

EC CS Series - supply air roof centrifugal



The EC CS series has been purpose designed for roof mounted supply of air into building ventilation systems. The EC CS series of roof mounted fans incorporates very high efficiency electronically commutated DC motors with on board infinitely variable control modules. These fans are AC powered with control and power conversion electronics integrated into the motor. Motor speeds can be controlled with 0-10V input signal or 10K potentiometer.

The ability to control the speed at which the fan operates in response to real time ventilation demands is the basis of our energy saver range. Fan power consumption changes to the cube of speed reduction while air flow reduction stays proportional to reduced speed. This means that tailoring fan speed to meet exact air flow requirements has the potential to greatly reduce energy consumption through the removal redundant fan capacity.

Construction

Components are made from UV stabilised polymer, corrosion protected steel and fibreglass. All models are fitted with bird mesh as standard. Available in optional ColorbondTMcolours. Backward curved centrifugal impellers are matched with very high efficiency DC external rotor motors incorporating sealed for life bearings.

Testing

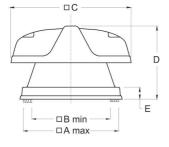
Rated fan performance has been determined by testing to ISO 5801:2007 . Fan sound data has been determined by testing to ISO 13347:2004.

Wiring Diagrams

Refer to the latest product datasheet for individual model wiring instructions, data and specifications. Datasheets are available from our electronic selection software **FansSelect** downloadable at **www.pacificHVAC.com** It is a condition of our warranty that all equipment supplied is installed according to the requirements of AS/NZS3000:2007 Australian/New Zealand wiring rules.

Suggested Specification

Roof Centrifugal Supply Air type fans shall be of the EC CS Series manufactured by Pacific HVAC Engineering. Backward curved impellers shall be driven by External Rotor motors with sealed for life bearings. Fan bases, and caps shall be weather proof and fabricated from UV resistant ABS polymer. All fans shall be fully tested in accordance with the requirements of ISO 5801: 2007 for air flow and ISO 13347: 2004 for sound.



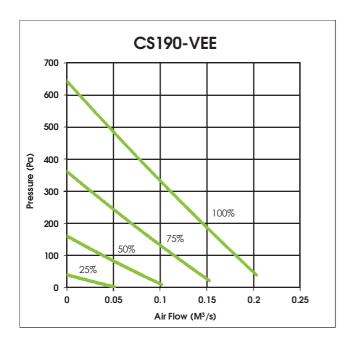
CS						
Size	Α	В	С	D	E	kg
190	380	325	430	260	50	3
355	510	440	710	550	90	17/22
450	810	710	960	800	95	27/35/46
630	1140	1040	1250	855	65	85/90

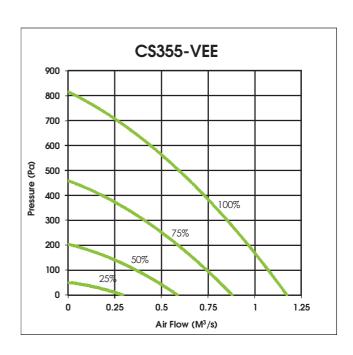


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Model	% Speed	kW	Amps	RPS	dB(A)	SPL dB referred to 10 ⁻¹² W							
					@ 3m	63	125	250	500	1K	2K	4K	8K
CS190-VEE	100	0.083	0.75	53	48	71	64	61	64	63	63	60	50
CS190-VEE	75	0.035	0.32	40	41	64	57	54	57	56	56	53	43
CS190-VEE	50	0.01	0.09	27	31	54	47	44	47	46	46	43	33
CS190-VEE	25	0.001	0.01	13	14	37	30	27	30	29	29	26	16
C\$355-VEE	100	0.5	2.2	31	50	82	80	77	68	60	58	56	49
CS355-VEE	75	0.211	0.93	23	43	75	73	70	61	53	51	49	42
CS355-VEE	50	0.063	0.28	15	33	65	63	60	51	43	41	39	32
C\$355-VEE	25	0.008	0.03	8	16	48	46	43	34	26	24	22	15
CS450-VEE	100	0.75	3.3	24	51	71	72	74	71	66	61	60	49
CS450-VEE	75	0.316	1.39	18	44	64	65	67	64	59	54	53	42
CS450-VEE	50	0.094	0.41	12	34	54	55	57	54	49	44	43	32
CS450-VEE	25	0.012	0.05	6	17	37	38	40	37	32	27	26	15
CS450-VDE	100	0.97	1.7	26	54	85	84	77	73	66	66	59	44
CS450-VDE	75	0.409	0.72	19	47	78	77	70	66	59	59	52	37
CS450-VDE	50	0.121	0.21	13	37	68	67	60	56	49	49	42	27
CS450-VDE	25	0.015	0.03	6	20	51	50	43	39	32	32	25	10
CS630-VDE	100	2.9	4.43	28	59	76	81	78	78	75	68	67	64
CS630-VDE	75	1.223	1.87	21	52	69	74	71	71	68	61	60	57
CS630-VDE	50	0.363	0.55	14	42	59	64	61	61	58	51	50	47
CS630-VDE	25	0.045	0.07	7	25	42	47	44	44	41	34	33	30

VEE = single phase. VDE = three phase







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