

Product datasheet

Specifications



AC servo motor BSH - 11.1 N.m - 2500 rpm - untapped shaft - without brake - IP65

BSH1401T22A1A

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 | IP65 standard IP67 with IP67 kit |
| Speed feedback resolution | 131072 points/turn x 4096 turns |
| 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 | 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 | Multiturn SinCos Hiperface |
| 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 | 7.41 kg.cm ² |
| 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 |
| Type of cooling | Natural convection |
| Length | 217.5 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 | 11.9 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 | 8.0 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-CO₂ 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

Circularity Profile No need of specific recycling operations