

Servo motor EMME-AS-100-M-HS-AMB

Part number: 2103502

FESTO



 General operating condition

Data sheet

| Feature | Value |
|--|--|
| Ambient temperature | -10 °C ... 40 °C |
| Storage temperature | -20 °C ... 70 °C |
| Relative air humidity | 0 - 90 % |
| Conforms to standard | IEC 60034 |
| Insulation protection class | F |
| Rating class according to EN 60034-1 | S1 |
| Degree of protection | IP21 |
| Electrical connection technology | Plug |
| Note on materials | RoHS-compliant |
| Corrosion resistance class (CRC) | 0 - No corrosion stress |
| LABS (PWIS) conformity | VDMA24364 zone III |
| Certification | RCM compliance mark c UL us - Recognized (OL) |
| CE marking (see declaration of conformity) | As per EU EMC directive As per EU low voltage directive As per EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC To UK RoHS instructions To UK instructions for electrical equipment |
| Nominal operating voltage DC | 565 V |
| DC nominal voltage | 565 V |
| Type of winding switch | Star inside |
| Number of pole pairs | 3 |
| Stall torque | 7.5 Nm |
| Nominal torque | 6.4 Nm |
| Peak torque | 30 Nm |
| Nominal rotary speed | 3000 rpm |
| Max. rotational speed | 3941 rpm |
| Motor nominal power | 2000 W |
| Continuous stall current | 4.6 A |
| Motor nominal current | 4.1 A |
| Peak current | 18.4 A |
| Motor constants | 1.561 Nm/A |
| Voltage constant, phase-to-phase | 101.4 mVmin |
| Phase-phase winding resistance | 3.2 Ohm |
| Winding inductance phase-phase | 12 mH |
| Total output inertia moment | 7.2 kgcm ² |

| Feature | Value |
|--|--|
| Product weight | 8550 g |
| Permissible axial shaft load | 136 N |
| Permissible radial shaft load | 680 N |
| Rotor position sensor | Absolute encoder, multi-turn |
| Rotor position sensor interface | HIPERFACE® |
| Rotor position sensor measuring principle | Capacitive |
| Rotor position encoder, sinusoidal/cosinusoidal periods per revolution | 16 |
| Typical rotor position sensor resolution | 12 bit |
| Rotor position encoder, typical angular accuracy | 20 arcmin |
| Brake holding torque | 9 Nm |
| Brake DC operating voltage | 24 V |
| Brake power consumption | 18 W |
| Brake mass moment of inertia | 0.654 kgcm ² |
| Switching cycles, holding brake | 5 million idle actuations (without friction work!) |
| MTTF, subcomponent | 1037 years, holding brake |
| MTTFd, subcomponent | 271 years, rotor position sensor |
| Energy efficiency | ENEFF (CN) / Class 2 |