

AC servo motor BSH - 1.3 N.m - 3000 rpm - untapped shaft - without brake - IP50

BSH0553P02A2A

Discontinued on: 9 Feb 2023

① Discontinued

EAN Code: 3389118159303

Main

Device short name	BSH		
Product or component type	Servo motor		
Maximum mechanical speed	9000 rpm		
Continuous stall torque	1.05 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 1.05 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 1.3 N.m for LXM05AD10M2, 200240 V, single phase 1.3 N.m for LXM05BD10M2, 200240 V, single phase 1.3 N.m for LXM05CD10M2, 200240 V, single phase 1.3 N.m for LXM05AD10M3X, 200240 V, three phase 1.3 N.m for LXM05BD10M3X at 1.5 A, 200240 V, three phase 1.3 N.m for LXM05CD10M3X, 200240 V, three phase 1.3 N.m for LXM05CD10M3X, 200240 V, three phase 1.3 N.m for LXM15LD13M3, 230 V, single phase 1.3 N.m for LXM15LD13M3, 230 V, three phase 1.3 N.m for LXM15LD10N4, 400 V, three phase 1.3 N.m for LXM05AD14N4, 380480 V, three phase 1.3 N.m for LXM05BD14N4, 380480 V, three phase 1.3 N.m for LXM05BD14N4, 380480 V, three phase		
Peak stall torque	3.5 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 3.5 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 2.7 N.m for LXM15LD13M3, 230 V, single phase 3.18 N.m for LXM05AD10M2, 200240 V, single phase 3.18 N.m for LXM05BD10M2, 200240 V, single phase 3.18 N.m for LXM05CD10M2, 200240 V, single phase 2.7 N.m for LXM05CD10M2, 200240 V, single phase 2.7 N.m for LXM15LD13M3 at 1.5 A, 230 V, three phase 3.87 N.m for LXM05AD10M3X, 200240 V, three phase 3.18 N.m for LXM05AD10M3X, 200240 V, three phase 3.87 N.m for LXM05BD10M3X, 200240 V, three phase 3.18 N.m for LXM05BD10M3X, 200240 V, three phase 3.18 N.m for LXM05BD10M3X, 200240 V, three phase 3.87 N.m for LXM05BD14N4, 380480 V, three phase 3.87 N.m for LXM05CD10M3X, 200240 V, three phase 3.87 N.m for LXM05CD10M3X, 200240 V, three phase		
Nominal output power	400 W for LXM32.U60N4 at 1.5 A, 400 V, three phase 400 W for LXM32.U60N4 at 1.5 A, 480 V, three phase 340 W for LXM15LD13M3, 230 V, three phase 340 W for LXM15LD13M3, 230 V, single phase 350 W for LXM05AD10M2, 200240 V, single phase 350 W for LXM05BD10M2, 200240 V, single phase 350 W for LXM05CD10M2 at 1.5 A, 200240 V, single phase 350 W for LXM05AD10M3X, 200240 V, three phase 350 W for LXM05AD10M3X, 200240 V, three phase 350 W for LXM05AD14N4, 380480 V, three phase 350 W for LXM05BD10M3X, 200240 V, three phase 350 W for LXM05CD14N4, 380480 V, three phase		

Nominal torque Nominal speed	0.65 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 0.65 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 1.08 N.m for LXM15LD13M3, 230 V, single phase 1.1 N.m for LXM05AD10M2, 200240 V, single phase 1.1 N.m for LXM05BD10M2, 200240 V, single phase 1.1 N.m for LXM05CD10M2, 200240 V, single phase 0.8 N.m for LXM15LD10N4 at 1.5 A, 400 V, three phase 1.08 N.m for LXM15LD13M3, 230 V, three phase 1.1 N.m for LXM05AD10M3X, 200240 V, three phase 1.1 N.m for LXM05AD10M3X, 200240 V, three phase 1.1 N.m for LXM05BD10M3X, 200240 V, three phase 1.1 N.m for LXM05BD10M3X, 200240 V, three phase 1.1 N.m for LXM05BD14N4, 380480 V, three phase 1.1 N.m for LXM05CD10M3X, 200240 V, three phase 1.1 N.m for LXM05CD14N4, 380480 V, three phase 6000 rpm for LXM32.U60N4 at 1.5 A, 480 V, three phase 6000 rpm for LXM32.U60N4 at 1.5 A, 480 V, three phase 3000 rpm for LXM05AD10M2, 200240 V, single phase 3000 rpm for LXM05BD10M2, 200240 V, single phase 3000 rpm for LXM05CD10M2, 200240 V, single phase 3000 rpm for LXM05CD10M2, 200240 V, single phase
	3000 rpm for LXM05AD10M3X, 200240 V, three phase 3000 rpm for LXM05AD14N4 at 1.5 A, 380480 V, three phase
	3000 rpm for LXM05BD10M3X, 200240 V, three phase
	3000 rpm for LXM05BD14N4, 380480 V, three phase
	3000 rpm for LXM05CD10M3X, 200240 V, three phase 3000 rpm for LXM05CD14N4, 380480 V, three phase
	3000 rpm for LXM15LD13M3, 230 V, single phase
	3000 rpm for LXM15LD13M3, 230 V, three phase
	8000 rpm for LXM15LD10N4, 400 V, three phase
Product compatibility	LXM05AD10M2 at 200240 V single phase
	LXM05BD10M2 at 200240 V single phase
	LXM05CD10M2 at 200240 V single phase LXM15LD13M3 at 230 V single phase
	LXM32.U60N4 at 400 V three phase
	LXM32.U60N4 at 480 V three phase
	LXM05AD10M3X at 200240 V three phase LXM05BD10M3X at 200240 V three phase
	LXM05CD10M3X at 200240 V three phase
	LXM15LD13M3 at 230 V three phase
	LXM05AD14N4 at 380480 V three phase LXM05BD14N4 at 380480 V three phase
	LXM05CD14N4 at 380480 V three phase
	LXM15LD10N4 at 400 V three phase
Shaft end	Untapped
IP degree of protection	IP50 standard
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors
Complementary	
Range compatibility	Lexium 15 Lexium 05 Lexium 32
supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	1.7 A
maximum continuous power	0.97 W

Maximum current Irms	8.7 A for LXM15LD13M3			
	8.7 A for LXM15LD10N4 6.5 A for LXM05AD10M2			
	6.5 A for LXM05AD10M3X			
	6.5 A for LXM05AD14N4			
	6.5 A for LXM05BD10M2 6.5 A for LXM05BD10M3X			
	6.5 A for LXM05BD14N4			
	6.5 A for LXM05CD10M2 6.5 A for LXM05CD10M3X			
	6.5 A for LXM05CD14N4			
	6 A for LXM32.U60N4			
Maximum permanent current	6.5 A			
Switching frequency	8 kHz			
Second shaft	Without second shaft end			
Shaft diameter	9 mm			
Shaft length	20 mm			
Feedback type	Multiturn SinCos Hiperface			
Motor flange size	55 mm			
Number of motor stacks	3			
Torque constant	0.7 N.m/A at 120 °C			
Back emf constant	41 V/krpm at 120 °C			
Number of motor poles	3.0			
Rotor inertia	0.134 kg.cm²			
Stator resistance	10.4 Ohm at 20 °C			
Stator inductance	13.02 mH at 20 °C			
Stator electrical time constant	2.4 ms at 20 °C			
Maximum radial force Fr	190 N at 8000 rpm 200 N at 7000 rpm			
	210 N at 6000 rpm			
	230 N at 5000 rpm			
	240 N at 4000 rpm 270 N at 3000 rpm			
	310 N at 2000 rpm			
Maximum axial force Fa	390 N at 1000 rpm			
	0.2 x Fr			
type of cooling	Natural convection			
Length	176.5 mm			
Centring collar diameter	40 mm			
centring collar depth	2 mm			
Number of mounting holes	4			
Mounting holes diameter	5.5 mm			
Circle diameter of the mounting holes	63 mm			
Net weight	1.76 kg			
Sizing reference	BSH0553P			
Network number of phases	3			
Accuracy error [angular]	1.4 °			
Temperature copper hot	120 °C			
Temperature magnet hot	100 °C			

Temperature magnet rt 20 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	12.3 cm
Package 1 Width	12.8 cm
Package 1 Length	37.7 cm
Package 1 Weight	1.4 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	nvironmental footprint			
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	743			
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	8c11b0c9-e501-4810-83eb-05fc6605ede4	
REACh Regulation	REACh Declaration	
PVC free	Yes	

Use Again

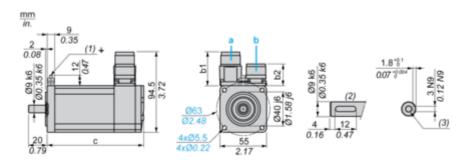
○ Repack and remanufacture					
Circularity Profile	No need of specific recycling operations				
Take-back	No				
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins				

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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) M4 screw
- (2) Shaft end, keyed slot (optional)
- (3) For screw M3 x 9 mm/M3 x 0.35 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors		a (with and bunks)	- 6
b	b1	b	b1	c (without brake)	c (with brake)
39.5	25.5	39.5	39.5	176.5	203

Dimensions in in

Differisions in in.						
Straight connectors		Rotatable angled connectors		- (itht hl)	a (with hardsa)	
b	b1	b	b1	c (without brake)	c (with brake)	
1.55	1.00	1.55	1.55	6.94	7.99	

Product datasheet

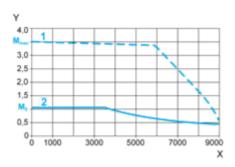
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive

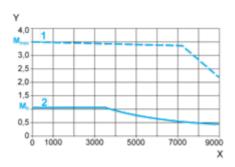


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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