Quality Sensor



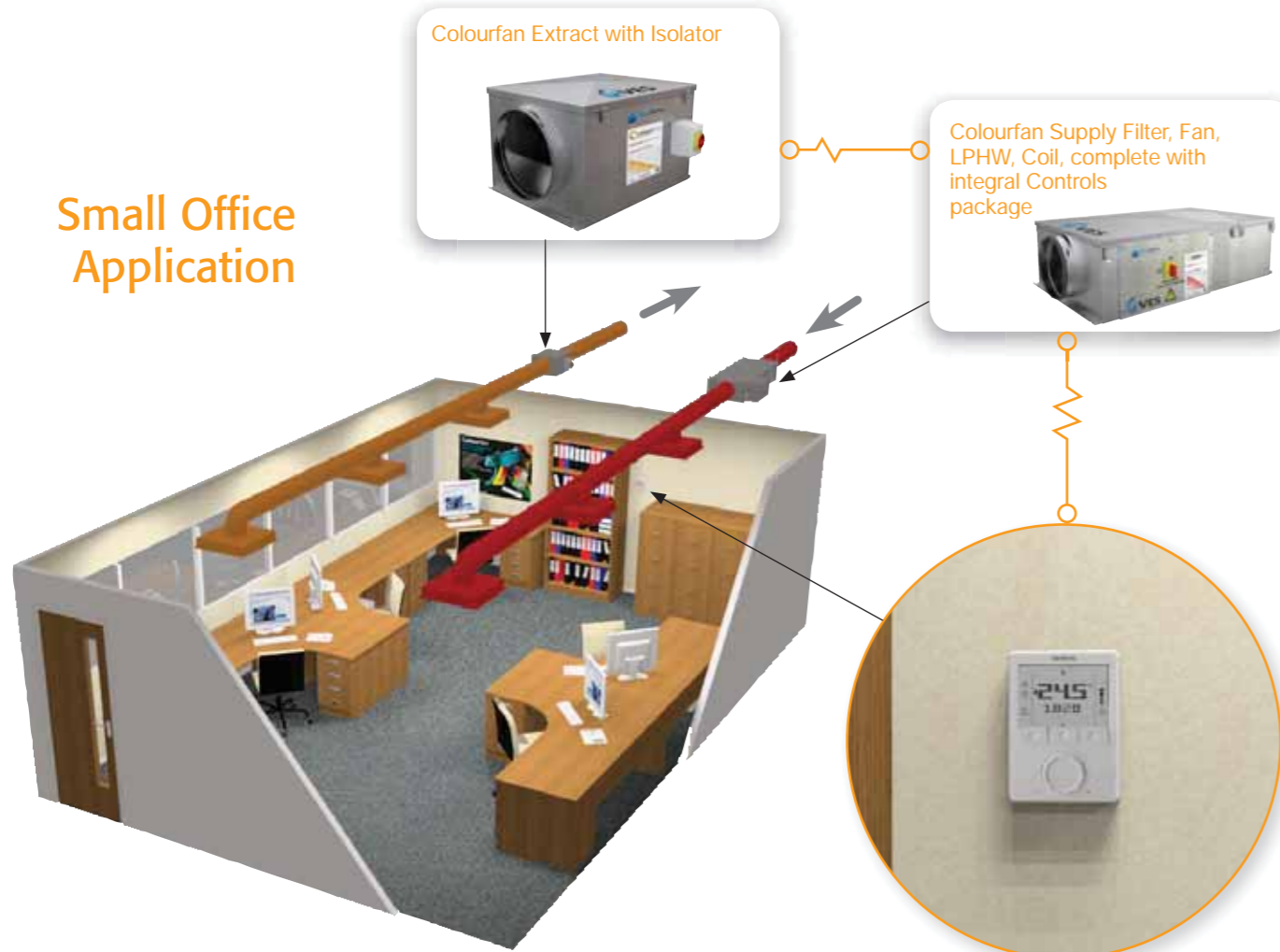
The sign of energy saving products, services and expertise

For more information refer to pages 28-29

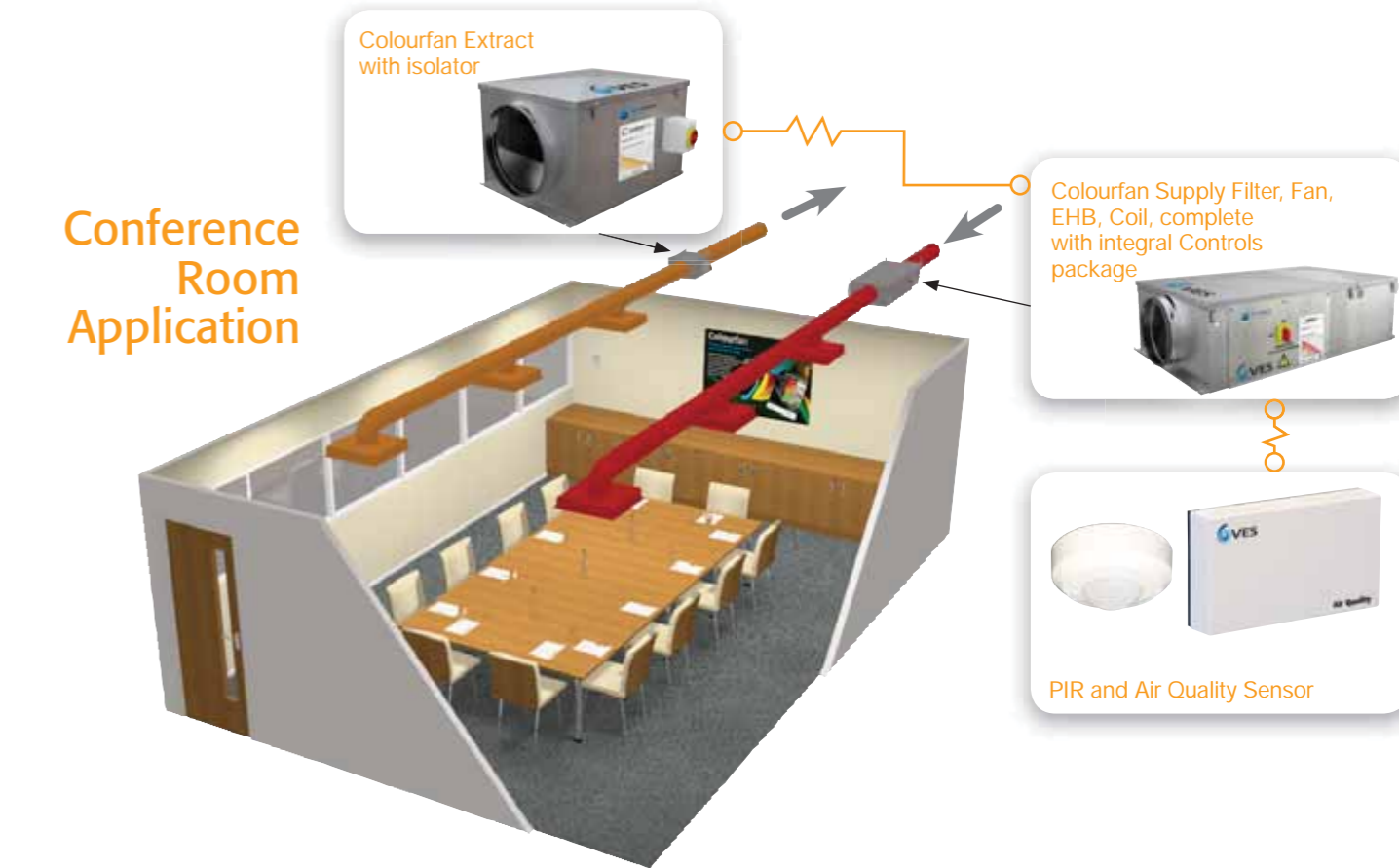
Supply, Extract or Twin Extract Working Together

The Colourfan Supply unit with integrated controls can work seamlessly with any Colourfan Extract or Colourfan Twin Extract unit. This provides fully protected motor and control signals that can be wired directly to the isolator on the Extract or Twin unit, reducing the need for any other control requirements and easing site installation.

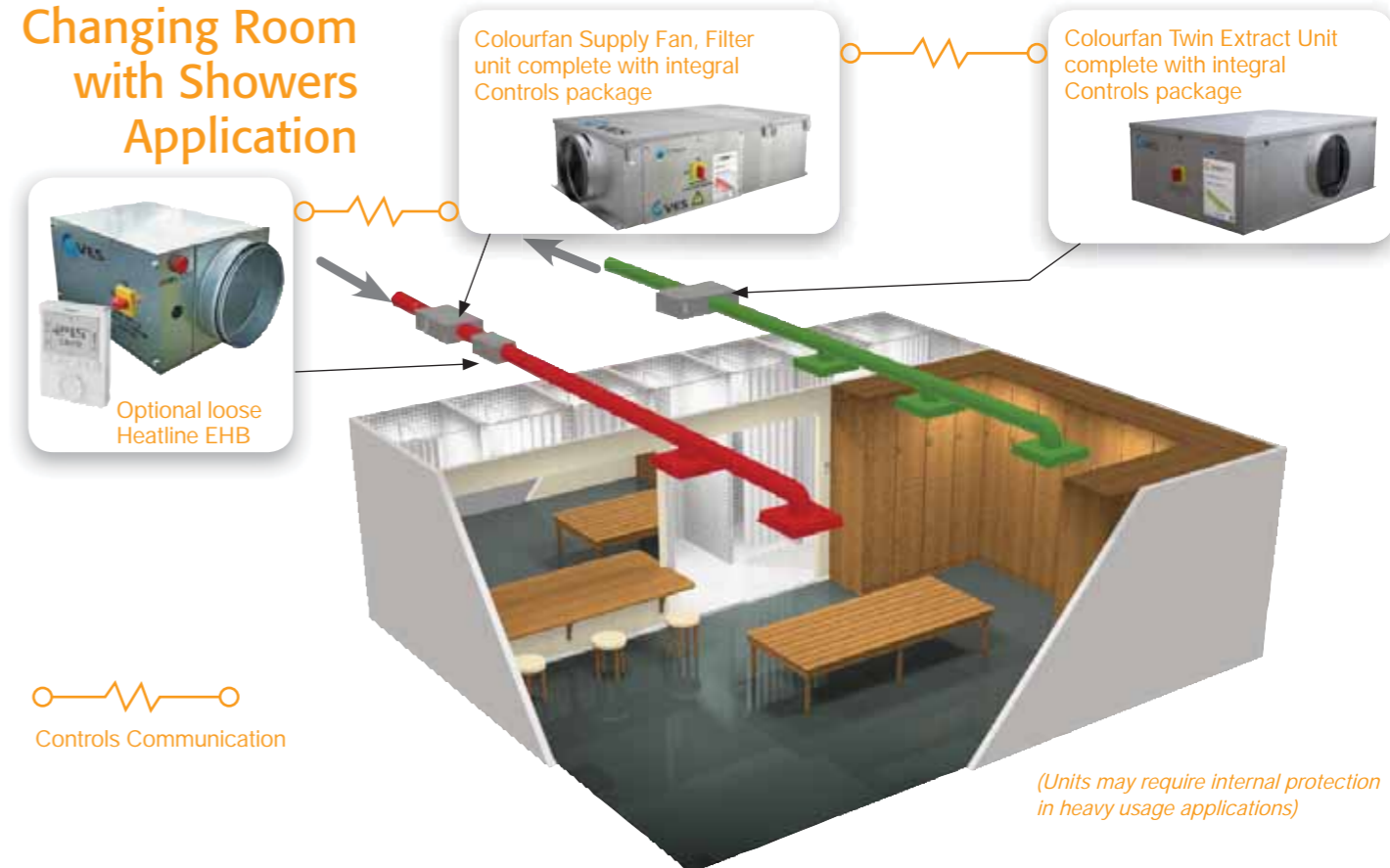
Small Office Application



Conference Room Application



Changing Room with Showers Application



(Units may require internal protection in heavy usage applications)



Colourfan BlueSense

All products in the Colourfan range can form part of the BlueSense energy saving commitment. By specifying a BlueSense package you are ensuring your Supply, Extract or Twin unit is optimised with a pre-wired controls package, energy efficient speed controller and air quality sensor, all programmed to work in unison, reducing energy consumption and saving money.

Pre-wired Controls



Colourfan unit with integral controls



Integral Speed Controller



Air Quality Sensor



The sign of energy saving products, services and expertise

For more information refer to page 28-29

Colourfan[®]
Supply and Supply Acoustic Units



Colourfan[®]
Extract and Extract Acoustic Units



Colourfan[®]
Twin and Twin Acoustic Units



Easy Selection

VES Colourfan Extract units are the versatile solution for a wide range of applications.

Selecting Colourfan units has been made easy, through our simple step by step process.

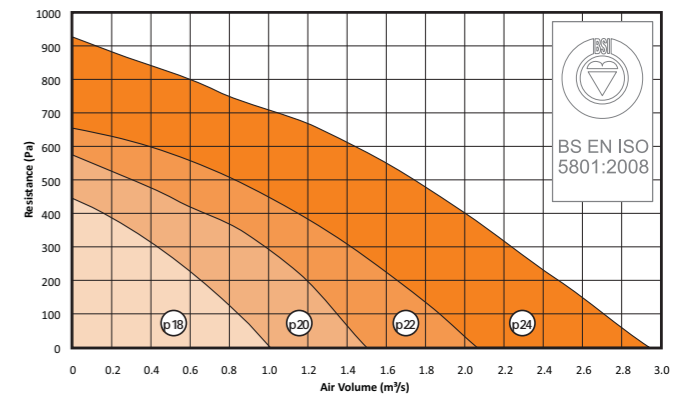
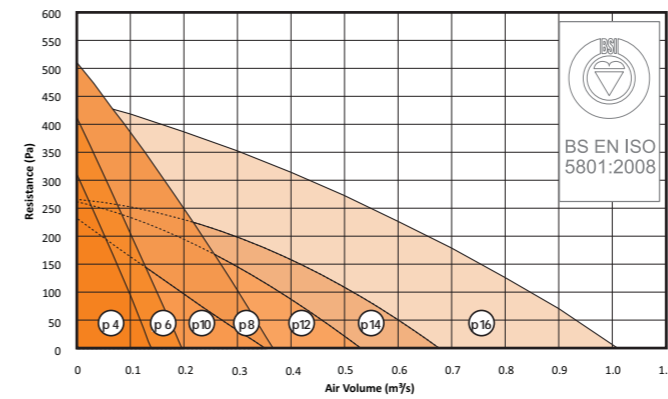
We've done all of the hard work leaving you to specify and define your unit requirements.



Duties up to 2.5 m³/s



Colourfan[®] Extract Performance



1 Choose duties up to 2.5 m³/s

Colourfan[®] Extract Duties up to 2.5 m³/s

Energy efficient, ErP compliant fans, robust case construction, low profile units, suitable for ceiling voids, plantrooms and roofs. Can be configured for top or bottom access.

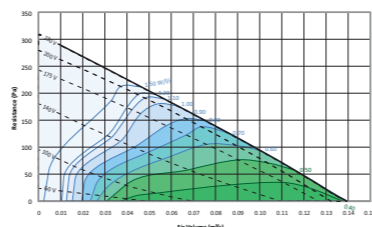


2 Specify your unit

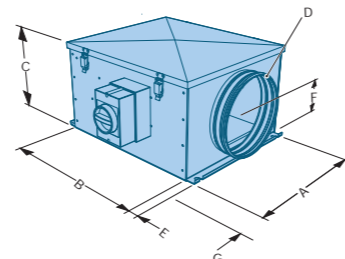
a Performance

b Unit Configuration

2a. Performance Curve



2b. Unit Configuration

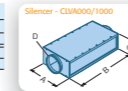


Also see Specifications on pages 32-33

c Noise Data and Silencer Option

2c. Noise Data and Silencer Option

Fan Model	Sound Spectrum dB (A) 1m ² P.W. Control	Coating Noise Breakout
100 LAC	21.5	21.5
125 LAC	22.5	22.5
160 LAC	24.5	24.5
200 LAC	26.5	26.5
250 LAC	28.5	28.5
315 LAC	30.5	30.5
400 LAC	32.5	32.5
500 LAC	34.5	34.5
630 LAC	36.5	36.5
800 LAC	38.5	38.5
1000 LAC	40.5	40.5
1250 LAC	42.5	42.5
1600 LAC	44.5	44.5
2000 LAC	46.5	46.5
2500 LAC	48.5	48.5
3150 LAC	50.5	50.5
4000 LAC	52.5	52.5
5000 LAC	54.5	54.5
6300 LAC	56.5	56.5
8000 LAC	58.5	58.5
10000 LAC	60.5	60.5



3 Add control packages for performance and efficiency Pages 28-30

Include BlueSense integrated controls to take advantage of energy saving demand ventilation, as well as many additional benefits.

Variety of control features:

- Local control or user interface options.
- Demand ventilation.
- Variety of heating options.
- Remote communication (Modbus[®], BACnet[®]).



Energy monitoring is an effective way of highlighting areas for potential savings, whilst providing a key indicator to ongoing energy consumption. Refer to pages 28-29.

4 Specify bespoke options for Colourfan products Page 31



As well as offering a wide range of standard Colourfan units VES is able to build bespoke versions for special applications and requirements.

Units can be adapted for higher specifications e.g. minimising noise breakout or for architectural aesthetics.

Our experience with controls also enables high levels of integration with Building Management Systems or existing systems, as well as matching to niche applications.

Selection Data

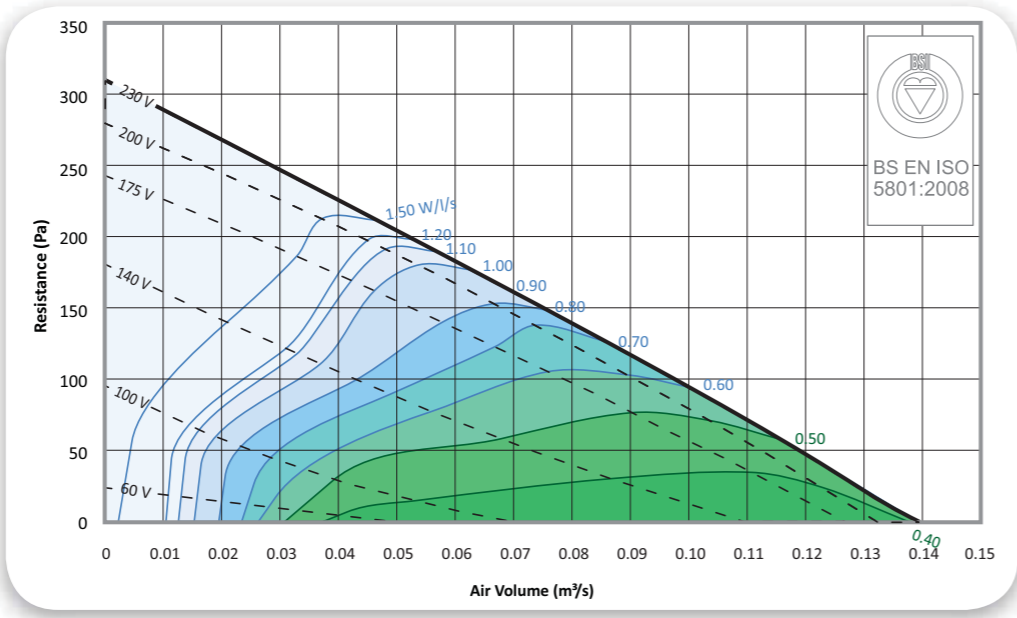
Unit Size 0 CLE031-1

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



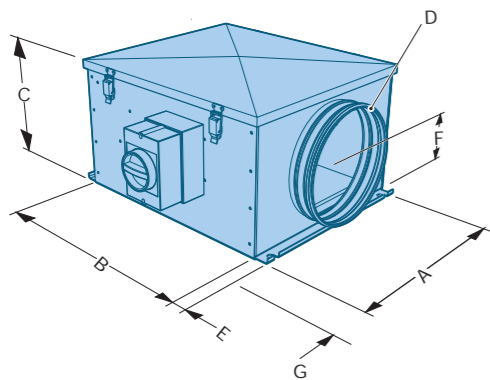
Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE031-1	1 Phase	0.06 kW	230 VAC	2500 rpm	0.26 A	Electric Thyristor

2b Configuration

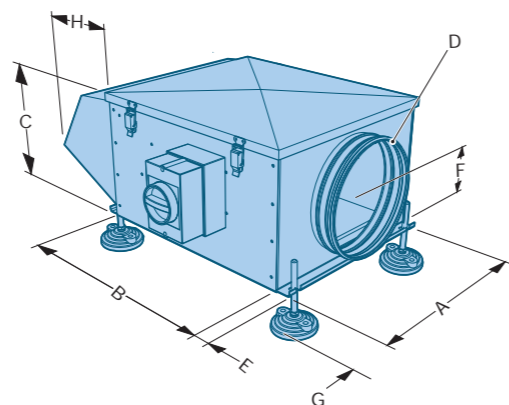
Configuration and Handling

CLE031-1 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom



W Weatherproof

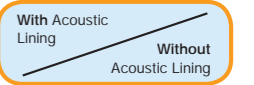


Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	DØ	E	F	G	H		LT	LB	RT	RB
CLE0 Plantroom Extract	350	400	245	197	25	120	97		15	✓	✓	✓	✓
CLE0 Weatherproof Extract With Cowl	350	400	245	197	25	120	97	225	16	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m		NR @ 3m		dBA @ 1m		dBA @ 3m	
230 VAC	61	61	60	58	57	57	56	50	31	37	23	28	35	39	27	31
200 VAC	60	61	57	56	55	55	54	45	28	33	20	25	34	37	26	29
175 VAC	61	59	54	54	53	53	52	40	25	30	16	22	32	35	24	27
140 VAC	56	57	50	49	48	49	47	30	23	26	14	17	29	31	21	23

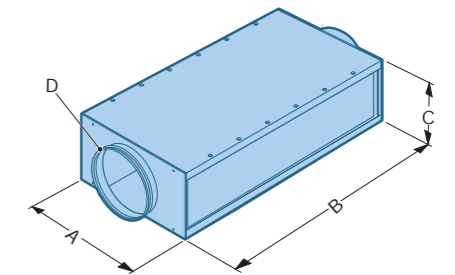
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
CLVA000/1000	63	125	250	500	1k	2k	4k	8k
Insertion Loss	-4	-5	-6	-14	-24	-27	-24	-18
CLVA000/1000	A	B	C	DØ		Weight kg		
Dimensions mm	450	1000	235	197		15		

Note: The silencer will add a maximum of 7 Pa to the external resistance.

Silencer - CLVA000/1000



Available on vesdirect.co.uk



SIZE 0 - CLE031-1

Selection Data

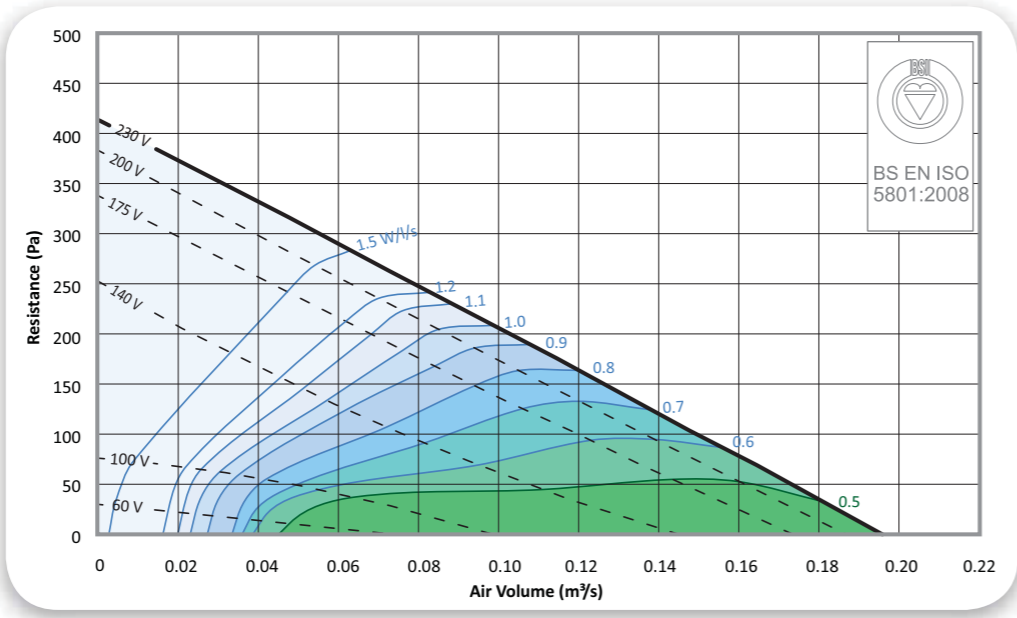
Unit Size 1 CLE132-1

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



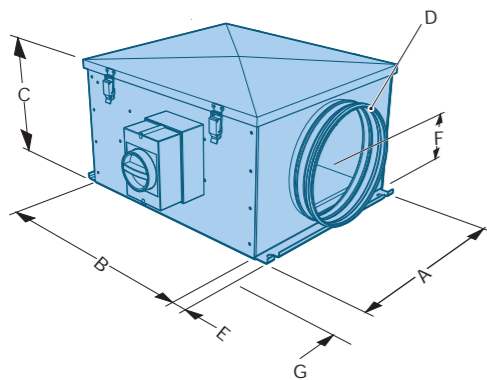
Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE132-1	1 Phase	0.1 kW	230 VAC	2560 rpm	0.45 A	Electric Thyristor

2b Configuration

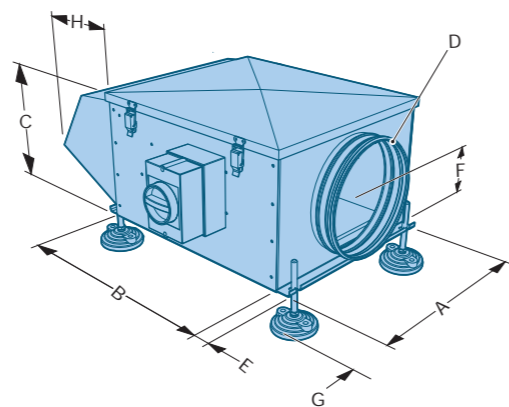
Configuration and Handling

CLE132-1 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom



W Weatherproof

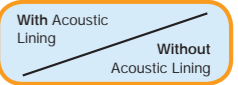


Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	DØ	E	F	G	H		LT	LB	RT	RB
CLE1 Plantroom Extract	350	505	306	247	25	149	97		16	✓	✓	✓	✓
CLE1 Weatherproof Extract With Cowl	350	505	306	247	25	149	97	250	16	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m		NR @ 3m		dBA @ 1m		dBA @ 3m	
230 VAC	64	62	60	58	57	55	52	48	31	37	23	28	36	40	28	32
200 VAC	73	68	61	59	55	54	51	45	39	40	29	30	42	44	34	36
175 VAC	65	70	64	60	56	53	49	42	38	41	29	32	41	44	33	36
140 VAC	66	73	63	58	53	51	45	35	41	43	32	34	43	45	35	37

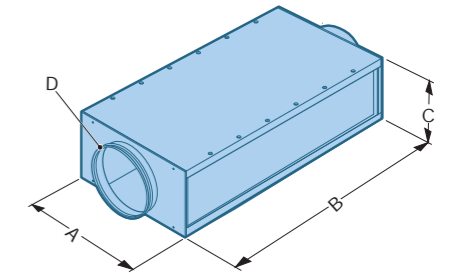
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
CLVA100/1000	63	125	250	500	1k	2k	4k	8k
Insertion Loss	-4	-5	-6	-14	-24	-27	-24	-18
CLVA100/1000	A	B	C	DØ		Weight kg		
Dimensions mm	450	1000	245	197		16		

Note: The silencer will add a maximum of 23 Pa to the external resistance.

Silencer - CLVA100/1000



Available on vesdirect.co.uk



SIZE 1 - CLE132-1

Selection Data

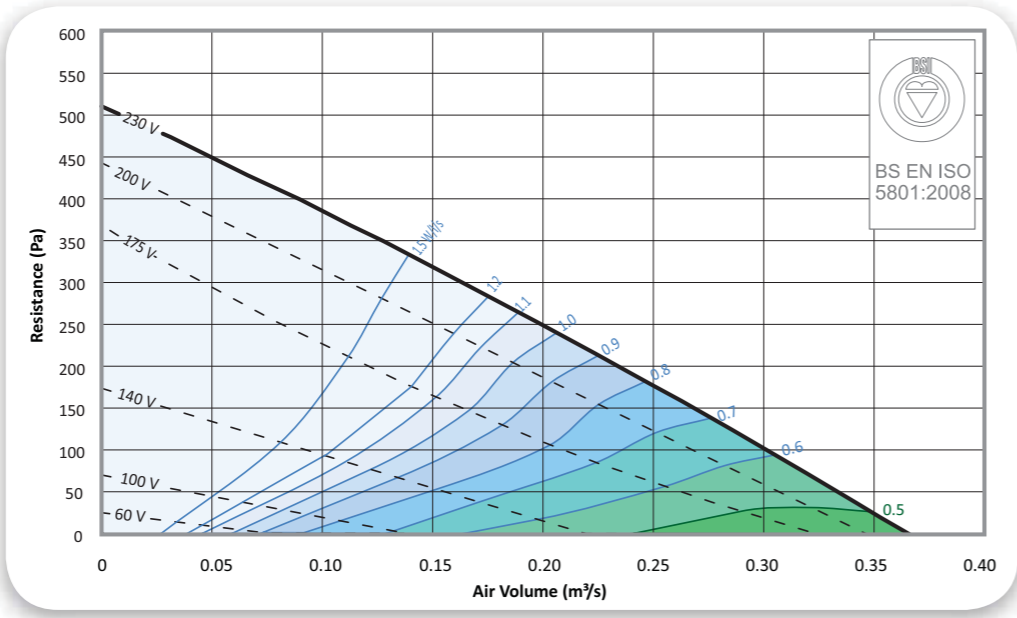
Unit Size 2 CLE233-1

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE233-1	1 Phase	0.24 kW	230 VAC	2730 rpm	1.05 A	Electric Thyristor

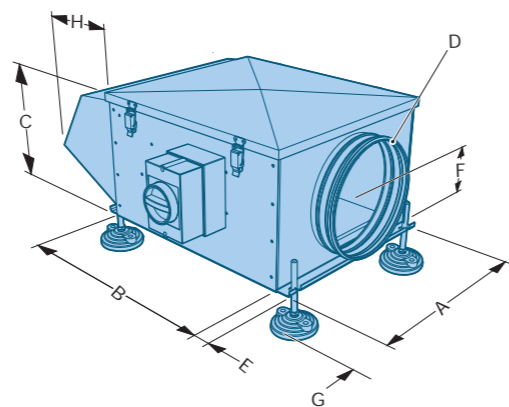
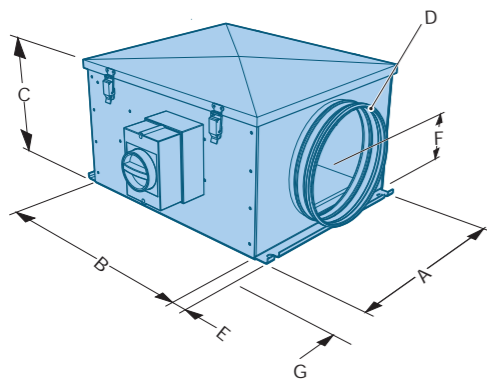
2b Configuration

Configuration and Handling

CLE233-1 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom

W Weatherproof



Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	DØ	E	F	G	H		LT	LB	RT	RB
CLE2 Plantroom Extract	450	545	380	312	25	186	97		23	✓	✓	✓	✓
CLE2 Weatherproof Extract With Cowl	450	545	380	315	25	186	97	295	23	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout			
	63	125	250	500	1k	2k	4k	8k	NR @ 1m	NR @ 3m	dBA @ 1m	dBA @ 3m
230 VAC	66	73	65	64	63	57	56	61	41 43	32 34	43 46	36 38
200 VAC	65	74	62	62	61	56	55	55	43 44	34 35	44 46	36 38
175 VAC	62	73	59	57	56	50	52	41	41 43	32 34	42 44	34 36
140 VAC	68	72	61	56	53	46	42	32	40 41	31 32	42 44	34 36

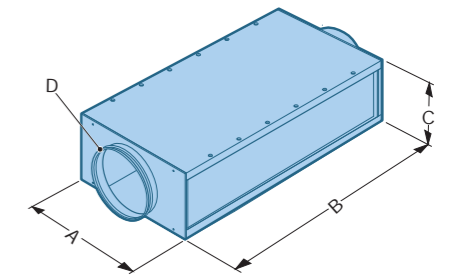
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
CLVA200/1200	63	125	250	500	1k	2k	4k	8k
Insertion Loss	-5	-7	-10	-1	-26	-28	-23	-20
CLVA200/1200	A	B	C	DØ		Weight kg		
Dimensions mm	550	1200	295	247		27		

Note: The silencer will add a maximum of 16 Pa to the external resistance.

Silencer - CLVA200/1200



Available on vesdirect.co.uk



SIZE 2 - CLE233-1

Selection Data

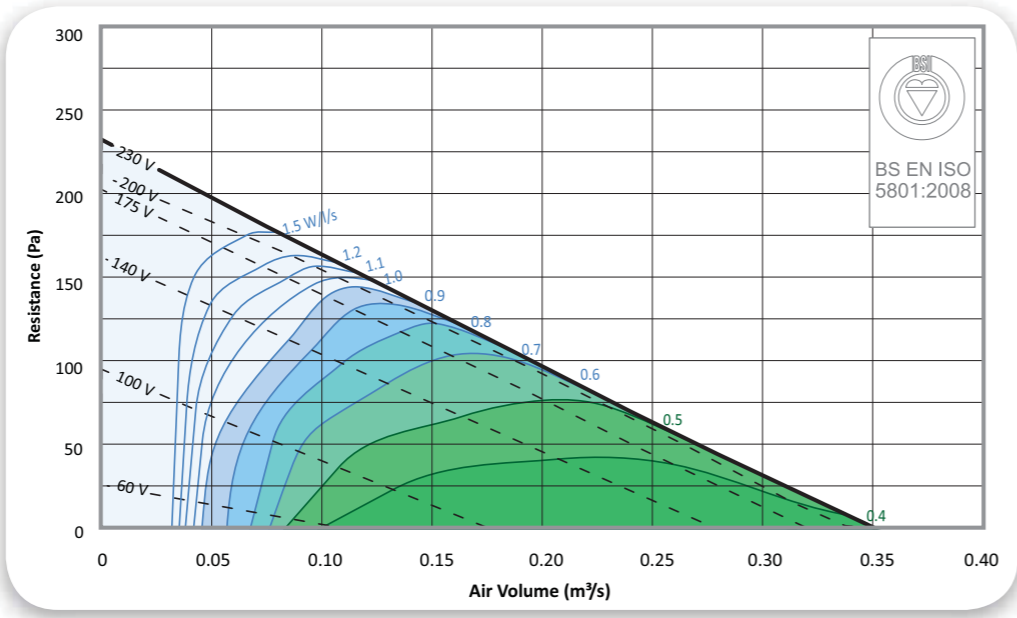
Unit Size 3 CLE334-1

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE334-1	1 Phase	0.11 kW	230 VAC	1360 rpm	0.53 A	Electric Thyristor

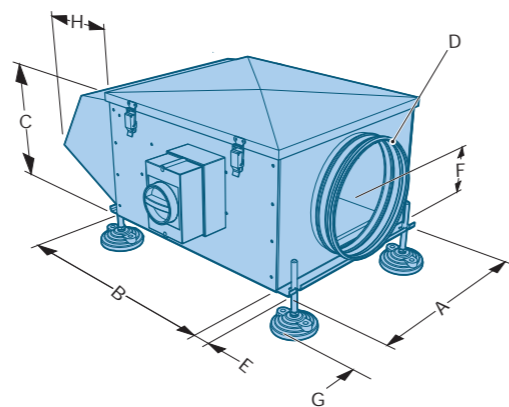
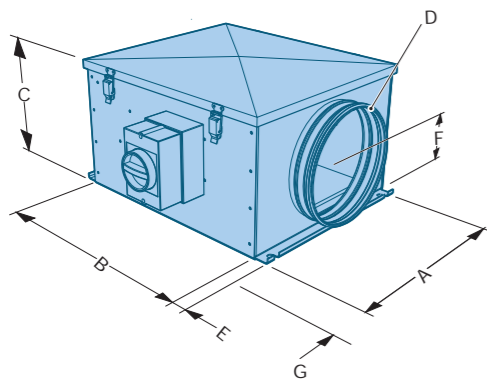
2b Configuration

Configuration and Handling

CLE334-1 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom

W Weatherproof

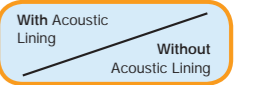


Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	D∅	E	F	G	H		LT	LB	RT	RB
CLE3 Plantroom Extract	500	625	405	315	25	200	97		26	✓	✓	✓	✓
CLE3 Weatherproof Extract With Cowl	500	625	405	315	25	200	97	300	27	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m	NR @ 3m	dBA @ 1m	dBA @ 3m				
230 VAC	62	64	61	58	55	45	55	33	32	38	24	29	37	40	29	32
200 VAC	59	65	60	56	52	47	54	36	32	37	23	28	36	40	28	32
175 VAC	58	67	57	56	50	46	54	33	35	36	25	27	37	39	29	31
140 VAC	58	65	54	60	54	43	53	27	32	33	23	24	35	38	27	30

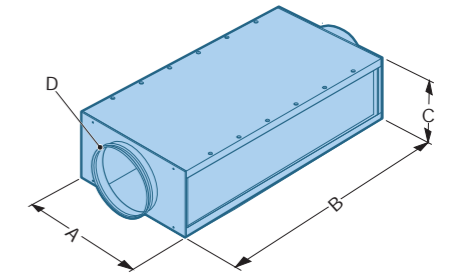
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
CLVA300/1200	63	125	250	500	1k	2k	4k	8k
Insertion Loss	-6	-8	-12	-19	-28	-30	-24	-21
CLVA300/1200	A	B	C	D∅		Weight kg		
Dimensions mm	600	1200	395	312		38		

Note: The silencer will add a maximum of 9 Pa to the external resistance.

Silencer - CLVA300/1200



Available on vesdirect.co.uk



SIZE 3 - CLE334-1

Selection Data

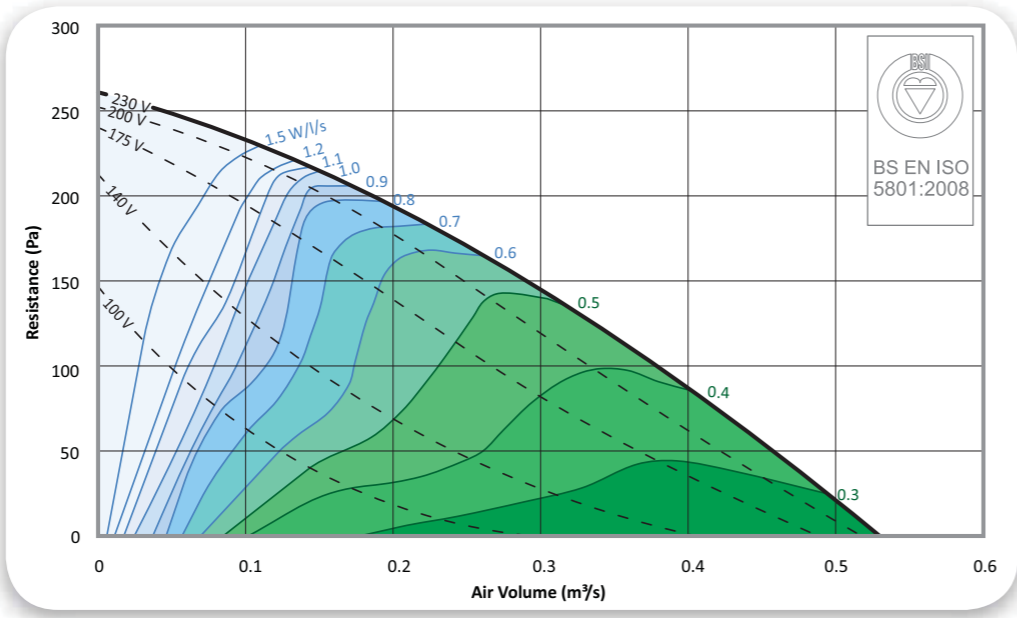
Unit Size 4 CLE435-1

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE435-1	1 Phase	0.15 kW	230 VAC	1310 rpm	0.66 A	Electric Thyristor

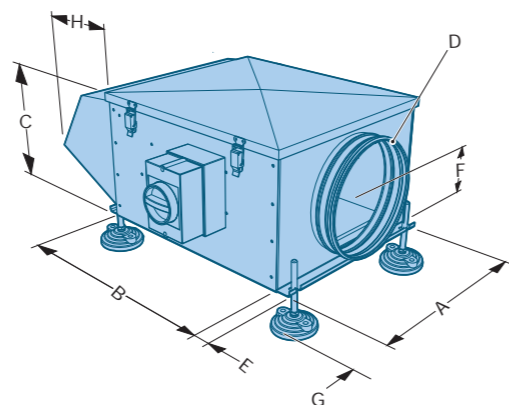
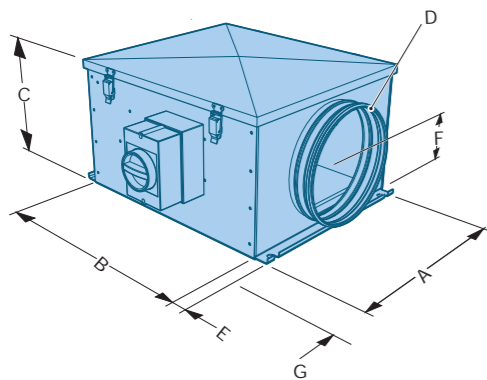
2b Configuration

Configuration and Handling

CLE435-1 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom

W Weatherproof

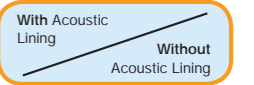


Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	DØ	E	F	G	H		LT	LB	RT	RB
CLE4 Plantroom Extract	600	700	506	397	25	252	97		36	✓	✓	✓	✓
CLE4 Weatherproof Extract With Cowl	600	700	506	397	25	252	97	400	37	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m		NR @ 3m		dBA @ 1m		dBA @ 3m	
230 VAC	59	68	60	58	55	45	50	48	34	36	26	28	37	40	30	33
200 VAC	61	64	58	56	56	44	52	43	30	33	21	26	34	37	27	30
175 VAC	55	66	51	61	54	40	46	26	32	33	24	25	35	37	27	30
140 VAC	55	69	52	55	42	40	39	24	36	37	27	28	37	38	30	31

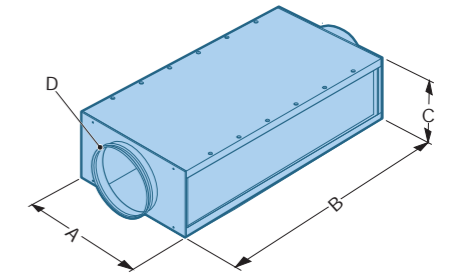
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
CLVA400/1200	63	125	250	500	1k	2k	4k	8k
Insertion Loss	-5	-9	-16	-30	-40	-40	-32	-26
CLVA400/1200	A	B	C	DØ		Weight kg		
Dimensions mm	700	1200	495	397		43		

Note: The silencer will add a maximum of 13 Pa to the external resistance.

Silencer - CLVA400/1200



Available on vesdirect.co.uk



SIZE 4 - CLE435-1

Selection Data

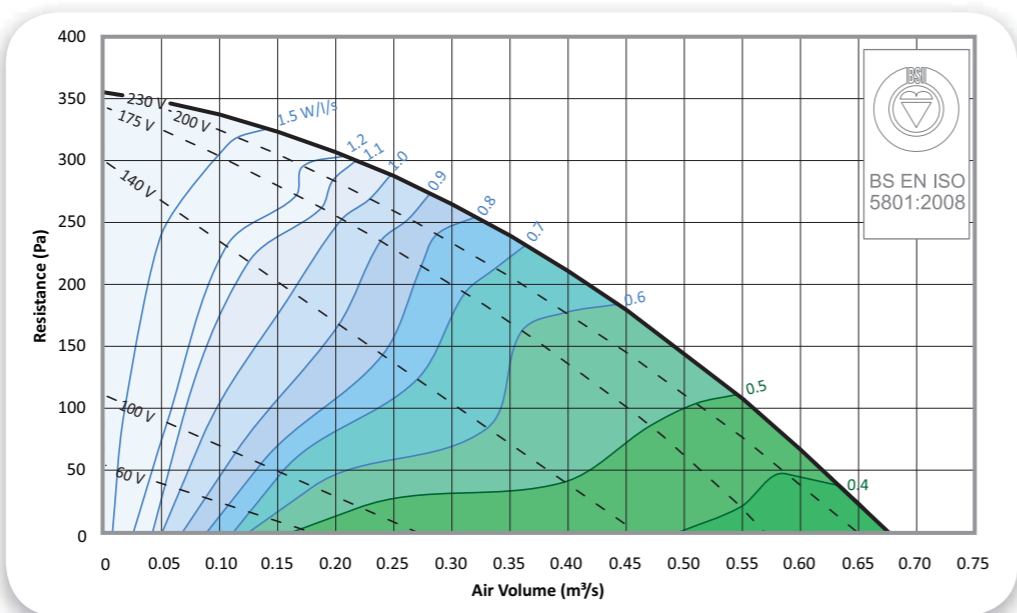
Unit Size 5 CLE536-1

2a Performance

$$\text{SFP} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



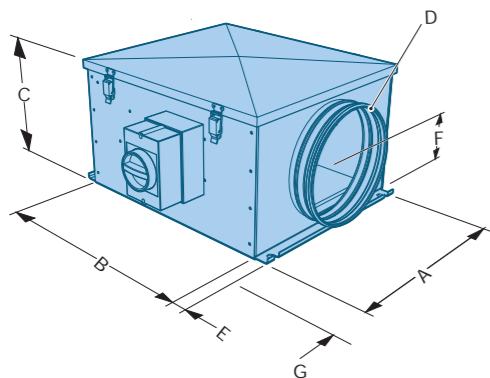
Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE536-1	1 Phase	0.27 kW	230 VAC	1390 rpm	1.3 A	Electric Thyristor

2b Configuration

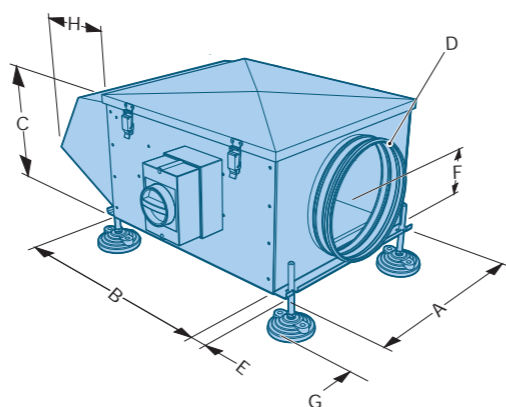
Configuration and Handling

CLE536-1 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom



W Weatherproof

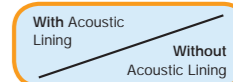


Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	DØ	E	F	G	H		LT	LB	RT	RB
CLE5 Plantroom Extract	600	725	556	397	25	262	97		43.5	✓	✓	✓	✓
CLE5 Weatherproof Extract With Cowl	600	725	556	397	25	262	97	400	45	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m	NR @ 3m	dBA @ 1m	dBA @ 3m				
230 VAC	65	66	61	59	53	51	53	51	32	36	24	29	37	40	30	33
200 VAC	64	64	59	59	52	50	53	48	30	34	21	27	35	38	28	31
175 VAC	65	64	58	57	50	48	54	42	30	33	21	25	35	38	28	31
140 VAC	58	58	55	51	44	43	49	27	25	30	17	22	30	33	23	36

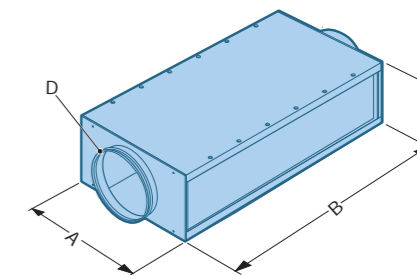
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
CLVA500/1200	63	125	250	500	1k	2k	4k	8k
Insertion Loss	-4	-6	-12	-25	-32	-32	-23	-15
CLVA500/1200	A	B	C	DØ		Weight kg		
Dimensions mm	700	1200	545	397		44		

Note: The silencer will add a maximum of 14 Pa to the external resistance.

Silencer - CLVA500/1200



Available on vesdirect.co.uk



Selection Data

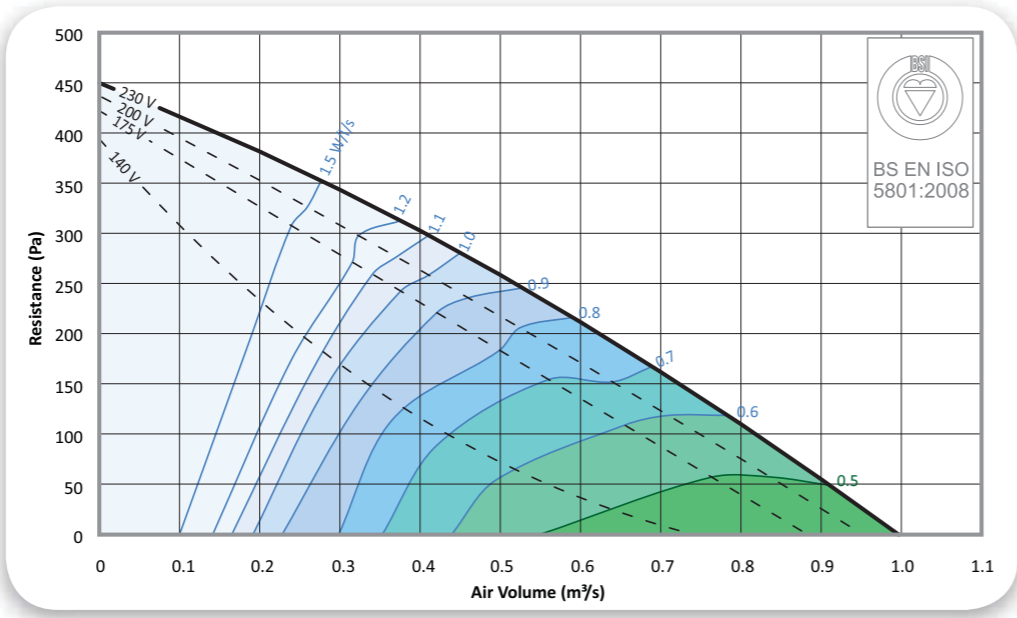
Unit Size 6-1 CLE637-1

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE637-1	1 Phase	0.50 kW	230 VAC	1370 rpm	2.4 A	Electric Thyristor

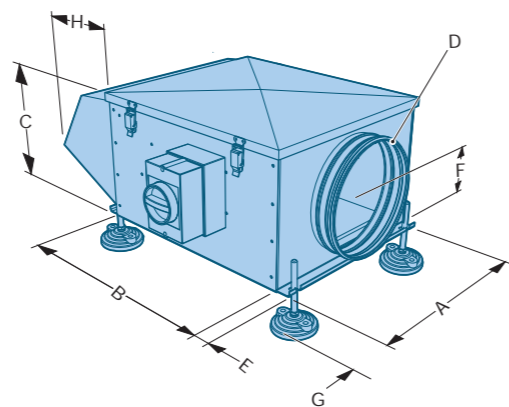
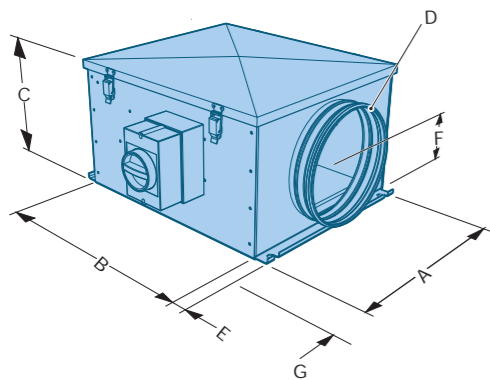
2b Configuration

Configuration and Handling

CLE637-1 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom

W Weatherproof

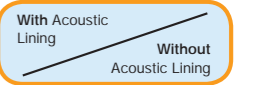


Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	D∅	E	F	G	H		LT	LB	RT	RB
CLE6 Plantroom Extract	750	800	580	447	25	290	97		56	✓	✓	✓	✓
CLE6 Weatherproof Extract With Cowl	750	800	580	447	25	290	97	400	56	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m		NR @ 3m		dBA @ 1m		dBA @ 3m	
230 VAC	62	67	67	61	54	51	46	53	37	43	30	35	39	44	33	37
200 VAC	62	66	64	60	53	50	45	51	34	39	26	32	37	41	30	34
175 VAC	60	65	59	57	51	48	44	50	30	34	22	26	35	38	28	31
140 VAC	60	63	55	51	46	45	43	44	28	30	20	22	32	35	25	28

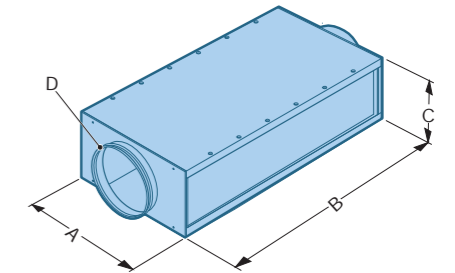
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
CLVA600/1200	63	125	250	500	1k	2k	4k	8k
Insertion Loss	-4	-6	-12	-25	-32	-32	-26	-20
CLVA600/1200	A	B	C	D∅		Weight kg		
Dimensions mm	850	1200	570	447		54		

Note: The silencer will add a maximum of 20 Pa to the external resistance.

Silencer - CLVA600/1200



Available on vesdirect.co.uk



SIZE 6-1 - CLE637-1

Selection Data

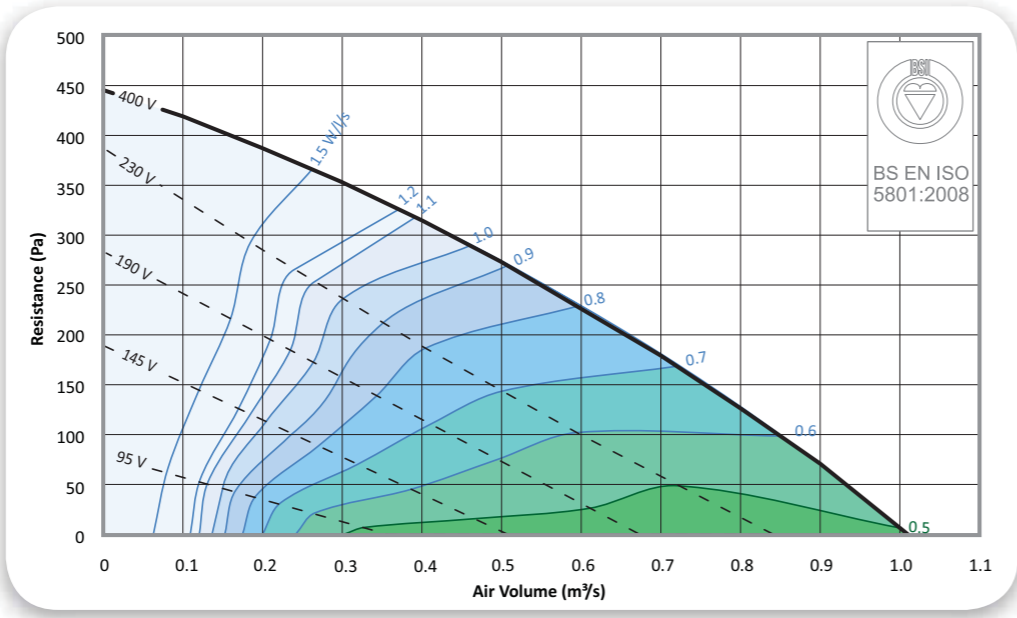
Unit Size 6-3 CLE637-3

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



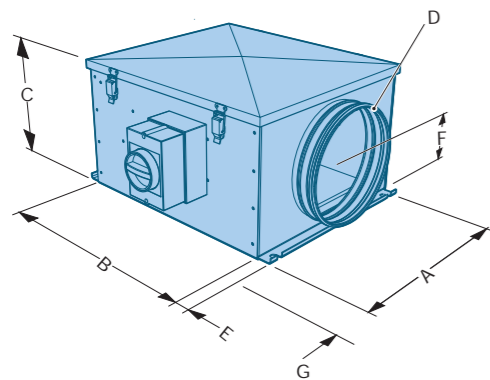
Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE637-3	3 Phase	0.44 kW	400 VAC	1340 rpm	0.8 A	Electric Thyristor

2b Configuration

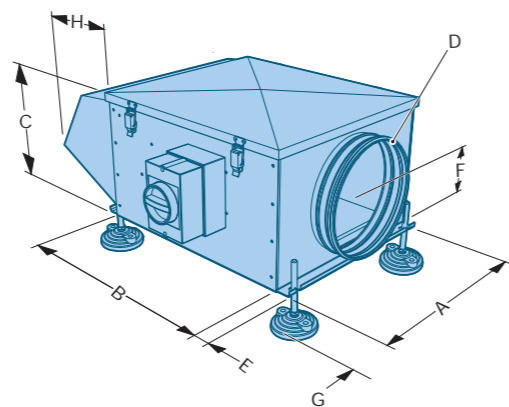
Configuration and Handling

CLE637-3 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom



W Weatherproof

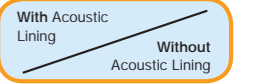


Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	DØ	E	F	G	H		LT	LB	RT	RB
CLE6 Plantroom Extract	750	800	580	447	25	290	97		56	✓	✓	✓	✓
CLE6 Weatherproof Extract With Cowl	750	800	580	447	25	290	97	400	58	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m	NR @ 3m	dBA @ 1m	dBA @ 3m				
400 VAC	62	68	62	62	56	52	47	52	34	37	26	30	38	41	31	34
300 VAC	63	60	64	60	62	52	49	46	30	35	22	27	35	39	28	32
240 VAC	57	63	57	58	49	47	50	39	28	32	20	24	33	36	26	29
190 VAC	60	53	54	52	44	45	49	28	23	29	16	21	29	32	22	25
145 VAC	54	48	56	43	40	39	38	21	25	31	18	23	27	32	20	25

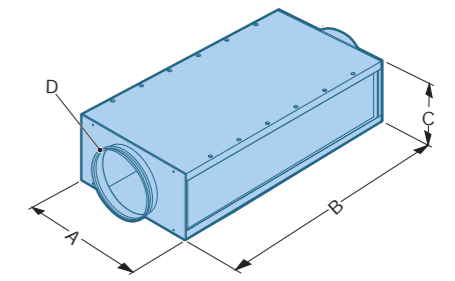
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
CLVA600/1200								
Induct Loss	-4	-6	-12	-25	-32	-32	-26	-20
CLVA600/1200	A	B	C	DØ	Weight kg			
Dimensions mm	850	1200	570	447	54			

Note: The silencer will add a maximum of 20 Pa to the external resistance.

Silencer - CLVA600/1200



Available on vesdirect.co.uk



SIZE 6-3 - CLE637-3

Selection Data

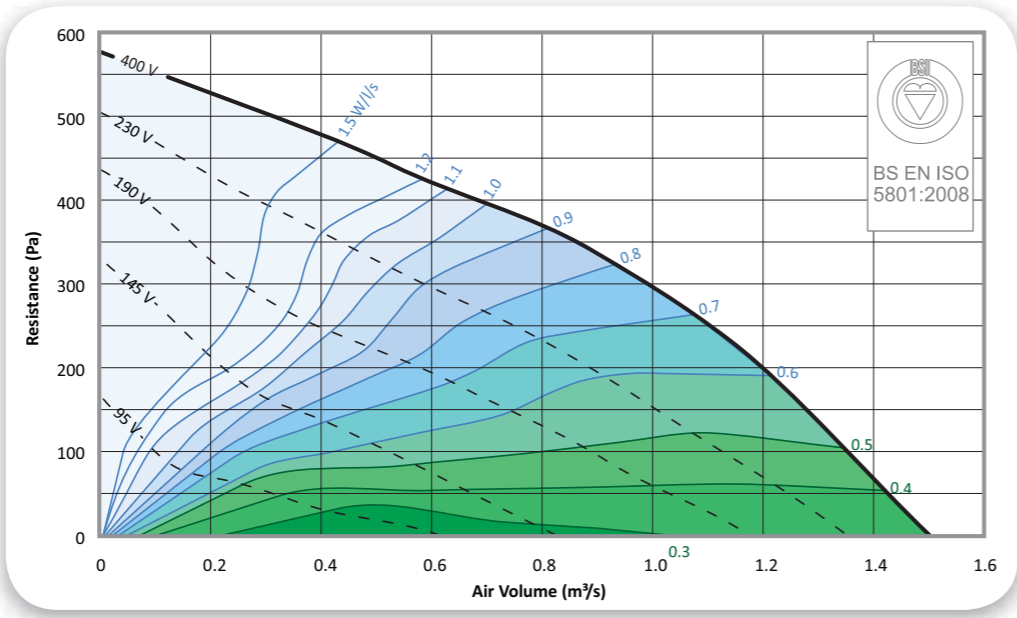
Unit Size 7 CLE738-3

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE738-3	3 Phase	0.77 kW	400 VAC	1350 rpm	1.6 A	Electric Thyristor

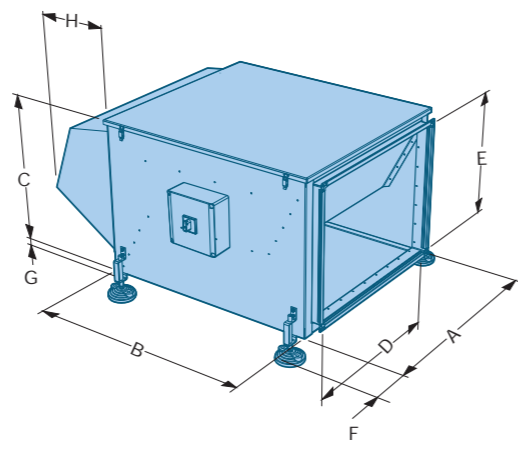
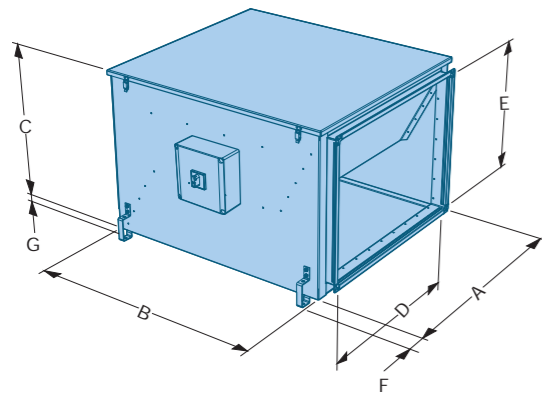
2b Configuration

Configuration and Handling

CLE738-3 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom

W Weatherproof

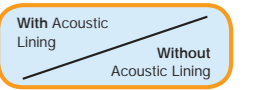


Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	D	E	F	G	H		LT	LB	RT	RB
CLE7 Plantroom Extract	850	900	595	750	500	98	25		67	✓	✓	✓	✓
CLE7 Weatherproof Extract With Cowl	850	900	595	750	500	98	25	500	76	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m	NR @ 3m	dBa @ 1m	dBa @ 3m				
400 VAC	62	68	62	62	56	52	48	52	34	37	26	30	38	41	31	34
300 VAC	60	64	60	62	52	49	46	49	30	35	22	24	35	39	28	32
240 VAC	57	63	57	58	49	57	50	39	29	32	20	24	33	36	26	29
190 VAC	60	53	54	52	44	45	49	28	24	29	16	21	29	32	22	25
145 VAC	54	48	56	43	40	39	38	21	26	31	18	23	28	32	21	25

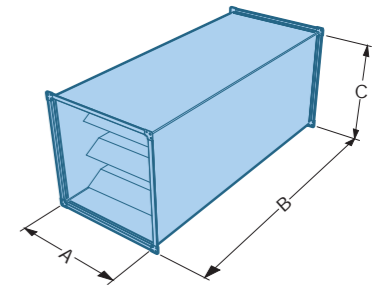
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
CLVA700/1200	-5	-9	-16	-30	-39	-39	-31	-26
Induct Loss								
CLVA700/1200	A	B	C	Weight kg				
Dimensions mm	750	1200	500	40				

Note: The silencer will add a maximum of 80 Pa to the external resistance.

Silencer - CLVA700/1200



Available on vesdirect.co.uk



SIZE 7 - CLE738-3

Selection Data

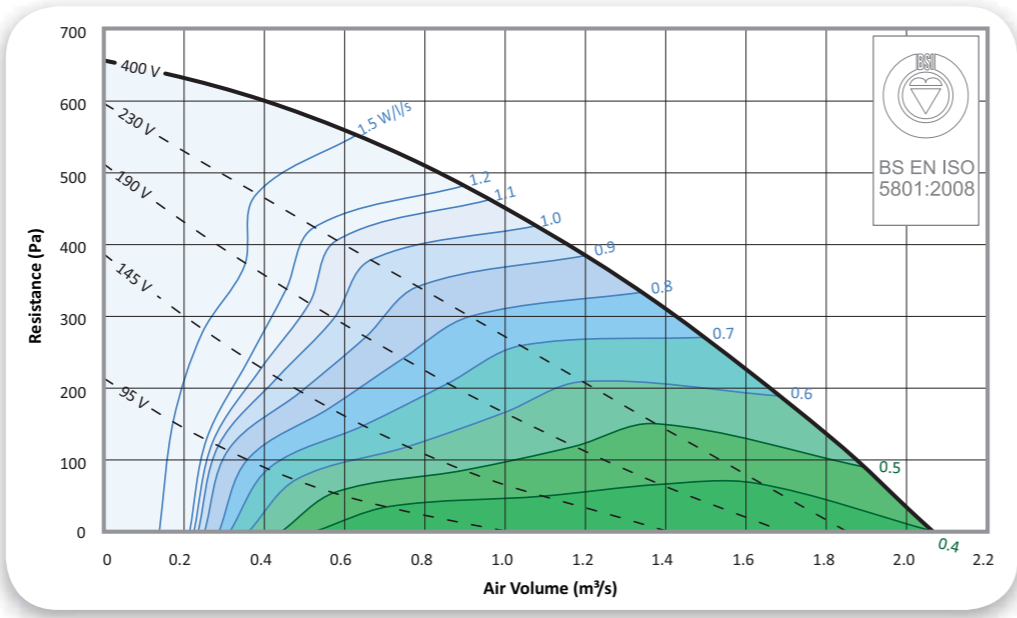
Unit Size 8 CLE839-3

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE839-3	3 Phase	1.2 kW	400 VAC	1330 rpm	2.2 A	Electric Thyristor

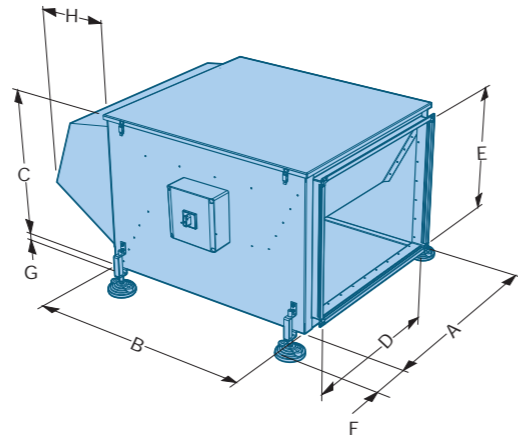
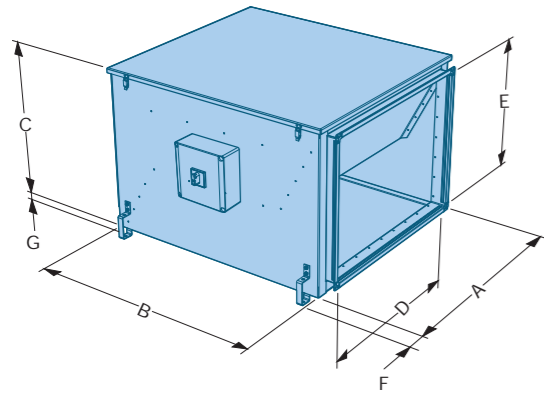
2b Configuration

Configuration and Handling

CLE839-3 / **P** **W** / **LT** **RB** / **LB** **RT**

P Plantroom

W Weatherproof



Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	D	E	F	G	H		LT	LB	RT	RB
CLE8 Plantroom Extract	900	1000	695	800	600	98	25		85	✓	✓	✓	✓
CLE8 Weatherproof Extract With Cowl	900	1000	695	800	600	98	25	600	96	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m	NR @ 3m	dBa @ 1m	dBa @ 3m				
400 VAC	75	77	72	69	73	59	55	58	44	48	36	40	48	51	41	44
300 VAC	73	75	69	67	61	56	53	55	42	45	34	37	45	48	38	41
240 VAC	70	72	65	67	54	52	48	51	39	41	30	33	42	45	35	38
190 VAC	68	66	61	65	53	48	45	40	32	36	24	29	38	41	31	34
145 VAC	67	59	54	54	49	42	38	31	29	31	20	22	34	36	27	29

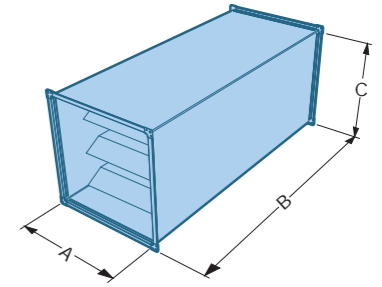
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19

With Acoustic Lining / Without Acoustic Lining

Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
CLVA800/1200	-5	-9	-16	-30	-39	-39	-31	-26
CLVA800/1200	A	B	C	Weight kg				
Dimensions mm	800	1200	600	45				

Note: The silencer will add a maximum of 75 Pa to the external resistance.

Silencer - CLVA800/1200



Available on vesdirect.co.uk



SIZE 8 - CLE839-3

Selection Data

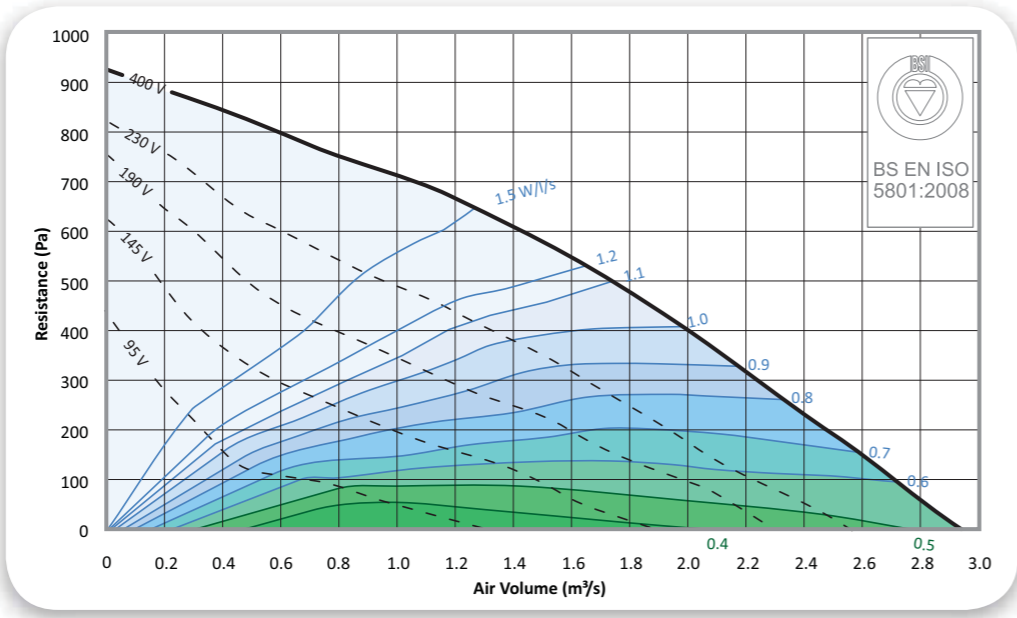
Unit Size 9 CLE9310-3

2a Performance

$$\text{SFP} \frac{\text{Watts/litres/second}}{\text{second}} = \frac{\text{Electrical input power (Watts)}}{\text{Air volume flow rate (litres/second)}}$$

Notes:
SFP figures quoted at voltages tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007.

Tolerances:
On flow rates: +/- 5%
On acoustic power and pressure: Levels: +/- 3 dB
By octave band: +/- 5 dB



Size	Phase	Motor Size	Voltage	Fan Speed	Motor Full Load Current	Speed Control
CLE9310-3	3 Phase	2.1 kW	400 VAC	1340 rpm	4.2 A	Electric Thyristor

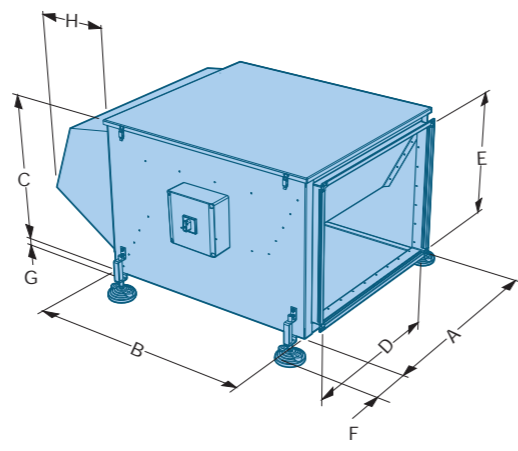
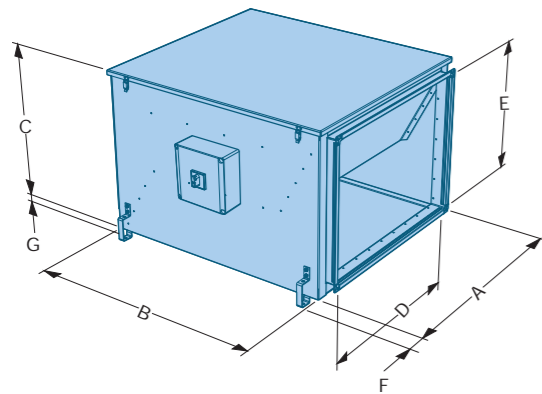
2b Configuration

Configuration and Handling

CLE9310-3 **P** **W**/ **LT** **RB**/ **LB** **RT**

P Plantroom

W Weatherproof

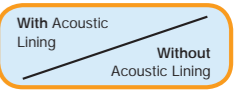


Unit Type	Dimensions mm								Weight kg	Configuration Options			
	A	B	C	D	E	F	G	H		LT	LB	RT	RB
CLE9 Plantroom Extract	1000	1200	795	900	700	98	25		131	✓	✓	✓	✓
CLE9 Weatherproof Extract With Cowl	1000	1200	795	900	700	98	25	700	146	✓	✓	✓	✓

2c Noise Data and Silencer Option

Fan Voltage	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)								Casing Noise Breakout							
	63	125	250	500	1k	2k	4k	8k	NR @ 1m	NR @ 3m	dBa @ 1m	dBa @ 3m				
400 VAC	70	80	73	68	63	58	56	62	47	49	39	41	49	51	42	44
300 VAC	69	75	69	62	59	53	52	57	42	45	34	37	44	47	37	40
240 VAC	68	67	61	58	54	48	50	43	32	36	25	28	38	40	31	33
190 VAC	68	67	58	53	48	43	48	32	32	34	25	26	37	39	30	32
145 VAC	64	61	50	47	43	42	38	27	26	27	18	19	32	33	25	26

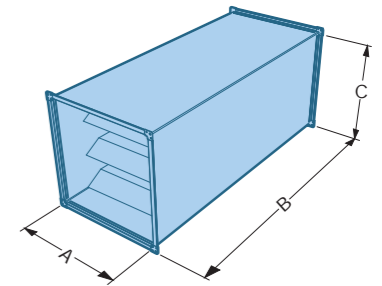
Centre Frequency	63	125	250	500	1k	2k	4k	8k
Case Insertion Loss (With Acoustic Lining)	+6	-2	-6	-17	-27	-31	-32	-25
Case Insertion Loss (Without Acoustic Lining)	+7	-1	-1	-11	-19	-23	-23	-19



Silencer Option	Sound Spectrum dB re 10 ⁻¹² W PWL Centre Frequency (Hz)							
CLVA900/1200	63	125	250	500	1k	2k	4k	8k
Induct Loss	-5	-9	-16	-30	-37	-39	-31	-26
CLVA900/1200	A	B	C	Weight kg				
Dimensions mm	900	1200	700	65				

Note: The silencer will add a maximum of 95 Pa to the external resistance.

Silencer - CLVA900/1200



Available on vesdirect.co.uk

SIZE 9 - CLE9310-3

Controls packages for performance and efficiency



Save energy and costs with BlueSense Controls

Demand ventilation solutions.

BlueSense philosophy combines intelligent control technologies with energy saving products, services and engineering expertise. BlueSense helps meet energy reduction commitments by optimising the equipment performance, improving energy efficiency, saving money and increasing equipment life expectancy.

BlueSense can be applied to a variety of projects and applications, providing efficient solutions whilst supporting design for best practice and sustainability.

BlueSense Features

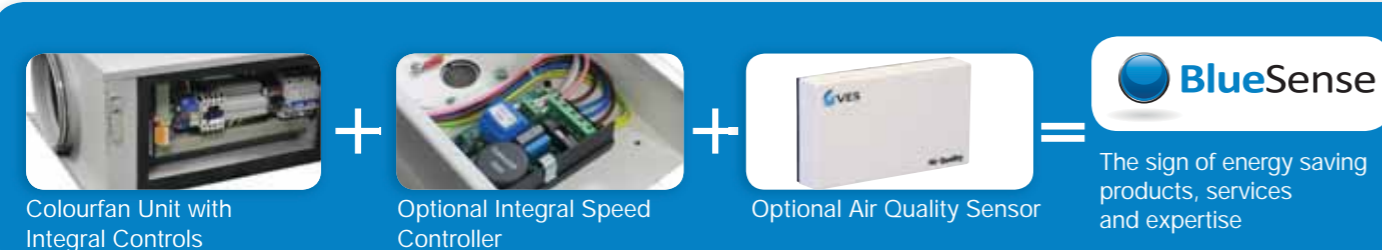
- ▶ Inbuilt intelligent controls technology
- ▶ Optimises performance and efficiency
- ▶ Demand ventilation control improves air quality, reducing energy consumption and lowering operating costs
- ▶ Combined CO₂ and VOC sensing technology with energy efficient speed control
- ▶ Extending equipment life expectancy and reducing maintenance
- ▶ Short term payback on capital expenditure
- ▶ Extended warranty

Prewired/Fitted Controls	Demand Ventilation	Case Construction	Filters	Air Quality	Thyristor Heater
Energy Efficient Fans	Speed Control	Plug & Play	Humidity	Temperature	Heat Recovery

Colourfan BlueSense

All products in the Colourfan range can form part of a BlueSense energy saving package. Specify BlueSense to ensure, Extract or Twin Extract units are optimised with pre-wired controls, energy efficient speed controller and air quality sensor. All of these work in unison, reducing energy consumption and saving money.

A BlueSense Example



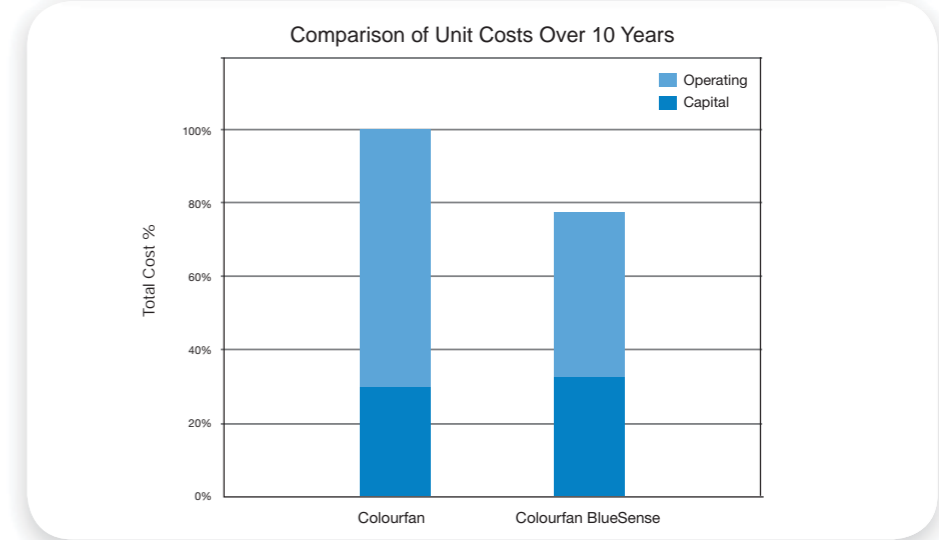
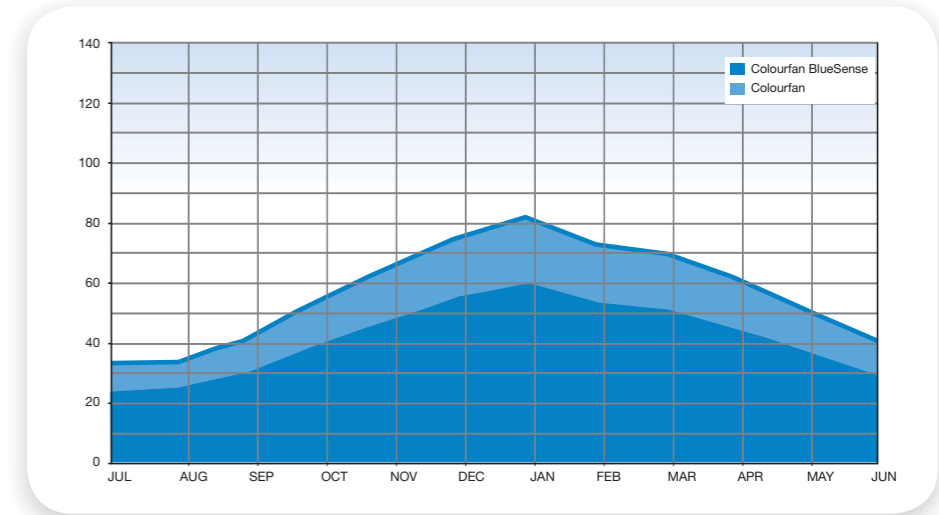
BlueSense Energy Savings

Energy Chart Life Cycle Costs



Energy comparisons for the Colourfan range illustrate how they reduce energy demands whilst improving the environment and saving money.

The example below is a typical office building, with an occupancy variation that results in an average 40% reduction in airflow requirement for 40% of the working day. The ventilation system operates from 8am till 6pm Monday to Friday, with a ventilation rate of 0.2 m³/s at 100 Pa.



The heating requirement has been based upon the UK heating profile for an air temperature setpoint of 18.5 °C; the same heater size has been used for all comparisons.

Conclusion

Combining VES products with BlueSense technology will reduce the impact to the environment, minimise overall life cycle costs and payback period.

VES is experienced at discussing energy requirements with clients, our knowledge and technology can help to identify areas where savings can be made.

VES can provide assistance for both new and existing buildings.

BlueSense Includes an Extended Warranty

- ▶ 3 years with BlueSense packages.
 - ▶ 5 years with BlueSense package and Post Installation Commissioning.
- Please quote BlueSense with your order or contact our specialist sales team for further information. Call +44 (0)8448 15 60 60 or Email info@ves.co.uk

Colourfan[®] Extract Controls Introduction

VES designs and manufactures all controls systems entirely in-house, this advantage ensures that the most efficient, lowest cost, highest quality packages are available.

The Colourfan supply unit with integrated controls can work seamlessly with any Colourfan Extract. This provides fully protected motor and control signals that can be wired directly to the isolator on the Extract unit, reducing the need for any other control requirements and easing site installation.

Features

- ▶ Single or three phase, extract fan control, with matching speed control options
- ▶ BlueSense energy saving package for demand ventilation control, complete with fully integrated pre-wired isolator, energy efficient speed control and air quality sensor



Air Quality Sensor



Speed Controller

Bespoke Solutions

As well as offering a wide range of standard Colourfan units VES are able to build bespoke versions for special applications and requirements.

Units can be adapted for higher specifications to address challenging locations and applications. Our experience with controls also enables high levels of integration with Building Management Systems or existing solutions, as well as matching to niche applications.

With VES you really get the full package without needing to mix and match suppliers.

Bespoke Options:

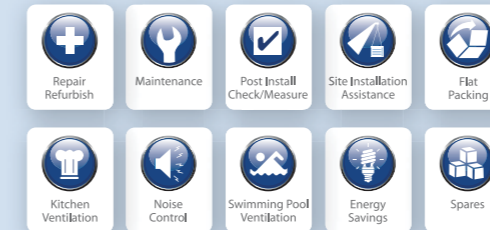
- ▶ EC Fans (Available with our Acoustic range)
- ▶ Dual outlet spigots
- ▶ Side spigots
- ▶ Bottom spigots
- ▶ Aesthetic requirements and paint colour finishes
- ▶ Saline environment
- ▶ Extreme temperatures
- ▶ Cooling coils

Specialist Site Services

VES operates a Specialist Site Services division, which is a market leader in the repair and refurbishment of any make or model of air handling equipment.

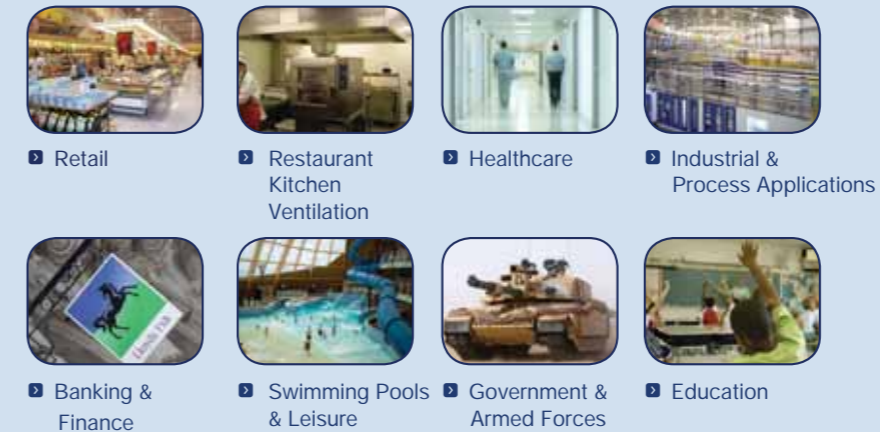
For buildings with faulty and deteriorating ventilation plant, the obvious choice may appear to be replacement. However there are many reasons, not least economic ones, why the repair or refurbish alternatives should also be explored.

Features of Specialist Site Services



In addition to being a First Class ISO Certified Manufacturer, the VES Specialist Site Services Division is the largest on-site solutions provider in the country.

Assistance in all Market Sectors



For all enquires about our services please contact us on +44 (0)8448 15 60 60 or email sssales@ves.co.uk



- ▶ 10% Online Discount
- ▶ 100s of Ventilation Products



Sales Freephone
0800 31 66 000
vesdirect.co.uk

Product Specification

Colourfan[®] Extract Fan Small Ventilation Units

1.1. General

- A. Provide an extract fan unit to meet the performance and configuration as indicated in the schedule and detail drawings. The extract fan unit shall be tested in accordance with BS EN ISO 5801:2008, BS 848-1:2007 and shall be of the Colourfan type as manufactured by VES Andover Ltd a company accredited with BS EN ISO 9001:2008.

1.2 Unit Construction

- A. The unit shall be provided pre-assembled comprising of a rigidly constructed case, twin centrifugal backward curved fans with direct drive motors and circular or rectangular spigots
- B. The unit shall be supplied pre-wired to an external isolator.
- C. The unit shall be available in plantroom or weatherproof construction as indicated in the schedule and detail drawings.
- D. 1. Units size 0-6 shall have circular duct spigots complete with rubber gasket seals as indicated in the schedule and detail drawings.
2. Units size 7-9 shall have rectangular dust spigots complete with 30mm MEZ flange as Indicated In the schedule and detail drawings.
- E. Weatherproof units shall be fitted with an exhaust cowl as standard, finished to match the unit casework.
- F. 1. Sizes 0-6 The unit casework shall incorporate high quality dual layer memory rubber gasket seals on service doors and panels.
2. The unit casework shall incorporate high quality leak resistant neoprene gaskets seals on service doors and panels..
- G. 1. Sizes 0-6 The unit shall be available with optional fitted flame retardant acoustic lining as standard to ensure maximum thermal insulation and reduced noise transmission.
2. Sizes 7-9 The unit shall be provided pre-assembled comprising of a rigidly constructed 25mm tubular aluminium case, double skinned galvanised sheet steel panels.
- H. Access for maintenance shall be via removable panels, allowing access for the cleaning or removal of internal components as indicated in the schedule and detail drawings.
- I. Plantroom units shall be suitable for top or bottom access as indicated in the schedule and detail drawings. Weatherproof units shall be suitable for top access only via a removable weather lid.
- J. 1. The casework shall incorporate mounting brackets compatible with drop-rod support systems.
2. Plantroom units 7-9 shall be suitable for side access as indicated in the schedule and detail drawings. Weatherproof units 0-6 shall be suitable for side access only via a removable weather lid.
- K. Weatherproof units shall be supplied as standard with mounting feet. Plantroom units shall be available with optional mounting feet as indicated in the schedule.
- L. Plantroom unit casework and spigots shall be supplied naturally finished in high quality galvanised steel as standard. Optional powdercoat colour as indicated in the schedule.
- M. Weatherproof units shall be supplied powdercoated signal grey RAL7004 as standard. Alternative colour according to schedule.
- N. The unit shall be designed to be secured to a suitable base, wall or ceiling, ensuring the use of correct fixings for the application and taking into account individual unit weight as indicated in the schedule and detail drawings.

1.3. Fans

- A. The fan impeller shall be of PA6 glass-fiber reinforced, backward curved plastic blade construction with galvanised steel mounting plate.
- B. The fan impeller shall be statically and dynamically balanced to G 2.5 / G 6.3 according to ISO1940 part 1.
- C. The fan impeller shall be mated with an aerodynamic bell inlet eye for high efficiency and low noise generation.

1.4. Motors

- A. The fans shall incorporate external rotor motors to IP44 environmental protection rating and shall be supplied with thermal protection cutouts as standard.
- B. The size 0 and 1 unit motors shall be to insulation class B. The size 2 and above unit motors shall be to insulation class F.
- C. The integrated motor shall be supplied epoxy painted blue to RAL5002.
- D. The integrated motor shall be available as AC or with high efficiency EC (Electronically Commutated) controller as standard.
- E. The motor shall be supplied pre-wired and fitted with a quick-change plug connector.

1.5 Operation Environment

- A. The unit shall be designed to operate with process air temperatures from -20 °C to 40 °C, and humidity up to 80%.

Colourfan [®] Extract				Case Construction			Options			Ancillaries Examples		
Product	Unit Size	Fan Type	Fan Size	Phase	Unit Config	Infill	Handing	Control Panel Section	Inlet/Outlet	Colour	Name	Part No.
CLE	0	3	1	-1	/P	[null]	/RT	/I	/C	[null]	Silencer	CLV/A000/1000
	1	3	2	-1	/W	-AL	/RB	/ISC	/CS	/RT004	Faet	NRGX9000
	2	3	3	-1		-DS	/LT		/SP			
	3	3	4	-1			/LB					
	4	3	5	-1								
	5	3	6	-1								
	6	3	7	-1								
	6	3	7	-3								
	7	3	8	-3								
	8	3	9	-3								
	9	3	10	-3								

Product
CLE=Colourfan Extract

Unit Config
/P=Plantroom
/W=Weatherproof

Infill
[null]=No Lining
-AL=Acoustic Lined
-DS=Doubled Skinned

Handing
/RT=Right Top
/RB=Right Bottom
/LT=Left Top
/LB=Left Bottom

Control Panel Section
/I=Isolator
/ISC=Isolator and Speed Control

Inlet / Outlet
/C=Cowl
/CS=Circular Spigot
/SP=Square Spigot

Colour
[null]=Galvanised
/R=RAL
(colours)

Example Coding

Extract CLE 031-1/W/AL/RT/ISC/C

1.6. Controls

- The unit shall be supplied as standard pre-wired to an external isolator.
- If speed control is indicated in the schedule the unit shall be supplied with an internally mounted speed controller pre-wired to an external isolator.

1.7. Ancillaries

- The unit shall be fully compatible with a standard range of spigot mounted silencers. The silencers shall be suitable for duct mounting or direct mounting to the unit as indicated in the schedule.
- The silencer shall be a rigidly constructed single skinned galvanised sheet steel lining incorporating internal splitters lined with resin bonded mineral wool. Polythene and perforated metal sheet lining shall be available where indicated in the schedule.
- The silencer casework shall be provided naturally finished in high quality galvanised steel as standard. Internal and external powder coat available as indicated in the schedule. Colour to be in accordance with schedule.
- The plantroom unit shall be fully compatible with loose spigot mounted dampers suitable for direct fitting to the unit.
- Dampers shall incorporate an aluminium extruded channel frame and aluminium damper blades, mounted on nylon cogs with nylon bearing inserts. Blade operation shall be via a 12mm sq. spindle mounted to one side of the damper.
- Dampers shall be of opposed blade type, incorporating gasket seals between blades and sealed angles on the frame to ensure maximum sealing efficiency when the blades are closed.
- Dampers shall be suitable for use with optional 230 VAC or 24 VAC open/close actuator as supplied by VES Andover Ltd.

Download specification from www.ves.co.uk/information-centre

Colourfan[®] Extract Step by Step Guide

1 Choose Duties up to 2.5 m³/s

Colourfan[®] Extract
Duties up to 2.5 m³/s



2

Specify
your chosen
unit

a
Performance
Curve

b
Unit
Configuration

c
Noise Data
and Silencer
Option

3

Add control
packages for
performance
and efficiency
Pages 28-30

BlueSense



4

Specify bespoke
options for
Colourfan[®]
products
Page 31



Other products and services from the complete range of VES HVAC solutions:

Air Handling Units

- Supply and extract, combined or separate.
- Heat recovery including crossflow plate heat exchangers, thermal wheel, run-around coils.
- Plantroom or weatherproof, flat or stacked.
- Fitted silencers, fitted inverters and controls.
- Matching DX condensing units.
- Various case constructions including EN 1886 certified units.

Duct Fans

- In-line centrifugal, with forward or backward curved impellers.
- Round fans, axial and mixed flow fans.
- Fitted silencers available all units.
- Manual and automatic speed controllers available.

Twin Fans

- For ceiling void, plantroom, and weatherproof.
- Many models and configurations.
- Fitted auto-changeover system.

Roof Extract Units

- Three ranges for volume and pressure.
- Curb and soaker sheet bases.

Wall and Ceiling Fans

- All types for commercial, industrial and domestic premises.

Kitchen Hood Extract Fans

- Heavy duty high temperature fans for hot greasy air.
- Motors out of airstream.
- Single inlet fans, in-line and vertical jet roof units.

Control Panels

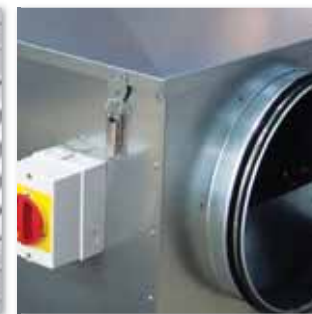
- Off the shelf and built to order panels.
- Air quality sensors and energy savers.
- Intelligent control software.
- A range of remotes including touch screen.

Noise Control

- Matching silencers available for all ventilation products.
- Silencers designed to meet noise criteria.
- Cleanable silencers.
- Weatherproof silencers.

Specialist Site Services

- Plant refurbishment.
- Energy saving upgrades.
- Noise reduction.
- Site surveys.
- Kitchen ventilation.
- AHU flat pack installation.
- Maintenance.
- Spares.



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ISO 9001:2008
Cert. No. Q05375

BSRIA



VES

Better air for the built environment

VES

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www.ves.co.uk

For details on Colourfan product codes please turn to the back of this flap.