

**STANDARD TEFC SCR MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motors suitable for 415V ±10%, 50Hz ±5%, Combined Variation ±10%, Insulation Class F with temperature rise limited to Class B, Degree of Protection IP55, Ambient Temperature 50° C, Duty S1, Conforms to IS:325.

3000 rpm 2 Pole					
kW	Hp	Frame	Type	Price	Excise
0.18	0.25	63	MA063213	8660	455
0.25	0.35	63	MA063233	8910	468
0.37	0.50	71	MA071213	9480	498
0.55	0.75	71	MA071233	10470	550
0.75	1.00	80	MA080213	10840	569
1.10	1.50	80	MA080233	11870	624
1.50	2.00	90S	MA09S233	13730	721
2.20	3.00	90L	MA09L253	17570	923
3.70	5.00	100L	MA10L213	21590	1134
5.50	7.50	132S	MA13S2B3	35500	1865
7.50	10.00	132S	MA13S2E3	36750	1930
9.30	12.50	132M	MA13M2N3	56880	2988
11.00	15.00	160M	MA16M213	63810	3352
15.00	20.00	160M	MA16M253	74770	3928
18.50	25.00	160L	MA16L273	96950	5093
22.00	30.00	180M	MA18M213	108070	5677
30.00	40.00	200L	MA20L233	160560	8434
37.00	50.00	200L	MA20L253	195930	10292
45.00	60.00	225M	MA22M233	252130	13244
55.00	75.00	250M	MA25M213	339400	17829
75.00	100.00	280S	MA28S213	441810	23208
90.00	120.00	280M	MA28M233	512170	26904
110.0	150.0	315S	MA31S233	677800	35605
125.0	170.0	315M	MA31M2A3	795600	41793
132.0	180.0	315M	MA31M233	833720	43795
150.0	200.0	315L	MA31L2A3	881420	46301
160.0	215.0	315L	MA31L253	913300	47976
180.0	240.0	315L	MA31L2B3	961040	50483
*200	270.0	315L	MA31L273	1070930	56256
*250	335.0	355L	MA35L213	1193800	62710
*315	425.0	355L	MA35L233	1300570	68319

1500 rpm 4 Pole					
kW	Hp	Frame	Type	Price	Excise
0.12	0.16	63	MA063413	8940	470
0.18	0.25	63	MA063433	9500	499
0.25	0.35	71	MA071413	9680	508
0.37	0.50	71	MA071433	10020	526
0.55	0.75	80	MA080413	11150	586
0.75	1.00	80	MA080433	11250	591
1.10	1.50	90S	MA09S433	12830	674
1.50	2.00	90L	MA09L453	14030	737
2.20	3.00	100L	MA10L433	18530	973
3.70	5.00	112M	MA11M433	23730	1247
5.50	7.50	132S	MA13S4B3	32700	1718
7.50	10.00	132M	MA13M4K3	38180	2006
9.30	12.50	160M	MA16M4A3	60470	3176
11.00	15.00	160M	MA16M4C3	61130	3211
15.00	20.00	160L	MA16L4K3	75970	3991
18.50	25.00	180M	MA18M433	102400	5379
22.00	30.00	180L	MA18L473	114170	5997
30.00	40.00	200L	MA20L433	154020	8091
37.00	50.00	225S	MA22S413	193150	10146
45.00	60.00	225M	MA22M433	229280	12044
55.00	75.00	250M	MA25M413	314850	16539
75.00	100.00	280S	MA28S413	403030	21171
90.00	120.00	280M	MA28M433	467620	24564
110.0	150.0	315S	MA31S413	594400	31224
125.0	170.0	315M	MA31M4A3	679990	35720
132.0	180.0	315M	MA31M433	697290	36629
150.0	200.0	315L	MA31L4A3	753630	39588
160.0	215.0	315L	MA31L453	818740	43008
180.0	240.0	315L	MA31L463	872730	45845
200.0	270.0	315L	MA31L473	996170	52329
250.0	335.0	355L	MA35L413	1103250	57954
315.0	425.0	355L	MA35L433	1262810	66335

Frames 63-132 are with Aluminium body with T Box on top with type "MA".

Frames 160 -225 are with Cast Iron body with T Box on RHS, with type "MA".(LHS T Box on request)

Frames 250 & above are with Cast Iron body with T Box on top with type "MA".

Frames 90-225 are also available with Cast Iron body with T Box on top with type "MX".

Frames 90 to 132 & 250 to 355 can also be offered with Cast Iron body with T Box RHS/LHS on request.

For higher ratings refer to High Efficiency Large Motors with DCCA.

\* These ratings are suitable for ambient 45° C.

**STANDARD TEFC SCR MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motors suitable for 415V ±10%, 50Hz ±5%, Combined Variation ±10%, Insulation Class F with temperature rise limited to Class B, Degree of Protection IP55, Ambient Temperature 50° C, Duty S1, Conforms to IS:325.

1000 rpm 6 Pole					
kW	Hp	Frame	Type	Price	Excise
0.25	0.35	71	MA071633	10980	577
0.37	0.50	80	MA080613	11820	621
0.55	0.75	80	MA080633	12100	636
0.75	1.00	90S	MA09S633	13620	715
1.10	1.50	90L	MA09L653	15030	790
1.50	2.00	100L	MA10L633	19150	1006
2.20	3.00	112M	MA11M633	22910	1203
3.70	5.00	132S	MA13S6B3	35020	1840
5.50	7.50	132M	MA13M6N3	39010	2049
7.50	10.00	160M	MA16M633	62990	3309
9.30	12.50	160L	MA16L663	74430	3910
11.00	15.00	160L	MA16L673	78370	4117
15.00	20.00	180L	MA18L613	107010	5621
18.50	25.00	200L	MA20L613	139340	7320
22.00	30.00	200L	MA20L633	151400	7953
30.00	40.00	225M	MA22M623	236010	12398
37.00	50.00	250M	MA25M603	317950	16702
45.00	60.00	280S	MA28S613	405120	21281
55.00	75.00	280M	MA28M633	459590	24142
75.00	100.0	315S	MA31S613	569900	29937
90.00	120.0	315M	MA31M633	716930	37660
110.0	150.0	315M	MA31M653	798650	41953
125.0	170.0	315L	MA31L6A3	870360	45720
132.0	180.0	315L	MA31L673	927860	48740
150.0	200.0	315L	MA31L6B3	958180	50333
160.0	215.0	315L	MA31L693	965850	50736
180.0	240.0	355L	MA35L6A3	1070430	56230
200.0	270.0	355L	MA35L613	1111590	58392
250.0	335.0	355L	MA35L633	1198040	62933

750 rpm 8 Pole					
kW	Hp	Frame	Type	Price	Excise
0.37	0.50	90S	MA09S813	13070	687
0.55	0.75	90L	MA09L853	14310	752
0.75	1.00	100L	MA10L813	17600	925
1.10	1.50	100L	MA10L833	21530	1131
1.50	2.00	112M	MA11M813	24840	1305
2.20	3.00	132S	MA13S8B3	32920	1729
3.70	5.00	160M	MA16M813	51780	2720
5.50	7.50	160M	MA16M833	62880	3303
7.50	10.00	160L	MA16L873	79850	4195
9.30	12.50	180M	MA18M813	103820	5454
11.00	15.00	180L	MA18L833	109360	5745
15.00	20.00	200L	MA20L833	154500	8116
18.50	25.00	225S	MA22S813	199330	10471
22.00	30.00	225M	MA22M833	240590	12638
30.00	40.00	250M	MA25M813	323550	16996
37.00	50.00	280S	MA28S823	413500	21721
45.00	60.00	280M	MA28M853	479750	25201
55.00	75.00	315S	MA31S813	585610	30762
75.00	100.00	315M	MA31M833	732840	38496
90.00	120.00	315M	MA31M853	823370	43252
110.00	150.00	315L	MA31L873	869410	45670
125.00	170.00	315L	MA31L8A3	965690	50728
132.00	180.00	315L	MA31L893	1023110	53744
150.00	200.00	355L	MA35L8A3	1069210	56166
160.00	215.00	355L	MA35L813	1175890	61770
180.00	240.00	355L	MA35L8B3	1203630	63227
200.00	270.00	355L	MA35L833	1288150	67667

Frames 63-132 are with Aluminium body with T Box on top with type "MA".

Frames 160 -225 are with Cast Iron body with T Box on RHS, with type "MA".(LHS T Box on request)

Frames 250 & above are with Cast Iron body with T Box on top with type "MA".

Frames 90-225 are also available with Cast Iron body with T Box on top with type "MX".

Frames 90 to 132 & 250 to 355 can also be offered with Cast Iron body with T Box RHS/LHS on request.

For higher ratings refer to High Efficiency Large Motors with DCCA.

**IE2 SERIES TEFC SCR MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motors suitable for 415V ±10%, 50Hz ±5%,  
 Combined Variation ±10%, Insulation Class F, with temperature rise limited to Class B, Degree of Protection IP55,  
 Duty S1, Ambient Temperature 50° C, Conforms to IS: 12615 : 2011.

3000 rpm 2 Pole					
kW	Hp	Frame	Type	LP 35	Excise
0.37	0.50	71	2H0712A3	10840	569
0.55	0.75	71	2H071233	12020	631
0.75	1.0	80	2H080213	12420	652
1.1	1.5	80	2H080233	13610	715
1.5	2.0	90S	2H09S243	15710	825
2.2	3.0	90L	2H09L273	20120	1057
3.7	5.0	100L	2H10L233	24900	1308
5.5	7.5	132S	2H13S263	40560	2131
7.5	10.0	132S	2H13S2N3	42350	2225
11.0	15.0	160M	2H16M253	75990	3992
15.0	20.0	160M	2H16M263	88970	4674
18.5	25.0	160L	2H16L293	114990	6040
22.0	30.0	180M	2H18M233	122330	6426
30.0	40.0	200L	2H20L2A3	182180	9570
37.0	50.0	200L	2H20L253	221130	11616
45.0	60.0	225M	2H22M253	284550	14947
55.0	75.0	250M	2H25M233	382750	20106
75.0	100.0	280S	2H28S233	477750	25096
90.0	120.0	280M	2H28M253	550830	28935
110.0	150.0	315S	2H31S233	702790	36918
125.0	170.0	315M	2H31M2A3	824290	43300
132.0	180.0	315M	2H31M233	863470	45358
160.0	215.0	315L	2H31L253	947580	49776
180.0	240.0	315L	2H31L2B3	996620	52352
*200	270.0	315L	2H31L273	1107700	58187
*250	335.0	355L	2H35L213	1233840	64814
*315	425.0	355L	2H35L233	1344080	70605

1500 rpm 4 Pole					
kW	Hp	Frame	Type	LP 35	Excise
0.37	0.50	71	2H071433	11240	590
0.55	0.75	80	2H080433	12760	670
0.75	1.0	80	2H080453	12940	680
1.1	1.5	90S	2H09S423	14810	778
1.5	2.0	90L	2H09L473	16070	844
2.2	3.0	100L	2H10L473	21420	1125
3.7	5.0	112M	2H11M473	27410	1440
5.5	7.5	132S	2H13S4K3	37910	1991
7.5	10.0	132M	2H13M4T3	44310	2328
11.0	15.0	160M	2H16M4K3	72240	3795
15.0	20.0	160L	2H16L4T3	89780	4716
18.5	25.0	180M	2H18M473	116970	6144
22.0	30.0	180L	2H18L483	129150	6784
30.0	40.0	200L	2H20L453	173780	9129
37.0	50.0	225S	2H22S433	215260	11308
45.0	60.0	225M	2H22M453	259880	13651
55.0	75.0	250M	2H25M433	357010	18754
75.0	100.0	280S	2H28S423	436280	22918
90.0	120.0	280M	2H28M453	506110	26586
110.0	150.0	315S	2H31S413	618030	32465
125.0	170.0	315M	2H31M4A3	708080	37195
132.0	180.0	315M	2H31M433	728230	38254
160.0	215.0	315L	2H31L453	850130	44657
180.0	240.0	315L	2H31L463	908430	47720
200.0	270.0	315L	2H31L473	1036690	54457
250.0	335.0	355L	2H35L413	1140190	59894
315.0	425.0	355L	2H35L433	1309100	68767

Frames 63-132 are with Aluminium body with T Box on top.

Frames 160 -225 are with Cast Iron body with T Box on RHS. (LHS T Box on request)

Frames 250 & above are with Cast Iron body with T Box on top.

Frames 90-225 can also be offered with Cast Iron body with T Box on top on request.

Frames 90 to 132 & 250 to 355 can also be offered with Cast Iron body with T Box RHS/LHS on request.

BBL IE2 motors are with inverter grade winding with 6 leads.

For higher ratings refer to High Efficiency Large Motors with DCCA.

\*These ratings are suitable for ambient 45° C.

**IE2 SERIES TEFC SCR MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motors suitable for 415V ±10%, 50Hz ±5%,  
 Combined Variation ±10%, Insulation Class F, with temperature rise limited to Class B, Degree of Protection IP55,  
 Duty S1, Ambient Temperature 50° C, Conforms to IS: 12615 : 2011.

1000 rpm 6 Pole					
kW	Hp	Frame	Type	Price	Excise
0.37	0.50	80	2H080613	13520	710
0.55	0.75	80	2H080633	13910	731
0.75	1.0	90S	2H09S633	15650	822
1.1	1.5	90L	2H09L653	17180	902
1.5	2.0	100L	2H10L633	22040	1158
2.2	3.0	112M	2H11M653	26430	1388
3.7	5.0	132S	2H13S663	40430	2124
5.5	7.5	132M	2H13M6T3	44800	2353
7.5	10.0	160M	2H16M633	74330	3905
11.0	15.0	160L	2H16L673	92590	4864
15.0	20.0	180L	2H18L633	121070	6360
18.5	25.0	200L	2H20L633	157490	8273
22.0	30.0	200L	2H20L653	170910	8978
30.0	40.0	225M	2H22M643	265950	13970
37.0	50.0	250M	2H25M633	357610	18785
45.0	60.0	280S	2H28S613	428390	22503
55.0	75.0	280M	2H28M633	488150	25643
75.0	100.0	315S	2H31S613	592960	31148
90.0	120.0	315M	2H31M633	745710	39172
110.0	150.0	315M	2H31M653	827860	43487
125.0	170.0	315L	2H31L6A3	914780	48053
132.0	180.0	315L	2H31L673	974770	51205
160.0	215.0	315L	2H31L693	1000540	52558
180.0	240.0	355L	2H35L6A3	1108750	58243
200.0	270.0	355L	2H35L613	1150100	60415
250.0	335.0	355L	2H35L633	1239140	65092

Frames 63-132 are with Aluminium body with T Box on top.

Frames 160 -225 are with Cast Iron body with T Box on RHS. (LHS T Box on request)

Frames 250 & above are with Cast Iron body with T Box on top.

Frames 90-225 can also be offered with Cast Iron body with T Box on top on request.

Frames 90 to 132 & 250 to 355 can also be offered with Cast Iron body with T Box RHS/LHS on request.

BBL IE2 motors are with inverter grade winding with 6 leads.

For higher ratings refer to High Efficiency Large Motors with DCCA.

**HIGH EFFICIENCY TEFC SCR 8 POLE MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motors suitable for 415V  $\pm 10\%$ , 50Hz  $\pm 5\%$  Combined Variation  $\pm 10\%$ , Insulation Class F, Degree of Protection IP55, Duty S1, Ambient Temperature 50° C with temperature rise limited to Class B, Conforms to IS:325.

750 rpm 8 Pole					
kW	Hp	Frame	Type	LP 35	Excise
0.37	0.50	90S	MH09S813	14940	785
0.55	0.75	90L	MH09L853	16400	861
0.75	1.00	100L	MH10L813	20110	1056
1.10	1.50	100L	MH10L833	24500	1287
1.50	2.00	112M	MH11M813	28410	1492
2.20	3.00	132S	MH13S8B3	37570	1974
3.70	5.00	160M	MH16M813	68200	3583
5.50	7.50	160M	MH16M833	71980	3781
7.50	10.00	160L	MH16L873	91380	4800
9.30	12.50	180M	MH18M813	113650	5970
11.00	15.00	180L	MH18L833	119710	6288
15.00	20.00	200L	MH20L833	169140	8885
18.50	25.00	225S	MH22S823	218220	11463
22.00	30.00	225M	MH22M833	263390	13836
30.00	40.00	250M	MH25M813	354960	18646
37.00	50.00	280S	MH28S823	432130	22700
45.00	60.00	280M	MH28M853	501330	26335
55.00	75.00	315S	MH31S813	591470	31070
75.00	100.00	315M	MH31M833	740170	38881
90.00	120.00	315M	MH31M853	831600	43684
110.00	150.00	315L	MH31L873	878100	46127
125.00	170.00	315L	MH31L8A3	975350	51235
132.00	180.00	315L	MH31L893	1074200	56428
150.00	200.00	355L	MH35L8A3	1079930	56729
160.00	215.00	355L	MH35L813	1187660	62388
180.00	240.00	355L	MH35L8B3	1274660	66958
200.00	270.00	355L	MH35L833	1301030	68343

For higher ratings refer to High Efficiency Large Motors with DCCA.

**HIGH EFFICIENCY TEFC SCR LARGE MOTORS WITH  
DUAL CIRCUIT COOLING ARRANGEMENT (DCCA)**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motors suitable for 415V ±10%, 50Hz ±5%,  
Combined Variation ±10%, Insulation Class F with temperature rise limited to Class B, Degree of Protection IP55,  
Ambient Temperature 40°C, Conforms to IS:325.

3000 rpm 2 Pole				
kW	Hp	Frame	Type	LP 35
355.0	475.0	355L	2H35K2M3	1786260
400.0	536.0	355L	MH35K2P3	1877050
450.0	603.0	355L	MH35K2T3	1952070
475.0	636.0	355L	MH35K2W3	2034320
500.0	670.0	355L	MH35K2W3	2059550
560.0	750.0	400L	MH40L293	On Enquiry
* 630.0	845.0	400L	MH40L2A3	On Enquiry

1500 rpm 4 Pole				
kW	Hp	Frame	Type	LP 35
400.0	536.0	355L	MH35K4P3	1723880
450.0	603.0	355L	MH35K4T3	1786930
475.0	636.0	355L	MH35K4W3	1905330
500.0	670.0	355L	MH35K4W3	1986100
560.0	750.0	400L	MH40L493	2279000
630.0	845.0	400L	MH40L4A3	2467680
* 710.0	952.0	400L	MH40L4B3	On Enquiry
800.0	1072.0	450M	MH45M433	On Enquiry
900.0	1206.0	450M	MH45M453	On Enquiry
1000.0	1340.0	450L	MH45L473	On Enquiry
upto 1250 kW		450L		On Enquiry

1000 rpm 6 Pole				
kW	Hp	Frame	Type	LP 35
315.0	422.0	355L	2H35K6M3	1673630
355.0	475.0	355L	2H35K6P3	1722500
400.0	536.0	355L	MH35K6T3	1940860
450.0	603.0	400L	MH40L693	On Enquiry
500.0	670.0	400L	MH40L6A3	On Enquiry
* 560.0	750.0	400L	MH40L6B3	On Enquiry
630.0	845.0	450M	MH45M633	On Enquiry
710.0	952.0	450M	MH45M653	On Enquiry
800.0	1072.0	450L	MH45L673	On Enquiry

750 rpm 8 Pole				
kW	Hp	Frame	Type	LP 35
** 250.0	335.0	355L	2H35K8P3	1705650
** 315.0	422.0	355L	2H35K8T3	1934920
355.0	475.0	400L	2H40L893	On Enquiry
400.0	536.0	400L	MH40L8A3	On Enquiry
* 450.0	603.0	400L	MH40L8B3	On Enquiry
500.0	670.0	450M	MH45M833	On Enquiry
560.0	750.0	450M	MH45M853	On Enquiry
630.0	845.0	450L	MH45L873	On Enquiry

Efficiency class 'IE2' will be punched on the nameplate as per IS : 12615-2011 for ratings up to 375 kW for 2,4 & 6 Pole.

\* Temperature rise limited to class "F".

\*\* Temp. rise 90°C.

The List price is inclusive of Space Heater, 3 nos winding RTDs (Simplex), 2 nos BTDs (Simplex) and inverter grade winding.

Insulated bearings at NDE is recommended for motors to be operated with VFD.(For charges refer to cash extras)

Motors with ratings 710 kW and above are offered with supply voltage as 690 V only.

**STANDARD TEFC SCR FLAME PROOF MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motor, 415V ±10%, 50Hz ±5%, Combined Variation ±10%, Insulation Class F, with temperature rise limited to Class B, Degree of Protection IP55, Duty S1, Ambient Temperature 45° C, Conforms to IS:325, IS/IEC 60079-1:2007, Gas Group IIA, IIB.

3000 rpm 2 Pole					
kW	Hp	Frame	Type	Price	Excise
0.37	0.50	80	MD0802A3	20780	1092
0.55	0.75	80	MD0802B3	23250	1221
0.75	1.00	80	MD080213	23960	1259
1.10	1.50	80	MD080233	26420	1388
1.50	2.00	90 L	MD09L233	29980	1575
2.20	3.00	90 L	MD09L253	37410	1965
3.70	5.00	100 L	MD10L213	47490	2495
5.50	7.50	132 M	MD13M233	67080	3524
7.50	10.00	132 M	MD13M253	74180	3897
9.30	12.50	132 M	MD13M293	105420	5538
11.00	15.00	160 M	MD16M213	129960	6827
15.00	20.00	160 M	MD16M253	157480	8272
18.50	25.00	160 L	MD16L273	178740	9389
22.00	30.00	180 L	MD18L213	211500	11110
30.00	40.00	200 L	MD20L233	285040	14973
37.00	50.00	200 L	MD20L253	369240	19396
45.00	60.00	225 M	MD22M233	466420	24501
55.00	75.00	250 M	MD25M213	572020	30048
75.00	100.00	280 S	MD28S213	765660	40220
90.00	120.00	280 M	MD28M233	793170	41665

1500 rpm 4 Pole					
kW	Hp	Frame	Type	Price	Excise
0.37	0.50	80	MD0804A3	20400	1072
0.55	0.75	80	MD080413	22520	1183
0.75	1.00	80	MD080433	23450	1232
1.10	1.50	90 L	MD09L433	26740	1405
1.50	2.00	90 L	MD09L453	29100	1529
2.20	3.00	100 L	MD10L433	36960	1942
3.70	5.00	112 M	MD11M433	46370	2436
5.50	7.50	132 M	MD13M433	63970	3360
7.50	10.00	132 M	MD13M473	72770	3823
9.30	12.50	160 M	MD16M4A3	111420	5853
11.00	15.00	160 M	MD16M4C3	117970	6197
15.00	20.00	160 L	MD16L4K3	143410	7533
18.50	25.00	180 L	MD18L433	162070	8514
22.00	30.00	180 L	MD18L473	192520	10113
30.00	40.00	200 L	MD20L433	259400	13626
37.00	50.00	225 S	MD22S413	337040	17705
45.00	60.00	225 M	MD22M433	424030	22274
55.00	75.00	250 M	MD25M413	520260	27329
75.00	100.00	280 S	MD28S413	668750	35129
90.00	120.00	280 M	MD28M433	681620	35805

All motors are with T Box on top.

Frames 112 & 132 can be offered with T Box on RHS on request.

Frames 160 to 280 can be offered with T Box on RHS/LHS on request.

For higher ratings refer to IE2 Series & High Efficiency 8 Pole Flame Proof Motors.

**STANDARD TEFC SCR FLAME PROOF MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motor, 415V ±10%, 50Hz ±5%, Combined Variation ±10%, Insulation Class F, with temperature rise limited to Class B, Degree of Protection IP55, Duty S1, Ambient Temperature 45° C, Conforms to IS:325, IS/IEC 60079-1:2007, Gas Group IIA, IIB.

1000 rpm 6 Pole					
kW	Hp	Frame	Type	LP 35	Excise
0.37	0.50	80	MD080613	24020	1262
0.55	0.75	80	MD080633	24420	1283
0.75	1.00	90 L	MD09L633	28400	1492
1.10	1.50	90 L	MD09L653	29200	1534
1.50	2.00	100 L	MD10L633	41830	2197
2.20	3.00	112 M	MD11M633	48730	2560
3.70	5.00	132 M	MD13M633	64530	3390
5.50	7.50	132 M	MD13M673	79780	4191
7.50	10.00	160 M	MD16M633	121260	6370
9.30	12.50	160 L	MD16L663	139880	7348
11.00	15.00	160 L	MD16L673	148020	7775
15.00	20.00	180 L	MD18L613	198250	10414
18.50	25.00	200 L	MD20L613	245600	12901
22.00	30.00	200 L	MD20L633	266300	13989
30.00	40.00	225 M	MD22M623	436420	22925
37.00	50.00	250 M	MD25M603	537170	28218
45.00	60.00	280 S	MD28S613	651260	34211
55.00	75.00	280 M	MD28M633	701990	36876

750 rpm 8 Pole					
kW	Hp	Frame	Type	LP 35	Excise
0.37	0.50	90L	MD09L833	27950	1468
0.55	0.75	90L	MD09L853	30220	1587
0.75	1.00	100 L	MD10L813	36470	1916
1.10	1.50	100 L	MD10L833	42430	2229
1.50	2.00	112 M	MD11M813	50720	2664
2.20	3.00	132M	MD13M813	66830	3511
3.70	5.00	160M	MD16M813	107910	5669
5.50	7.50	160M	MD16M833	124070	6517
7.50	10.00	160L	MD16L873	151100	7937
9.30	12.50	180L	MD18L813	191710	10071
11.00	15.00	180L	MD18L833	202050	10614
15.00	20.00	200L	MD20L833	272720	14326
18.50	25.00	225S	MD22S813	338520	17782
22.00	30.00	225M	MD22M833	444980	23375
30.00	40.00	250M	MD25M813	546500	28708
37.00	50.00	280S	MD28S823	701250	36837
45.00	60.00	280M	MD28M853	716110	37617

All motors are with T Box on top.

Frames 112 & 132 can be offered with T Box on RHS on request.

Frames 160 to 280 can be offered with T Box on RHS/LHS on request.

For higher ratings refer to IE2 Series & High Efficiency 8 Pole Flame Proof Motors.

**IE2 SERIES TEFC SCR FLAME PROOF MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motor, 415V ±10%, 50Hz ±5%, Combined Variation ±10%, Insulation Class F, with temperature rise limited to Class B, Degree of Protection IP55, Duty S1, Ambient Temperature 45° C, Conforms to IS/IEC 60079-1:2007, IE2 efficiency class conforming to IS:12615: 2011, Gas Group IIA, IIB.

3000 rpm 2 Pole						1500 rpm 4 Pole					
kW	Hp	Frame	Type	Price	Excise	kW	Hp	Frame	Type	Price	Excise
0.37	0.50	80	2J0802A3	24140	1268	0.37	0.50	80	2J080413	23710	1245
0.55	0.75	80	2J0802B3	26990	1418	0.55	0.75	80	2J080433	26170	1375
0.75	1.00	80	2J080213	27810	1461	0.75	1.00	80	2J080453	27210	1429
1.10	1.50	80	2J080233	31150	1636	1.10	1.50	90L	2J09L423	31130	1635
1.50	2.00	90L	2J09L243	34830	1830	1.50	2.00	100L	2J10L453	37260	1957
2.20	3.00	100L	2J10L213	43540	2287	2.20	3.00	112M	2J11M433	43880	2305
3.70	5.00	112M	2J11M233	55240	2902	3.70	5.00	132M	2J13M433	58850	3091
5.50	7.50	132M	2J13M253	78450	4121	5.50	7.50	132M	2J13M473	74880	3933
7.50	10.00	132M	2J13M293	86540	4546	7.50	10.00	160M	2J16M4A3	85300	4481
9.30	12.50	160M	2J16M233	71890	3776	9.30	12.50	160M	2J16M4C3	68200	3583
9.30	12.50	160M	2J16M233	147070	7726	9.30	12.50	160M	2J16M4C3	130590	6860
11.00	15.00	160M	2J16M253	149270	7841	11.00	15.00	160M	2J16M4K3	137980	7248
15.00	20.00	160M	2J16M263	184390	9686	15.00	20.00	160L	2J16L4T3	168050	8828
18.50	25.00	160L	2J16L293	209760	11019	18.50	25.00	180L	2J18L473	181950	9558
22.00	30.00	180L	2J18L233	237310	12466	22.00	30.00	200L	2J20L433	216270	11361
30.00	40.00	200L	2J20L2A3	320370	16829	30.00	40.00	200L	2J20L453	291490	15312
37.00	50.00	200L	2J20L253	415680	21836	37.00	50.00	225M	2J22M433	379660	19944
45.00	60.00	225M	2J22M253	525300	27594	45.00	60.00	250M	2J25M413	477950	25107
55.00	75.00	280S	2J28S213	644840	33873	55.00	75.00	280S	2J28S413	587090	30840
75.00	100.00	280M	2J28M233	825090	43342	75.00	100.00	280S	2J28S423	720420	37844
90.00	120.00	280M	2J28M253	854930	44909	90.00	120.00	280M	2J28M453	734360	38576
110.00	150.00	315S	2J31S233	990520	52032	110.00	150.00	315S	2J31S413	877790	46110
125.00	170.00	315M	2J31M2A3	1162550	61069	125.00	170.00	315M	2J31M4A3	1010300	53071
132.00	180.00	315M	2J31M233	1174440	61693	132.00	180.00	315M	2J31M433	1052370	55281
150.00	200.00	315L	2J31L2A3	877260	46082	150.00	200.00	315L	2J31L4A3	750060	39401
150.00	200.00	315L	2J31L2A3	1290440	67787	150.00	200.00	315L	2J31L4A3	1093940	57465
160.00	215.00	315L	2J31L253	1331510	69944	160.00	215.00	315L	2J31L453	1105030	58047
180.00	240.00	315L	2J31L2B3	1596400	83859	180.00	240.00	315L	2J31L463	1322770	69485
* 200.00	270.00	315L	2J31L273	1917170	100709	* 200.00	270.00	315L	2J31L473	1592440	83651

All motors are with T Box on top.

Frames 112 & 132 can be offered with T Box on RHS on request.

Frames 160 to 280 can be offered with T Box on RHS/LHS on request.

\* These ratings are suitable for Ambient Temperature 40° C.

**IE2 SERIES TEFC SCR FLAME PROOF MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motor, 415V ±10%, 50Hz ±5%, Combined Variation ±10%, Insulation Class F, with temperature rise limited to Class B, Degree of Protection IP55, Duty S1, Ambient Temperature 45° C, Conforms to IS/IEC 60079-1:2007, IE2 efficiency class conforming to IS:12615: 2011, Gas Group IIA, IIB.

1000 rpm 6 Pole					
kW	Hp	Frame	Type	Price	Excise
0.37	0.50	80	2J080613	27570	1448
0.55	0.75	80	2J080633	28290	1486
0.75	1.00	90L	2J09L633	32970	1732
1.10	1.50	90L	2J09L653	33940	1783
1.50	2.00	100L	2J10L633	49150	2582
2.20	3.00	112M	2J11M653	57110	3000
3.70	5.00	132M	2J13M633	75670	3975
5.50	7.50	132M	2J13M693	91710	4818
7.50	10.00	160M	2J16M633	141910	7455
9.30	12.50	160L	2J16L663	85130	4472
9.30	12.50	160L	2J16L663	164010	8615
11.00	15.00	160L	2J16L673	173820	9131
15.00	20.00	180L	2J18L633	222340	11680
18.50	25.00	200L	2J20L633	276520	14526
22.00	30.00	200L	2J20L653	299960	15757
30.00	40.00	225M	2J22M643	491750	25832
37.00	50.00	250M	2J25M633	603950	31725
45.00	60.00	280S	2J28S613	701440	36847
55.00	75.00	280M	2J28M633	756570	39743
75.00	100.00	315S	2J31S613	887180	46604
90.00	120.00	315M	2J31M633	1040340	54649
110.00	150.00	315M	2J31M653	1140570	59914
125.00	170.00	315L	2J31L6A3	1349620	70896
132.00	180.00	315L	2J31L673	1382560	72626
150.00	200.00	315L	2J31L6B3	953670	50096
150.00	200.00	315L	2J31L6B3	1617850	84986
160.00	215.00	315L	2J31L693	1741920	91503

All motors are with T Box on top.

Frames 112 & 132 can be offered with T Box on RHS on request.

Frames 160 to 280 can be offered with T Box on RHS/LHS on request.

\* These ratings are suitable for Ambient Temperature 40° C.

**HIGH EFFICIENCY TEFC SCR 8 POLE FLAME PROOF MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motors, 415V ±10%, 50Hz ±5%, Combined Variation ±10%, Insulation Class F, with temperature rise limited to Class B, Degree of Protection IP55, Duty S1, Ambient Temperature 45°C, Conforms to IS:325, IS/IEC 60079-1-2007, Gas Group IIA, IIB.

750 rpm 8 Pole					
kW	Hp	Frame	Type	Price	Excise
0.37	0.50	90L	MJ09L833	30040	1578
0.55	0.75	90L	MJ09L853	32500	1707
0.75	1.00	100 L	MJ10L813	39280	2063
1.10	1.50	100 L	MJ10L833	45840	2408
1.50	2.00	112 M	MJ11M813	54710	2874
2.20	3.00	132M	MJ13M813	72070	3786
3.70	5.00	160M	MJ16M813	116180	6103
5.50	7.50	160M	MJ16M833	133680	7022
7.50	10.00	160L	MJ16L873	163260	8576
9.30	12.50	180L	MJ18L813	208200	10937
11.00	15.00	180L	MJ18L833	219420	11526
15.00	20.00	200L	MJ20L833	297210	15612
18.50	25.00	225S	MJ22S823	370030	19438
22.00	30.00	225M	MJ22M833	483190	25382
30.00	40.00	250M	MJ25M813	597670	31396
37.00	50.00	280S	MJ28S823	766630	40271
45.00	60.00	280M	MJ28M853	791510	41578
55.00	75.00	315S	MJ31S813	874970	45962
75.00	100.00	315M	MJ31M833	1024800	53833
90.00	120.00	315M	MJ31M853	1121630	58919
110.00	150.00	315L	MJ31L873	1403000	73700
125.00	170.00	315L	MJ31L8A3	1655420	86959
132.00	180.00	315L	MJ31L893	1705470	89588

All motors are with T Box on top.

Frames 112 & 132 can be offered with T Box on RHS on request.

Frames 160 to 280 can be offered with T Box on RHS/LHS on request.

**CRANE & HOIST DUTY TEFC SCR MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motors suitable to operate on DOL supply, 415V ±10%, 50Hz ±5%, Combined Variation ±10%, Insulation Class F, Degree of Protection IP55, Ambient Temperature 45° C, 150 Starts/Stops per hour, Duty S4, CDF 40%, Conforms to IS:325.

1500 rpm 4 Pole					
kW	Hp	Frame	Type	Price	Excise
0.55	0.75	71	MC071433	10970	576
0.75	1.00	80	MC080413	12200	641
1.10	1.50	80	MC080433	12870	676
1.50	2.00	90S	MC09S433	14080	740
2.20	3.00	90L	MC09L453	15360	807
3.70	5.00	100L	MC10L453	20330	1068
5.50	7.50	112M	MC11M453	27250	1431
7.50	10.00	132S	MC13S453	35840	1883
9.30	12.50	132M	MC13M483	43860	2304
11.00	15.00	160M	MC16M4A3	65220	3426
15.00	20.00	160M	MC16M4F3	66900	3514
18.50	25.00	160L	MC16L4P3	83210	4371
22.00	30.00	180L	MC18L473	124980	6565
30.00	40.00	200L	MC20L433	168620	8858
37.00	50.00	225S	MC22S413	216620	11379
45.00	60.00	225M	MC22M433	251090	13190
55.00	75.00	250M	MC25M413	344700	18107
75.00	100.00	280S	MC28S413	441230	23178
90.00	120.00	280M	MC28M433	511920	26891
110.00	150.00	315S	MC31S413	644630	33862
132.00	160.00	315M	MC31M433	756260	39726
160.00	215.00	315L	MC31L453	887960	46645
180.00	250.00	315L	MC31L463	964520	50666
200.00	270.00	315L	MC31L473	1080390	56753

1000 rpm 6 Pole					
kW	Hp	Frame	Type	Price	Excise
0.37	0.50	71	MC071633	12010	631
0.55	0.75	80	MC080613	12930	679
0.75	1.00	80	MC080633	13890	730
1.10	1.50	90L	MC09L6A3	14950	785
1.50	2.00	90L	MC09L653	15670	823
2.20	3.00	100L	MC10L653	20970	1102
3.70	5.00	112M	MC11M653	26270	1380
5.50	7.50	132S	MC13S653	38340	2014
7.50	10.00	132M	MC13M693	44750	2351
9.30	12.50	160M	MC16M633	68950	3622
11.00	15.00	160L	MC16L663	81460	4279
13.00	17.50	160L	MC16L673	85910	4513
17.00	23.00	180L	MC18L633	117150	6154
22.00	30.00	200L	MC20L633	165750	8707
30.00	40.00	225M	MC22M623	258370	13572
37.00	50.00	250M	MC25M603	348090	18285
45.00	60.00	280S	MC28S613	443510	23298
52.00	70.00	280M	MC28M633	503140	26430
70.00	95.00	315S	MC31S613	618050	32466
85.00	115.00	315M	MC31M633	777550	40845
102.00	135.00	315M	MC31M653	866160	45499
125.00	167.00	315L	MC31L673	1006290	52860
150.00	200.00	315L	MC31L693	1047470	55024

**CRANE & HOIST DUTY TEFC SCR MOTORS**

Foot mounted (B3 construction) 3 Phase Squirrel Cage Induction Motors suitable to operate on DOL supply, 415V ±10%, 50Hz ±5%, Combined Variation ±10%, Insulation Class F, Degree of Protection IP55, Ambient Temperature 45° C, 150 Starts/Stops per hour, Duty S4, CDF 40%, Conforms to IS:325.

750 rpm 8 Pole					
kW	Hp	Frame	Type	Price	Excise
0.55	0.75	90S	MC09S813	14320	752
0.75	1.00	90L	MC09L853	15660	823
1.10	1.50	100L	MC10L813	19250	1011
1.50	2.00	100L	MC10L833	23450	1232
2.20	3.00	112M	MC11M833	27200	1429
3.70	5.00	132S	MC13S853	39520	2076
5.50	7.50	160M	MC16M833	59300	3115
7.50	10.00	160L	MC16L873	87430	4593
9.30	12.50	180M	MC18M813	113650	5970
11.00	15.00	180L	MC18L833	119710	6288
15.00	20.00	200L	MC20L833	169140	8885
18.50	25.00	225S	MC22S813	218220	11463
22.00	30.00	225M	MC22M833	263400	13836
30.00	40.00	250M	MC25M813	354200	18606
37.00	50.00	280S	MC28S823	452700	23780
45.00	60.00	280M	MC28M853	525210	27589
55.00	75.00	315S	MC31S813	628690	33025
75.00	100.00	315M	MC31M833	790980	41550
90.00	120.00	315M	MC31M853	888690	46683
110.00	150.00	315L	MC31L873	938390	49294
132.00	180.00	315L	MC31L893	1099010	57731

B3 construction, 3 Phase Slipring Induction Motor, 415V ±10%, 50Hz ±5% Combined Variation ±10%, Insulation Stator/Rotor Class F/F, Degree of Protection IP55, Ambient Temperature 45° C, Duty S4, CDF 40%, 60 Starts/ Stops per hour, Conforms to IS : 325.

B3 Construction , 3 Phase Squirrel Cage Induction Motor, 415V ±10%, 50Hz ±5% Combined variation ±10%, Insulation Class F, Degree of Protection IP55, Ambient Temperature 45° C, Conforms to IS : 325.

1000 rpm 6 Pole						
kW	Hp	Frame	Type	NP	Price	Excise
1.10	1.50	100L	MP10L613	17332	56000	2942
1.50	2.00	100L	MP10L623	18314	59170	3108
2.40	3.20	112M	MP11M623	19705	63660	3344
3.30	4.40	112M	MP11M643	24040	77670	4080
4.00	5.30	132M	MP13M613	25961	83870	4406
5.50	7.50	132M	MP13M663	28291	91400	4801
7.00	9.40	160L	MP16L613	33982	109790	5767
10.00	13.40	160L	MP16L653	43212	139610	7334

1500 rpm 4 Pole						
kW	Hp	Frame	Type	Price	Excise	
2.20	3.00	100L	MR10L453	19490	1024	
3.70	5.00	112M	MR11M453	24930	1310	
5.50	7.50	132S	MR13S453	34370	1805	
7.50	10.00	132M	MR13M483	40100	2106	
9.30	12.50	160M	MR16M413	62570	3287	
11.00	15.00	160M	MR16M433	64180	3371	
13.00	17.50	160L	MR16L453	73680	3870	
15.00	20.00	160L	MR16L473	79750	4189	

**Note:**

1. This LP replaces our LP34 dated 29th July 2013.
2. Prices mentioned are maximum recommended selling prices and are subject to change without notice.
3. Prices are Ex-Works / Ex-Godown exclusive of Excise duty, Sales tax and other Central / Local levies which will be charged extra at actuals.
- 4 kW & HP are indicated, however kW is binding and HP is approximate.
5. Product upgradation is a continuous process, hence data in this price list is subject to change without prior notice. For latest information please contact our Sales Office.

**Extra Price Calculations.**

- a) Wherever percentage is mentioned, add to LP and then offer discount.
- b) Where absolute values are mentioned, same to be directly added to the nett price( No discount applicable on absolute values).

Sr. No.	FEATURES	EXTRA CHARGES	REMARKS
<b>1.00</b>	<b>MECHANICAL FEATURES</b>		
1.01	<b>TYPE OF CONSTRUCTION (MOUNTING)</b>		
(a)	B3,B6,B7,B8,V5 & V6 Std. Flange /Face mounting	Nil	
(b)	(B14,B5,V1,V18 & V19) 63 to 160 Frame	3%	
	180 Frame & above	5%	
(c)	Foot cum Flange /Face mounting 63 to 160 Frame	3%	
	180 Frame & above	5%	
1.02	<b>Canopy (Top plate or V1 construction)</b>	5%	Subject to max.Rs5000/-
1.03	<b>Shaft Extension</b>		
(a)	Non-std single /double shaft extention with diameter & length less than or equal to standard	5%	
(b)	Non-std single /double shaft extention with length restricted to 2.5 times	10%	
(c)	For any higher diameter	Refer to Sales Office	
(d)	EN9 / EN24 / EN57 material	10%	
(e)	Stainless Steel Shaft material	15%	
1.04	<b>Painting</b>		
(a)	Anti corrosive treatment with acid alkali epoxy paint & epoxy gel coat on winding overhang & SS nameplate (Paint shade AAP 631 & AAP 632 only)	5%	Subject to max.Rs5000/- (AAP not to be charged extra for hazardous & marine duty motors)
(b)	Non-std shade of paint( i.e other than std shade of BBL	5%	Subject to max.Rs7000/- In case of specific brand required, please refer to Sales Office
(c)	Only Epoxy gel coat on winding overhang	2%	
(d)	Additional paint thickness more than 70 Micron upto 130 microns	5%	Refer to Sales Office for confirmation
1.05	<b>Enclosure / Types: IP56/IP65 protection</b>	5%	
1.06	<b>Motors for Hazardous Areas.</b> With anti corrosive treatment, acid alkali proof epoxy paint & epoxy gel coat on winding overhang & S S nameplate		
(a)	Non Sparking Motors (Type 'nA')	7.50%	
(b)	Increased Safety Motors (Type 'e')	15%	
(c)	Plug & socket arrangement for FLP motors		
	- 30 Amps. 600 V	Rs.17800	
	- 110 Amps. 600 V	Rs.21000	
	- 150 Amps. 600 V	Rs.28600	



1.17	<b>Bearings</b>			
	(a) Roller Bearing at DE Side in place of ball bearing			
	Frame 160 to 180	Rs.1800		
	Frame 200 to 250	Rs. 3000		
	Frame 280 to 355	Rs. 10000		
	Frame 400 to 450	Rs. 22000		
	(b) Insulated Bearings			
	(i) Insulated bearing NDE - Fr 250, 280,315	Rs. 33,600/-		
	(ii) Insulated bearing NDE - Fr 355, 400	Rs. 47,000/-		
	(iii) Insulated bearing NDE - Fr 450	Rs.85,000/-		
	(iv) Insulated bearing NDE - Fr 132 - 250	Refer to Sales Office		
1.18	<b>Longer core length in same frame</b>	10%		
1.19	<b>Other Miscellaneous Features</b>			
	(a) Larger Size T Box / Higher / C I T Box	2%		
	(b) C I Fan(where plastic fan is standard)	2%		
	(c) S.S. Hardware	2%		
	(d) Locked bearing upto Frame 112	5%		
	(e) Seaworthy/export packing case for home market (Without fumigation certificate)	5%	Subject to max.Rs.5500/-	
	(f) Flying leads(length not exceeding 1.5mtr)	2%	Subject to max.Rs.3500/-	
	(g) Extra Name Plate (upto 355 Fr)	Rs. 250/-		
	(h) Spread box	2%	From 180 to 450 Exlcl- FLP	
	(i) On Line Greasing Arrangment	Rs. 950/-	For 160 - 200 Fr only	
	(j) SPM Nipples provision	2%	Excluding FLP Motors	
	(k) High Temperature Grease (Molycot 44)			
	(* For other grade High Temperature Grease refer to Sales Office)	63-100 Fr Rs. 800/- 112 - 160 Fr Rs. 1600/- 180-280 Fr Rs. 4000/- 315-355 Fr Rs. 6400/- 400-450 Fr Rs.22,000/-		
	(l) 3,4 cable Run T Box	5%	For 355 Fr & above	
<b>2.00</b>	<b>ELECTRICAL FEATURES</b>			
2.01	<b>Base voltage between 250 -550 V</b>			
	(a) 415 V 50 Hz	Nil		
	(b) Non Std Voltage 220- 550 V,50Hz /60Hz	3%		
	(c) Dual voltage with 1:2 ratio example 220/440V	3%		
2.02	<b>Insulation Class 'H'</b>	10%		
2.03	<b>Thermistors / Thermostats</b>			
	(a) Set of 3 nos PTC Thermistors witout controller	Rs. 2400/-		
	(b) Set of 6 nos PTC Thermistors witout controller	Rs. 4800/-		
	(c) Thermostats per unit	Rs. 600/-		

2.04	<b>Multispeed Motors</b>		
	(a) Single tapped winding upto 8 pole	10%	
	(b) Dual speed with separate winding or polarity above 8 pole	17.50%	
	(c) Motors with 10,12,16, Poles	10%	
	(d) Multi speed Motor with more than 2 speed	Refer to Sales Office	
2.05	<b>RTD : Simplex</b>		
	(a) RTD- 3 nos.(1 per phase)	Rs. 4500/-	Standard for DCCA Motors
	(b) RTD- 6 nos.(2 per phase)	Rs. 9000/-	
2.06	<b>BTD : Simplex - 2 nos for Frame 250 &amp; above</b>	Rs. 8600/-	Standard for DCCA Motors
3	<b>OTHER CHARGES</b>		
3.01	<b>Routine Testing</b>		
	(a) Frame 63 to 132	Rs. 1300/-	
	(b) Frame 160 to 225	Rs. 3350/-	
	(c) Frame 250 & above	Rs. 6600/-	
3.02	<b>TYPE TEST</b>		
	(a) Frame 63 to 132	Rs. 3200/-	
	(b) Frame 160 to 225	Rs. 6600/-	
	(c) Frame 250 to 315	RS. 13500/-	
	(d) Frame 355 & above	Rs. 16000/-	
3.03	<b>IP55/IP56 2nd digit testing</b>		
	(a) Upto Frame 160	RS. 2700/-	
	(b) For Frame 180 & above	Rs. 5300/-	
3.04	<b>Motor tesing with Inverter Drive</b>	Refer to Sales Office	
3.05		6.00%	
	<b>Motors dispatch under Nil Excise Duty- Despatch under any government project notification e.g. Water treatment plant</b>		

Notes: 1) All % (percentage) figures are to be loaded on List Price.  
 2) All Rs. Figures are to be added on net price.  
 3) Inspection charges are subject to Excise & Taxes.