

# INDUSTRIAL FANS AND BLOWERS

RANGE OF AIR MOVING PRODUCTS



- Axial Flow Fans
- Centrifugal Blowers
- Backward Curved Fans
- Inline Fans
- Cross Flow Fans

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## COMPANY PROFILE

Rotech manufactures External Rotor Motors, Axial Flow Fans and Centrifugal Blowers. These products are used for a wide range of Industrial and HVAC applications as detailed in this catalogue. Our External Rotor Motors are manufactured to EN 60335-1 standards.

Rotech is an ISO 9001 certified company. We have an experienced team of workmen and a contemporary manufacturing set-up. The manufacturing facility is equipped with State-of-the-Art Machinery having CNC controls which can cater to bulk requirements. Rotech products are well known in the industry for their quality and reliability. Every product goes through stringent quality checks to ensure life long guarantee of trouble free performance.

Rotech constantly focuses on developing and innovating new products. Committed to manufacturing & supplying innovative high quality products, Rotech has a long list of faithful clients, in this age of brand switching. Almost all products are used by leading industries or wherever product quality counts.



Factory at Bilimora, Gujarat

## SALIENT FEATURES

- Manufactured to EN 60335-1 standards.
- Compact size.
- Continuous rating with high efficiency.
- Variable speed by changing input voltage or frequency.
- Dynamic balance in 2 planes as per grade 6.3 of ISO 1940-1-2003: VDI 2060.
- Winding surge and H.V Tested.
- Double shielded pre-lubricated ball bearing.
- Low noise.
- Maximum ambient temperature 60°C.
- Air performance measurement are in conformance with IS:3588-1987
- All sound measurements are carried out in an acoustic test room.
- The sound levels checked are the A-weighted overall sound power level.

## APPLICATIONS

### AXIAL FLOW FANS

[Applications requiring high air volume at low pressure]

- Instrumentation and electrical panel cooling.
- UPS systems.
- Condenser fans in air conditioning & refrigeration.
- Walk in coolers and deep freezers.
- Welding sets and rectifiers.
- Lift cabin fans.
- Industrial & domestic exhaust fans.

### CROSS FLOW FANS

[Applications requiring air at low velocity]

- Lift cabin cooling.
- Electrical panel cooling.
- HVAC applications.

### CENTRIFUGAL BLOWERS

[Applications requiring high static pressure at outlet]

- Cooling AC/DC drives.
- HVAC applications.

### BACKWARD CURVED FANS

[Applications requiring high static pressure at inlet]

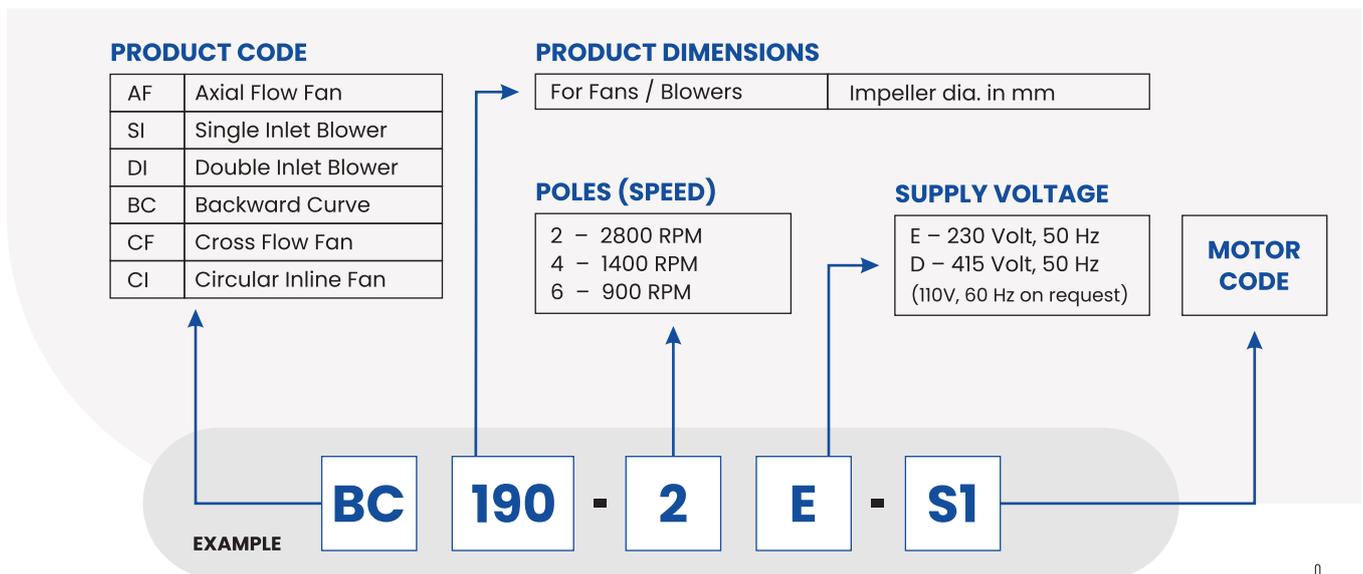
- Roof extractors.
- Electrical panel cooling.
- Thyristor panel cooling.

### INLINE FANS

[Applications requiring boosting airflow within ducts]

- HVAC applications.
- Industrial & domestic ventilation in bathrooms & kitchens.

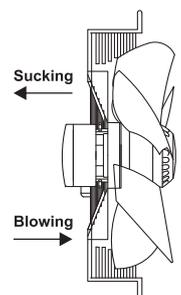
## MODEL CODING SYSTEM - HOW TO ORDER



**NOTE :** For Axial Flow Fans the following additional details need to be specified :

- 1) Air Flow Direction** - Reverse/Suction (R) [From Blade to Grill] **OR** Forward/Blow (F) [From Grill to Blade]
- 2) Accessories** - Flat Grill (FG), Basket Grill (BG), Square Frame (SQ), Housing (H).

**Example for Axial Flow Fan : AF200-2E-S1-RBG**



# AXIAL FLOW FANS

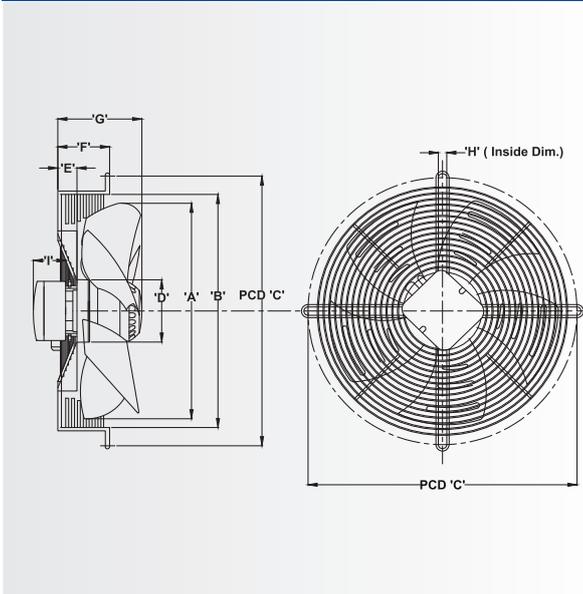


**AXIAL FLOW FANS ARE CE CERTIFIED AND RoHS COMPLIANT**

**Blade Diameter** : 200 to 800 MM  
**Input Volts** : 110, 230, 415 Volts AC 50/60 Hz. Single & Three Phase  
**Speed** : 900, 1400, 2800 RPM  
**Air Volume** : 950 to 21500 M<sup>3</sup>/HR  
**Max Pressure** : 35 MM WG

**ACCESSORIES AVAILABLE : FRAMES, HOUSINGS, FLAT & BASKET GRILLS**

## DIMENSIONS - AXIAL FLOW FANS



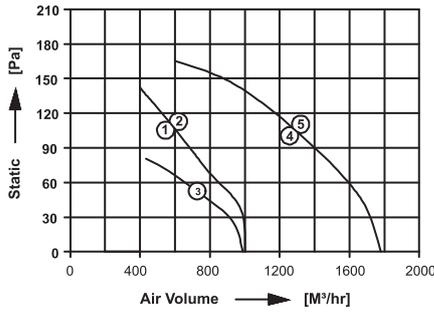
Model	A	B	PCD C	D	E	F	G	H	I
AF200	200	220	260	92	-	45	68	7.0	55
AF250	250	275	320	92	-	45	78	7.0	55
AF300	300	320	360	92	30	90	88	8.0	55
AF350	350	370	420	102	30	90	107	10.0	55
AF400	400	420	470	102	30	90	120	10.0	55
AF450	450	470	520	102	30	90	133	10.0	55
AF450	450	470	520	138	30	90	123	10.0	55
AF500	500	520	570	138	30	90	123	10.5	55
AF550	550	570	620	138	30	100	138	10.5	55
AF600	600	620	680	138	30	100	156	10.5	55
AF630	630	650	750	138	30	100	156	10.5	55
AF710	710	703	780	180	42	172	251	14.0	55
AF800	800	780	925	180	42	188	281	14.0	55

All Dimensions are in MM

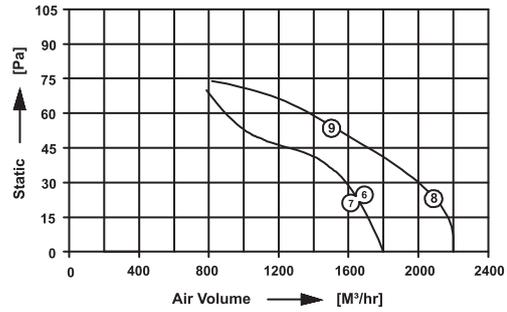


# Performance Curves

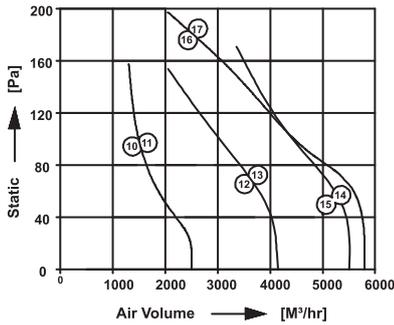
AF200 & 250



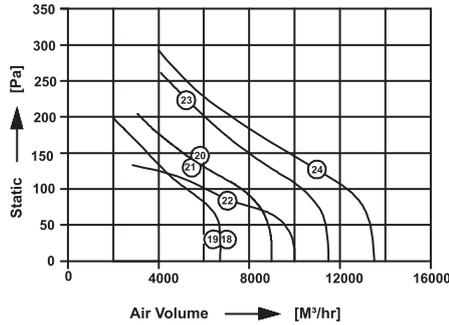
AF300



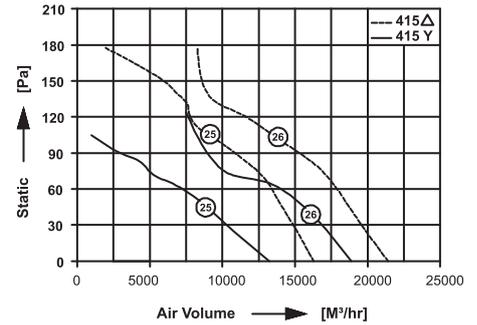
AF350 To 450



AF500 To 630



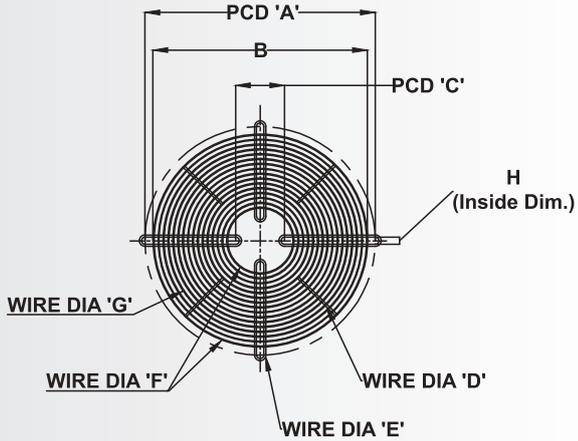
AF710 & 800



## TECHNICAL SPECIFICATION - AXIAL FLOW FANS

Sr. No.	Model	Volt (V)	Watts (W)	Current (A)	Speed (RPM)	Capacitor (μF)	Air Vol. (m³/hr)	Air Vol. (CFM)	Noise (dBA)	Nt. Wt. (Kg)
1	AF200-2E-S1	230	70	0.30	2400	2.00	1000	589	58	2.0
2	AF200-2D-S1	415	78	0.18	2400	-	1000	589	58	2.0
3	AF250-4E-S2	230	60	0.32	1450	2.00	950	559	60	2.3
4	AF250-2E-S2	230	115	0.50	2600	3.15	1750	1030	66	2.3
5	AF250-2D-S2	415	115	0.27	2600	-	1750	1030	66	2.3
6	AF300-4E-S3	230	90	0.37	1400	3.15	1800	1059	60	3.5
7	AF300-4D-S3	415	92	0.36	1400	-	1800	1059	60	3.5
8	AF300-2E-S3	230	140	0.60	2100	4.00	2300	1354	66	3.7
9	AF300-2D-S3	415	150	0.26	2100	-	2300	1354	66	3.7
10	AF350-4E-K3	230	140	0.63	1400	4.00	2500	1472	58	4.8
11	AF350-4D-K3	415	140	0.48	1400	-	2500	1472	58	4.8
12	AF400-4E-K4	230	180	0.75	1400	6.00	4150	2443	64	5.6
13	AF400-4D-K4	415	180	0.57	1400	-	4150	2443	64	5.6
14	AF450-4E-K5	230	250	1.02	1400	8.00	5500	3237	65	6.6
15	AF450-4D-K5	415	250	0.60	1400	-	5500	3237	65	6.6
16	AF450-4E-M3	230	380	1.60	1350	10.00	5800	3414	71	7.9
17	AF450-4D-M3	415	380	1.23	1350	-	5800	3414	71	7.9
18	AF500-4E-M3	230	390	1.72	1350	10.00	6800	4002	70	8.8
19	AF500-4D-M3	415	385	0.75	1350	-	6800	4002	70	8.8
20	AF550-4E-M5	230	560	2.45	1300	12.50	9000	5297	72	11.4
21	AF550-4D-M5	415	525	1.15	1400	-	9000	5297	72	11.4
22	AF600-4E-M7	230	710	3.00	1150	16.00	11000	6475	76	14.8
23	AF600-4D-M7	415	780	1.45	1350	-	11500	6769	76	14.8
24	AF630-4D-M7	415	815	1.50	1350	-	13500	7946	78	15.5
25	AF710-6D-F7	415Δ/415Y	1150/750	1.80/1.20	900/680	-	16000/13000	9417/7652	76/65	27.0
26	AF800-6D-F11	415Δ/415Y	1550/1200	3.00/1.90	920/780	-	21350/19100	12567/11242	80/72	36.0

## FLAT GRILL

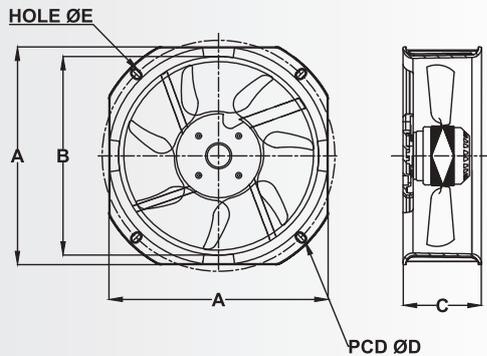


Blade Dia	PCD A	B	PCD C	D	E	F	G	H
200	260	205	58	-	4	3	2.5	6.5
250	320	235	58	-	4	3	2.5	6.5
300	360	290	58	4	4	3	3	7.0
350	422	380	90	5	5	4	3	9.5
400	470	435	90	5	5	4	3	9.5
450	522	485	90/120	6	6	4	3	9.5
500	570	520	120	6	6	4	3	10.5
550	622	580	120	6	6	4	3	11.0
600	680	620	120	6	7.5	4	3	11.0
630	770	660	120	6	7.5	4	3	11.0

Note: Please inquire with us if a special type of grill is required

All Dimensions are in MM

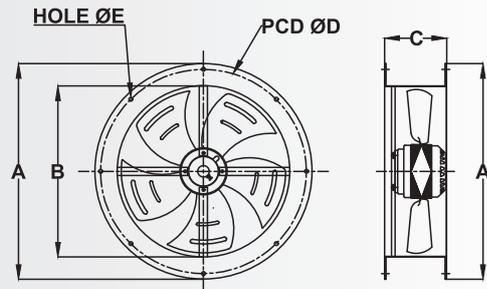
## SQUARE HOUSING - ALUMINUM / STEEL



Blade Dia	A	B	C	D	ØE	No's of Hole	Material Thick
<b>ALUMINUM</b>							
200	224	204	80	240	6.5x10	4.0	2.0
<b>STEEL</b>							
200	220	205	80/86	240	6.0	4.0	1.0
250	280	253	100	290	6x14	4.0	1.0

All Dimensions are in MM

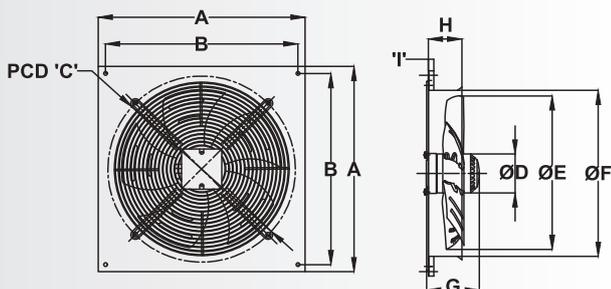
## ROUND HOUSING



Blade Dia	A	B	C	D	E	No's of Hole	Material Thick
300	360	310	100	335	7.5	6.0	1.0
400	528	416	150	500	7.5	8.0	2.0

All Dimensions are in MM

## SQUARE FRAME



Blade Dia	A	B	PCD C	D	E	F	G	H	I
300	435	380	360	92	300	315	110	66	15
350	485	435	420	102	350	360	130	66	15
400	545	490	470	102	400	410	140	78	15

All Dimensions are in MM

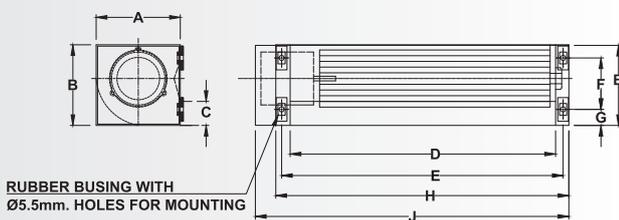
# CROSS FLOW FANS



**Impeller Diam.** : 100 MM  
**Input Volts** : 230 Volts AC 50 Hz. Single Phase  
**Speed** : 1400 RPM  
**Air Volume** : 400 to 600 M3/HR

## IMPELLERS IN PLASTIC

### DIMENSIONS - CROSS FLOW FANS



Model	A	B	C	D	E	F	G	H	J
CF300-C2	125	130	39	354	375	90	28	395	450
CF400-C2	127	135	42	450	470	90	28	485	510

All Dimensions are in MM

### TECHNICAL SPECIFICATION - CROSS FLOW FANS

Sr. No.	Model	Volt (V)	Watts (W)	Current (A)	Speed (RPM)	Capacitor (µF)	Air Vol. (m <sup>3</sup> /hr)	Air Vol. (CFM)	Noise (dBA)	Nt. Wt. (Kg)
1	CF300-4E-C2	230	45	0.17	1250	1.50	450	265	55	3.3
2	CF400-4E-C2	230	45	0.19	1200	1.50	580	341	55	3.8

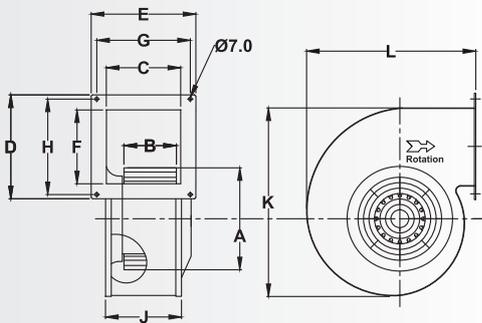
# SINGLE INLET CENTRIFUGAL BLOWER



**Impeller Diam.** : 133 to 240 MM  
**Input Volts** : 110, 230, 415 Volts AC 50/60 Hz. Single & Three Phase  
**Speed** : 1400, 2800 RPM  
**Air Volume** : 250 to 1400 M<sup>3</sup>/HR  
**Max Pressure** : 60 MM WG

SCROLLS IN C.R.C.A., POWDER COATED & IMPELLERS IN GI

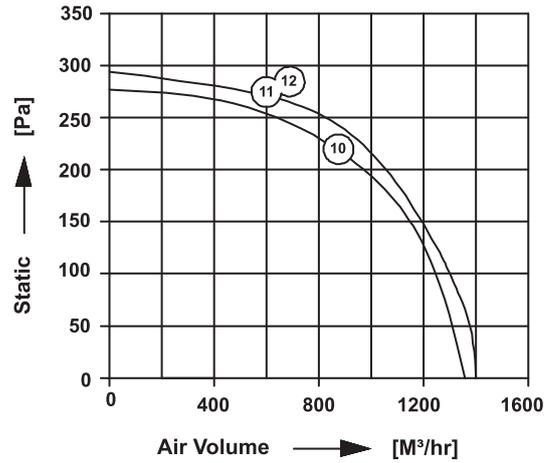
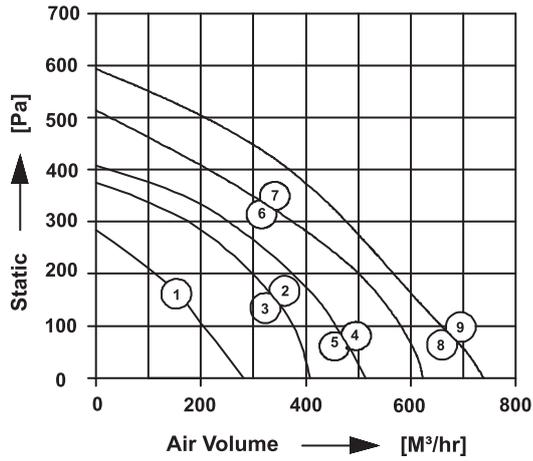
## DIMENSIONS - SINGLE INLET



Model	A	B	C	D	E	F	G	H	J	K	L
SI133-S1	133	48	60	75	100	110	80	90	62	190	192
SI140-S2	140	60	80	75	120	115	100	95	82	205	195
SI150-S3	160	60	74	140	102	94	90	120	76	245	235
SI160-S3	160	60	80	90	120	130	90	120	82	258	235
SI180-K4	180	75	100	110	138	150	115	128	102	270	265
SI200-K5	210	100	140	146	196	200	176	180	143	373	328
SI240-M5	240	100	140	146	196	200	176	180	143	355	338

All Dimensions are in MM

## Performance Curves



### TECHNICAL SPECIFICATION - SINGLE INLET

Sr. No.	Model	Volt (V)	Watts (W)	Current (A)	Speed (RPM)	Capacitor (µF)	Air Vol. (m³/hr)	Air Vol. (CFM)	Noise (dBA)	Nt. Wt. (Kg)
1	SI133-2E-S1	230	50	0.20	2100	1.00	260	153	58	2.5
2	SI140-2E-S2	230	100	0.40	2350	2.00	415	244	60	2.7
3	SI140-2D-S2	415	104	0.19	2350	-	415	244	60	2.7
4	SI150-2E-S3	230	175	0.75	2100	4.00	520	306	65	3.7
5	SI150-2D-S3	415	175	0.30	2100	-	520	306	65	3.7
6	SI160-2E-S3	230	200	0.82	2250	4.00	630	371	65	4.0
7	SI160-2D-S3	415	195	0.35	2250	-	630	371	65	4.0
8	SI180-2E-K4	230	280	1.23	2500	6.00	730	430	74	5.3
9	SI180-2D-K4	415	280	0.45	2500	-	730	430	74	5.3
10	SI200-4E-K5	230	280	1.15	1300	8.00	1365	803	65	8.2
11	SI240-4E-M5	230	375	1.60	1350	10.00	1400	824	66	12.0
12	SI240-4D-M5	415	375	0.75	1400	-	1400	824	66	12.0

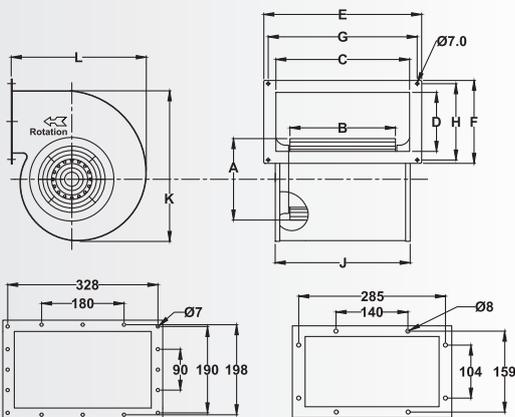
# DOUBLE INLET CENTRIFUGAL BLOWER



**Impeller Diam.** : 133 to 250 MM  
**Input Volts** : 110, 230, 415 Volts AC 50/60 Hz. Single & Three Phase  
**Speed** : 1400, 2800 RPM  
**Air Volume** : 800 to 3500 M3/HR  
**Max Pressure** : 90 MM WG

SCROLLS IN C.R.C.A., POWDER COATED & IMPELLERS IN GI

## DIMENSIONS - DOUBLE INLET



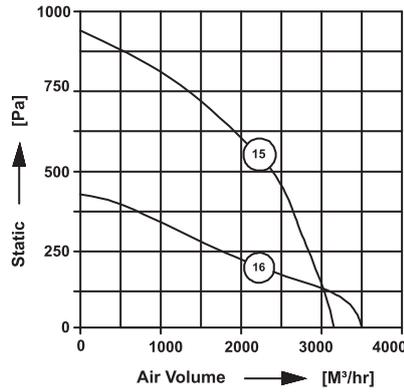
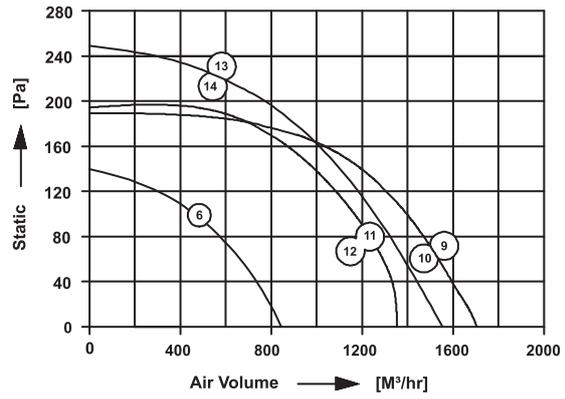
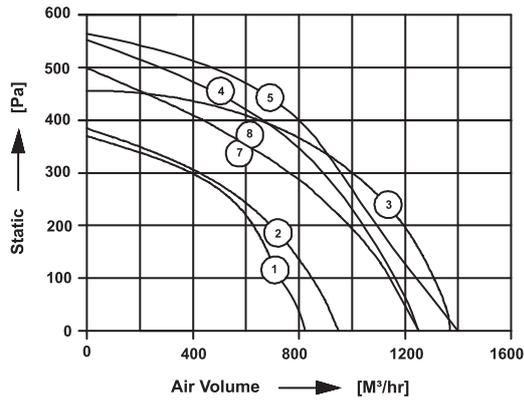
FLANGE DETAILS FOR  
DI250-M7

FLANGE DETAILS FOR  
DI180-K3

Model	A	B	C	D	E	F	G	H	J	K	L
DI133-S3	133	190	215	68	254	108	238	92	215	187	188
DI146-S6	146	180	232	88	266	120	251	105	232	236	226
DI150-S8	160	150	200	82	246	126	218	100	203	237	250
DI160-S3/S8	160	150	202	105	240	145	220	125	202	223	227
DI180-K3	180	210	258	135	310	180	As shown separately		260	308	300
DI180-K4	180	180	228	100	275	150	255	130	230	267	257
DI200-M5/M7	200	170	207	148	256	204	225	175	207	372	330
DI250-M7	250	250	298	167	349	218	As shown separately		300	395	390

All Dimensions are in MM

# Performance Curves



## TECHNICAL SPECIFICATION - DOUBLE INLET

Sr. No.	Model	Volt (V)	Watts (W)	Current (A)	Speed (RPM)	Capacitor (µF)	Air Vol. (m³/hr)	Air Vol. (CFM)	Noise (dBA)	Nt. Wt. (Kg)
1	DI133-2E-S3	230	180	0.73	1450	3.15	850	500	60	3.9
2	DI133-2D-S3	415	198	0.32	2150	-	925	544	60	3.9
3	DI146-2E-S6	230	365	1.50	2250	10.00	1350	795	62	6.7
4	DI150-2E-S8	230	405	1.75	2250	10.00	1250	736	67	8.5
5	DI150-2D-S8	415	550	1.15	2600	-	1500	883	67	8.5
6	DI160-4E-S3	230	115	0.47	1200	3.15	815	480	60	4.8
7	DI160-2E-S8	230	420	1.80	2300	10.00	1250	736	68	7.1
8	DI160-2D-S8	415	420	0.75	2300	-	1250	736	68	7.1
9	DI180-4E-K3	230	210	0.90	1000	5.00	1700	1001	59	7.2
10	DI180-4D-K3	415	250	0.45	1000	-	1700	1001	59	7.2
11	DI180-4E-K4	230	240	1.05	1300	6.00	1350	795	62	7.7
12	DI180-4D-K4	415	250	0.58	1300	-	1350	795	62	7.7
13	DI200-4E-M5	230	360	1.50	1350	10.00	1550	912	65	15.0
14	DI200-4D-M5	415	360	0.78	1400	-	1550	912	65	15.0
15	DI200-2D-M7	415	1750	2.63	2350	-	3100	1825	68	19.0
16	DI250-4D-M7	415	900	1.60	1350	-	3500	2060	71	20.0

# BACKWARD CURVED FANS



**Impeller Diam.** : 175 to 450 MM  
**Input Volts** : 110, 230, 415 Volts AC 50/60 Hz. Single & Three Phase  
**Speed** : 1400, 2800 RPM  
**Air Volume** : 500 to 4750 M<sup>3</sup>/HR  
**Max Pressure** : 70 MM WG

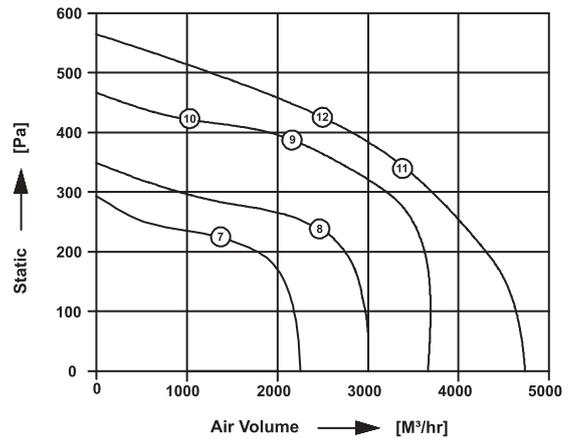
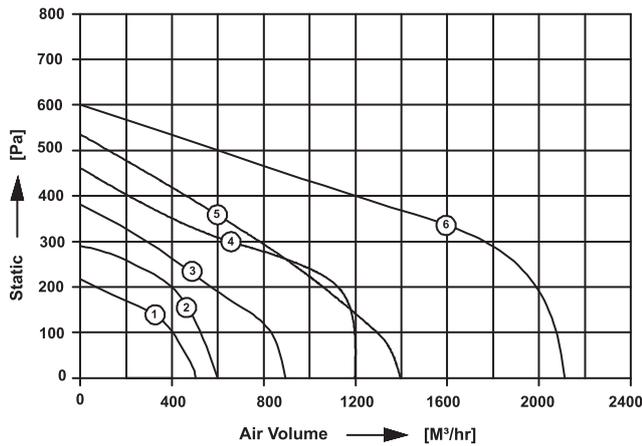
**IMPELLERS IN NYLON / GI / ALUMINIUM**

## DIMENSIONS - BACKWARD CURVED FANS

	Model	A	B	C	D	E	F	G	H	I	J	K
	<b>BC175-S1</b>	175	132	74	62	47	170	125	14	58	M5X8MM	Ø158-4
	<b>BC190-S1</b>	190	132	75	62	52	170	125	14	58	M5X8MM	Ø158-4
	<b>BC220-S2</b>	220	154	71	62	52	252	145	21	58	M5X8MM	Ø245-4
	<b>BC225-S3</b>	225	154	102	90	62	222	145	27	58	M5X8MM	Ø210-4
	<b>BC250-S3</b>	250	174	100	78	57	254	165	30	58	M5X8MM	Ø240-4
	<b>BC280-S4</b>	280	190	123	82	52	298	175	30	58	M5X8MM	Ø286-6
	<b>BC315-K3</b>	319	212	178	140	94	350	207	30	90	M6X10MM	Ø340-6
	<b>BC355-K4</b>	359	240	183	145	94	354	227	30	90	M6X10MM	Ø345-6
	<b>BC400-M5</b>	400	268	208	168	135	375	256	55	120	M8X15MM	Ø350-6
	<b>BC450-M7</b>	454	300	220	178	112	415	287	70	120	M8X15MM	Ø390-6

All Dimensions are in MM

# Performance Curves



## TECHNICAL SPECIFICATION - BACKWARD CURVED FANS

Sr. No.	Model	Volt (V)	Watts (W)	Current (A)	Speed (RPM)	Capacitor (μF)	Air Vol. (m³/hr)	Air Vol. (CFM)	Noise (dBA)	Nt. Wt. (Kg)
1	BC175-2E-S1	230	46	0.21	2400	1.0	500	294	57	1.3
2	BC190-2E-S1	230	70	0.29	2300	2.0	600	353	60	1.4
3	BC220-2E-S2	230	92	0.42	2450	2.0	900	530	65	2.0
4	BC225-2E-S3	230	150	0.65	2400	4.0	1200	706	69	2.4
5	BC250-2E-S3	230	168	0.74	2400	4.0	1400	824	68	2.5
6	BC280-2E-S4	230	260	1.15	2550	8.0	2100	1236	75	3.3
7	BC315-4E-K3	230	130	0.64	1400	4.0	2200	1295	62	4.9
8	BC355-4E-K4	230	190	0.85	1400	6.0	3000	1766	65	5.0
9	BC400-4E-M5	230	400	1.95	1400	10.0	3650	2148	70	8.9
10	BC400-4D-M5	415	400	1.55	1400	-	3650	2148	70	8.9
11	BC450-4E-M7	230	520	2.45	1400	20.0	4750	2796	77	12.0
12	BC450-4D-M7	415	530	1.78	1450	-	4750	2796	77	12.0

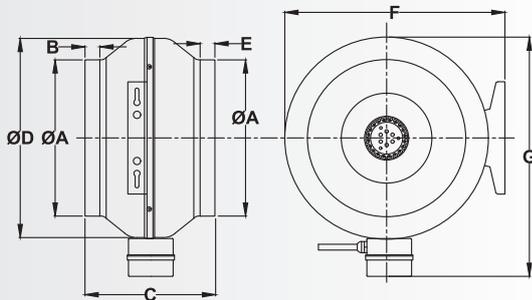
# CIRCULAR INLINE FANS



**Impeller Diam.** : 190 to 280 MM  
**Input Volts** : 110, 230, 415 Volts AC 50/60 Hz. Single & Three Phase  
**Speed** : 2800 RPM  
**Air Volume** : 300 to 1800 M3/HR  
**Max Pressure** : 70 MM WG

**IMPELLERS IN NYLON & GI**

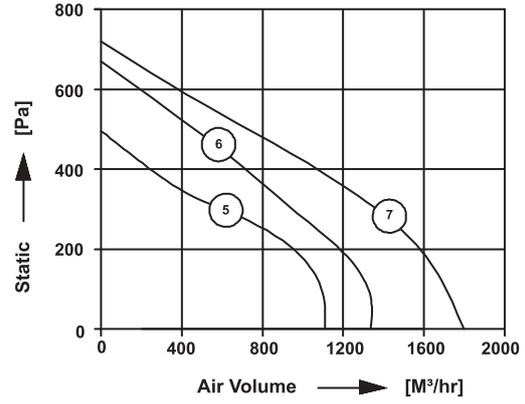
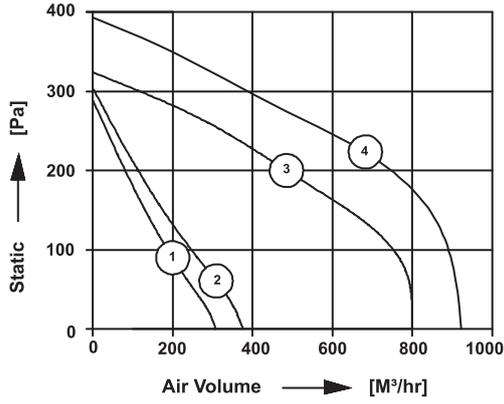
## DIMENSIONS - CIRCULAR INLINE FANS



Model	A	B	C	D	E	F	G
<b>CI100-S1</b>	100	23	195	242	23	283	308
<b>CI125-S2</b>	125	25	195	242	25	283	308
<b>CI150-S2</b>	150	27	230	332	27	373	398
<b>CI160-S3</b>	160	27	230	332	27	373	398
<b>CI200-S3</b>	198	35	230	332	30	373	398
<b>CI250-S4</b>	248	35	215	332	30	373	398
<b>CI315-S4</b>	315	40	258	402	30	442	467

All Dimensions are in MM

# Performance Curves



## TECHNICAL SPECIFICATION - CIRCULAR INLINE FANS

Sr. No.	Model	Volt (V)	Watts (W)	Current (A)	Speed (RPM)	Capacitor (µF)	Air Vol. (m³/hr)	Air Vol. (CFM)	Noise (dBA)	Nt. Wt. (Kg)
1	C1100-2E-S1	230	55	0.21	2350	1.50	300	177	56	2.9
2	C1125-2E-S2	230	80	0.37	2650	2.00	375	221	62	3.2
3	C1150-2E-S2	230	92	0.40	2400	2.00	800	471	64	4.4
4	C1160-2E-S3	230	105	0.45	2650	4.00	925	544	66	4.9
5	C1200-2E-S3	230	135	0.55	2350	4.00	1075	633	65	5.0
6	C1250-2E-S4	230	290	1.20	2450	8.00	1300	765	70	7.8
7	C1315-2E-S4	230	240	1.10	2650	8.00	1750	1030	75	8.0



**Industrial Fans & Blowers**



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