

Single-Phase Motors

موتورهای تک فاز تک خازنه و دو خازنه

Industrial Motors

IEC Single-Phase Capacitor Run Motors

Standard Motors up to Frame Size 100

Technical Data

Aluminium Housing. Basic Version

Rated Output kW	Size	Type	Rated Speed rpm	Nominal Efficiency %	Power Factor	Rated Current at 220 V A	Rated Torque Nm	Starting Torque	Starting Current	Capacitor	Capacitor Voltage	Efficiency Class
								For Direct-on-Line starting as multiple of the rated				
								Torque	Current	μF	V	
3000 rpm, 2-pole, 50 Hz												
0.18 0.25	63	34180	2830	60.3	1	1.4	0.61	0.73	4.6	10	400	IE2
		34250	2750	64.8	0.99	1.8	0.87	0.45	3.0	10	450	IE2
0.37 0.55	71	35370	2860	71.4	1	2.6	1.2	0.50	3.8	12	450	IE2
		35550	2850	74.5	0.95	3.5	1.9	0.40	4.3	16	450	IE2
0.75 1.1	80	37750	2830	77.4	0.98	4.6	2.6	0.45	3.2	30	400	IE2
		37110	2820	75	0.95	6.7	3.7	0.40	3.6	35	400	IE1
1.5 2.2	90	39150	2840	77.2	0.99	8.7	5.1	0.40	3.5	40	400	IE1
		39220	2870	79.7	0.96	13	7.3	0.40	3.8	50	400	IE1
1500 rpm, 4-pole, 50 Hz												
0.12 0.18	63	41120	1370	52.3	0.98	1.1	0.85	0.54	2.2	6	450	IE1
		41180	1325	54.5	0.94	1.6	1.25	0.55	2.2	7	450	IE0
0.25 0.37	71	36250	1420	68.5	0.98	1.8	1.7	0.50	2.8	14	400	IE2
		36370	1390	65	0.96	2.7	2.6	0.30	3.5	16	450	IE0
0.55 0.75	80	38550	1420	70.2	0.98	3.6	3.7	0.50	2.6	35	400	IE1
		38750	1420	72.1	1	4.6	5	0.40	2.6	30	400	IE1
1.1 1.5	90	40110	1430	75.5	0.97	6.8	7.3	0.32	3.0	35	450	IE1
		40150	1425	77	0.98	9.2	10	0.33	3.2	50	400	IE1
2.2	100	43220	1435	78.1	0.98	13.2	14.5	0.31	3.0	70	400	IE0

*Flange-mounted (B5) and foot mounted (B3) are available for all type of motors.

IEC Single-Phase Capacitor Run & Start (CRS) Motors

Standard Motors up to Frame Size 112

Technical Data
Aluminium Housing. Basic Version

Rated Output kW	Size	Type	Rated Speed rpm	Nominal Efficiency %	Power Factor	Rated Current at 220 V A	Rated Torque Nm	Starting Torque	Starting Current	Capacitor		Efficiency Class
								For Direct-on-Line starting as multiple of the rated		Permanent μF	Start μF	
								Torque	Current			
3000 rpm, 2-pole, 50 Hz												
0.18 0.25	63	34188	2830	60.3	1	1.4	0.61	2.0	4.6	10	30	IE2
		34258	2750	64.8	0.99	1.8	0.87	2.0	4.7	10	30	IE2
0.37 0.55	71	35378	2860	71.4	1	2.6	1.2	1.9	4.6	12	40	IE2
		35558	2850	74.5	0.95	3.5	1.9	1.9	4.4	16	60	IE2
0.75 1.1	80	37758	2830	77.4	0.98	4.6	2.6	2.0	4.2	30	60	IE2
		37118	2820	75	0.95	6.7	4.3	2.0	4.4	35	80	IE1
1.5 2.2	90	39158	2840	77.2	0.99	8.7	5.1	1.8	4.3	40	100	IE1
		39228	2840	79.7	0.99	12.4	7.3	1.8	4.4	50	140	IE1
1500 rpm, 4-pole, 50 Hz												
0.12 0.18	63	41128	1370	52.3	0.98	1.1	0.85	1.6	3.4	6	20	IE1
		41188	1325	54.5	0.94	1.6	1.25	1.6	3.8	7	25	IE0
0.25 0.37	71	36258	1415	67.4	0.99	1.8	1.7	1.9	3.8	14	30	IE2
		36378	1390	65	0.95	2.8	2.6	1.9	3.9	16	40	IE0
0.55 0.75	80	38558	1420	70.2	0.98	3.6	3.7	1.8	4.0	35	60	IE1
		38758	1420	76	1	4.6	5	1.8	4.0	30	80	IE1
1.1 1.5	90	40118	1420	75	0.96	7.0	7.3	1.9	4.3	35	125-158	IE1
		40158	1420	77.2	0.96	9.3	10	1.8	4.2	50	125-158	IE1
2.2	100	43228	1435	78.1	0.95	13.1	14.5	1.8	4.4	70	175	IE0
2.2	112	46224	1450	76.1	0.66	21	14.5	2.3	4.2	-	2x(125-158)	IE0

Single-Phase Electrical Motors (Dimensional Specification)

اطلاعات ابعادی موتورهای تک فاز

Industrial Motors

IEC Single-Phase Capacitor Run Motors

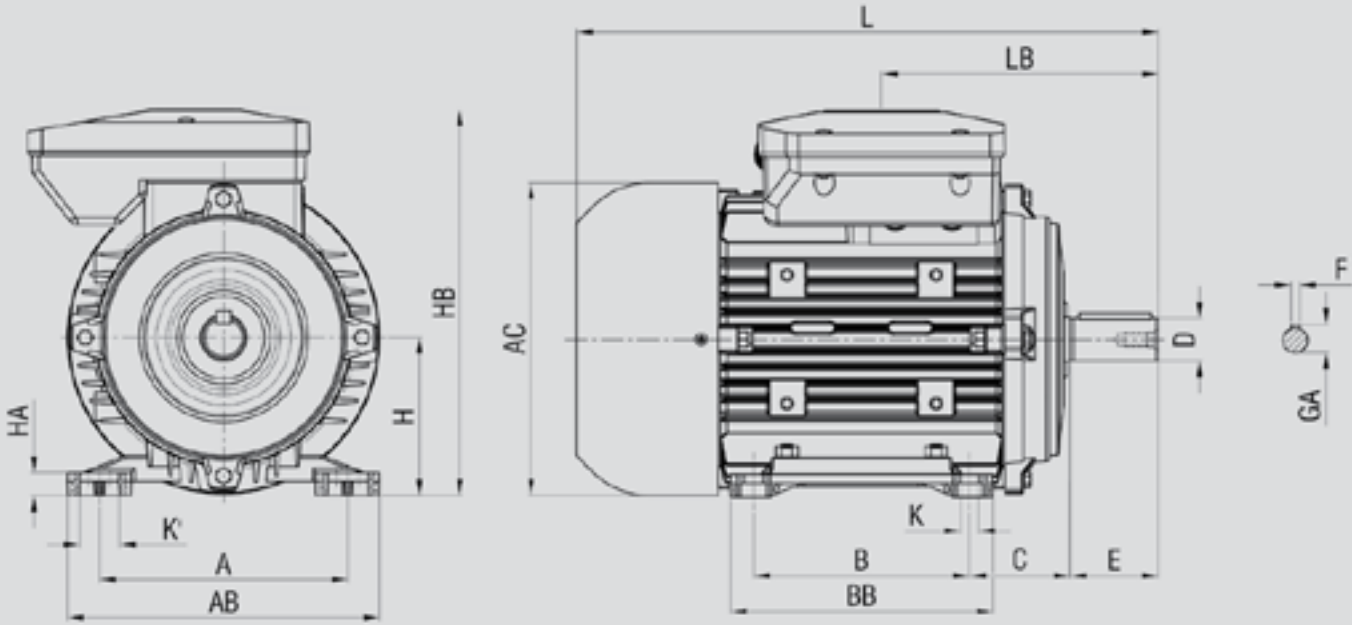
Foot-Mounted Motor, IMB3



Technical Data

Frame Size	No. of Poles	Dimension drawing according to IEC																
		H	B	A	C	K	K'	D	E	F	GA	HA	BB	AB	AC	HB	LB	L
63	2-8	63	80	100	40	M6	12	11	23	4	12.5	7	101	120	124	155	91.5	208
71		71	90	112	47			14	30	5	16	11	108	136	141	186	105	244
80		125	80	125	50	M8	16.5	19	40	6	21.5	12	125	150	159	209	118	273
90			90	140	56			24	50	8	27	15	155	174	176	219	133	327
100		140	100	160	63	M10	21	28	60		31	16	175	193	194	244	148	402
112			112	190	70								176	233	218	265	154	432

Dimensions





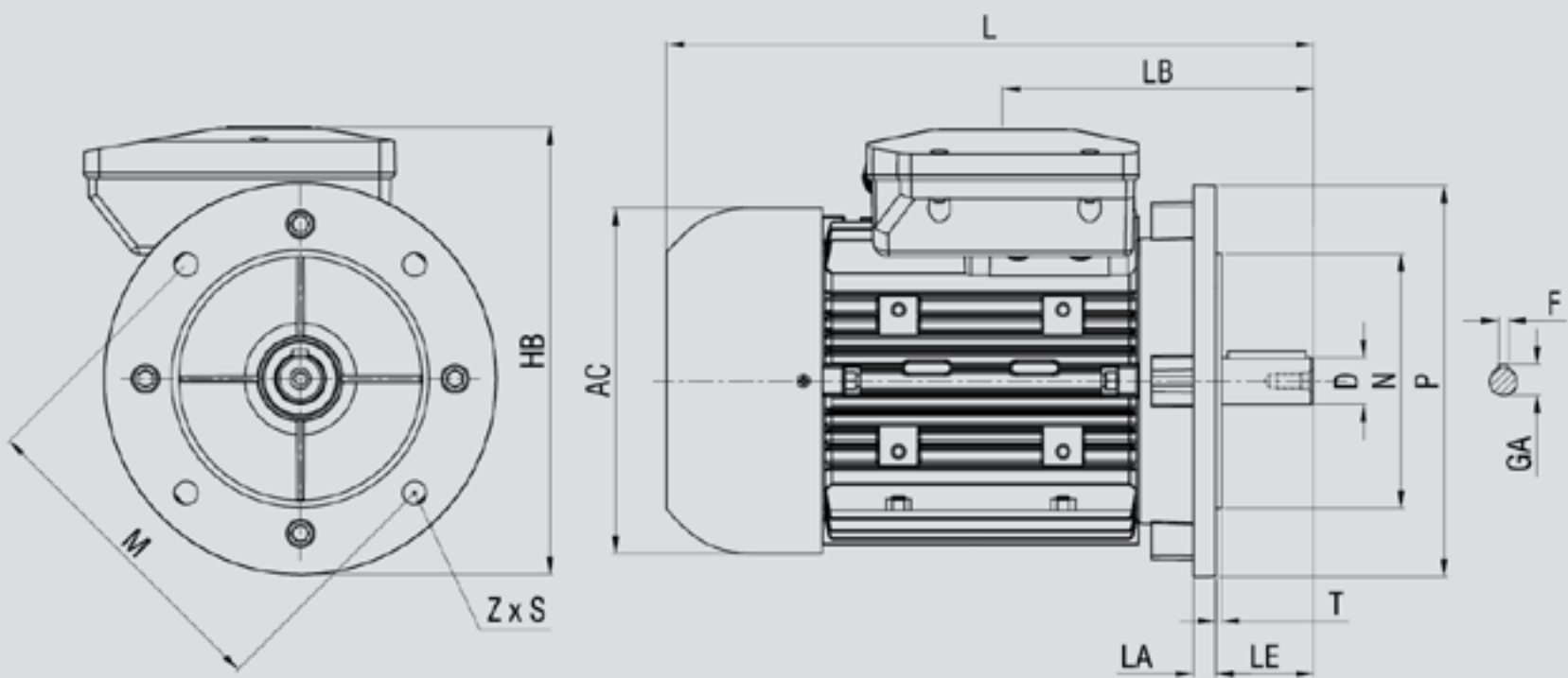
IEC Single-Phase Capacitor Run Motors

Flange-Mounted Motor, IMB5

Technical Data

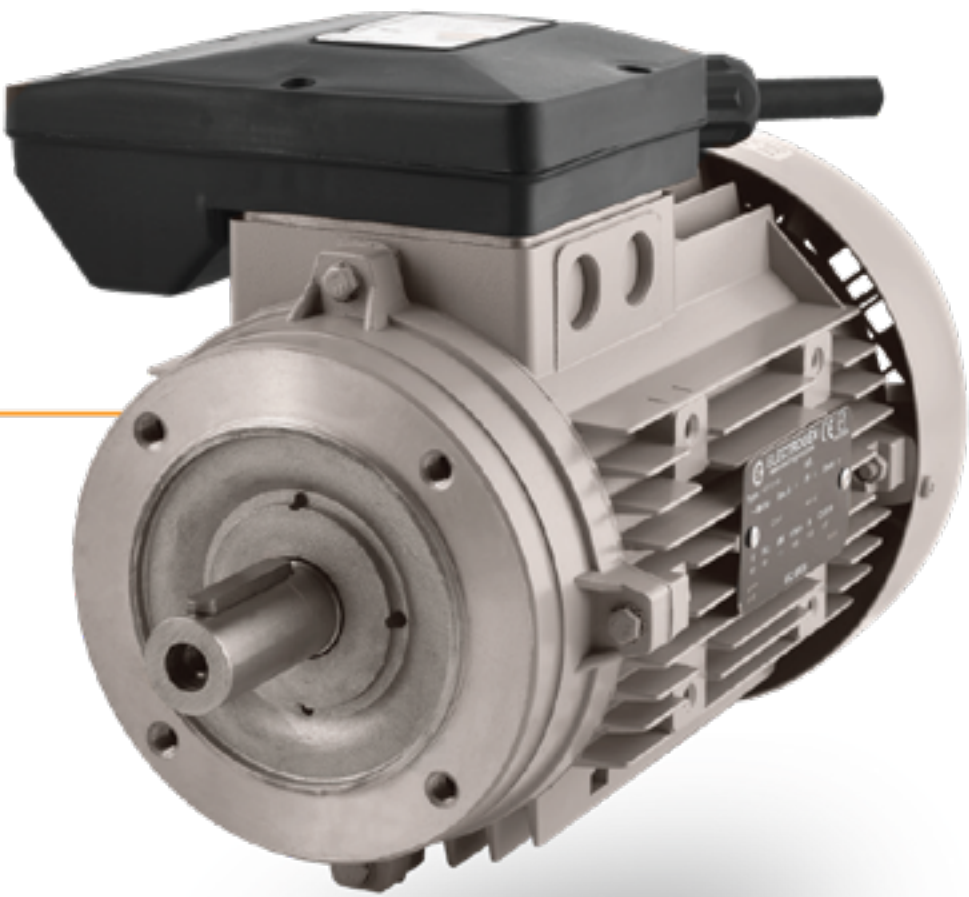
Frame Size	No. of Poles	Dimension drawing according to IEC															
		P	N	M	LA	T	D	LE	F	GA	AC	HB	Z	S	LB	L	
63	2-8	140	95	115	11	3	11	23	4	12.5	124	162	4	M8	91.5	208	
71		160	110	130	9	3.5	14	30	5	16	141	195			105	244	
80		200	130	165	11		19	40	6	21.5	159	230		M10	118	273	
90						24	50	8	27	176	269				133	327	
100		250	180	215	15	4	28					60		31	194	218	278
112									154	432							

Dimensions



IEC Single-Phase Capacitor Run Motors

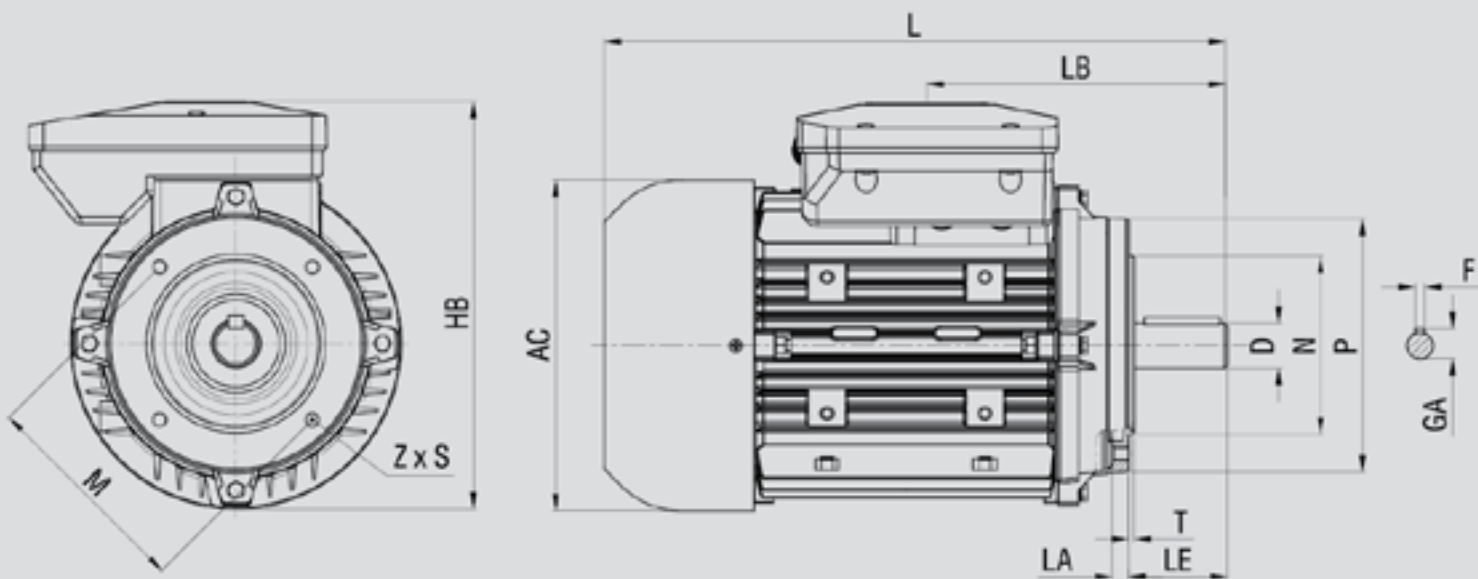
Flange-Mounted Motor, IMB14



Technical Data

Frame Size	No. of Poles	Dimension drawing according to IEC															
		P	N	M	LA	T	D	LE	F	GA	AC	HB	Z	S	LB	L	
63	2-8	90	60	75	9.5	2.5	11	23	4	12.5	124	155	4	M6	91.5	208	
71		106	70	85		3	14	30	5	16	141	186			105	244	
80		119	80	100	9		19	40	6	21.5	159	209			118	273	
90		135	95	115			24	50	8	27	176	217		M8	133	327	
100		160	110	130	16.5	3.5	28	60		31	194	242			148	402	
112											218	265			154	432	

Dimensions



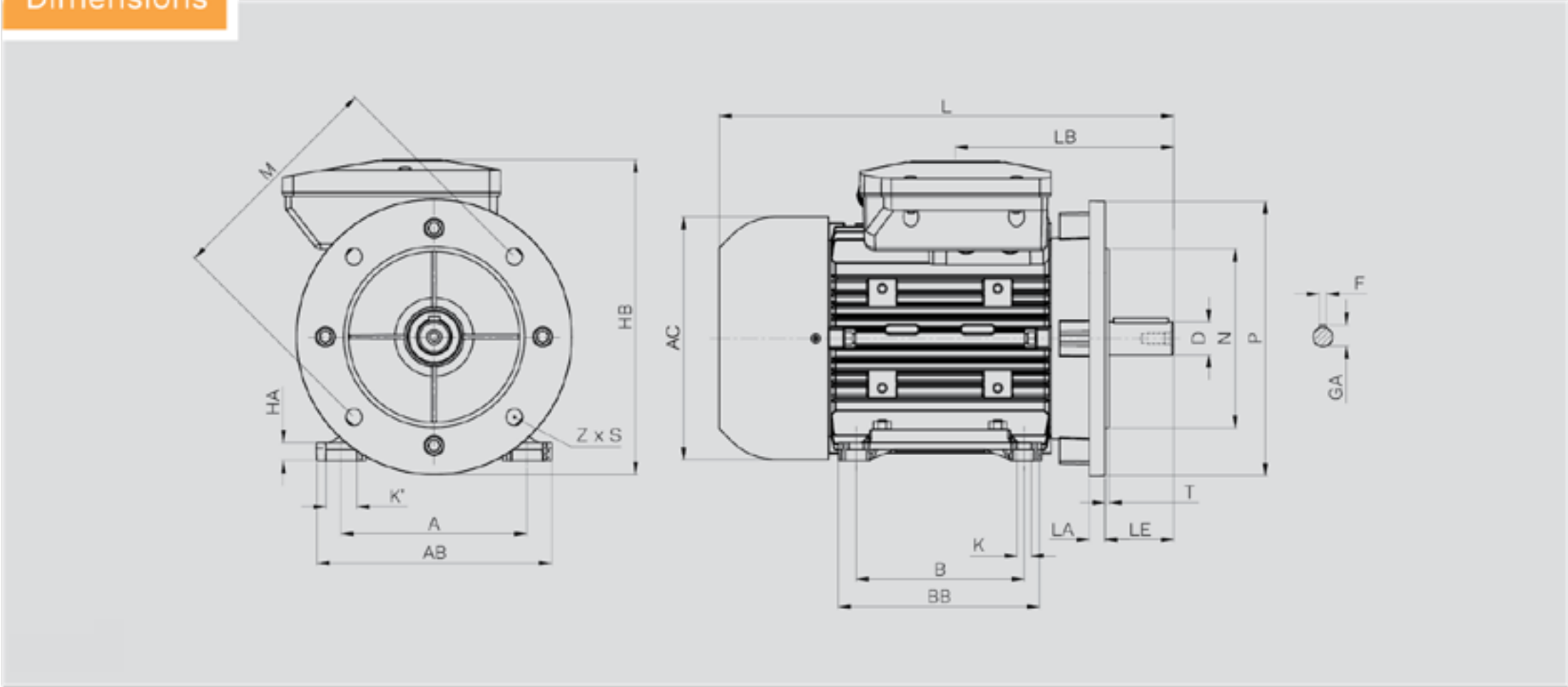


IEC Single-Phase Capacitor Run Motors
Foot and Flange-Mounted Motor, IMB35

Technical Data

Frame Size	No. of Poles	Dimension drawing according to IEC																					
		P	N	M	LA	T	D	LE	F	GA	AC	HB	Z	S	LB	L	A	B	K	K'	HA	BB	AB
63	2-8	140	95	115	11	3	11	23	4	12.5	124	162	4	M8	91.5	208	100	80	M6	12	7	101	120
71		160	110	130	9	3.5	14	30	5	16	141	195			105	244	112	90		12	11	108	136
80		200	130	165	11		19	40	6	21.5	159	229		M10	118	273	125	125	M8	16.5	12	125	150
90		200					24	50	8	27	176	230			133	327	140			17.5	15	155	174
100		250	180	215	15	4	28	60		31	194	269		M12	148	402	160	140	M10	21	16	175	193
112		250									218	278			154	432	190	140		22		176	233

Dimensions



IEC Single-Phase Capacitor Run Motors

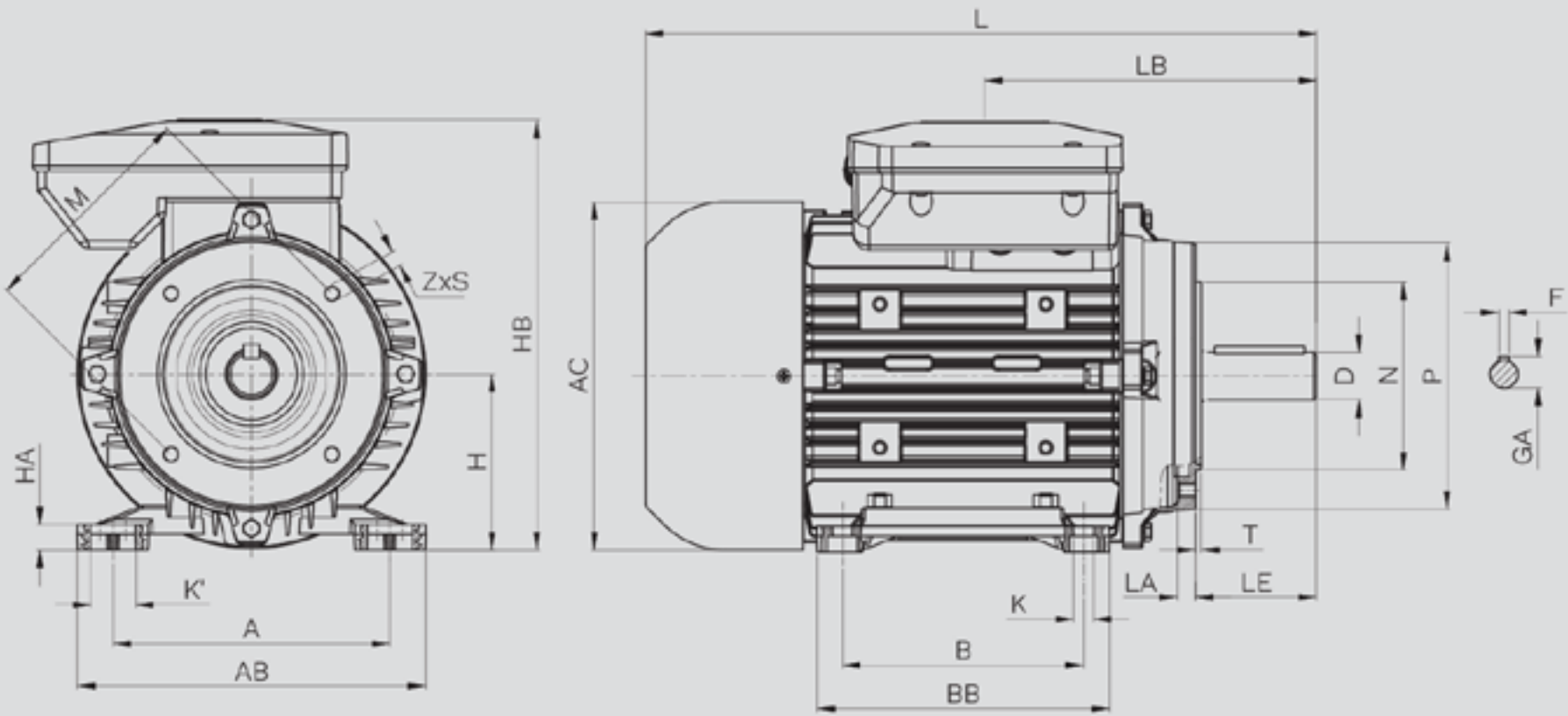
Foot and Flange-Mounted Motor, IMB34



Technical Data

Frame Size	No. of Poles	Dimension drawing according to IEC																					
		P	N	M	LA	T	D	LE	F	GA	AC	HB	Z	S	LB	L	B	A	K	K'	HA	BB	AB
63	2-8	90	60	75	9.5	2.5	11	23	4	12.5	124	155	4	M6	91.5	208	80	100	M6	12	7	101	120
71		106	70	85		3	14	30	5	16	141	186			105	244	90	112		11	108	136	
80		119	80	100	9		19	40	6	21.5	159	209			118	273	100	125	M8	16.5	12	125	150
90		135	95	115			24	50	8	27	176	219		133	327	125	140	17.5		15	155	174	
100		160	110	130			28	60		31	194	244		M8	148	402	140	160	M10	21	16	175	193
112											218	265			154	432		190		22		176	233

Dimensions



IEC Single-Phase Capacitor Run & Start Motors

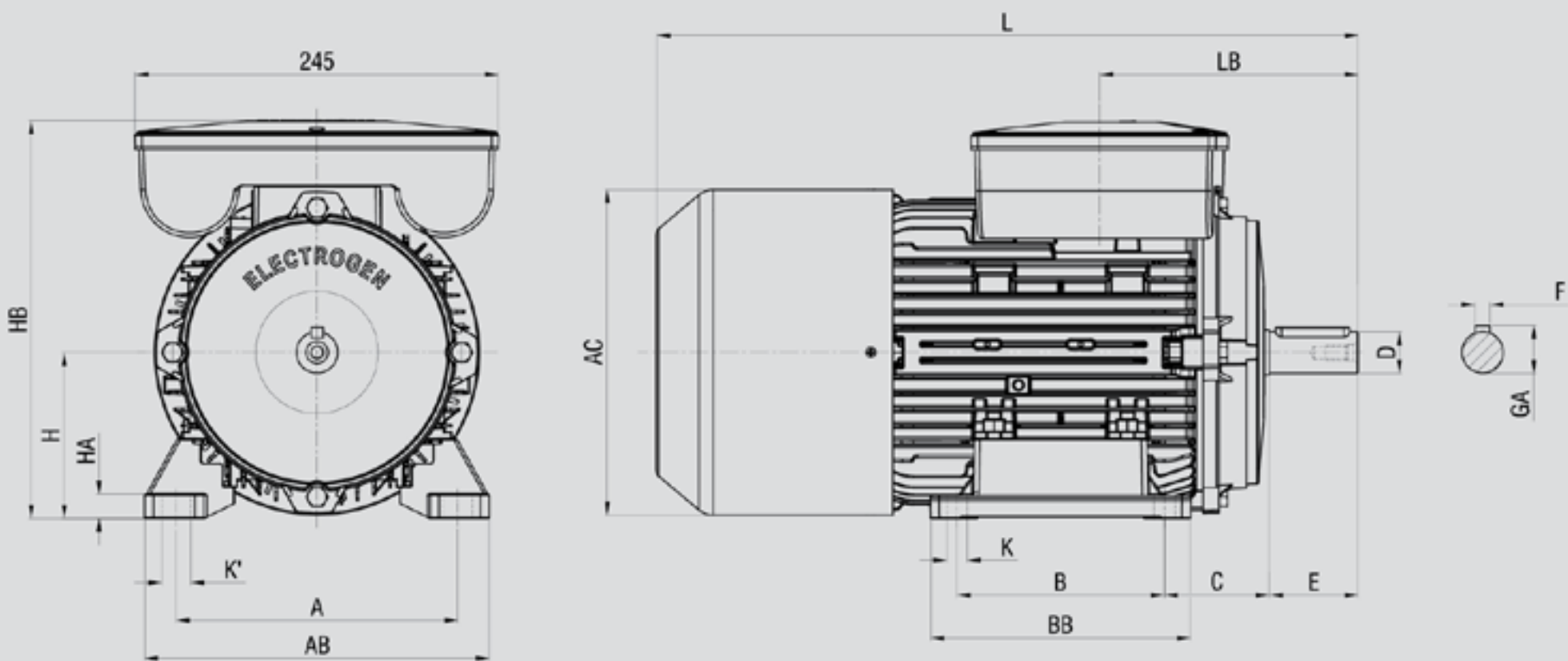
Foot-Mounted Motor, IMB3



Technical Data

Frame Size	No. of Poles	Dimension drawing according to IEC																
		H	B	A	C	K	K'	D	E	F	GA	HA	BB	AB	AC	HB	LB	L
90	2-4	90	125	140	57	M8	17.5	24	50	8	27	15	155	174	176	226	155	365
100		100	140	160	63	M10	21	28	60		31	16	175	193	195	247	170	437
112		112	140	190	70		22				176	233	220	265	157	474		

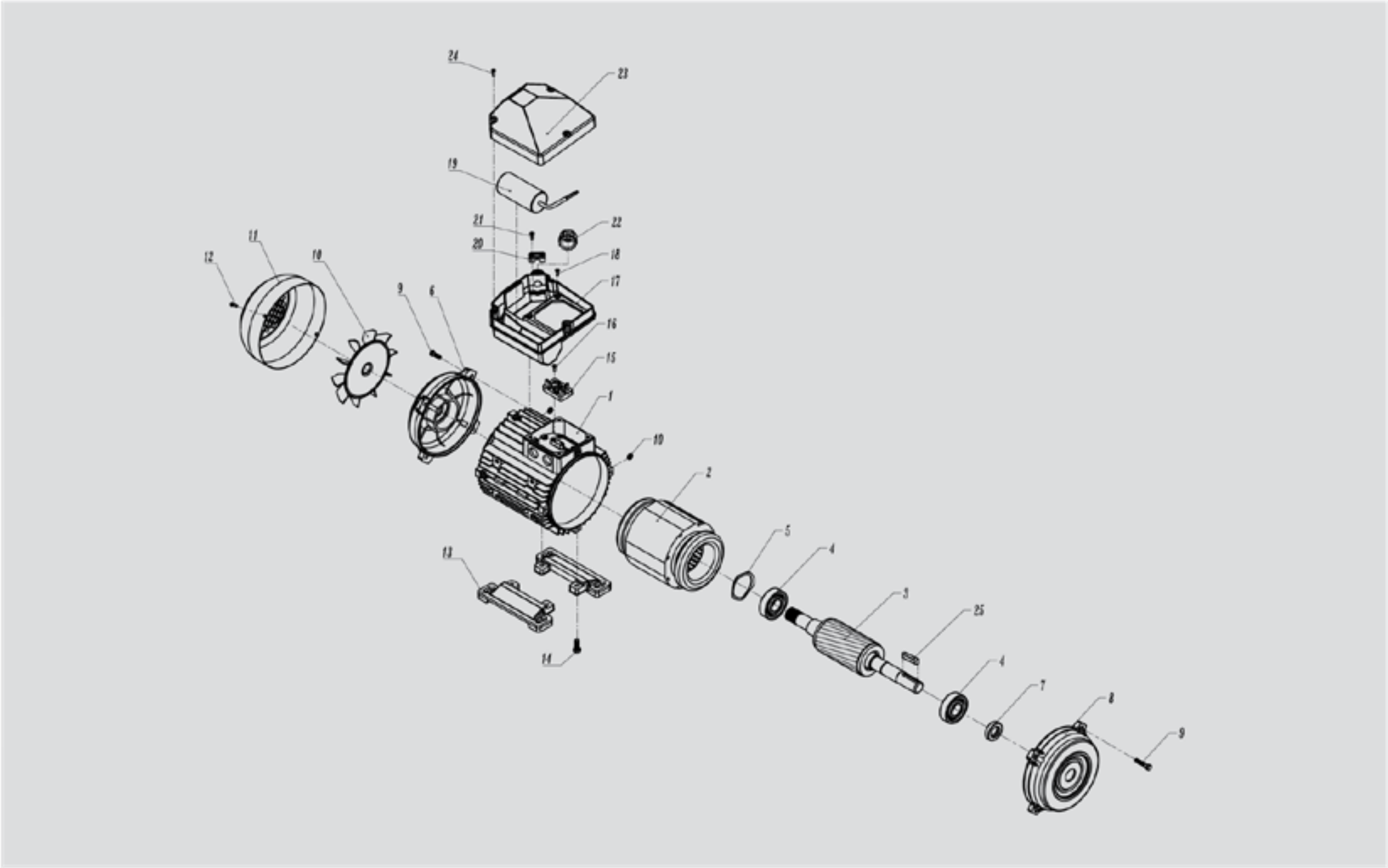
Dimensions



IEC Single-Phase Capacitor Run Motors

Spare Parts

Part No.	Designation	Part No.	Designation
1	Frame	14	Screw
2	Stator	15	Terminal Board
3	Rotor	16	Screw
4	Ball Bearing	17	Terminal Box
5	Wave Spring	18	Screw
6	Endshield, ND-end	19	Capacitor
7	V-ring	20	Cable Clip
8	Endshield, D-end	21	Screw
9	Screw	22	Terminal Box Nut
10	Fan	23	Terminal Box Cover
11	Fan Cover	24	Screw
12	Screw	25	Shaft Key
13	Frame Feet	26	



IEC Single-Phase Capacitor Run & Start Motors

Spare Parts

Part No.	Designation	Part No.	Designation	Part No.	Designation
1	Frame	17	Screw	33	Capacitor Box Cover
2	Stator	18	Centrifugal Switch (CS)	34	Thermal Insulator
3	Rotor	19	Screw	35	Run Capacitor
4	Ball Bearing	20	CS Plastic Cover	36	Start Capacitor
5	Wave Spring	21	Screw	37	Screw
6	Lip Seal	22	Fan	38	Shaft Key
7	Endshield,D-end	23	CirClip	39	O-ring
8	Endshield,ND-end	24	Fan Cover	40	Washer
9	Gland	25	Screw	41	Washer
10	Nut	26	Terminal Board	42	Resistor
11	Washer	27	Screw	43	Gland O-ring
12	Screw	28	Sealant Rubber	44	Eye-Bolt
13	Frame Foot(Left)	29	Capacitor Box		
14	Frame Foot(Right)	30	Sealant Foam		
15	Screw	31	Gland		
16	Switch Contact	32	Screw		

