

Product datasheet

Specifications



servo motor BSH, Lexium 32,
25.4N.m, 750rpm, 140mm,
untapped shaft, Sincos single turn,
without brake, IP50, straight

BSH1403M01A1A

! Discontinued

Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	25.4 N.m for LXM15MD40N4, 230 V, three phase 27.8 N.m for LXM15MD40N4, 400 V, three phase 27.8 N.m for LXM15MD40N4, 480 V, three phase 25.4 N.m for LXM05AD34N4, 380...480 V, three phase 25.4 N.m for LXM05AD57N4, 380...480 V, three phase 25.4 N.m for LXM05BD34N4, 380...480 V, three phase 25.4 N.m for LXM05BD57N4, 380...480 V, three phase 25.4 N.m for LXM05CD34N4, 380...480 V, three phase 25.4 N.m for LXM05CD57N4, 380...480 V, three phase
Peak stall torque	71.7 N.m for LXM15MD40N4, 230 V, three phase 71.76 N.m for LXM15MD40N4, 400 V, three phase 71.76 N.m for LXM15MD40N4, 480 V, three phase 68 N.m for LXM05AD34N4, 380...480 V, three phase 71.7 N.m for LXM05AD57N4, 380...480 V, three phase 68 N.m for LXM05BD34N4, 380...480 V, three phase 71.7 N.m for LXM05BD57N4, 380...480 V, three phase 68 N.m for LXM05CD34N4, 380...480 V, three phase 71.7 N.m for LXM05CD57N4, 380...480 V, three phase
Nominal output power	1800 W for LXM15MD40N4, 230 V, three phase 2700 W for LXM05AD34N4, 380...480 V, three phase 2700 W for LXM05BD34N4, 380...480 V, three phase 2700 W for LXM05CD34N4, 380...480 V, three phase 3150 W for LXM15MD40N4, 400 V, three phase 3150 W for LXM15MD40N4, 480 V, three phase 3200 W for LXM05AD57N4, 380...480 V, three phase 3200 W for LXM05BD57N4, 380...480 V, three phase 3200 W for LXM05CD57N4, 380...480 V, three phase
Nominal torque	17.2 N.m for LXM05AD34N4, 380...480 V, three phase 17.2 N.m for LXM05BD34N4, 380...480 V, three phase 17.2 N.m for LXM05CD34N4, 380...480 V, three phase 20 N.m for LXM15MD40N4, 400 V, three phase 20 N.m for LXM15MD40N4, 480 V, three phase 20.3 N.m for LXM05AD57N4, 380...480 V, three phase 20.3 N.m for LXM05BD57N4, 380...480 V, three phase 20.3 N.m for LXM05CD57N4, 380...480 V, three phase 22.8 N.m for LXM15MD40N4, 230 V, three phase
Nominal speed	1500 rpm for LXM15MD40N4, 400 V, three phase 1500 rpm for LXM05AD34N4, 380...480 V, three phase 1500 rpm for LXM05BD34N4, 380...480 V, three phase 1500 rpm for LXM05CD34N4, 380...480 V, three phase 1500 rpm for LXM15MD40N4, 480 V, three phase 1500 rpm for LXM05AD57N4, 380...480 V, three phase 1500 rpm for LXM05BD57N4, 380...480 V, three phase 1500 rpm for LXM05CD57N4, 380...480 V, three phase 750 rpm for LXM15MD40N4, 230 V, three phase

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

Product compatibility	LXM05AD34N4 at 380...480 V three phase LXM05BD34N4 at 380...480 V three phase LXM05CD34N4 at 380...480 V three phase 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
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	Straight connectors

Complementary

Range compatibility	Lexium 05 Lexium 15
supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	9 A
maximum continuous power	4.27 W
Maximum current Irms	31.3 A for LXM05CD34N4 31.3 A for LXM05CD57N4 31.3 A for LXM15MD40N4 31.3 A for LXM05AD34N4 31.3 A for LXM05AD57N4 31.3 A for LXM05BD34N4 31.3 A for LXM05BD57N4
Maximum permanent current	31.3 A
Switching frequency	4 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
Torque constant	3.09 N.m/A at 120 °C
Back emf constant	205 V/krpm at 120 °C
Rotor inertia	17.94 kg.cm²
Stator resistance	1.52 Ohm at 20 °C
Stator inductance	19.4 mH at 20 °C 20.3 mH at 20 °C
Stator electrical time constant	12.76 ms at 20 °C 13.31 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
Product weight	21.2 kg
Sizing reference	BSH1403M
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
----------------------	----



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 Better

Materials and Substances	
EU RoHS Directive	Compliant By Exemption
PVC free	Yes

Use Longer

Lifetime extension	
Repair	No

Use Again

Repack and remanufacture	
End of life manual availability	No need of specific recycling operations