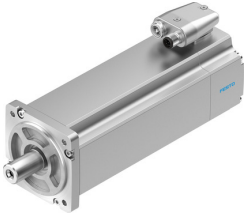


# Servo motor EMME-AS-80-M-HS-ASB

Part number: 2093202

**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                                                       |
| 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               | 565 V                                                      |
| DC nominal voltage                         | 565 V                                                      |
| Type of winding switch                     | Star inside                                                |
| Number of pole pairs                       | 3                                                          |
| Stall torque                               | 3.5 Nm                                                     |
| Nominal torque                             | 3.2 Nm                                                     |
| Peak torque                                | 14 Nm                                                      |
| Nominal rotary speed                       | 3000 1/min                                                 |
| Max. rotational speed                      | 4097 1/min                                                 |
| Motor nominal power                        | 1000 W                                                     |
| Continuous stall current                   | 2.2 A                                                      |
| Motor nominal current                      | 2.1 A                                                      |
| Peak current                               | 8.8 A                                                      |
| Motor constants                            | 1.524 Nm/A                                                 |
| Voltage constant, phase-to-phase           | 97.5 mVmin                                                 |
| Phase-phase winding resistance             | 9 Ohm                                                      |
| Winding inductance phase-phase             | 22.8 mH                                                    |
| Total output inertia moment                | 2.2 kgcm <sup>2</sup>                                      |
| Product weight                             | 4350 g                                                     |
| Permissible axial shaft load               | 72 N                                                       |

| Feature                                                                | Value                                              |
|------------------------------------------------------------------------|----------------------------------------------------|
| Permissible radial shaft load                                          | 360 N                                              |
| Rotor position sensor                                                  | Absolute encoder, single-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                                                   | 4.5 Nm                                             |
| Brake DC operating voltage                                             | 24 V                                               |
| Brake power consumption                                                | 12 W                                               |
| Brake mass moment of inertia                                           | 0.222 kgcm <sup>2</sup>                            |
| Switching cycles, holding brake                                        | 5 million idle actuations (without friction work!) |
| MTTF, subcomponent                                                     | 797 years, holding brake                           |
| MTTFd, subcomponent                                                    | 340 years, rotor position sensor                   |
| Energy efficiency                                                      | ENEFF (CN) / Class 2                               |