

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

BMI1003P17A

EAN Code: 3606485377704

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	
Network number of phases	Three phase	
Supply frequency	50/60 Hz - 55 %	
Network frequency limits	47.563 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	8.5 N.m at 208480 V three phase	
Peak stall torque	19.2 N.m at 400 V three phase 19.2 N.m at 480 V three phase 19.2 N.m at 208 V three phase	
Nominal output power	1000 W at 208 V three phase 2000 W at 400 V three phase 2100 W at 480 V three phase	
Nominal torque	7.2 N.m at 208 V three phase 6.8 N.m at 400 V three phase 5.6 N.m at 480 V three phase	
Nominal speed	1500 rpm at 208 V three phase 3000 rpm at 400 V three phase 3700 rpm at 480 V three phase	
Maximum current Irms	26.7 A at 208 V, three phase 26.7 A at 400 V, three phase 26.7 A at 480 V, three phase	
Product compatibility	Drive control unit LXM32i CANopen Drive control unit LXM32i EtherCAT	
Shaft end	Keyed	
Second shaft	Without second shaft end	
Shaft diameter	19 mm	
Shaft length	40 mm	

key width	6 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	100 mm	
Electrical connection	Printed circuit board connector	
Torque constant	1.7 N.m/A at 20 °C	
Back emf constant	112 V/krpm at 20 °C	
Number of motor poles	10	
Rotor inertia	9.37 kg.cm ²	
Stator resistance	2.31 Ohm at 20 °C	
Stator inductance	11.43 mH at 20 °C	
Stator electrical time constant	4.95 ms at 20 °C	
Maximum radial force Fr	1050 N at 1000 rpm 830 N at 2000 rpm 730 N at 3000 rpm 660 N at 4000 rpm 610 N at 5000 rpm	
Maximum axial force Fa	0.2 x Fr	
type of cooling	Natural convection	
Length	299 mm	
Number of motor stacks	3	
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 Shaft: IP54
Housing: IP65

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	11.0 kg

Logistical informations

Country of origin DE

Contractual warranty

Warranty

1 Jul 2025

18 months



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

0	Environmental	factorint
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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

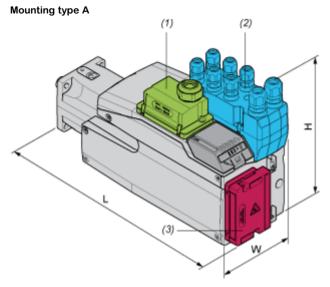
Use Again

○ 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



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

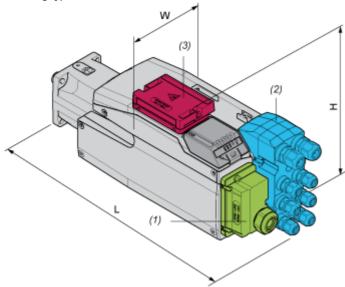
Dimensions in mm

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

BMI1003P17A

(3) Standard braking resistor

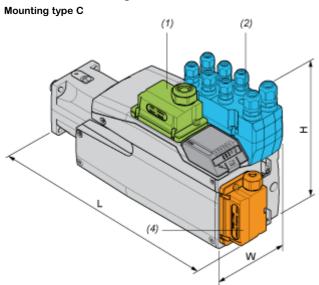
Dimensions in mm

D			
W	Н	L	
132,6	168	369	

Dimensions in in.

W	Н	L
5,22	6,61	14,53

With External Braking Resistor



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

Dimensions in mm

W	Н	L
132,6	217	332

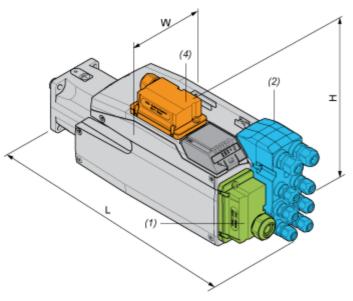
Dimensions in in.

W	V H L				
5,22	8,54	13,07			

Mounting type D

Product datasheet

BMI1003P17A



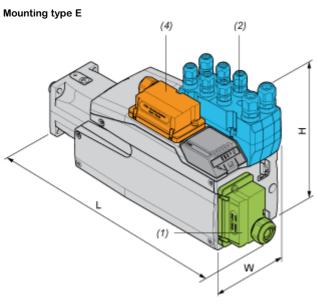
- (1) Module for supply voltage
- (2) I/O module
- (4) External braking resistor

Dimensions in mm

D					
W	Н	L			
132,6	180	369			

Dimensions in in.

W	H L					
5,22	7,09	14,53				



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

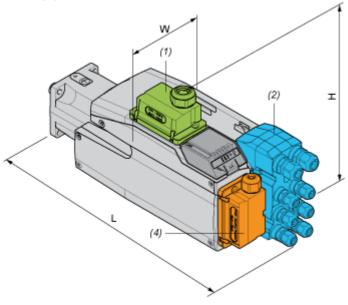
Dimensions in mm

D					
W	H L				
132,6	217	359			

Dimensions in in.

W	Н	L
5,22	8,54	14,13

Mounting type F



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

Dimensions in mm

W	Н	L
132,6	206,5	369

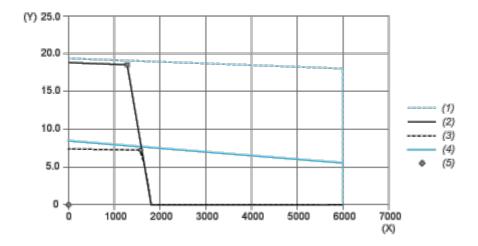
Dimensions in in

W	Н	L	
5,22	8,13	14,53	

Performance Curves

Performance Curves

Torque/Speed Curves with 208 V Three Phases Supply Voltage

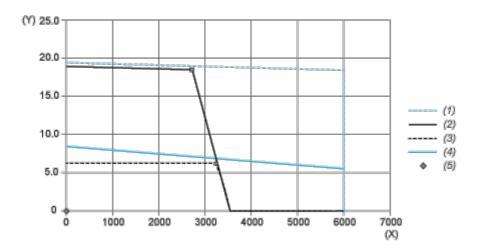


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		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

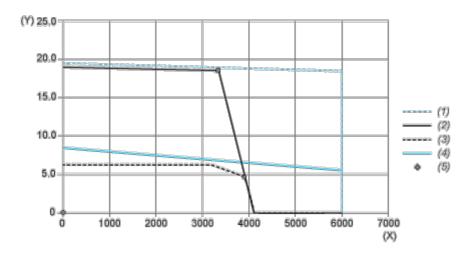


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		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

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		6454 W	3360 rpm	18.34 N.m
max Cont. Power (Drive)	•	1994 W	3960 rpm	4.81 N.m