BMI0702P37A

servo motor BMI 3-phase - keyed IP65 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	8000 rpm	
[Us] rated supply voltage	208480 V - 1510 %	
Supply voltage limits	208480 V	
Network number of phases	Three phase	
Supply frequency	50/60 Hz - 55 %	
Network frequency limits	47.563 Hz	
EMC filter	Integrated	
Continuous output current	2 A at 8 kHz	
Output current 3s peak	6 A at 400 V for 3 s	
Continuous stall current	2 A	
Continuous stall torque	2.48 N.m at 208480 V three phase	
Peak stall torque	6.8 N.M at 208 V three phase 6.8 N.M at 400 V three phase	
	6.8 N.m at 480 V three phase	
Nominal output power	400 W at 208 V three phase 800 W at 400 V three phase 900 W at 480 V three phase	
Nominal torque	2.4 N.M at 208 V three phase 2.2 N.M at 400 V three phase 2 N.m at 480 V three phase	
Nominal speed	1800 rpm at 208 V three phase 3600 rpm at 400 V three phase 4400 rpm at 480 V three phase	
Maximum current Irms	9.6 A at 208 V, three phase 9.6 A at 400 V, three phase 9.6 A at 480 V, three phase	
Product compatibility	Drive control unit LXM32i CANopen[RETURN]Drive control unit LXM32i EtherCAT	
Shaft end	Keyed	
Second shaft	Without second shaft end	
Shaft diameter	11 mm	
Shaft length	23 mm	
Key width	4 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	70 mm	
Electrical connection	Printed circuit board connector	
Torque constant	1.15 N.m/A at 20 °C	
Back emf constant	77.18 V/krpm at 20 °C	
Number of motor poles	10	
Rotor inertia	1.13 kg.cm²	
Stator resistance	8.89 Ohm at 20 °C	
Stator inductance	25.75 mH at 20 °C	
Stator electrical time constant	2.9 ms at 20 °C	
Maximum radial force Fr	710 N at 1000 rpm 560 N at 2000 rpm 490 N at 3000 rpm 450 N at 4000 rpm 410 N at 5000 rpm 390 N at 6000 rpm	
Maximum axial force Fa	0.2 x Fr	
Type of cooling	Natural convection	
Length	268 mm	
Number of motor stacks	2	
Centring collar diameter	60 mm	
Centring collar depth	2.5 mm	
Number of mounting holes	4	
Mounting holes diameter	5.5 mm	
Circle diameter of the mounting holes	7582 mm	
Distance shaft shoulder-flange	2.5 mm	

Environment

IP degree of protection	IP65

Packing Units

r doming office	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	26.0 cm
Package 1 Width	20.0 cm
Package 1 Length	59.0 cm
Package 1 Weight	5.4 kg

Offer Sustainability

Sustainable offer status	Green Premium product	
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

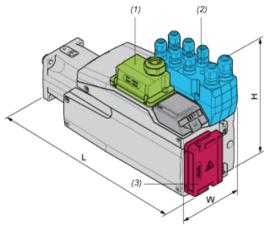
Warranty	18 months
vvarianty	10 1110111113

BMI0702P37A

External Dimensions

With Standard Braking Resistor

Mounting type A



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

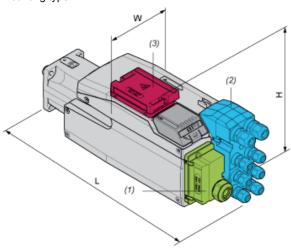
Dimensions in mm

W	Н	L
99	187	289

Dimensions in in.

W	н	L
3,9	7,36	11,38

Mounting type B



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

Dimensions in mm

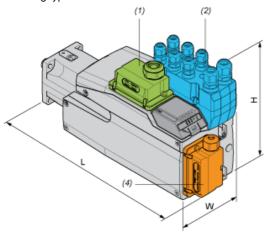
W	н	L
99	138,5	338

Dimensions in in.

W	н	L
3,9	5,45	13,31

With External Braking Resistor

Mounting type C



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

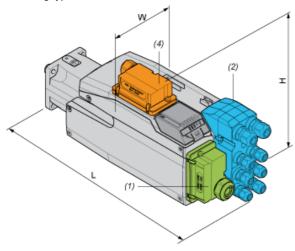
Dimensions in mm

W	Н	L
99	187	301

Dimensions in in.

W	н	L
3,9	7,36	11,85

Mounting type D



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

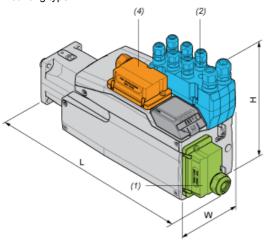
Dimensions in mm

W	Н	L
99	160	338

Dimensions in in.

W	Н	L
3,9	6,3	13,31

Mounting type E



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

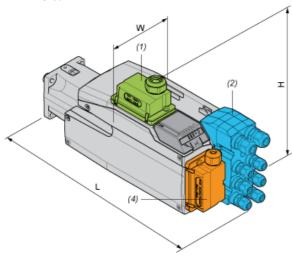
Dimensions in mm

W	Н	L
99	187	328

Dimensions in in.

W	Н	L
3,9	7,36	12,91

Mounting type F



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

Dimensions in mm

W	Н	L
99	180	338

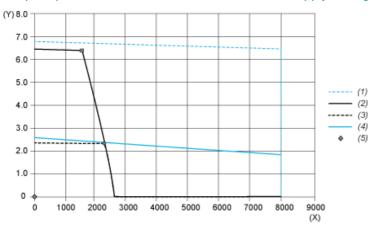
Dimensions in in.

W	Н	L
3,9	7,09	13,31

Performance Curves

Performance Curves

Torque/Speed Curves with 208 V Three Phases Supply Voltage

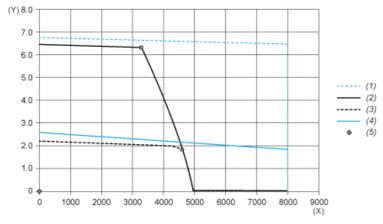


- Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak Drive peak
- (2) (3) Drive cont
- (4) Motor cont
- Operating point

		Power	At Speed	With Torque
max. Peak Power		1013 W	1520 rpm	6.36 N.m
max Cont. Power (Drive)	•	519 W	2240 rpm	2.21 N.m

Performance Curves

Torque/Speed Curves with 400 V Three Phases Supply Voltage



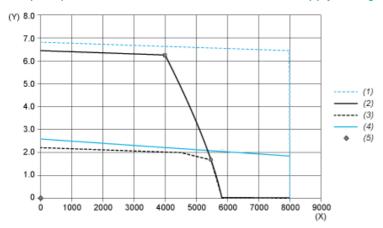
- Speed (rpm)
- (Y) Torque (N.m)
- Motor peak (1)
- (2) Drive peak (3) Drive cont Drive peak
- (4) Motor cont
- Operating point

		Power	At Speed	With Torque
max. Peak Power	•	2161 W	3280 rpm	6.29 N.m

		Power	At Speed	With Torque
max Cont. Power (Drive)	•	892 W	4560 rpm	1.87 N.m

Performance Curves

Torque/Speed Curves with 480 V Three Phases Supply Voltage



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

- (3) Drive cont(4) Motor cont(5) Operating point

		Power	At Speed	With Torque
max. Peak Power		2623 W	4000 rpm	6.26 N.m
max Cont. Power (Drive)	•	943 W	5600 rpm	1.61 N.m