

EuroSeries[®] (ESC)

- External rotor motors
- Die cast aluminium impellers
- Fully speed controllable
- Protected to IP54
- Operating Temperatures from -40°C up to +70°C
- Motor Insulation Class F
- HOT SPOT Protection
- Most models reversible - Supply or Extract
- Tough epoxy paint finish
- Quality Assurance to BS EN ISO 9001:2015
- Performance tested to BS848 Part 1 1980



The EuroSeries[®] ESC Short Cased axial blade fans, feature a single shot die cast aluminium blade & external rotor motor design.

Impellers

All sizes are supplied with cast aluminium impellers, ensuring performance when working against outdoor conditions and abrasive airflow.

Motors

External rotor motors are specially designed and styled for this range of fan. Ball bearings are greased for life. Rotors are dynamically balanced to ISO 1940. Sizes 250-1000mm, motors are protected to IP54, against dust and moisture complying with BS EN 60529:1992. They are ribbed aluminium body castings for efficient cooling. Motor insulation is Class 'F' (from -40°C to +70°C).

Electrical

Single phase 220-240V 50Hz. Capacitor start and run. Three phase 380-415V 50Hz. An IP54 terminal box are supplied with most models with 20mm and PGII entry. All motors are fitted with thermal overload Protection which should be wired into all controller circuits and into starter contactors.

Terminal Box

Terminal Box to IP54 as standard, protected against dust and water from any angle allowing outside applications.

Performance

The fan performance is in accordance with tests to BS848 Part 1 1980.

Sound Levels

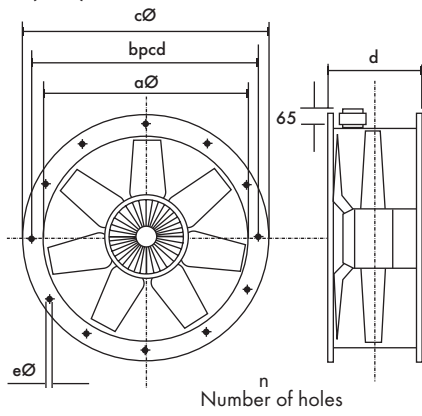
Fan sound levels, measured in a reverberant chamber in accordance with BS848 Part 2 1985. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at a reference level of 2×10^{-5} Pa (20 micro-Pascal). The sound power level spectra figures are dB with reference level of 10^{-12} Watts (1 pico-watt). To ensure minimum noise levels during speed control, an auto transformer speed control is recommended.

Accessories

A full range of accessories:

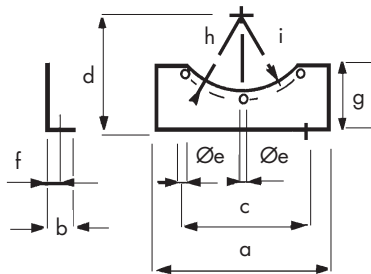
- Electronic Speed Controllers
- Auto Transformer Speed Controllers
- D.O.L. Starters & Overloads
- Ancillary Packs (comprising:- 4 AVM's, 2 mounting feet, 2 matching flanges, 2 flexible connectors + clips)
- Wire Guards
- Attenuators
- Mounting Feet
- Matching Flanges
- Anti Vibration Mounts
- Louvre Shutters

Dimensions (mm)



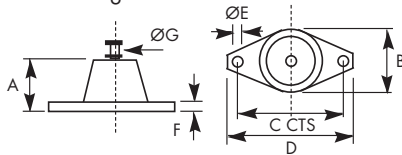
Dia	Øa	Øb	Øc	d	Øe	n	kg
315	316.5	356	382	135	9.5	8	6.1
710	711	751	785	260	11.5	16	31
800	797	837	871	280	11.5	24	39

Mounting Feet



Stock Ref	a	b	c	d	Øe	f	g	h	i
MFZ315	315	40	265	200	10	20	71	178	166
MFZ710	465	50	415	450	12	25	119	376	362
MFZ800	458	50	420	518	12	25	176	419	405

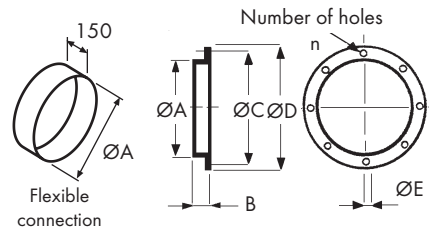
*Anti Vibration Mountings



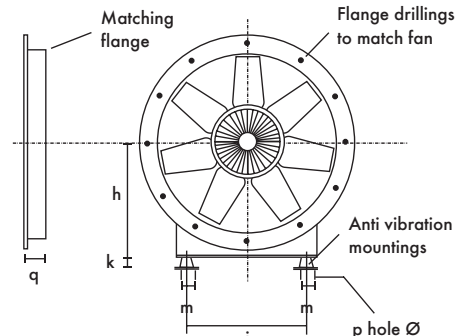
Stock Ref	A	B	C	D	ØE	F	ØG
68MP033G	27	37	54	67	7	3	M8

*Available for floor mounting only, as compression is required. Not compatible with ceiling mounting.

Coupling Flanges

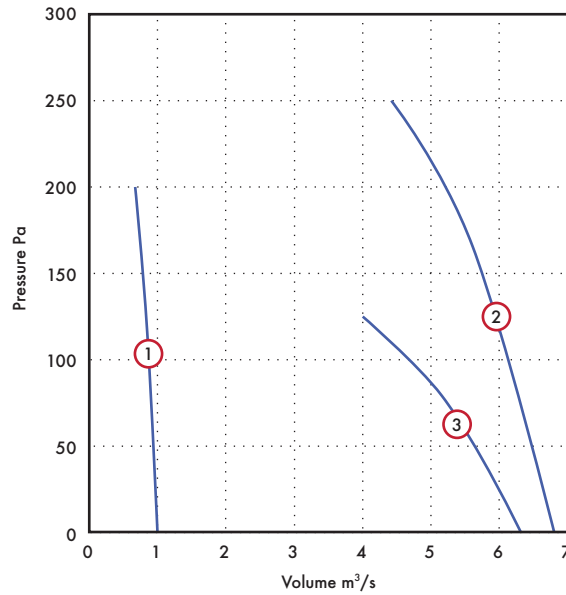


Stock Ref	ØA	B	ØC	ØD	ØE	n	Flexible Connection
CFZ315	313	40	356	382	10	8	FCZ315
CFZ710	708	50	751	785	12	16	FCZ710
CFZ800	798	50	837	871	12	24	FCZ800



Unit size	h	i	k↑	m	pØ	q
315	200	265	27	54	7	40
710	450	415	27	54	7	50
800	518	420	27	54	7	50

Performance Guide



Dia.	Motor Phase	Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s @ Pa					Motor kW	S.C. Amps	F.L.C Amps	dB(A) @ 3m
							0	50	100	150	200				
315	1	ESC31512B	2	2690	IP54	2	1.02	0.96	0.88	0.8	0.68	0.56	72	2.4	64
710	3	ESC71034	4	1290	IP54	2	6.81	6.49	6.16	5.72	5.22	2.9	19	5.3	72
800	3	ESC80036	6	900	IP54	3	6.3	5.58	4.67			1.4	9.8	2.7	64

For Fans wired to reverse run, duty reduced by 30%. ESC31512B not suitable for reverse airflow

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

Dia.	Motor Phase	Stock Ref	Poles	Spectrum	dB(A) @ 3m								
					63	125	250	500	1k	2k	4k	8k	
315	1	ESC31512B	2	Inlet	69	73	79	74	74	76	73	66	61
315	1	ESC31512B	2	Outlet	69	73	79	74	74	76	73	66	61
710	3	ESC71034	4	Inlet	80	87	86	88	89	86	83	79	72
710	3	ESC71034	4	Outlet	80	87	86	88	89	86	83	79	72
800	3	ESC80036	6	Inlet	75	75	73	71	72	70	64	57	56
800	3	ESC80036	6	Outlet	75	75	73	71	72	70	64	57	56

Models & Accessories

Fan Stock Ref	Speed Controller			Starter Stock Ref	Overload Stock Ref
	Electronic Stock Ref		Stock Ref		
	ESC31512BB	SC5001	SPM5020		
ESC71034	SC5030TK	RDTK70	444747	444703	
ESC80036	-	RDTK40	444747	444702	

Fan Stock Ref	Overload Stock Ref	Ancillary Packs Stock Ref	Mounting Feet (pair) Stock Ref	Matching Flanges (each)	Wire Guards (each)	*Anti-Vibration Mounts (set of 4)
				Stock Ref	Stock Ref	Stock Ref
ESC31512BB	444701	APZ315	MFZ315	CFZ315	WGZ315	68MP033G
ESC71034	444703	APZ710	MFZ710	CFZ710	WGZ710	68MP033G
ESC80036	444702	APZ800	MFZ800	CFZ800	WGZ800	68MP033G

- Note:
- The Standard roof cowl colour is BS 00 A 05 (Goose Wing Grey) for all special B.S. or RAL colours contact Vent-Axia.
 - When speed control is required a 5 step auto transformer speed controller is recommended, to ensure low noise levels.
 - All 3 phase models are suitable for frequency inverter speed control.
 - Vent-Axia only recommends using inverters with integral sine filters for reliable operation.
 - *Available for floor mounting only, as compression is required. Not compatible with ceiling mounting.

Size	1D Long - No Pod	1D Long - With Pod	2D Long - No Pod	2D Long - With Pod
	Stock Ref	Stock Ref	Stock Ref	Stock Ref
315	ACZ3151D	ACZ3151DP	ACZ3152D	ACZ3152DP
710	ACZ7101D	ACZ7101DP	ACZ7102D	ACZ7102DP
800	ACZ8001D	ACZ8001DP	ACZ8002D	ACZ8002DP