Product datasheet

Specifications

Green Premium™

AC servo motor BSH, Lexium 05, 11.1N.m, 2500rpm, untapped shaft, with brake, IP50

BSH1401T01F1A

⊘ **Discontinued on:** 01-Nov-2020

⊘ **Discontinued**

Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	11.1 N.m for LXM15MD56N4, 230 V, three phase 11.4 N.m for LXM05AD42M3X, 200...240 V, three phase 11.4 N.m for LXM05BD42M3X, 200...240 V, three phase 11.4 N.m for LXM05CD42M3X, 200...240 V, three phase
Peak stall torque	23.33 N.m for LXM15MD56N4, 230 V, three phase 23.33 N.m for LXM05AD42M3X, 200...240 V, three phase 23.33 N.m for LXM05BD42M3X, 200...240 V, three phase 23.33 N.m for LXM05CD42M3X, 200...240 V, three phase
Nominal output power	2000 W for LXM15MD56N4, 230 V, three phase 2200 W for LXM05AD42M3X, 200...240 V, three phase 2200 W for LXM05BD42M3X, 200...240 V, three phase 2200 W for LXM05CD42M3X, 200...240 V, three phase
Nominal torque	6.9 N.m for LXM05AD42M3X, 200...240 V, three phase 6.9 N.m for LXM05BD42M3X, 200...240 V, three phase 6.9 N.m for LXM05CD42M3X, 200...240 V, three phase 7.63 N.m for LXM15MD56N4, 230 V, three phase
Nominal speed	3000 rpm for LXM05AD42M3X, 200...240 V, three phase 3000 rpm for LXM05BD42M3X, 200...240 V, three phase 3000 rpm for LXM05CD42M3X, 200...240 V, three phase 2500 rpm for LXM15MD56N4, 230 V, three phase
Product compatibility	LXM05AD42M3X at 200...240 V three phase LXM05BD42M3X at 200...240 V three phase LXM05CD42M3X at 200...240 V three phase LXM15MD56N4 at 230 V three phase
Shaft end	Untapped
IP degree of protection	IP50 standard
Speed feedback resolution	131072 points/turn
Holding brake	With
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	13.9 A
maximum continuous power	3.6 W
Maximum current Irms	37.1 A for LXM15MD56N4 37.1 A for LXM05AD42M3X 37.1 A for LXM05BD42M3X 37.1 A for LXM05CD42M3X
Maximum permanent current	37.1 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
Holding torque	23 N.m holding brake
Motor flange size	140 mm
Number of motor stacks	1
Torque constant	0.83 N.m/A at 120 °C
Back emf constant	56 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	8.56 kg.cm²
Stator resistance	0.4 Ohm at 20 °C 0.44 Ohm at 20 °C
Stator inductance	4.9 mH at 20 °C 5.15 mH at 20 °C
Stator electrical time constant	11.14 ms at 20 °C 12.88 ms at 20 °C
Maximum radial force Fr	1530 N at 3000 rpm 1760 N at 2000 rpm 2210 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	24 W
Type of cooling	Natural convection
Length	255.5 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	13 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	48.2 cm

| **Package 1 Weight** | 9.79 kg |

Contractual warranty

| **Warranty** | 18 months |

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium ›

Guide to assess a product's sustainability ›

Transparency   RoHS/REACh

Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information   Yes

Certifications & Standards

Eu Rohs Directive   Pro-active compliance (Product out of EU RoHS legal scope)

China Rohs Regulation   China RoHS declaration

Environmental Disclosure   Product Environmental Profile

Weee   The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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Circularity Profile   No need of specific recycling operations

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