

AC servo motor BSH - 1.3 N.m - 3000 rpm - untapped shaft - with brake - IP50

BSH0553T01F2A

EAN Code: 3389118159648

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 LAWIOJOD 17 WOA, 200240 V, HIIGE PHASE				

Nominal speed	6000 rpm for LXM32.U90M2 at 3 A, 230 V, single phase	
Nominal Speed	3000 rpm for LXM05AD17F1, 110120 V, single phase	
	3000 rpm for LXM05BD17F1, 110120 V, single phase	
	3000 rpm for LXM05CD17F1, 110120 V, single phase	
	3000 rpm for LXM05AD17M2, 200240 V, single phase	
	3000 rpm for LXM05BD17M2, 200240 V, single phase	
	3000 rpm for LXM05CD17M2, 200240 V, single phase	
	3000 rpm for LXM32.D18M2 at 6 A, 115 V, single phase	
	3000 rpm for LXM05AD17M3X, 200240 V, three phase	
	3000 rpm for LXM05BD17M3X at 6 A, 200240 V, three phase	
	3000 rpm for LXM05CD17M3X, 200240 V, three phase	
Product compatibility	LXM05AD17F1 at 110120 V single phase	
	LXM05AD17M2 at 200240 V single phase	
	LXM05BD17F1 at 110120 V single phase	
	LXM05BD17M2 at 200240 V single phase	
	LXM05CD17F1 at 110120 V single phase	
	LXM05CD17M2 at 200240 V single phase	
	LXM32.U90M2 at 230 V single phase	
	LXM32.D18M2 at 115 V single phase	
	LXM05AD17M3X at 200240 V three phase	
	LXM05BD17M3X at 200240 V three phase	
	LXM05CD17M3X at 200240 V three phase	
Shaft end	Untapped	
IP degree of protection	IP50 standard	
Speed feedback resolution	131072 points/turn	
Holding brake	With	
Mounting support	International standard flange	
Electrical connection	Rotatable right-angled connectors	
Complementary		
Range compatibility	Lexium 05	
<u></u>	Lexium 32	
supply voltage max	480 V	
Network number of phases	Three phase	

Range compatibility	Lexium 05 Lexium 32				
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				
Holding torque	0.8 N.m holding brake				
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	0.1553 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			
Brake pull-in power	10 W			
type of cooling	Natural convection			
Length	203 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	1.9 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	12.3 cm
Package 1 Width	12.8 cm
Package 1 Length	37.7 cm
Package 1 Weight	1.55 kg

Logistical informations

Country of origin

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)	614
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

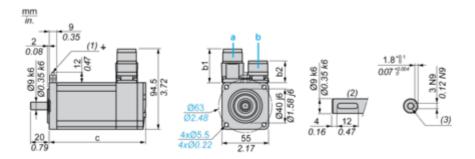
Repack and remanufacture			
Circularity Profile	No need of specific recycling operations		
Take-back	No		
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins		

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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

Zimonololo in mini						
Straight connectors		Rotatable angled connectors		a (ithatha.alaa)	a (with hardsa)	
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)	- (ith hards-)	
b	b1	b	b1	c (without brake)	c (with brake)	
1.55	1.00	1.55	1.55	6.94	7.99	

Product datasheet

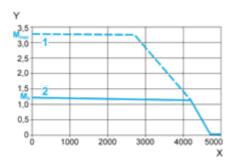
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Performance Curves

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive



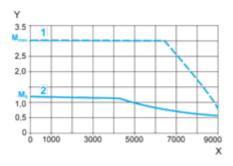
- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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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