

# Servo motor EMME-AS-60-MK-LS-AMX

Part number: 4267578

FESTO



## Data sheet

| Feature                                    | Value                                                      |
|--------------------------------------------|------------------------------------------------------------|
| Type code                                  | EMME-AS                                                    |
| 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                                                       |
| Featherkey shaft design                    | DIN 6885<br>A 5 x 5 x 22                                   |
| Electrical connection technology           | Plug                                                       |
| Note on materials                          | RoHS-compliant                                             |
| Corrosion resistance class (CRC)           | 0 - No corrosion stress                                    |
| LABS 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 |
| 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 1/min                                                 |
| Max. rotational speed                      | 4925 1/min                                                 |
| 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                | 0.413 kgcm <sup>2</sup>                                    |

| Feature                                                                | Value                                                          |
|------------------------------------------------------------------------|----------------------------------------------------------------|
| Product weight                                                         | 1850 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                                                      |
| 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                                |
| MTTFd, subcomponent                                                    | 874 years, rotor position sensor                               |