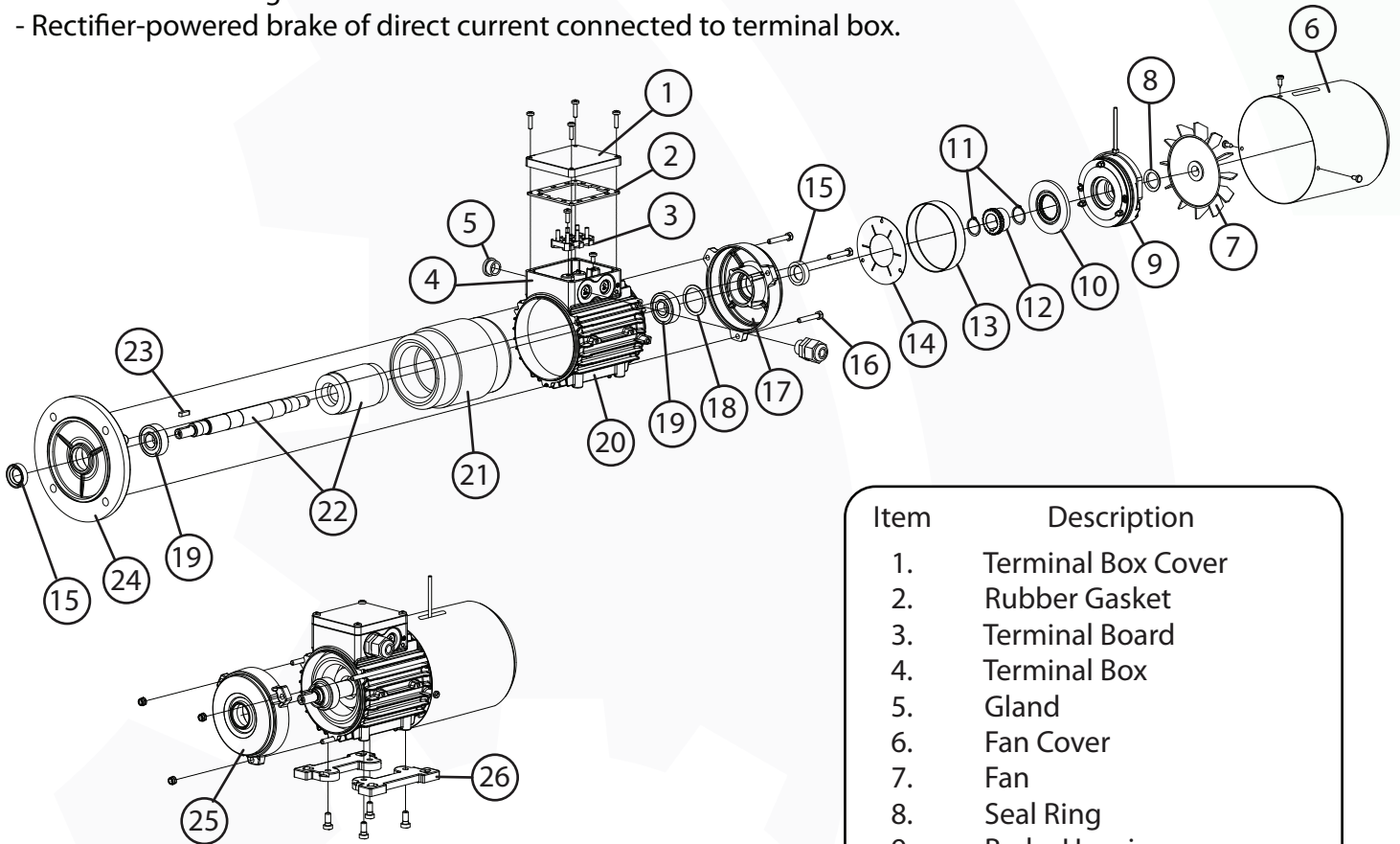


## FMB Series - Three Phase Motors with DC Brake

- Duty: S1
- Rated voltage: 230V, 380V, 400V, 690V ( $\Delta/Y$ )
- Frequency: 50/60 Hz
- Ambient temperature: from  $-15^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$
- Mounting height: up to 1000 m above sea level
- Insulation class: F
- Degree of protection IP 55
- Terminal box with glands and terminal board with 6 terminals.
- Rectifier-powered brake of direct current connected to terminal box.

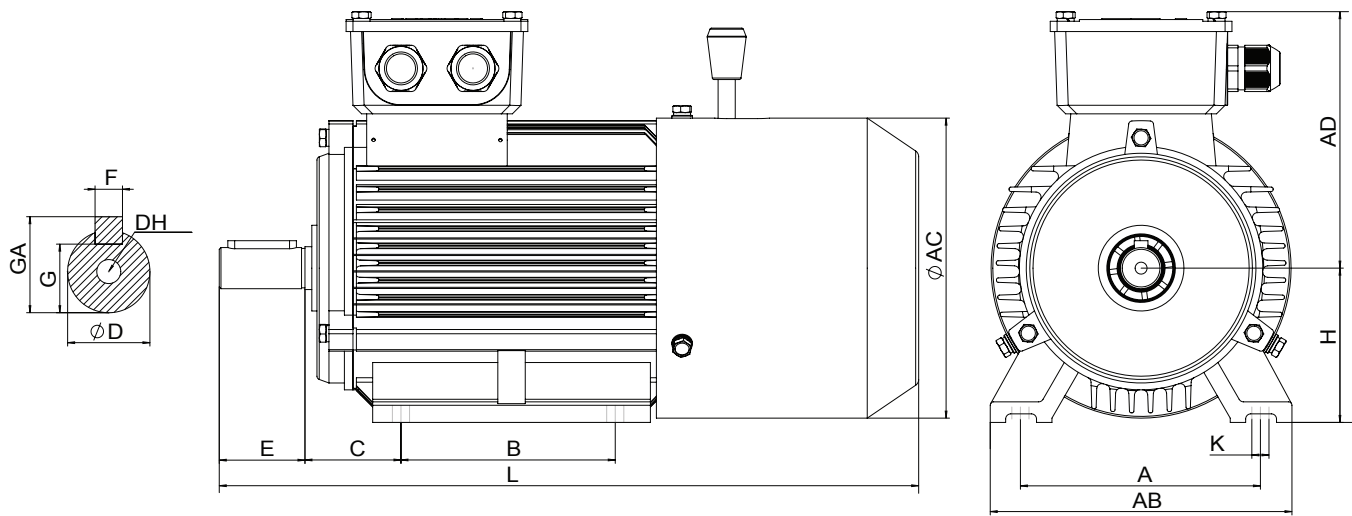


Item	Description
1.	Terminal Box Cover
2.	Rubber Gasket
3.	Terminal Board
4.	Terminal Box
5.	Gland
6.	Fan Cover
7.	Fan
8.	Seal Ring
9.	Brake Housing
10.	Brake Disc
11.	Stop Ring
12.	Brake Hub
13.	Cap Kit
14.	Stainless Steel Disc
15.	Shaft Seal
16.	Tie Rod
17.	NDE Shield
18.	Spring Washer
19.	Bearing
20.	Housing
21.	Stator
22.	Rotor
23.	Key
24.	Flange End Shield
25.	DE Shield
26.	Feet

# FMB Series - Electromagnetic brake motors

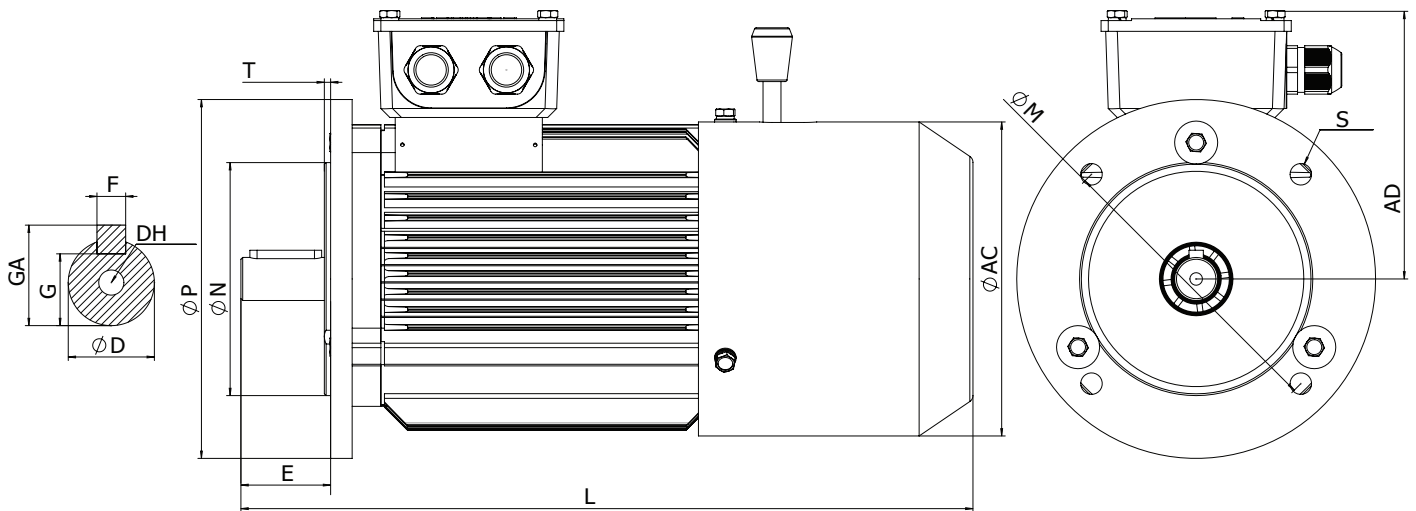
Item	Type	Rated Output		Rated Speed	Rated Torque	Efficiency	Power factor	Full Load Current			Locked Rotor Torque	Breakdown Torque	Locked Rotor Current	Moment of inertia	Braking Torque	Weight
		P <sub>N</sub>		n <sub>N</sub>	T <sub>N</sub>	η <sub>N</sub> [%] at % of full load	cos φ <sub>N</sub>	I <sub>N</sub> at rated voltage			T <sub>L</sub> /T <sub>N</sub>	T <sub>B</sub> /T <sub>N</sub>	I <sub>L</sub> /I <sub>N</sub>	J	-	m
		[kW]	[HP]	[min <sup>-1</sup> ]	[Nm]	100%	[-]	[A]230V	[A]380V	[A]400V	[-]	[-]	[-]	[kgm <sup>2</sup> x 10 <sup>-3</sup> ]	[Nm]	[kg]
<b>2p=2 n<sub>s</sub>=3000 rpm</b>																
1	FMB63-2A	0.18	0.25	2720	0.63	65.0	0.80	0.85	0.53	0.49	2.3	2.3	5.5	0.31	1.96	5.2
2	FMB63-2B	0.25	0.33	2720	0.88	68.0	0.81	1.09	0.69	0.63	2.3	2.3	5.5	0.6	1.96	5.4
3	FMB71-2A	0.37	0.5	2755	1.28	69.0	0.81	1.59	1.01	0.92	2.2	2.3	6.1	0.75	3.92	7.8
4	FMB71-2B	0.55	0.75	2790	1.88	74.0	0.82	2.18	1.38	1.26	2.3	2.3	6.1	0.9	3.92	8.1
5	FMB80-2A	0.75	1	2845	2.52	75.0	0.83	2.77	1.77	1.60	2.3	2.2	6.1	1.2	7.36	12.7
6	FMB80-2B	1.1	1.5	2835	3.71	76.2	0.84	3.88	2.61	2.24	2.3	2.2	6.9	1.4	7.36	13.7
7	FMB90S-2	1.5	2	2850	5.03	78.5	0.84	5.46	3.46	3.15	2.3	2.2	7.0	2.9	14.7	16.5
8	FMB90L-2	2.2	3	2855	7.36	81.0	0.85	7.62	4.85	4.40	2.3	2.2	7.0	5.5	14.7	17.5
9	FMB100L-2	3	4	2860	10.02	82.6	0.87	9.99	6.34	5.77	2.3	2.2	7.5	10.9	29.4	28.5
10	FMB112M-2	4	5.5	2880	13.26	84.2	0.88	-	8.20	7.46	2.3	2.2	7.5	12.6	39.2	34.2
11	FMB132S-2A	5.5	7.5	2900	18.11	86.2	0.88	-	11.10	10.53	2.2	2.2	7.0	10.9	73.60	66.5
12	FMB132S-2B	7.5	10	2900	24.70	86.2	0.88	-	14.90	14.10	2.2	2.2	7.0	12.6	73.60	69.5
13	FMB160M-2A	11	15	2930	35.85	87.2	0.88	-	21.20	20.20	2.2	2.2	7.0	37.7	147.20	123
14	FMB160M-2B	15	20	2930	48.89	88.2	0.88	-	28.60	27.20	2.2	2.2	7.0	49.9	147.20	130
15	FMB160L-2	18.5	25	2930	60.30	89.0	0.89	-	34.70	33.00	2.2	2.2	7.0	55	147.20	149
16	FMB180M-2	22	30	2940	71.46	89.0	0.89	-	41.00	39.00	2.2	2.2	7.0	75	215.80	192
17	FMB200L-2A	30	40	2950	97.12	90.0	0.89	-	55.40	52.60	2.2	2.2	7.0	124	294.30	266
18	FMB200L-2B	37	50	2950	119.78	90.5	0.89	-	67.90	64.50	2.2	2.2	7.0	139	294.30	278
19	FMB225M-2	45	60	2970	144.70	91.5	0.89	-	82.10	78.00	2.2	2.2	7.0	233	441.50	345
<b>2p=4 n<sub>s</sub>=1500 rpm</b>																
20	FMB63-4A	0.12	0.16	1310	0.87	57.0	0.72	0.73	0.44	0.42	2.2	2.1	4.4	0.5	1.96	5.2
21	FMB63-4B	0.18	0.25	1310	1.31	60.0	0.73	1.02	0.62	0.59	2.2	2.1	4.4	0.6	1.96	5.4
22	FMB71-4A	0.25	0.33	1340	1.78	65.0	0.74	1.30	0.79	0.75	2.2	2.1	5.2	0.8	3.92	7.8
23	FMB71-4B	0.37	0.5	1340	2.64	67.0	0.75	1.91	1.12	1.10	2.2	2.1	5.2	1.3	3.92	8.1
24	FMB80-4A	0.55	0.75	1390	3.78	71.0	0.75	2.49	1.52	1.44	2.3	2.4	5.2	1.8	7.36	12.7
25	FMB80-4B	0.75	1	1390	5.15	73.0	0.76	3.20	1.95	1.85	2.3	2.3	6.0	2.1	7.36	13.7
26	FMB90S-4	1.1	1.5	1390	7.56	76.2	0.77	4.68	2.85	2.70	2.3	2.3	6.0	2.3	14.7	15.5
27	FMB90L-4	1.5	2	1400	10.23	78.5	0.78	6.11	3.72	3.53	2.3	2.3	6.0	2.7	14.7	17.5
28	FMB100L-4A	2.2	3	1420	14.80	81.0	0.81	8.37	5.09	4.83	2.3	2.3	7.0	5.4	29.4	27.5
29	FMB100L-4B	3	4	1420	20.18	82.6	0.82	11.08	6.78	6.40	2.3	2.3	7.0	6.7	29.4	29.5
30	FMB112M-4	4	5.5	1435	26.62	84.2	0.82	-	8.80	8.36	2.3	2.3	7.0	9.5	39.2	35.2
31	FMB132S-4	5.5	7.5	1440	36.48	85.5	0.84	-	11.70	11.20	2.2	2.2	7.0	21.4	73.6	72.5
32	FMB132M-4	7.5	10	1440	49.74	87.0	0.85	-	15.60	14.80	2.2	2.2	7.0	29.6	73.6	81
33	FMB160M-4	11	15	1460	71.95	88.0	0.84	-	22.50	21.40	2.2	2.2	7.0	74.7	147.2	126
34	FMB160L-4	15	20	1460	98.12	88.5	0.85	-	30.00	28.50	2.2	2.2	7.0	91.8	147.2	145
35	FMB180M-4	18.5	25	1470	120.19	91.0	0.86	-	36.30	34.50	2.2	2.2	7.0	139	215.8	187
36	FMB180L-4	22	30	1470	142.93	91.5	0.86	-	43.20	40.80	2.2	2.2	7.0	158	215.8	205
37	FMB200L-4	30	40	1470	194.90	92.5	0.87	-	57.60	55.10	2.2	2.2	7.0	262	294.3	276
38	FMB225S-4	37	50	1480	238.75	91.8	0.87	-	70.20	66.70	2.2	2.2	7.0	406	414.5	343
39	FMB225M-4	45	60	1480	290.37	92.3	0.88	-	84.90	80.70	2.2	2.2	7.0	469	441.5	368
<b>2p=6 n<sub>s</sub>=1000 rpm</b>																
40	FMB71-6A	0.18	0.25	870	1.98	56	0.66	1.21	0.74	0.7	2	1.9	4	1.1	3.92	7.8
41	FMB71-6B	0.25	0.33	870	2.74	59	0.68	1.56	0.95	0.9	2	1.9	4	1.4	3.92	8.1
42	FMB80-6A	0.37	0.5	880	4.02	62	0.7	2.03	1.23	1.17	2	1.9	4.7	1.6	7.36	12.7
43	FMB80-6B	0.55	0.75	880	5.97	65	0.72	2.77	1.7	1.6	2.1	1.9	4.7	1.9	7.36	13.7
44	FMB90S-6	0.75	1	905	7.91	69	0.72	3.78	2.29	2.18	2.1	2	5.3	2.9	14.7	16.5
45	FMB90L-6	1.1	1.5	905	11.61	72	0.73	5.23	3.18	3.02	2.1	2	5.5	3.5	14.7	17.5
46	FMB100L-6	1.5	2	920	15.57	76	0.76	6.58	4	3.8	2.1	2	5.5	6.9	29.4	27.5
47	FMB112M-6	2.2	3	935	22.47	79	0.76	9.21	5.6	5.32	2.1	2	6.5	14	39.2	34.2
48	FMB132S-6	3	4	960	29.84	83.0	0.76	12.18	7.40	7.03	2.0	2.0	6.5	28.6	73.6	68
49	FMB132M-6A	4	5.5	960	39.79	84.0	0.77	-	9.75	9.26	2.0	2.0	6.5	35.7	73.6	75
50	FMB132M-6B	5.5	7.5	960	54.71	85.3	0.78	-	12.90	12.30	2.0	2.0	6.5	44.9	73.6	85.5
51	FMB160M-6	7.5	10	970	73.84	86.0	0.78	-	17.20	16.30	2.0	2.0	6.5	81	147.2	122
52	FMB160L-6	11	15	970	108.30	86.0	0.78	-	24.50	23.30	2.0	2.0	6.5	116	147.2	138
53	FMB180L-6	15	20	970	147.68	89.5	0.81	-	31.60	30.00	1.8	2.0	6.5	207	215.8	194
54	FMB200L-6A	18.5	25	970	182.14	89.8	0.83	-	38.60	36.60	1.8	2.0	6.5	315	294.2	284
55	FMB200L-6B	22	30	970	216.60	90.2	0.83	-	44.70	42.50	1.8	2.0	6.5	360	294.3	295
56	FMB225M-6	30	40	980	292.35	90.2	0.85	-	59.30	56.30	1.8	2.0	6.5	547	441.5	342

## FMB Series B3 dimension



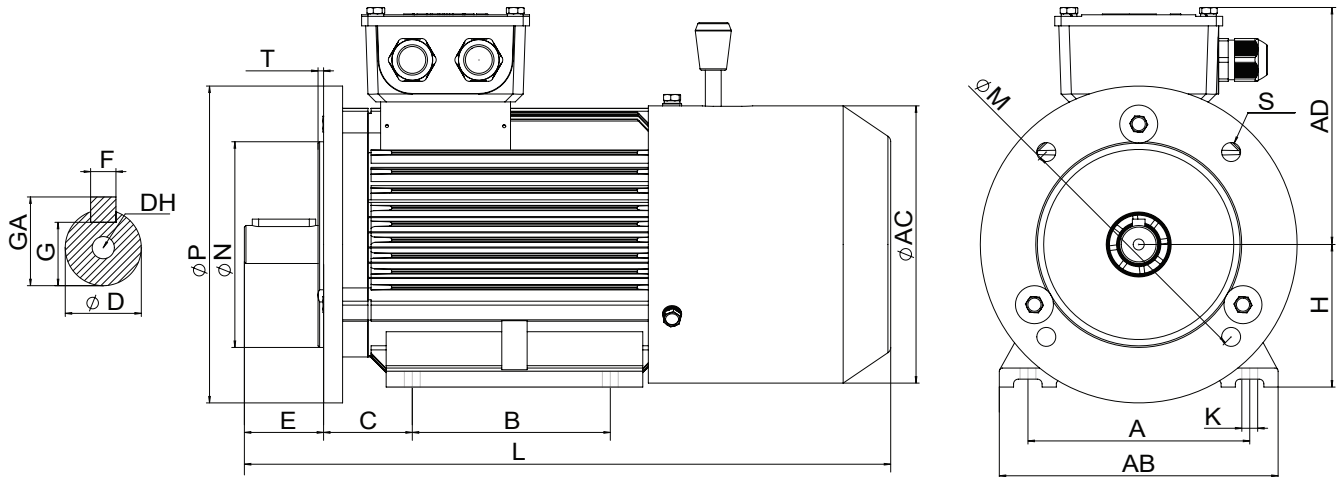
Frame size	A	B	C	D	E	F	G	GA	H	K	AB	AC	AD	L	DH
FMB 63-..	100	80	40	11	23	4	8.5	12.5	63	7	137	123	111	271	M4X12
FMB 71-..	112	90	45	14	30	5	11	16	71	7	133	137	127	305	M5X12
FMB 80-..	125	100	50	19	40	6	15.5	21.5	80	10	165	155	145	344	M6X16
FMB 90S-..	140	100	56	24	50	8	20	28	90	10	180	175	155	386	M8X19
FMB 90L-..	140	125	56	24	50	8	20	28	90	10	180	175	155	408	M8X19
FMB 100L-..	160	140	63	28	60	8	24	32	100	12	205	196	180	444	M10X22
FMB 112M-..	190	140	70	28	60	8	24	32	112	12	230	220	190	470	M10X22
FMB 132S-..	216	140	89	38	80	10	33	43	132	12	270	259	210	584	M12X28
FMB 132M-..	216	178	89	38	80	10	33	43	132	12	270	259	210	584	M12X28
FMB 160M-..	254	210	108	42	110	12	37	45	160	15	320	315	255	710	M16X36
FMB 160L-..	254	254	108	42	110	12	37	45	160	15	320	315	255	755	M16X36
FMB 180M-..	279	241	121	48	110	14	42.5	51.5	180	15	355	355	280	803	M16X36
FMB 180L-..	279	279	121	48	110	14	42.5	51.5	180	15	355	355	280	839	M16X36
FMB 200L-..	318	305	133	55	110	16	49	59	200	19	395	397	305	876	M20X42
FMB 225S-..	356	286	149	60	140	18	53	68	225	19	435	445	335	942	M20X42
FMB 225M-2	356	311	149	55	110	16	49	59	225	19	435	445	335	937	M20X42
FMB 225M-..	356	311	149	60	140	18	53	68	225	19	435	445	335	967	M20X42

## FMB Series B5 dimension



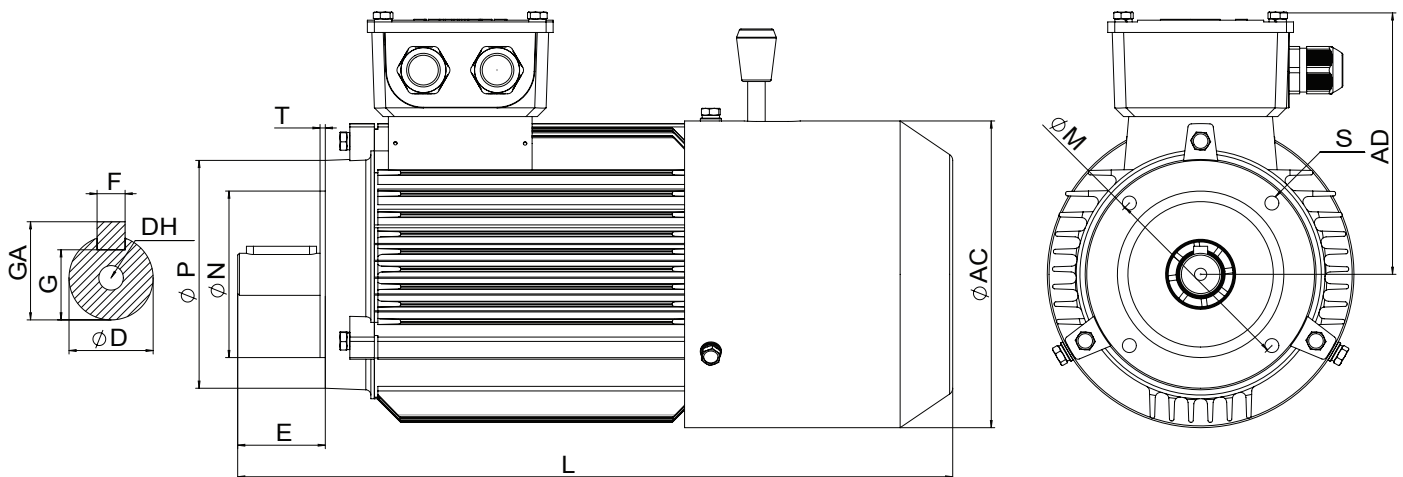
Frame size	D	E	F	G	GA	M	N	P	S	T	Flange Holes	AC	AD	L	DH
FMB 63-..	11	23	4	8.5	12.5	115	95	140	10	3	4	123	111	271	M4X12
FMB 71-..	14	30	5	11	16	130	110	160	10	3.5	4	137	127	305	M5X12
FMB 80-..	19	40	6	15.5	21.5	165	130	200	12	3.5	4	155	145	344	M6X16
FMB 90S-..	24	50	8	20	28	165	130	200	12	3.5	4	175	155	386	M8X19
FMB 90L-..	24	50	8	20	28	165	130	200	12	3.5	4	175	155	408	M8X19
FMB 100L-..	28	60	8	24	32	215	180	250	15	4	4	196	180	444	M10X22
FMB 112M-..	28	60	8	24	32	215	180	250	15	4	4	220	190	470	M10X22
FMB 132S-..	38	80	10	33	43	265	230	300	15	4	4	259	210	584	M12X28
FMB 132M-..	38	80	10	33	43	265	230	300	15	4	4	259	210	584	M12X28
FMB 160M-..	42	110	12	37	45	300	250	350	19	5	4	315	255	710	M16X36
FMB 160L-..	42	110	12	37	45	300	250	350	19	5	4	315	255	755	M16X36
FMB 180M-..	48	110	14	42.5	51.5	300	250	350	19	5	4	355	280	803	M16X36
FMB 180L-..	48	110	14	42.5	51.5	300	250	350	19	5	4	355	280	839	M16X36
FMB 200L-..	55	110	16	49	59	350	300	400	19	5	4	397	305	876	M20X42
FMB 225S-..	60	140	18	53	68	400	350	450	19	5	8	445	335	942	M20X42
FMB 225M-2	55	110	16	49	59	400	350	450	19	5	8	445	335	937	M20X42
FMB 225M-..	60	140	18	53	68	400	350	450	19	5	8	445	335	967	M20X42

## FMB Series B35 dimension



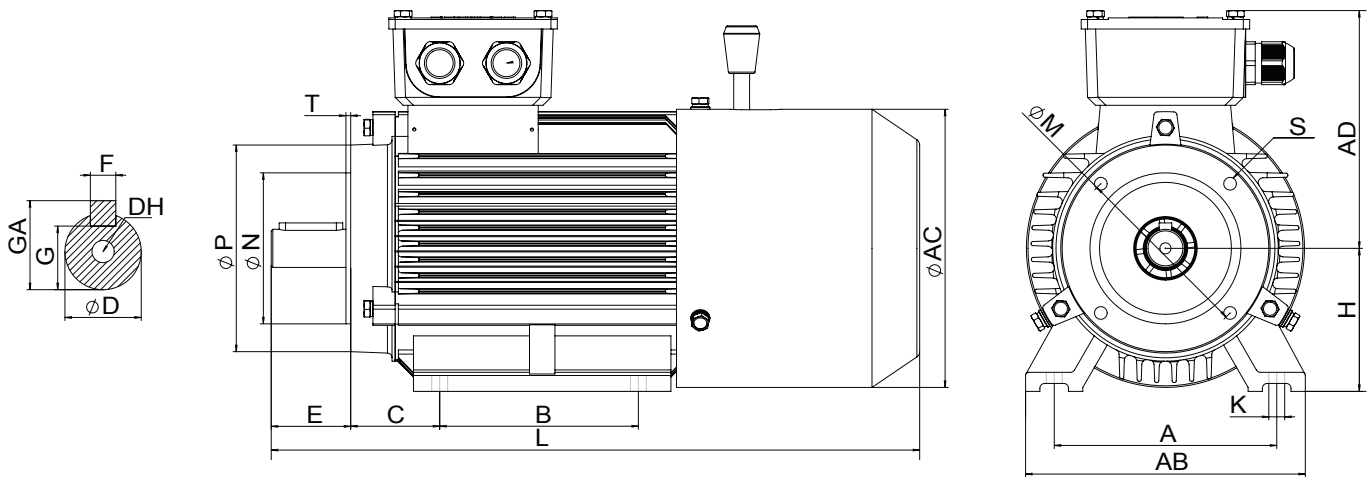
Frame size	A	B	C	D	E	F	G	GA	H	K	M	N	P	S	T	Flange Holes	AB	AC	AD	L	DH
FMB 63-..	100	80	40	11	23	4	8.5	12.5	63	7	115	95	140	10	3	4	137	123	111	271	M4X12
FMB 71-..	112	90	45	14	30	5	11	16	71	7	130	110	160	10	3.5	4	133	137	127	305	M5X12
FMB 80-..	125	100	50	19	40	6	15.5	21.5	80	10	165	130	200	12	3.5	4	165	155	145	344	M6X16
FMB 90S-..	140	100	56	24	50	8	20	28	90	10	165	130	200	12	3.5	4	180	175	155	386	M8X19
FMB 90L-..	140	125	56	24	50	8	20	28	90	10	165	130	200	12	3.5	4	180	175	155	408	M8X19
FMB 100L-..	160	140	63	28	60	8	24	32	100	12	215	180	250	15	4	4	205	196	180	444	M10X22
FMB 112M-..	190	140	70	28	60	8	24	32	112	12	215	180	250	15	4	4	230	220	190	470	M10X22
FMB 132S-..	216	140	89	38	80	10	33	43	132	12	265	230	300	15	4	4	270	259	210	584	M12X28
FMB 132M-..	216	178	89	38	80	10	33	43	132	12	265	230	300	15	4	4	270	259	210	584	M12X28
FMB 160M-..	254	210	108	42	110	12	37	45	160	15	300	250	350	19	5	4	320	315	255	710	M16X36
FMB 160L-..	254	254	108	42	110	12	37	45	160	15	300	250	350	19	5	4	320	315	255	755	M16X36
FMB 180M-..	279	241	121	48	110	14	42.5	51.5	180	15	300	250	350	19	5	4	355	355	280	803	M16X36
FMB 180L-..	279	279	121	48	110	14	42.5	51.5	180	15	300	250	350	19	5	4	355	355	280	839	M16X36
FMB 200L-..	318	305	133	55	110	16	49	59	200	19	350	300	400	19	5	4	395	397	305	876	M20X42
FMB 225S-..	356	286	149	60	140	18	53	68	225	19	400	350	450	19	5	8	435	445	335	942	M20X42
FMB 225M-2	356	311	149	55	110	16	49	59	225	19	400	350	450	19	5	8	435	445	335	937	M20X42
FMB 225M-..	356	311	149	60	140	18	53	68	225	19	400	350	450	19	5	8	435	445	335	967	M20X42

## FMB Series B14 dimension



Frame size	Flange	D	E	F	G	GA	M	N	P	S	T	Flange Holes	AC	AD	L	DH
FMB 63-..	B14/C1	11	23	4	8.5	12.5	100	80	120	M6	2.5	4	123	111	271	M4X12
FMB 63-..	B14/C2	11	23	4	8.5	12.5	75	60	90	M5	2.5	4	123	111	271	M4X12
FMB 71-..	B14/C1	14	30	5	11	16	115	95	140	M8	3	4	137	127	305	M5X12
FMB 71-..	B14/C2	14	30	5	11	16	85	70	105	M6	2.5	4	137	127	305	M5X12
FMB 80-..	B14/C1	19	40	6	15.5	21.5	130	110	160	M8	3.5	4	155	136	344	M6X16
FMB 80-..	B14/C2	19	40	6	15.5	21.5	100	80	120	M6	3	4	155	145	344	M6X16
FMB 90S-..	B14/C1	24	50	8	20	28	130	110	160	M8	3.5	4	175	155	386	M8X19
FMB 90S-..	B14/C2	24	50	8	20	28	115	95	140	M8	3	4	175	155	386	M8X19
FMB 90L-..	B14/C1	24	50	8	20	28	130	110	160	M8	3.5	4	175	155	408	M8X19
FMB 90L-..	B14/C2	24	50	8	20	28	115	95	140	M8	3	4	175	155	408	M8X19
FMB 100L-..	B14/C1	28	60	8	24	32	165	130	200	M10	3.5	4	196	180	444	M10X22
FMB 100L-..	B14/C2	28	60	8	24	32	130	110	160	M8	3.5	4	196	180	444	M10X22
FMB 112M-..	B14/C1	28	60	8	24	32	165	130	200	M10	3.5	4	220	190	470	M10X22
FMB 112M-..	B14/C2	28	60	8	24	32	130	110	160	M8	3.5	4	220	190	470	M10X22
FMB 132S-..	B14/C1	38	80	10	33	43	215	180	250	M12	4	4	259	210	584	M12X28
FMB 132S-..	B14/C2	38	80	10	33	43	165	130	200	M10	3.5	4	259	210	584	M12X28
FMB 132M-..	B14/C1	38	80	10	33	43	215	180	250	M12	4	4	259	210	584	M12X28
FMB 132M-..	B14/C2	38	80	10	33	43	165	130	200	M10	3.5	4	259	210	584	M12X28

# FMB Series B34 dimension



Frame size	Flange	A	B	C	D	E	F	G	GA	H	K	M	N	P	S	T	Flange Holes	AB	AC	AD	L	DH
FMB 63-..	B14/C1	100	80	40	11	23	4	8.5	12.5	63	7	100	80	120	M6	2.5	4	137	123	111	271	M4X12
FMB 63-..	B14/C2	100	80	40	11	23	4	8.5	12.5	63	7	75	60	90	M5	2.5	4	137	123	111	271	M4X12
FMB 71-..	B14/C1	112	90	45	14	30	5	11	16	71	7	115	95	140	M8	3	4	133	137	127	305	M5X12
FMB 71-..	B14/C2	112	90	45	14	30	5	11	16	71	7	85	70	105	M6	2.5	4	133	137	127	305	M5X12
FMB 80-..	B14/C1	125	100	50	19	40	6	15.5	21.5	80	10	130	110	160	M8	3.5	4	165	155	145	344	M6X16
FMB 80-..	B14/C2	125	100	50	19	40	6	15.5	21.5	80	10	100	80	120	M6	3	4	165	155	145	344	M6X16
FMB 90S-..	B14/C1	140	100	56	24	50	8	20	28	90	10	130	110	160	M8	3.5	4	180	175	155	386	M8X19
FMB 90S-..	B14/C2	140	100	56	24	50	8	20	28	90	10	115	95	140	M8	3	4	180	175	155	386	M8X19
FMB 90L-..	B14/C1	140	125	56	24	50	8	20	28	90	10	130	110	160	M8	3.5	4	180	175	155	408	M8X19
FMB 90L-..	B14/C2	140	125	56	24	50	8	20	28	90	10	115	95	140	M8	3	4	180	175	155	408	M8X19
FMB 100L-..	B14/C1	160	140	63	28	60	8	24	32	100	12	165	130	200	M10	3.5	4	205	196	180	444	M10X22
FMB 100L-..	B14/C2	160	140	63	28	60	8	24	32	100	12	130	110	160	M8	3.5	4	205	196	180	444	M10X22
FMB 112M-..	B14/C1	190	140	70	28	60	8	24	32	112	12	165	130	200	M10	3.5	4	230	220	190	470	M10X22
FMB 112M-..	B14/C2	190	140	70	28	60	8	24	32	112	12	130	110	160	M8	3.5	4	230	220	190	470	M10X22
FMB 132S-..	B14/C1	216	140	89	38	80	10	33	43	132	12	215	180	250	M12	4	4	270	259	210	584	M12X28
FMB 132S-..	B14/C2	216	140	89	38	80	10	33	43	132	12	165	130	200	M10	3.5	4	270	259	210	584	M12X28
FMB 132M-..	B14/C1	216	178	89	38	80	10	33	43	132	12	215	180	250	M12	4	4	270	259	210	584	M12X28
FMB 132M-..	B14/C2	216	178	89	38	80	10	33	43	132	12	165	130	200	M10	3.5	4	270	259	210	584	M12X28