



Brushless Servo Motors

SERVO MOTORS - PREFERRED

- Speed, precision, control for top performance
- Application oriented: tailor-made service, from design to assistance
- Preferred series: for minimum delivery times



TECHNICAL DATA

Motor Type

B13.81I 81 Nm - 3000 rpm - 6 poles - 400V

PERFORMANCE DATA

Type	B13.81I
Stall torque (Deltat=105°C) Mo Nm	81
Rated speed n rpm	3000
Rated power P _n kW	16.8
Rated torque (Deltat=105°C) Mn Nm	53.5
Peak torque M _{pk} Nm	231
Max speed n _{max} rpm	3600
Moment of inertia J 10 ⁻⁴ Kgm ²	126
Peack torque acceleration a _{pk} rad/sec ²	18333
Thermal time constant T _{th} min	70
Voltage constant k _e V _s	0.94
Torque constant k _t Nm/A	1.63
Resistance phase to phase (20°C) R _w ?	0.1
Inductance phase to phase L _w mH	2.9

B.E.M.F. @ rated speed E_n Vrms	296
Stall current I_o Arms	49.7
Rated current I_n Arms	32.8
Peak current I_{pk} Arms	181
Power connector size	7/1.5
Weight kg	67

Mechanical Data

Design	Aluminium
Degree of protection	IP 65 except A side flange
Bearings DE	6309 2ZC3WT
Bearings NDE	6208 2ZC3WT
Lubrication grease	low & high temperature grease
Regreasing device	permanent lubrication
Cooling	radiation and natural convection
Vibration Level	A (normal)

Electrical Data

Poles	6
Voltage	400V
Thermal protection threshold θ_{max} °C	140