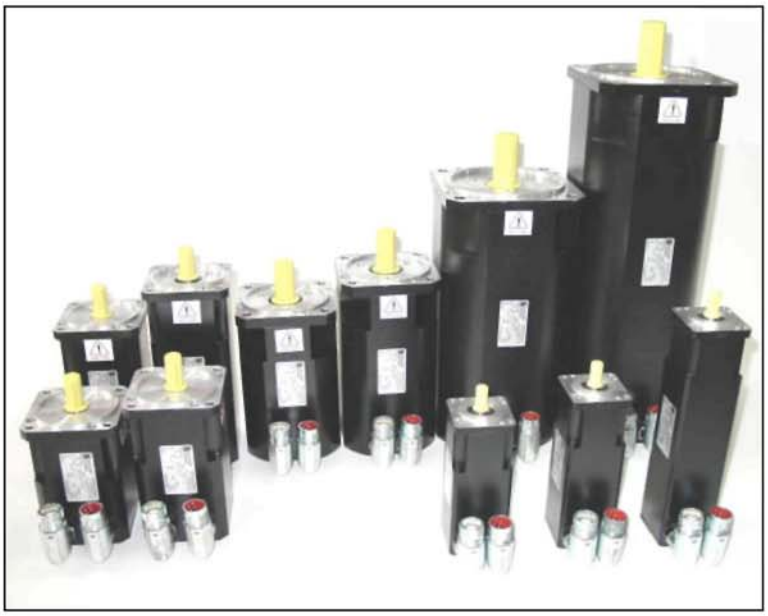
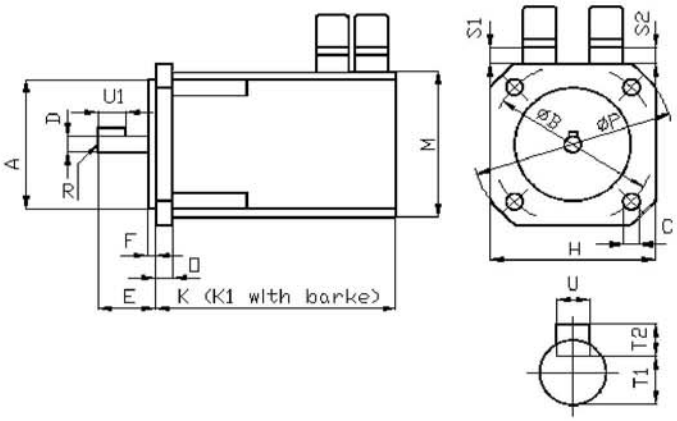
ELECTRICAL ENGINEERING Co.
RESEARCH AND DEVELOPMENT
MANUFACTURING
INTERNATIONAL BUSINESS
313 Splaiul Unirii, 030138 Bucuresti, ROMANIA
Tel.:+40 21 5893300; Fax:+40 21 5893434; e-mail:icpe.sa@icpe.ro; http://www.icpe.ro

QUALITY-ENVIRONMENT INTEGRATE SYSTEM
ISO 9001 ISO 14001





AC servo motors – BSM series

Technical data

- High energy Nd-Fe-B magnets
- 6 (six) magnetic poles
- Insulation Class F
- Standard Feedback System: Resolver
- Winding Protection with PTC
- Standard protective structure is IP55 class

Features

- Torque range from 0.1 to 20 Nm
- Maintenance free
- High demagnetization level
- Low ripple torque
- High torque to weight ratios
- Superior low speed performance
- Very low inertia

Options

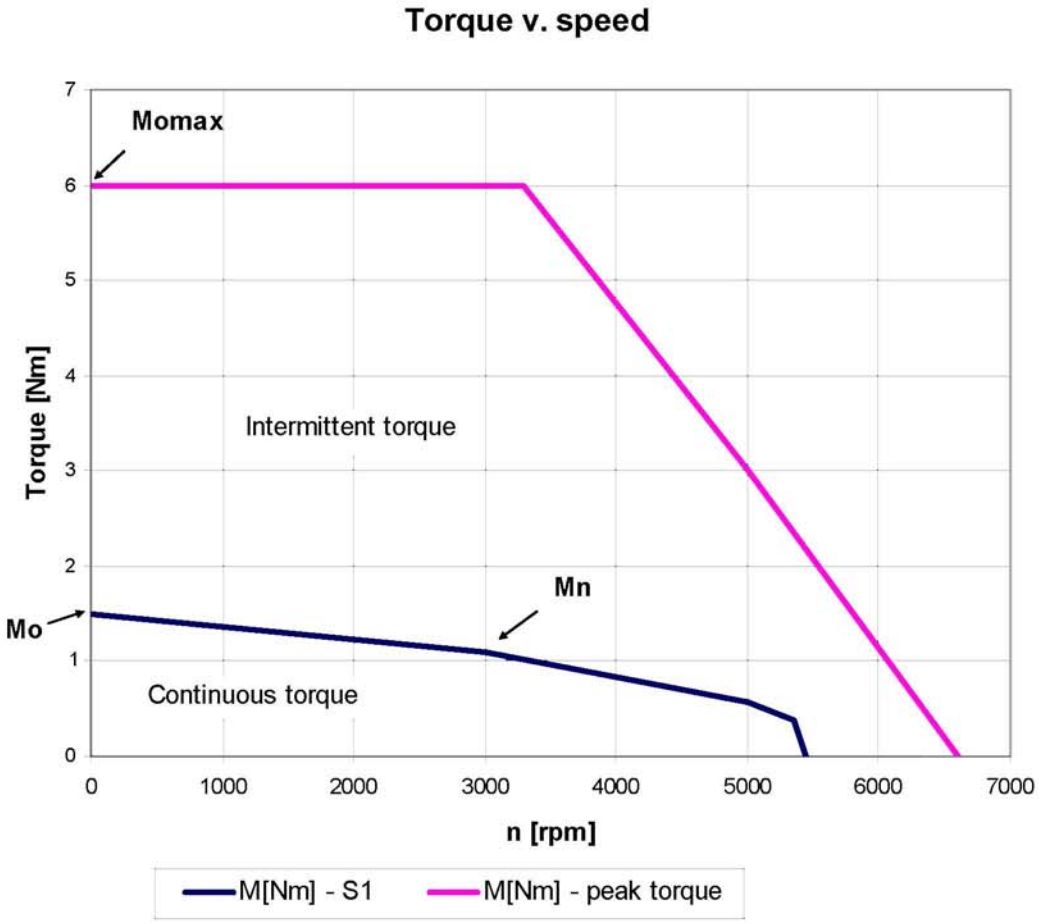
- Shaft with Keyway according to DIN 6885
- Fail safe Brake 24 VDC
- Shaft Seal Ring
- Additional Feedback Systems (Encoder)
- Protection Class IP 65
- Custom windings
- Special dimensions and configurations

size	A J6	B	C	D k6	E	F	H	K	K1	M	O	P	R	S1	S2	T1	T2 h9	U h9	U1
0.1	40	63	5.8	9	24	2.5	55	118	151	55	8	74	M3.10	39	39	7.2	3	3	14
0.2	40	63	5.8	9	24	2.5	55	143	176	55	8	74	M3.10	39	39	7.2	3	3	14
0.3	40	63	5.8	9	24	2.5	55	163	196	55	8	74	M3.10	39	39	7.2	3	3	14
0.4	40	63	5.8	9	24	2.5	55	183	216	55	8	74	M3.10	39	39	7.2	3	3	14
0.5	40	63	5.8	9	24	2.5	55	254	287	55	8	74	M3.10	39	39	7.2	3	3	14
1.1	80	100	7	14	30	3	88	132	173	82	10	115	M4.12	36	36	11.1	5	5	20
1.2	80	100	7	14	30	3	88	152	193	82	10	115	M4.12	36	36	11.1	5	5	20
1.3	80	100	7	14	30	3	88	172	213	82	10	115	M4.12	36	36	11.1	5	5	20
1.4	80	100	7	14	30	3	88	192	233	82	10	115	M4.12	36	36	11.1	5	5	20
1.5	80	100	7	14	40	3	88	222	263	82	10	115	M4.12	36	36	11.1	5	5	20
2.1	95	115	9	19	40	3	105	198	238	105	12	135	M6.15	39	39	15.5	6	6	30
2.2	95	115	9	19	40	3	105	228	268	105	12	135	M6.15	39	39	15.5	6	6	30
2.3	95	115	9	19	40	3	105	248	288	105	12	135	M6.15	39	39	15.5	6	6	30
2.4	95	115	9	19	40	3	105	293	333	105	12	135	M6.15	39	39	15.5	6	6	30
3.1	130	165	11	24	50	3.5	145	280	323	145	12	188	M8.25	39	39	19.9	8	8	40
3.2	130	165	11	24	50	3.5	145	320	363	145	12	188	M8.25	39	39	19.9	8	8	40
3.3	130	165	11	24	50	3.5	145	440	483	145	12	188	M8.25	39	39	19.9	8	8	40

Dimensions in mm

Size	Dim.	P_N(kW)	M_N(Nm)	Mo[Nm]	Mom[Nm]	In[A]	Io[A]	J [kgcm^2]	m[kg]	m+BR[kg]	R[Ohm]	L[mH]	k_E[V]]	k_T[Nm/A]
BSM 55 - 0020 - 3	0.1	0.04	0.13	0.2	0.8	0.3	0.4	0.05	0.83	1.2	122	66.5	30	0.50
BSM 55 - 0050 - 3	0.2	0.13	0.35	0.5	1	0.9	1.2	0.1	1.3	1.6	18,3	13	26	0.43
BSM 55 - 0070 - 3	0.3	0.19	0.5	0.7	2.8	1.2	1.6	0.15	1.6	1.8	11.9	14.3	28	0.46
BSM 55 - 0070 - 6	0.3	0.19	0.5	0.7	2.8	0.7	0.9	0.15	1.6	1.8	32	28	47	0.78
BSM 55 - 0085 - 3	0.4	0.29	0.74	0.85	3.4	1.7	1.9	0.2	1.9	2.2	8.9	9.3	28	0.46
BSM 55 - 0085 - 6	0.4	0.29	0.74	0.85	3.4	0.9	1.1	0.2	1.9	2.2	28	23	50	0.83
BSM 55 - 0150 - 3	0.5	0.54	1.35	1.5	6	3.1	3.4	0.33	2.8	3.1	3.8	4.6	28	0.46
BSM 55 - 0150 - 6	0.5	0.54	1.35	1.5	6	1.7	1.9	0.33	2.8	3.1	13.7	13.9	51	0.84
BSM 88 - 0100 - 3	1.1	0.23	0.66	1	4	1.6	2.4	0.3	2	2.8	6.3	14.3	26	0.43
BSM 88 - 0100 - 6	1.1	0.23	0.66	1	4	1.0	1.4	0.3	2	2.8	18.4	39	44	0.73
BSM 88 - 0170 - 3	1.2	0.38	1.1	1.7	6.2	2.3	3.6	0.68	2.9	3.7	3.3	9.2	30	0.50
BSM 88 - 0170 - 6	1.2	0.38	1.1	1.7	6.2	1.4	2.2	0.68	2.9	3.7	7.7	24	50	0.83
BSM 88 - 0260 - 3	1.3	0.63	1.8	2.6	10.4	3.8	5.5	1	3.7	4.5	1.7	6	30	0.50
BSM 88 - 0260 - 6	1.3	0.63	1.8	2.6	10.4	1.9	2.8	1	3.7	4.5	5.2	16.7	59	0.98
BSM 88 - 0350 - 3	1.4	0.92	2.5	3.5	14	4.8	6.6	1.4	4.3	5.5	1.1	4.3	33.5	0.55
BSM 88 - 0350 - 6	1.4	0.92	2.5	3.5	14	3.1	4.3	1.4	4.3	5.5	2.8	10.8	52	0.86
BSM 88 - 0420 - 3	1.5	1.21	3.2	4.2	16.8	6.2	8.1	1.8	5.4	6.7	0.8	3.2	33	0.55
BSM 88 - 0420 - 6	1.5	1.21	3.2	4.2	16.8	3.7	4.8	1.8	5.4	6.7	2.4	9.3	55	0.91
BSM 105 - 0450 - 3	2.1	1.34	3.5	4.5	18	6.4	8.2	2.4	6	6.9	1	5.5	35	0.58
BSM 105 - 0450 - 6	2.1	1.34	3.5	4.5	18	3.7	4.8	2.4	6	6.9	2.8	13.6	60	0.99
BSM 105 - 0650 - 3	2.2	2.01	5.2	6.5	26	11.1	13.8	3.2	7.6	9.5	0.4	2.3	30	0.50
BSM 105 - 0650 - 6	2.2	2.01	5.2	6.5	26	4.9	6.1	3.2	7.6	9.5	2	11.3	68	1.12
BSM 105 - 0750 - 3	2.3	2.72	6.8	7.5	30	13.0	14.4	3.6	8.5	11.4	0.47	1.9	33	0.55
BSM 105 - 0750 - 6	2.3	2.72	6.8	7.5	30	7.1	7.9	3.6	8.5	11.4	1.5	8.4	60	0.99
BSM 105 - 1000 - 6	2.4	3.48	8.7	10	40	10.3	11.8	4.5	16	19	0.8	4.4	54	0.89
BSM 145 - 1500 - 6	3.1	4.02	11	15	30	12.0	16.4	5.3	19.5	24	0.6	6.1	58	0.96
BSM 145 - 2000 - 6	3.2	5.03	15	20	40	18.5	26.5	6.7	22	28	0.3	3.2	48	0.79
BSM 145 - 3000 - 6	3.3	8.38	22	30	60	22.0	29.3	11.2	30	34	0.3	3.8	65	1.08

nominal speed = 3000 rpm



n_N - Nominal speed

P_N - Nominal power

M_N - Nominal torque

Mo - Static torque - continuous standstill torque

Momax - Maximum static torque - maximum intermittent static torque

I_N - Nominal current (± 10%)

Io - Static current (± 10%)

J - Moment of inertia including resolver (without brake)

m - Weight of the motor (weight of the motor with brake)

R - Line to line motor resistance (25°C) (± 10%)

L - Line to line motor inductivity (± 20%)

k_E - Electromotive force [V] at 1000 rpm (± 10%)

k_T - Torque constant (± 10%)

- ***The product is developed, tested and manufactured by ICPE SA***

- **Manufacturing in integrated quality-environment assurance system according to:** SR EN ISO 9001/2001 and SR EN ISO 14001/2005.

- ***Contact: tel. (+4)021 346 72 33, fax (+4)021 346 72 33 e-mail info03@icpe.ro***