

servo motor BMH - 8.4 Nm - 6000 rpm - untapped shaft - without brake - IP65/IP67

BMH1003P27A2A

Discontinued on: 9 Feb 2023

① Discontinued

EAN Code: 3606485196763

Main

Device short name	ВМН			
Product or component type	Servo motor			
Maximum mechanical speed	6000 rpm			
Continuous stall torque	8.4 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 8.4 N.m for LXM32.D30N4 at 10 A, 480 V, three phase			
Peak stall torque	25.1 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 25.1 N.m for LXM32.D30N4 at 10 A, 480 V, three phase			
Nominal output power	2700 W for LXM32.D30N4 at 10 A, 400 V, three phase 2700 W for LXM32.D30N4 at 10 A, 480 V, three phase			
Nominal torque	6.2 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 6.2 N.m for LXM32.D30N4 at 10 A, 480 V, three phase			
Nominal speed	4000 rpm for LXM32.D30N4 at 10 A, 400 V, three phase 4000 rpm for LXM32.D30N4 at 10 A, 480 V, three phase			
Product compatibility	LXM32.D30N4 at 400480 V three phase			
Shaft end	Smooth shaft			
IP degree of protection	IP65 standard IP67 with IP67 kit			
Speed feedback resolution	32768 points/turn x 4096 turns			
Holding brake	Without			
Mounting support	International standard flange			
Electrical connection	Rotatable right-angled connectors			

Complementary

Range compatibility	Lexium 32	
[Us] rated supply voltage	480 V	
Network number of phases	Three phase	
Continuous stall current	7.69 A	
Continuous power	3.3 W	
Maximum current Irms 26.71 A for LXM32.D30N4		
Maximum permanent current	29.1 A	
Second shaft Without second shaft end		
Shaft diameter	ter 19 mm	
Shaft length	40 mm	

Feedback type	Multiturn SinCos Hiperface		
Motor flange size	100 mm		
Number of motor stacks	3		
Torque constant	1.17 N.m/A at 120 °C		
Back emf constant	63.5 V/krpm at 120 °C		
Number of motor poles	5.0		
Rotor inertia	9.37 kg.cm²		
Stator resistance	0.63 Ohm at 20 °C		
Stator inductance	2.615 mH at 20 °C		
Stator electrical time constant	6.3 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	192.6 mm		
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		
Net weight	6.5 kg		
Sizing reference	BMH1003P		
Network number of phases	3		
Accuracy error [angular]	4.8 °		
Temperature copper hot	135 °C		
Temperature magnet hot	100 °C		

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	20.000 cm
Package 1 Width	22.400 cm
Package 1 Length	40.700 cm
Package 1 Weight	7.602 kg

Contractual warranty

Warranty 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 >

☑ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	2961
Environmental Disclosure	Product Environmental Profile

Use Better

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)
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
REACh Regulation	REACh Declaration
PVC free	Yes

Use Again

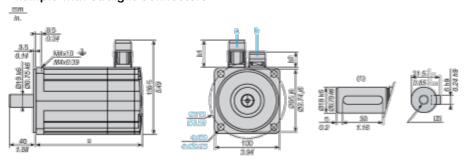
○ Repack and remanufacture					
Circularity Profile	No need of specific recycling operations				
Take-back	No				
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins				

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Dimensions Drawings

Servo Motors Dimensions

Example with Straight Connectors



- a: Power supply for servo motor brake
- b: Power supply for servo motor encoder
- (1) Shaft end, keyed slot (optional)
- (2) For screw M6 x 21 mm/M6 x 0.83 in.

Dimensions in mm

Straight c	connectors Rotatable angled connectors		a (without broke)	(د ا د ا د ا د ا	
b1	b2	b1	b2	c (without brake)	c (with brake)
39.5	25.5	39.5	39.5	192	234

Dimensions in in.

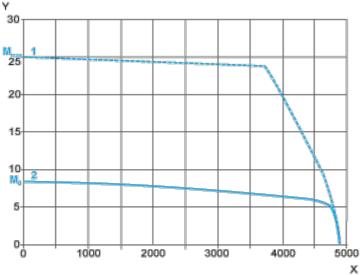
Straight connectors		Rotatable angled connectors		c (without brake)	(د ا د ا د ا د ا د ا	
b1	b2	b1	b2	c (without brake)	c (with brake)	
1.55	1.00	1.55	1.55	7.55	9.21	

Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

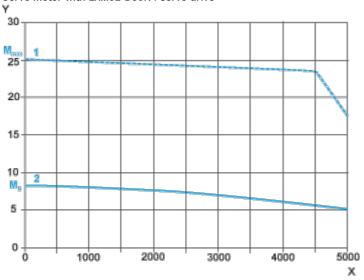


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque