

Product datasheet

Specifications



servo motor BSH, Lexium 15,
9.31N.m, 1500rpm, 100mm, keyed
shaft, Sincos single turn, without
brake, IP65, straight

BSH1004M31A1A

! Discontinued

Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	6000 rpm
Continuous stall torque	9.31 N.m for LXM15LD10N4, 400 V, three phase 9.31 N.m for LXM15LD17N4, 400 V, three phase 9.31 N.m for LXM15LD17N4, 480 V, three phase 9.31 N.m for LXM15MD40N4, 400 V, three phase 9.31 N.m for LXM15MD40N4, 480 V, three phase
Peak stall torque	19.8 N.m for LXM15LD10N4, 400 V, three phase 29.87 N.m for LXM15LD17N4, 400 V, three phase 29.87 N.m for LXM15LD17N4, 480 V, three phase 34.17 N.m for LXM15MD40N4, 400 V, three phase 34.17 N.m for LXM15MD40N4, 480 V, three phase
Nominal output power	1300 W for LXM15LD17N4, 400 V, three phase 1300 W for LXM15LD10N4, 400 V, three phase 1300 W for LXM15MD40N4, 400 V, three phase 1700 W for LXM15LD17N4, 480 V, three phase 1700 W for LXM15MD40N4, 480 V, three phase
Nominal torque	8 N.m for LXM15LD17N4, 480 V, three phase 8 N.m for LXM15MD40N4, 480 V, three phase 8.2 N.m for LXM15LD10N4, 400 V, three phase 8.2 N.m for LXM15LD17N4, 400 V, three phase 8.2 N.m for LXM15MD40N4, 400 V, three phase
Nominal speed	2000 rpm for LXM15LD17N4, 480 V, three phase 1500 rpm for LXM15LD10N4, 400 V, three phase 1500 rpm for LXM15LD17N4, 400 V, three phase 1500 rpm for LXM15MD40N4, 400 V, three phase 2000 rpm for LXM15MD40N4, 480 V, three phase
Product compatibility	LXM15LD10N4 at 400 V three phase LXM15LD17N4 at 400 V three phase LXM15LD17N4 at 480 V three phase LXM15MD40N4 at 400 V three phase LXM15MD40N4 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 15
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Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	3.2 A
maximum continuous power	5 W
Maximum current Irms	17.4 A for LXM15LD10N4 17.4 A for LXM15LD17N4 17.4 A for LXM15MD40N4
Maximum permanent current	16.8 A
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	100 mm
Torque constant	3 N.m/A at 120 °C
Back emf constant	195 V/krpm at 120 °C
Number of motor poles	8
Rotor inertia	4.22 kg.cm²
Stator resistance	7.1 Ohm at 20 °C
Stator inductance	43.9 mH at 20 °C
Stator electrical time constant	6.18 ms at 20 °C
Maximum radial force Fr	1070 N at 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	276.5 mm
Centring collar diameter	95 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	115 mm
Net weight	9.2 kg
Sizing reference	BSH1004M
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

Contractual warranty

Warranty (in months)	18
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Environmental Data

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 >](#)

Use Longer

Lifetime extension	
Repair	No