

**Large range
Efficient design**

Initial cost of Motor

Running cost of Motor

**Think long term
use BCH IE2/IE3 motors**



BCH IE2/IE3/IE4 MOTORS



BCH

**BCH
ELECTRIC
LIMITED**



Low Voltage AC TEFC Squirrel Cage Induction Motors

Range & Features

- **Wide** range
- Range: 0.16 HP to 425 HP
- **Robust** design - IE2/IE3/IE4^{a)} versions
- Dynamically balanced rotors
- Corrosion-resistant stator frames and end-bracket hardware
- High efficient stator laminations with superior low loss **CRNGO** steel
- **Inverter Ready**^{b)} standard motors with unique **Dual Coat** copper winding wire
- Designed for 50° C ambient temperature for the entire range.
- Fully tropicalised design for Indian conditions.
- V / F / VF Variation $\pm 10\%$ / 5% / 10% .
- Class **F** insulation
- Temperature rise restricted to class B limit
- Stainless steel rating plate
- **Six terminal** Terminal box across the range
- Various mounting possibilities
- Motor feet **Integral** to stator housing
- Superior aesthetics - RAL-5014 paint shade as standard
-  marking
- Manufactured in quality assurance system compliant with ISO 9001
- Customised motor design capability
- Compatible A.C. Drive & Soft Starter range
- Complete range of electromagnetic starters & MCC
 - A single source solution
- Nationwide sales & service network.

Special Purpose Motors

- Crane duty & Hoist application motors
- Brake Motors
- Dual Speed Motors
- Cooling Tower Motors (upto 45 kw upto 12 Poles)
- Inverter Duty Motors
- Motor with Higher poles
- Low Vibration Motors
- Ginning Motors

a) IE4 Motors on request b) Consult nearest Branch office to check suitability to specific application

General Specifications

Specification of Catalogue Versions		
Description		
Supply voltage	:	415 Volts $\pm 10\%$, 3 Phase, A. C.
Frequency	:	50 Hz $\pm 5\%$
Combined voltage & frequency variations (absolute sum)	:	$\pm 10\%$
Ambient temperature	:	50° C
Altitude	:	Up to 1000 meters above MSL
Relative humidity	:	Up to 100%
Insulation class	:	F
Winding temperature rise	:	Designed to operate within class B limit
Duty	:	Continuous (S1)
Protection class	:	IP 55
Method of cooling	:	IC0411 (Standard motors) / IC0416 (Forced cooling)
Motor feet	:	Integral to motor housing
Terminal box position	:	At Top towards drive end
Shaft Extension	:	Single Cylindrical at drive end
Paint shade	:	RAL-5014



BCH IE SERIES : (As Per IS : 12615-2011, IEC-60034-30 2008)

Low Voltage 3 Phase TEFC Squirrel Cage Induction Motor

IE2/IE3

Motors

IE2- Frame Size: 63 to 355 - Rating: 0.12 KW to 315 KW - Pole: 2, 4, 6 & 8

IE3- Frame Size: 63 to 355 - Rating: 0.12 KW to 315 KW - Pole: 2, 4, 6 & 8

Motor Housing

- Cast Iron (CI) stator housing:
63-355 frame
- Pressure Die Cast Aluminum stator housing : (On Request)
63-132 frame

Bearing arrangement

Frames up to 180L have sealed bearing which are lubricated for life. Frames 200 & above have re-greasing arrangement as a standard feature

Frame Size	Driving End	Non - Driving End	Regreasing Time (Hrs.)	
			2 pole	4, 6, 8 pole
63	6201ZZ	6201ZZ	-	-
71	6202ZZ	6202ZZ	-	-
80	6204ZZ	6204ZZ	-	-
90S/L	6305ZZ	6205ZZ	-	-
100L	6206ZZ	6206ZZ	-	-
112M	6206ZZ	6206ZZ	-	-
132S/M	6208ZZ	6208ZZ	-	-
160M/L	6309ZZ	6209ZZ	-	-
180M/L	6310ZZ	6210ZZ	-	-
200L	6312	6312	3,500	8,000
225S/M	6313	6313	3,500	8,000
250M	6315	6315	2,500	6,000
280S/M	6317	6317	2,000	5,000
315S/M/L	6319	6319	2,000	4,000

Terminal Box Data

Frame Size	Cable Entry Size	Max. Cable Size DOL starting	Max. Cable Size Star-Delta starting	Terminal Stud Size
63-90	1 x 3/4" BSC	3C x 4.00mm ²	-	M4
100-132	2 x 1" BSC	3C x 10.00mm ²	2 x 3C x 10.00mm ²	M5
160-180	2 x 1" BSC	3C x 35.00mm ²	2 x 3C x 25.00mm ²	M6
200	2 x 2" BSC	3C x 120.00mm ²	2 x 3C x 70.00mm ²	M8
225-250	2 x 2" BSC	3C x 120.00mm ²	2 x 3C x 70.00mm ²	M8
280-315	2 x 2 1/2" BSC	3C x 240.00mm ²	2 x 3C x 150.00mm ²	M12
355	2 x 3" BSC	3C x 400.00mm ²	2 x 3C x 300.00mm ²	M16

Equivalent metric & Pg threadings can also be provided on request



Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

IE2 MOTOR

2 Pole

BCH IE2 induction motors suitable for 415 ± 10%, 50 Hz ± 5%, combined ± 10%, 3 phase supply, ambient temperature 50°C, TEFC, Class 'F' insulation, IP-55 protection, continuous rated (S1 duty) with bare shaft & key as per IS:12615-2011 / IEC:60034-1

2 Pole, 3000 RPM, IE2

Rated Output		Motor Type	Frame Size	Rated Speed (rpm)	Rated Current (A)	Rated Torque (kg-m)	Efficiency %			Power factor %			Ist/ In	Tst/ Tn	Tpo/ Tn	GD ² (kgm ²)	Wt. (kg)
KW	HP						FL	3/4L	1/2FL	FL	3/4L	1/2FL					
0.18	0.25	EC2-260-0202M	63	2900	0.53	0.06	60.4	60.4	56.0	0.78	0.72	0.59	5.0	2.0	2.3	0.0009	8
0.25	0.33	EC2-263-0202M	63	2900	0.67	0.08	64.8	64.8	59.0	0.80	0.73	0.62	5.0	2.0	2.3	0.0009	9
0.37	0.50	EC2-270-0202M	71	2810	0.89	0.13	69.5	69.5	64.0	0.83	0.78	0.70	5.0	2.0	2.6	0.0010	10
0.55	0.75	EC2-273-0202M	71	2840	1.25	0.19	74.1	74.1	71.0	0.83	0.78	0.70	5.5	2.4	2.7	0.0014	11
0.75	1.0	EC2-280-0202M	80	2845	1.7	0.26	77.4	77.4	75.0	0.79	0.76	0.72	6.5	2.4	2.7	0.0038	14
1.1	1.5	EC2-283-0202M	80	2845	2.4	0.38	79.6	79.6	76.0	0.80	0.77	0.73	6.5	2.4	2.7	0.0049	16
1.5	2.0	EC2-290-0202M	90S	2870	3.2	0.51	81.3	81.3	77.0	0.80	0.77	0.73	6.5	2.4	2.8	0.0072	24
2.2	3.0	EC2-296-0202M	90L	2870	4.5	0.75	83.2	83.2	80.0	0.82	0.78	0.74	7.0	2.4	2.8	0.0093	26
3.7	5.0	EC2-306-0202M	100L	2900	7.2	1.24	85.5	85.5	82.0	0.84	0.81	0.77	7.0	2.4	2.8	0.0130	35
5.5	7.5	EC2-313-0202M	132S	2925	10.0	1.83	87.0	87.0	84.0	0.88	0.85	0.80	7.0	2.2	2.7	0.0583	61
7.5	10.0	EC2-330-0202M	132S	2925	13.3	2.50	88.1	88.1	85.0	0.89	0.86	0.82	7.0	2.2	2.5	0.0583	65
9.3	12.5	EC2-362-0202M	160M	2930	16.5	3.09	88.9	88.9	85.5	0.88	0.85	0.80	7.0	2.3	2.8	0.1301	100
11.0	15.0	EC2-363-0202M	160M	2935	19.5	3.65	89.4	89.4	86.0	0.88	0.85	0.80	7.0	2.3	2.8	0.1301	122
15.0	20.0	EC2-364-0202M	160M	2940	26.4	4.97	90.3	90.3	86.5	0.88	0.85	0.80	7.0	2.3	2.8	0.1705	128
18.5	25.0	EC2-366-0202M	160L	2940	32.0	6.13	90.9	90.9	87.0	0.88	0.85	0.80	7.0	2.3	2.8	0.1974	151
22.0	30.0	EC2-383-0202M	180M	2950	39.0	7.26	91.3	91.3	88.0	0.86	0.85	0.80	7.0	2.3	2.7	0.1972	179
30.0	40.0	EC2-406-0202M	200L	2955	51.0	9.89	92.0	92.0	89.0	0.89	0.86	0.81	7.0	2.3	2.7	0.4468	284
37.0	50.0	EC2-407-0202M	200L	2955	62.8	12.20	92.5	92.5	89.5	0.89	0.86	0.81	7.0	2.3	2.7	0.5257	300
45.0	60.0	EC2-423-0202M	225M	2965	76.0	14.78	92.9	92.9	90.0	0.89	0.86	0.81	7.0	2.4	2.7	0.6722	368
55.0	75.0	EC2-453-0202M	250M	2965	91.0	18.07	93.2	93.2	90.5	0.90	0.87	0.83	7.0	2.3	2.7	1.0690	501
75.0	100.0	EC2-480-0202M	280S	2975	124.0	24.55	93.8	93.8	91.0	0.90	0.87	0.83	7.0	2.3	2.7	2.2591	770
90.0	120.0	EC2-483-0202M	280M	2975	148.0	29.47	94.1	94.1	91.5	0.90	0.87	0.83	7.0	2.3	2.7	2.4850	810
110.0	150.0	EC2-510-0202M	315S	2980	180.0	35.95	94.3	94.3	91.8	0.90	0.87	0.83	7.0	2.2	2.6	3.3595	1030
132.0	180.0	EC2-514-0202M	315M	2980	216.0	43.14	94.6	94.6	92.0	0.90	0.87	0.83	7.0	2.2	2.6	3.9994	1070
160.0	215.0	EC2-516-0202M	315L	2985	260.0	52.21	94.8	94.8	92.5	0.90	0.87	0.83	7.0	2.2	2.6	4.6393	1160
200.0	270.0	EC2-517-0202M	315L	2985	326.0	65.26	95.0	95.0	93.0	0.90	0.87	0.83	7.0	2.2	2.6	4.1594	1200
250.0	335.0	EC2-553-0202M	355M	2985	407.0	81.57	95.0	95.0	93.0	0.90	0.87	0.83	7.0	2.0	2.4	8.9735	1710
315.0	425.0	EC2-557-0202M	355L	2985	512.0	102.78	95.0	95.0	93.0	0.90	0.87	0.83	7.0	2.0	2.4	10.0292	1900

Note : Motors upto 2.0 HP are Star (Y) connected & Motors above 2.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.





Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

IE2 MOTOR

4 Pole

BCH IE2 induction motors suitable for 415 ± 10%, 50 Hz ± 5%, combined ± 10%, 3 phase supply, ambient temperature 50°C, TEFC, Class 'F' insulation, IP-55 protection, continuous rated (S1 duty) with bare shaft & key as per IS:12615-2011 / IEC:60034-1

4 Pole, 1500 RPM, IE2																	
Rated Output		Motor Type	Frame Size	Rated Speed (rpm)	Rated Current (A)	Rated Torque (kg-m)	Efficiency %			Power factor %			I _{st} / I _n	T _{st} / T _n	T _{po} / T _n	GD ² (kgm²)	Wt. (kg)
KW	HP						FL	3/4L	1/2FL	FL	3/4L	1/2FL					
0.12	0.16	EC2-260-0402M	63	1380	0.52	0.08	59.1	59.1	55.0	0.54	0.48	0.40	4.8	1.8	2.0	0.0010	8
0.18	0.25	EC2-263-0402M	63	1380	0.57	0.13	64.7	64.7	61.0	0.68	0.64	0.54	5.0	1.8	2.0	0.0010	8
0.25	0.33	EC2-270-0402M	71	1390	0.75	0.18	68.5	68.5	64.0	0.68	0.64	0.54	5.5	1.8	2.2	0.0022	10
0.37	0.50	EC2-273-0402M	71	1390	1.0	0.26	72.7	72.7	65.0	0.71	0.67	0.58	6.0	1.9	2.3	0.0024	11
0.55	0.75	EC2-280-0402M	80	1420	1.4	0.38	77.1	77.1	71.0	0.71	0.67	0.58	6.0	1.9	2.3	0.0038	15
0.75	1.0	EC2-283-0402M	80	1415	1.7	0.52	79.6	79.6	75.0	0.77	0.70	0.63	6.0	2.5	3.0	0.0062	18
1.1	1.5	EC2-290-0402M	90S	1430	2.4	0.75	81.4	81.4	80.0	0.78	0.73	0.65	6.0	2.5	3.0	0.0093	23
1.5	2.0	EC2-296-0402M	90L	1430	3.2	1.02	82.8	82.8	81.0	0.79	0.74	0.65	6.0	2.4	2.8	0.0134	29
2.2	3.0	EC2-306-0402M	100L	1440	4.4	1.49	84.3	84.3	82.5	0.83	0.76	0.65	6.5	2.4	2.8	0.0182	33
3.7	5.0	EC2-313-0402M	112M	1445	7.1	2.49	86.3	86.3	85.0	0.84	0.80	0.68	7.0	2.4	2.8	0.0404	45
5.5	7.5	EC2-330-0402M	132S	1450	10.5	3.69	87.7	87.7	86.0	0.83	0.79	0.72	7.0	2.4	2.8	0.0676	59
7.5	10.0	EC2-333-0402M	132M	1450	14.1	5.04	88.7	88.7	87.0	0.83	0.79	0.72	7.0	2.2	2.6	0.1013	76
9.3	12.5	EC2-334-0402M	160M	1455	17.5	6.23	89.3	89.3	87.5	0.83	0.80	0.72	7.0	2.2	2.6	0.1696	124
11.0	15.0	EC2-364-0402M	160M	1455	20.5	7.36	89.8	89.8	88.0	0.83	0.80	0.72	7.0	2.2	2.6	0.1871	132
15.0	20.0	EC2-366-0402M	160L	1455	27.5	10.04	90.6	90.6	89.0	0.84	0.80	0.73	7.0	2.2	2.6	0.2573	156
18.5	25.0	EC2-383-0402M	180M	1460	33.5	12.34	91.2	91.2	90.5	0.84	0.80	0.74	7.0	2.3	2.6	0.3222	182
22.0	30.0	EC2-386-0402M	180L	1460	40.0	14.68	91.6	91.6	90.5	0.84	0.80	0.74	7.0	2.3	2.6	0.3790	210
30.0	40.0	EC2-406-0402M	200L	1465	54.0	19.95	92.3	92.3	91.0	0.84	0.80	0.74	7.0	2.3	2.6	0.7298	347
37.0	50.0	EC2-420-0402M	225SX	1470	65.0	24.52	92.7	92.7	91.5	0.85	0.83	0.77	7.0	2.3	2.6	1.1642	365
45.0	60.0	EC2-423-0402M	225MX	1475	78.0	29.72	93.1	93.1	92.0	0.86	0.83	0.77	7.0	2.3	2.6	1.3970	390
55.0	75.0	EC2-453-0402M	250MX	1480	94.0	36.20	93.5	93.5	93.0	0.87	0.84	0.79	7.0	2.3	2.6	1.9856	529
75.0	100.0	EC2-480-0402M	280SX	1482	128.0	49.29	94.0	94.0	93.5	0.87	0.84	0.79	7.0	2.2	2.5	3.5195	716
90.0	120.0	EC2-483-0402M	280MX	1482	152.0	59.15	94.2	94.2	93.5	0.87	0.84	0.80	7.0	2.2	2.5	4.1594	755
110.0	150.0	EC2-510-0402M	315SX	1485	187.0	72.15	94.5	94.5	93.7	0.87	0.84	0.80	7.0	2.2	2.5	7.7057	1020
132.0	180.0	EC2-514-0402M	315MX	1485	226.0	86.58	94.7	94.7	94.0	0.86	0.84	0.80	7.0	2.2	2.5	8.8912	1060
160.0	215.0	EC2-516-0402M	315LX	1485	272.0	104.94	94.9	94.9	94.2	0.86	0.84	0.80	7.0	2.2	2.5	10.3731	1210
200.0	270.0	EC2-517-0402M	315LX	1485	336.0	131.18	95.1	95.1	94.6	0.87	0.84	0.80	7.0	2.2	2.5	13.0404	1250
250.0	335.0	EC2-553-0402M	355MX	1488	420.0	163.64	95.1	95.1	94.6	0.87	0.84	0.78	7.0	2.0	2.4	15.9163	1720
315.0	425.0	EC2-557-0402M	355LX	1488	527.0	206.19	95.1	95.1	94.6	0.87	0.84	0.78	7.0	2.0	2.4	19.9879	1900

Note : Motors upto 2.0 HP are Star (Y) connected & Motors above 2.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.





Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

IE2 MOTOR

6 Pole

BCH IE2 induction motors suitable for 415 ± 10%, 50 Hz ± 5%, combined ± 10%, 3 phase supply, ambient temperature 50°C, TEFC, Class 'F' insulation, IP-55 protection, continuous rated (S1 duty) with bare shaft & key as per IS:12615-2011 / IEC:60034-1

6 Pole, 1000 RPM, IE2																	
Rated Output		Motor Type	Frame Size	Rated Speed (rpm)	Rated Current (A)	Rated Torque (kg-m)	Efficiency %			Power factor %			Ist / In	Tst / Tn	Tpo/ Tn	GD² (kgm²)	Wt. (kg)
KW	HP						FL	3/4L	1/2FL	FL	3/4L	1/2FL					
0.18	0.25	EC2-273-0602M	71	915	0.65	0.19	56.6	56.6	53.0	0.68	0.59	0.48	4.5	1.8	2.0	0.0033	11
0.25	0.33	EC2-274-0602M	71	915	0.80	0.27	61.6	61.6	55.0	0.71	0.61	0.50	4.5	1.8	2.0	0.0033	11
0.37	0.50	EC2-280-0602M	80	925	1.0	0.39	67.6	67.6	64.0	0.76	0.65	0.54	4.5	1.9	2.2	0.0049	16
0.55	0.75	EC2-283-0602M	80	930	1.5	0.58	73.1	73.1	67.0	0.70	0.63	0.52	4.5	2.2	2.6	0.0063	17
0.75	1.0	EC2-290-0602M	90S	935	2.0	0.78	75.9	75.9	73.0	0.69	0.63	0.52	5.0	2.1	2.5	0.0122	24
1.1	1.5	EC2-296-0602M	90L	935	2.7	1.15	78.1	78.1	74.0	0.73	0.68	0.54	5.0	2.1	2.5	0.0176	28
1.5	2.0	EC2-306-0602M	100L	945	3.4	1.55	79.8	79.8	77.0	0.77	0.70	0.56	5.5	2.1	2.5	0.0269	32
2.2	3.0	EC2-313-0602M	112M	950	4.8	2.26	81.8	81.8	78.5	0.78	0.71	0.58	6.0	2.1	2.5	0.0467	41
3.7	5.0	EC2-330-0602M	132S	950	7.6	3.79	84.3	84.3	80.0	0.80	0.74	0.62	6.0	2.2	2.6	0.0991	61
5.5	7.5	EC2-333-0602M	132M	955	11.0	5.61	86.0	86.0	83.0	0.81	0.76	0.62	6.5	2.2	2.6	0.1321	77
7.5	10.0	EC2-363-0602M	160M	970	14.6	7.53	87.2	87.2	84.0	0.82	0.77	0.65	7.0	2.2	2.6	0.2625	125
9.3	12.5	EC2-366-0602M	160L	970	18.0	9.34	88.1	88.1	85.0	0.82	0.77	0.65	7.0	2.1	2.5	0.3440	149
11.0	15.0	EC2-367-0602M	160L	970	21.0	11.05	88.7	88.7	86.0	0.82	0.77	0.65	7.0	2.1	2.5	0.4164	160
15.0	20.0	EC2-386-0602M	180L	970	29.0	15.06	89.7	89.7	86.5	0.80	0.75	0.65	7.0	2.1	2.5	0.5949	197
18.5	25.0	EC2-406-0602M	200L	975	35.6	18.48	90.4	90.4	87.0	0.80	0.75	0.65	7.0	2.1	2.5	0.8605	304
22.0	30.0	EC2-407-0602M	200L	975	42.0	21.98	90.9	90.9	87.5	0.80	0.75	0.65	7.0	2.1	2.5	1.1642	308
30.0	40.0	EC2-423-0602M	225MX	975	56.0	29.97	91.7	91.7	88.0	0.81	0.77	0.66	7.0	2.1	2.4	1.4702	370
37.0	50.0	EC2-453-0602M	250MX	980	68.0	36.77	92.2	92.2	89.0	0.82	0.79	0.70	7.0	2.1	2.4	2.0474	520
45.0	60.0	EC2-480-0602M	280SX	983	80.0	44.59	92.7	92.7	89.4	0.84	0.81	0.73	7.0	2.2	2.4	3.8890	694
55.0	75.0	EC2-483-0602M	280MX	983	98.0	54.50	93.1	93.1	89.7	0.84	0.81	0.73	7.0	2.2	2.4	4.8613	750
75.0	100.0	EC2-510-0602M	315SX	986	133.0	74.09	93.7	93.7	90.0	0.84	0.81	0.73	7.0	2.1	2.4	7.2611	1010
90.0	120.0	EC2-513-0602M	315MX	986	159.0	88.90	94.0	94.0	92.0	0.84	0.81	0.74	7.0	2.1	2.4	8.5948	1050
110.0	150.0	EC2-514-0602M	315MX	986	192.0	108.66	94.3	94.3	92.0	0.85	0.82	0.75	7.0	2.1	2.4	10.3731	1100
132.0	180.0	EC2-517-0602M	315LX	987	227.0	130.26	94.6	94.6	93.0	0.86	0.83	0.76	7.0	2.1	2.4	10.3731	1200
160.0	215.0	EC2-550-0602M	355SX	988	280.0	157.73	94.8	94.8	94.0	0.84	0.82	0.75	7.0	2.1	2.4	19.1900	1680
200.0	270.0	EC2-553-0602M	355MX	988	345.0	197.17	95.0	95.0	94.5	0.85	0.82	0.75	7.0	2.1	2.4	21.0176	1830
250.0	335.0	EC2-557-0602M	355LX	988	433.0	246.46	95.0	95.0	94.5	0.85	0.82	0.75	7.0	2.1	2.4	23.7590	2000

Note : Motors upto 2.0 HP are Star (Y) connected & Motors above 2.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.





Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

IE2 MOTOR

8 Pole

BCH IE2 induction motors suitable for 415 ± 10%, 50 Hz ± 5%, combined ± 10%, 3 phase supply, ambient temperature 50°C, TEFC, Class 'F' insulation, IP-55 protection, continuous rated (S1 duty) with bare shaft & key as per IS:12615-2011 / IEC:60034-1

8 Pole, 1000 RPM, IE2																	
Rated Output		Motor Type	Frame Size	Rated Speed (rpm)	Rated Current (A)	Rated Torque (kg-m)	Efficiency %			Power factor %			Ist / In	Tst / Tn	Tpo/ Tn	GD² (kgm²)	Wt. (kg)
KW	HP						FL	3/4L	1/2FL	FL	3/4L	1/2FL					
0.12	0.16	EC2-273-0802M	71	680	0.75	0.17	39.8	39.8	35.0	0.56	0.50	0.42	3.5	1.6	2.0	0.0033	11
0.18	0.25	EC2-280-0802M	80	685	0.85	0.26	45.9	45.9	40.0	0.64	0.50	0.42	4.0	1.7	2.0	0.0049	16
0.25	0.33	EC2-283-0802M	80	690	1.0	0.35	50.6	50.6	45.0	0.69	0.52	0.42	4.0	1.8	2.1	0.0063	18
0.37	0.50	EC2-290-0802M	90S	695	1.4	0.52	56.1	56.1	49.0	0.66	0.53	0.42	4.0	1.7	2.0	0.0095	24
0.55	0.75	EC2-296-0802M	90L	700	2.0	0.77	61.7	61.7	56.0	0.62	0.54	0.42	4.5	1.8	2.0	0.0122	28
0.75	1.0	EC2-306-0802M	100L	705	2.2	1.04	66.2	66.2	62.0	0.72	0.60	0.48	5.0	1.9	2.1	0.0228	34
1.1	1.5	EC2-307-0802M	100L	700	3.0	1.53	70.8	70.8	65.0	0.72	0.62	0.48	5.0	1.9	2.1	0.0296	36
1.5	2.0	EC2-313-0802M	112M	710	3.9	2.06	77.0	74.1	73.0	0.69	0.63	0.51	5.5	1.8	2.3	0.0467	45
2.2	3.0	EC2-330-0802M	132S	715	5.3	3.00	77.6	77.6	75.0	0.74	0.66	0.53	5.0	2.2	2.4	0.0826	59
3.7	5.0	EC2-363-0802M	160M	722	8.2	4.99	81.4	81.4	79.5	0.77	0.71	0.59	6.0	2.2	2.4	0.2625	106
5.5	7.5	EC2-364-0802M	160M	720	11.8	7.44	83.8	83.8	82.0	0.77	0.72	0.60	6.0	2.0	2.2	0.2625	115
7.5	10.0	EC2-366-0802M	160L	723	15.8	10.10	85.3	85.3	83.0	0.77	0.72	0.60	6.0	2.0	2.2	0.3440	148
9.3	12.5	EC2-383-0802M	180M	725	19.5	12.49	86.3	86.3	83.5	0.77	0.72	0.60	6.0	2.1	2.3	0.5057	181
11.0	15.0	EC2-386-0802M	180L	727	23.0	14.74	86.9	86.9	84.0	0.77	0.68	0.55	6.0	2.2	2.4	0.5949	195
15.0	20.0	EC2-406-0802M	200L	730	31.0	20.01	88.0	88.0	85.0	0.76	0.68	0.56	6.0	2.0	2.2	1.1136	306
18.5	25.0	EC2-420-0802M	225SX	732	37.5	24.62	88.6	88.6	86.0	0.77	0.70	0.61	6.0	2.0	2.2	1.5437	366
22.0	30.0	EC2-423-0802M	225MX	733	44.8	29.23	89.1	89.1	87.0	0.77	0.70	0.58	6.0	2.2	2.4	1.8378	380
30.0	40.0	EC2-453-0802M	250MX	733	60.7	39.86	89.8	89.8	88.0	0.77	0.71	0.61	6.0	2.1	2.3	2.5127	523
37.0	50.0	EC2-480-0802M	280SX	735	72.0	49.03	90.3	90.3	89.0	0.79	0.74	0.64	6.0	2.2	2.5	3.8890	698
45.0	60.0	EC2-483-0802M	280MX	735	87.0	59.63	90.7	90.7	89.3	0.79	0.75	0.67	6.0	2.2	2.4	4.8613	735
55.0	75.0	EC2-510-0802M	315SX	737	108.4	72.69	91.0	91.0	90.0	0.78	0.72	0.60	6.0	2.1	2.3	7.2611	1010
75.0	100.0	EC2-513-0802M	315MX	737	146.0	99.12	91.6	91.6	90.5	0.78	0.73	0.64	6.0	2.1	2.3	8.5948	1050
90.0	120.0	EC2-516-0802M	315LX	737	175.0	118.94	91.9	91.9	90.7	0.78	0.74	0.65	6.0	2.0	2.2	10.3731	1180
110.0	150.0	EC2-517-0802M	315LX	737	213.0	145.37	92.3	92.3	91.0	0.78	0.74	0.64	6.0	2.0	2.3	11.8549	1200
132.0	180.0	EC2-550-0802M	355SX	739	255.8	173.98	92.6	92.6	91.5	0.78	0.72	0.60	6.0	2.0	2.2	19.1900	1680
160.0	215.0	EC2-553-0802M	355MX	739	315.0	210.88	93.0	93.0	91.7	0.76	0.68	0.56	6.0	2.0	2.4	23.7590	1830
200.0	270.0	EC2-556-0802M	355LX	739	390.0	263.60	93.5	93.5	92.5	0.76	0.70	0.60	6.0	2.0	2.4	28.3281	1920
225.0	300.0	EC2-557-0802M	355LX	739	431.0	296.55	93.5	93.5	93.0	0.78	0.71	0.63	6.0	2.0	2.2	28.3281	1930

Note : Motors upto 2.0 HP are Star (Y) connected & Motors above 2.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.





Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

IE3 Motor

2 Pole

BCH IE3 induction motors suitable for $415 \pm 10\%$, $50 \text{ Hz} \pm 5\%$, combined $\pm 10\%$, 3 phase supply, ambient temperature 50°C , TEFC, Class 'F' insulation, IP-55 protection, continuous rated (S1 duty) with bare shaft & key as per IS:12615-2011 / IEC:60034-1

2 Pole, 3000 RPM, IE3																	
Rated Output		Motor Type	Frame Size	Rated Speed (rpm)	Rated Curr. (A)	Rated Torque (kgm)	Efficiency %			Power factor %			I _{st} /I _n	T _{st} /T _n	T _{po} /T _n	GD ² (kgm ²)	Wt. (kg)
KW	HP						FL	3/4L	1/2FL	FL	3/4L	1/2FL					
0.18	0.25	EC3-260-0202M	63	2800	0.53	0.06	65.9	65.9	60.5	0.72	0.64	0.52	6.5	2.0	2.3	0.0010	8
0.25	0.33	EC3-263-0202M	63	2800	0.66	0.09	69.7	69.7	67.0	0.76	0.66	0.54	6.5	2.0	2.3	0.0010	9
0.37	0.50	EC3-270-0202M	71	2810	0.90	0.13	73.8	73.8	70.5	0.77	0.69	0.57	6.5	2.1	2.5	0.0010	12
0.55	0.75	EC3-273-0202M	71	2840	1.25	0.19	77.8	77.8	74.5	0.79	0.74	0.60	7.0	2.2	2.6	0.0014	13
0.75	1.0	EC3-280-0202M	80	2850	1.6	0.26	80.7	80.7	78.0	0.81	0.76	0.63	7.0	2.5	2.5	0.0049	16
1.1	1.5	EC3-283-0202M	80	2850	2.2	0.38	82.7	82.7	80.0	0.84	0.80	0.72	7.0	2.6	2.5	0.0062	18
1.5	2.0	EC3-290-0202M	90S	2870	3.0	0.51	84.2	84.2	82.5	0.83	0.81	0.75	7.0	2.5	3.0	0.0052	27
2.2	3.0	EC3-296-0202M	90L	2870	4.3	0.75	85.9	85.9	84.5	0.83	0.81	0.75	7.7	2.5	3.0	0.0066	29
3.7	5.0	EC3-306-0202M	100L	2890	6.8	1.25	87.8	87.8	85.0	0.86	0.83	0.77	7.7	2.5	3.0	0.0168	39
5.5	7.5	EC3-313-0202M	132S	2945	9.8	1.82	89.2	89.2	87.0	0.88	0.86	0.82	7.7	2.5	3.0	0.0583	63
7.5	10.0	EC3-330-0202M	132S	2945	13.0	2.48	90.1	90.1	89.5	0.89	0.87	0.84	7.7	2.5	3.0	0.0716	71
9.3	12.5	EC3-362-0202M	160M	2940	16.0	3.08	90.7	90.7	89.0	0.89	0.86	0.81	7.0	2.3	2.8	0.1700	112
11.0	15.0	EC3-363-0202M	160M	2940	19.0	3.64	91.2	91.2	90.0	0.88	0.86	0.79	7.0	2.3	2.8	0.1700	137
15.0	20.0	EC3-364-0202M	160M	2935	25.3	4.98	91.9	91.9	90.9	0.90	0.88	0.82	7.0	2.5	2.9	0.2040	142
18.5	25.0	EC3-366-0202M	160L	2930	31.0	6.15	92.4	92.4	91.4	0.90	0.88	0.81	7.0	2.3	2.8	0.2312	164
22.0	30.0	EC3-383-0202M	180M	2935	37.0	7.30	92.7	92.7	91.5	0.89	0.87	0.81	7.0	2.2	2.7	0.2585	185
30.0	40.0	EC3-406-0202M	200L	2955	49.0	9.89	93.3	93.3	92.2	0.91	0.89	0.85	7.0	2.0	2.5	0.5257	300
37.0	50.0	EC3-407-0202M	200L	2955	60.5	12.20	93.7	93.7	92.5	0.91	0.90	0.85	7.0	2.0	2.5	0.5257	320
45.0	60.0	EC3-423-0202M	225M	2960	73.0	14.81	94.0	94.0	93.0	0.91	0.90	0.86	7.0	2.3	2.5	0.8450	386
55.0	75.0	EC3-453-0202M	250M	2960	89.0	18.10	94.3	94.3	93.0	0.91	0.90	0.86	7.0	2.0	2.5	1.0690	510
75.0	100.0	EC3-480-0202M	280S	2970	121.5	24.60	94.7	94.7	93.5	0.91	0.90	0.86	7.0	2.0	2.8	2.9368	800
90.0	120.0	EC3-483-0202M	280M	2970	145.0	29.52	95.0	95.0	94.0	0.91	0.89	0.84	7.0	2.0	2.8	2.9368	845
110.0	150.0	EC3-510-0202M	315S	2980	177.0	35.95	95.2	95.2	94.0	0.91	0.90	0.86	7.0	1.9	2.6	4.6393	1090
132.0	180.0	EC3-514-0202M	315M	2980	212.0	43.14	95.4	95.4	94.2	0.91	0.90	0.87	7.5	1.9	2.6	4.6393	1140
160.0	215.0	EC3-516-0202M	315L	2980	257.0	52.30	95.6	95.6	94.0	0.91	0.90	0.88	7.5	1.9	2.6	5.4392	1220
200.0	270.0	EC3-517-0202M	315L	2980	320.0	65.37	95.8	95.8	94.5	0.91	0.90	0.87	7.5	2.0	2.6	5.5991	1260
250.0	335.0	EC3-553-0202M	355M	2980	403.0	81.71	95.8	95.8	94.0	0.90	0.88	0.84	7.5	1.9	2.6	8.9735	1740
315.0	425.0	EC3-557-0202M	355L	2980	506.0	102.96	95.8	95.8	94.0	0.90	0.88	0.84	7.5	2.0	2.6	10.0292	1900

Note : Motors upto 2.0 HP are Star (Y) connected & Motors above 2.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.





Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

IE3 Motor

4 Pole

BCH IE3 induction motors suitable for 415 ± 10%, 50 Hz ± 5%, combined ± 10%, 3 phase supply, ambient temperature 50°C, TEFC, Class 'F' insulation, IP-55 protection, continuous rated (S1 duty) with bare shaft & key as per IS:12615-2011 / IEC:60034-1

4 Pole, 1500 RPM, IE3																	
Rated Output		Motor Type	Frame Size	Rated Speed (rpm)	Rated Current (A)	Rated Torque (kg-m)	Efficiency %			Power factor %			Ist/In	Tst/Tn	Tpo/Tn	GD² (kgm²)	Wt. (kg)
KW	HP						FL	3/4L	1/2FL	FL	3/4L	1/2FL					
0.12	0.16	EC3-260-0402M	63	1400	0.51	0.08	64.8	64.8	58.0	0.51	0.46	0.38	5.0	2.0	2.4	0.0010	8
0.18	0.25	EC3-263-0402M	63	1400	0.57	0.13	69.9	69.9	64.0	0.63	0.57	0.48	5.0	2.0	2.4	0.0010	9
0.25	0.33	EC3-270-0402M	71	1415	0.75	0.17	73.5	73.5	68.0	0.63	0.58	0.48	5.0	2.1	2.5	0.0022	11
0.37	0.50	EC3-273-0402M	71	1420	1.0	0.25	77.3	77.3	72.0	0.67	0.63	0.50	5.0	2.2	2.6	0.0028	12
0.55	0.75	EC3-280-0402M	80	1430	1.3	0.37	80.8	80.8	74.0	0.73	0.66	0.53	6.0	2.2	2.6	0.0049	16
0.75	1.0	EC3-283-0402M	80	1430	1.6	0.51	82.5	82.5	78.0	0.79	0.75	0.64	6.5	2.6	3.0	0.0062	18
1.1	1.5	EC3-290-0402M	90S	1430	2.3	0.75	84.1	84.1	81.5	0.79	0.75	0.64	6.5	2.5	3.0	0.0093	24
1.5	2.0	EC3-296-0402M	90L	1435	3.1	1.02	85.3	85.3	83.0	0.79	0.75	0.64	6.5	2.5	3.0	0.0134	29
2.2	3.0	EC3-306-0402M	100L	1440	4.3	1.49	86.7	86.7	84.0	0.82	0.78	0.67	7.0	2.5	3.0	0.0237	38
3.7	5.0	EC3-313-0402M	112M	1450	7.5	2.49	88.4	88.4	85.5	0.78	0.69	0.60	7.0	2.5	3.0	0.0497	53
5.5	7.5	EC3-330-0402M	132S	1455	10.5	3.68	89.6	89.6	87.0	0.81	0.76	0.65	7.0	2.5	3.0	0.0811	60
7.5	10.0	EC3-333-0402M	132M	1455	14.2	5.02	90.4	90.4	88.0	0.81	0.76	0.66	7.0	2.5	3.0	0.1081	77
9.3	12.5	EC3-363-0402M	160M	1465	16.5	6.18	91.0	91.0	90.0	0.86	0.82	0.73	7.0	2.5	2.8	0.2369	150
11.0	15.0	EC3-364-0402M	160M	1460	19.8	7.34	91.4	91.4	90.2	0.85	0.80	0.72	7.0	2.3	2.6	0.2369	162
15.0	20.0	EC3-366-0402M	160L	1470	26.2	9.94	92.1	92.1	91.4	0.86	0.83	0.74	7.0	2.4	2.7	0.3032	186
18.5	25.0	EC3-383-0402M	180M	1470	32.8	12.26	92.6	92.6	91.6	0.85	0.81	0.73	7.0	2.4	2.7	0.3790	195
22.0	30.0	EC3-386-0402M	180L	1470	38.8	14.58	93.0	93.0	92.0	0.85	0.81	0.73	7.0	2.3	2.6	0.4359	224
30.0	40.0	EC3-406-0402M	200L	1475	52.5	19.81	93.6	93.6	92.5	0.85	0.81	0.73	7.5	2.3	2.6	0.9987	367
37.0	50.0	EC3-420-0402M	225SX	1475	63.5	24.43	93.9	93.9	93.0	0.86	0.83	0.76	7.5	2.3	2.6	1.3970	387
45.0	60.0	EC3-423-0402M	225MX	1475	77.8	29.72	94.2	94.2	93.2	0.85	0.82	0.74	7.5	2.5	2.8	1.6299	413
55.0	75.0	EC3-453-0402M	250MX	1482	92.0	36.15	94.6	94.6	94.0	0.88	0.86	0.80	7.5	2.5	2.8	2.3466	557
75.0	100.0	EC3-480-0402M	280SX	1482	125.0	49.29	95.0	95.0	94.2	0.88	0.85	0.77	7.5	2.2	2.5	4.1594	746
90.0	120.0	EC3-483-0402M	280MX	1482	150.0	59.15	95.2	95.2	94.0	0.88	0.85	0.77	7.5	2.2	2.5	5.1192	790
110.0	150.0	EC3-510-0402M	315SX	1485	183.0	72.15	95.4	95.4	94.4	0.88	0.85	0.77	7.7	2.0	2.4	10.3731	1110
132.0	180.0	EC3-514-0402M	315MX	1485	216.0	86.58	95.6	95.6	94.5	0.89	0.87	0.82	7.7	2.2	2.5	11.8549	1110
160.0	215.0	EC3-516-0402M	315LX	1485	260.0	104.94	95.8	95.8	94.5	0.89	0.87	0.81	7.7	2.2	2.5	13.0404	1270
200.0	270.0	EC3-517-0402M	315LX	1485	326.0	131.18	96.0	96.0	95.0	0.89	0.87	0.81	7.7	2.2	2.5	15.4114	1310
250.0	335.0	EC3-553-0402M	355MX	1485	412.0	163.97	96.0	96.0	95.0	0.88	0.85	0.77	7.7	2.0	2.5	15.9163	1735
315.0	425.0	EC3-557-0402M	355LX	1486	519.0	206.47	96.0	96.0	95.0	0.88	0.85	0.77	7.7	2.0	2.5	19.9879	1950

Note : Motors upto 2.0 HP are Star (Y) connected & Motors above 2.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.





Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

IE3 Motor

6 Pole

BCH IE3 induction motors suitable for 415 ± 10%, 50 Hz ± 5%, combined ± 10%, 3 phase supply, ambient temperature 50°C, TEFC, Class 'F' insulation, IP-55 protection, continuous rated (S1 duty) with bare shaft & key as per IS:12615-2011 / IEC:60034-1

6 Pole, 1000 RPM, IE3																	
Rated Output		Motor Type	Frame Size	Rated Speed (rpm)	Rated Current (A)	Rated Torque (kg-m)	Efficiency %			Power factor %			Ist/In	Tst/Tn	Tpo/Tn	GD² (kgm²)	Wt. (kg)
KW	HP						FL	3/4L	1/2FL	FL	3/4L	1/2FL					
0.18	0.25	EC3-273-0602M	71	915	0.64	0.19	63.9	63.9	59.0	0.61	0.51	0.42	5.0	1.8	2.3	0.0033	12
0.25	0.33	EC3-274-0602M	71	915	0.80	0.27	68.6	68.6	64.0	0.63	0.57	0.46	5.0	1.8	2.3	0.0041	14
0.37	0.50	EC3-280-0602M	80	925	1.05	0.39	73.5	73.5	69.0	0.67	0.63	0.50	5.0	1.8	2.3	0.0049	18
0.55	0.75	EC3-283-0602M	80	925	1.45	0.58	77.2	77.2	72.0	0.68	0.62	0.50	5.0	2.0	2.4	0.0080	21
0.75	1.0	EC3-290-0602M	90S	930	1.9	0.79	78.9	78.9	74.0	0.70	0.62	0.50	5.0	2.2	2.6	0.0135	26
1.1	1.5	EC3-296-0602M	90L	940	2.7	1.14	81.0	81.0	76.0	0.70	0.62	0.50	5.5	2.2	2.6	0.0190	30
1.5	2.0	EC3-306-0602M	100L	945	3.3	1.55	82.5	82.5	80.0	0.77	0.71	0.60	5.5	2.2	2.6	0.0336	35
2.2	3.0	EC3-313-0602M	112M	955	4.7	2.24	84.3	84.3	82.0	0.77	0.71	0.60	6.0	2.2	2.6	0.0630	45
3.7	5.0	EC3-330-0602M	132S	960	7.5	3.75	86.5	86.5	84.0	0.79	0.72	0.63	6.5	2.4	2.8	0.1321	71
5.5	7.5	EC3-333-0602M	132M	960	11.0	5.58	88.0	88.0	86.0	0.79	0.72	0.63	7.5	2.6	3.0	0.1487	79
7.5	10.0	EC3-363-0602M	160M	970	14.0	7.53	89.1	89.1	88.0	0.84	0.79	0.69	7.0	2.2	2.5	0.3718	140
9.3	12.5	EC3-366-0602M	160L	965	17.0	9.39	89.8	89.8	88.5	0.85	0.80	0.70	7.0	2.2	2.5	0.4759	153
11.0	15.0	EC3-367-0602M	160L	965	20.0	11.10	90.3	90.3	88.5	0.85	0.80	0.70	7.0	2.2	2.5	0.5503	169
15.0	20.0	EC3-386-0602M	180L	970	27.5	15.06	91.2	91.2	90.0	0.83	0.80	0.71	7.5	2.3	2.6	0.7437	212
18.5	25.0	EC3-406-0602M	200L	978	34.0	18.42	91.7	91.7	90.3	0.83	0.78	0.70	7.0	2.2	2.5	1.1642	306
22.0	30.0	EC3-407-0602M	200L	978	40.0	21.91	92.2	92.2	90.7	0.83	0.78	0.69	7.0	2.2	2.5	1.3667	320
30.0	40.0	EC3-423-0602M	225MX	980	55.0	29.82	92.9	92.9	91.5	0.82	0.77	0.67	7.0	2.2	2.5	1.8378	388
37.0	50.0	EC3-453-0602M	250MX	982	66.0	36.70	93.3	93.3	92.0	0.84	0.81	0.72	7.0	2.2	2.5	2.6988	542
45.0	60.0	EC3-480-0602M	280SX	984	79.0	44.54	93.7	93.7	92.5	0.85	0.82	0.75	7.0	2.3	2.5	4.8613	740
55.0	75.0	EC3-483-0602M	280MX	984	95.0	54.44	94.1	94.1	93.2	0.86	0.84	0.77	7.0	2.3	2.5	5.8335	780
75.0	100.0	EC3-510-0602M	315SX	986	131.0	74.09	94.6	94.6	93.5	0.84	0.81	0.73	7.0	2.3	2.4	8.5948	1045
90.0	120.0	EC3-513-0602M	315MX	986	156.0	88.90	94.9	94.9	94.0	0.85	0.81	0.73	7.0	2.3	2.4	10.3731	1090
110.0	150.0	EC3-514-0602M	315MX	987	194.0	108.55	95.1	95.1	94.0	0.83	0.79	0.69	7.5	2.5	2.5	11.8549	1130
132.0	180.0	EC3-517-0602M	315LX	988	228.0	130.13	95.4	95.4	94.5	0.84	0.81	0.72	7.5	2.5	2.5	14.2259	1240
160.0	215.0	EC3-550-0602M	355SX	990	276.0	157.41	95.6	95.6	95.0	0.84	0.81	0.72	7.5	2.0	2.4	23.7590	1800
200.0	270.0	EC3-553-0602M	355MX	990	347.0	196.77	95.8	95.8	95.0	0.84	0.80	0.71	7.5	2.2	2.4	23.7590	1810
250.0	335.0	EC3-557-0602M	355LX	989	430.0	246.21	95.8	95.8	95.0	0.84	0.81	0.73	7.5	2.0	2.4	26.5005	2000

Note : Motors upto 2.0 HP are Star (Y) connected & Motors above 2.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.





Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

IE3 Motor

8 Pole

BCH IE3 induction motors suitable for 415 ± 10%, 50 Hz ± 5%, combined ± 10%, 3 phase supply, ambient temperature 50°C, TEFC, Class 'F' insulation, IP-55 protection, continuous rated (S1 duty) with bare shaft & key as per IS:12615-2011 / IEC:60034-1

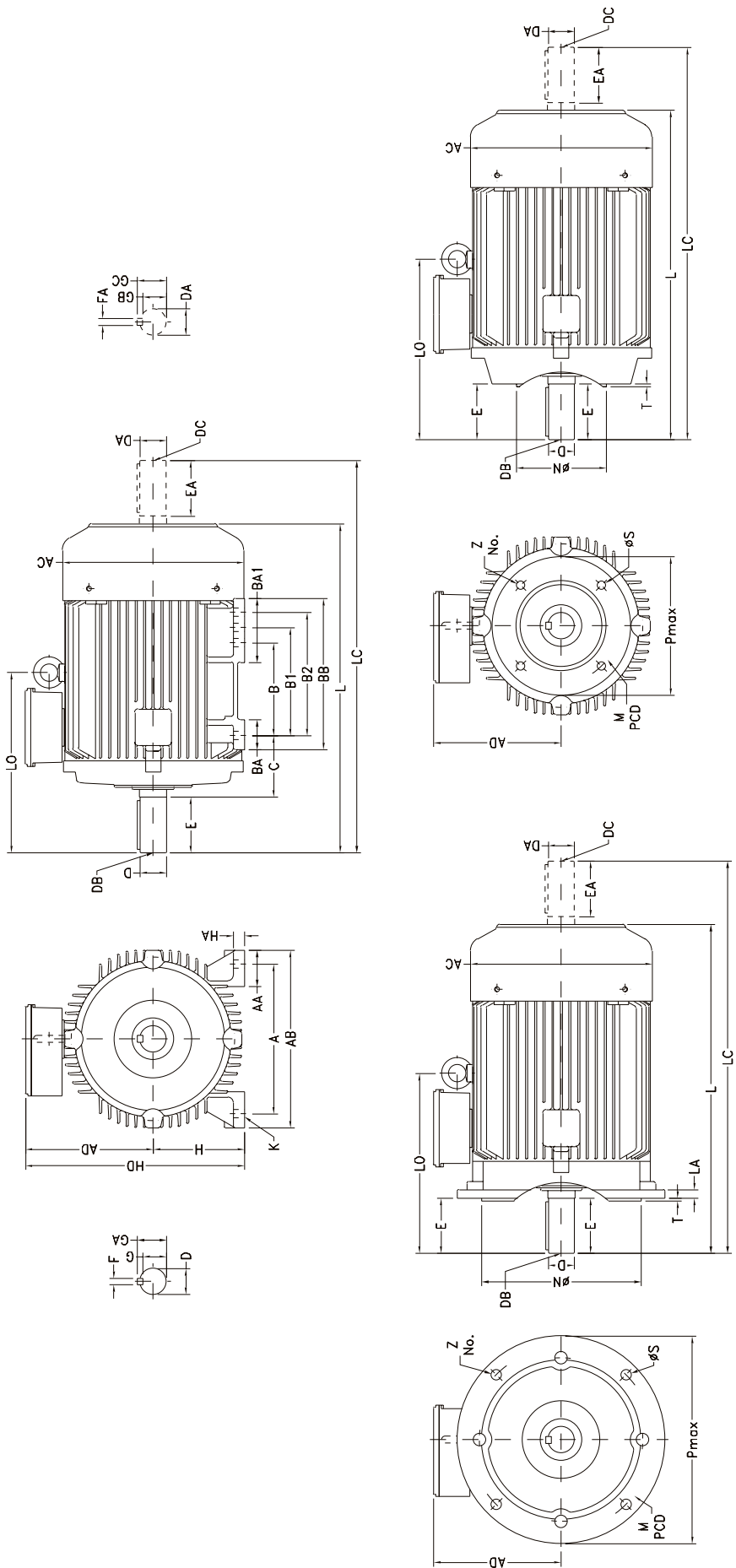
8 Pole, 1000 RPM, IE3																	
Rated Output		Motor Type	Frame Size	Rated Speed (rpm)	Rated Current (A)	Rated Torque (kg-m)	Efficiency %			Power factor %			Ist/In	Tst/Tn	Tpo/Tn	GD² (kgm²)	Wt. (kg)
KW	HP						FL	3/4L	1/2FL	FL	3/4L	1/2FL					
0.12	0.16	EC3-270-0802M	71	685	0.66	0.17	50.7	48.0	42.0	0.50	0.45	0.38	3.5	1.6	2.0	0.0033	11
0.18	0.25	EC3-280-0802M	80	690	0.75	0.25	58.7	56.0	49.0	0.57	0.50	0.40	4.0	1.8	2.1	0.0049	17
0.25	0.33	EC3-283-0802M	80	695	0.92	0.35	64.1	63.0	57.0	0.59	0.51	0.42	4.5	1.8	2.1	0.0080	20
0.37	0.50	EC3-290-0802M	90S	700	1.3	0.51	69.3	69.3	60.0	0.57	0.48	0.40	4.5	2.0	2.2	0.0122	27
0.55	0.75	EC3-296-0802M	90L	700	1.7	0.77	73.0	73.0	66.0	0.62	0.54	0.42	4.5	1.8	2.0	0.0176	30
0.75	1.0	EC3-306-0802M	100L	700	2.1	1.04	75.0	75.0	71.0	0.66	0.58	0.48	5.0	2.0	2.2	0.0228	35
1.1	1.5	EC3-307-0802M	100L	700	2.9	1.53	77.7	77.7	73.0	0.68	0.61	0.51	5.0	2.0	2.2	0.0336	38
1.5	2.0	EC3-313-0802M	112M	710	3.7	2.06	79.7	79.7	75.0	0.71	0.65	0.55	5.5	2.0	2.2	0.0584	48
2.2	3.0	EC3-330-0802M	132S	715	5.1	3.00	81.9	81.9	77.0	0.73	0.67	0.56	6.0	2.2	2.4	0.0991	62
3.7	5.0	EC3-363-0802M	160M	723	7.9	4.98	84.5	84.5	82.0	0.77	0.73	0.61	7.0	2.3	2.5	0.2625	110
5.5	7.5	EC3-364-0802M	160M	724	11.5	7.40	86.2	86.2	82.5	0.77	0.73	0.60	7.0	2.2	2.4	0.2625	118
7.5	10.0	EC3-366-0802M	160L	725	15.4	10.08	87.3	87.3	83.5	0.78	0.73	0.60	7.0	2.2	2.4	0.3440	152
9.3	12.5	EC3-383-0802M	180M	725	19.4	12.49	88.1	88.1	84.0	0.76	0.70	0.58	7.0	2.2	2.4	0.5057	184
11.0	15.0	EC3-386-0802M	180L	727	23.0	14.74	88.6	88.6	85.0	0.75	0.67	0.54	7.0	2.3	2.5	0.5949	198
15.0	20.0	EC3-406-0802M	200L	730	31.0	20.01	89.6	89.6	86.0	0.75	0.68	0.56	7.0	2.1	2.3	1.1136	310
18.5	25.0	EC3-420-0802M	225SX	732	37.0	24.62	90.1	90.1	87.0	0.77	0.71	0.60	7.0	2.0	2.2	1.5437	370
22.0	30.0	EC3-423-0802M	225MX	733	44.5	29.23	90.6	90.6	87.5	0.76	0.69	0.58	7.0	2.2	2.4	1.8378	385
30.0	40.0	EC3-453-0802M	250MX	733	60.0	39.86	91.3	91.3	88.5	0.76	0.70	0.60	7.0	2.2	2.4	2.5127	530
37.0	50.0	EC3-480-0802M	280SX	735	71.0	49.03	91.8	91.8	89.5	0.79	0.75	0.65	7.0	2.2	2.4	4.8613	720
45.0	60.0	EC3-483-0802M	280MX	735	86.0	59.63	92.2	92.2	90.0	0.79	0.76	0.67	7.0	2.2	2.4	5.8335	750
55.0	75.0	EC3-510-0802M	315SX	737	108.1	72.69	92.5	92.5	90.5	0.77	0.71	0.60	7.0	2.2	2.4	7.2611	1020
75.0	100.0	EC3-513-0802M	315MX	737	145.5	99.12	93.1	93.1	90.8	0.77	0.73	0.64	7.0	2.1	2.3	8.5948	1060
90.0	120.0	EC3-516-0802M	315LX	737	172.8	118.94	93.4	93.4	91.0	0.78	0.74	0.65	7.0	2.0	2.2	10.3731	1190
110.0	150.0	EC3-517-0802M	315LX	737	210.7	145.37	93.7	93.7	91.4	0.78	0.74	0.64	7.0	2.1	2.3	11.8549	1220
132.0	180.0	EC3-550-0802M	355SX	739	255.3	173.98	94.0	94.0	91.8	0.77	0.71	0.60	7.0	2.1	2.3	19.1900	1700
160.0	215.0	EC3-553-0802M	355MX	739	315.0	210.88	94.3	94.3	92.0	0.75	0.68	0.56	7.0	2.1	2.4	23.7590	1850
200.0	270.0	EC3-556-0802M	355LX	739	389.0	263.60	94.6	94.6	93.0	0.76	0.70	0.60	7.0	2.1	2.4	28.3281	1950
225.0	300.0	EC3-557-0802M	355LX	739	430.0	296.55	94.6	94.6	93.5	0.77	0.71	0.63	7.0	2.0	2.2	28.3281	1970

Note : Motors upto 2.0 HP are Star (Y) connected & Motors above 2.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.





MECHANICAL DIMENSIONS - STANDARD, IE2 MOTORS





Low Voltage AC TEFC Squirrel Cage Induction Motors

MECHANICAL DIMENSIONS

IE2 MOTORS

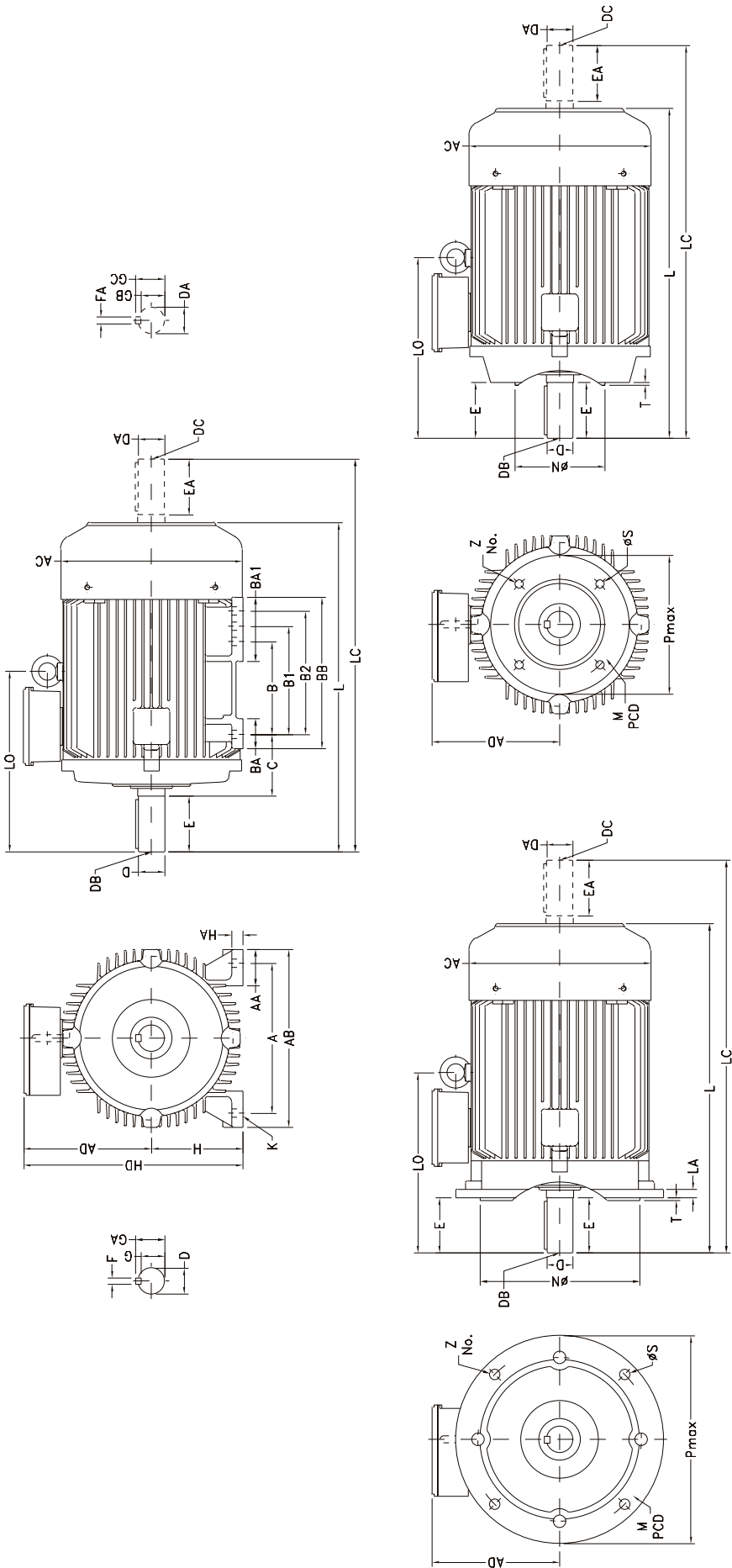
MECHANICAL DIMENSIONS - STANDARD, IE2 MOTORS

[illegible]

Note: Suffix "X" denotes motors other than 2 pole motors.



MECHANICAL DIMENSIONS - STANDARD, IE3 MOTORS





IE3 MOTORS

[illegible]

Note: Suffix "X" denotes motors other than 2 pole motors.

- (a) - 2(1.1kW), 4(0.75kW), 6(0.55kW), 8(0.25kW)
- (b) - For frame 160/8P, refer to dimensions table of IE2 motors.



BCH IE SERIES : (As Per IS : 12615-2011, IEC-60034-30 2008)
Low Voltage 3 Phase TEFC Squirrel Cage Induction Motor

IE2- Frame Size: 63 to 180 - Rating: 0.12 KW to 9.3 KW - Pole: 2, 4, 6 & 8

IE2/IE3
Motors

Bhartia Series

General Specifications

Specification of Catalogue Versions		
Description		
Supply voltage	:	415 Volts $\pm$ 10%, 3 Phase, A. C.
Frequency	:	50 Hz $\pm$ 5%
Combined voltage & frequency variations (absolute sum)	:	$\pm$ 10%
Ambient temperature	:	50° C
Altitude	:	Up to 1000 meters above MSL
Relative humidity	:	Up to 100%
Insulation class	:	F
Winding temperature rise	:	Designed to operate within class B limit
Duty	:	Continuous (S1)
Protection class	:	IP 55
Method of cooling	:	IC0411 (Standard motors) / IC0416 (Forced cooling)
Motor feet	:	Integral to motor housing
Terminal box position	:	At Top towards drive end
Shaft Extension	:	Single Cylindrical at drive end
Paint shade	:	RAL-5014



KEY FEATURES

- **Standard Followed:** All the motors are manufactured as per IS : 12615 for 3 phase for electrical parameters and mechanical dimensions are as per IS : 1231 & IS : 2223.
- **Ratings:** Motors are rated for continuous duty (S1) at an ambient temperature of 50°C and a height of up to 1000 meter above sea level.
- **Voltage :** Motors are designed for 415 volts 10% for 3 supply
- **Frequency :** Motors are designed for 50Hz 5% for 3 supply
- **Insulation Quality :** Motors are manufactured with insulation class F. class H also can be supplied (requirements need to be confirmed at the time of placing order).
- **Winding :** Modified super enamelled copper wire which is tested as per IS : 13730 part III is used for winding of all motors. Additionally, high dielectric and mechanical strength material used for slot insulation.
- **Stator :** Electrical stampings are of CRNO material with high grade, C-6 coating with lower losses.
- **Rotor & Shaft :** Aluminium pressure die casted rotors and shaft of EN8D steel material is provided in all motors. All rotors are dynamically balance for low vibration and long bearing life.
- **Bearings :** High quality bearings are used and mounted on shaft by induction heating procedure for smooth running, low noise and long life.
- **Motor Body and Covers :** These are made of graded C.I. casting material for required strength and reliability. Motor body with external fins increase heat dissipation rate, thus improving motor life.
- **Assembling :** Assembling is done on horizontal hydraulic press for perfect fitment and best alignment of shaft with bearings which is never possible in manual fitting thus improved quality & life by proper assembling.
- **Inspection & Testing :** All components are manufactured and inspected as per ISO:9001-2015 quality system on latest precision machineries and calibrated instruments to give years of maintenance free operation. All motors are tested as per relevant Indian Standard.





BCH IE SERIES : (As Per IS : 12615-2011, IEC-60034-30 2008)

Low Voltage 3 Phase TEFC Squirrel Cage Induction Motor

IE2/IE3

Motors

IE2- Frame Size: 63 to 180 - Rating: 0.12 KW to 9.3 KW - Pole: 2, 4, 6 & 8

Motor Housing

- Cast Iron (CI) stator housing:
63-180 frame
- Pressure Die Cast Aluminum stator housing : (On Request)
63-100 frame

Bearing arrangement

Frames up to 180L have sealed bearing which are lubricated for life.

Frame Size	Driving End	Non - Driving End	Regeasing Time (Hrs.)	
			2 pole	4, 6, 8 pole
63	6201ZZ	6201ZZ	-	-
71	6202ZZ	6202ZZ	-	-
80	6204ZZ	6204ZZ	-	-
90S/L	6305ZZ	6205ZZ	-	-
100L	6206ZZ	6206ZZ	-	-
112M	6206ZZ	6206ZZ	-	-
132S/M	6208ZZ	6208ZZ	-	-
160M/L	6309ZZ	6209ZZ	-	-
180M/L	6310ZZ	6210ZZ	-	-

Terminal Box Data

Frame Size	Cable Entry Size	Max. Cable Size DOL starting	Max. Cable Size Star-Delta starting	Terminal Stud Size
63-90	1 x 3/4" BSC	3C x 4.00mm ²	-	M4
100-132	2 x 1" BSC	3C x 10.00mm ²	2 x 3C x 10.00mm ²	M5
160-180	2 x 1" BSC	3C x 35.00mm ²	2 x 3C x 25.00mm ²	M6

Equivalent matric & Pg threadings can also be provided on request



Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

BHARTIA SERIES IE2 MOTORS

2 POLE

BHARTIA Series IE2 Induction Motors suitable for 415 ±10%, 50Hz ±5%, combinđ ±10%, 3 Phase supply , ambient temperature 50 °C, TEFC, , Insulation Class: F Temperature limited to Class:B, IP-55 Protection, Continuous rated (S1 duty) with bare shaft & Key as per IS:12615-2011/IEC:60034-1

MODEL NO:	KW	HP	FRAME	No. of Ph.	Pole	V	Hz	Rated Curr. (A)	rpm	Tq (Nm)	EFFICIENCY			POWER FACTOR			Temp. Rise (Res.)	Str. Con.	Motor Wt. (appr) (kg)
											100%	75%	50%	100%	75%	50%			
BC2-0D25-2P3B03	0.18	0.25	63	3	2	415	50	0.57	2750	0.06	60.4	59.0	57.0	0.72	0.67	0.55	31.71	STAR	6.3
BC2-0D33-2P3B03	0.25	0.33	63	3	2	415	50	0.90	2825	0.09	64.8	64.0	62.0	0.73	0.62	0.50	25.48	STAR	7.1
BC2-0D50-2P3B03	0.37	0.50	71	3	2	415	50	0.94	2820	0.13	69.5	69.5	67.0	0.78	0.72	0.58	25.23	STAR	10
BC2-0D75-2P3B03	0.55	0.75	71	3	2	415	50	1.4	2810	0.19	74.1	74.0	71.5	0.73	0.66	0.53	46.22	STAR	11
BC2-1D00-2P3B03	0.75	1.00	80	3	2	415	50	1.75	2860	0.26	77.4	76.5	73.0	0.77	0.71	0.58	44.35	STAR	15
BC2-1D50-2P3B03	1.1	1.5	80	3	2	415	50	2.34	2860	0.38	79.6	79.6	74.0	0.82	0.75	0.61	52.08	STAR	16
BC2-2D00-2P3B03	1.5	2.0	90S	3	2	415	50	3.25	2880	0.51	81.3	81.0	78.0	0.79	0.67	0.55	47.29	STAR	21
BC2-3D00-2P3B03	2.2	3.0	90L	3	2	415	50	4.59	2860	0.75	83.2	82.75	81.0	0.80	0.76	0.65	47.92	STAR	23
BC2-5D00-2P3B03	3.7	5.0	100L	3	2	415	50	7.25	2880	1.25	85.5	85.0	84.0	0.83	0.79	0.69	74.59	DELTA	35
BC2-7D50-2P3B03	5.5	7.5	132S	3	2	415	50	10.1	2930	1.86	87.0	85.8	82.0	0.87	0.87	0.81	59.41	DELTA	60
BC2-10D0-2P3B03	7.5	10.0	132S	3	2	415	50	13.6	2940	2.52	88.1	87.0	84.5	0.87	0.86	0.80	53.18	DELTA	74

4 POLE

BHARTIA Series IE2 Induction Motors suitable for 415 ±10%, 50Hz ±5%, combinđ ±10%, 3 Phase supply , ambient temperature 50 °C, TEFC, , Insulation Class: F Temperature limited to Class:B, IP-55 Protection, Continuous rated (S1 duty) with bare shaft & Key as per IS:12615-2011/IEC:60034-1

MODEL NO:	KW	HP	FRAME	No. of Ph.	Pole	V	Hz	Rated Curr. (A)	rpm	Tq	EFFICIENCY			POWER FACTOR			Temp. Rise (Res.)	Str. Con.	Motor Wt. (appr) (kg)
											100%	75%	50%	100%	75%	50%			
BC2-0D25-4P3B03	0.18	0.25	63	3	4	415	50	0.69	1370	0.13	64.7	62.0	59.0	0.56	0.45	0.35	41.56	STAR	6.7
BC2-0D33-4P3B03	0.25	0.33	71	3	4	415	50	0.79	1370	0.18	68.5	66.5	62.0	0.64	0.55	0.43	34.66	STAR	10.4
BC2-0D50-4P3B03	0.37	0.50	71	3	4	415	50	1.25	1375	0.26	72.7	70.0	65.0	0.57	0.47	0.36	48.40	STAR	10.65
BC2-0D75-4P3B03	0.55	0.75	80	3	4	415	50	1.45	1440	0.38	77.1	75.0	68.0	0.68	0.58	0.44	33.86	STAR	13
BC2-1D00-4P3B03	0.75	1.0	80	3	4	415	50	1.83	1425	0.51	79.6	79.0	74.0	0.72	0.63	0.49	43.41	STAR	15
BC2-1D50-4P3B03	1.1	1.50	90S	3	4	415	50	2.5	1435	0.75	81.4	81.0	78.0	0.75	0.64	0.50	41.66	STAR	19
BC2-2D00-4P3B03	1.5	2.0	90L	3	4	415	50	3.4	1440	1.01	82.8	82.0	80.0	0.74	0.65	0.51	54.72	STAR	23
BC2-3D00-4P3B03	2.2	3.0	100L	3	4	415	50	4.9	1445	1.48	84.3	84.0	82.0	0.74	0.65	0.51	57.55	STAR	31
BC2-5D00-4P3B03	3.7	5.0	112M	3	4	415	50	7.3	1440	2.49	86.3	86.0	84.0	0.82	0.76	0.64	61.34	DELTA	42
BC2-7D50-4P3B03	5.5	7.5	132S	3	4	415	50	10.63	1450	3.69	87.7	87.0	86.0	0.82	0.76	0.64	62.67	DELTA	59
BC2-10D0-4P3B03	7.5	10.0	132M	3	4	415	50	14.7	1460	5.02	88.7	88.00	86.5	0.80	0.74	0.61	73.89	DELTA	71
BC2-12D5-4P3B03	9.3	12.5	132M	3	4	415	50	18.25	1450	6.20	89.8	89.0	88.0	0.79	0.72	0.59	67.10	DELTA	90
BC2-12D5-4P3B03	9.3	12.5	160M	3	4	415	50	17.15	1450	6.20	89.8	89.0	88.0	0.84	0.83	0.76	65.98	DELTA	105

Note : Motors upto 3.0 HP are Star (Y) connected & Motors above 3.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.





Low Voltage AC TEFC Squirrel Cage Induction Motors

Electrical Performance

BHARTIA SERIES IE2 MOTORS

6 POLE

BHARTIA Series IE2 Induction Motors suitable for 415 ±10%, 50Hz ±5%, combind ±10%, 3 Phase supply , ambient temperature 50 °C, TEFC, , Insulation Class: F Temperature limited to Class:B, IP-55 Protection, Continuous rated (S1 duty) with bare shaft & Key as per IS:12615-2011/IEC:60034-1

MODEL NO:	KW	HP	FRAME	No. of Ph.	Pole	V	Hz	Rated Curr. (A)	rpm	Tq (KgM)	EFFICIENCY			POWER FACTOR			Temp. Rise (Res.)	Str. Con.	Motor Wt. (appr) (kg)
											100%	75%	50%	100%	75%	50%			
BC2-0D50-6P3B03	0.37	0.50	80	3	6	415	50	1.1	920	0.40	67.6	67.0	65.0	0.68	0.57	0.44	53.99	STAR	15
BC2-0D75-6P3B03	0.55	0.75	80	3	6	415	50	1.74	930	0.59	73.5	72.5	68.0	0.60	0.50	0.38	51.76	STAR	16
BC2-1D00-6P3B03	0.75	1.0	90S	3	6	415	50	2.17	930	0.79	75.9	75.0	72.0	0.63	0.53	0.41	43.95	STAR	20
BC2-1D50-6P3B03	1.1	1.5	90L	3	6	415	50	2.96	935	1.15	78.1	77.5	74.0	0.66	0.58	0.45	67.64	STAR	24
BC2-2D00-6P3B03	1.5	2.0	100L	3	6	415	50	3.95	945	1.56	79.8	79.0	75.0	0.66	0.56	0.43	56.38	STAR	30.5
BC2-3D00-6P3B03	2.2	3.0	112M	3	6	415	50	5.5	940	2.28	81.8	80.0	79.0	0.68	0.61	0.48	69.64	STAR	40.18
BC2-5D00-6P3B03	3.7	5.0	132S	3	6	415	50	8.3	960	3.79	84.3	83.0	81.5	0.73	0.64	0.51	63.02	DELTA	58
BC2-7D50-6P3B03	5.5	7.5	132M	3	6	415	50	11.95	960	5.58	86.0	84.0	81.5	0.74	0.71	0.59	77.30	DELTA	73
BC2-10D0-6P3B03	7.5	10	160M	3	8	415	50	16	960	7.61	87.2	87.0	85.0	0.78	0.74	0.66	77.00	DELTA	110

8 POLE

BHARTIA Series IE2 Induction Motors suitable for 415 ±10%, 50Hz ±5%, combind ±10%, 3 Phase supply , ambient temperature 50 °C, TEFC, , Insulation Class: F Temperature limited to Class:B, IP-55 Protection, Continuous rated (S1 duty) with bare shaft & Key as per IS:12615-2011/IEC:60034-1

MODEL NO:	KW	HP	FRAME	No. of Ph.	Pole	V	Hz	Rated Curr. (A)	rpm	Tq	EFFICIENCY			POWER FACTOR			Temp. Rise (Res.)	Str. Con.	Motor Wt. (appr) (kg)
											100%	75%	50%	100%	75%	50%			
BC2-0D25-8P3B03	0.18	0.25	80	3	8	415	50	0.9	670	0.27	46.0	45.0	42.0	0.58	0.47	0.37	45.19	STAR	14
BC2-0D33-8P3B03	0.37	0.50	90S	3	8	415	50	1.5	690	0.55	56.1	55.5	54.0	0.60	0.44	0.34	41.43	STAR	19
BC2-0D50-8P3B03	0.55	0.75	90L	3	8	415	50	2.10	700	0.80	61.7	59.5	56.0	0.59	0.46	0.36	62.98	STAR	23
BC2-0D75-8P3B03	0.75	1.0	100L	3	8	415	50	2.64	705	1.09	66.2	65.0	64.0	0.60	0.48	0.37	66.75	STAR	31
BC2-1D00-8P3B03	1.1	1.5	100L	3	8	415	50	3.49	700	1.59	70.8	69.0	65.0	0.62	0.51	0.41	70.95	STAR	32
BC2-1D50-8P3B03	1.5	2.0	112M	3	8	415	50	4.5	700	2.15	74.1	73.5	72.0	0.62	0.52	0.40	72.03	STAR	41
BC2-2D00-8P3B03	2.2	3.0	132S	3	8	415	50	6.05	710	3.11	77.6	75.5	73.0	0.65	0.54	0.41	54.40	STAR	60

Note : Motors upto 3.0 HP are Star (Y) connected & Motors above 3.0 HP are Delta (Δ) connected suitable for Star-Delta Starting.

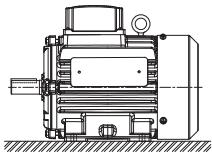




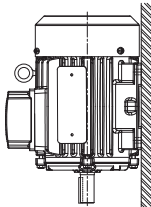
MOUNTING DETAILS

MOTOR MOUNTING POSITIONS

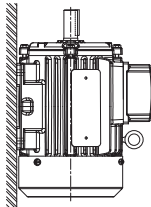
FOOT MOUNTING



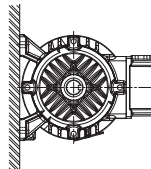
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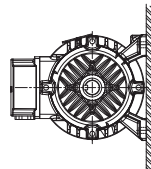
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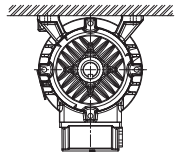
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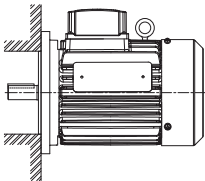
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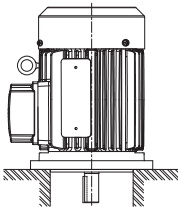
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FLANGE MOUNTING

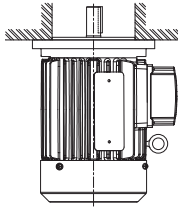
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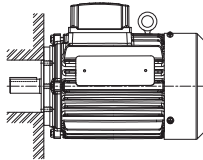
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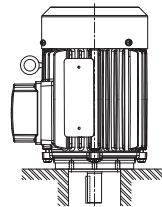
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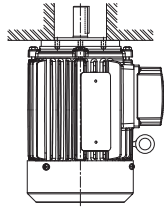
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IM V18
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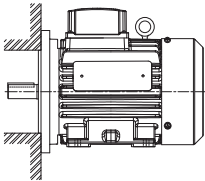


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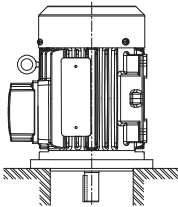
‘C’ TYPE (FACE MOUNTING)

FOOT CUM FLANGE MOUNTING

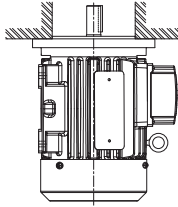
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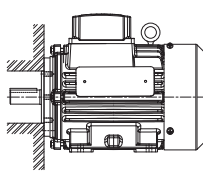
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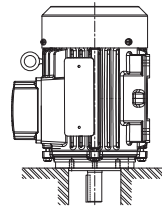
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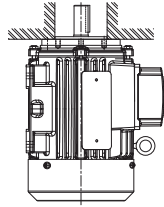
IM V36
IM 2031



IM B34
IM 2101



IM 2111



IM 2131

‘C’ TYPE (FACE MOUNTING)

Technical drawings of the motor showing front, side, and shaft extension views with dimension labels.

Front View Dimensions:

- AC: Total width
- HA: Total height
- HD: Height to top of terminal box
- HC: Height to center of shaft
- H ± 0.5: Height to base of mounting feet
- AB: Distance between mounting feet
- AA: Distance from mounting foot to center line
- A ± 0.75: Distance from center line to mounting foot base
- K: Distance from center line to terminal box base

Side View Dimensions:

- L ± 10: Total length
- ED: Distance from end face to terminal box base
- E ± 0.5: Distance from end face to mounting foot base
- C ± 1.0: Distance from mounting foot base to terminal box base
- BB: Total length of motor body
- B ± 0.75: Distance from center line to terminal box base
- BA: Distance from center line to mounting foot base

Shaft Extension (Enlarged View) Dimensions:

- Shaft diameter: $N9/H9$
- Key width: F
- Key height: GE (+0.1)
- Key depth: GD
- Shaft extension length: TH x Deep
- Shaft diameter at extension: $\phi 5$
- Shaft diameter at base: D

FRAME SIZE	A	B	C	H	K	L	TH	AA	AB	AC	BB	BA	HA	HD	D	E	ED	F	GA	GD	GE	TOLERANCE IN MICRON (µm)		
																						D	K	GD
63	100	80	40	63	7	210	M4X10	25	123	122	101	27	8	159	11	23	20	4	12.5	4	2.5	+8 -3	+360	-25
71	112	90	45	71	7	244	M5X13	30	135	140	113	30	10	178	14	30	28	5	16	5	3	+9 -4		+360
80	125	100	50	80	10	282	M6X20	35	155	160	128	41	10	205	19	40	35	6	21.5	6	3.5		+9 -4	
90S	140	100	56	90	10	306	M8X20	35	170	177	128	41	12	225	24	50	45	8	27	7	4	+9 -4		+360
90L	140	125	56	90	10	331	M8X20	35	170	177	153	45	12	225	24	50	45	8	27	7	4		+9 -4	
100L	160	140	63	100	12	369	M10X20	44	197	200	183	55	13	249	28	60	55	8	31	7	4	+9 -4		+360
112M	190	140	70	112	12	400	M10X20	49	229	220	174	49	14	273	28	60	55	8	31	7	4		+9 -4	
132S	216	140	89	132	12	462	M12X25	57	258	258	186	49	18	316	38	80	70	10	41	8	5	+9 -4		+360
132M	216	178	89	132	12	500	M12X25	57	258	258	224	68	18	316	38	80	70	10	41	8	5		+9 -4	
160M	254	210	108	160	15	606	M16X32	67	306	308	262	75	23	363	42	110	100	12	45	8	5	+9 -4		+360
160L	254	254	108	160	15	650	M16X32	67	306	308	295	75	23	363	42	110	100	12	45	8	5		+9 -4	
180M	279	241	121	180	15	660	M16X32	75	345	353	295	85	25	470	48	110	100	14	51.5	9	5.5	+9 -4		+360
180L	279	279	121	180	15	700	M16X32	75	345	353	335	85	25	470	48	110	100	14	51.5	9	5.5		+9 -4	
200L	318	305	133	200	19	770	M20X40	85	390	400	365	85	26	480	55	110	100	16	59	10	6	+30/+11		+520

Technical drawings of the motor showing front, shaft extension, and side views with dimensions.

Front View Dimensions:

- AD: Total height of the motor.
- 45°: Angle of the cooling fins.
- M ± 0.3 : Mounting hole diameter.
- S: Mounting hole spacing.
- GD: Distance from mounting hole to top flange.
- GA: Distance from mounting hole to bottom flange.
- D: Shaft diameter.
- TH x Deep: Thread and depth of the shaft extension.
- SHAFT EXTENSION (ENLARGED VIEW): Detail of the shaft extension.
- J6: Distance from mounting hole to center of shaft.
- N: Distance between mounting holes.
- P: Total width of the motor.

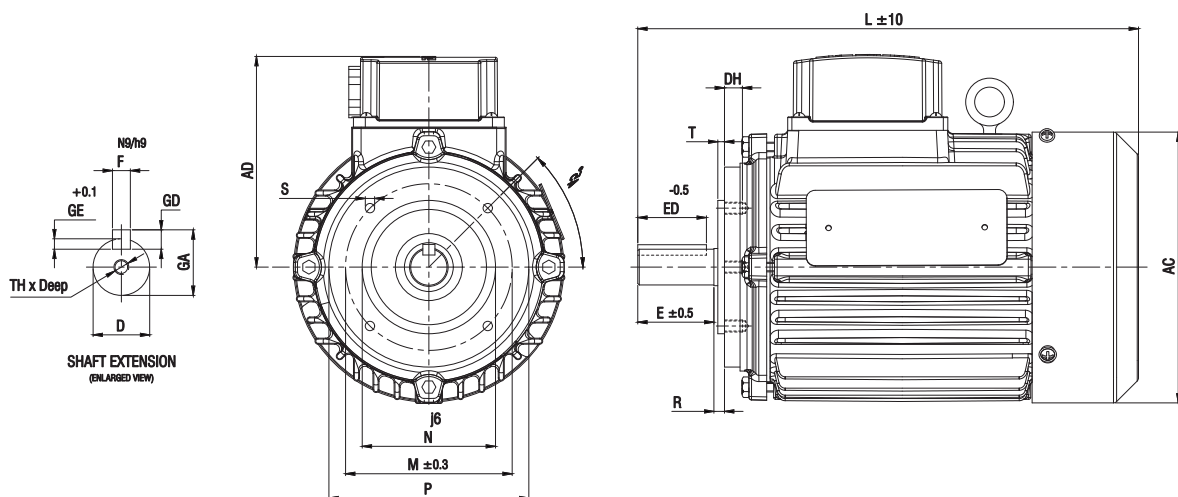
Side View Dimensions:

- L ± 10 : Total length of the motor.
- T: Total height of the motor.
- ED: Distance from mounting hole to top flange.
- E ± 0.5 : Distance from mounting hole to bottom flange.
- R: Distance from mounting hole to center of shaft.
- LA: Distance from mounting hole to left side of the motor.

FRAME SIZE	M	N	P	S	NO. OF HOLES	T	LA	L	TH	AC	AD	R	D	E	ED	F	GA	GD	GE	TOLERANCE IN MICRON (µm)	
																				D	GD
63	115	95	140	10	4	3	9	210	M4X10	122	96	0	11	23	20	4	12.5	4	2.5	+8	-25
71	130	110	160	10	4	3.5	9	244	M5X13	140	107	0	14	30	28	5	16	5	3	-3	-30
80	165	130	200	12	4	3.5	10	282	M6X20	160	125	0	19	40	35	6	21.5	6	3.5	+9	
90S	165	130	200	12	4	3.5	10	315	M8X20	177	135	0	24	50	45	8	27	7	4		-4
90L	165	130	200	12	4	3.5	10	345	M8X20	177	135	0	24	50	45	8	27	7	4		
100L	215	180	250	15	4	4	11	369	M10X20	200	149	0	28	60	55	8	31	7	4		
112M	215	180	250	15	4	4	11	400	M10X20	220	161	0	28	60	55	8	31	7	4		
132S	265	230	300	15	4	4	12	462	M12X25	258	183	0	38	80	70	10	41	8	5		+18
132M	265	230	300	15	4	4	12	500	M12X25	258	183	0	38	80	70	10	41	8	5	+2	
160M	300	250	350	19	4	5	13	606	M16X32	305	203	0	42	110	100	12	45	8	5		
160L	300	250	350	19	4	5	13	650	M16X32	305	203	0	42	110	100	12	45	8	5		

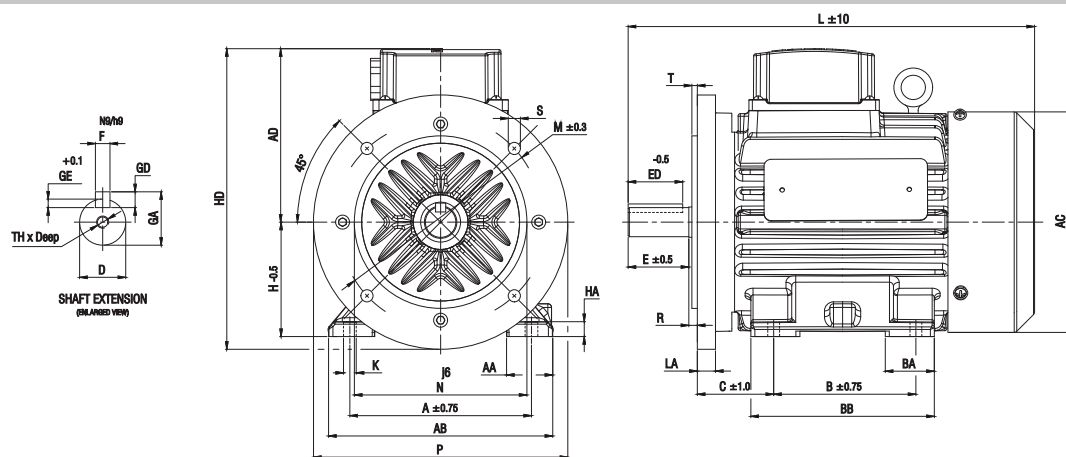


DIMENSIONS OF FACE MOUNTED MOTORS (B14) - CAST IRON



FRAME SIZE	M	N	P	S	NO. OF HOLES	DH	T	TH	L	AC	AD	R	D	E	ED	F	GA	GD	GE	TOLERANCE IN MICRON (µm)	
																				D	GD
63	75	60	90	M5	4	8	2.5	M4X10	210	122	96	0	11	23	20	4	12.5	4	2.5	+8	-25
71	85	70	105	M6	4	8	2.5	M5X13	244	140	107	0	14	30	28	5	16	5	3	-3	-30
80	100	80	120	M6	4	10	3	M6X20	282	160	125	0	19	40	35	6	21.5	6	3.5	+9 -4	-90
90S	115	95	140	M8	4	10	3	M8X20	315	177	135	0	24	50	45	8	27	7	4		
90L	115	95	140	M8	4	10	3	M8X20	345	177	135	0	24	50	45	8	27	7	4		
100L	130	110	160	M8	4	10	3.5	M10X20	369	200	149	0	28	60	55	8	31	7	4		
112M	130	110	160	M8	4	10	3.5	M10X20	387	220	161	0	28	60	55	8	31	7	4		
132S	165	130	200	M12	4	14	3.5	M12X25	462	258	183	0	38	80	70	10	41	8	5	+18	+2
132M	165	130	200	M12	4	14	3.5	M12X25	500	258	183	0	38	80	70	10	41	8	5	+2	

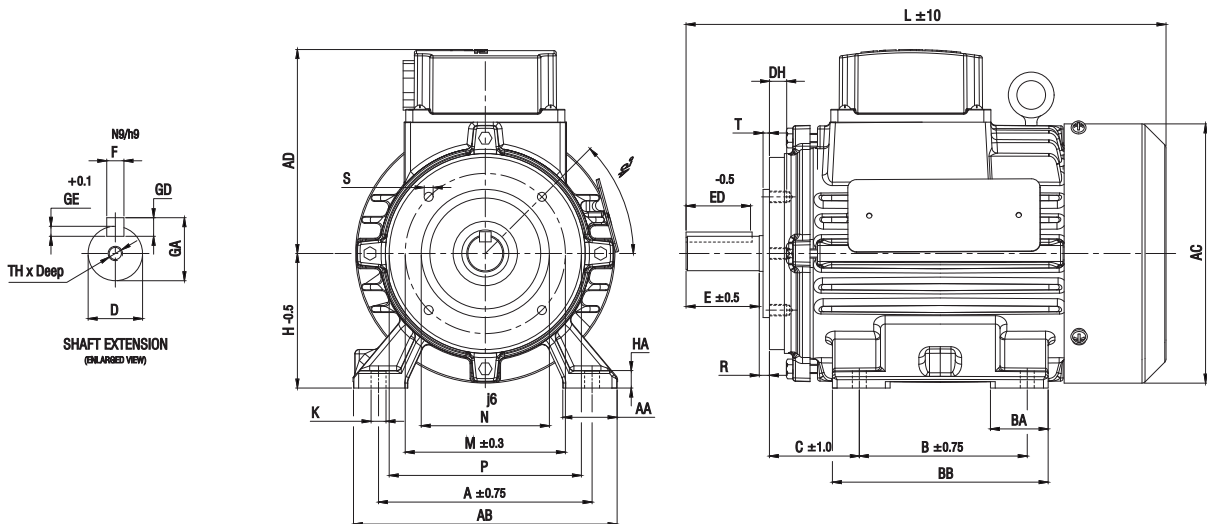
DIMENSIONS OF FOOT CUM FLANGE MOUNTED MOTORS - CAST IRON



FRAME SIZE	A	B	C	H	K	M	N	P	S	NO. OF HOLES	T	LA	L	TH	AA	AB	BB	BA	HA	HD	AC	AD	R	D	E	ED	F	GA	GD	GE	TOLERANCE IN MICRON (µm)	
																															D	GD
63	100	80	40	63	7	115	95	140	10	4	3	9	210	M4X10	25	123	101	27	8	166	122	96	0	11	23	20	4	12.5	4	2.5	+8	-25
71	112	90	45	71	7	130	110	160	10	4	3.5	9	244	M5X13	30	135	113	30	10	187	140	107	0	14	30	28	5	16	5	3	-3	-30
80	125	100	50	80	10	165	130	200	12	4	3.5	10	282	M6X20	35	155	128	41	10	225	160	125	0	19	40	35	6	21.5	6	3.5	+9 -4	-90
90S	140	100	56	90	10	165	130	200	12	4	3.5	10	315	M8X20	35	170	128	42	12	235	177	135	0	24	50	45	8	27	7	4		
90L	140	125	56	90	10	165	130	200	12	4	3.5	10	345	M8X20	35	170	153	41	12	235	177	135	0	24	50	45	8	27	7	4		
100L	160	140	63	100	12	215	180	250	15	4	4	11	369	M10X20	44	197	183	55	13	275	200	149	0	28	60	55	8	31	7	4		
112M	190	140	70	112	12	215	180	250	15	4	4	11	400	M10X20	49	229	174	49	14	287	220	161	0	28	60	55	8	31	7	4		
132S	216	140	89	132	12	265	230	300	15	4	4	12	462	M12X25	57	258	186	49	18	335	258	183	0	38	80	70	10	41	8	5	+18	+2
132M	216	178	89	132	12	265	230	300	15	4	4	12	500	M12X25	57	258	224	68	18	335	258	183	0	38	80	70	10	41	8	5	+2	

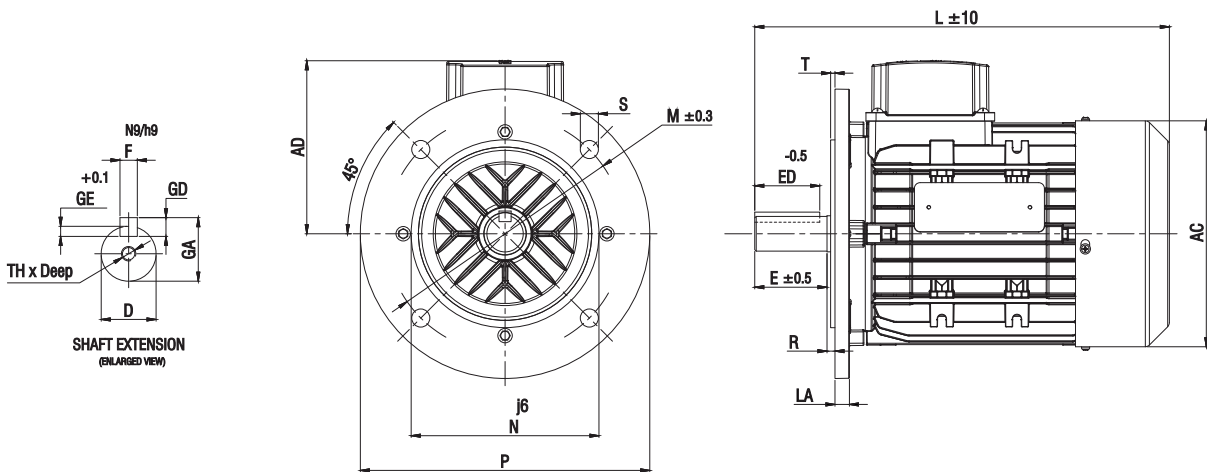


DIMENSIONS OF FOOT CUM FACE MOUNTED MOTORS-CAST IRON



FRAME SIZE	A	B	C	H	K	M	N	P	S	NO. OF HOLES	T	LA	L	TH	AA	AB	BB	BA	HA	AC	AD	DH	R	D	E	ED	F	GA	GD	GE	TOLERANCE IN MICRON (µm)	
																															D	GD
63	100	80	40	63	7	75	60	90	M5	4	3	10	210	M4X10	25	123	101	27	8	122	96	8	0	11	23	20	4	12.5	4	2.5	+8	-25
71	112	90	45	71	7	88	70	105	M6	4	3.5	10	244	M5X13	30	135	113	30	10	140	107	8	0	14	30	28	5	16	5	3	-3	-30
80	125	100	50	80	10	100	80	120	M6	4	3.5	10	275	M6X20	35	155	128	41	10	160	125	10	0	19	40	35	6	21.5	6	3.5	+9	-30
90S	140	100	56	90	10	115	95	140	M8	4	3.5	10	315	M8X20	35	170	128	42	12	177	135	10	0	24	50	45	8	27	7	4	-4	-90
90L	140	125	56	90	10	115	95	140	M8	4	3.5	10	345	M8X20	35	170	153	41	12	177	135	10	0	24	50	45	8	27	7	4	+9	-90
100L	160	140	63	100	12	130	110	160	M8	4	4	11	369	M10X20	44	197	183	55	13	200	149	10	0	28	60	55	8	31	7	4	-4	-90
112M	190	140	70	112	12	130	110	160	M8	4	4	11	387	M10X20	49	229	174	49	14	220	161	10	0	28	60	55	8	31	7	4	+18	-90
132S	216	140	89	132	12	165	130	200	M10	4	4	12	442	M12X25	57	258	186	49	18	258	183	12	0	38	80	70	10	41	8	5	+18	-90
132M	216	178	89	132	12	165	130	200	M10	4	4	12	480	M12X25	57	258	224	68	18	258	183	12	0	38	80	70	10	41	8	5	+2	-90

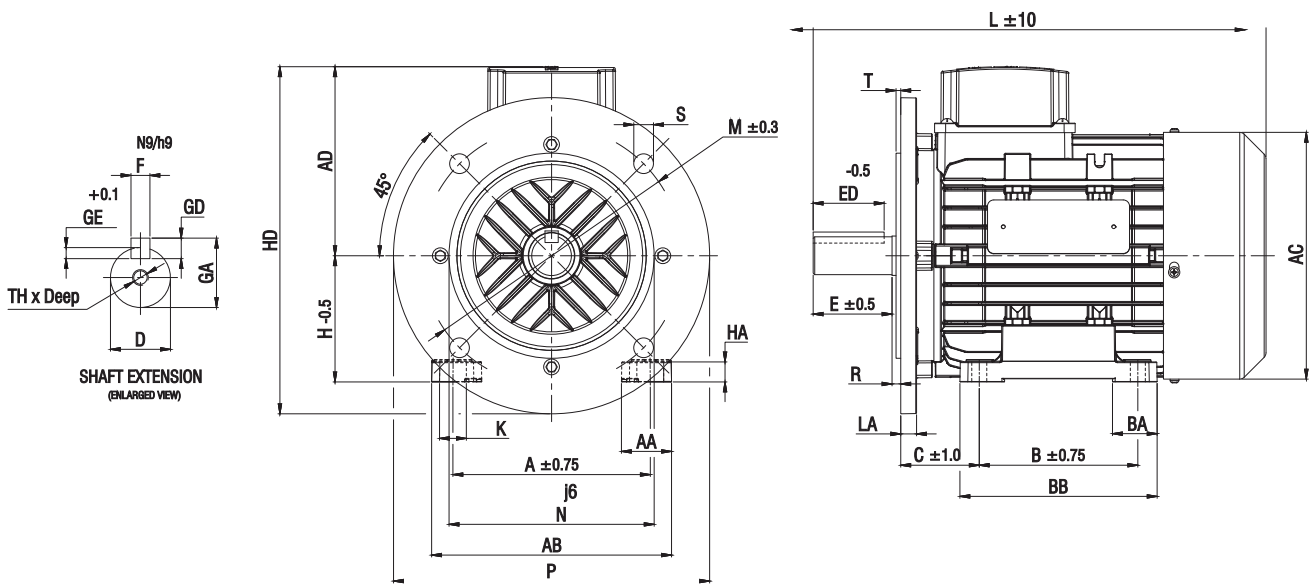
DIMENSIONS OF FLANGE MOUNTED MOTORS-ALUMINIUM



FRAME SIZE	M	N	P	S	NO. OF HOLES	T	LA	L	TH	AC	AD	R	D	E	ED	F	GA	GD	GE	TOLERANCE IN MICRON (µm)	
																				D	GD
63	115	95	140	10	4	3	9	212	M4X10	117	96	0	11	23	20	4	12.5	4	2.5	+8	-25
71	130	110	160	10	4	3.5	9	246	M5X13	134	103	0	14	30	28	5	16	5	3	-3	-30
80	165	130	200	12	4	3.5	10	274	M6X20	157	122	0	19	40	35	6	21.5	6	3.5	+9	-30
90S	165	130	200	12	4	3.5	10	304	M8X20	172	127	0	24	50	45	8	27	7	4	-4	-90
90L	165	130	200	12	4	3.5	10	329	M8X20	172	127	0	24	50	45	8	27	7	4	-4	-90

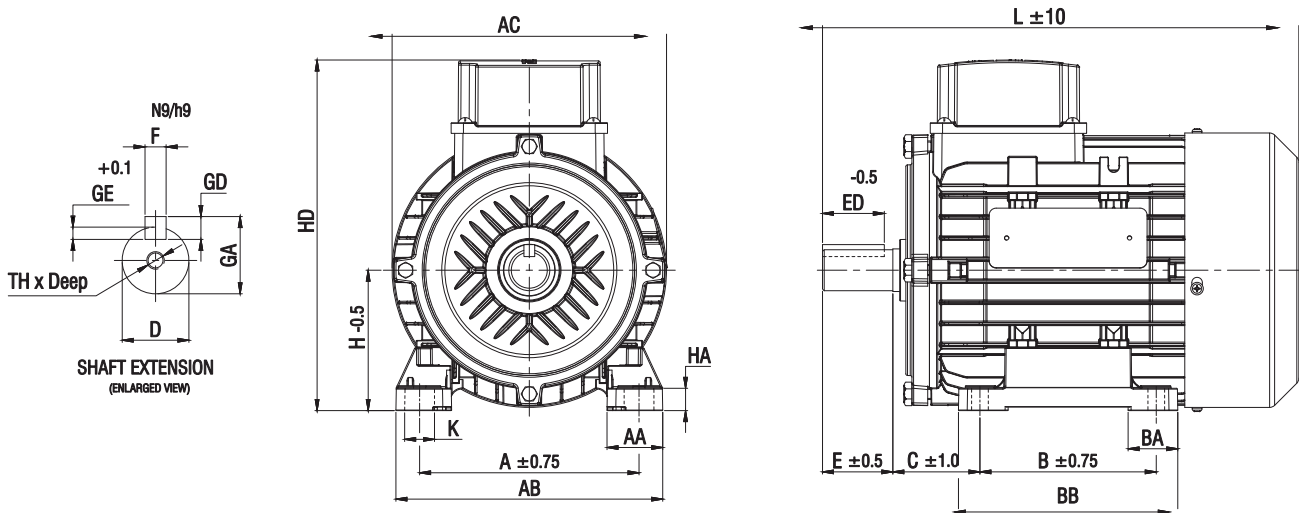


DIMENSIONS OF FOOT CUM FLANGE MOUNTED MOTORS-ALUMINIUM



FRAME SIZE	A	B	C	H	K	M	N	P	S	NO. OF HOLES	T	LA	L	TH	AA	AB	AC	BB	BA	HA	HD	AD	R	D	E	ED	F	GA	GD	GE	TOLERANCE IN MICRON (μm)	
																															D	GD
63	100	80	40	63	13	115	95	140	10	4	3	9	212	M4X10	29	122	117	102	24	11	166	96	0	11	23	20	4	12.5	4	2.5	+8	-25
71	112	90	45	71	13	130	110	160	10	4	3.5	9	246	M5X13	30	137	134	108	26	12	180	103	0	14	30	28	5	16	5	3	-3	-30
80	125	100	50	80	17	165	130	200	12	4	3.5	10	274	M6X20	32	157	157	125	28	14	220	122	0	19	40	35	6	21.5	6	3.5	+9	-90
90S	140	100	56	90	17	165	130	200	12	4	3.5	10	304	M8X20	35	172	172	129	29	13	227	127	0	24	50	45	8	27	7	4	-4	-90
90L	140	125	56	90	17	165	130	200	12	4	3.5	10	329	M8X20	35	172	172	154	31	13	227	127	0	24	50	45	8	27	7	4		

DIMENSIONS OF FOOT MOUNTED MOTORS-ALUMINIUM



FRAME SIZE	A	B	C	H	K	L	TH	AA	AB	AC	BB	BA	HA	HD	D	E	ED	F	GA	GD	GE	TOLERANCE IN MICRON (μm)		
																						D	K	GD
63	100	80	40	63	13	212	M4X10	29	122	117	102	24	11	159	11	23	20	4	12.5	4	2.5	+8		-25
71	112	90	45	71	13	246	M5X13	30	137	134	108	26	12	174	14	30	28	5	16	5	3	-3		-30
80	125	100	50	80	17	274	M6X20	32	152	157	125	28	14	202	19	40	35	6	21.5	6	3.5	+9	+360	
90S	140	100	56	90	17	304	M8X20	35	169	172	129	29	13	217	24	50	45	8	27	7	4	-4		-90
90L	140	125	56	90	17	329	M8X20	35	169	172	154	31	13	217	24	50	45	8	27	7	4			

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Since product improvement is a continuous process, the data furnished in this brochure may undergo revision without prior notice.