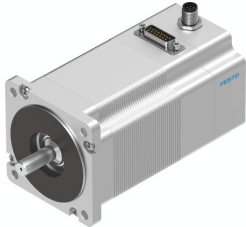


# Stepper motor EMMS-ST-87-M-SE-G2

Part number: 1370487

FESTO



 General operating condition

## Data sheet

| Feature                                            | Value                                                 |
|----------------------------------------------------|-------------------------------------------------------|
| Ambient temperature                                | -10 °C ... 50 °C                                      |
| Storage temperature                                | -20 °C ... 70 °C                                      |
| Relative air humidity                              | 0 - 85%                                               |
| Conforms to standard                               | IEC 60034                                             |
| Insulation protection class                        | B                                                     |
| Temperature class as per EN 60034-1                | B                                                     |
| Rating class as per EN 60034-1                     | S1                                                    |
| Degree of protection                               | IP54                                                  |
| Electrical connector system                        | Plug                                                  |
| Note on materials                                  | RoHS-compliant                                        |
| Corrosion resistance class CRC                     | 1 - Low corrosion stress                              |
| LABS (PWIS) conformity                             | VDMA24364-B2-L                                        |
| Approval                                           | RCM trademark<br>c UL us - Recognized (OL)            |
| CE mark (see declaration of conformity)            | To EU EMC Directive                                   |
| CE marking (see declaration of conformity)         | To UK instructions for EMC<br>To UK RoHS instructions |
| Nominal operating voltage DC                       | 48 V                                                  |
| Motor holding torque                               | 5.9 Nm                                                |
| Max. rotational speed                              | 550 rpm                                               |
| Stepper angle for complete step                    | 1.8 deg                                               |
| Stepping angle tolerance                           | ±5%                                                   |
| Nominal motor current                              | 9.5 A                                                 |
| Voltage constant, phase                            | 68.6 mVmin                                            |
| Phase winding resistance                           | 0.23 Ohm                                              |
| Phase winding inductance                           | 2.6 mH                                                |
| Mass moment of inertia of rotor                    | 1.9 kgcm <sup>2</sup>                                 |
| Total mass moment of inertia of output             | 1.9 kgcm <sup>2</sup>                                 |
| Product weight                                     | 3200 g                                                |
| Permissible axial shaft load                       | 65 N                                                  |
| Permissible radial shaft load                      | 200 N                                                 |
| Rotor position sensor                              | Incremental encoder                                   |
| Rotor position encoder interface                   | RS422 TTL AB channels + zero index                    |
| Rotor position sensor, encoder measuring principle | Optical                                               |
| Brake holding torque                               | 2 Nm                                                  |