

# Product datasheet

## Characteristics

### BSH1004T31A1A

AC servo motor BSH - 8.18 N.m - 3500 rpm - keyed shaft - without brake - IP65



#### Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000 rpm
Continuous stall torque	9.31 N.m for LXM15MD40N4, 230 V, three phase 8.18 N.m for LXM15LD28M3, 230 V, three phase
Peak stall torque	15.7 N.m for LXM15LD28M3, 230 V, three phase 21.04 N.m for LXM15MD40N4, 230 V, three phase
Nominal output power	2500 W for LXM15LD28M3, 230 V, three phase 2500 W for LXM15MD40N4, 230 V, three phase
Nominal torque	7 N.m for LXM15LD28M3, 230 V, three phase 7 N.m for LXM15MD40N4, 230 V, three phase
Nominal speed	3500 rpm for LXM15LD28M3, 230 V, three phase 3500 rpm for LXM15MD40N4, 230 V, three phase
Product compatibility	LXM15LD28M3 at 230 V three phase LXM15MD40N4 at 230 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

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

#### Complementary

Range compatibility	Lexium 15
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	12.7 A
Maximum continuous power	3.64 W
Maximum current $I_{rms}$	34.8 A for LXM15LD28M3 61 A for LXM15MD40N4
Maximum permanent current	66.3 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
Number of motor stacks	4
Torque constant	1.62 N.m/A at 120 °C 0.86 N.m/A at 120 °C
Back emf constant	103 V/krpm at 120 °C 50 V/krpm at 120 °C
Number of motor poles	8
Rotor inertia	4.22 kg.cm <sup>2</sup>
Stator resistance	1.81 Ohm at 20 °C
Stator inductance	13 mH at 20 °C 2.9 mH at 20 °C
Stator electrical time constant	6.44 ms at 20 °C 7.18 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
Product weight	9.2 kg

### Contractual warranty

Warranty	18 months
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