



# AC servo motor BSH - 11.1 N.m - 1500 rpm - keyed shaft - without brake - IP50

BSH1401P11A1A

EAN Code: 3389118140820

#### 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 LXM15MD28N4, 400 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 23.8 N.m for LXM05AD34N4, 380480 V, three phase 23.33 N.m for LXM05BD34N4, 380480 V, three phase 23.33 N.m for LXM05BD34N4, 380480 V, three phase 23.33 N.m for LXM05BD34N4, 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 2400 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 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					
Nominal Speed	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 LXM15MD40N4, 400 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 480 V three phase					
	LXM15MD28N4 at 230 V three phase					
Shaft end	Keyed					
IP degree of protection	IP50 standard					
Speed feedback resolution	131072 points/turn					
Holding brake	Without					
mounting support	International standard flange					
Electrical connection	Straight connectors					
Complementary						
Range compatibility	Lexium 05					
	Lexium 32					
	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 ourrent Irms	00.0 A feet VAMEL DOOMO					

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Range compatibility	Lexium 05			
9	Lexium 32			
	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 LXM32.D30N4			
Maximum permanent current	20.8 A			
Switching frequency	8 kHz			
Second shaft	Without second shaft end			
Shaft diameter	24 mm			
Shaft length	50 mm			
Key width	40 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	10			
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Rotor inertia	7.41 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				
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				

## **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	8.0 kg			

# **Contractual warranty**

Warranty 18 months



**Green Premium**<sup>TM</sup> **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-CO<sub>2</sub> products.

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Transparency RoHS/REACh

#### Well-being performance

	Mercury Free	
<b>②</b>	Rohs Exemption Information	Yes
	Pvc Free	

#### **Certifications & Standards**

Reach Regulation	REACh Declaration				
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				

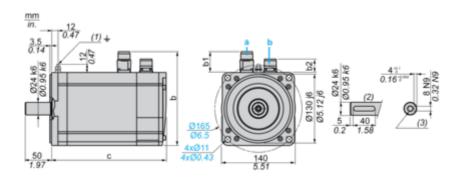
11 Sept 2024

#### **BSH1401P11A1A**

#### **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	Straight 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.

Straig	Straight connectors Rotatable angled connectors		a (veith a et handea)	( د ا د د ا د الله الله الله الله الله ال			
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

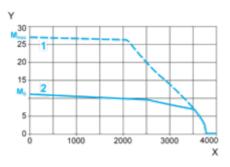
### BSH1401P11A1A

#### Performance Curves

### 400 V 3-Phase Supply Voltage

#### **Torque/Speed Curves**

Servo motor with LXM32•D30N4 servo drive

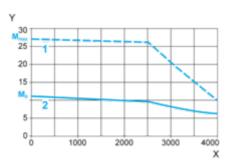


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

#### 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