

# Servo motor EMMS-AS-140-LK-HV-RMB-S1

Part number: 1574710

FESTO



## Data sheet

Feature	Value
Number of pole pairs	6
Type code	EMMS-AS
Rotor position sensor	Absolute encoder, multi-turn
Rotor position sensor interface	EnDat® 22
Rotor position sensor measuring principle	Inductive
Temperature monitoring	PTC resistor
Max. rotational speed	3830 1/min
Nominal rotary speed	2800 1/min
Brake DC operating voltage	24 V
Insulation protection class	F
Brake power consumption	15.6 W
Motor constants	1.75 Nm/A
Motor nominal power	5110 W
DC nominal voltage	565 V
Motor nominal current	9.96 A
Rotor position sensor resolution	19 bit
Phase-phase winding resistance	0.586 Ohm
Winding inductance phase-phase	4.65 mH
Type of winding switch	Star inside
Peak current	51.5 A
Voltage constant, phase-to-phase	104.41 mVmin
Rating class according to EN 60034-1	S1
CE marking (see declaration of conformity)	As per EU EMC directive As per EU low voltage directive
Corrosion resistance class (CRC)	2 - Moderate corrosion stress
Storage temperature	-20 °C ... 60 °C
Relative air humidity	0 - 90 %
Degree of protection	IP65
Ambient temperature	-10 °C ... 40 °C
Certification	RCM compliance mark c UL us - Recognized (OL)
Total output inertia moment	20.108 kgcm <sup>2</sup>
Brake holding torque	18 Nm
Brake mass moment of inertia	1.2 kgcm <sup>2</sup>
Nominal torque	17.41 Nm
Peak torque	67.5 Nm

Feature	Value
Stall torque	25.5 Nm
Permissible axial shaft load	200 N
Permissible radial shaft load	1060 N
MTTF, subcomponent	76 years, rotor position sensor 4469 years, holding brake
MTTFd, subcomponent	152 years, rotor position sensor
Switching cycles, holding brake	5 million idle actuations (without friction work!)
Product weight	17000 g
Electrical connection technology	Plug
Note on materials	RoHS-compliant
Conforms to standard	IEC 60034
Featherkey shaft design	DIN 6885 A 8 x 7 x 40