

# BSH1403P31A1A

AC servo motor BSH, Lexium 32, 22.2N.m,  
1500rpm, keyed shaft, without brake, IP65



## Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	4000 rpm
Continuous stall torque	25.4 N.M for LXM05AD57N4, 380...480 V, three phase 25.4 N.M for LXM05BD57N4, 380...480 V, three phase 25.4 N.M for LXM05CD57N4, 380...480 V, three phase 22.2 N.M for LXM15MD40N4, 230 V, three phase 22.2 N.M for LXM15MD40N4, 400 V, three phase 22.2 N.M for LXM15MD40N4, 480 V, three phase 27.8 N.M for LXM15MD56N4, 230 V, three phase 27.8 N.M for LXM15MD56N4, 400 V, three phase 27.8 N.m for LXM15MD56N4, 480 V, three phase
Peak stall torque	41.6 N.M for LXM15MD40N4, 230 V, three phase 41.6 N.M for LXM15MD40N4, 400 V, three phase 41.6 N.M for LXM15MD40N4, 480 V, three phase 57.3 N.M for LXM15MD56N4, 230 V, three phase 57.3 N.M for LXM15MD56N4, 400 V, three phase 57.3 N.M for LXM15MD56N4, 480 V, three phase 57.32 N.M for LXM05AD57N4, 380...480 V, three phase 57.32 N.M for LXM05BD57N4, 380...480 V, three phase 57.32 N.m for LXM05CD57N4, 380...480 V, three phase
Nominal output power	3400 W for LXM15MD56N4, 480 V, three phase 3000 W for LXM15MD40N4, 230 V, three phase 3000 W for LXM15MD56N4, 230 V, three phase 3400 W for LXM15MD40N4, 480 V, three phase 3900 W for LXM05AD57N4, 380...480 V, three phase 3900 W for LXM05BD57N4, 380...480 V, three phase 3900 W for LXM05CD57N4, 380...480 V, three phase 3900 W for LXM15MD40N4, 400 V, three phase 3900 W for LXM15MD56N4, 400 V, three phase
Nominal torque	12.4 N.M for LXM15MD40N4, 400 V, three phase 12.4 N.M for LXM15MD56N4, 400 V, three phase 12.43 N.M for LXM05AD57N4, 380...480 V, three phase 12.43 N.M for LXM05BD57N4, 380...480 V, three phase 12.43 N.M for LXM05CD57N4, 380...480 V, three phase 18.8 N.M for LXM15MD40N4, 230 V, three phase 18.8 N.M for LXM15MD56N4, 230 V, three phase 8.1 N.M for LXM15MD40N4, 480 V, three phase 8.1 N.m for LXM15MD56N4, 480 V, three phase
Nominal speed	1500 rpm for LXM15MD40N4, 230 V, three phase 3000 rpm for LXM05AD57N4, 380...480 V, three phase 3000 rpm for LXM05BD57N4, 380...480 V, three phase 3000 rpm for LXM05CD57N4, 380...480 V, three phase 3000 rpm for LXM15MD40N4, 400 V, three phase 1500 rpm for LXM15MD56N4, 230 V, three phase 3000 rpm for LXM15MD56N4, 400 V, three phase 4000 rpm for LXM15MD40N4, 480 V, three phase 4000 rpm for LXM15MD56N4, 480 V, three phase

Product compatibility	LXM15MD40N4 at 400 V three phase LXM15MD40N4 at 480 V three phase LXM05AD57N4 at 380...480 V three phase LXM05BD57N4 at 380...480 V three phase LXM05CD57N4 at 380...480 V three phase LXM15MD40N4 at 230 V three phase LXM15MD56N4 at 230 V three phase LXM15MD56N4 at 400 V three phase LXM15MD56N4 at 480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Straight connectors

## Complementary

Range compatibility	Lexium 05 Lexium 15
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	17.6 A
Maximum continuous power	3.3 W
Maximum current Irms	61 A for LXM15MD40N4 61 A for LXM15MD56N4 61 A for LXM05AD57N4 61 A for LXM05BD57N4 61 A for LXM05CD57N4
Maximum permanent current	61 A
Switching frequency	4 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	3
Torque constant	1.58 N.m/A at 120 °C
Back emf constant	105 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	17.94 kg.cm <sup>2</sup>
Stator resistance	0.4 Ohm at 20 °C
Stator inductance	5.1 mH at 20 °C
Stator electrical time constant	12.75 ms at 20 °C
Maximum radial force Fr	1780 N at 3000 rpm 2030 N at 2000 rpm 2560 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	327.5 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	21.2 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	54.4 cm
Package 1 Weight	15.0 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Contractual warranty

Warranty	18 months
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