Marathon India Industrial Axial And Centrifugal Fans

Industrial Motors

Commercial & Appliance Motors

Automation

Digital & Systems

Energy

Transmission & Distribution

Coatings

May 2025 India





Driving efficiency and sustainability





MARATHON[™] FANS Pioneer and acknowledged leader in Air Technology.



We offer a wide range of Axial Flow and Centrifugal Fans suitable for industrial ventilation, processed application like purging fan and dairy application, air conditioning, dust extraction, and fume extraction systems.

Custom built fans catering to the specific requirement of Steel Plant, Fertilizer Plant, Tea Industry, Mine, Ship, Power Plants (Thermal and Nuclear) Chemical Plant etc. are also available.



AXIAL FLOW FAN

FEATURES

Axial flow fans are available in wide range of combinations from 12" to 60" diameter fitted with motors from 0.37 kW to 110 kW in 2 Pole, 4 Pole, 6 Pole and 8 Pole variants. Motors are suitable for 415 volts $\pm 10\%$, 50 Hz $\pm 5\%$, 3 Phase Power Supply, as per IS:12615, which are in-house manufactured ensuring better fit and proper matching. Fans are available in single phase version also.

Axial Flow Fans are capable of handling up to 150000 m3/ hr air delivery and static pressure up to 110. Further pressure can be developed with multiple staging of fans.

CONSTRUCTION

Fan Casing is made of heavy gauge Mild Steel (MS) Sheet (as per IS-1079/ 2062) having robust construction. It has flanges at both ends for easy fixing on ducts/ walls.

Impeller is made of Die Cast aluminium (LM-6 of BS 1490/ IS 617 Gr. 4600) having aerofoil design with adjustable pitch angles. The solidity (No. of wings) is varied in order to use the most efficient part of the fan characteristics.

Axial Flow Fans are tested in accordance with IS-3588-1987. Standard fans are finished with Epoxy Paint.

Depending on application, fans can be supplied with casing made of stainless steel or zinc sprayed MS sheet. Epoxy paint may also be provided. Fans are available both in Wall Mounted and Duct Mounted configuration. Fan selection chart and general arrangement dimensions are given in Table -1 & 2 respectively. Following special application fans are also offered depending on application and end use.









BIFURCATED FANS

Marathon[®] Electric Bifurcated Fans are available from sizes 19" to 60". These fans are used to handle hazardous air, where motors are kept outside the air stream.

FLAME PROOF FANS

Marathon Electric Flame Proof Axial Fans are available from sizes 15" to 60" and are used extensively in Fire Hazard Areas.

ROOF EXTRACTOR

Marathon Electric Roof Extractor Units are available from sizes 19" to 60", fitted with Hood and Bottom Plate. These units are used on the roof to extract and exhaust contaminated air.

BELT DRIVEN FAN Marathon Electric Belt Driven Fans are available from sizes 19" to 60". Fans are driven by belt and pulley arrangement. The motor is located outside the air stream.



Duct Mounted Fan



Wall Mounted Fan





SMOKE-SPILL FANS

This Fan is suitable for 250°C for 2 hrs operation.

Air Flow	_	3,300 – 80,000 m3/hr
Static Pressure	_	5mm to 100 mm wg
Sweep	_	12" to 48"
Fan Performance	_	IS 3588

These fans are used for ventilation systems in case of fire when the polluted air needs to be ventilated outside with help of fans. These fans are placed on the opening to the environment which extracts smoke and releases it in the environment. It can be used for daily ventilation, as well as, smoke extraction in case of fire (suitable for 250°C for 2 Hours operation.



TEA INDUSTRY FANS

We have been supplying Withering Fans to various Tea companies all over India for more than 15 years. WITHERING is the first and foremost step involved in tea manufacture. Withering is the process of removal of moisture from green tea leaves by blowing hot air over the leaves in a withering trough.

The current of air performs two functions – 1) Conveyance of hot air to promote evaporation and 2) Carrying away the water vapour through a bed of green leaves.

Considering the above need and operating condition, we developed a series of Fans which are best suited for the Tea Industry.



TRANSFORMER COOLING FANS

This fan is primarily developed for Transformer cooling purposes and are widely used by reputed manufacturers like ABB®*, Transformer and Rectifier®*, TBEA®*, etc. These fans operate mainly on Free Air Delivery condition.

OPTIONAL ACCESSORIES

The following optional accessories are also available.

- Louvre Shutter
- Wall Cowl and Bird Screen
- Filter / Filter Frame with adapter cone
- Dampers

*The following trademarks are not owned by or under the control of Marathon Electric: ABB is a trademark or tradename of ABB Ltd; TBEA is a trademark or tradename of TBEA Co., Ltd.; Transformer and Rectifier is a trademark or trade name of Transformers & Rectifiers (India) Limited.



DIMENSIONAL DRAWINGS

LONG CASING







FAN MODEL	MOTOR RATING	L	L1	А	В	с	D	Е	F	G	к	м	N
12K/ K37 P2	0.37 kW 2 POLE	000	005	005	0.40	000	005	070	0	10	401/0	00	- 4.4
12K/ K55 P2	0.55 kW 2 POLE	- 380	225	305	349	203	305	2/3	8	10	4086	36	14
15J/ K37 P4	0.37 kW 4 POLE												
15J/ K37 P4	0.55 kW 2 POLE												
15J/ K75 P2	0.75 kW 2 POLE	- 380	225	381	425	241	381	343	8	11	40X6	36	14
15J/ 1K1 P2	1.1 kW 2 POLE												
15J/ 1K5 P2	1.5 kW 2 POLE	406	1										
19J/ K37 P4	0.37 kW 4 POLE	400											
19J/ K75-P4	0.75 kW 4 POLE	406											
19J/ 1K5-P2	1.5 kW 2 POLE	420	225	483	541	311	483	483	8	14	40X6	36	14
19J/ 2K2 P2	2.2 kW 2 POLE	450	1										
19J/ 3K7 P2	3.7 kW 2 POLE	520	1										
24J/ K37 P6	0.37 kW 6 POLE												
24J/ K55 P6	0.55 kW 6 POLE	-		610	668	381							18
24J/ K75 P4	0.75 kW 4 POLE	- 406							12	14			
24J/ 1K1 P4	1.1 kW 4 POLE	-	225				610	559			40X6	36	
24J/ 1K5 P4	1.5 kW 4 POLE	430											
24J/ 2K2 P4	2.2 kW 4 POLE	460											
30J/ K55 P6	0.55 kW 6 POLE		-										
30J/ K75 P6	0.75 kW 6 POLE	- 430	225										
30J/ 1K1 P6	1.1 kW 6 POLE	450	1									36	
30J/ 1K5 P6	1.5 kW 6 POLE	480	280	1									
30J/ 1K5 P4	1.5 kW 4 POLE	450	225	- 762	821	483	762	711	12	14	40X6		18
30J/ 2K2 P4	2.2 kW 4 POLE	480		1									
30J/ 3K7 P4	3.7 kW 4 POLE		280										
30J/ 5K5 P4	5.5 kW 4 POLE	- 524											
38J/ 1K5 P6	1.5 kW 6 POLE	510											
38J/ 2K2 P6	2.2 kW 6 POLE	560	1	965	1035								
38.1/ 3K7 P6	3.7 kW 6 POLE	000	280										
38.1/ 5K5 P6	5.5 kW 6 POLE	- 590										36	
38.1/ 5K5 P4	5.5 kW 4 POLE	560				597	965	914	16	18	65X6		18
38.1/ 7K5 P4	7.5 kW 4 POLE	590											
38.1/ 11K P4	11 kW 4 POLE	000											
38.1/ 15K P4	15 kW 4 POLE	- 760	305									41	
38.1/ 18K5 P4	18.5 kW 4 POLF	870	-	-									
48.1/ 5K5 P6	5.5 kW 6 POLE	640											
48.1/ 7K5 P6	7.5 kW 6 POLE	770	305										
48.1/ 11K P6	11 kW 6 POLE	770										41	
48.1/ 15K P6	15 kW 6 POLE	870		1									
48.1/ 18K5 P6	18.5 kW 6 POLE	910										76	
48.I/ 18K5 P4	18.5 kW 4 POLE	870	500	1219	1289	737	1220	1143	20	18	65X6	41	22
48.1/ 22K P4	22 kW 4 POLE	870	1 000									1	
48.1/ 30K P4	30 kW 4 POLE	910	-										
48.1/ 37K P4	37 kW 4 POLE	010		-								76	
48.1/ 45K P4	45 kW 4 POLE	1000	-										
60 I/ 18K5 P6	18.5 KW 6 POLE	020											
60K/ 22K P6	22 kW 6 POLE	920	_	-			1524	1422	24				
60.1/ 30K P6	30 kW 6 POLE	1000	_	-									
60.1/ 37K P6	37 kW 6 POLE	1060		1526	1626	921				18	65X8	78	-
60 I/ 15K P6		1000		-									
60 1/ 55K P6		-	-	-									
000/001 F0	JU KW OFULE	-	-										

All dimensions are in mm subject to tolerence as per IS 2102

■ Power Supply 415 V ± 10%, 3 PH, 50 Hz ± 5%, AC

Motor Degree of protection: IP-55

Motor Class of Insulation: 'F' (temp limited to class 'B')

Painting Specification - 1 Coat of primer & 1 coat of synthetic enamel paint of colour D. A. Grey

SELECTION CHART – STANDARD AXIAL FLOW FAN

SL.	FAN	FANDIA	MOTOR	MOTOR	FREE	REE VOLUME FLOW (m3/hr) AT DIFFERENT STATIC PRESSURE (mmwg)														
NO.	MODEL	(mm)	RATING (kw/pole)	F/S (rpm)	AIR (m3/hr)	5	10	15	20	25	30	35	40	50	60	70	80	90	100	110
1	12K/K37-P2	305	0.37/2	2800	2300	-	2000	1750	1400	-	-	-	-	-	-	-	-	-	-	-
2	12K/K37-P2	305	0.37/2	2800	3900	-	3200	3000	2650	-	_	-	-	-	-	-	-	-	-	-
3	12K/K55-P2	305	0.55/2	2800	4400	-	3850	3650	3300	_	_	-	-	-	_	-	-	-	-	-
4	15J/K37-P4	381	0.37/4	1440	1750	1400	850	-	-	_	_	-	-	-	_	-	-	-	-	-
5	15J/K37-P4	381	0.37/4	1440	4500	3700	3100	-	_	_	_	-	_	-	_	-	-	-	-	-
6	15J/K55-P2	381	0.55/2	2850	4500	-	4100	3900	3700	3300	3000	2600	-	-	-	-	-	-	-	-
7	15J/K75-P2	381	0.75/2	2850	5600	-	5300	5100	5000	4600	4300	3700	-	-	-	-	-	-	-	-
8	15J/1K1-P2	381	1.1/2	2850	7200	-	6700	6500	6200	5700	5400	5000	-	-	_	-	-	-	-	-
9	15J/1K5-P2	381	1.5/2	2850	8500	-	8000	7850	7300	7100	6800	6300	_	_	_	-	-	-	-	-
10	19J/K37-P4	483	0.37/4	1440	6750	6000	5500	4400	_	_	_	-	_	_	_	-	-	-	-	-
11	19J/K75-P4	483	0.75/4	1440	8600	8000	7500	6200	_	_	_	-	_	_	_	-	-	-	-	-
12	19J/1K5-P2	483	1.5/2	2900	7500	-	-	-	6500	6200	6000	5800	5200	4500	3500	-	-	-	_	-
13	19J/2K2-P2	483	2.2/2	2900	11500	-	-	-	10000	9800	9500	9000	8600	7500	6500	-	-	-	-	-
14	19J/3K7-P2	483	3.7/2	2900	15300	-	-	_	14200	13850	13600	13100	12700	11700	10500	_	-	-	-	-
15	24J/K37-P6	610	0.37/6	940	4900	4000	2200	_	_	_	_	-	_	_	_	-	-	-	-	-
16	24J/K55-P6	610	0.55/6	940	11000	8700	8000	_	_	_	_	-	_	_	_	-	-	-	-	-
17	24J/K75-P4	610	0.75/4	1440	10000	-	9000	8300	7000	_	_	-	_	_	_	-	-	-	-	-
18	24J/1K1-P4	610	1.1/4	1440	13500	-	12000	10000	9800	_	_	-	_	-	_	-	-	-	_	-
19	24J/1K5-P4	610	1.5/4	1440	15500	-	13600	13000	11300	_	_	-	_	_	_	_	-	_	-	-
20	24J/2K2-P4	610	2.2/4	1440	17000	-	16500	15500	14000	_	_	-	_	_	_	-	-	-	-	-
21	24K/5K5-P2	610	5.5/2	2950	19500	-	-	_	18000	17900	17800	17100	16500	15500	14500	13500	12300	11000	-	-
22	24K/7K5-P2	610	7.5/2	2950	22500	-	-	_	21500	21250	21000	20500	20000	19000	18500	17500	16000	14500	-	-
23	24K/11K-P2	610	11/2	2950	28500	-	-	-	27000	26750	26500	26000	25500	24500	23000	22000	21000	20000	-	-
24	30J/K55-P6	762	0.55/6	940	10500	9500	8000	6000	_	_	_	-	_	_	_	-	-	-	-	-
25	30J/K75-P6	762	0.75/6	940	15000	13500	11750	9000	_	_	_	-	_	_	_	-	-	-	-	-
26	30J/1K1-P6	762	1.1/6	940	18000	17000	15000	12000	_	_	_	-	_	_	_	-	-	-	-	-
27	30J/1K5-P6	762	1.5/6	940	21500	20000	18000	15800	_	_	_	-	_	-	_	-	-	-	-	-
28	30J/1K5-P4	762	1.5/4	1450	14000	-	13000	12000	11300	10250	9000	8000	_	_	_	-	-	-	-	-
29	30J/2K2-P4	762	2.2/4	1450	18500	-	17000	15800	15000	14000	12800	11000	_	_	_	-	-	-	-	-
30	30J/3K7-P4	762	3.7/4	1450	22000	-	20500	19800	18500	17800	16500	14500	-	-	-	-	-	-	_	-
31	30J/5K5-P4	762	5.5/4	1450	34000	-	32000	31000	29000	27500	26000	24000	_	_	_	_	-	-	_	-
32	38J/1K5-P6	965	1.5/6	960	19500	-	17000	15250	13000	9800	_	_	_	_	_	_	-	-	_	-
33	38J/2K2-P6	965	2.2/6	960	25000	-	21500	19500	18000	14800	_	-	_	_	_	_	-	-	_	-
34	38J/3K7-P6	965	3.7/6	960	36500	_	33500	31500	29500	26500	_	_	_	_	_	_	_	_	_	-

Fan selection is based on air at 20°C and density 1.2 kg/m3

■ Fan performance and tolerance as per IS 3588 – 1987.

For selection of Fans in other solidity (no of blades), or in intermediate performance point please refer to Regional/Branch Offices or Factory

SELECTION CHART – STANDARD AXIAL FLOW FAN

			MOTOR	RMOTOR	FREE	VOLUME FLOW (m3/hr) AT DIFFERENT STATIC PRESSURE (mmwg)														
SL. NO.	FAN MODEL	Fandia (mm)	RATING (kw/ pole)	F/S (rpm)	AIR (m3/hr)	5	10	15	20	25	30	35	40	50	60	70	80	90	100	110
35	38J/5K5-P6	965	5.5/6	960	45000	-	42000	39000	37000	34000	-	-	-	_	-	-	-	-	-	-
36	38J/5K5-P4	965	5.5/4	1475	30000	-	_	_	26000	25000	24500	23000	22000	18000	15000	_	_	-	-	-
37	38J/7K5-P4	965	7.5/4	1475	39000	-	_	_	35000	33000	32500	30500	30000	26000	22000	-	-	-	-	-
38	38J/11K-P4	965	11/4	1475	48000	-	-	-	46000	45000	44000	42500	41000	37500	32500	-	-	-	-	-
39	38J/15K-P4	965	15/4	1475	61000	-	_	_	56000	54500	54000	51500	51000	47000	44000	_	_	-	_	-
40	38J/18K5-P4	965	18.5/4	1475	68000	-	_	_	65000	63000	62000	60000	58500	54500	51000	-	-	-	-	-
41	48J/5K5-P6	1219	5.5/6	975	42000	-	-	_	36000	34500	30500	28000	22000	_	-	-	-	-	-	-
42	48J/7K5-P6	1219	7.5/6	975	55000	-	_	_	47000	45500	43000	39000	35000	_	-	-	-	-	-	-
43	48J/11K-P6	1219	11/6	975	72000	-	_	_	62000	59500	57000	52500	50000	_	_	_	_	-	-	-
44	48J/15K-P6	1219	15/6	975	83000	-	_	_	77000	74500	69000	67500	64000	_	_	_	_	-	_	-
45	48J/18K5-P6	1219	18.5/6	975	90000	-	_	_	85000	81000	75000	73000	70000	_	_	-	-	-	-	-
46	48J/18K5-P4	1219	18.5/4	1480	62000	-	_	_	_	_	_	-	-	50000	45000	41000	38000	35000	28000	-
47	48J/22K-P4	1219	22/4	1480	71000	-	_	_	_	_	-	-	-	59000	57000	54000	49000	44000	39000	-
48	48J/30K-P4	1219	30/4	1480	92000	-	_	_	_	_	-	-	-	80000	75000	70000	68000	62000	53000	-
49	48J/37K-P4	1219	37/4	1480	102000	-	_	_	_	_	_	-	-	88000	84000	80000	75000	71000	67000	-
50	48J/45K-P4	1219	45/4	1480	150000	-	_	_	_	_	_	-	-	102000	98000	95000	90000	85000	78000	-
51	60J/18K5-P6	1524	18.5/6	975	_	-	_	_	_	_	_	-	-	_	50000	40000	_	-	-	-
52	60J/22K-P6	1524	22/6	975	-	-	_	_	_	_	-	-	-	_	62000	50000	-	-	-	-
53	60J/30K-P6	1524	30/6	975	-	-	_	_	_	_	-	-	-	_	85000	69000	-	-	-	-
54	60J/37K-P6	1524	37/6	975	-	-	-	_	_	-	-	-	-	_	100000	90000	-	-	-	-
55	60J/45K-P6	1524	45/6	975	-	-	_	_	_	_	-	-	-	_	124000	108000	_	-	-	-
56	60J/55K-P6	1524	55/6	975	-	-	_	_	_		_	-	-	_	139000	127000	_	-	-	-
57	75J1/2/30K-P6	1905	30/6	975	-	-	-	_	_	_	-	-	-	110000	93000	80000	50000	-	-	-
58	75J1/2/37K-P6	1905	37/6	975	-	-	_	-	_	-	-	-	-	130000	115000	100000	60000	-	-	-
59	75J1/2/55K-P6	1905	55/6	975	-	-	-	-	_	-	-	-	-	180000	165000	150000	130000	_	-	-
60	75J/2/75K-P6	1905	75/6	975	-	-	-	_	_	_	-	-	-	_	_	_				
61	75J/55K-P6	1905	55/6	975	-	-	-	_	_	-	-	-	-	_	_	_				
62	75J/55K-P6	1905	75/6	975	-	-	-	_	_	_	-	-	-	_	-	_				

Fan selection is based on air at 20°C and density 1.2 kg/m3

■ Fan performance and tolerance as per IS 3588 – 1987.

For selection of Fans in other solidity (no of blades), or in intermediate performance point please refer to Regional/Branch Offices or Factory

CENTRIFUGAL FAN

FEATURES

Marathon offers a wide range of Centrifugal Fans with highly efficient impellers of type Backward Inclined, Backward Curved, Aerofoiled, depending upon application.

Marathon[®] Centrifugal Fans are suitable for air delivery up to 300,000 M3/ Hr and Static Pressure up to 1000 MM WG. Fans are available both in single inlet single width (SISW) and in double inlet double width (DIDW) versions.

CONSTRUCTION

Centrifugal Fans are usually made of mild steel (IS 1079/2062) rigid casing with Inspection window and drain plug. The impeller is mounted on C-40 (IS 1570) shaft. Double Row Ball/ Spherical roller Bearings are used for smooth operation. Fans are either belt driven or direct coupled. Direct driven Fans, with Impeller mounted directly on motor shaft, are also available.

- Standard Fans are painted with Epoxy Paint.
- Other than mild steel, fans are offered in Stainless Steel and Aluminium Construction also, depending on application need.
- For High temperature (from 100°C to 350°C) application, Aluminium cooling disc is provided and the fan is painted with Heat Resistant Aluminium Paint.
- Centrifugal Fans are tested in accordance with IS-4894-1987/ AMCA-210

SPECIAL FEATURES

The following Special Features are provided depending application need.

- Spark Proof Construction
- Zinc Sprayed
- Synthetic Enamel Paint

The following optional acessories are also available.

- Common base frame for Fan and Motor
- V-belt drive set.
- Belt guard
- Motor slide rail
- Foundation bolt
- Filter
- Filter frame with adapter cone
- Inlet and outlet flexible connection
- Inlet box
- Inlet and outlet dampers
- Antivibration mounting



Backward inclind



Backward curved



Aerofoil





DISCHARGING ROTATION

Fans are available in different discharge angles from 0 to 315 both in left hand and right hand rotation viewing from motor end with motor position as X, Y, W & Z.



ARRANGEMENT

Fans are manufactured in five different drive arrangements depending upon application.



Arrangement 1 Single inlet pedestal

For belt drive. Impeller overhung. Two bearings on full- depth pedestal.



Arrangement 3 Single inlet bearer bar

For belt drive. One bearing on each side of casing, supported by bearer bars.



Arrangement 4 Single inlet direct drive and stool

 For direct drive. Impeller overhung on motor shaft. No bearings on fan. Motor feet supported by full-depth pedestal.



Arrangement 5 Single inlet direct drive, no stool

For direct drive. Impeller overhung on motor shaft. No bearings on fan. Motor Bolted to fan casing by its flanged end shield.



Arrangement 6 Double inlet bearer bar

 Double inlet, double width fan for belt drive. One bearing in each inlet, supported by bearer bars.



Arrangement 8 Single inlet coupling

 For coupling drive. Generally as arrangement 1 but pedestal extended to receive motor.

The scope of WEG Group solutions is not limited to products and solutions presented in this catalogue. To see our portfolio, contact us.



www.weg.net





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