

AC - Servomotor: BSM105-0650-3X

Pos	Description	Character	Unit	Value	Tolerances
1	Rated Power 1)	P _n	kW	2.01	+/-10%
2	Rated Torque 1)	M _n	Nm	4.8	+/-10%
3	Continuous Stall Torque 1)	M _o	Nm	6.5	+/-10%
4	Peak Torque	M _{o_max}	Nm	26	+/-10%
5	Rated current 1)	I _n	A _{rms}	31.36	+/-10%
6	Rated voltage	U _{DC}	V _{DC}	325	+/-10%
7	Continuous Stall current 1)	I _o	A _{rms}	42.5	+/-10%
8	Peak current	I _{o_max}	A _{rms}	170	+/-10%
9	Rated speed	n	rot/min	4000	+/-10%
10	Maximum speed	n _{max}	rot/min	11000	+/-10%
11	Resistance 2)	R _{ph/ph}	Ω	0.007	+/-10%
12	Inductance 2)	L _{ph/ph}	mH	0.08	+/-20%
13	Torque constant 1)	K _T	Nm/A _{rms}	0.153	+/-10%
14	BEMF constant 2)	K _E	V _{rms} /krpm	9.70	+/-10%
15	Number of poles			6	
16	Thermal time constant with rated current	T _{thN}	min	29	+/-10%
17	Thermal resistance	R _{th}	C°/W	1	+/-10%
18	Static friction torque	M _R	Nm	0.192	+/-25%
19	Resolver model	-	-	15 RX	
20	Number of poles of resolver			2	
21	Moment of inertia	J _M	kgcm ²	3.2	
22	Weight	m	kg	7.6	
23	Max. radial shaft load (at nominal speed)	F _R	N	346	
24	Max. axial shaft load (at nominal speed)	F _A	N	71	
25	Degree of protection	IP	-	55	
26	Ambient temperature	ψ	C° min...max	-15 +40	
27	Winding - protection	-	-	PTC 155°C	
28	Cooling method	-	-	-	natural cooling
29	Insulation class	-	-	F	
30	Vibration severity	Class	-	G2.5	
31	Rotational accuracy	-	mm	0.035	
32	Shaft height tolerance	-	mm	0.012	

speed	M	speed	Mpeak
rpm	Nm	rpm	Nm
0	6.5	0	26
4000	4.8	7500	26
10000	1	1100	0
1100	0		

1) Motor mounted on a metallic flange with an area equal to twice the cross section of the housing.

Ambient temperature 40 °C

2) Measured at 25 °C

