

Product datasheet

Specifications



servo motor BMI 3-phase -
untapped IP65 multiturn - 32768 p/t
x 4096 t

BMI1002P27A

EAN Code: 3606485377148

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	6 N.m at 208...480 V three phase
Peak stall torque	14 N.m at 208 V three phase 14 N.m at 400 V three phase 14 N.m at 480 V three phase
Nominal output power	1000 W at 208 V three phase 1900 W at 400 V three phase 1900 W at 480 V three phase
Nominal torque	5.1 N.m at 400 V three phase 5.4 N.m at 208 V three phase 4.1 N.m at 480 V three phase
Nominal speed	1900 rpm at 208 V three phase 3800 rpm at 400 V three phase 4700 rpm at 480 V three phase
Maximum current Irms	17.5 A at 208 V, three phase 17.5 A at 400 V, three phase 17.5 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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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	100 mm
Electrical connection	Printed circuit board connector
Torque constant	1.28 N.m/A at 20 °C
Back emf constant	84.52 V/krpm at 20 °C
Number of motor poles	10
Rotor inertia	6.28 kg.cm²
Stator resistance	2.347 Ohm at 20 °C
Stator inductance	9.79 mH at 20 °C
Stator electrical time constant	4.17 ms at 20 °C
Maximum radial force Fr	990 N at 1000 rpm 790 N at 2000 rpm 690 N at 3000 rpm 620 N at 4000 rpm 580 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
type of cooling	Natural convection
Length	273 mm
Number of motor stacks	2
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	IP65
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Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	25.0 cm
Package 1 Width	18.6 cm
Package 1 Length	55.0 cm
Package 1 Weight	9.5 kg

Logistical informations

Country of origin	DE
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Contractual warranty

Warranty

18 months

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint	
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	REACH Declaration
PVC free	Yes

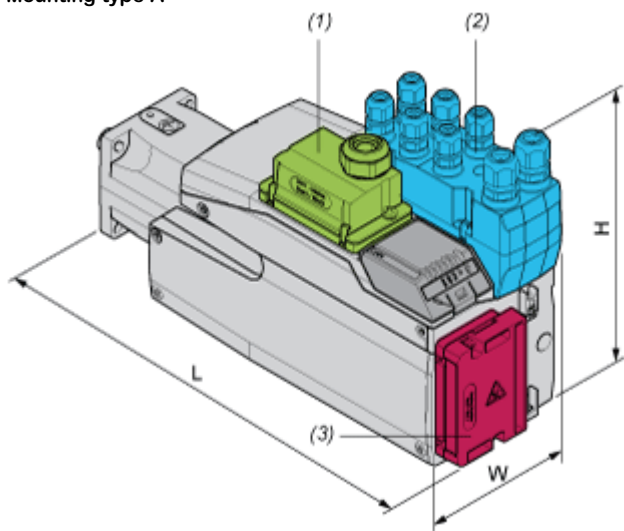
Use Again

Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

External Dimensions

With Standard Braking Resistor
Mounting type A



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

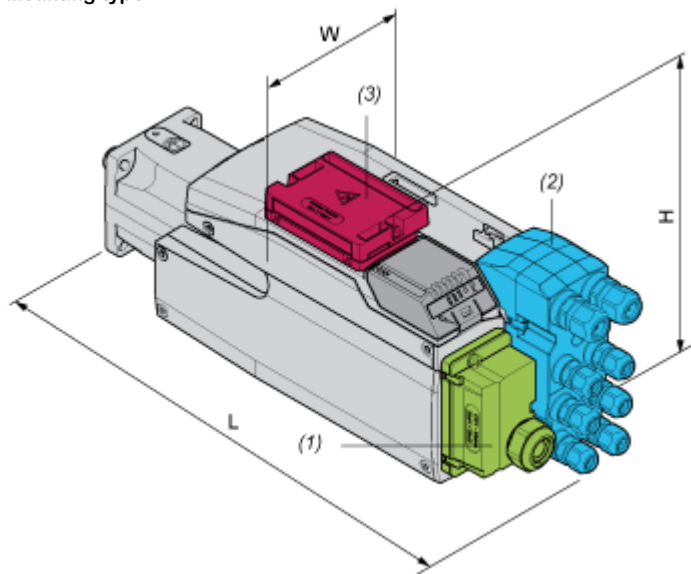
Dimensions in mm

W	H	L
132,6	217	294

Dimensions in in.

W	H	L
5,22	8,54	11,57

Mounting type B



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

(3) Standard braking resistor

Dimensions in mm

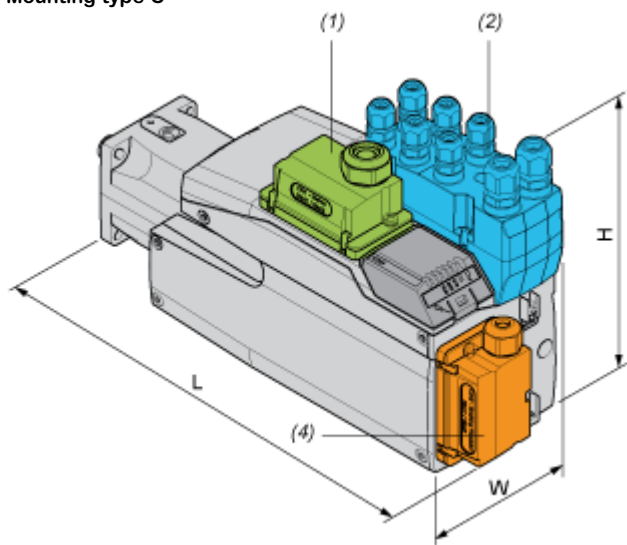
W	H	L
132,6	168	343

Dimensions in in.

W	H	L
5,22	6,61	13,5

With External Braking Resistor

Mounting type C



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

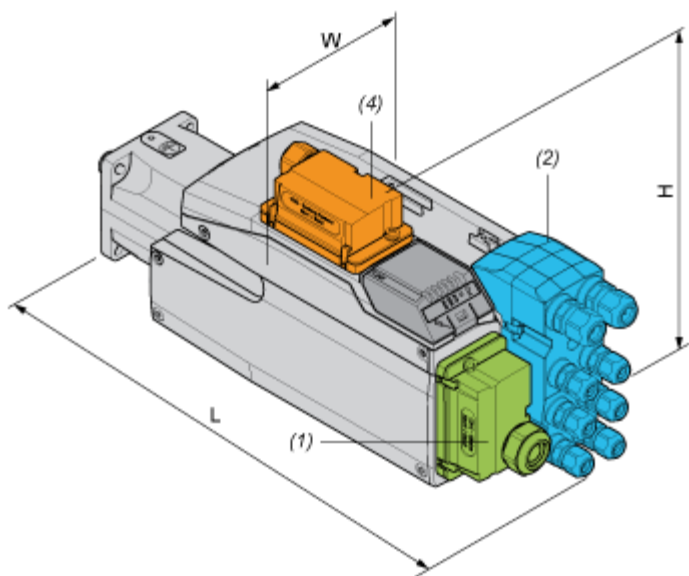
Dimensions in mm

W	H	L
132,6	217	306

Dimensions in in.

W	H	L
5,22	8,54	12,05

Mounting type D



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

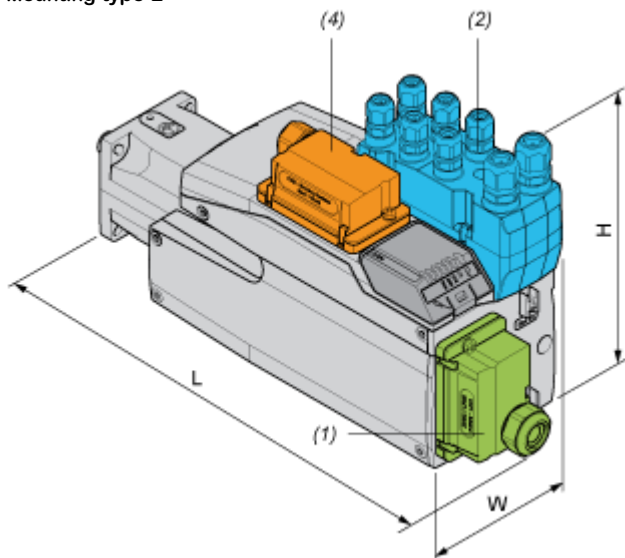
Dimensions in mm

W	H	L
132,6	180	343

Dimensions in in.

W	H	L
5,22	7,09	13,5

Mounting type E



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

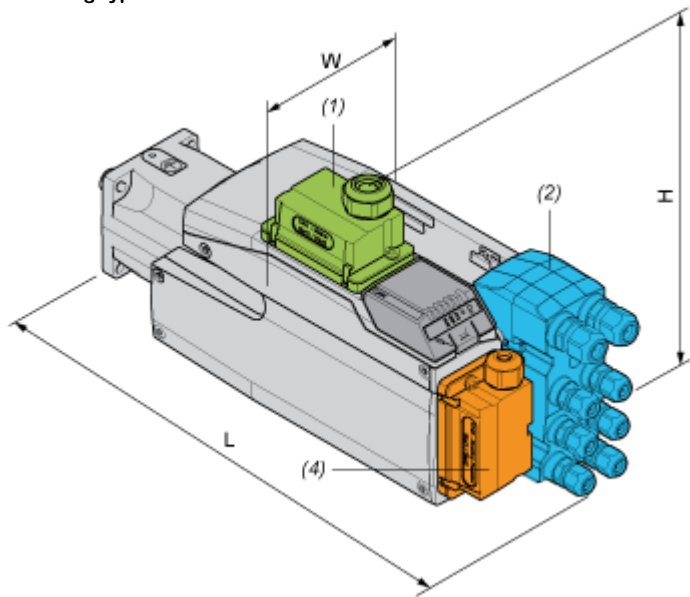
Dimensions in mm

W	H	L
132,6	217	333

Dimensions in in.

W	H	L
5,22	8,54	13,11

Mounting type F



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

Dimensions in mm

W	H	L
132,6	206,5	343

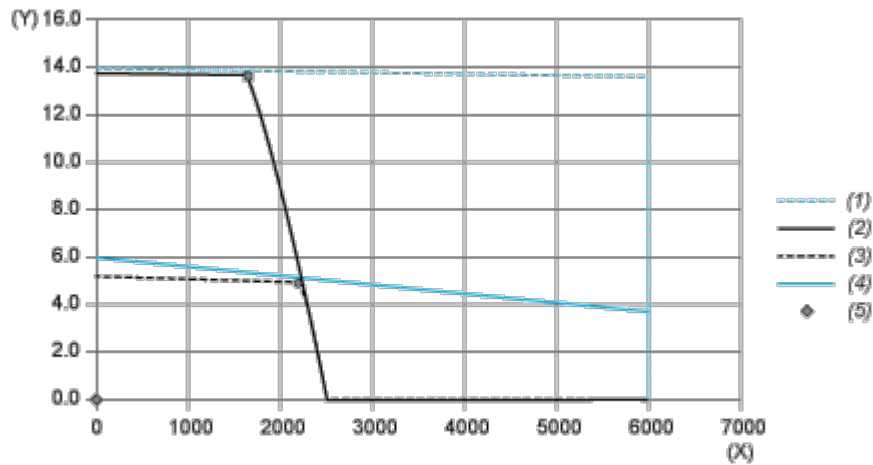
Dimensions in in.

W	H	L
5,22	8,13	13,5

Performance Curves

Performance Curves

Torque/Speed Curves with 208 V Three Phases Supply Voltage

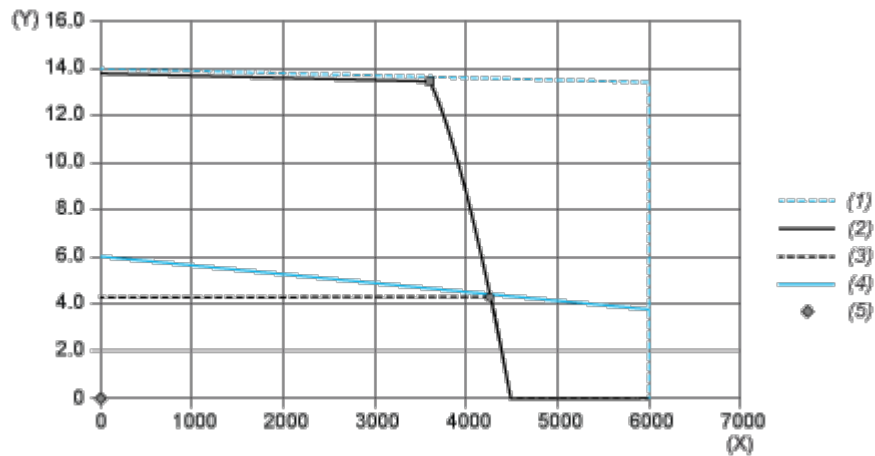


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power	■	2499 W	1740 rpm	13.72 N.m
max Cont. Power (Drive)	●	1109	2160 rpm	4.90 N.m

Performance Curves

Torque/Speed Curves with 400 V Three Phases Supply Voltage

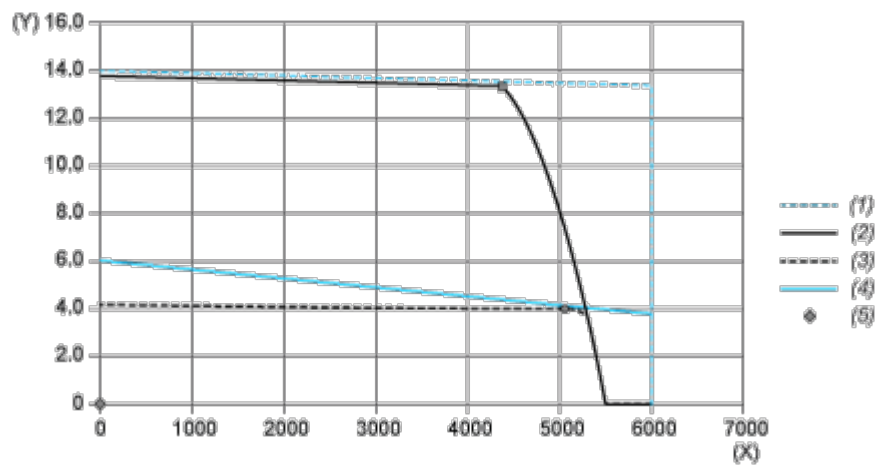


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power	■	5090 W	3600 rpm	13.50 N.m
max Cont. Power (Drive)	●	1954 W	4320 rpm	4.32 N.m

Performance Curves

Torque/Speed Curves with 480 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	■	6117 W	4380 rpm	13.34 N.m
max Cont. Power (Drive)	●	2080 W	5040 rpm	3.94 N.m