

servo motor BSH, Lexium 05, 11.1N.m, 1500rpm, 140mm, untapped shaft, Sincos single turn, without brake, IP50

BSH1401P01A2A

Main

Device short name	BSH					
Product or component type	Servo motor					
Maximum mechanical speed	4000 rpm					
Continuous stall torque	11.1 N.m for LXM32.D30N4 at 10 A, 400 V, three phase					
	11.1 N.m for LXM32.D30N4 at 10 A, 480 V, three phase					
	11.1 N.m for LXM15MD28N4, 400 V, three phase					
	11.1 N.m for LXM15MD28N4 at 10 A, 480 V, three phase					
	11.1 N.m for LXM15MD28N4, 230 V, three phase					
	11.1 N.m for LXM15MD40N4, 400 V, three phase					
	11.1 N.m for LXM15MD40N4, 480 V, three phase					
	11.1 N.m for LXM15LD28M3, 230 V, three phase					
	11.4 N.m for LXM05AD34N4, 380480 V, three phase					
	11.4 N.m for LXM05BD34N4, 380480 V, three phase					
	11.4 N.m for LXM05CD34N4, 380480 V, three phase					
Peak stall torque	27 N.m for LXM32.D30N4 at 10 A, 400 V, three phase					
	27 N.m for LXM32.D30N4 at 10 A, 480 V, three phase					
	23.33 N.m for LXM15MD28N4, 230 V, three phase					
	23.33 N.m for LXM15MD28N4 at 10 A, 400 V, three phase					
	23.33 N.m for LXM15MD28N4, 480 V, three phase					
	23.33 N.m for LXM15MD40N4, 400 V, three phase					
	23.33 N.m for LXM15MD40N4, 480 V, three phase					
	23.8 N.m for LXM15LD28M3, 230 V, three phase					
	23.33 N.m for LXM05AD34N4, 380480 V, three phase					
	23.33 N.m for LXM05BD34N4, 380480 V, three phase					
	23.33 N.m for LXM05CD34N4, 380480 V, three phase					
Nominal output power	2500 W for LXM32.D30N4 at 10 A, 400 V, three phase					
	3000 W for LXM32.D30N4 at 10 A, 480 V, three phase					
	2000 W for LXM15MD28N4, 400 V, three phase					
	2000 W for LXM15MD40N4 at 10 A, 400 V, three phase					
	2200 W for LXM05AD34N4, 380480 V, three phase					
	2200 W for LXM05BD34N4, 380480 V, three phase					
	2200 W for LXM05CD34N4, 380480 V, three phase					
	2200 W for LXM05CD34N4, 380480 V, three phase 1400 W for LXM15LD28M3, 230 V, three phase					
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	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase					
	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 400 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 480 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 6.8 N.m for LXM15MD28N4, 480 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 6.8 N.m for LXM15MD28N4, 480 V, three phase 6.8 N.m for LXM15MD40N4 at 10 A, 480 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 6.8 N.m for LXM15MD28N4, 480 V, three phase 6.8 N.m for LXM15MD40N4 at 10 A, 480 V, three phase 6.9 N.m for LXM05AD34N4, 380480 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 6.8 N.m for LXM15MD28N4, 480 V, three phase 6.8 N.m for LXM15MD40N4 at 10 A, 480 V, three phase 6.9 N.m for LXM05AD34N4, 380480 V, three phase 6.9 N.m for LXM05BD34N4, 380480 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase 2150 W for LXM32.D30N4 at 10 A, 400 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 6.8 N.m for LXM15MD28N4, 480 V, three phase 6.8 N.m for LXM15MD40N4 at 10 A, 480 V, three phase 6.9 N.m for LXM05AD34N4, 380480 V, three phase 6.9 N.m for LXM05BD34N4, 380480 V, three phase 6.9 N.m for LXM05CD34N4, 380480 V, three phase					
Nominal torque	1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase 2150 W for LXM32.D30N4 at 10 A, 400 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 6.8 N.m for LXM15MD28N4, 480 V, three phase 6.8 N.m for LXM15MD40N4 at 10 A, 480 V, three phase 6.9 N.m for LXM05AD34N4, 380480 V, three phase 6.9 N.m for LXM05BD34N4, 380480 V, three phase 6.9 N.m for LXM05CD34N4, 380480 V, three phase 7.63 N.m for LXM15MD28N4, 400 V, three phase					

Nominal speed	2500 rpm for LXM32.D30N4 at 10 A, 400 V, three phase 3000 rpm for LXM32.D30N4 at 10 A, 480 V, three phase 3000 rpm for LXM05AD34N4, 380480 V, three phase 3000 rpm for LXM05BD34N4 at 10 A, 380480 V, three phase 3000 rpm for LXM05CD34N4, 380480 V, three phase 1500 rpm for LXM15MD28N4, 230 V, three phase 1500 rpm for LXM15LD28N3, 230 V, three phase 2500 rpm for LXM15MD28N4, 400 V, three phase 2500 rpm for LXM15MD40N4, 400 V, three phase 3000 rpm for LXM15MD28N4, 480 V, three phase 3000 rpm for LXM15MD28N4, 480 V, three phase						
Product compatibility	LXM15LD28M3 at 230 V three phase LXM05AD34N4 at 380480 V three phase LXM05BD34N4 at 380480 V three phase LXM05CD34N4 at 380480 V three phase LXM15MD28N4 at 400 V three phase LXM15MD28N4 at 480 V three phase LXM15MD40N4 at 480 V three phase LXM15MD28N4 at 230 V three phase						
Shaft end	Untapped						
IP degree of protection	IP50 standard						
Speed feedback resolution	131072 points/turn						
Holding brake	Without						
Mounting support	International standard flange						
Electrical connection	Rotatable right-angled connectors						
Complementary							
Range compatibility	Lexium 32 Lexium 05 Lexium 15						
supply voltage max	480 V						
Network number of phases	Three phase						
Continuous stall current	7.8 A						
maximum continuous power	3.6 W						
Maximum current Irms	20.8 A for LXM15LD28M3 20.8 A for LXM15MD28N4 20.8 A for LXM15MD40N4 20.8 A for LXM05AD34N4 20.8 A for LXM05BD34N4 20.8 A for LXM05CD34N4 20.8 A for LXM05CD34N4						
Maximum permanent current	20.8 A						
Switching frequency	8 kHz						
Second shaft	Without second shaft end						
Shaft diameter	24 mm						
Shaft length	50 mm						
Feedback type	Single turn SinCos Hiperface						
Motor flange size	140 mm						
Number of motor stacks	1						
Torque constant	1.43 N.m/A at 120 °C						
Back emf constant	100 V/krpm at 120 °C						
Number of motor poles	5.0						
Rotor inertia	7.41 kg.cm ²						

Stator resistance	1.41 Ohm at 20 °C				
Stator inductance	8.17 mH at 20 °C				
Stator electrical time constant	11.06 ms at 20 °C				
Maximum radial force Fr	1530 N at 3000 rpm 1760 N at 2000 rpm 2210 N at 1000 rpm				
Maximum axial force Fa	0.2 x Fr				
type of cooling	Natural convection				
Length	217.5 mm				
Centring collar diameter	130 mm				
centring collar depth	3.5 mm				
Number of mounting holes	4				
Mounting holes diameter	11 mm				
Circle diameter of the mounting holes	165 mm				
Net weight	11.9 kg				
Sizing reference	BSH1401P				
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

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	29.7 cm
Package 1 Width	21.7 cm
Package 1 Length	55.67 cm
Package 1 Weight	12.432 kg
Unit Type of Package 2	P06
Number of Units in Package 2	6
Package 2 Height	77.0 cm
Package 2 Width	80.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	83.092 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	
Total lifecycle Carbon footprint	3293
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

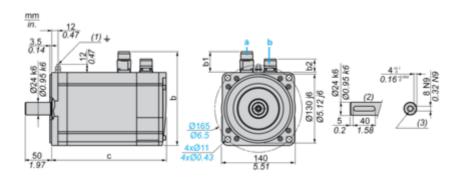
○ Repack and remanufacture							
End of life manual availability	No need of specific recycling operations						
Take-back	No						

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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 screws M8 x 19 mm/M8 x 0.75 in.

Dimensions in mm

Straig	tht connectors Rotatable angled connectors			(د دا معرا لم در طالمان د	- (ith handes)		
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
178	39.5	25.5	178	39.5	39.5	218	256

Dimensions in in.

Straight connectors		Rotatable angled connectors			a (itha atha aadaa)	(د ا د د ا داند د ا	
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
7.00	1.55	1.00	7.00	1.55	1.55	8.58	10.07

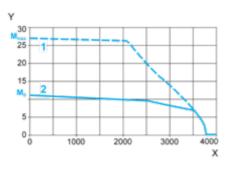
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

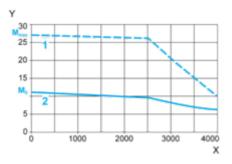


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



- X Speed in rpm
- ${\bf Y}$ Torque in Nm
- 1 Peak torque
- 2 Continuous torque