

ABB Limited

LV Motors

FRSM-59A Effective from 18.02.2014
(Superseding FRSM-59 dated 08-10-2013)

Price List



1. Standard Totally Enclosed Fan Cooled (TEFC) Squirrel Cage Motors

(Enclosure Conforming to protection IP55) Horizontal Foot Mounted Induction motors, continuously rated suitable for operation on 415±10%, 3-Phase, 50Hz±5%, AC Supply with class 'F' insulation for an ambient of 50 Deg.C and altitude less than 1000M above MSL and conforming to IS:325-1996

Two Pole

Output				3000 rpm	
kW	H.P	Frame size	Price (Rs)	Ex. Duty (Rs)	
0.37	0.50	M2BA71A2	9500	391	
0.55	0.75	M2BA71B2	10500	433	
0.75	1.00	M2BA80A2	10850	447	
1.10	1.50	M2BA80B2	11900	490	
1.50	2.00	M2BA90S2	13770	567	
2.20	3.00	M2BA90LB2	17620	726	
3.70	5.00	M2BA100LB2	21620	891	
5.50	7.50	M2BA132SA2	35550	1465	
7.50	10.00	M2BA132SB2	36540	1505	
9.30	12.50	M2BA132SC2	56910	2345	
11.00	15.00	HX+160MLB2	63840	2630	
15.00	20.00	HX+160MLD2	74860	3084	
18.50	25.00	HX+160MLE2	97020	3997	
22.00	30.00	HX+180MLB2	108150	4456	
30.00	40.00	HX+200MLB2	160650	6619	
37.00	50.00	HX+200MLC2	196350	8090	
45.00	60.00	HX+225SMC2	252100	10387	
55.00	75.00	HX+250MB2	339460	13986	
75.00	100.00	HX+280SMB2	441840	18204	
90.00	125.00	HX+280SMC2	512190	21102	

Four Pole

Output				1500 rpm	
kW	H.P	Frame size	Price (Rs)	Ex. Duty (Rs)	
0.25	0.33	M2BA71A4	9700	400	
0.37	0.50	M2BA71B4	10030	413	
0.55	0.75	M2BA80A4	11170	460	
0.75	1.00	M2BA80B4	11270	464	
1.10	1.50	M2BA90S4	12840	529	
1.50	2.00	M2BA90L4	14060	579	
2.20	3.00	M2BA100LA4	18570	765	
3.70	5.00	M2BA112MA4	23780	980	
5.50	7.50	M2BA132S4	32760	1350	
7.50	10.00	M2BA132M4	38190	1573	
9.30	12.50	HX+160MLB4	60480	2492	
11.00	15.00	HX+160MLD4	61160	2520	
15.00	20.00	HX+160MLE4	76000	3131	
18.50	25.00	HX+180MLB4	102430	4220	
22.00	30.00	HX+180MLC4	114240	4707	
30.00	40.00	HX+200MLC4	154040	6346	
37.00	50.00	HX+225SMB4	193300	7964	
45.00	60.00	HX+225SMC4	229320	9448	
55.00	75.00	HX+250MB4	314900	12974	
75.00	100.00	HX+280SMB4	403200	16612	
90.00	125.00	HX+280SMC4	467770	19272	

Six Pole

Output				1000 rpm	
KW	H.P	Frame size	Price (Rs)	Ex. Duty (Rs)	
0.18	0.25	M2BA71A6	10810	445	
0.25	0.34	M2BA71B6	11020	454	
0.37	0.50	M2BA80A6	11870	489	
0.55	0.75	M2BA80B6	12130	500	
0.75	1.00	M2BA90L6	13700	564	
1.10	1.50	M2BA90LB6	15060	620	
1.50	2.00	M2BA100L6	19190	791	
2.20	3.00	M2BA112M6	22950	946	
3.70	5.00	M2BA132MA6	35050	1444	
5.50	7.50	M2BA132MC6	39020	1608	
7.50	10.00	HX+160MLC6	63000	2596	
9.30	12.50	HX+160MLD6	74550	3071	
11.00	15.00	HX+160MLE6	78380	3229	
15.00	20.00	HX+180MLC6	107050	4410	
18.50	25.00	HX+200MLB6	139440	5745	
22.00	30.00	HX+200MLC6	151410	6238	
30.00	40.00	HX+225SMC6	235940	9721	
37.00	50.00	HX+250MB6	318000	13102	
45.00	60.00	HX+280SMB6	405300	16698	
55.00	75.00	HX+280SMC6	459900	18948	

Eight Pole

Output				750 rpm	
KW	H.P	Frame size	Price (Rs)	Ex. Duty (Rs)	
0.09	0.12	M2BA71A8	11030	454	
0.12	0.16	M2BA71B8	11250	464	
0.37	0.50	M2BA90L8	13130	541	
0.55	0.75	M2BA90LB8	14400	593	
0.75	1.00	M2BA100LA8	17640	727	
1.10	1.50	M2BA100LB8	21530	887	
1.50	2.00	M2BA112MA8	24890	1025	
2.20	3.00	M2BA132S8	32970	1358	
3.70	5.00	HX+160MLB8	51820	2135	
5.50	7.50	HX+160MLD8	63000	2596	
7.50	10.00	HX+160MLE8	79900	3292	
9.30	12.50	HX+180MLA8	103950	4283	
11.00	15.00	HX+180MLB8	109410	4508	
15.00	20.00	HX+200MLC8	154560	6368	
18.50	25.00	HX+225SMB8	199500	8219	
22.00	30.00	HX+225SMC8	240660	9915	
30.00	40.00	HX+250MB8	323610	13333	
37.00	50.00	HX+280SMB8	413700	17044	
45.00	60.00	HX+280SMC8	479850	19770	



2. M2000 ENERGY EFFICIENT MOTORS

Standard TEFC Squirrel Cage Motor Suitable for Ambient temperature of 50 Deg. Centigrade, Horizontal foot mounting and conforming to IS:325-1996

Two Pole

Output	KW	H.P	Frame size	3000 rpm	
				Price (Rs)	Ex. Duty (Rs)
110.00	150.00		M2BA315SMA2	678300	27946
125.00	170.00		M2BA315SMB2k	796400	32812
132.00	180.00		M2BA315SMB2	833490	34340
150.00	200.00		M2BA315MLA2k	881790	36330
160.00	220.00		M2BA315MLA2	912350	37589
180.00	240.00		M2BA315MLC2k	961590	39618
200.00	270.00		M2BA315MLC2	1071000	44125
250.00	340.00		M2BA355SMA2	1188600	48970
315.0	425.00		M2BA355MLA2	1294400	53329

Four Pole

Output	KW	H.P	Frame size	1500 rpm	
				Price (Rs)	Ex. Duty (Rs)
110.00	150.00		M2BA315SMA4	594300	24485
125.00	170.00		M2BA315SMB4k	680500	28037
132.00	180.00		M2BA315SMB4	699510	28820
150.00	200.00		M2BA315MLA4k	753900	31061
160.00	220.00		M2BA315MLA4	818500	33722
180.00	240.00		M2BA315MLB4k	873600	35992
187.00	250.00		M2BA315MLB4	904050	37247
200.00	270.00		M2BA315MLC4	996450	41054
225.00	300.00		M2BA355SMA4k	1019550	42005
250.00	340.00		M2BA355SMA4	1098300	45250
260.00	350.00		M2BA355SMA4h	1098300	45250
315.00	425.00		M2BA355MLA4	1257900	51825
355.0	475.00		M2BA355MLB4	1621200	66793

Six Pole

Output	KW	H.P	Frame size	1000 rpm	
				Price (Rs)	Ex. Duty (Rs)
75.00	100.00		M2BA315SMA6	570150	23490
90.00	125.00		M2BA315SMB6	716940	29538
110.00	150.00		M2BA315SMC6	799050	32921
125.00	170.00		M2BA315SMC6k	870450	35863
132.00	180.00		M2BA315MLC6	932930	38437
160.00	220.00		M2BA315MLD6	983850	40535
180.00	240.00		M2BA355SMB6k	1094630	45099
200.00	270.00		M2BA355SMB6	1107750	45639
250.00	340.00		M2BA355MLA6	1192800	49143
315.00	425.00		M2BA355MLB6	1888950	77825

Eight Pole

Output	KW	H.P	Frame size	750 rpm	
				Price (Rs)	Ex. Duty (Rs)
55.00	75.00		M2BA315SMA8	584750	24092
75.00	100.00		M2BA315SMB8	729750	30066
90.00	125.00		M2BA315SMC8	823200	33916
110.00	150.00		M2BA315MLC8	871500	35906
132.00	180.00		M2BA355SMA8	1064700	43866
150.00	200.00		M2BA355MLA8k	1142400	47067
160.00	220.00		M2BA355MLA8	1172850	48321
180.00	240.00		M2BA355MLB8i	1256850	51782
200.00	270.00		M2BA355MLC8	1283100	52864
225.00	300.00		M2BA355MLB8h	1819650	74970
250*	340.00		M2BA355MLB8k	2012850	82929

Type	Three phase squirrel cage induction motor
Enclosure	Totally enclosed fan cooled
Voltage +/- variation	415+/- 10%
Frequency +/- variation	50Hz +/- 5%
Combined +/- variation	10% (Absolute Sum)
Mounting Reference	As per IS 4691
Frame Dimensions	As per IS 1231 : IS 2223
Altitude	Upto 1000 M
Relative Humidity	Upto 100%
Degree of Protection	IP55
Class of Insulation	Class F
Ambient Temperature/ Temp	50 Deg C/ 70 Deg C
Duty	S1 / Continuous
Position of terminal box	Top at drive end
Connection / No. of leads	Upto 2HP- STAR / 3 Leads > 2 HP- DELTA / 6 Leads
Direction of Rotation	Bi-directional
Grease Type	Lithium complex grease
Greasing arrangement	Online greasing arrangement for frame 250 and above
Cooling	IC411 (TEFC)
Paint	Polyurethane(Shade: Munsell Blue)

* This rating is suitable for class F temp rise only

The M2000 Series

M2000 motors have been engineered for the twin objective of high power to weight ratio and efficiency at a designed ambient of 50Deg.C. The performance of M2BA' is well ahead of relevant IEC & IS standards resulting in lower consumption, reduced operational costs and ultimately faster returns on investment. M2BA motors have a wide range of applications including windmill.

Heavy Duty Design

The electrical and mechanical design of 'M2BA' motors offer high performance values in all the mounting arrangements, protection class and in all operations. M2BA' motors have withstood the test of time and are established for reliability in stringent operating conditions like thermal power plants worldwide.



3. Standard screen protected drip proof squirrel cage motors -Type 'Q'

(Enclosure conforming to IP23). Horizontal foot mounted induction motors, continuously rated suitable for operation on 415V \pm 10%,50Hz \pm 5% , 3 Phase, Insulation Class F, suitable for 40 deg centigrade ambient temperature and to confirm IS 325-1996.

Two Pole

Output	KW	H.P	Frame size	3000 rpm	
				Price (Rs)	Ex. Duty (Rs)
11.0	15.00		Q160M2ai	71400	2942
15.0	20.00		Q160M2a	89250	3677
18.5	25.00		Q160L2am	114450	4715
22.0	30.00		Q160L2bm	123900	5105
30.0	40.00		Q160L2b	132300	5451
37.0	50.00		Q180L2d	189000	7787
45.0	60.00		Q200M2a	229950	9474
55.0	75.00		HQ200L2a	300300	12372
75.0	100.00		Q225M2a	351750	14492
90.0	125.00		Q225M2b	375900	15487
110.0	150.00		Q250M2emi	519750	21414
132.0	180.00		Q250M2em	604800	24918

Four Pole

Output	KW	H.P	Frame size	1500 rpm	
				Price (Rs)	Ex. Duty (Rs)
9.3	12.50		Q160M4ai	61950	2552
11.0	15.00		Q160M4a	65100	2682
15.0	20.00		Q160L4a	80850	3331
18.5	25.00		Q160L4c	106050	4369
22.0	30.00		HQ180L4b	118650	4888
30.0	40.00		Q180L4e	132300	5451
37.0	50.00		Q200M4b	168000	6922
45.0	60.00		Q200L4b	212100	8739
55.0	75.00		HQ225M4a	261450	10772
75.0	100.00		HQ225M4d	337050	13886
90.0	125.00		HQ250M4d	373800	15401
110.0	150.00		HQ250M4f	456750	18818
132.0	180.00		Q280M4c	529200	21803
160.0	220.00		Q315M4a	670950	27643
200.0	270.00		Q315M4c	762300	31407
250.0	340.00		Q315M4e	1097250	45207

Six Pole

Output	KW	H.P	Frame size	1000 rpm	
				Price (Rs)	Ex. Duty (Rs)
7.5	10.00		Q160M6b	64050	2639
9.3	12.50		Q160L6bi	73500	3028
11.0	15.00		Q160L6b	80850	3331
15.0	20.00		Q180L6c	113400	4672
18.5	25.00		Q180L6f	133350	5494
22.0	30.00		Q200M6a	172200	7095
30.0	40.00		Q200L6c	215250	8868
37.0	50.00		Q225M6a	268800	11075
45.0	60.00		Q250M6b	329700	13584
55.0	75.00		Q250M6d	376950	15530
75.0	100.00		Q250M6g	468300	19294
90.0	125.00		Q280M6d	513450	21154
110.0	150.00		Q315M6b	660450	27211
132.0	180.00		Q315M6d	764400	31493
160.0	220.00		Q315M6g	903000	37204



Ex d

Totally Enclosed Fan Cooled (TEFC) Squirrel Cage Flame Proof Motors

Enclosure conforming to protection IP55 as per IEC: 60034-5:2006, Horizontal foot mounted (B3) induction motors, continuously rated suitable for , operation on 415V +/-10%, 3 phase, 50Hz +/-5%A.C supply with class 'F' insulation for **50 Deg.C ambient temperature in Gas Group IIA & IIB** and altitude less than 1000M above MSL and conforming to IS/IEC 60079-1 (2007)

Two Pole

Output	kW	H.P	Frame size	3000 rpm	
				Price (Rs)	Ex. Duty (Rs)
0.37	0.37	0.50	JHX71C2	20370	839
0.55	0.55	0.75	JHX71D2	22890	943
0.75	0.75	1.00	JHX80C2	23630	974
1.10	1.10	1.50	JHX80D2	26350	1086
1.50	1.50	2.00	JHX90SLC2	29400	1211
2.20	2.20	3.00	JHX90SLD2	36750	1514
3.70	3.70	5.00	JHX100LB2	46830	1929
5.50	5.50	7.50	JHX132SMB2	66470	2739
7.50	7.50	10.00	JHX132SMC2	73500	3028
9.30	9.30	12.50	JHX132SME2	104470	4304
11.00	11.00	15.00	JHX160MLB2	129150	5321
15.00	15.00	20.00	JHX160MLD2	156450	6446
18.50	18.50	25.00	JHX160MLE2	178500	7354

Four Pole

Output	kW	H.P	Frame size	1500 rpm	
				Price (Rs)	Ex. Duty (Rs)
0.25	0.25	0.33	JHX71B4	19950	822
0.37	0.37	0.50	JHX71C4	20050	826
0.55	0.55	0.75	JHX80D4	22150	913
0.75	0.75	1.00	JHX80E4	23100	952
1.10	1.10	1.50	JHX90SLD4	26350	1086
1.50	1.50	2.00	JHX90SLE4	28560	1177
2.20	2.20	3.00	JHX100LB4	36430	1501
3.70	3.70	5.00	JHX112MB4	46200	1903
5.50	5.50	7.50	JHX132SMC4	63520	2617
7.50	7.50	10.00	JHX132SME4	72450	2985
9.30	9.30	12.50	JHX160MLB4	110770	4564
11.00	11.00	15.00	JHX160MLD4	116860	4815
15.00	15.00	20.00	JHX160MLE4	142380	5866

Six Pole

Output	kW	H.P	Frame size	1000 rpm	
				Price (Rs)	Ex. Duty (Rs)
0.25	0.25	0.33	JHX80D6	23310	960
0.37	0.37	0.50	JHX80D6	23410	964
0.55	0.55	0.75	JHX80E6	23940	986
0.75	0.75	1.00	JHX90SLD6	27820	1146
1.10	1.10	1.50	JHX90SLE6	28870	1189
1.50	1.50	2.00	JHX100LB6	41680	1717
2.20	2.20	3.00	JHX112MB6	48300	1990
3.70	3.70	5.00	JHX132SMC6	64150	2643
5.50	5.50	7.50	JHX132SME6	77700	3201
7.50	7.50	10.00	JHX160MLC6	120220	4953
9.30	9.30	12.50	JHX160MLD6	139650	5754
11.00	11.00	15.00	JHX160MLE6	147000	6056

Eight Pole

Output	kW	H.P	Frame size	750 rpm	
				Price (Rs)	Ex. Duty (Rs)
0.37	0.37	0.50	JHX90SLA8	27300	1125
0.55	0.55	0.75	JHX90SLD8	29710	1224
0.75	0.75	1.00	JHX100LA8	35910	1479
1.10	1.10	1.50	JHX100LB8	42000	1730
1.50	1.50	2.00	JHX112MA8	50080	2063
2.20	2.20	3.00	JHX132SMB8	66150	2725
3.70	3.70	5.00	JHX160MLB8	107100	4413
5.50	5.50	7.50	JHX160MLD8	123160	5074
7.50	7.50	10.00	JHX160MLE8	150150	6186

Note:- Special Features given below shall not be applicable for Flame Proof Motors.

ABB reserves the right to change the price, design, technical specification and dimensions without prior notice

Additional charges for specific requirements
Frame 71-355 of TEFC and SPDP



SI no	Description for extra features	Extra charge
1.0	Shaft	
1.1	Non standard single/ double shaftextension, diameter of shaft being same or less as standard. kindly refer to us for following: a) Dia more than standard b) Length more than twice of the standard	5% of LP
1.2	Shaft material - EN24	10% of LP
2.0	Mounting Standard flange or face mounting (B14, B5, V1, V18 & V19) or foot cum flange/ face mounting(B35, B34, V14, V36) (for frames 225 and above in TEFC/ SPDP please refer to us.)	
2.1	Upto frame 160	3% of LP
2.2	Frame 180 and above	5% of LP
3.0	Non standard paint shades per IS 5	
3.1	Epoxy	
3.11	Epoxy 631/632	3% of LP
3.12	Paint shade other than munshell blue and 631/632 shade	5% of LP
3.2	Non-Epoxy	
3.21	Paint shade other than munshell blue and 631/632 shade	5% subject to max of RS 6500/-nett
3.3	Paint Thickness Rust Coat Primer + PU paint is 70 microns For Additional Thickness upto 150 micros For thickness > 150 upto 215microns	4% of LP 6% of LP
4.0	Epoxy gel coat on winding overhang	3% of LP
5.0	Insulation class "H"	10% on LP
6.0	Vaccum pressure impregnation	5% on LP
7.0	Stainless steel hardware	Rs 500/-nett
8.0	Non standard nominal voltage 220-550 V with frequency 50 HZ and 60 HZ	3% of LP
9.0	Multi speed motors Dual speed motor upto 8 pole (to be taken on higher frame) Tapped winding is indicated by speed ratio 1:2(e.g 4/8, 2/4) Two winding e.g. 4/6, 6/8	12.5% on LP for Tapped wdg 20% on LP for Two wdg.
10.0	Crane duty motor(SCR) (KHx motors)	10% on LP (frame wise)
11.0	Enclosure/ Types	
11.1	Ring frame (Textile motors)(RHx motors)	5% on LP
11.2	Non sparking Type "n"motors (NHx motors)	7.5% on LP
11.3	Increased safety Type "e" motors (IHx motors)	15% on LP
11.4	IP56	5% on LP



12.0	Space Heaters	
12.1	Frame 160	Rs 1200/-nett
12.2	Frame 180-355 frame	Rs 2650/-nett
13.0	PTC thermistors (without relays)	
13.1	3 no's	Rs 2150/-nett
13.2	6 no's	Rs 4300/-nett
14.0	RTD (frame 160-355)	
14.1	3 no's	Rs 4000/-nett
14.2	6 no's	Rs 8000/-nett
15.0	BTD(Frame 225-355)	
	2 no's simplex	Rs 7500/-nett
16.0	Cable glands	
16.1	Single compression cable glands	
	Frame 71-132	Rs 400/-nett
	Frame 160-225	Rs 1000/-nett
	Frame 250-355	Rs 1300/-nett
16.2	Double compression cable gland	
	Frame 71-132	Rs 800/-nett
	Frame 160-225	Rs 2000/-nett
	Frame 250-355	Rs 2500/-nett
17.0	Forced cooling arrangement	
	Frame 200- 225	Rs 20000/-nett
	Frame 250-280	Rs 25000/-nett
	Frame 315	Rs 31000/-nett
	Frame 355	Rs 35000/-nett
18	Roller Bearing	
	Frame 160- 200	Rs 1500/-nett
	Frame 225- 250	Rs 3000/-nett
	Frame 280-315	Rs 5000/-nett
	Frame 355- 400	Rs 9000/-nett
19.0	Testing	
19.1	Routine Test per motor	
	Frame 71-132	Rs 1200/-nett
	Frame 160-225	Rs 2400/-nett
	Frame 250-355	Rs 3600/-nett
19.2	Type test per rating on one motor	
	Frame 71-132	Rs 5000/-nett
	Frame 160-225	Rs 7500/-nett
	Frame 250-280	Rs 10000/-nett
	Frame 315-355	Rs 15000/-nett
19.3	First Numeral IP55 Test	
	Frame 71-200	Rs 5000/-nett
19.4	Second Numeral IP55 Test	
	Frame 71-355	Rs 3000/-nett

Terms & Conditions

1. Taxes & Duties: The list price is exclusive of Excise Duties, Sales Tax and any other Central or Local Taxes, Octroi Duty and other levies. These will be charged extra as the rates ruling on the date of supply. Excise duty shall be inclusive of E. Cess. and H Cess

2. Delivery: Prices are Ex works/Ex- Godown basis

3. Conditions of Sale: The price list is subject to our Standard 'General Terms and Conditions' of Tender and sale and the prices are subject to revision without prior notice.

4. General:

- a) Due to improvement being made from time to time, Frame sizes indicated above are provisional and subject to change without notice.
- b) For more details, please contact us.