Product data sheet
Characteristics

BMI1003P07F
servo motor BMI 3-phase - untapped IP54 multiturn - 32768 p/t x 4096 t - brake



Main

Range compatibility	Lexium 32i
Device short name	BMI
Product or component type	Servo motor with power stage

Complementary

Maximum mechanical speed	6000 Rpm
[Us] rated supply voltage	208...480 V - 15...10 %
Supply voltage limits	208…480 V
Network number of phases	Three phase
Supply frequency	50/60 Hz - 5...5 %
Network frequency limits	47.5…63 Hz
EMC filter	Integrated
Continuous output current	4 A at 8 kHz
Output current 3s peak	12 A at 400 V for 3 s
Continuous stall current	4 A
Continuous stall torque	8.5 N.M at 208...480 V three phase
Peak stall torque	19.2 N.M at 400 V three phase 19.2 N.M at 480 V three phase 19.2 N.M at 208 V three phase
Nominal output power	1000 W at 208 V three phase 2000 W at 400 V three phase 2100 W at 480 V three phase
Nominal torque	7.2 N.M at 208 V three phase 6.8 N.M at 400 V three phase 5.6 N.M at 480 V three phase
Nominal speed	1500 rpm at 208 V three phase 3000 rpm at 400 V three phase 3700 rpm at 480 V three phase
Maximum current Irms	26.7 A at 208 V, three phase 26.7 A at 400 V, three phase 26.7 A at 480 V, three phase
Product compatibility	Drive control unit LXM32i CANopen Drive control unit LXM32i EtherCAT
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	19 Mm
Shaft length	40 Mm
Feedback type	Absolute multiturn SinCos Hiperface
Speed feedback resolution	32768 points/turn x 4096 turns
Holding brake	With

Holding torque	9 N.M holding brake
Mounting support	International standard flange
Motor flange size	100 Mm
Electrical connection	Printed circuit board connector
Torque constant	1.7 N.M/A at 20 °C
Back emf constant	112 V/Krpm at 20 °C
Number of motor poles	10
Rotor inertia	10.3 Kg.Cm²
Stator resistance	2.31 Ohm at 20 °C
Stator inductance	11.43 MH at 20 °C
Stator electrical time constant	4.95 Ms at 20 °C
Maximum radial force Fr	1050 N at 1000 rpm 830 N at 2000 rpm 730 N at 3000 rpm 660 N at 4000 rpm 610 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	8 W
Type of cooling	Natural convection
Length	338 Mm
Number of motor stacks	3
Centring collar diameter	95 Mm
Centring collar depth	3.5 Mm
Number of mounting holes	4
Mounting holes diameter	9 Mm
Circle diameter of the mounting holes	115 Mm
Distance shaft shoulder-flange	3.5 Mm

Environment

IP degree of protection	Shaft: IP54 Housing: IP65

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	20.0 Cm
Package 1 Width	59.0 Cm
Package 1 Length	25.8 Cm
Package 1 Weight	11.0 Kg
Unit Type of Package 2	P06
Number of Units in Package 2	8
Package 2 Height	77.0 Cm
Package 2 Width	80.0 Cm
Package 2 Length	60.0 Cm
Package 2 Weight	96.5 Kg

Offer Sustainability

Recyclability potential, in %	93
Total lifecycle Carbon footprint	6 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	4.264337058172626
Carbon footprint of the manufacturing phase [A1 to A3]	4 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	0
Carbon footprint of the use phase [B2, B3, B4, B6]	0 kg CO2 eq.

Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	1.7336025667776225
Carbon footprint of the end-of-life phase [C1 to C4]	2 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	6
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
PVC free	Yes
End of life manual availability	End Of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised