

# Servo motor EMME-AS-40-M-LV-AS

Part number: 2082444

**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 as per EN 60034-1               | S1                                                                                                  |
| Degree of protection                         | IP21                                                                                                |
| Electrical connector system                  | Plug                                                                                                |
| Note on materials                            | RoHS-compliant                                                                                      |
| Corrosion resistance class CRC               | 0 - No corrosion stress                                                                             |
| LABS (PWIS) conformity                       | VDMA24364 zone III                                                                                  |
| Approval                                     | RCM trademark<br>c UL us - Recognized (OL)                                                          |
| CE mark (see declaration of conformity)      | To EU EMC Directive<br>To EU Low Voltage Directive<br>In accordance with EU RoHS Directive          |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions<br>To UK regulations for electrical equipment |
| Nominal operating voltage DC                 | 360 V                                                                                               |
| Nominal voltage DC                           | 360 V                                                                                               |
| Type of winding switch                       | Star inside                                                                                         |
| Number of pole pairs                         | 2                                                                                                   |
| Standstill torque                            | 0.35 Nm                                                                                             |
| Nominal torque                               | 0.21 Nm                                                                                             |
| Peak torque                                  | 1.4 Nm                                                                                              |
| Nominal rotary speed                         | 9000 rpm                                                                                            |
| Max. rotational speed                        | 10000 rpm                                                                                           |
| Nominal power rating of motor                | 200 W                                                                                               |
| Continuous stall current                     | 1.6 A                                                                                               |
| Nominal motor current                        | 1.2 A                                                                                               |
| Peak current                                 | 6.4 A                                                                                               |
| Motor constant                               | 0.175 Nm/A                                                                                          |
| Voltage constant, phase-to-phase             | 13.2 mV/min                                                                                         |
| Phase-phase winding resistance               | 8.6 Ohm                                                                                             |
| Phase-phase winding inductance               | 4.51 mH                                                                                             |
| Total mass moment of inertia of output       | 0.054 kgcm <sup>2</sup>                                                                             |

| Feature                                              | Value                            |
|------------------------------------------------------|----------------------------------|
| Product weight                                       | 700 g                            |
| Permissible axial shaft load                         | 12 N                             |
| Permissible radial shaft load                        | 115 N                            |
| Rotor position sensor                                | Absolute single-turn encoder     |
| Rotor position encoder interface                     | HIPERFACE®                       |
| Rotor position sensor, encoder measuring principle   | Capacitive                       |
| Rotor pos. enc., sin/cosin p/r                       | 16                               |
| Rotor pos. encoder, typ. res.                        | 12 bit                           |
| Rot. pos. enc., typ. ang. acc.                       | 20 arcmin                        |
| Mean time to dangerous failure (MTTFd), subcomponent | 340 years, rotor position sensor |