



## Brushless Servo Motors

### TORQUE MOTORS

- Performance = speed + accuracy + efficiency
- Design and support to match your needs
- Designed for compatibility with most drives for maximum flexibility



## TECHNICAL DATA

Motor Type

B16.50P 50 Nm - 1000 rpm - 24 poles - 400V

## PERFORMANCE DATA

| Type                                                           | B16.50P |
|----------------------------------------------------------------|---------|
| Stall torque (Deltat=105°C) Mo Nm                              | 50      |
| Rated speed n rpm                                              | 1000    |
| Rated power P <sub>n</sub> kW                                  | 4.1     |
| Rated torque (Deltat=105°C) Mn Nm                              | 39      |
| Peak torque M <sub>pk</sub> Nm                                 | 173     |
| Max speed n <sub>max</sub> rpm                                 | 1200    |
| Moment of inertia J 10 <sup>-4</sup> Kgm <sup>2</sup>          | 409     |
| Peack torque acceleration a <sub>pk</sub> rad/sec <sup>2</sup> | 4230    |
| Thermal time constant T <sub>th</sub> min                      | 50      |
| Thermal protection threshold ?max °C                           | 140     |
| Voltage constant k <sub>e</sub> V <sub>s</sub>                 | 2.85    |
| Torque constant k <sub>t</sub> Nm/A                            | 4.94    |
| Resistance phase to phase (20°C) R <sub>w</sub> ?              | 0.82    |

|                                    |      |
|------------------------------------|------|
| Inductance phase to phase $L_w$ mH | 6.6  |
| B.E.M.F. @ rated speed $E_n$ Vrms  | 298  |
| Stall current $I_o$ Arms           | 10.1 |
| Rated current $I_n$ Arms           | 7.9  |
| Weight kg                          | 33   |

## Mechanical Data

|                      |                                  |
|----------------------|----------------------------------|
| Design               | Aluminium                        |
| Degree of protection | IP 65 except A side flange       |
| Bearings DE          | 6216 2ZC3WT                      |
| Bearings NDE         | 6309 2ZC3WT                      |
| Lubrication grease   | low & high temperature grease    |
| Regreasing device    | permanent lubrication            |
| Cooling              | radiation and natural convection |
| Vibration Level      | A (normal)                       |

## Electrical Data

|                     |                   |
|---------------------|-------------------|
| Voltage             | 400V              |
| Poles               | 24                |
| Thermal protection  | On-Off PTO switch |
| Insulation class    | F                 |
| Ambient temperature | -15°C / +40 °C    |
| Altitude            | 1000 m.a.s.l.     |