



Servo Motor Data sheet

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Page	1 / 1

APM-SC series motor

Model	Unit	APM-SC04A	APM-SC06A	APM-AC08A	APM-SC10A	APM-SC03D	APM-SC05D	APM-SC06D	APM-SC07D	
Motor ID		21	22	23	24	25	26	27	28	
M/D Capacity	[A]	15	15	20	30	15	15	20	30	
M/D Continuous current	[A]	3,2	3,2	4,3	6,4	3,2	3,2	4,3	6,4	
M/D Max. current	[A]	9,6	9,6	12,9	19,2	9,6	9,6	12,9	19,2	
Rated Output	[W]	400	600	800	1.000	300	450	550	650	
Pole No.	Pole	8	8	8	8	8	8	8	8	
Rated Torque	[N m]	1,27	1,91	2,55	3,18	1,43	2,15	2,63	3,10	
	[Kgf cm]	12,99	19,49	25,98	32,48	14,61	21,92	26,79	31,66	
Max. Instantaneous torque	[N m]	3,82	5,73	7,64	9,55	4,30	6,45	7,88	9,31	
	[Kgf cm]	38,97	58,46	77,94	97,43	43,84	65,77	80,38	94,99	
Rated rpm	[rpm]	3.000	3.000	3.000	3.000	2.000	2.000	2.000	2.000	
Max. rpm	[rpm]	5.000	5.000	5.000	5.000	3.000	3.000	3.000	3.000	
BEMF	V/Krpm	29,29	35,20	35,60	39,22	34,20	43,30	44,60	45,70	
Inertia	[gf cm s ²]	0,688	1,114	1,540	1,966	0,688	1,114	1,540	1,966	
	[Kg m ² x 10 ⁻⁴]	0,674	1,092	1,509	1,927	0,674	1,092	1,509	1,927	
Torque Constant	[Kgf cm/A]	4,794	5,648	5,575	6,294	5,869	7,049	7,301	7,468	
Phase Inductance	[mH]	7,610	4,590	2,971	2,519	9,802	6,713	4,528	3,449	
Phase Resistance	[Ω]	1,209	0,714	0,434	0,373	1,599	0,993	0,644	0,512	
Rated Current	[A]	2,82	3,58	4,83	5,37	2,59	3,23	3,82	4,42	
Rated Voltage	[V]	109,20	119,20	117,20	128,10	88,50	102,80	100,20	102,20	
No-load Current	[A]	0,11	0,13	0,17	0,21	0,10	0,12	0,15	0,18	
Encoder Type	[P/r]	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	
Increasing Winding Temp	[°C]	66,5	59,4	69,3	86,3	67	56,9	50,4	73,5	
Power Rated	[kW/s]	24,05	33,39	42,96	52,57	30,43	42,27	45,69	49,97	
Mechanical Time Constant	[ms]	0,620	0,419	0,353	0,311	0,574	0,380	0,319	0,309	
Electrical Time Constant	[ms]	6,294	6,429	6,846	6,753	6,130	6,760	7,031	6,736	
Thermal Resistance	[°C/W]	0,079	0,051	0,049	0,058	0,108	0,058	0,042	0,069	
Thermal Time constant	[min]	19	21	22	25	30	32	36	41	