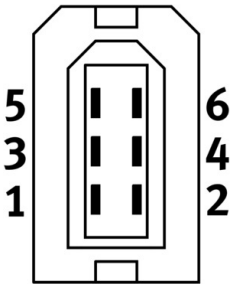
Servo motor
EMMB-AS-40-01-K-S30MB

Part number: 8097170





Data sheet

Feature	Value
Ambient temperature	-15 °C ... 40 °C
Note on ambient temperature	Up to 60 °C with derating of -1.5% per degree Celsius
Max. installation height	4000 m
Information on max. installation height	with 1,000 m and longer only with derating of -1.0% per 100 m
Storage temperature	-20 °C ... 55 °C
Relative air humidity	0 - 90 %
Conforms to standard	IEC 60034
Thermal class according to EN 60034-1	F
Max. winding temperature	155 °C
Rating class according to EN 60034-1	S1
Temperature monitoring	Digital motor temperature transmission via Nikon A format
Motor type as per EN 60034-7	IM B5 IM V1 IM V3
Mounting position	Any
Degree of protection	IP65
Note on degree of protection	IP40 for motor shaft without rotary shaft seal IP54 for motor shaft with rotary shaft seal IP65 for motor housing without connection technology
Concentricity, coaxiality, axial runout according to DIN SPEC 42955	N
Balancing quality	G 2.5
Storage lifetime, under nominal conditions	20000 h
Featherkey shaft design	DIN 6885 A 3 x 3 x 12
Electrical connection 1, connection type	Plug
Electrical connection 1, connection technology	Connection diagram RE
Electrical connection 1, number of pins/wires	6
Electrical connection for input 1, connection pattern	00995792
Contamination level	2
Note on materials	RoHS-compliant
Corrosion resistance class (CRC)	0 - No corrosion stress
LABS conformity	VDMA24364 zone III
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6

Feature	Value
Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Certification	c UL us - Recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per EU low voltage directive As per EU RoHS directive
Certificate issuing authority	UL E342973 UL E342973
Nominal operating voltage DC	300 V
DC nominal voltage	300 V
Type of winding switch	Star inside
Number of pole pairs	5
Stall torque	0.352 Nm
Nominal torque	0.32 Nm
Peak torque	0.96 Nm
Nominal rotary speed	3000 1/min
Max. rotational speed	6000 1/min
Max. mechanical speed	10000 1/min
Motor nominal power	100 W
Continuous stall current	1.43 A
Motor nominal current	1.3 A
Peak current	3.9 A
Motor constants	0.268 Nm/A
Voltage constant, phase-to-phase	16.2 mVmin
Phase-phase winding resistance	7.9 Ohm
Winding inductance phase-phase	10.5 mH
Electric time constant	1.33 ms
Measuring flange	175 x 200 x 10 mm, aluminum
Total output inertia moment	0.063 kgcm²
Product weight	770 g
Permissible axial shaft load	60 N
Permissible radial shaft load	120 N
Rotor position sensor	Absolute encoder, multi-turn
Rotor position sensor for manufacturer designation	MAR-MX50AHN00
Rotor position encoder for absolutely detectable revolutions	65536
Rotor position sensor interface	Nikon A-format
Rotor position sensor measuring principle	Optical
Rotor position encoder for DC operating voltage	5 V
Rotor position encoder for DC operating voltage range	4.75 V ... 5.25 V
Rotor position encoder for positional values per revolution	1048576
Rotor position sensor resolution	20 bit
Rotor position encoder system accuracy angle measurement	-120 arcsec ... 120 arcsec
Brake holding torque	0.32 Nm
Brake DC operating voltage	24 V
Brake power consumption	5.9 W