BMI1003P07A

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





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	208480 V - 1510 %	
Supply voltage limits	208480 V	
Phase	Three phase	
Supply frequency	50/60 Hz - 55 %	
Network frequency limits	47.563 Hz	
EMC filter	Integrated	
Continuous output current	4 A 8 kHz	
Output current 3s peak	12 A 400 V 3 s	
Continuous stall current	4 A	
Continuous stall torque	75.23 lbf.in (8.5 N.m) 208480 V three phase	
Peak stall torque	169.93 Lbf.In (19.2 N.m) 400 V three phase 169.93 Lbf.In (19.2 N.m) 480 V three phase 169.93 lbf.in (19.2 N.m) 208 V three phase	
Nominal output power	1000 W 208 V three phase 2000 W 400 V three phase 2100 W 480 V three phase	
Nominal torque	63.73 Lbf.In (7.2 N.m) 208 V three phase 60.18 Lbf.In (6.8 N.m) 400 V three phase 49.56 lbf.in (5.6 N.m) 480 V three phase	
Nominal speed	1500 rpm 208 V three phase 3000 rpm 400 V three phase 3700 rpm 480 V three phase	
Maximum current Irms	26.7 A 208 V, three phase 26.7 A 400 V, three phase 26.7 A 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	0.75 in (19 mm)	
Shaft length	1.57 in (40 mm)	
Feedback type	Absolute multiturn SinCos Hiperface	
Speed feedback resolution	32768 points/turn x 4096 turns	
Holding brake	Without	
Mounting Support	International standard flange	

Motor flange size	3.94 in (100 mm)
Electrical Connection	Printed circuit board connector
Torque constant	1.7 N.m/A 68 °F (20 °C)
Back emf constant	112 V/krpm 68 °F (20 °C)
Number of motor poles	10
Rotor inertia	9.37 kg.cm²
Stator resistance	2.31 Ohm 68 °F (20 °C)
Stator inductance	11.43 mH 68 °F (20 °C)
Stator electrical time constant	4.95 ms 68 °F (20 °C)
Maximum radial force Fr	1050 N 1000 rpm 830 N 2000 rpm 730 N 3000 rpm 660 N 4000 rpm 610 N 5000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	11.77 in (299 mm)
Number of motor stacks	3
Centring collar diameter	3.74 in (95 mm)
Centring collar depth	0.14 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.35 in (9 mm)
Circle diameter of the mounting holes	4.53 in (115 mm)
Distance shaft shoulder-flange	0.14 in (3.5 mm)

Environment

IP Degree of Protection	Shaft IP54	
	Housing IP65	

Ordering and shipping details

Category	US1PC5618287	
Discount Schedule	PC56	
GTIN	3606485377629	
Returnability	No	
Country of origin	US	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	10.16 in (25.8 cm)
Package 1 Width	7.9 in (20.0 cm)
Package 1 Length	23.2 in (59.0 cm)
Package 1 Weight	24.3 lb(US) (11.0 kg)
Unit Type of Package 2	P06
Number of Units in Package 2	8
Package 2 Height	30.3 in (77.0 cm)
Package 2 Width	31.5 in (80.0 cm)
Package 2 Length	23.6 in (60.0 cm)
Package 2 Weight	212.75 lb(US) (96.5 kg)

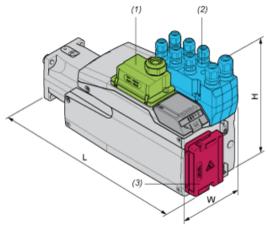
Offer Sustainability

Sustainable offer status	Green Premium product	
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov	
REACh Regulation	☑REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
Mercury free	Yes	
China RoHS Regulation	China RoHS Declaration	
RoHS exemption information	€Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.	
PVC free	Yes	
Contractual warranty		
Warranty	18 months	

External Dimensions

With Standard Braking Resistor

Mounting type A



- (1) Module for supply voltage
- (2) I/O module
- (3) Standard braking resistor

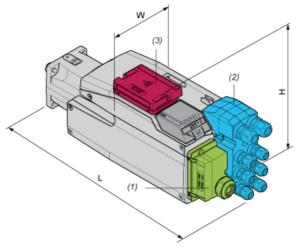
Dimensions in mm

W	н	L
132,6	217	320

Dimensions in in.

W	Н	L
5,22	8,54	12,6

Mounting type B



- (1) Module for supply voltage
- (2) I/O module
- (3) Standard braking resistor

Dimensions in mm

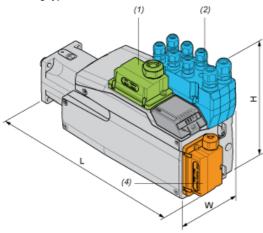
W	н	L
132,6	168	369

Dimensions in in.

W	Н	L
5,22	6,61	14,53

With External Braking Resistor

Mounting type C



- Module for supply voltage I/O module
- (4) External braking resistor

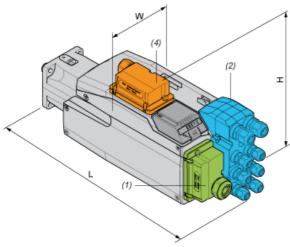
Dimensions in mm

W	Н	L
	217	332

Dimensions in in.

W	н	L
5,22	8,54	13,07

Mounting type D



- (1) Module for supply voltage(2) I/O module(4) External braking resistor

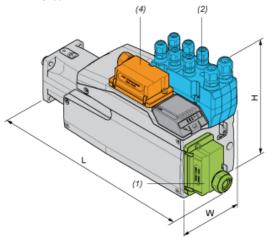
Dimensions in mm

W	Н	L
132,6	180	369

Dimensions in in.

W	н	L
5,22	7,09	14,53

Mounting type E



- (1) (2) Module for supply voltage I/O module
- (4) External braking resistor

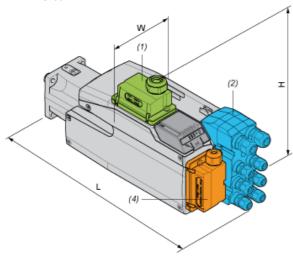
Dimensions in mm

W	н	L
132,6	217	359

Dimensions in in.

W	Н	L
5,22	8,54	14,13

Mounting type F



- (1) (2) Module for supply voltage
- I/O module
- External braking resistor

Dimensions in mm

W	Н	L
132,6	206,5	369

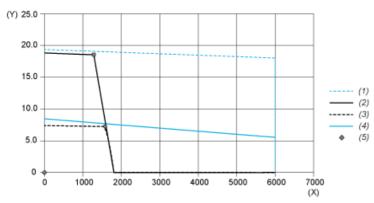
Dimensions in in.

W	Н	L
5,22	8,13	14,53

Product data sheet Performance Curves

Performance Curves

Torque/Speed Curves with 208 V Three Phases Supply Voltage

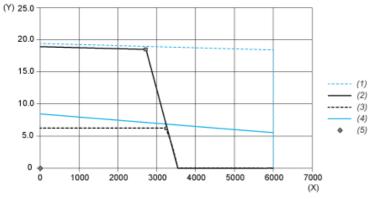


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power	•	2675 W	1380 rpm	18.51 N.m
max Cont. Power (Drive)	•	1223 W	1620 rpm	7.21 N.m

Performance Curves

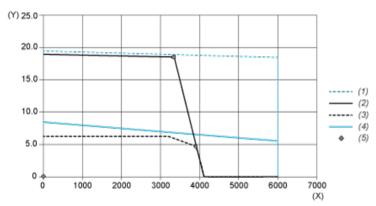
Torque/Speed Curves with 400 V Three Phases Supply Voltage



- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power	•	5328 W	2760 rpm	18.44 N.m
max Cont. Power (Drive)	•	2096 W	3240 rpm	6.18 N.m

Torque/Speed Curves with 480 V Three Phases Supply Voltage



- Speed (rpm)
 Torque (N.m)
 Motor peak
 Drive peak
 Drive cont
- (X) (Y) (1) (2) (3) (4) (5)

- Motor cont Operating point

		Power	At Speed	With Torque
max. Peak Power		6454 W	3360 rpm	18.34 N.m
max Cont. Power (Drive)	•	1994 W	3960 rpm	4.81 N.m