JM Multi-Stage - Cased Axial Fans

Features

- 400 - 630 mm diameter
- Volume up to 25,920 m^3/h (7.2 m^3/s)
- Static pressures up to 1000 Pa
- Fans tested to ISO5801 and BS848
- High energy efficiency
- Low installed noise levels
- Motor protection IP55
- Overheat protection fitted as standard

Electrical Supply

- 220-240V/50Hz/1 ϕ
- 380-420V/50Hz/3 ϕ

Temperature Range

- -40ºC to 50ºC as standard
- BT or CT motors can be continuously operated at temperatures up to 70ºC

Sizes

400, 450, 500, 560 and 630 mm

Impellers

A unique high efficiency aerofoil section blade with a purposely smoothed hub and clamp plate for adjustable pitch angle availability.

The Fläkt Woods impellers are all high pressure die cast to offer thin aerofoil sections for low generation of noise. Every cast aluminium component is X-ray examined using Real Time Radiography prior to assembly.

Motors

All motors are totally enclosed air stream rated class F insulation. Constructed from aluminium as standard with special 'T' slot or pad mounted fixings. Motors are suitable for speed control.

Suitable for horizontal through to vertical shaft operation. Supplied IP55, with removable drain plugs.

Sealed for life bearings lubricated with wide temperature range grease. Motors are fitted with thermostat overheat protection as standard. Three phase motors are suitable for inverter speed control down to 20% of full speed .

Casings

MaXfan² are available fully cased, complete with an externally mounted pre-wired electrical terminal box. Casings are spun from sheet steel with integral pre-drilled and radiused inlet flanges. The galvanised finish gives a high resistance to corrosion and is ideal for external as well as internal use.

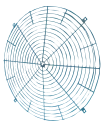
Product Code

50JM2/20/4/6/41/32

- 50 - denotes the fan impeller diameter in centimetres
- JM2 - denotes JM2 Fan Type ie, 2 stage fan
- 20 - denotes impeller hub diameter in centimetres
- 4 - denotes a nominal 4 pole speed
- 6 - denotes the number of blades
- 32 - denotes the pitch Angle for the required duty

Accessories


Damper


Guard


Bellmouth


Flange


Mounting Feet


Rubber AV's


Spring AV's

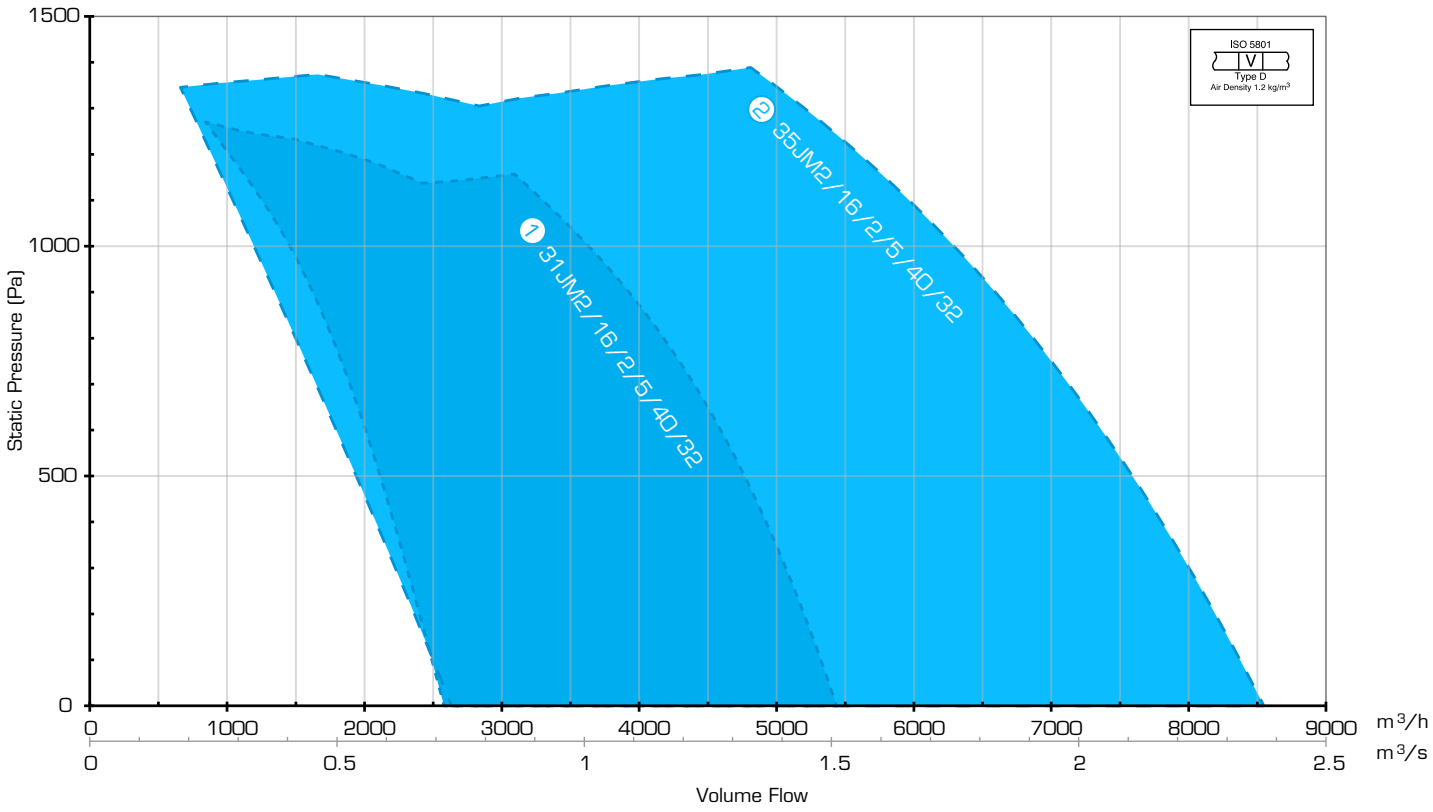

Flexible Connector


Silencer


Controls Inverter

Product Performance and Electrical Data

Performance Chart - 315-355 mm
380-420v/50Hz/3ϕ



Performance Table - 315-355 mm
380-420v/50Hz/3ϕ

Ref	Product Code	m³/s @ Pa (Static)													
		0	50	100	150	200	250	300	400	500	600	700	800	900	1000
1	31JM2/16/2/5/40/32	1.51	1.49	1.47	1.46	1.44	1.42	1.4	1.36	1.32	1.27	1.22	1.16	1.09	1
2	35JM2/16/2/5/40/32	2.37	2.35	2.32	2.3	2.27	2.24	2.22	2.16	2.1	2.04	1.97	1.9	1.83	1.74

Product, Electrical and ErP Table - 315-355 mm
380-420v/50Hz/3ϕ

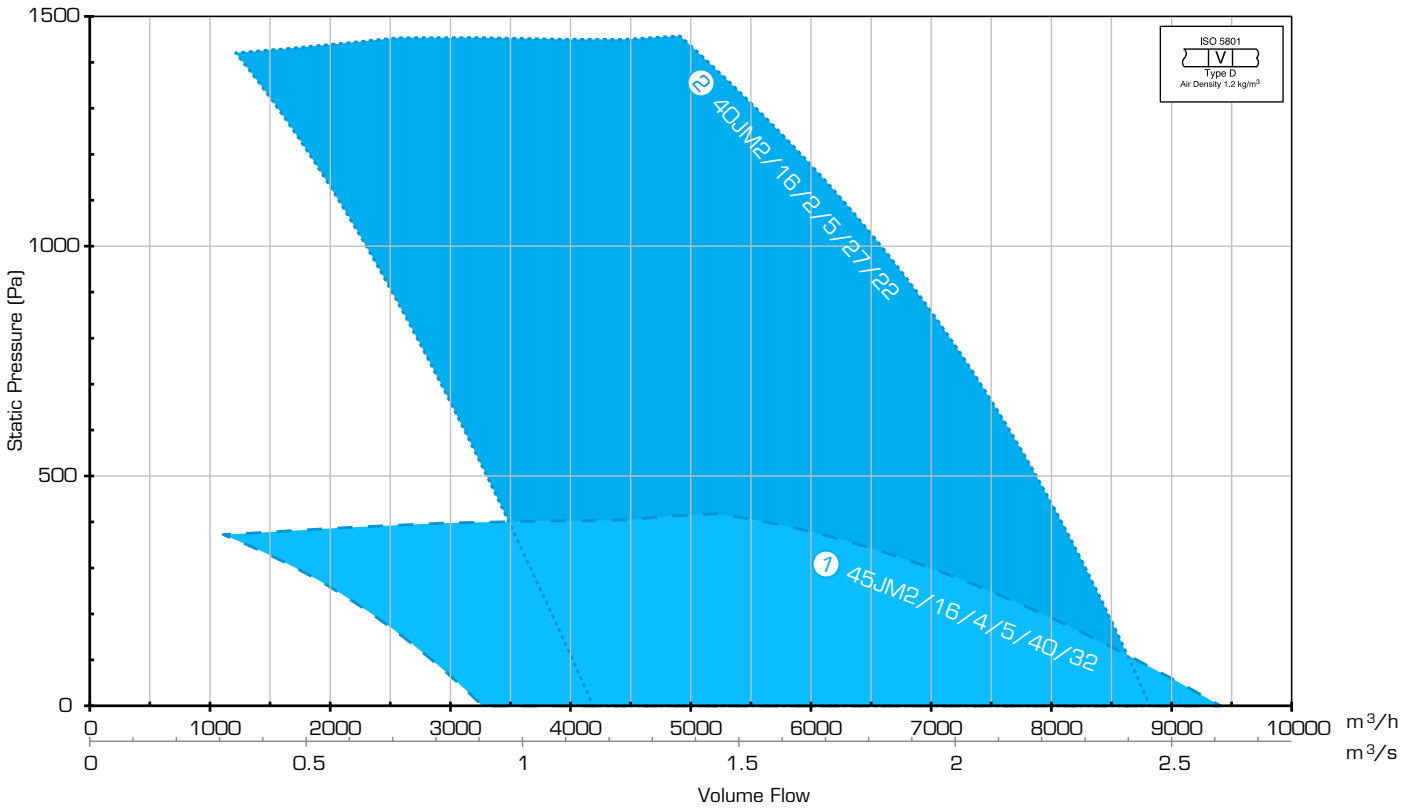
Ref	Product Code	Product Number	Pitch Angle (°)		Speed rev/min	Motor	Rating (kW)	Full Load Current (A)	Starting Current (A)	Wiring Diagram (CD)	Speed Controller		
			Min	Max							Electronic	Transformer	Inverter
1	31JM2/16/4/5/...	EQ341452	16/14	40/32	1420	80 (IE2)	0.30	0.70	tbc	CD2416	N/A	N/A	IDDX554-2.2
2	35JM2/16/2/5/...	EQ381273	8/8	40/32	2840	80 (IE2)	1.73	3.59	18.30	CD2416	N/A	N/A	IDDX554-3.7

Ref	Product Code	Product Number	Inlet Sound Levels	Efficiency Rating	Target	Grade
1	31JM2/16/4/5/...	EQ341452	57	41.5	48.6	51
2	35JM2/16/2/5/...	EQ381273	80	58.0	53.2	62

Sound pressure levels quoted are at the inlet, and are average dBA at 3m distance over a sphere at the mid point at the highest angle given, under free field conditions. These are presented for comparative purposes only.

Product Performance and Electrical Data

Performance Chart - 400-450 mm
380-420v/50Hz/3ϕ



Performance Table - 400-450 mm
380-420v/50Hz/3ϕ

Ref	Product Code	m³/s @ Pa (Static)													
		0	50	100	150	200	250	300	400	500	600	700	800	900	1000
1	40JM2/16/2/5/27/22	2.45	2.42	2.4	2.37	2.35	2.32	2.3	2.24	2.18	2.12	2.05	1.98	1.91	1.82
2	45JM2/16/4/5/40/32	2.61	2.51	2.41	2.31	2.2	2.08	1.94	1.56						

Product, Electrical and ErP Table - 400-450 mm
380-420v/50Hz/3ϕ

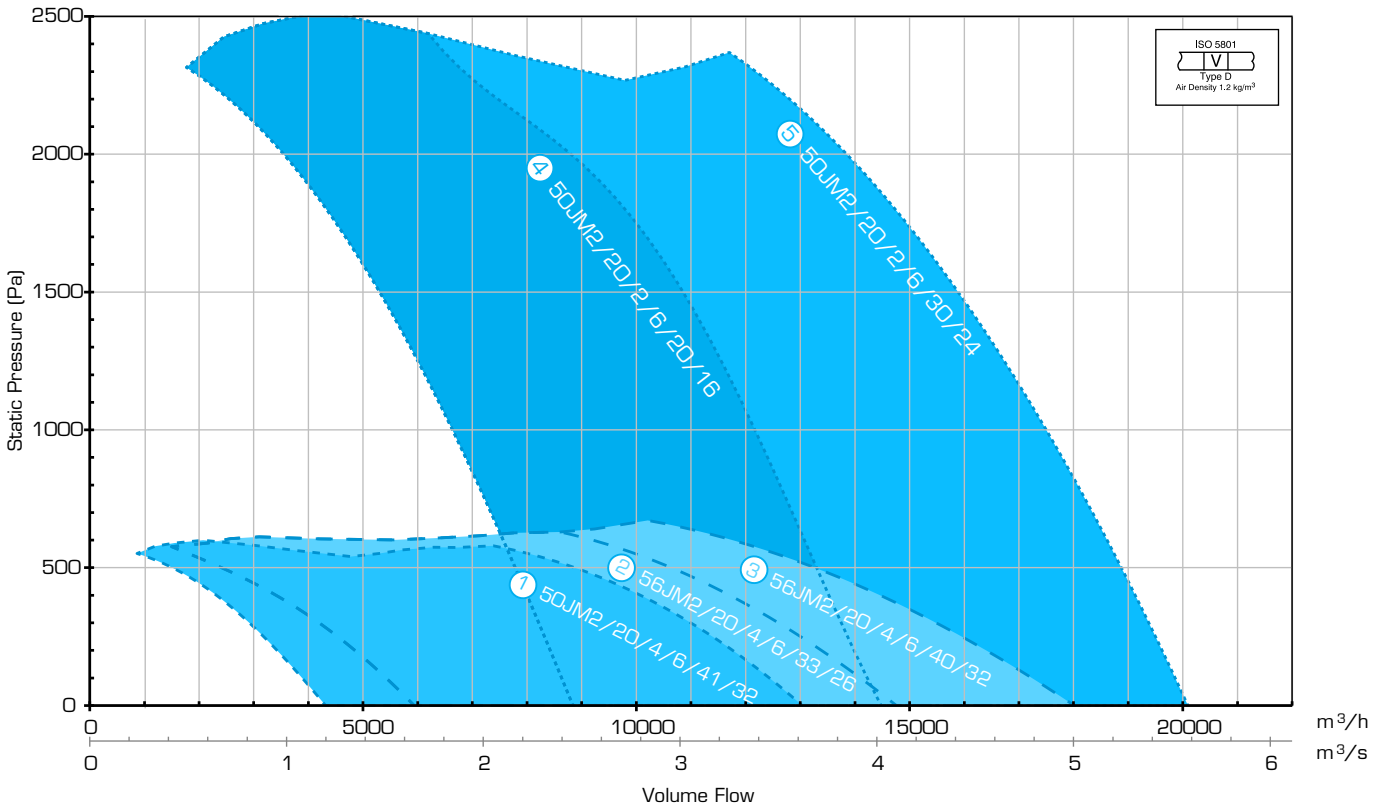
Ref	Product Code	Product Number	Pitch Angle (°)		Speed rev/min	Motor	Rating (kW)	Full Load Current (A)	Starting Current (A)	Wiring Diagram (CD)	Speed Controller		
			Min	Max							Electronic	Transformer	Inverter
1	40JM2/16/2/5/27/22	EQ431274	8/8	27/22	2840	80 (IE2)	1.73	3.59	18.30	CD2416	N/A	N/A	IDDX554-3.7
2	45JM2/16/4/5/40/32	EQ481454	10/8	40/32	1420	80 (IE2)	0.66	1.49	7.37	CD2416	N/A	N/A	IDDX554-2.2

Ref	Product Code	Product Number	Inlet Sound Levels	Efficiency Rating	Target	Grade
1	40JM2/16/2/5/27/22	EQ431274	80	60.1	53.1	64
2	45JM2/16/4/5/40/32	EQ481454	69	57.9	50.4	65

Sound pressure levels quoted are at the inlet, and are average dBA at 3m distance over a sphere at the mid point at the highest angle given, under free field conditions. These are presented for comparative purposes only.

Product Performance and Electrical Data

Performance Chart - 500-560 mm
380-420v/50Hz/3ϕ



Performance Table - 500-560 mm
380-420v/50Hz/3ϕ

Ref	Product Code	m³/s @ Pa (Static)													
		0	50	100	150	200	250	300	400	500	600	700	800	900	1000
1	50JM2/20/2/6/20/16	4.02	3.98	3.95	3.92	3.88	3.85	3.81	3.75	3.69	3.63	3.57	3.51	3.44	3.38
2	50JM2/20/2/6/30/24	5.58	5.54	5.51	5.48	5.44	5.41	5.38	5.31	5.24	5.17	5.09	5.01	4.94	4.86
3	50JM2/20/4/6/41/32	3.62	3.53	3.45	3.36	3.26	3.16	3.05	2.79	2.46					
4	56JM2/20/4/6/33/26	4.09	4	3.91	3.81	3.71	3.61	3.49	3.25	2.95	2.55				
5	56JM2/20/4/6/40/32	5	4.89	4.78	4.67	4.55	4.43	4.3	4.01	3.68	3.26				

Product, Electrical and ErP Table - 500-560 mm
380-420v/50Hz/3ϕ

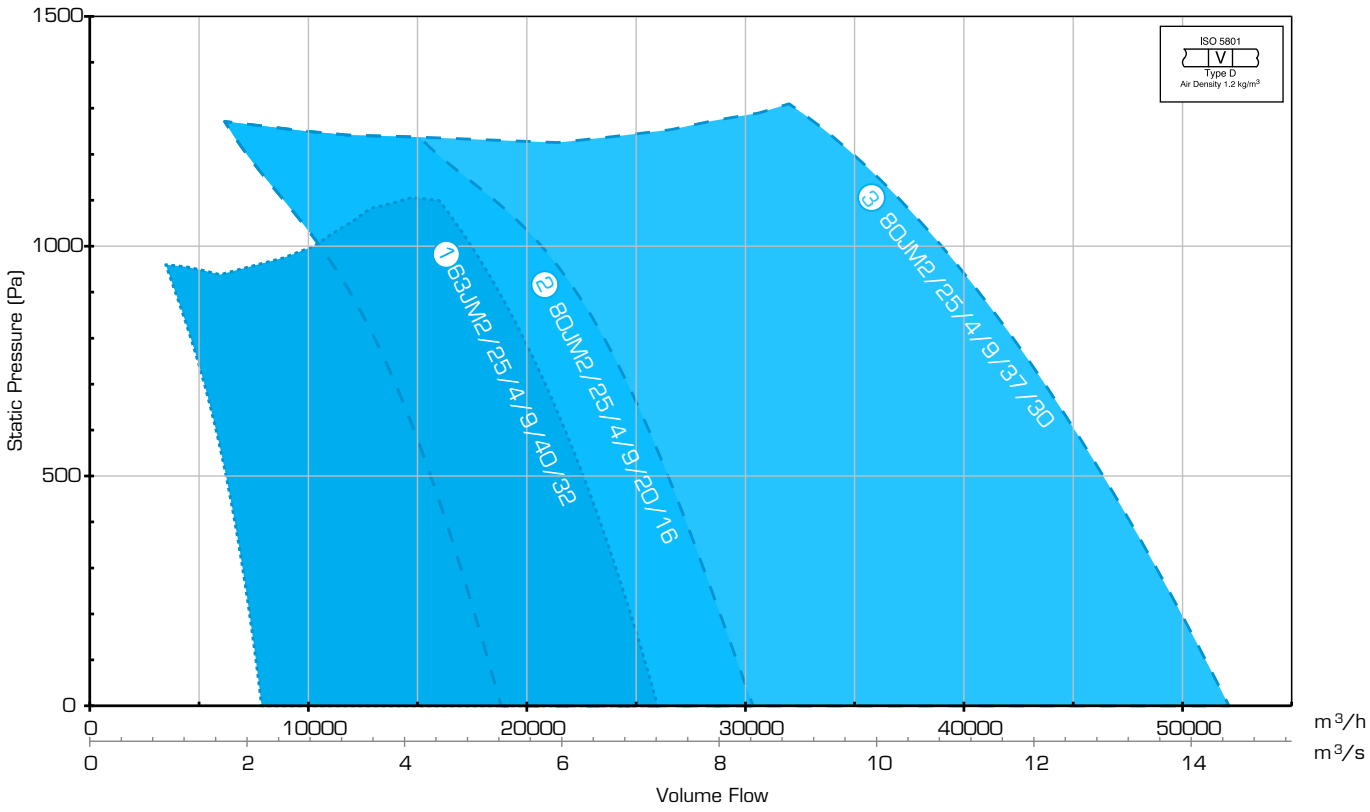
Ref	Product Code	Product Number	Pitch Angle (°)		Speed rev/min	Motor	Rating (kW)	Full Load Current (A)	Starting Current (A)	Wiring Diagram (CD)	Speed Controller		
			Min	Max							Electronic	Transformer	Inverter
1	50JM2/20/2/6/20/16	EQ531275	9/8	20/16	2910	100L (IE2)	3.6	7.10	45.44	CD2416	N/A	N/A	IDDXF54-7.2
2	50JM2/20/2/6/30/24	EQ531276	9/8	30/24	2910	112M (IE2)	6.05	11.6	76.56	CD2417	N/A	N/A	IDDXF54-12
3	50JM2/20/4/6/41/32	EQ531409	9/8	41/32	1420	90S (IE2)	1.32	2.84	15.6	CD2416	N/A	N/A	IDDXF54-3.7
4	56JM2/20/4/6/33/26	EQ591477	9/8	33/26	1420	90L (IE2)	1.32	2.84	15.6	CD2416	N/A	N/A	IDDXF54-3.7
5	56JM2/20/4/6/40/32	EQ591479	9/8	40/32	1420	90L (IE2)	1.8	3.76	20.68	CD2417	N/A	N/A	IDDXF54-12

Ref	Product Code	Product Number	Inlet Sound Levels	Efficiency Rating	Target	Grade
1	50JM2/20/2/6/20/16	EQ531275	83	69.9	55.2	72
2	50JM2/20/2/6/30/24	EQ531276	88	72.1	57.5	72
3	50JM2/20/4/6/41/32	EQ531409	73	65.0	52.0	71
4	56JM2/20/4/6/33/26	EQ591477	74	66.6	52.3	72
5	56JM2/20/4/6/40/32	EQ591479	76	65.6	53.2	70

Sound pressure levels quoted are at the inlet, and are average dBA at 3m distance over a sphere at the mid point at the highest angle given, under free field conditions. These are presented for comparative purposes only.

Product Performance and Electrical Data

Performance Chart - 630-800 mm
380-420v/50Hz/3ϕ



Performance Table - 630-800 mm
380-420v/50Hz/3ϕ

Ref	Product Code	m³/s @ Pa (Static)													
		0	50	100	150	200	250	300	400	500	600	700	800	900	1000
1	63JM2/25/4/9/40/32	7.21	7.13	7.05	6.96	6.87	6.78	6.68	6.48	6.27	6.04	5.79	5.51	5.2	4.85
2	80JM2/25/4/9/20/16	8.43	8.33	8.22	8.11	8	7.89	7.79	7.58	7.35	7.1	6.83	6.53	6.19	5.74
3	80JM2/25/4/9/37/30	14.48	14.33	14.18	14.03	13.87	13.71	13.55	13.22	12.88	12.52	12.14	11.73	11.3	10.82

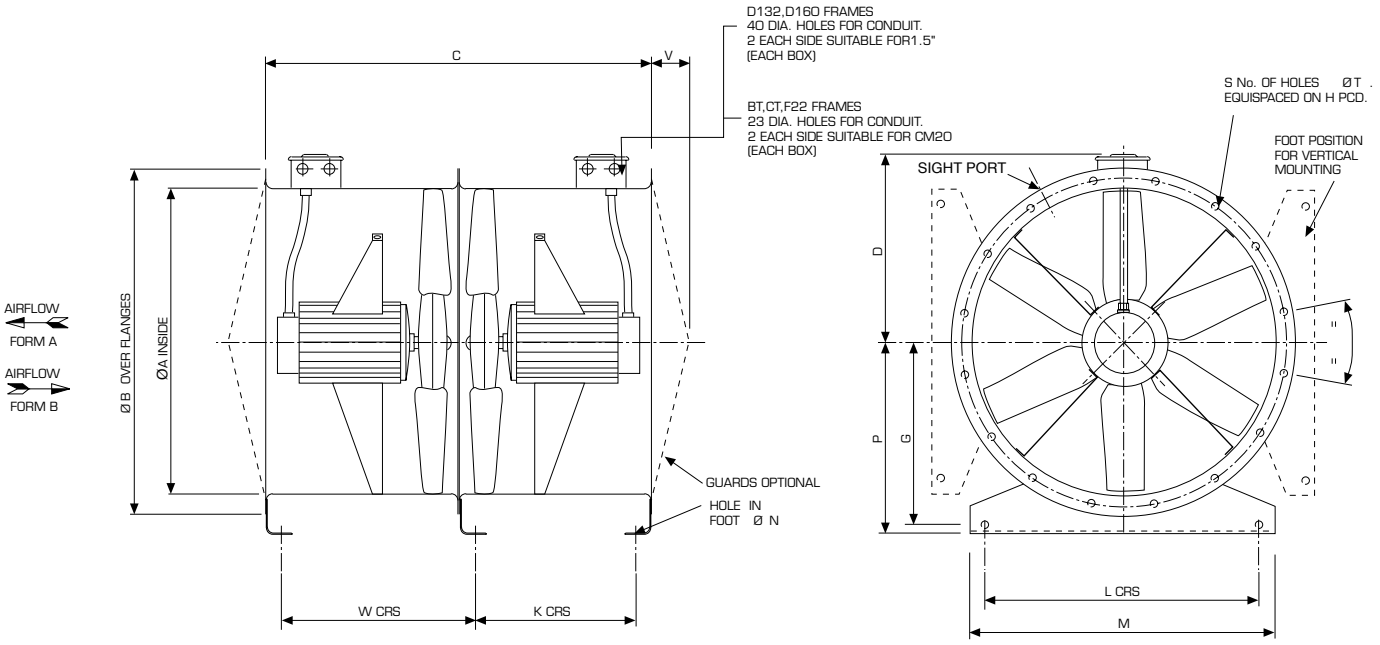
Product, Electrical and ErP Table - 630-800 mm
380-420v/50Hz/3ϕ

Ref	Product Code	Product Number	Pitch Angle (°)		Speed rev/min	Motor	Rating (kW)	Full Load Current (A)	Starting Current (A)	Wiring Diagram (CD)	Speed Controller		
			Min	Max							Electronic	Transformer	Inverter
1	63JM2/25/4/9/40/32	EQ661477	9/8	40/32	1440	112M (IE2)	4.80	9.69	49.53	CD2417	N/A	N/A	IDDXF54-12
2	80JM2/25/4/9/20/16	EQ831474	9/8	20/16	1440	112M (IE2)	4.80	9.69	49.53	CD2417	N/A	N/A	IDDXF54-12
3	80JM2/25/4/9/37/30	EQ831475	10/8	37/30	1440	132M (IE2)	10.60	19.90	133.21	CD2417	N/A	N/A	IDDXF54-23

Ref	Product Code	Product Number	Inlet Sound Levels	Efficiency Rating	Target	Grade
1	63JM2/25/4/9/40/32	EQ661477	80	68.0	55.5	70
2	80JM2/25/4/9/20/16	EQ831474	82	68.9	55.7	71
3	80JM2/25/4/9/37/30	EQ831475	87	68.6	57.9	68

Sound pressure levels quoted are at the inlet, and are average dBA at 3m distance over a sphere at the mid point at the highest angle given, under free field conditions. These are presented for comparative purposes only.

Drawings - 315-800 mm, JM Multi Stage

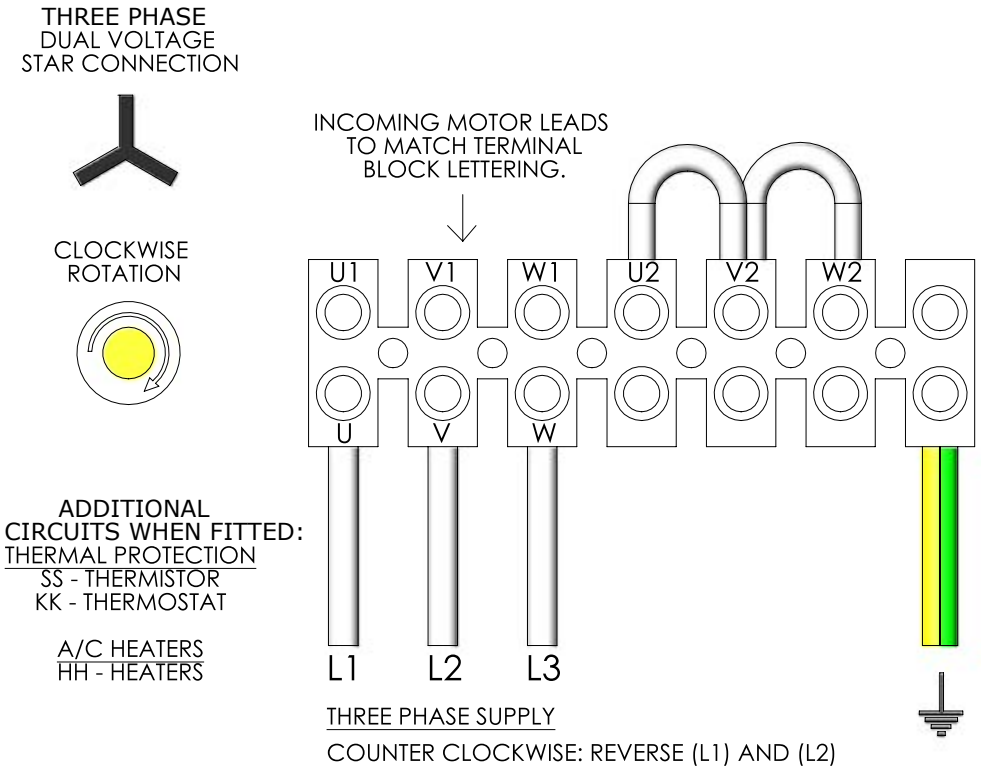


Product Code	Motor	A	B	C	D	G	H	K	L	M	N	P	S	T	W	Weight (Kg)
31JM2/16/4/5/40/32	BT4	315	395	750	235	175	355	290	265	315	10	200	8	10	375	44
35JM2/16/4/5/40/32	BT5	355	435	750	256	200	395	290	305	355	10	225	8	10	375	48
35JM2/16/2/5/24/20	CT5	355	435	750	266	200	395	290	305	355	10	225	8	10	375	56
40JM2/16/2/5/27/22	CT9	400	480	750	279	225	450	290	350	400	10	250	8	12	375	60
45JM2/16/4/5/40/32	CT5	450	530	750	306	255	500	290	400	450	10	280	8	12	375	64
50JM2/20/4/6/41/32	CT9	500	564	750	338	290	560	280	450	500	10	315	12	12	375	68
50JM2/20/2/6/20/16	F22	500	594	1040	338	290	560	424	450	500	10	315	12	12	520	108
50JM2/20/2/6/30/24	PM112	500	594	1040	338	290	560	424	450	500	10	315	12	12	520	130
56JM2/20/4/6/30/24	CT9	560	654	750	368	330	620	280	510	560	10	355	12	12	375	76
56JM2/20/4/6/36/28	CT9	560	654	750	368	330	620	280	510	560	10	355	12	12	375	76
63JM2/20/4/6/20/16	F22	630	724	1040	403	375	690	434	580	630	10	400	12	12	520	140
63JM2/25/4/9/40/32	PM112	630	724	1040	403	375	690	434	580	630	10	400	12	12	520	162
80JM2/25/4/9/20/16	PM112	800	894	1040	488	485	860	434	750	800	10	510	16	12	520	188

All dimensions in mm

Wiring Diagrams - JM Multi-Stage

CD2416



CD2417