

servo motor EMMB-AS-60-04-S30SB

Part number: 8097180

FESTO



Data sheet

| Feature | Value |
|---|---|
| Ambient temperature | -15 ... 40 °C |
| Note on ambient temperature | Up to 60° C with derating of -1.5% per degree Celsius |
| Max. installation height | 4,000 m |
| Note on max. installation height | As of 1,000 m, only with derating of -1.0% per 100 m |
| Storage temperature | -20 ... 55 °C |
| Relative air humidity | 0 - 90 % |
| Conforms to standard | IEC 60034 |
| Thermal class according to EN 60034-1 | F |
| Max. winding temperature | 155 °C |
| Rating class according to EN 60034-1 | S1 |
| Temperature monitoring | Digital motor temperature transmission via Nikon A format |
| Motor type to EN 60034-7 | IM B5 IM V1 IM V3 |
| Assembly position | Any |
| Protection class | IP65 |
| Note on degree of protection | IP40 motor shaft without RWDR IP54 motor shaft with rotary shaft seal IP65 motor housing without connection |
| Concentricity, coaxiality, axial runout to DIN SPEC 42955 | N |
| Balance quality | G 2,5 |
| Storage lifetime under nominal conditions | 20,000 h |
| Electrical connection 1, connection type | Plug |
| Electrical connection 1, connection technology | Connection pattern RE |
| Electrical connection 1, number of pins/wires | 6 |
| Degree of contamination | 2 |
| Materials note | Conforms to RoHS |
| Corrosion resistance classification CRC | 0 - No corrosion stress |
| PWIS conformity | VDMA24364 zone III |
| Vibration resistance | Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 |
| Shock resistance | Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 |
| Authorisation | c UL us - Recognized (OL) |
| CE mark (see declaration of conformity) | to EU directive for EMC to EU directive low-voltage devices in accordance with EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK instructions for electrical equipment To UK instructions for EMC To UK RoHS instructions |
| Certificate issuing department | UL E342973 |
| Nominal operating voltage DC | 300 V |
| Nominal voltage DC | 300 V |
| Type of winding switch | Star inside |
| Number of pole pairs | 3 |
| Standstill torque | 1.4 Nm |

| Feature | Value |
|---|------------------------------|
| Nominal torque | 1.27 Nm |
| Peak torque | 3.81 Nm |
| Nominal rotary speed | 3,000 1/min |
| Max. speed | 6,000 1/min |
| Max. mechanical speed | 10,000 1/min |
| Nominal motor power | 400 W |
| Continuous open-circuit current | 2.6 A |
| Nominal motor current | 2.4 A |
| Peak current | 7.2 A |
| Motor constant | 0.562 Nm/A |
| Voltage constant, phase-to-phase | 34 mVmin |
| Phase-phase winding resistance | 5.8 Ohm |
| Phase-phase winding inductance | 11.5 mH |
| Electric time constant | 1.98 ms |
| Measuring flange | 255 x 255 x 8, aluminium |
| Overall mass moment of inertia at power take-off | 0.425 kgcm ² |
| Product weight | 1,900 g |
| Permissible axial shaft load | 90 N |
| Permissible radial shaft load | 180 N |
| Rotor position sensor | Absolute single turn encoder |
| Rotor position sensor, manufacturer designation | SAR-ML50AJC00 |
| Rotor position sensor, absolute detectable revolutions | 1 |
| Rotary position encoder interface | Nikon A format |
| Rotary position encoder measuring principle | Optical |
| Rotor position sensor, DC operating voltage | 5 V |
| Rotor position sensor, DC operating voltage range | 4.75 ... 5.25 V |
| Rotor position sensor, position values per revolution | 1,048,576 |
| Rotor position encoder resolution | 20 Bit |
| Rotor position sensor, system accuracy of angle measurement | -120 ... 120 arcsec |
| Brake holding torque | 1.3 Nm |
| Operating voltage DC for brake | 24 V |
| Power consumption, brake | 7.2 W |