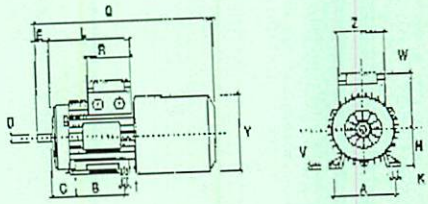
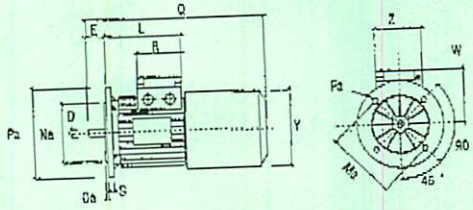
Size	56	63	71	80	90S	90L	100L	112M	132S	132M	160M	180L
A	90	100	112	125	140	140	160	190	216	216	254	254
B	71	80	90	100	100	125	140	140	140	178	210	254
C	36	40	45	50	56	56	63	70	89	89	108	108
D	9	11	14	19	24	24	28	28	38	38	42	42
d	M3	M4	M5	M6	M8	M8	M10	M10	M12	M12	M16	M16
E	20	23	30	40	50	50	60	60	80	80	110	110
Fa	6.6	9.5	9.5	11.5	11.5	11.5	14.5	14.5	14.5	14.5	18.5	18.5
Fb	M5	M5	M6	M6	M8	M8	M8	M8	M10	M10		
f	3	4	5	6	8	8	8	8	10	10	12	12
g	7.2	8.5	11	15.5	20	20	24	24	33	33	37	37
H	56	63	71	80	90	90	100	112	132	132	160	160
h	3	4	5	6	7	7	7	7	8	8	8	8
I	6	7	7	10	10	10	12	12	12	12	14.5	14.5
K	11	10.5	10.5	14	14	14	16	16	22	22	24	24
L	99	130	145	162	171	196	217	229	255	293		
L1		166	182	194	207	232	254	262	294	339	373	395
Ma	100	115	130	165	165	165	215	215	265	265	300	300
Mb	65	75	85	100	115	115	130	130	165	165		
Na	80	95	110	130	130	130	180	180	230	230	250	250
Nb	50	60	70	80	95	95	110	110	130	130		
Oa	3	3	3.5	3.5	3.5	3.5	4	4	4	4	5	5
Ob	2.5	2.5	2.5	3	3	3	3.5	3.5	3.5	3.5		
Pa	120	140	160	200	200	200	250	250	300	300	350	350
Pb	80	90	105	120	140	140	160	160	200	200		
Q	230	260	295	334	360	385	435	470	565	604	716	760
R	75	80	80	80	98.5	98.5	98.5	98.5	108	108		
R1		135	135	135	170	170	170	170	199	199	268	268
S	8	10	10	12	12	12	14	14	15	15	15	15
V	7	7	8	9.5	10.5	10.5	12.5	13.5	16	16	21	21
W	93	97	105	113	127	127	138	158	198	198	155	155
W1		111	121	130	148	148	162	176	210	210	246	246
Y	110	121	136	153	178	178	198	219,5	255	255	293	293
Z	75	75	75	75	98.5	98.5	98.5	98.5	108	108		
Z1		86	86	86	112	112	112	112	151	151	167	167

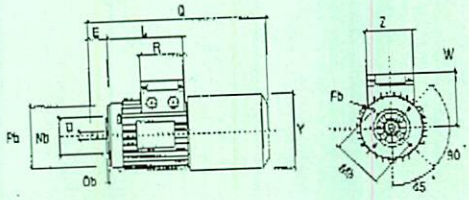
B3 (Foot Mounting)



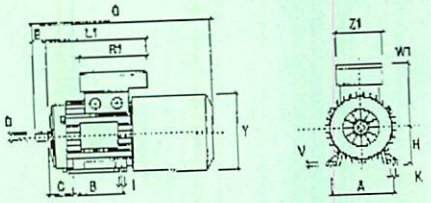
B5 (Flange Mounting)



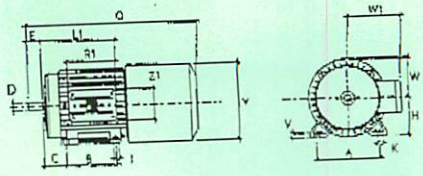
B14 (Face Mounting)



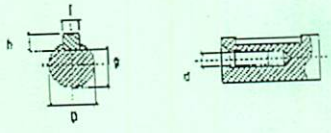
Double Terminal Board Box



Size 160 B3 (Foot Mounting)



Shaft End



Note Cable glands are
- M 16 on size 56 up to 63
- M 20 on size 71 up to 80
- M 25 on size 90 up to 112
- M 32 on size 132
- PG 29 on size 160

Technical Data Single Speed Motor – Single Winding

Motor type	Power (kW)	RPM	In 400 V (A)	Power factor Cos φ	Tn (Nm)	Ia/In	Ia/In	DC brake Ia (mA)	Z_0 (starts/hour)	Moment of inertia Jx 10^{-4} Kgm²	Max Brake torque (Nm)	A-Sound pressure dB(A)	Weight (Kg)
6 pole												1000 RPM	
BM 56 B6	0.06	850	0.45	0.71	0.67	1.9	1.5	130	12000	1.85	2	41	4.0
BM 63 C6	0.09	890	0.50	0.56	0.97	2.4	1.9	200	12000	3.55	5	42	5.5
BM 63 D6	0.12	870	0.60	0.60	1.32	2.7	1.9	200	12000	3.83	5	42	6.0
BM 71 A6	0.18	875	0.60	0.71	1.96	2.0	2.6	200	11500	8.55	5	45	7.5
BM 71 B6	0.25	900	0.80	0.71	2.65	2.0	2.8	200	11500	10.01	5	45	8.0
BM 80 A6	0.37	910	1.25	0.67	3.88	2.6	3.4	160	9700	19.05	10	47	12.0
BM 80 B6	0.55	900	1.80	0.68	5.84	2.2	2.8	160	9250	22.86	10	47	13.0
BM 90 SA6	0.75	910	2.30	0.68	7.87	2.1	3.5	190	7300	31.52	20	54	16.0
BM 90 LA6	1.10	910	3.20	0.68	11.54	2.2	3.6	190	5400	41.67	20	54	18.5
BM 90 LB6*	1.30	910	3.90	0.68	13.64	2.5	4.0	190	4300	48.10	20	54	20.5
BM 100 LA6	1.50	930	3.90	0.71	15.40	2.3	4.3	250	3650	80.76	40	56	26
BM 100 LB6	1.85	920	5.00	0.68	19.20	2.6	4.5	250	3200	92.55	40	56	28
BM 112 MB6	2.20	945	5.20	0.79	22.23	2.0	5.3	470	2100	200.60	60	58	39
BM 132 SB6	3.00	960	7.20	0.72	29.84	2.5	6.5	600	650	304.90	100	58	66
BM 132 MA6	4.00	960	9.50	0.72	39.79	2.3	6.5	600	550	360.70	100	58	71
BM 132 MB6	5.50	960	12.30	0.75	54.71	2.3	6.5	600	550	467.70	100	58	82
BM 160 MB6	7.50	965	15.90	0.79	74.22	2.2	7.1	700	550	867.00	150	59	138
BM 160 LA6*	9.20	970	18.30	0.81	90.58	2.2	7.1	700	500	1160.00	150	59	156
BM 160 LB6	11.00	970	22.70	0.80	108.30	2.5	7.5	700	440	1160.00	150	59	156
8 pole												750 RPM	
BM 63 D8	0.07	650	0.45	0.62	1.03	2.2	1.55	200	15000	3.83	5	42	6.0
BM 71 A8	0.08	660	0.60	0.53	1.16	2.0	2.0	200	8750	5.67	5	43	7.5
BM 71 B8	0.11	660	0.80	0.55	1.59	2.0	2.0	200	8750	6.57	5	43	8.0
BM 80 A8	0.18	675	0.95	0.59	2.55	2.0	2.2	160	8150	19.05	10	45	12.0
BM 80 B8	0.25	675	1.25	0.62	3.54	2.0	2.2	160	7250	22.86	10	45	13.0
BM 90 SA8	0.37	690	1.50	0.60	5.12	2.1	2.9	190	7000	31.52	20	46	16.5
BM 90 LA8	0.55	690	2.20	0.56	7.61	2.1	2.8	190	5400	41.67	20	46	19
BM 90 LB8*	0.65	690	2.70	0.56	9.00	2.1	2.8	190	4400	48.00	20	46	21
BM 100 LA8	0.75	700	2.75	0.58	10.23	2.1	3.0	250	3850	80.76	40	49	26
BM 100 LB8	1.1	700	4.10	0.59	15.01	2.5	4.0	250	3600	92.55	40	49	28
BM 112 MB8	1.5	705	4.90	0.60	20.32	2.0	4.5	470	2500	200.60	60	52	39
BM 132 SB8	2.2	700	5.20	0.75	30.01	2.1	4.7	600	700	283.90	100	55	61
BM 132 MB8	3.0	700	7.10	0.75	40.93	2.1	4.7	600	700	372.70	100	55	68
BM 160 MA8	4.0	725	9.60	0.72	52.69	2.3	6.5	700	630	959.00	150	58	138
BM 160 MB8	5.5	725	13.60	0.70	72.45	2.3	6.1	700	630	959.00	150	58	138
BM 160 LA8	7.5	725	18.60	0.70	98.79	2.3	6.1	700	630	1280.00	150	58	156

* Non Standard Power

1. Motor characteristic values reported in the tables refer to continuous duty (S1), 50 Hz frequency, ambient temperature max. 40 °C, altitude up to 1000 m. above sea level operating condition.

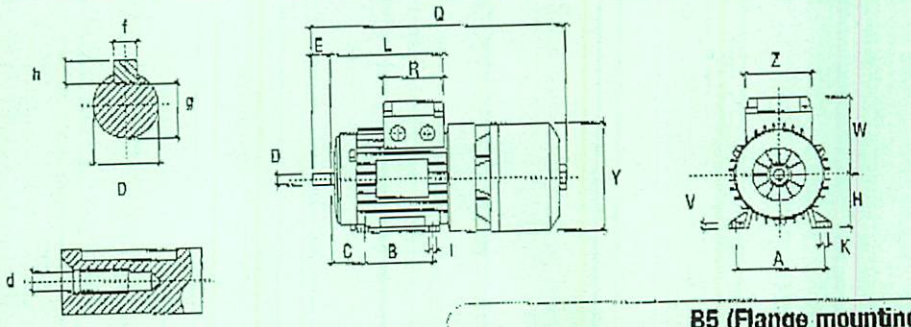
2. The expressed brake torque is the max admissible one. Brake current consumption values refer to a rated voltage of 230V AC single-phase.

3. The table shows the sound pressure noise level, measured at one metre range from the motor according to the Acurve (ISO 1680). The shown noise levels refer to motor no-load operating condition and should be regarded with a tolerance of ± 3dB.

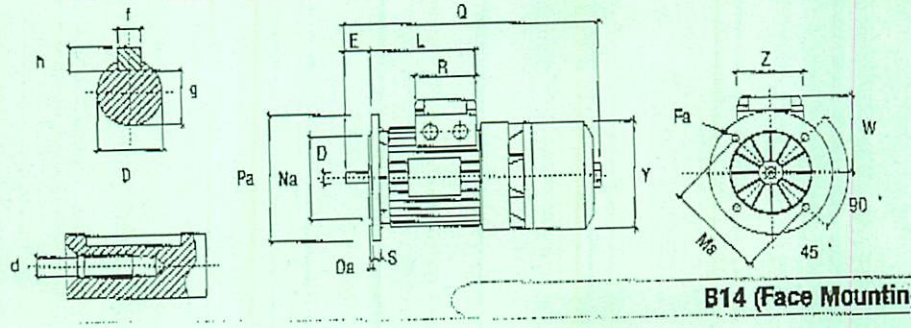
4. Z_0 is the max number of no-load starts. It is meant for calculation purposes only, and is used to obtain the max number of starts with load according to the formula expressed at page 38. The number of starts with load (Zload) is indicative and it has to be operatively tested for confirmation. The use of Thermo-protectors is strongly recommended when the operative number of starts is close to the calculated Zload. It is necessary to verify the max permissible brake energy dissipation and the max permissible RPM.

BA series 71 – 280 dimensions

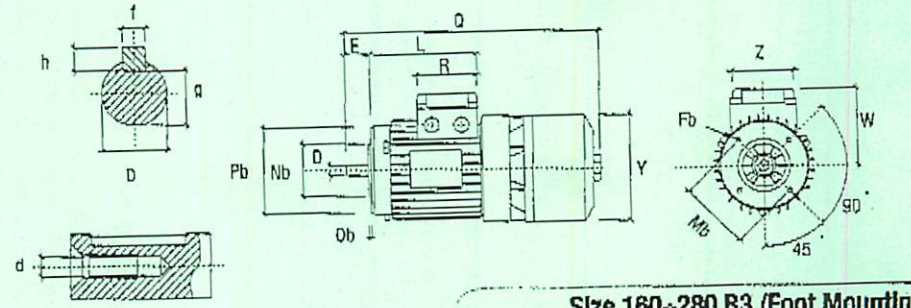
B3 (Foot Mounting)



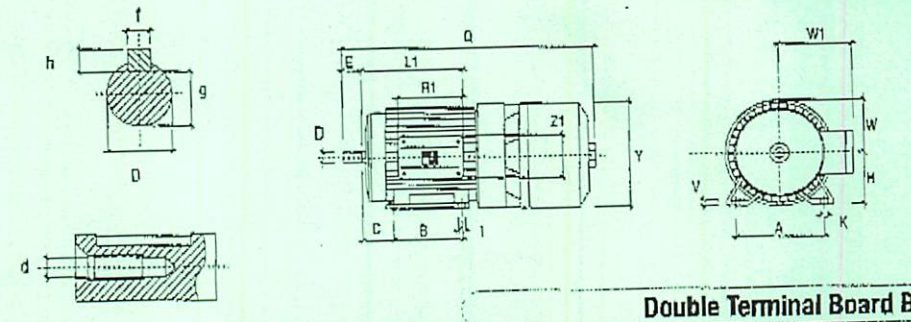
B5 (Flange mounting)



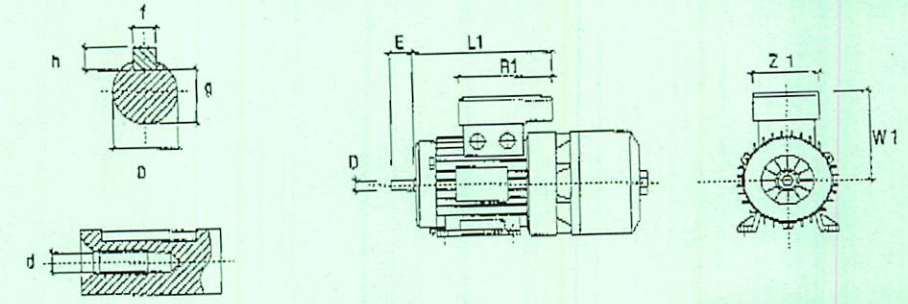
B14 (Face Mounting)



Size 160÷280 B3 (Foot Mounting)



Double Terminal Board Box



BA series 71 – 280 dimensions

Size	BA 71	BA 80	BA 90 S	BA 90 L	BA 100 L	BA 112 M	BA 132 S	BA 132 M	BA 160 M	BA 160 L	BA 180 L	BA 200 L	BA 225 S	BA 225 M	BA 250M	BA 280 S	BA 280 M
A	112	125	140	140	160	190	216	216	254	254	279	318	356	356	406	457	457
B	90	100	100	125	140	140	140	178	210	254	279	305	286	311	349	368	419
C	45	50	56	56	63	70	89	89	108	108	121	133	149	149	168	190	190
D*	14	19	24	24	28	28	38	38	42	42	48	55	60	60	65	65	75
d	M5	M6	M8	M8	M10	M10	M12	M12	M16	M16	M16	M16	M16	M16	M20	M20	M20
E*	30	40	50	50	60	60	80	80	110	110	110	110	140	140	140	140	140
Fa	9.5	11.5	11.5	11.5	14.5	14.5	14.5	14.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
Fb	M6	M6	M8	M8	M8	M8	M10	M10									
f	5	6	8	8	8	8	10	10	12	12	14	16	18	18	18	18	20
g	11	15.5	20	20	24	24	33	33	37	37	42.5	49	53	53	53	58	67.5
H	71	80	90	90	100	112	132	132	160	160	180	200	225	225	250	280	280
h	5	6	7	7	7	7	8	8	8	8	9	10	11	11	11	11	12
I	7	10	10	10	12	12	12	12	14.5	14.5	15	18.5	18	18	22	24	24
K	10.5	14	14	14	16	16	22	22	24	24	24	30	33	33	33	24	24
L	148	162	171	196	217	229											
L1	184	194	207	232	254	262	294	339	373	395	420	446	440	440	436	436	436
Ma	130	165	165	165	215	215	265	265	300	300	300	350	400	400	500	500	500
Mb	85	100	115	115	130	130	165	165									
Na	110	130	130	130	180	180	230	230	250	250	250	300	350	350	450	450	450
Nb	70	80	95	95	110	110	130	130									
Oa	3.5	3.5	3.5	3.5	4	4	4	4	5	5	5	5	5	5	5	5	5
Ob	2.5	3	3	3	3.5	3.5	3.5	3.5									
Pa	160	200	200	200	250	250	300	300	350	350	350	400	450	450	550	550	550
Pb	105	120	140	140	160	160	200	200									
Q	344	380	412	436	487	505	600	640	745	789	865	890	995	1000	1155	1155	1210
QBAF-BAPV	368	403	436	460	511	531	634	672	765	809	907	932	1014	1035			
R	80	80	98.5	98.5	98.5	98.5											
R1	135	135	170	170	170	170	199	199	268	268	268	268	327	327	327	327	327
S	10	12	12	12	14	14	15	15	15	15	15	15	20	20	18	18	18
V	8	9.5	10.5	10.5	12.5	13.5	16	16	21	21	24	24	32	32	32	40	40
W	105	113	127	127	138	158			165	165	188	188	224	224	252	252	252
W1	121	130	148	148	162	176	215	215	246	246	266	266	341	341	361	361	361
Y	145	160	180	180	196	218	265	265	324	324	357	357	430	430	493	493	493
Z	75	75	98.5	98.5	98.5	98.5											
Z1	86	86	112	112	112	112	151	151	167	167	167	167	202	202	202	202	202

* 225S-225M 2 pole D=55 E=110, 250M 2 pole D=160 E=140, 280S-280M 2 pole D=65 E=140

Notes:

Q_{BAF} is the Q dimension for BAF series

Q_{BAPV} is the Q dimension for BAPV series

Cable glands are M 20 on size 71 up to 80
M 25 on size 90 up to 112
M 32 on size 132
PG 29 on size 160 up to 200
M 50 and M 32 on size 225/280

Motor type	Power (kW)	RPM	In 400 V (A)	Power factor Cos φ	Tn (Nm)	It/Tn	Is/In	AC brake In (mA)	DC brake In (mA)	Z_0 (starts/hour)	Moment of inertia Jx 10⁻⁴ Kgm²	Max Brake torque (Nm)	A-Sound pressure dB(A)	Weight (Kg)
6 pole													1000 r.p.m.	
BA 71 A6	0.18	875	0.60	0.71	1.96	2.0	2.6	90	110	28000	10.08	14	45	10.5
BA 71 B6	0.25	900	0.80	0.71	2.65	2.0	2.8	90	110	28000	11.54	14	45	11.0
BA 80 A6	0.37	910	1.25	0.67	3.88	2.6	3.4	140	150	18000	23.40	18	47	14.5
BA 80 B6	0.55	900	1.8	0.68	5.84	2.2	2.8	140	150	18000	27.21	18	47	15.5
BA 90 SA6	0.75	910	2.3	0.68	7.87	2.1	3.5	300	150	18000	35.93	38	54	19.5
BA 90 LA6	1.1	910	3.2	0.68	11.54	2.2	3.6	300	150	15000	46.08	38	54	22.0
BA 90 LB6*	1.3	910	3.9	0.68	13.64	2.5	4.0	300	150	12000	53.00	38	54	24.0
BA 100 LA6	1.5	930	3.9	0.71	15.40	2.3	4.3	300	150	11000	87.40	50	56	33.0
BA 100 LB6 *	1.85	920	5.0	0.68	19.20	2.6	4.5	300	150	8500	99.19	50	56	35.0
BA 112 MB6	2.2	945	5.2	0.79	22.23	2.0	5.3	280	470	6500	168.3	80	58	45
BA 132 SB6	3.0	960	7.2	0.72	29.84	2.5	6.5	580	680	1800	346.0	150	58	78
BA 132 MA6	4.0	960	9.5	0.72	39.79	2.3	6.5	580	680	1500	401.0	150	58	83
BA 132 MB6	5.5	960	12.3	0.75	54.71	2.3	6.5	580	680	1200	508.0	150	58	94
BA 160 MB6	7.5	965	15.9	0.79	74.22	2.2	7.1	1390	860	1200	943.0	190	59	156
BA 160 LA6 *	9.2	970	18.3	0.81	90.58	2.2	7.1	1390	860	1100	1240.0	190	59	174
BA 160 LB6	11.0	970	22.7	0.80	108.30	2.5	7.5	1390	860	950	1240.0	190	59	174
BA 180 LB6	15.0	970	29.4	0.84	147.68	2.3	7.8	950	1100	600	2070.0	300	60	243
BA 200 LA6	18.5	970	38.1	0.82	182.14	2.2	8.0	950	1100	350	2360.0	300	61	289
BA 200 LB6	22.0	965	43.5	0.85	217.72	2.2	8.0	950	1100	350	2360.0	300	61	289
BA 225 M6	30.0	980	60.7	0.78	292.35	2.6	6.5	1350	1500	350	7470.0	400	63	440
BA 250 M6	37.0	985	73.0	0.78	358.00	2.7	6.6	2000	-	200	10090.0	700	65	675
BA 280 S6	45.0	985	87.0	0.80	436.00	2.6	6.3	2000	-	160	10690.0	1000	65	750
BA 280 M6	55.0	985	105.0	0.80	533.00	2.5	6.0	2000	-	160	11640.0	1000	65	790
8 pole													750 r.p.m.	
BA 71 A8	0.08	660	0.60	0.53	1.16	2.0	2.0	90	110	30000	7.20	14	43	10.0
BA 71 B8	0.11	660	0.80	0.55	1.59	2.0	2.0	90	110	30000	8.10	14	43	10.5
BA 80 A8	0.18	675	0.95	0.59	2.55	2.0	2.2	140	150	30000	23.40	18	45	14.5
BA 80 B8	0.25	675	1.25	0.62	3.54	2.0	2.2	140	150	30000	27.21	18	45	15.5
BA 90 SA8	0.37	680	1.50	0.60	5.20	2.1	2.9	300	150	20000	35.93	38	46	20.0
BA 90 LA8	0.55	690	2.20	0.56	7.61	2.1	2.8	300	150	17000	46.08	38	46	22.5
BA 90 LB8*	0.65	690	2.70	0.56	9.00	2.1	2.8	300	150	14000	53.00	38	46	24.0
BA 100 LA8	0.75	700	2.75	0.58	10.23	2.1	3.0	300	150	14000	87.40	50	49	33.0
BA 100 LB8	1.1	700	4.1	0.59	15.01	2.5	4.0	300	150	9400	99.19	50	49	35.0
BA 112 MB8	1.5	705	4.9	0.60	20.32	2.0	4.5	280	470	7200	168.3	80	52	45
BA 132 SB8	2.2	700	5.2	0.75	30.01	2.1	4.7	580	680	2100	325.0	150	55	73
BA 132 MB8	3.0	700	7.1	0.75	40.93	2.1	4.7	580	680	2100	413.0	150	55	80
BA 160 MA8	4.0	725	9.6	0.72	52.69	2.3	6.5	1390	860	1800	1030.0	190	58	156
BA 160 MB8	5.5	725	13.6	0.70	72.45	2.3	6.1	1390	860	1800	1030.0	190	58	156
BA 160 LA8	7.5	725	18.6	0.70	98.79	2.3	6.1	1390	860	1800	1360.0	190	58	174
BA 180 LB8	11.0	730	25.9	0.72	143.90	2.0	5.9	950	1100	800	2460.0	300	59	243
BA 200 LA8	15.0	730	32.8	0.77	196.23	1.9	6.1	950	1100	500	2880.0	300	60	243
BA 225 M8	22.0	735	51.3	0.71	285.85	2.1	6.4	1350	1500	350	7470.0	400	62	440
BA 250 M8	30.0	740	66.0	0.72	387.00	3.0	6.5	2000	-	250	11140.0	700	65	675
BA 280 S8	37.0	740	82.0	0.71	478.00	2.0	6.0	2000	-	190	12140.0	1000	65	750
BA 280 M8	45.0	740	96.0	0.73	581.00	1.8	5.8	2000	-	190	14640.0	1000	65	790

* Non Standard Power

1. Motor characteristic values reported in the tables refer to continuous duty (S1), 50 Hz frequency, ambient temperature max. 40 °C, altitude up to 1000 m. above sea level operating condition.

2. DC brake is provided on request only on BA series motors . Brake current consumption values refer to a rated voltage of 3-phase 400V for AC brakes and single-phase 230V for DC brakes.

3. The table shows the sound pressure noise level, measured at one metre range from the motor according to the Acurve (ISO 1680). The shown noise levels refer to motor no-load operating condition and should be regarded with a tolerance of ± 3dB.

4. Max brake torque and Z_0 values refer to AC brake. Go to pag. 23 for DC max brake torque values.

5. The expressed Z_0 values refers to AC Brake. Z_0 is the max number of no-load starts. It is meant for calculation purposes only, and is used to obtain the max number of starts with load according to the formula expressed at page 22. The number of starts with load (Zload) is indicative and it has to be operatively tested for confirmation. The use of Thermo-protectors is strongly recommended when the operative number of starts is close to the calculated Zload. It is necessary to verify the max permissible brake energy dissipation and the max permissible RPM.

6. The maximum brake torque for BAK 132 motors series is 120Nm