

# AC servo motor BSH - 32.1 N.m - 3000 rpm - untapped shaft - without brake - IP50

BSH1404P01A2P

EAN Code: 3389118361409

### Main

Device short name	BSH				
Product or component type	Servo motor				
Maximum mechanical speed	4000 rpm				
Continuous stall torque	33.4 N.m for LXM32.D72N4 at 24 A, 400 V, three phase				
	33.4 N.m for LXM32.D72N4 at 24 A, 480 V, three phase				
	32.1 N.m for LXM05AD57N4, 380480 V, three phase				
	32.1 N.m for LXM05BD57N4, 380480 V, three phase				
	32.1 N.m for LXM05CD57N4, 380480 V, three phase				
Peak stall torque	103.6 N.m for LXM32.D72N4 at 24 A, 400 V, three phase				
	103.6 N.m for LXM32.D72N4 at 24 A, 480 V, three phase				
	63.09 N.m for LXM05AD57N4, 380480 V, three phase				
	63.09 N.m for LXM05BD57N4, 380480 V, three phase				
	63.09 N.m for LXM05CD57N4, 380480 V, three phase				
Nominal output power	5000 W for LXM32.D72N4 at 24 A, 400 V, three phase				
	5000 W for LXM32.D72N4 at 24 A, 480 V, three phase				
	3400 W for LXM05AD57N4, 380480 V, three phase				
	3400 W for LXM05BD57N4, 380480 V, three phase				
	3400 W for LXM05CD57N4, 380480 V, three phase				
Naminal tarrus	40 Nov. for LVM00 D70N4 at 04 A 400 V through an				
Nominal torque	19 N.m for LXM32.D72N4 at 24 A, 400 V, three phase				
	19 N.m for LXM32.D72N4 at 24 A, 480 V, three phase				
	10.8 N.m for LXM05AD57N4, 380480 V, three phase				
	10.8 N.m for LXM05BD57N4, 380480 V, three phase				
	10.8 N.m for LXM05CD57N4, 380480 V, three phase				
Nominal speed	2500 rpm for LXM32.D72N4 at 24 A, 400 V, three phase				
	2500 rpm for LXM32.D72N4 at 24 A, 480 V, three phase				
	3000 rpm for LXM05AD57N4, 380480 V, three phase				
	3000 rpm for LXM05BD57N4, 380480 V, three phase				
	3000 rpm for LXM05CD57N4, 380480 V, three phase				
Product compatibility	LXM05AD57N4 at 380480 V three phase				
, ,	LXM05BD57N4 at 380480 V three phase				
	LXM05CD57N4 at 380480 V three phase				
	LXM32.D72N4 at 400 V three phase				
	LXM32.D72N4 at 480 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 05 Lexium 32
supply voltage max	480 V

Network number of phases	Three phase					
Continuous stall current	21.3 A					
maximum continuous power	4.33 W					
Maximum current Irms	72 A for LXM32.D72N4 95.6 A for LXM05AD57N4 95.6 A for LXM05BD57N4 95.6 A for LXM05CD57N4					
Maximum permanent current	95.6 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	4					
Torque constant	1.57 N.m/A at 120 °C					
Back emf constant	104 V/krpm at 120 °C					
Number of motor poles	5.0					
Rotor inertia	23.7 kg.cm²					
Stator resistance	0.28 Ohm at 20 °C					
Stator inductance	2.035 mH at 20 °C					
Stator electrical time constant	13.93 ms at 20 °C					
Maximum radial force Fr	1840 N at 3000 rpm 2110 N at 2000 rpm 2660 N at 1000 rpm					
Maximum axial force Fa	0.2 x Fr					
type of cooling	Natural convection					
Length	382.5 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	26 kg					
Sizing reference	BSH1404P					
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	27.0 cm
Package 1 Width	27.0 cm
Package 1 Length	60.6 cm
Package 1 Weight	18.5 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	119.5 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 >

<b>⊘</b> Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	5467
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**

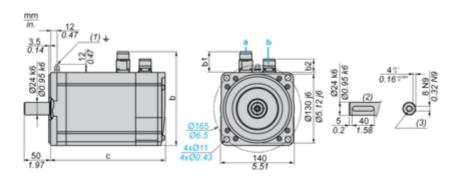
○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

#### BSH1404P01A2P

## **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

Straigh	t conn	ectors	Rotatable	table angled connectors c (without brake) c (with br		- (ith hards-)	
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
192.5	54	25.5	198.5	60	39.5	383	421

#### Dimensions in in.

Straight connectors		Rotatable angled connector		nnectors	a (itha atha aadaa)	( د ا د ا د ا د ا	
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
7.57	2.12	1.00	7.81	2.36	1.55	15.07	16.57

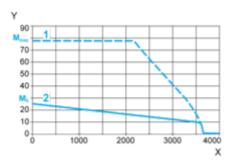
## BSH1404P01A2P

#### Performance Curves

## 400 V 3-Phase Supply Voltage

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

Servo motor with LXM32•D72N4 servo drive

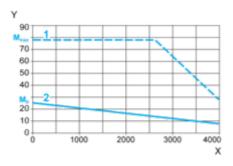


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

#### 480 V 3-Phase Supply Voltage

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

Servo motor with LXM32•D72N4 servo drive



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