

# Servo motor EMMS-AS-140-LK-HS-RSB

Part number: 560905

FESTO



## Data sheet

Feature	Value
Type code	EMMS-AS
Ambient temperature	-10 °C ... 40 °C
Storage temperature	-20 °C ... 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
Degree of protection	IP54
Featherkey shaft design	DIN 6885 A 8 x 7 x 40
Electrical connection technology	Plug
Note on materials	RoHS-compliant
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
LABS conformity	VDMA24364-B2-L
Certification	RCM compliance mark c UL us - Recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per EU low voltage directive
DC nominal voltage	565 V
Type of winding switch	Star inside
Number of pole pairs	6
Stall torque	25.48 Nm
Nominal torque	20.05 Nm
Peak torque	48.8 Nm
Nominal rotary speed	2000 1/min
Max. rotational speed	2460 1/min
Motor nominal power	4420 W
Motor nominal current	7.8 A
Peak current	20 A
Motor constants	2.72 Nm/A
Voltage constant, phase-to-phase	162.39 mVmin
Phase-phase winding resistance	1.41 Ohm
Winding inductance phase-phase	13.44 mH
Total output inertia moment	20.108 kgcm <sup>2</sup>
Product weight	17000 g

Feature	Value
Permissible axial shaft load	200 N
Permissible radial shaft load	1060 N
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor interface	EnDat® 22
Rotor position sensor measuring principle	Inductive
Rotor position sensor resolution	18 bit
Brake holding torque	18 Nm
Brake DC operating voltage	24 V
Brake power consumption	15.6 W
Brake mass moment of inertia	1.082 kgcm <sup>2</sup>
Switching cycles, holding brake	5 million idle actuations (without friction work!)
MTTF, subcomponent	76 years, rotor position sensor 4469 years, holding brake
MTTFd, subcomponent	152 years, rotor position sensor
Energy efficiency	ENEFF (CN) / Class 2