

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

BSH0553T01A2A

EAN Code: 3389118159624

Main

Device short name	BSH		
Product or component type	Servo motor		
Maximum mechanical speed	9000 rpm		
Continuous stall torque	1.2 N.m for LXM32.U90M2 at 3 A, 230 V, single phase 1.3 N.m for LXM05AD17F1, 110120 V, single phase		
	1.3 N.m for LXM05AD17M2, 200240 V, single phase 1.3 N.m for LXM05BD17F1, 110120 V, single phase		
	1.3 N.m for LXM05BD17M2, 200240 V, single phase		
	1.3 N.m for LXM05CD17F1, 110120 V, single phase		
	1.3 N.m for LXM05CD17M2, 200240 V, single phase		
	1.2 N.m for LXM32.D18M2 at 6 A, 115 V, single phase		
	1.3 N.m for LXM05AD17M3X, 200240 V, three phase		
	1.3 N.m for LXM05BD17M3X at 6 A, 200240 V, three phase 1.3 N.m for LXM05CD17M3X, 200240 V, three phase		
Peak stall torque	3 N.m for LXM32.U90M2 at 3 A, 230 V, single phase		
	3.31 N.m for LXM05AD17F1, 110120 V, single phase		
	3.31 N.m for LXM05AD17M2, 200240 V, single phase		
	3.31 N.m for LXM05BD17F1, 110120 V, single phase		
	3.31 N.m for LXM05BD17M2, 200240 V, single phase		
	3.31 N.m for LXM05CD17F1, 110120 V, single phase		
	3.31 N.m for LXM05CD17M2, 200240 V, single phase		
	3.3 N.m for LXM32.D18M2 at 6 A, 115 V, single phase		
	3.31 N.m for LXM05AD17M3X, 200240 V, three phase		
	3.31 N.m for LXM05BD17M3X at 6 A, 200240 V, three phase 3.31 N.m for LXM05CD17M3X, 200240 V, three phase		
Nominal output power	550 W for LXM32.U90M2 at 3 A, 230 V, single phase		
	350 W for LXM05AD17F1, 110120 V, single phase		
	350 W for LXM05AD17M2, 200240 V, single phase		
	350 W for LXM05BD17F1, 110120 V, single phase		
	350 W for LXM05BD17M2, 200240 V, single phase		
	350 W for LXM05CD17F1, 110120 V, single phase		
	350 W for LXM05CD17M2, 200240 V, single phase		
	350 W for LXM32.D18M2 at 6 A, 115 V, single phase 350 W for LXM05AD17M3X, 200240 V, three phase		
	350 W for LXM05BD17M3X at 6 A, 200240 V, three phase		
	350 W for LXM05CD17M3X, 200240 V, three phase		
Nominal torque	0.84 N.m for LXM32.U90M2 at 3 A, 230 V, single phase		
	1.1 N.m for LXM05AD17F1, 110120 V, single phase		
	1.1 N.m for LXM05AD17M2, 200240 V, single phase		
	1.1 N.m for LXM05BD17F1, 110120 V, single phase		
	1.1 N.m for LXM05BD17M2, 200240 V, single phase		
	1.1 N.m for LXM05CD17F1, 110120 V, single phase		
	1.1 N.m for LXM05CD17M2, 200240 V, single phase		
	1.14 N.m for LXM32.D18M2 at 6 A, 115 V, single phase		
	1.1 N.m for LXM05AD17M3X, 200240 V, three phase 1.1 N.m for LXM05BD17M3X at 6 A, 200240 V, three phase		
	1.1 N.m for LXM05CD17M3X at 6 A, 200240 V, three phase		
	1.1 14.111 101 LAWI000D 17 WOA, 200240 V, HIIGE phase		

Range compatibility	Lexium 32 Lexium 05			
supply voltage max	480 V			
Network number of phases	Three phase			
Continuous stall current	3.1 A			
maximum continuous power	0.97 W			
Maximum current Irms	11.9 A for LXM05AD17F1			
	11.9 A for LXM05AD17M2			
	11.9 A for LXM05AD17M3X			
	11.9 A for LXM05BD17F1			
	11.9 A for LXM05BD17M2			
	11.9 A for LXM05BD17M3X			
	11.9 A for LXM05CD17F1			
	11.9 A for LXM05CD17M2			
	11.9 A for LXM05CD17M3X			
	10 A for LXM32.D18M2			
	9 A for LXM32.U90M2			
Maximum permanent current	11.9 A			
Switching frequency	8 kHz			
Second shaft	Without second shaft end			
Shaft diameter	9 mm			
Shaft length	20 mm			
Feedback type	Single turn SinCos Hiperface			
Motor flange size	55 mm			
Number of motor stacks	3			
Torque constant	0.39 N.m/A at 120 °C			

Back emf constant	22 V/krpm at 120 °C
Number of motor poles	3.0
Rotor inertia	0.134 kg.cm²
Stator resistance	3.1 Ohm at 20 °C
Stator inductance	3.9 mH at 20 °C
Stator electrical time constant	2.39 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 390 N at 1000 rpm
Maximum axial force Fa	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	BSH0553T
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	11 cm
Package 1 Width	19.5 cm
Package 1 Length	39.5 cm
Package 1 Weight	2.232 kg
Unit Type of Package 2	P06
Number of Units in Package 2	12
Package 2 Height	77 cm
Package 2 Width	80 cm
Package 2 Length	60 cm
Package 2 Weight	35.284 kg

Logistical informations

Country of origin

DE

Contractual warranty

Warranty

18 months

1 Jul 2025



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 footprint			
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	618			
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)
SCIP Number	8c11b0c9-e501-4810-83eb-05fc6605ede4
REACh Regulation	REACh Declaration
PVC free	Yes

Use Again

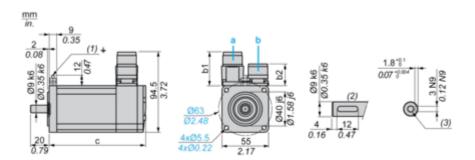
○ Repack and remanufacture					
Circularity Profile	No need of specific recycling operations				
Take-back	No				
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins				

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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		- (itht hl)	a (with hands)
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 harden)	
b	b1	b	b1	c (without brake)	c (with brake)	
1.55	1.00	1.55	1.55	6.94	7.99	

Product datasheet

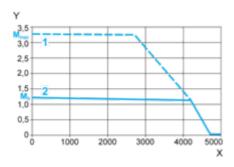
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Performance Curves

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive

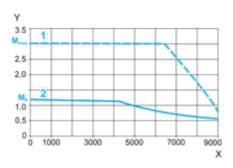


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U90M2 servo drive



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