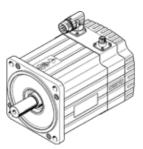
## servo motor EMMS-AS-140-SK-HV-RSB-S1 Part number: 1574648 Product to be discontinued

**FESTO** 

Without gear unit.



## **Data sheet**

| Feature  | Value                                       |
|--|---|
| Ambient temperature                              | -10 40 °C                                   |
| Storage temperature                              | -20 60 °C                                   |
| Relative air humidity                            | 0 - 90 %                                    |
| Conforms to standard                             | IEC 60034                                   |
| Insulation protection class                      | F   |
| Rating class according to EN 60034-1             | S1  |
| Temperature monitoring                           | PTC resistor                                |
| Protection class                                 | IP65  |
| Shaft design Featherkey                          | DIN 6885                                    |
| · · · · · · · · · · · · · · · · · · ·            | A 8 x 7 x 40                                |
| Electrical connector system                      | Plug  |
| Materials note                                   | Conforms to RoHS                            |
| Corrosion resistance classification CRC          | 2 - Moderate corrosion stress               |
| PWIS conformity                                  | VDMA24364-B2-L                              |
| Authorisation                                    | RCM Mark                                    |
|  | c UL us - Recognized (OL)                   |
| CE mark (see declaration of conformity)          | to EU directive for EMC                     |
| ,          | to EU directive low-voltage devices         |
|  | in accordance with EU RoHS directive        |
| UKCA marking (see declaration of conformity)     | To UK instructions for electrical equipment |
|  | To UK instructions for EMC                  |
|  | To UK RoHS instructions                     |
| Nominal voltage DC                               | 565 V                                       |
| Type of winding switch                           | Star inside                                 |
| Number of pole pairs                             | 6   |
| Standstill torque                                | 11.08 Nm                                    |
| Nominal torque                                   | 7.7 Nm                                      |
| Peak torque                                      | 27 Nm                                       |
| Nominal rotary speed                             | 3,900 1/min                                 |
| Max. speed                                       | 4,510 1/min                                 |
| Nominal motor power                              | 3,140 W                                     |
| Nominal motor current                            | 5.23 A                                      |
| Peak current                                     | 24.4 A                                      |
| Motor constant                                   | 1.47 Nm/A                                   |
| Voltage constant, phase-to-phase                 | 88.71 mVmin                                 |
| Phase-phase winding resistance                   | 1.6 Ohm                                     |
| Phase-phase winding inductance                   | 9.01 mH                                     |
| Overall mass moment of inertia at power take-off | 9.271 kgcm2                                 |
| Product weight                                   | 10,400 g                                    |
| Permissible axial shaft load                     | 200 N                                       |
| Permissible radial shaft load                    | 780 N                                       |
| Rotor position sensor                            | Absolute single turn encoder                |
| Rotary position encoder interface                | EnDat 22                                    |
| Rotary position encoder measuring principle      | Inductive                                   |



| Feature                           | Value   |
|-----------------------------------|---|
| Rotor position encoder resolution | 18 Bit  |
| Brake holding torque              | 18 Nm   |
| Operating voltage DC for brake    | 24 V  |
| Power consumption, brake          | 15.6 W  |
| Mass moment of inertia of brake   | 1.2 kgcm2   |
| Switching cycles, holding brake   | 5 million idle actuations (without work of friction!) |
| MTTF, subcomponent                | 76 years, rotary position encoder                     |
|                                   | 4469 years, holding brake                             |
| MTTFd, subcomponent               | 152 years, rotary position encoder                    |