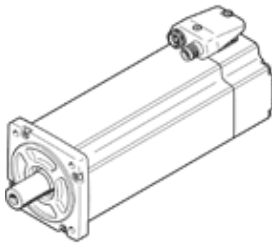


# servo motor EMME-AS-80-M-LS-AMB

Part number: 2093171

**FESTO**

Without gear unit/with brake.



## Data sheet

| Feature                                                                | Value                                                          |
|------------------------------------------------------------------------|----------------------------------------------------------------|
| Ambient temperature                                                    | -10 ... 40 °C                                                  |
| Storage temperature                                                    | -20 ... 70 °C                                                  |
| Relative air humidity                                                  | 0 - 90 %                                                       |
| Conforms to standard                                                   | IEC 60034                                                      |
| Insulation protection class                                            | F                                                              |
| Rating class according to EN 60034-1                                   | S1                                                             |
| Protection class                                                       | IP21                                                           |
| Electrical connector system                                            | Plug                                                           |
| Materials note                                                         | Contains PWIS substances<br>Conforms to RoHS                   |
| Corrosion resistance classification CRC                                | 0 - No corrosion stress                                        |
| Authorisation                                                          | RCM Mark<br>c UL us - Recognized (OL)                          |
| CE mark (see declaration of conformity)                                | to EU directive for EMC<br>to EU directive low-voltage devices |
| Nominal operating voltage DC                                           | 360 V                                                          |
| Nominal voltage DC                                                     | 360 V                                                          |
| Type of winding switch                                                 | Star inside                                                    |
| Number of pole pairs                                                   | 3                                                              |
| Standstill torque                                                      | 3.5 Nm                                                         |
| Nominal torque                                                         | 3.2 Nm                                                         |
| Peak torque                                                            | 14 Nm                                                          |
| Nominal rotary speed                                                   | 3,000 1/min                                                    |
| Max. speed                                                             | 4,627 1/min                                                    |
| Nominal motor power                                                    | 1,000 W                                                        |
| Continuous open-circuit current                                        | 3.9 A                                                          |
| Nominal motor current                                                  | 3.7 A                                                          |
| Peak current                                                           | 15.6 A                                                         |
| Motor constant                                                         | 0.865 Nm/A                                                     |
| Voltage constant, phase-to-phase                                       | 55 mVmin                                                       |
| Phase-phase winding resistance                                         | 2.8 Ohm                                                        |
| Phase-phase winding inductance                                         | 7.43 mH                                                        |
| Overall mass moment of inertia at power take-off                       | 2.2 kgcm <sup>2</sup>                                          |
| Product weight                                                         | 4,350 g                                                        |
| Permissible axial shaft load                                           | 72 N                                                           |
| Permissible radial shaft load                                          | 360 N                                                          |
| Rotor position sensor                                                  | Absolute multi-turn encoder                                    |
| Rotary position encoder interface                                      | HIPERFACE®                                                     |
| Rotary position encoder measuring principle                            | Capacitive                                                     |
| Rotor position encoder, sinusoidal/cosinusoidal periods per revolution | 16                                                             |
| Rotor position encoder, typical resolution                             | 12 Bit                                                         |
| Rotor position encoder, typical angular accuracy                       | 20 arcmin                                                      |
| Brake holding torque                                                   | 4.5 Nm                                                         |
| Operating voltage DC for brake                                         | 24 V                                                           |

| Feature                         | Value                                                 |
|---------------------------------|-------------------------------------------------------|
| Power consumption, brake        | 12 W                                                  |
| Mass moment of inertia of brake | 0.222 kgcm <sup>2</sup>                               |
| Switching cycles, holding brake | 5 million idle actuations (without work of friction!) |
| MTTF, subcomponent              | 797 years, holding brake                              |
| MTTFd, subcomponent             | 271 years, rotary position encoder                    |