Product data sheet Characteristics

BMI0702P06A

servo motor BMI 3-phase - untapped IP54 single turn - 32768 p/t



Main Range compatibility Lexium 32i Product or component type Device short name BMI

Complementary

| Complementary | |
|---------------------------|--|
| Maximum mechanical speed | 8000 |
| [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 480 V, three phase 6.8 N.m at 400 V, three phase 6.8 N.m at 208 V, three phase |
| Nominal output power | 900 W at 480 V, three phase 800 W at 400 V, three phase 400 W at 208 V, three phase |
| Nominal torque | 2 N.m at 480 V, three phase 2.2 N.m at 400 V, three phase 2.4 N.m at 208 V, three phase |
| Nominal speed | 4400 rpm at 480 V, three phase 3600 rpm at 400 V, three phase 1800 rpm at 208 V, three phase |
| Maximum current Irms | 9.6 A at 480 V, three phase 9.6 A at 400 V, three phase 9.6 A at 208 V, three phase |
| Product compatibility | LXM32i drive control unit (EtherCAT) LXM32i drive control unit (CANopen) |
| Shaft end | Untapped |
| Second shaft | Without second shaft end |
| Shaft diameter | 11 mm |
| Shaft length | 23 mm |
| Feedback type | Absolute single turn SinCos Hiperface |
| Speed feedback resolution | 32768 points/turn |
| 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 | 390 N at 6000 rpm 410 N at 5000 rpm 450 N at 4000 rpm 490 N at 3000 rpm 560 N at 2000 rpm 710 N at 1000 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 for housing | |
|-------------------------|------------------|--|
| | IP54 for shaft | |

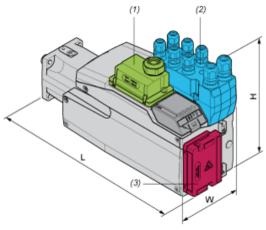


BMI0702P06A

External Dimensions

With Standard Braking Resistor

Mounting type A



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

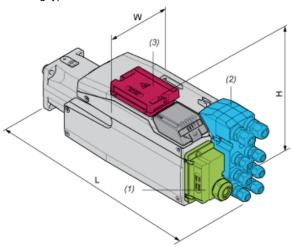
Dimensions in mm

| 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

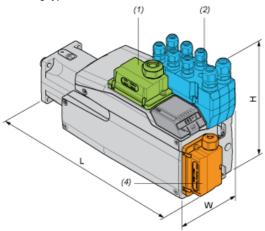
| W | н | L |
|----|-------|-----|
| 99 | 138,5 | 338 |

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

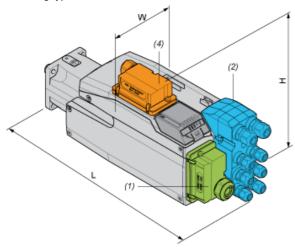
Dimensions in mm

| 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

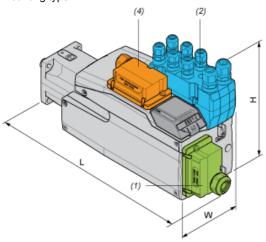
Dimensions in mm

| W | Н | L |
|----|-----|-----|
| 99 | 160 | 338 |

Dimensions in in.

| W | Н | L |
|-----|-----|-------|
| 3,9 | 6,3 | 13,31 |

Mounting type E



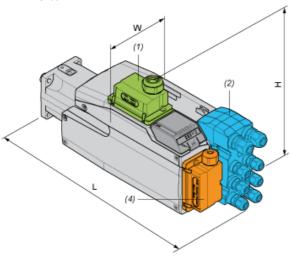
- Module for supply voltage I/O module
- (1) (2)
- (4) External braking resistor

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 |