

# Servo motor EMME-AS-60-M-LS-AMXB

Part number: 4267577

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<br>c UL us - Recognized (OL)   |
| CE marking (see declaration of conformity)   | As per EU EMC directive<br>As per EU low voltage directive<br>As per EU RoHS directive               |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions<br>To UK instructions for electrical equipment |
| Nominal operating voltage DC                 | 360 V  |
| DC nominal voltage                           | 360 V  |
| Type of winding switch                       | Star inside  |
| Number of pole pairs                         | 3  |
| Stall torque                                 | 1.5 Nm   |
| Nominal torque                               | 1.2 Nm   |
| Peak torque                                  | 6 Nm   |
| Nominal rotary speed                         | 3000 rpm   |
| Max. rotational speed                        | 4925 rpm   |
| Motor nominal power                          | 380 W  |
| Continuous stall current                     | 1.8 A  |
| Motor nominal current                        | 1.5 A  |
| Peak current                                 | 7.2 A  |
| Motor constants                              | 0.8 Nm/A   |
| Voltage constant, phase-to-phase             | 51.7 mVmin   |
| Phase-phase winding resistance               | 9.8 Ohm  |
| Winding inductance phase-phase               | 16.8 mH  |
| Total output inertia moment                  | 0.512 kgcm <sup>2</sup>  |

| Feature  | Value  |
|--|--|
| Product weight   | 2200 g   |
| Permissible axial shaft load   | 54 N   |
| Permissible radial shaft load  | 270 N  |
| Rotor position sensor  | Safety encoder, absolute multi-turn                            |
| Rotor position sensor interface  | HIPERFACE®   |
| Rotor position sensor measuring principle                              | Optical  |
| Rotor position encoder, sinusoidal/cosinusoidal periods per revolution | 128  |
| Typical rotor position sensor resolution                               | 15 bit   |
| Rotor position encoder, typical angular accuracy                       | 20 arcmin  |
| Brake holding torque   | 2 Nm   |
| Brake DC operating voltage   | 24 V   |
| Brake power consumption  | 11 W   |
| Brake mass moment of inertia   | 0.086 kgcm <sup>2</sup>  |
| Switching cycles, holding brake  | 5 million idle actuations (without friction work!)             |
| Safety Integrity Level (SIL), subcomponent                             | SIL 2, rotor position sensor<br>SILCL 2, rotor position sensor |
| Performance Level (PL), subcomponent                                   | Category 3, performance level d, rotor position encoder        |
| PFHd, subcomponent   | 1.3 x 10E-8, rotor position sensor                             |
| Duration of use Tm, subcomponent                                       | 20 years, rotor position sensor                                |
| MTTF, subcomponent   | 538 years, holding brake                                       |
| MTTFd, subcomponent  | 874 years, rotor position sensor                               |