

# SHORT CASED AXIAL FANS

## PERFORMANCE GUIDE & ELECTRICAL DATA

Unit Code	Nom. RPM	Phase	Duty - m <sup>3</sup> /s @ Pa										Motor kW	Amps		dBA @3m	
			0	25	50	75	100	125	150	200	250	300		FLC	SC		
<b>2 Pole</b>																	
CA250/2/1B	2500	1												0.24	1.2	4.3	59
CA250/2/3B	2500	3	0.614	0.591	0.569	0.544	0.517	0.465						0.24	0.5	3	
CA315/2/1A	2500	1	0.870	0.840	0.811	0.780	0.744	0.700	0.648	0.460	0.210			0.5	2.3	9.2	66
CA315/2/3A	2600	3	0.900	0.872	0.846	0.819	0.785	0.750	0.703	0.571	0.290			0.6	1.1	6.6	
CA350/2/1A	2000	1	1.060	0.985	0.915	0.847	0.770	0.680	0.540	0.202				0.55	2.6	10.4	70
CA350/2/3A	2400	3	1.170	1.131	1.095	1.052	1.005	0.953	0.871	0.717	0.400	0.185		0.65	1.9	11.4	
<b>4 Pole</b>																	
CA250/4/1B	1330	1	0.347	0.301										0.6	0.3	1.2	45
CA250/4/3B	1330	3												0.6	0.2	1.2	
CA315/4/1B	1300	1	0.650	0.571	0.496									0.10	0.6	2.4	49
CA315/4/3B	1300	3												0.15	0.3	1.8	
CA350/4/1B	1225	1	0.964	0.893	0.813									0.2	1	4	53
CA350/4/3B	1260	3												0.2	0.5	3	
CA400/4/1B	1200	1	1.416	1.333	1.220	1.084	0.940							0.34	1.6	6.4	57
CA400/4/3B	1360	3												0.33	0.8	4.8	
CA450/4/1B	1370	1	1.972	1.874	1.782	1.700	1.610	1.482						0.62	2.7	10.8	57
CA450/4/3B	1400	3												0.63	1.6	9.6	
CA500/4/1B	1300	1	2.697	2.610	2.525	2.440	2.350	2.245	2.120					0.80	3.5	14	61
CA500/4/3B	1350	3												0.88	1.7	10.2	
CA560/4/1B	1340	1	3.827	3.755	3.674	3.579	3.460	3.305	3.125					1.68	7.7	30.8	65
CA560/4/3B	1370	3												1.52	2.8	16.8	
CA630/4/3B	1400	3	5.056	4.960	4.863	4.756	4.633	4.500	4.351	4.020				2.2	4.0	24	67
<b>6 Pole</b>																	
CA350/6/1B	800	1	0.617	0.510										0.09	0.5	2	39
CA350/6/3B	875	3												0.09	0.3	1.8	
CA400/6/1B	750	1	0.900	0.770										0.11	0.6	2.4	44
CA400/6/3B	830	3												0.11	0.3	1.8	
CA450/6/1B	890	1	1.275	1.119	0.932									0.24	1.2	4.8	55
CA450/6/3B	910	3												0.20	0.5	3.0	
CA500/6/1B	890	1	1.694	1.591	1.395									0.31	1.7	6.8	58
CA500/6/3B	900	3												0.27	0.6	3.5	
CA560/6/1B	900	1	2.411	2.269	2.080									0.55	2.8	11.2	61
CA560/6/3B	900	3												0.47	1.0	6.0	
CA630/6/1B	930	1	3.611	3.450	3.250	3.010	2.700							0.98	5.4	21.6	64
CA630/6/3B	950	3												0.86	2.8	16.8	

FLC = Full Load Current    SC = Starting Current

# SHORT CASED AXIAL FANS

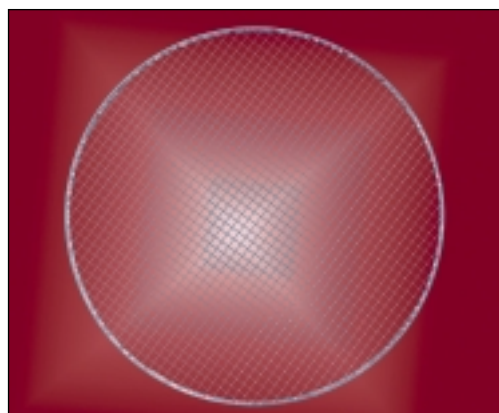
## ACCESSORIES

Unit Code	Electronic Controller Code	Auto Transf. Controller Code	D.O.L. Starter Code	Ancillary Pack Code	Mounting Feet Code	Matching Flanges Code	Wire Guards Code	Flexible Connections Code	Anti Vib. Mounts Code
CA250/2/1B	-	-	RDO1D	CA250PKB	CA250FTB	CA250MFB	CA250FGB	CA250FCB	AVM220
CA250/2/3B	-	-	RDO3B						
CA315/2/1A	-	-	RDO1E	CA315PKB	CA315FTB	CA315MFB	CA315FGB	CA315FCB	AVM220
CA315/2/3A	-	-	RDO3D						
CA350/2/1A	-	-	RDO1F	CA350PKB	CA350FTB	CA350MFB	CA350FGB	CA350FCB	AVM220
CA350/2/3A	-	-	RDO3E						
CA250/4/1B	SP5001	SPM5026	RDO1A	CA250PKB	CA250FTB	CA250MFB	CA250FGB	CA250FCB	AVM220
CA250/4/3B	-	RDTK1	-						
CA315/4/1B	SP5001	SPM5026	RDO1B	CA315PKB	CA315FTB	CA315MFB	CA315FGB	CA315FCB	AVM220
CA315/4/3B	-	RDTK1	RDO3A						
CA350/4/1B	SP5001	SPM5026	RDO1D	CA350PKB	CA350FTB	CA350MFB	CA350FGB	CA350FCB	AVM220
CA350/4/3B	-	RDTK1	RDO3B						
CA400/4/1B	SP5025	SPM5026	RDO1E	CA400PKB	CA400FTB	CA400MFB	CA400FGB	CA400FCB	AVM220
CA400/4/3B	-	RDTK1	RDO3C						
CA450/4/1B	SP5050	SPM5055	RDO1F	CA450PKB	CA450FTB	CA450MFB	CA450FGB	CA450FCB	AVM220
CA450/4/3B	-	RDTK2	RDO3E						
CA500/4/1B	SP5050	SPM5055	RDO1G	CA500PKB	CA500FTB	CA500MFB	CA500FGB	CA500FCB	AVM220
CA500/4/3B	-	RDTK4	RDO3E						
CA560/4/1B	-	-	RDO1H	CA560PKB	CA560FTB	CA560MFB	CA560FGB	CA560FCB	AVM250
CA560/4/3B	-	*	RDO3F						
CA630/4/3B	-	*	RDO3G	CA630PKB	CA630FTB	CA630MFB	CA630FGB	CA630FCB	AVM250
CA350/6/1B	SP5001	SPM5026	RDO1B	CA350PKB	CA350FTB	CA350MFB	CA350FGB	CA350FCB	AVM220
CA350/6/3B	-	RDTK1	RDO3A						
CA400/6/1B	SP5001	SPM5026	RDO1B	CA400PKB	CA400FTB	CA400MFB	CA400FGB	CA400FCB	AVM220
CA400/6/3B	-	RDTK1	RDO3A						
CA450/6/1B	SP5001	SPM5026	RDO1D	CA450PKB	CA450FTB	CA450MFB	CA450FGB	CA450FCB	AVM220
CA450/6/3B	-	RDTK1	RDO3B						
CA500/6/1B	SP5025	SPM5026	RDO1E	CA500PKB	CA500FTB	CA500MFB	CA500FGB	CA500FCB	AVM220
CA500/6/3B	-	RDTK1	RDO3B						
CA560/6/1B	SP5050	SPM5055	RDO1F	CA560PKB	CA560FTB	CA560MFB	CA560FGB	CA560FCB	AVM250
CA560/6/3B	-	RDTK2	RDO3D						
CA630/6/1B	SP5010	SPM5070	RDO1G	CA630PKB	CA630FTB	CA630MFB	CA630FGB	CA630FCB	AVM250
CA630/6/3B	-	RDTK4	RDO3F						

**NOTE:** All \* models are suitable for frequency inverter speed control.

When speed control is required on all other models a step auto transformer speed controller is recommended, to ensure low noise levels.

**Guards:** Some installations may occur where additional safety parts are needed, to ensure safety in operation. For example, the unit may be fitted at the inlet or outlet end of a ducted ventilation system, thereby exposing the impeller/motor to unguarded access. In this event, the installer must fit a safety guard complying to current regulations. These guards are available as an optional extra.



# SHORT CASED AXIAL FANS

## ACCESSORIES

Unit Code	Cased Attenuators 1D Code	Cased Attenuators + Pod 1D Code	Cased Attenuators 2D Code	Cased Attenuators + Pod 2D Code
CA250/4	EPS2501D	-	EPS2502D	-
CA315/4	EPS3151D	EPSP3151D	EPS3152D	EPSP3152D
CA350/4	EPS3501D	EPSP3501D	EPS3502D	EPSP3502D
CA400/4	EPS4001D	EPSP4001D	EPS4002D	EPSP4002D
CA450/4	EPS4501D	EPSP4501D	EPS4502D	EPSP4502D
CA500/4	EPS5001D	EPSP5001D	EPS5002D	EPSP5002D
CA560/4	EPS5601D	EPSP5601D	EPS5602D	EPSP5602D
CA630/4	EPS6301D	EPSP6301D	EPS6302D	EPSP6302D

## SOUND DATA

### SOUND POWER LEVEL SPECTRA dB (ref 10<sup>-12</sup> Watts)

Unit Code		MID OCTAVE BANDS							dBA @ 3m	
		63	125	250	500	1000	2000	4000		8000
<b>2 Pole</b>										
CA250/2	Inlet	75	77	77	77	74	74	67	58	59
	Outlet	75	77	77	77	74	74	67	58	59
CA315/2	Inlet	82	85	86	78	76	75	72	69	66
	Outlet	82	85	86	78	76	75	72	69	66
CA350/2	Inlet	84	86	91	81	80	78	74	70	70
	Outlet	84	86	91	81	80	78	74	70	70
<b>4 Pole</b>										
CA250/4	Inlet	69	66	66	62	60	58	52	41	45
	Outlet	69	66	66	62	60	58	52	41	45
CA315/4	Inlet	62	63	66	65	66	62	56	47	49
	Outlet	62	63	66	65	66	62	56	47	49
CA350/4	Inlet	64	75	65	69	70	65	60	51	53
	Outlet	64	75	65	69	70	65	60	51	53
CA400/4	Inlet	66	78	67	71	74	69	65	42	57
	Outlet	66	78	67	71	74	69	65	42	57
CA450/4	Inlet	64	69	71	75	75	72	66	59	57
	Outlet	64	69	71	75	75	72	66	59	57
CA500/4	Inlet	66	71	73	77	78	74	69	61	61
	Outlet	66	71	73	77	78	74	69	61	61
CA560/4	Inlet	70	75	77	81	81	78	72	65	65
	Outlet	70	75	77	81	81	78	72	65	65
CA630/4	Inlet	72	77	79	83	83	80	75	67	67
	Outlet	72	77	79	83	83	80	75	67	67
<b>6 Pole</b>										
CA350/6	Inlet	64	61	55	56	53	53	47	36	39
	Outlet	64	61	55	56	53	53	47	36	39
CA400/6	Inlet	59	62	58	63	60	59	52	40	44
	Outlet	59	62	58	63	60	59	52	40	44
CA450/6	Inlet	60	65	67	71	71	68	63	55	55
	Outlet	60	65	67	71	71	68	63	55	55
CA500/6	Inlet	63	68	70	74	74	70	65	58	58
	Outlet	63	68	70	74	74	70	65	58	58
CA560/6	Inlet	66	71	73	77	78	74	69	61	61
	Outlet	66	71	73	77	78	74	69	61	61
CA630/6	Inlet	69	74	76	80	80	76	71	64	64
	Outlet	69	74	76	80	80	76	71	64	64

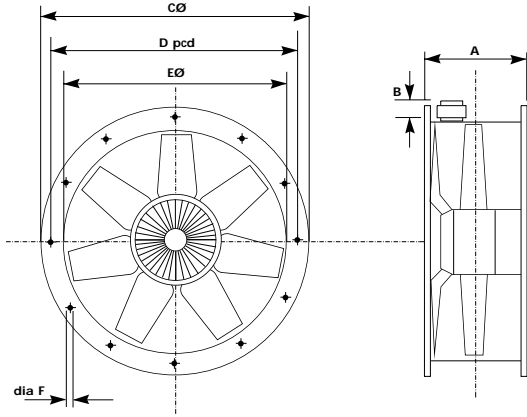
**Note:** The above Sound Power Level Spectra is for **B-Form** Running Fans.

Published dB (A) figures, are free field sound levels at 3m, with spherical propagation at a reference level of 2 x 10<sup>-5</sup> Pa. The sound power level spectra figure, are dB with reference of 10<sup>-12</sup> Watts.

To ensure minimum noise levels during speed control, an auto transformer speed controller is recommended.

# SHORT CASED AXIAL FANS

## DIMENSIONS (mm)



Unit Size	Dimensions in mm						No Holes	Weight kg
	A	B	CØ	D pcd	EØ	FØ		
CA250	170	65	327	292	254	10	4	7
CA315	170	65	386	355	315	10	8	10
CA350	170	65	426	395	355	10	8	12
CA400	170	65	487	450	400	12	8	14
CA450	180	65	537	500	450	12	8	18
CA500	180	65	595	560	500	12	12	22
CA560	240	65	655	620	560	12	12	31
CA630	240	65	725	690	630	12	12	35

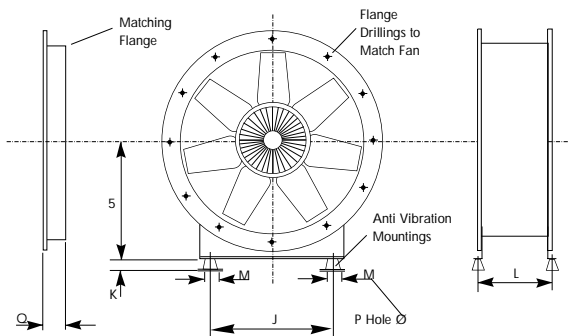
## ACCESSORIES

### DIMENSIONS (mm)

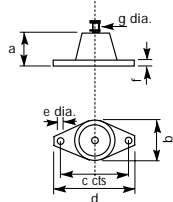
To complement the fans, we offer a comprehensive range of purpose made ancillary items. These can be either purchased individually, or for more convenience and economy, they are also available as an ancillary pack containing:

- 4 - Anti vibration mountings
- 4 - Mounting feet
- 2 - Matching flanges
- 2 - Sound barrier flexible connectors (with clips)

Overall length 150mm



### Anti-vibration mounts



Unit size	H	J	K*	L	M	P	Q	Weight
								kg
250	200	180	27	178	54	7	55	7
315	224	224	27	178	54	7	55	10
350	250	250	27	178	54	7	55	12
400	280	280	27	178	54	7	63	14
450	315	315	27	187	54	7	63	18
500	315	315	27	187	54	7	69	22
560	355	355	27	252	54	7	69	31
630	400	400	27	252	54	7	69	35

\* Deflection under load, sizes 315-630 = 4.5mm

Code	a	b	c	d	e	f	g
AVM220/250	27	37	54	67	7	3	M8

# SHORT CASED AXIAL FANS

## ATTENUATOR INSERTION LOSSES

Eurofoil circular attenuators are designed to match the Roof Units standard range of cased axial fans. The casings and liners are spiral wound construction to give high rigidity and noise reduction.

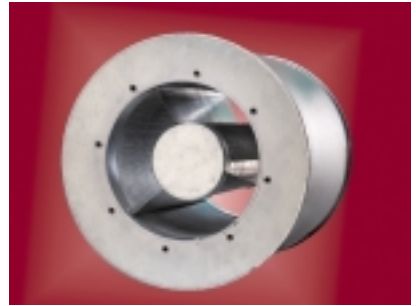
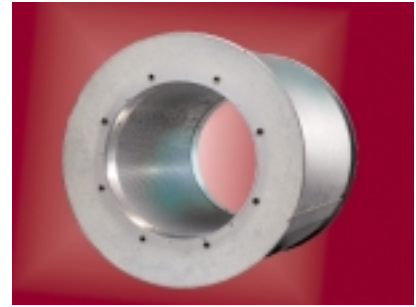
Unit Code EPS	Attenuator Insertion Loss (ID)							
	Frequency Hz							
Inside Dia	63	125	250	500	1K	2K	4K	8K
250	1	4	5	10	14	10	8	7
315	1	3	5	10	14	10	8	7
350	1	2	5	11	14	10	8	6
400	2	3	6	11	14	10	8	6
450	2	4	6	12	14	10	8	6
500	2	4	6	12	14	10	8	6
560	3	5	7	13	14	10	8	6
630	3	5	8	14	14	9	8	6

For Silencer length 2D the Attenuation figures may be multiplied by 1.8

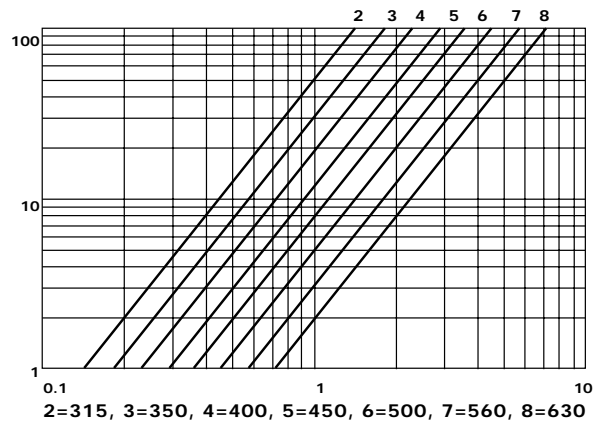
Unit Code EPSP	Attenuator Insertion Loss (ID)							
	Frequency Hz							
Inside Dia	63	125	250	500	1K	2K	4K	8K
315	2	5	7	11	18	20	17	15
350	2	5	7	11	19	20	18	15
400	2	5	7	13	19	20	18	15
450	3	5	8	14	20	20	19	15
500	3	5	8	15	21	20	17	13
560	3	5	8	15	21	20	17	13
630	3	6	9	16	21	20	16	12

For Silencer length 2D the Attenuation figures may be multiplied by 1.8

Fan Size	Dimension			Length		Weight EPS kgs		Weight EPSP kgs	
	A	B	C	1D	2D	1D	2D	1D	2D
CA250	292	350	M8	250	500	9	18	-	-
CA315	355	500	M8	300	600	11	22	14	28
CA350	395	560	M8	350	700	12	24	15	30
CA400	450	630	M10	400	800	16	32	18	36
CA450	500	710	M10	450	900	20	40	25	50
CA500	560	710	M10	500	1000	26	52	30	60
CA560	620	800	M10	550	1100	31	62	36	72
CA630	690	900	M10	650	1300	36	72	43	86

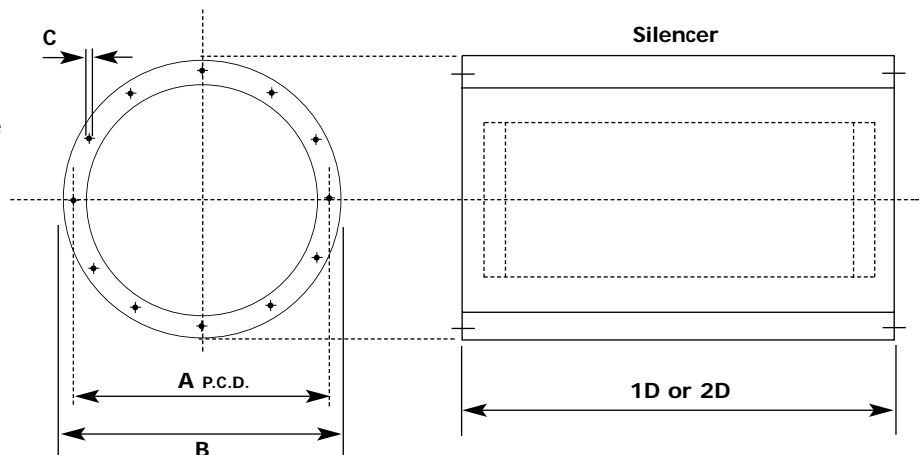


EPSP 1D Attenuator with pod air pressure drop



For the pressure drop of a 2D Attenuator with POD, increase the above resistance by +60%.

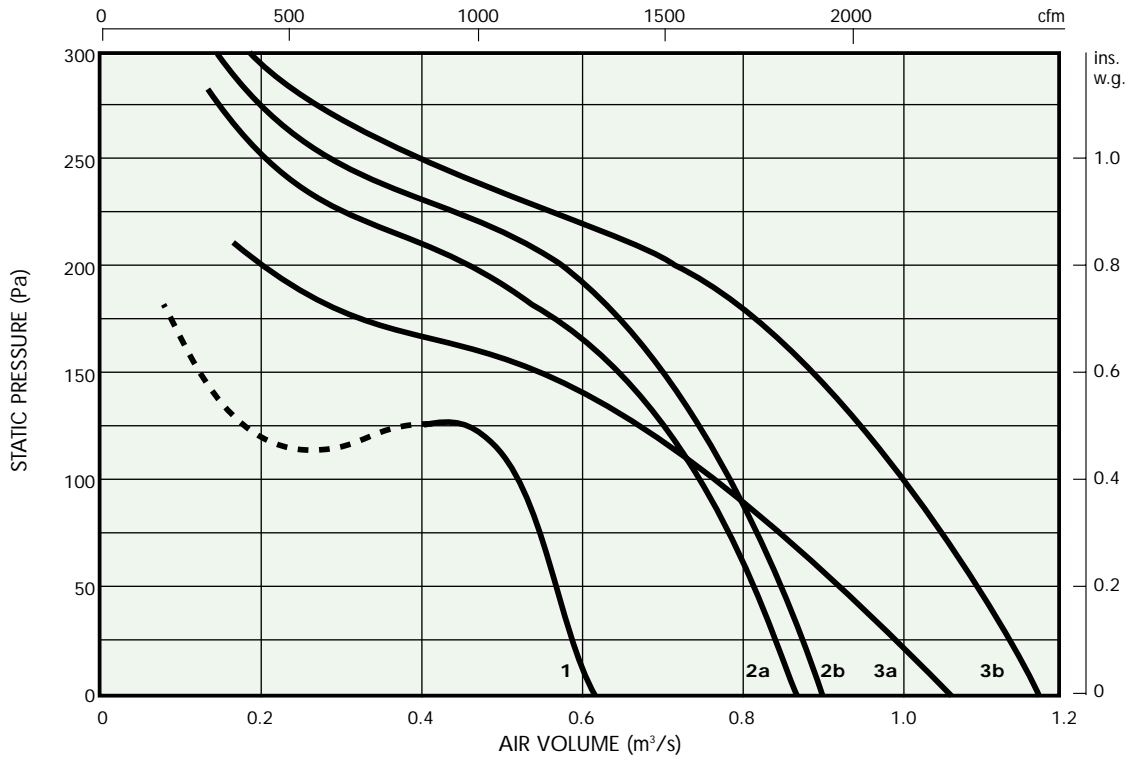
In some instances the silencer outer casing may extend below the base of the foot/av in which case a packing piece or special foot will be necessary.



# SHORT CASED AXIAL FANS

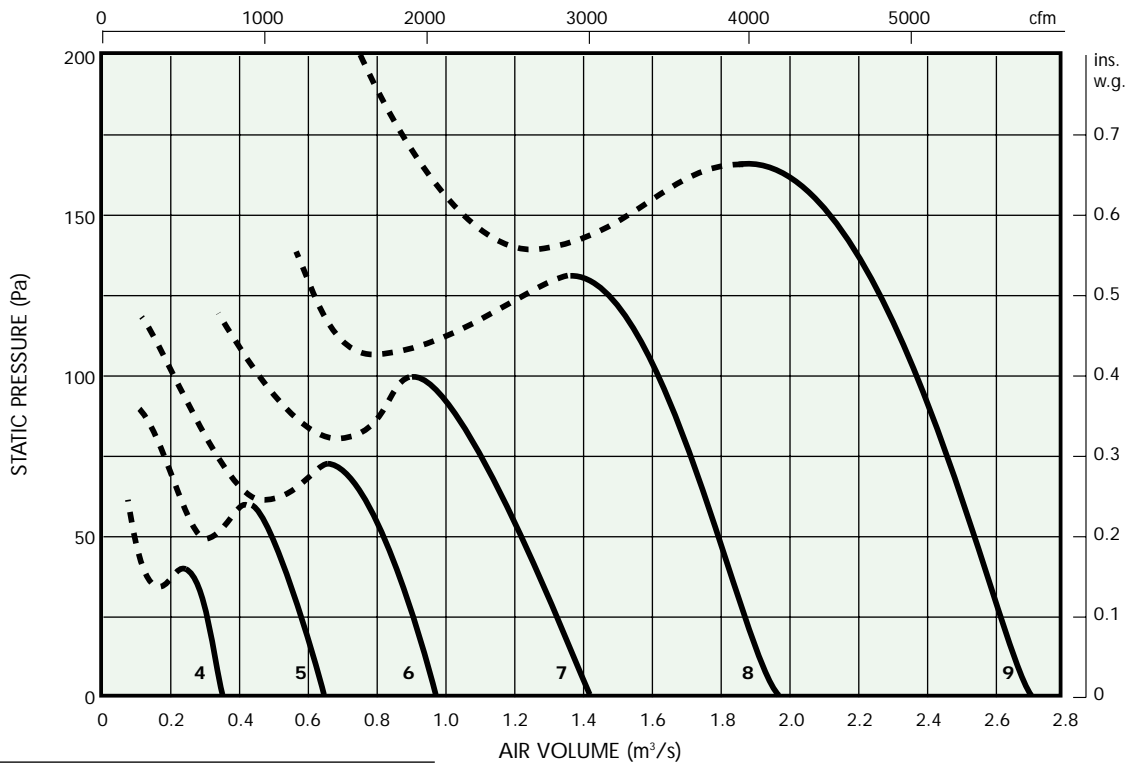
## PERFORMANCE CURVES

### 2 POLE MOTORS



Size	250	315-1ph	315-3ph	350-1ph	350-3ph
	1	2a	2b	3a	3b

### 4 POLE MOTORS



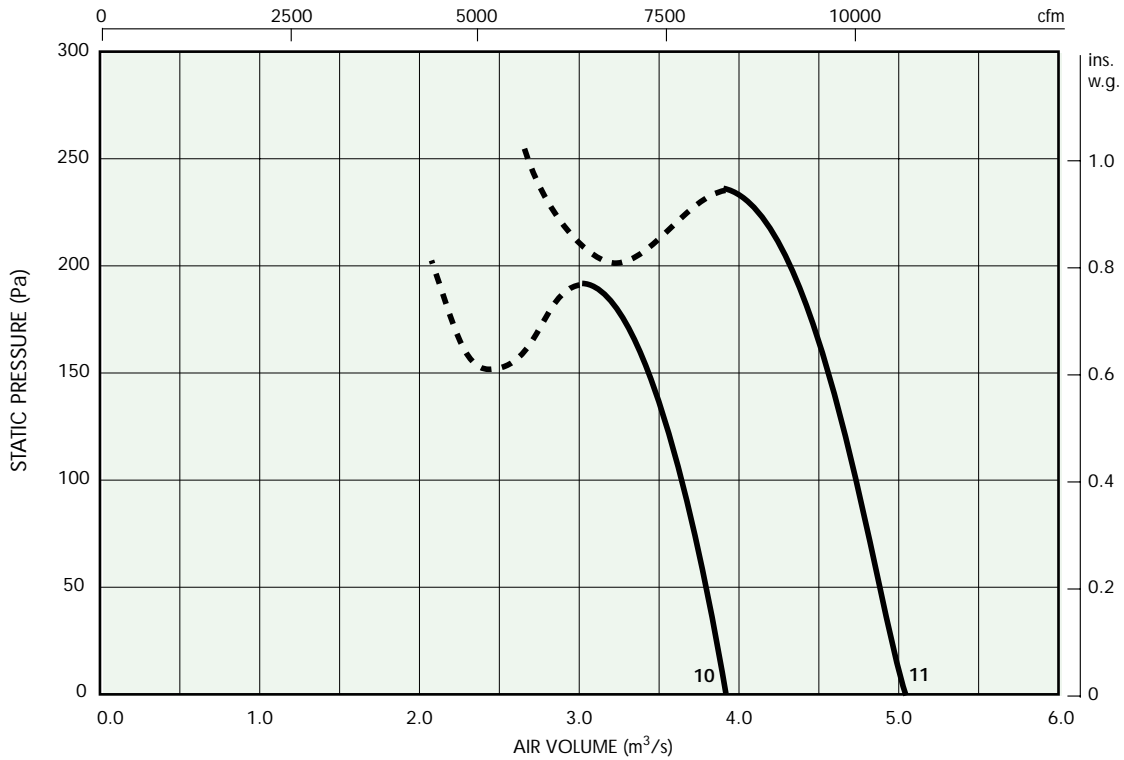
Size	250	315	350	400	450	500
	4	5	6	7	8	9

**Note:** The broken points of all performance curves are for illustration purposes only and not for selection.

# SHORT CASED AXIAL FANS

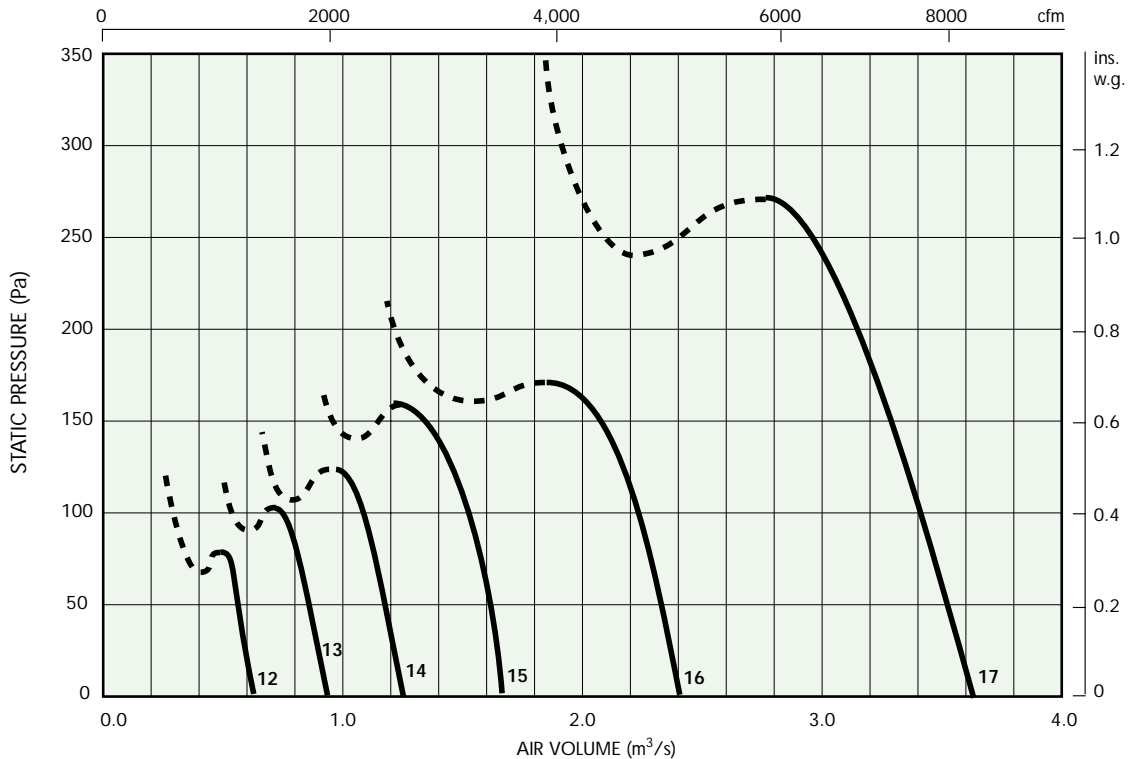
## PERFORMANCE CURVES

### 4 POLE MOTORS



Size	560	630
	10	11

### 6 POLE MOTORS

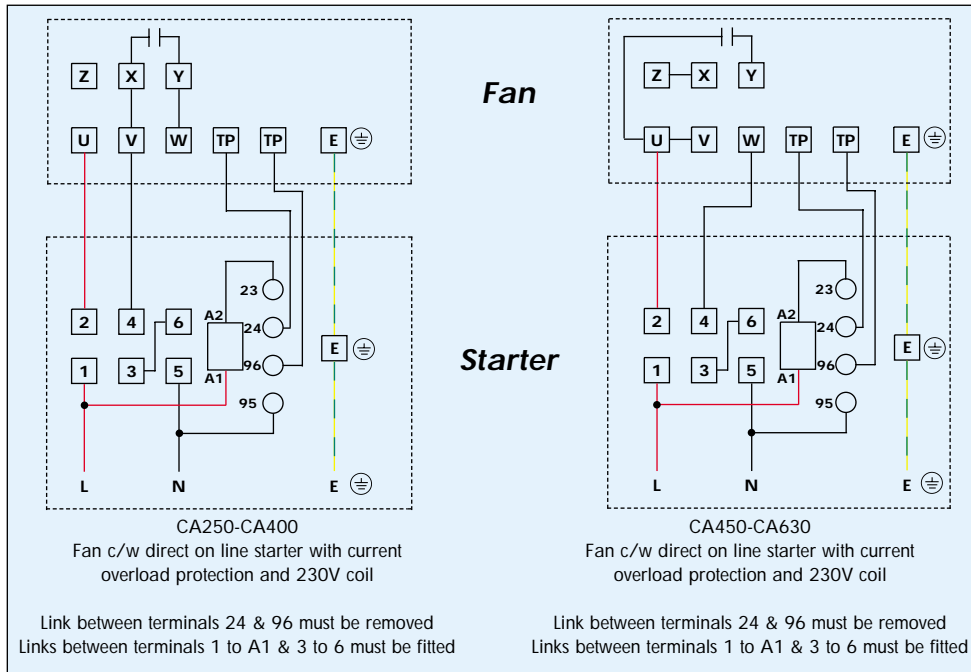


Size	350	400	450	500	560	630
	12	13	14	15	16	17

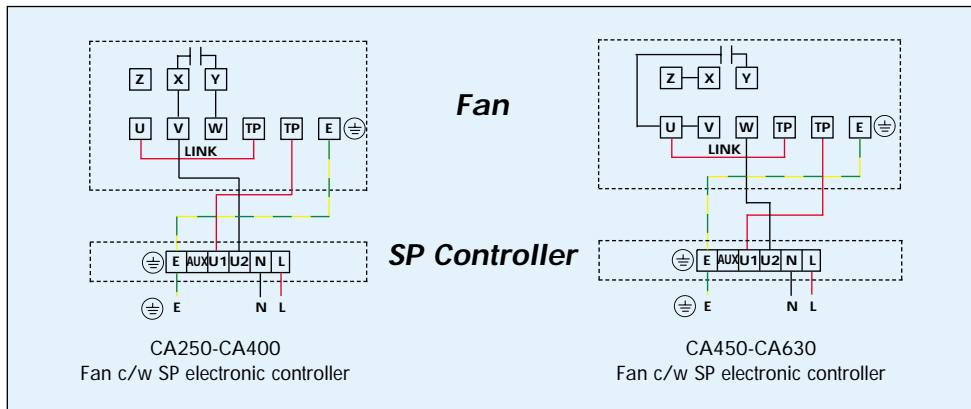
**Note:** The broken points of all performance curves are for illustration purposes only and not for selection.

# SINGLE PHASE SHORT CASED AXIAL FANS WIRING DIAGRAMS 230V 1PH 50Hz SUPPLY

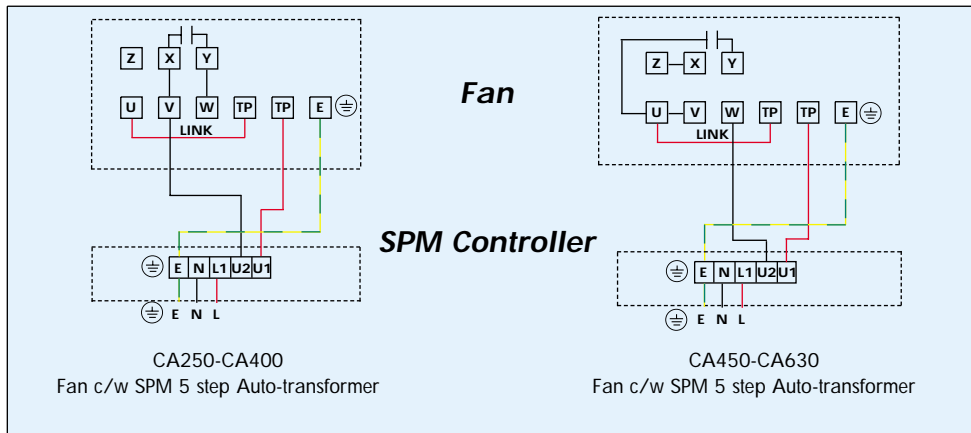
## D.O.L. STARTER WIRING DIAGRAMS



## SINGLE PHASE ELECTRONIC SPEED CONTROLLER WIRING DIAGRAMS



## SINGLE PHASE AUTO TRANSFORMER SPEED CONTROLLER WIRING DIAGRAMS



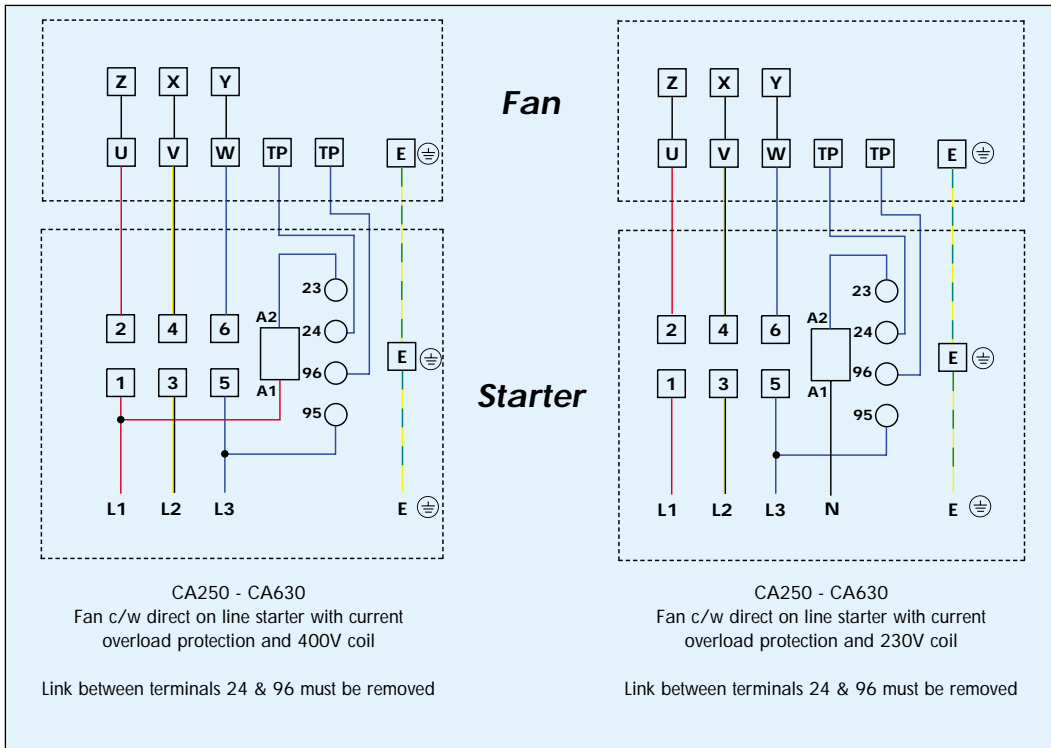
These products must be installed by a suitably qualified and competent person in accordance with current applicable regulations

Note: 2 pole units are not speed controllable

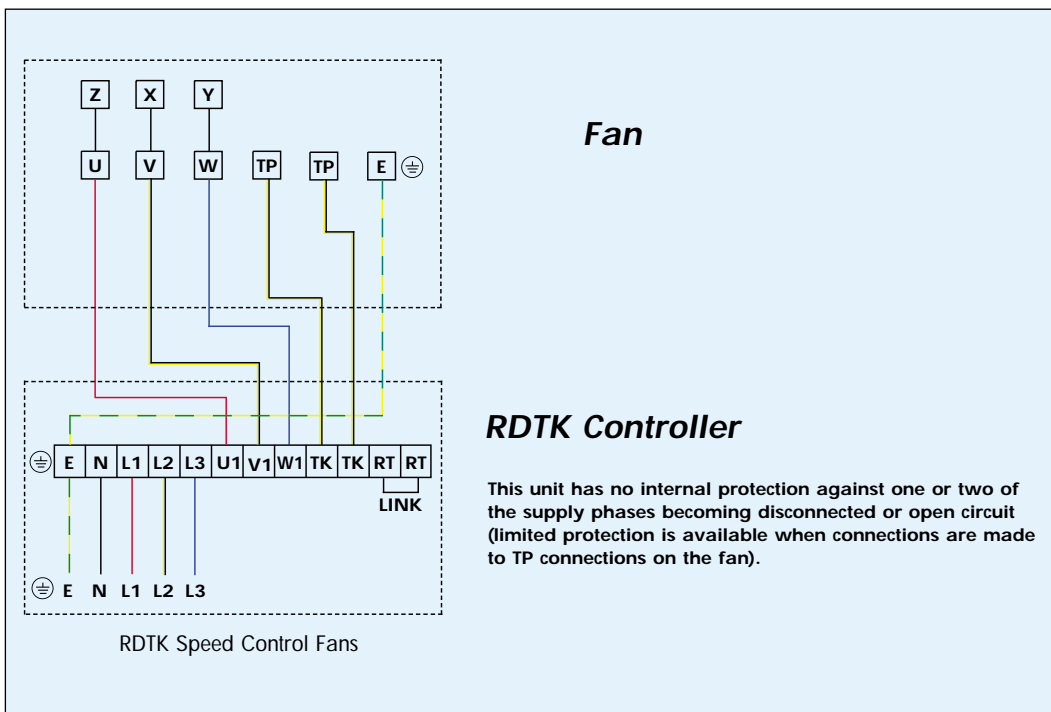


# THREE PHASE SHORT CASED AXIAL FANS WIRING DIAGRAMS 400V 3PH 50Hz SUPPLY

## D.O.L. STARTER WIRING DIAGRAMS



## THREE PHASE AUTO TRANSFORMER SPEED CONTROLLER WIRING DIAGRAM



*These products must be installed by a suitably qualified and competent person in accordance with current applicable regulations*