



## 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 <sub>n</sub> kW	16.8
Rated torque (Deltat=105°C) Mn Nm	53.5
Peak torque M <sub>pk</sub> Nm	231
Max speed n <sub>max</sub> rpm	3600
Moment of inertia J 10?? Kgm <sup>2</sup>	126
Peack torque acceleration a <sub>pk</sub> rad/sec <sup>2</sup>	18333
Thermal time constant T <sub>th</sub> min	70
Voltage constant k <sub>e</sub> V <sub>s</sub>	0.94
Torque constant k <sub>t</sub> Nm/A	1.63
Resistance phase to phase (20°C) R <sub>w</sub> ?	0.1
Inductance phase to phase L <sub>w</sub> mH	2.9

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

## Mechanical Data

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

## Electrical Data

<b>Poles</b>	6
<b>Voltage</b>	400V
<b>Thermal protection threshold <math>\theta_{max}</math> °C</b>	140