



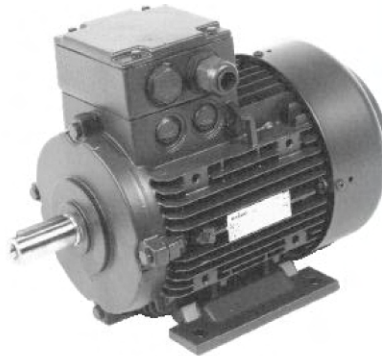
squirrel cage induction motors



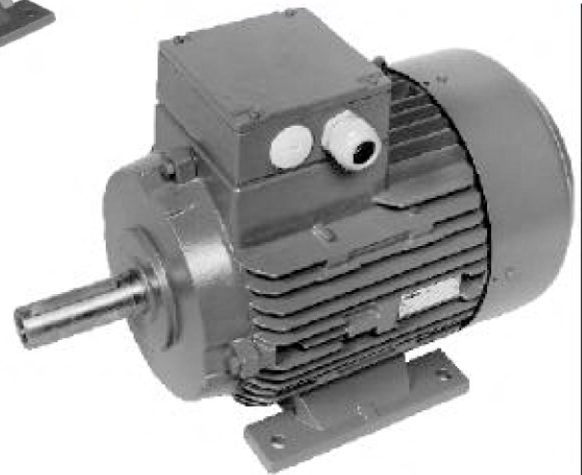
7AA63-80



7AA90



7AA100-160



7BA100-160

7AA56-160
THREE-PHASE MOTORS
ALUMINIUM FRAME

7BA100-160
THREE-PHASE MOTORS
CAST IRON FRAME

For larger frame sizes
please consult other
Exico Catalogues.

THREE-PHASE MOTORS



Standard Voltage: 400V±10% 50Hz (suitable for 480V 60Hz).
Larger frame sizes suitable for Star/Delta Starting.

Foot mounted motors, Flanges B3, B5, B14A, B14B, Foot & Flanged motors - all dimensions to IEC 72.

Protection: IP55 as standard

Insulation class: F

Temperature rise: B

Cooling: IC 0141 (TEFC) (56 frame is non-ventilated)

Ambient Temperature: -30°C to +40°C, Altitude up to 1000 metres above sea level

7AA - Aluminium frame

7BA - Cast iron frame

TYPE	Output kW	Speed rpm	Rated Current			Power Factor cosφ	Efficiency Class	Efficiency		Starting Current	Starting Torque	Breakdown Torque	Rated Torque Nm	Moment of Inertia kgm ²	Weight [kg]	
			380V A	400V A	415V A			100% Load	75% Load						Aluminium Frame	Cast Iron Frame
2 pole, synchronous speed 3000 rpm																
7AA56M02	0.12	2800	0.34	0.32	0.31	0.83	-	65%	64%	3.7	2.1	2.4	0.41	0.00015	3.5	N/A
7AA63M02K	0.18	2820	0.54	0.51	0.49	0.82	-	63%	62%	3.7	2	2.2	0.61	0.00018	4	N/A
7AA63M02	0.25	2830	0.72	0.68	0.66	0.82	-	65%	65%	4	2	2.2	0.84	0.00023	4.6	N/A
7AA71M02K	0.37	2740	1.05	1	0.96	0.82	-	66%	65%	3.5	2.3	2.3	1.3	0.00035	5.9	N/A
7AA71M02	0.55	2800	1.43	1.36	1.31	0.82	-	71%	70%	4.3	2.5	2.6	1.9	0.00045	7.5	N/A
7AA80M02K	0.75	2855	1.82	1.73	1.67	0.86	-	73%	72%	5.6	2.3	2.4	2.5	0.00085	8.9	N/A
7AA80M02	1.1	2845	2.53	2.4	2.31	0.87	eff2	77%	77%	6.1	2.6	2.7	3.7	0.0011	10.6	N/A
7AA90S02	1.5	2860	3.42	3.25	3.13	0.85	eff2	79%	80%	5.5	2.4	2.7	5	0.0015	14.1	N/A
7AA90L02	2.2	2880	4.79	4.55	4.39	0.85	eff2	82%	82%	6.3	2.8	3.1	7.3	0.0020	16.9	N/A
7AA or 7BA100L02	3	2890	6.42	6.1	5.88	0.85	eff2	84%	84%	6.8	2.8	3	9.9	0.0038	23.5	28
7AA or 7BA112M02	4	2905	8.21	7.8	7.52	0.86	eff2	86%	86%	7.2	2.6	2.9	13.1	0.0055	31	38
7AA or 7BA112M02V	5.5	2900	11.26	10.7	10.3	0.87	-	86%	86	7.5	2.6	3.4	18	0.0077	39	46
7AA or 7BA132S02K	5.5	2925	10.84	10.3	9.93	0.89	eff2	86.5%	86.5%	5.9	2	2.8	24.4	0.016	43	52
7AA or 7BA132S02	7.5	2930	14.53	13.8	13.3	0.89	eff2	88%	88%	6.9	2.3	3	24.5	0.021	51	60
7AA or 7BA132M02V	11	2900	22.11	21	20.2	0.88	-	86%	86%	7.5	2.6	3.6	36.22	0.026	61	70
7AA or 7BA160M02K	11	2915	22.32	21.2	20.4	0.85	eff2	90%	89.5%	6	1.9	2.8	36.04	0.034	71	92
7AA or 7BA160M02	15	2925	29.68	28.2	27.2	0.87	eff2	90%	90.2%	6.4	2.2	3.1	48.97	0.040	79	100
7AA or 7BA160L02	18.5	2935	36.21	34.4	33.2	0.85	eff2	91%	91.2%	7.1	2.6	3.4	60.2	0.052	89.5	111
4 pole, synchronous speed 1500 rpm																
7AA56M04	0.09	1350	0.31	0.29	0.28	0.77	-	58%	57%	2.6	1.9	1.9	0.63	0.00027	3.5	N/A
7AA63M04K	0.12	1350	0.44	0.42	0.41	0.75	-	55%	54%	2.8	1.9	2	0.84	0.0003	4	N/A
7AA63M04	0.18	1350	0.59	0.56	0.54	0.77	-	60%	60%	3	1.9	1.9	1.3	0.0004	4.6	N/A
7AA71M04K	0.25	1350	0.8	0.76	0.73	0.79	-	60%	60%	3	1.9	1.9	1.8	0.0006	5.7	N/A
7AA71M04	0.37	1370	1.08	1.03	0.99	0.8	-	65%	65%	3.3	1.9	2.1	2.5	0.0008	6.9	N/A
7AA80M04K	0.55	1395	1.53	1.45	1.4	0.82	-	67%	67%	3.9	2.2	2.2	3.7	0.0015	8.7	N/A
7AA80M04	0.75	1395	1.96	1.86	1.79	0.81	-	72%	72%	4.2	2.3	2.3	5.1	0.0018	10.1	N/A
7AA90S04	1.1	1415	2.68	2.55	2.46	0.81	eff2	77%	77%	4.6	2.3	2.4	7.4	0.0028	13.5	N/A
7AA90L04	1.5	1420	3.58	3.4	3.28	0.81	eff2	79%	79%	5.3	2.4	2.6	10.1	0.0035	16.8	N/A
7AA or 7BA100L04K	2.2	1420	4.95	4.7	4.53	0.82	eff2	82%	82.5%	5.6	2.5	2.8	14.8	0.0048	23.5	28
7AA or 7BA100L04	3	1420	6.74	6.4	6.17	0.82	eff2	83%	83.5%	5.6	2.7	3	20.2	0.0058	26.5	32
7AA or 7BA112M04	4	1440	8.63	8.2	7.9	0.83	eff2	85%	85.5%	6	2.7	3	26.5	0.011	33	40
7AA or 7BA112M04V	5.5	1435	7.79	7.4	7.13	0.77	-	81%	81%	6.5	3.3	3.4	36.6	0.014	39	46
7AA or 7BA132S04	5.5	1455	12	11.4	11.0	0.81	eff2	86%	86%	6.3	2.5	3.1	36.1	0.018	45	54
7AA or 7BA132M04	7.5	1455	16	15.2	14.6	0.82	eff2	87%	87.5%	6.7	2.7	3.2	49.2	0.024	51.5	61
7AA or 7BA160M04	11	1460	22.64	21.5	20.7	0.84	eff2	88.5%	89%	6.2	2.2	2.7	72	0.040	70.5	91.5
7AA or 7BA160L04	15	1460	30	28.5	27.5	0.84	eff2	90%	90.2%	6.5	2.6	3	98.1	0.052	96	117.5

Standard Data are based on continuous rating - S1

For vertical mounting (with shaft down) use of protective canopy is recommended

Available on request: PTC Thermistors, Anti-condensation Heaters, Increased Protection of IP56, Special Voltages, Epoxy Paint, Second Shaft End, etc.

Standard Voltage: 400V±10% 50Hz (suitable for 480V 60Hz).
Larger frame sizes suitable for Star/Delta Starting.

Foot mounted motors, Flanges B3, B5, B14A, B14B, Foot & Flanged motors - all dimensions to IEC 72.

Protection: IP55 as standard

Insulation class: F

Temperature rise: B

Cooling: IC 0141 (TEFC) (56 frame is non-ventilated)

Ambient Temperature: -30°C to +40°C, Altitude up to 1000 metres above sea level

7AA - Aluminium frame

7BA - Cast iron frame

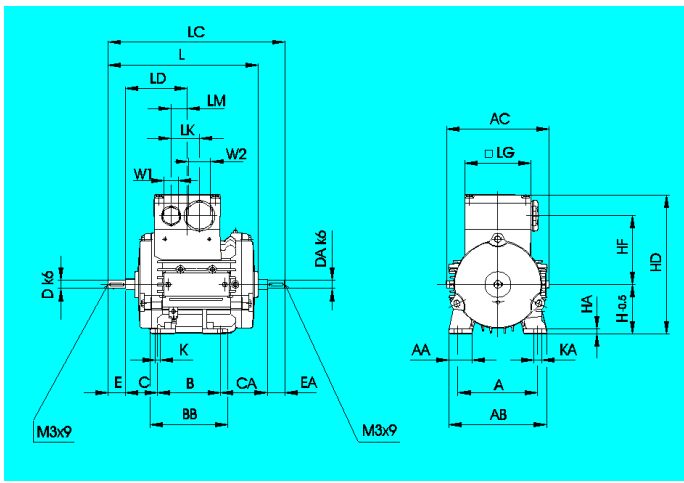
TYPE	Output kW	Speed rpm	Rated Current			Power Factor cosφ	Class	Efficiency		Starting Current	Ratio		Rated Torque Nm	Moment of Inertia kgm ²	Weight [kg]	
			380V A	400V A	415V A			100% Load	75% Load		Starting Torque	Breakdown Torque			Aluminium Frame	Cast Iron Frame
6 pole, synchronous speed 1000 rpm																
7AA63M06	0.12	860	0.56	0.53	0.51	0.65	-	50%	50%	2.2	1.8	1.9	1.33	0.0005	4.5	N/A
7AA71M06K	0.18	835	0.65	0.62	0.6	0.75	-	56%	55%	2.3	2.1	1.9	2.06	0.0006	5.7	N/A
7AA71M06	0.25	850	0.82	0.78	0.75	0.76	-	61%	60%	2.7	2.2	2	2.81	0.0009	6.7	N/A
7AA80M06K	0.37	920	1.26	1.2	1.16	0.72	-	62%	61%	3.1	1.9	2.1	3.84	0.0015	8.4	N/A
7AA80M06	0.55	910	1.68	1.6	1.54	0.74	-	67%	66%	3.4	2.1	2.2	5.77	0.0018	9.6	N/A
7AA90S06	0.75	915	2.21	2.1	2.02	0.76	-	56%	55%	3.7	2.2	2.2	7.83	0.0028	12.3	N/A
7AA90L06	1.1	915	3.05	2.9	2.8	0.77	-	72%	71%	3.8	2.3	2.3	11.48	0.0035	15.4	N/A
7AA or 7BA100L06	1.5	925	4.11	3.9	3.76	0.75	-	74%	73%	4.2	2.2	2.4	15.49	0.0063	24.5	29
7AA or 7BA112M06	2.2	940	5.47	5.2	5.01	0.78	-	78%	77%	4.6	2.2	2.5	22.35	0.011	28	35
7AA or 7BA112M06V	3	930	4.53	4.3	4.15	0.75	-	78%	77%	4.6	2.2	2.3	30.81	0.015	33	40
7AA or 7BA132S06	3	950	7.58	7.2	6.94	0.76	-	79%	78%	4.2	1.9	2.2	30.16	0.015	40	49
7AA or 7BA132S06V	4	950	9.9	9.4	9.06	0.76	-	80.5%	80%	4.5	2.1	2.4	40.21	0.019	47	56
7AA or 7BA132M06	5.5	950	13.47	12.8	12.3	0.76	-	83%	82%	5	2.3	2.6	55.29	0.025	54.5	64
7AA or 7BA160M06	7.5	960	17.9	17	16.4	0.74	-	86%	85%	4.6	2.1	2.5	74.61	0.041	76	97
7AA or 7BA160L06	11	960	25.79	24.5	23.6	0.74	-	87.5%	87%	4.8	2.3	2.6	109.43	0.049	96.5	118
8 pole, synchronous speed 750 rpm																
7AA71M08K	0.09	630	0.38	0.36	0.35	0.68	-	53%	53%	2.2	1.9	1.7	1.36	0.0009	6.5	N/A
7AA71M08	0.12	645	0.54	0.51	0.49	0.64	-	53%	53%	2.2	2.2	2	1.78	0.0009	6.6	N/A
7AA80M08K	0.18	675	0.79	0.75	0.72	0.68	-	51%	51%	2.3	1.7	1.9	2.55	0.0015	8.6	N/A
7AA80M08	0.25	680	1.08	1.03	0.99	0.64	-	55%	53%	2.6	2	2.2	3.51	0.0018	9.6	N/A
7AA90S08	0.37	675	1.19	1.13	1.09	0.75	-	63%	62%	2.9	1.6	1.8	5.24	0.0025	10.7	N/A
7AA90L08	0.55	675	1.66	1.58	1.52	0.76	-	66%	65%	3	1.7	1.9	7.78	0.0035	12.3	N/A
7AA90L08V	0.75	670	2.32	2.2	2.12	0.72	-	70%	69%	3.1	1.8	1.97	10.69	0.0050	15.5	N/A
7AA or 7BA100L08K	0.75	680	2.26	2.15	2.07	0.76	-	66%	65%	3	1.7	1.9	10.53	0.0053	20.5	26
7AA or 7BA100L08	1.1	680	3.05	2.9	2.8	0.76	-	72%	71%	3.4	1.9	2.1	15.45	0.007	23.5	30
7AA or 7BA112M08	1.5	705	4.11	3.9	3.76	0.76	-	74%	73%	3.7	1.8	2.1	20.32	0.013	26	33
7AA or 7BA112M08V	2.2	695	6.53	6.2	5.98	0.7	-	73%	72%	3.9	2.2	2.3	30.23	0.019	32	39
7AA or 7BA132S08	2.2	695	6	5.7	5.49	0.74	-	75%	74%	3.9	1.9	2.3	30.23	0.014	43	52
7AA or 7BA132S08V	3	690	8.58	8.15	7.86	0.69	-	77%	76%	3.7	2.1	2.4	41.52	0.019	40	49
7AA or 7BA132M08V	4	690	12.11	11.5	11.1	0.68	-	74%	73%	3.9	2.2	2.4	55.36	0.025	54.5	64
7AA or 7BA160M08K	4	715	10.53	10	9.64	0.72	-	80%	79%	4.5	2.2	2.6	53.43	0.035	66	87
7AA or 7BA160M08	5.5	710	13.79	13.1	12.4	0.73	-	83.5%	83%	4.7	2.3	2.7	73.98	0.043	76	97
7AA or 7BA160L08	7.5	715	18.63	17.7	17.1	0.72	-	85.5%	85%	5.3	2.7	3	100.18	0.062	96.5	118

Standard Data are based on continuous rating - S1

For vertical mounting (with shaft down) use of protective canopy is recommended

Available on request: PTC Thermistors, Anti-condensation Heaters, Increased Protection of IP56, Special Voltages, Epoxy Paint, Second Shaft End, etc.

B3
Foot
Mounted



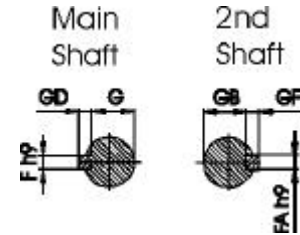
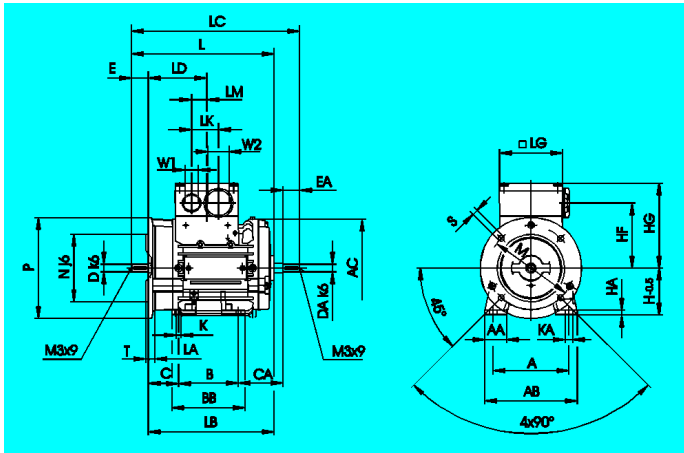
7AA56
Aluminium Frame, Cast Iron
end-shields & flanges

Terminal box turnable at 90°

Quality ball bearings
lubricated for life
Type: 6201 2Z C3

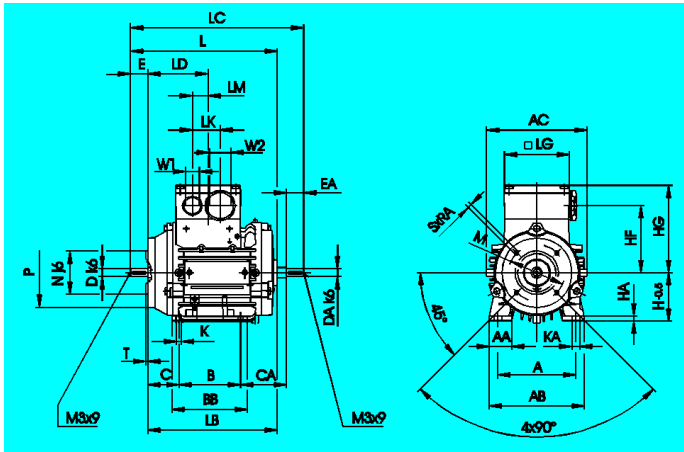
Shaft: Ø9mm - M3x9mm

B5
Flange
Mounted



B3/B5
Foot & Flange

B14A
Flange
Mounted
B14B
Flange
Mounted



B3/B14A
Foot & Flange
B3/B14B
Foot & Flange

SIZE	A	AA	AB	AC	B	BB	C	CA	H	HA	HD	HF	HG	K	KA	L	LA	LB	LC	LD	LF	LG	LK	LM	W1	W2
AA56M...	90	25	110	116	71	87	36	53	56	6	157	77.5	101	5.8	9	169.5	8	149.5	200	69.5	--	75	32	18	M16	M25

SIZE
AA56M...

Shaft				
D	E	F	G	GD
9	20	3	7.2	3

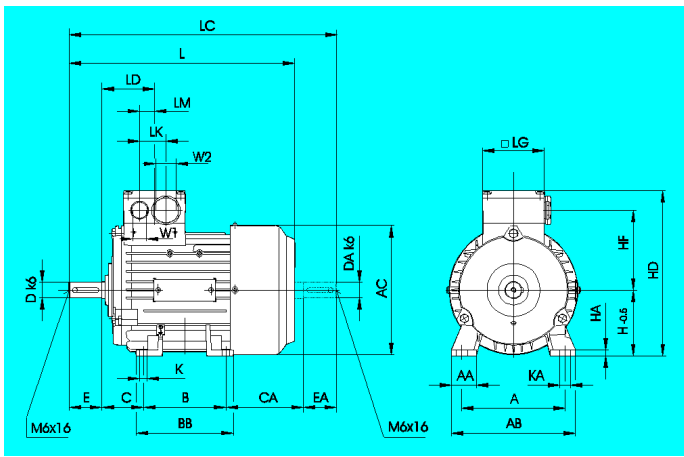
B5 FLANGE				
M	N	P	S	T
100	80	120	7	3

B14A FLANGE					
RA	M	N	P	S	T
10	65	50	80	M5	2.5

B14B FLANGE					
RA	M	N	P	S	T
10	85	70	105	M6	2.5

RA-depth of tapped holes in flange

B3
Foot
Mounted



7AA63,71,80

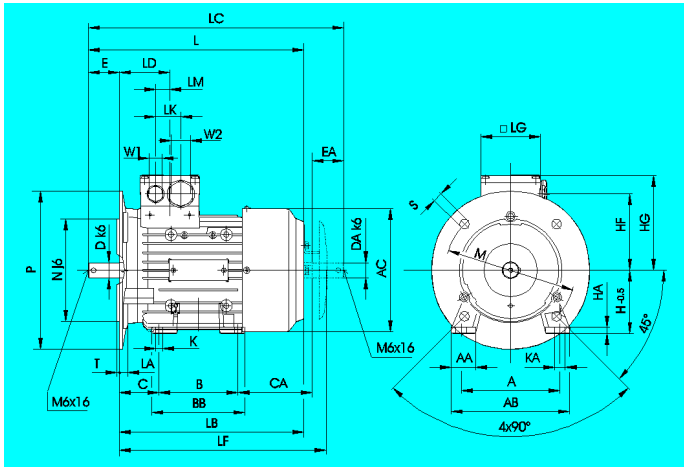
Aluminium Frame, Cast Iron end-shields & flanges

Terminal box turnable at 90°

Quality ball bearings lubricated for life

Type: 63 frame-6201 2Z C3
71 frame-6202 2Z C3
80 frame-6204 2Z C3

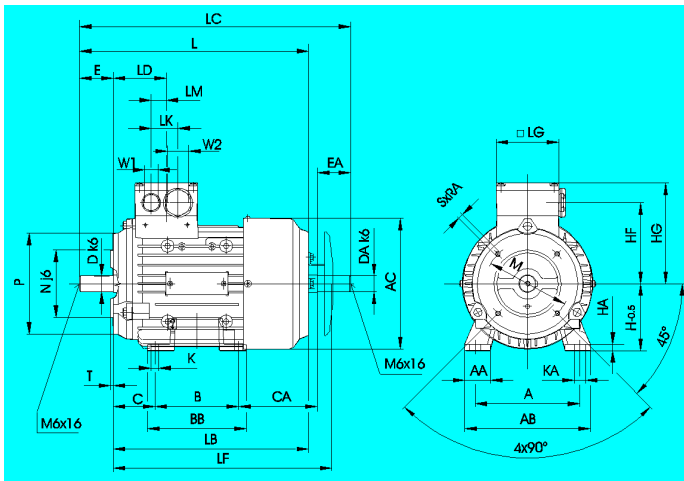
B5
Flange
Mounted



B3/B5
Foot & Flange

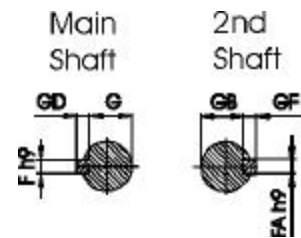
Shaft:
63 frame: Ø9mm - M3x9mm
71 frame: Ø14mm - M5x12.5mm
80 frame: Ø19mm - M6x16mm

B14A
Flange
Mounted



B14B
Flange
Mounted

B3/B14A
Foot & Flange
B3/B14B
Foot & Flange



SIZE	A	AA	AB	AC	B	BB	C	CA	H	HA	HD	HF	HG	K	KA	L	LA	LB	LC	LD	LF	LG	LK	LM	W1	W2
7AA63M...	100	27	120	118	80	96	40	66	63	7	164	77.5	101	7	10	202.5	8	179.5	232	69.5	208.5	75	32	18	M16	M25
7AA71M...	112	30.5	132	139	90	106	45	83	71	7	182	87.5	111	7	10	240	5	210	278	63.5	239	75	32	18	M16	M25
7AA80M...	125	30.5	150	156.5	100	118	50	94	80	8	200	96.5	120	9.5	13.5	273.5	10	233.5	324	63.5	262.5	75	32	18	M16	M25

SIZE	D	E	F	G	GD
7AA63M...	11	23	4	8.5	4
7AA71M...	14	30	5	11	5
7AA80M...	19	40	6	16	6

Shaft				
D	E	F	G	GD
11	23	4	8.5	4
14	30	5	11	5
19	40	6	16	6

B5 FLANGE				
M	N	P	S	T
115	95	140	10	3
130	110	160	10	3.5
165	130	200	12	3.5

B14A FLANGE					
RA	M	N	P	S	T
10	75	60	90	M5	2.5
12	85	70	105	M6	2.5
12	100	80	120	M6	3

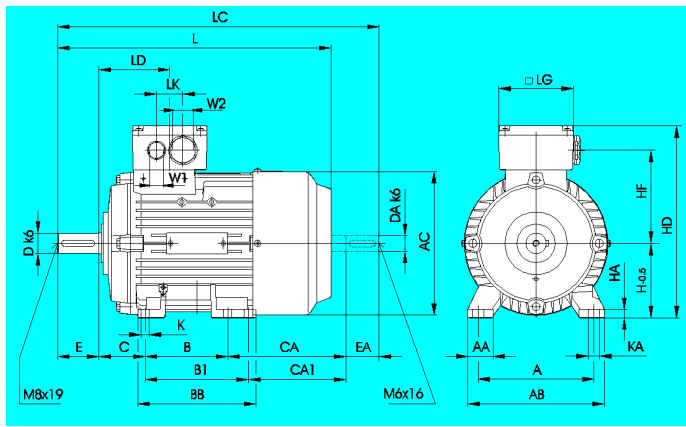
B14B FLANGE					
RA	M	N	P	S	T
10	100	80	120	M6	3
13	115	95	140	M8	3
12	130	111	160	M8	3.5

RA-depth of tapped holes in flange

7AA90

Aluminium Frame, Cast Iron end-shields & flanges

B3
Foot Mounted

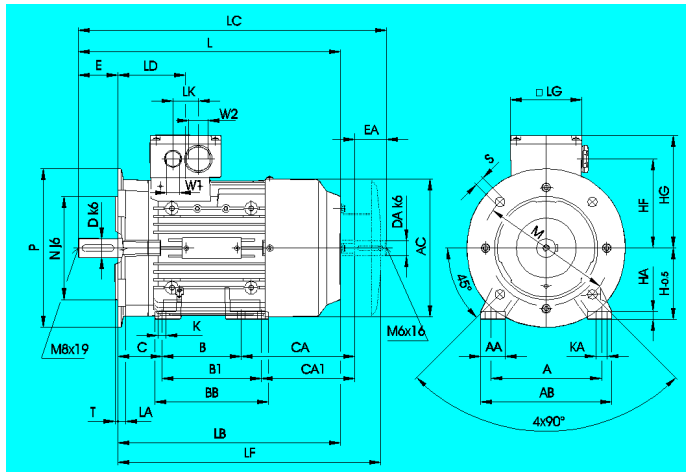


Terminal box turnable at 90°

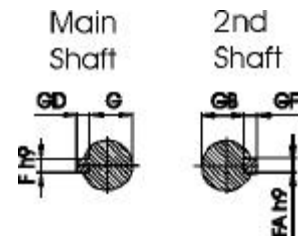
Quality ball bearings lubricated for life
Type: 6205 2Z C3

Shaft: Ø24mm - M8x19mm

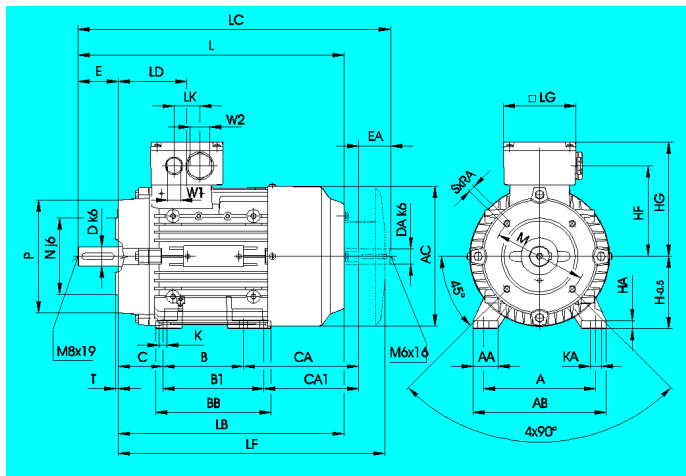
B5
Flange Mounted



B3/B5
Foot & Flange



B14A
Flange Mounted



B14B
Flange Mounted

B3/B14A
Foot & Flange
B3/B14B
Foot & Flange

SIZE	A	AA	AB	AC	B	BB	C	CA	H	HA	HD	HF	HG	K	KA	L	LA	LB	LC	LD	LF	LG	LK	LM	W1	W2
7AA90S...	140	30.5	165	173.6	100	143	56	143	90	10	218	104.5	128	10	14	331	10	281	389	79	333	75	32	18	M16	M25
7AA90L...	140	30.5	165	173.6	125	143	56	118	90	10	218	104.5	128	10	14	331	10	281	389	79	333	75	32	18	M16	M25

SIZE
7AA90S...
7AA90L...

Shaft				
D	E	F	G	GD
24	50	8	20	7
24	50	8	20	7

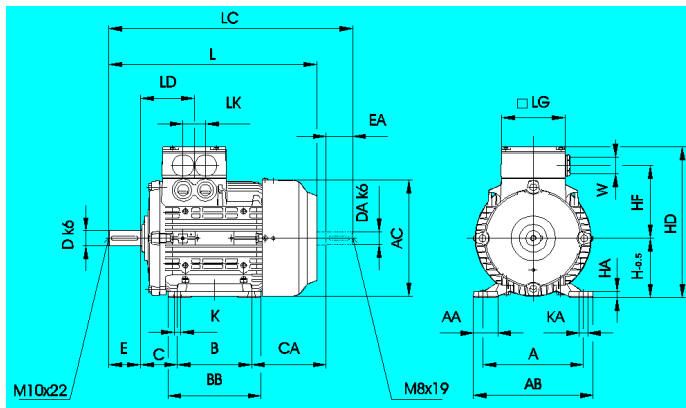
B5 FLANGE				
M	N	P	S	T
165	130	200	12	3.5
165	130	200	12	3.5

B14A FLANGE					
RA	M	N	P	S	T
13	115	95	140	M8	3
13	115	95	140	M8	3

B14B FLANGE					
RA	M	N	P	S	T
13	130	110	160	M8	3.5
13	130	110	160	M8	3.5

RA-depth of tapped holes in flange

B3
Foot
Mounted



7AA100,112,132,160

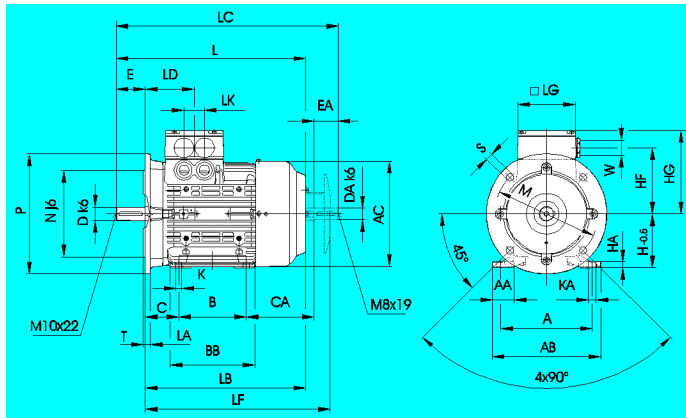
Aluminium Frame, Cast Iron end-shields & flanges

7BA100,112,132,160

Cast Iron Frame, end-shields & flanges

Terminal box turnable at 90°

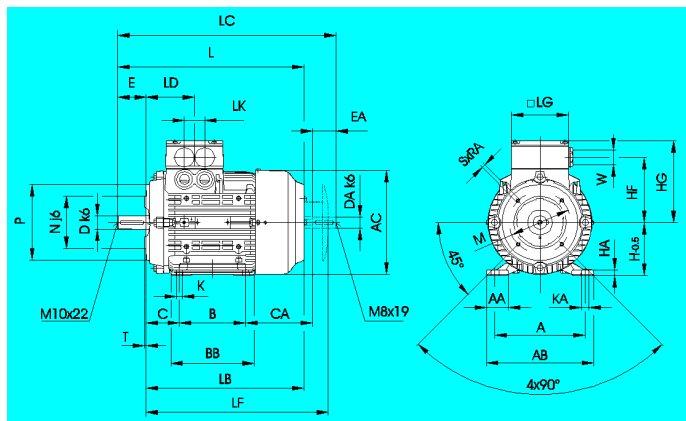
B5
Flange
Mounted



Quality ball bearings lubricated for life

Type: 100 frame-6206 2Z C3
112 frame-6306 2Z C3
132 frame-6308 2Z C3

B3/B5
Foot &
Flange



Quality ball bearings with re-greasing facility

Type: 160 frame-6309 C3

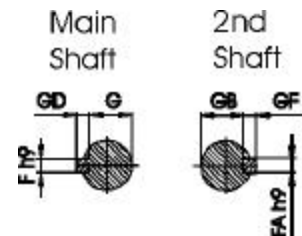
Shaft:

100 frame:Ø28mm - M10x22mm
112 frame:Ø28mm - M10x22mm
132 frame:Ø38mm - M12x28mm
160 frame:Ø42mm - M16x36mm

B14A
Flange
Mounted

B14B
Flange
Mounted

B3/B14A
Foot & Flange
B3/B14B
Foot & Flange



SIZE	A	AA	AB	AC	B	BB	C	CA	H	HA	HD	HF	HG	K	KA	L	LA	LB	LC	LD	LF	LG	LK	W1	W2
7AA100L...	160	42	196	196	140	176	63	125	100	12	260	125	160	12	16	372	11	312	438	102	363	120	43	M32	M32
7AA or 7BA112M...	190	46	225	219.5	140	180	70	141	112	15	287	140	175	12	16	393	11	333	461	104.5	385	120	43	M32	M32
7AA/7BA112M02V;04V	190	46	225	219.5	140	180	70	179	112	15	287	140	175	12	16	431	11	371	499	104.5	423	120	43	M32	M32
7AA/7BA112M06V;08V	190	46	225	219.5	140	180	70	141	112	15	287	140	175	12	16	393	11	333	461	104.5	385	120	43	M32	M32
7AA or 7BA132S...	216	53	255	259	140	180	89	163	132	17	323	156	191	12	16	454	12	374	552	130.5	426	140	44	M32	M32
7AA or 7BA132M...	216	53	255	259	178	218	89	125	132	17	323	156	191	12	16	454	12	374	552	130.5	426	140	44	M32	M32
7AA or 7BA132M02V	216	53	255	259	178	218	89	167	132	17	323	156	191	12	16	496	12	416	594	130.5	468	140	44	M32	M32
7AA or 7BA160M...	254	60	300	314	210	256	108	183	160	18	383	184	223	14.5	18	588	13	478	721	160	531	165	54	M40	M40
7AA or 7BA160L...	254	60	300	314	254	300	108	139	160	18	383	184	223	14.5	18	588	13	478	721	160	531	165	54	M40	M40

SIZE	Shaft					B5 FLANGE					B14A FLANGE					B14B FLANGE						
	D	E	F	G	GD	M	N	P	S	T	RA	M	N	P	S	T	RA	M	N	P	S	T
7AA100L...	28	60	8	24	7	215	180	250	14.5	4	14	130	110	160	M8	3.5	12	165	130	200	M10	3.5
7AA or 7BA112M...	28	60	8	24	7	215	180	250	14.5	4	14	130	110	160	M8	3.5	14	165	130	200	M10	3.5
7AA or 7BA132S,M...	38	80	10	33	8	265	230	300	14.5	4	15	165	130	200	M10	3.5	--	--	--	--	--	--
7AA.or 7BA160M,L...	42	110	12	37	8	300	250	350	18.5	5	--	--	--	--	--	--	--	--	--	--	--	--

RA-depth of tapped holes in flange

All Technical Data and Dimensions given in this Catalogue are subject to change without notice. Always consult motor's Name Plate for technical information.