Product data sheet Characteristics

BMI0703T07A

servo motor BMI 1-phase - untapped IP54 multiturn - 32768 p/t x 4096 t





Main

Widin	
Range Compatibility	Lexium 32i
Product or Component Type	Servo motor with power stage
Device short name	BMI

Complementary

Maximum mechanical speed	8000 rpm
[Us] rated supply voltage	115230 V - 1510 %
Supply voltage limits	100240 V
Phase	Single phase
Supply frequency	50/60 Hz - 55 %
Network frequency limits	47.563 Hz
EMC filter	Integrated
Continuous output current	3.5 A 8 kHz
Output current 3s peak	10.5 A 230 V 3 s
Continuous stall current	3.5 A
Continuous stall torque	30.09 lbf.in (3.4 N.m) 115230 V single phase
Peak stall torque	76.12 Lbf.ln (8.6 N.m) 115 V single phase 76.12 lbf.in (8.6 N.m) 230 V single phase
Nominal output power	700 W 230 V single phase 400 W 115 V single phase
Nominal torque	25.67 Lbf.ln (2.9 N.m) 115 V single phase 19.47 lbf.in (2.2 N.m) 230 V single phase
Nominal speed	3200 rpm 230 V single phase 1400 rpm 115 V single phase
Maximum current Irms	17.8 A 115 V, single phase 17.8 A 230 V, single phase
Product compatibility	Drive control unit LXM32i CANopen[RETURN]Drive control unit LXM32i EtherCAT
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	0.55 in (14 mm)
Shaft length	1.18 in (30 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	2.76 in (70 mm)
Electrical Connection	Printed circuit board connector
Torque constant	0.81 N.m/A 68 °F (20 °C)
Back emf constant	54.44 V/krpm 68 °F (20 °C)
Number of motor poles	10

Rotor inertia	1.67 kg.cm²
Stator resistance	2.58 Ohm 68 °F (20 °C)
Stator inductance	2.28 mH 68 °F (20 °C)
Stator electrical time constant	0.88 ms 68 °F (20 °C)
Maximum radial force Fr	730 N 1000 rpm 580 N 2000 rpm 510 N 3000 rpm 460 N 4000 rpm 430 N 5000 rpm 400 N 6000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	11.81 in (300 mm)
Number of motor stacks	3
Centring collar diameter	2.36 in (60 mm)
Centring collar depth	0.10 in (2.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.22 in (5.5 mm)
Circle diameter of the mounting holes	2.953.23 in (7582 mm)
Distance shaft shoulder-flange	0.10 in (2.5 mm)

Environment

Housing IP65
nousing iPos

Ordering and shipping details

Category	18287-LEXIUM 32 INTEGRATED DRIVES
Discount Schedule	PC56
GTIN	3606485376660
Returnability	No
Country of origin	DE

Packing Units

3	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	24.41 in (62.0 cm)
Package 1 Width	7.87 in (20.0 cm)
Package 1 Length	23.23 in (59.0 cm)
Package 1 Weight	12.33 lb(US) (5.594 kg)
Unit Type of Package 2	P06
Number of Units in Package 2	8
Package 2 Height	30.31 in (77.0 cm)
Package 2 Width	31.50 in (80.0 cm)
Package 2 Length	23.62 in (60.0 cm)
Package 2 Weight	117.40 lb(US) (53.252 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	

Product Environmental Profile
End Of Life Information
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Yes

Warranty	18 months

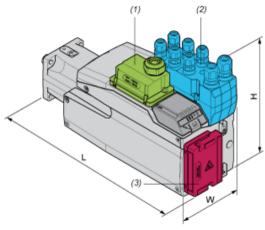
Product data sheet Dimensions Drawings

BMI0703T07A

External Dimensions

With Standard Braking Resistor

Mounting type A



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

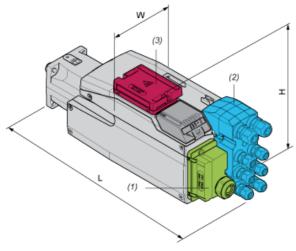
Dimensions in mm

W	н	L
99	187	321

Dimensions in in.

W	Н	L
3,90	7,36	12,64

Mounting type B



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

Dimensions in mm

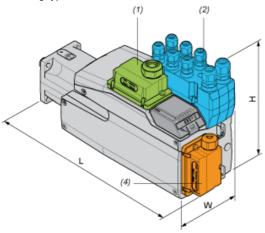
W	н	L
99	138,5	370

Dimensions in in.

W	Н	L
3,90	5,45	14,57

With External Braking Resistor

Mounting type C



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

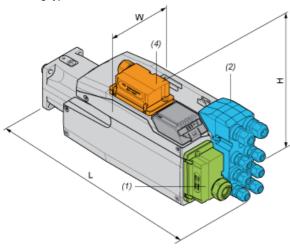
Dimensions in mm

W	Н	L
99	187	333

Dimensions in in.

W	Н	L
3,90	7,36	13,11

Mounting type D



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

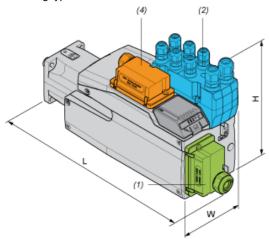
Dimensions in mm

W	Н	L
99	160	370

Dimensions in in.

W	Н	L
3,90	6,3	14,57

Mounting type E



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

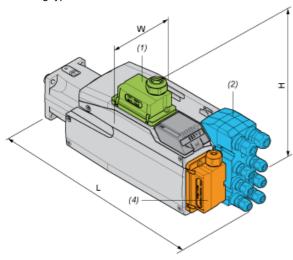
Dimensions in mm

W	н	L
99	187	360

Dimensions in in.

W	Н	L
3,90	7,36	14,17

Mounting type F



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

Dimensions in mm

W	Н	L
99	180	370

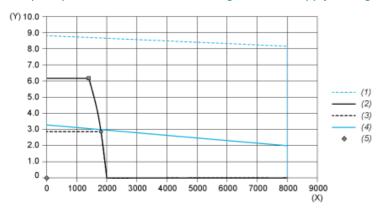
Dimensions in in.

W	н	L
3,90	7,09	14,57

Product data sheet Performance Curves

Performance Curves

Torque/Speed Curves with 115 V Single Phase Supply Voltage

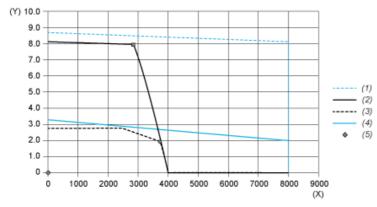


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power		889 W	1360 rpm	6.24 N.m
max Cont. Power (Drive)	•	501 W	1680 rpm	2.85 N.m

Performance Curves

Torque/Speed Curves with 230 V Single Phase 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	•	2314 W	2800 rpm	7.89 N.m
max Cont. Power (Drive)	•	738 W	3600 rpm	1.96 N.m