



AC servo motor BSH, Lexium 05, 11.1N.m, 1500rpm, keyed shaft, with brake, IP50

BSH1401P11F2A

! Discontinued on: 30 Jun 2023

! Discontinued

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, 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, 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, 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				
	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	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, 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				
	7.63 N.m for LXM15MD40N4, 400 V, three phase				
	9.1 N.m for LXM15LD28M3, 230 V, three phase				
	9.1 N.m for LXM15MD28N4, 230 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, 380480 V, three phase 3000 rpm for LXM05CD34N4, 380480 V, three phase 1500 rpm for LXM15MD28N4, 230 V, three phase 1500 rpm for LXM15LD28M3, 230 V, three phase 2500 rpm for LXM15MD28N4, 400 V, three phase 2500 rpm for LXM15MD28N4, 400 V, three phase 3000 rpm for LXM15MD28N4, 480 V, three phase 3000 rpm for LXM15MD28N4, 480 V, three phase 3000 rpm for LXM15MD40N4, 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 400 V three phase LXM15MD40N4 at 400 V three phase LXM15MD40N4 at 480 V three phase LXM15MD40N4 at 480 V three phase LXM15MD40N4 at 230 V three phase				
Shaft end	Keyed				
IP degree of protection	IP50 standard				
Speed feedback resolution	131072 points/turn				
Holding brake	With				
mounting support	International standard flange				
Complementary Range compatibility	Lexium 05 Lexium 32				
Range compatibility	Lexium 32 Lexium 15				
Range compatibility supply voltage max	Lexium 32 Lexium 15 480 V				
Range compatibility supply voltage max Network number of phases	Lexium 32 Lexium 15 480 V Three phase				
Range compatibility supply voltage max Network number of phases Continuous stall current	Lexium 32 Lexium 15 480 V Three phase 7.8 A				
Range compatibility supply voltage max Network number of phases	Lexium 32 Lexium 15 480 V Three phase				
Range compatibility supply voltage max Network number of phases Continuous stall current maximum continuous power	Lexium 32 Lexium 15 480 V Three phase 7.8 A 3.6 W 20.8 A for LXM15LD28M3 20.8 A for LXM15MD28N4 20.8 A for LXM15MD40N4 20.8 A for LXM05AD34N4 20.8 A for LXM05AD34N4 20.8 A for LXM05BD34N4 20.8 A for LXM05CD34N4				
Range compatibility supply voltage max Network number of phases Continuous stall current maximum continuous power Maximum current Irms	Lexium 32 Lexium 15 480 V Three phase 7.8 A 3.6 W 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				
Range compatibility supply voltage max Network number of phases Continuous stall current maximum continuous power Maximum current Irms	Lexium 32 Lexium 15 480 V Three phase 7.8 A 3.6 W 20.8 A for LXM15LD28M3 20.8 A for LXM15MD28N4 20.8 A for LXM15MD28N4 20.8 A for LXM5MD40N4 20.8 A for LXM05AD34N4 20.8 A for LXM05CD34N4 20.8 A for LXM05CD34N4 20.8 A for LXM32.D30N4 20.8 A				
Range compatibility supply voltage max Network number of phases Continuous stall current maximum continuous power Maximum current Irms Maximum permanent current Switching frequency	Lexium 32 Lexium 15 480 V Three phase 7.8 A 3.6 W 20.8 A for LXM15LD28M3 20.8 A for LXM15MD28N4 20.8 A for LXM15MD40N4 20.8 A for LXM05AD34N4 20.8 A for LXM05AD34N4 20.8 A for LXM05CD34N4 20.8 A for LXM05CD34N4 20.8 A for LXM32.D30N4 20.8 A				
Range compatibility supply voltage max Network number of phases Continuous stall current maximum continuous power Maximum current Irms Maximum permanent current Switching frequency Second shaft	Lexium 32 Lexium 15 480 V Three phase 7.8 A 3.6 W 20.8 A for LXM15LD28M3 20.8 A for LXM15MD28N4 20.8 A for LXM15MD40N4 20.8 A for LXM05AD34N4 20.8 A for LXM05AD34N4 20.8 A for LXM05CD34N4 20.8 A for LXM05CD34N4 20.8 A for LXM32.D30N4 20.8 A 8 kHz Without second shaft end				
Range compatibility supply voltage max Network number of phases Continuous stall current maximum continuous power Maximum current Irms Maximum permanent current Switching frequency Second shaft Shaft diameter	Lexium 32 Lexium 15 480 V Three phase 7.8 A 3.6 W 20.8 A for LXM15LD28M3 20.8 A for LXM15MD28N4 20.8 A for LXM15MD28N4 20.8 A for LXM05AD34N4 20.8 A for LXM05BD34N4 20.8 A for LXM05CD34N4 20.8 A for LXM32.D30N4 20.8 A 8 kHz Without second shaft end				

23 N.m holding brake

1.43 N.m/A at 120 $^{\circ}\text{C}$

100 V/krpm at 120 $^{\circ}\text{C}$

140 mm

Holding torque

Motor flange size

Torque constant

Back emf constant

Number of motor stacks

Number of motor poles	10			
Rotor inertia	9.21 kg.cm²			
Stator resistance	1.41 Ohm at 20 °C			
Stator inductance	15.6 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			
Brake pull-in power	24 W			
Type of cooling	Natural convection			
Length	255.5 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	13 kg			

Packing Units

Unit Type of Package 1	PCE		
Number of Units in Package 1	1		
Package 1 Height	27.0 cm		
Package 1 Width	27.0 cm		
Package 1 Length	48.2 cm		
Package 1 Weight	9.79 kg		

Contractual warranty

Warranty 18 months



Green PremiumTM **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance

	Mercury Free	
⊘	Rohs Exemption Information	Yes
	Pvc Free	

Certifications & Standards

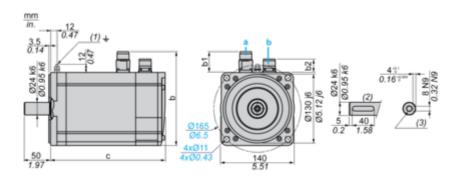
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)				
China Rohs Regulation	China RoHS declaration				
Environmental Disclosure	Product Environmental Profile				
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins				
Circularity Profile	No need of specific recycling operations				

BSH1401P11F2A

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

Straight connectors Rotatable angled connectors			a (itha at haralaa)	- (
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.

Straig	ht conne	ectors	Rotatable	angled co	onnectors	a (itha atha aadaa)	(د ا د ا د ا 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

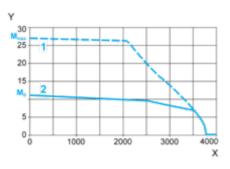
BSH1401P11F2A

Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

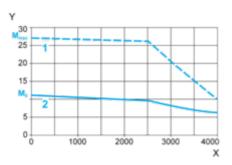


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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