

Product datasheet

Specifications



servo motor BMH, Lexium 32,
34.4Nm, 3800rpm, untapped shaft,
without brake, IP65, IP67, 128
multiturn encoder, straight

BMH2051P22A1A

Main

| | |
|---------------------------|--|
| Device short name | BMH |
| Product or component type | Servo motor |
| Maximum mechanical speed | 3800 rpm |
| Continuous stall torque | 34.4 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 34.4 N.m for LXM32.D72N4 at 24 A, 480 V, three phase |
| Peak stall torque | 103.4 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 103.4 N.m for LXM32.D72N4 at 24 A, 480 V, three phase |
| Nominal output power | 5400 W for LXM32.D72N4 at 24 A, 400 V, three phase 5400 W for LXM32.D72N4 at 24 A, 480 V, three phase |
| Nominal torque | 25.8 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 25.8 N.m for LXM32.D72N4 at 24 A, 480 V, three phase |
| Nominal speed | 2000 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 2000 rpm for LXM32.D72N4 at 24 A, 480 V, three phase |
| Product compatibility | LXM32.D72N4 at 400...480 V three phase |
| Shaft end | Smooth shaft |
| 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 32 |
| [Us] rated supply voltage | 480 V |
| Network number of phases | Three phase |
| Continuous stall current | 21.5 A |
| Continuous power | 6.8 W |
| Maximum current Irms | 78.1 A for LXM32.D72N4 |
| Maximum permanent current | 78.1 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 38 mm |
| Shaft length | 80 mm |
| Feedback type | Multiturn SinCos Hiperface |

| | |
|---------------------------------------|---|
| Motor flange size | 205 mm |
| Number of motor stacks | 1 |
| Torque constant | 1.6 N.m/A |
| Back emf constant | 104 V/krpm at 120 °C |
| Number of motor poles | 5.0 |
| Rotor inertia | 71.4 kg.cm ² |
| Stator resistance | 0.3 Ohm at 20 °C |
| Stator inductance | 2.95 mH at 20 °C |
| Stator electrical time constant | 19.7 ms at 20 °C |
| Maximum radial force Fr | 3730 N at 1000 rpm 2960 N at 2000 rpm 2580 N at 3000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Type of cooling | Natural convection |
| Length | 321 mm |
| Centring collar diameter | 180 mm |
| Centring collar depth | 4 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 14 mm |
| Circle diameter of the mounting holes | 215 mm |
| Net weight | 33 kg |
| Sizing reference | BMH2051P |
| Network number of phases | 3 |
| Accuracy error [angular] | 1.4 ° |
| Temperature copper hot | 135 °C |
| Temperature magnet hot | 100 °C |
| Temperature magnet rt | 20 °C |
| Output current 3s peak | 78.1 A |
| Inertia | 0.0 kg.cm ² of brake 71.4 kg.cm ² of motor |

Packing Units

| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 36.0 cm |
| Package 1 Width | 31.0 cm |
| Package 1 Length | 58.0 cm |
| Package 1 Weight | 39.0 kg |

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 >](#)



Environmental footprint

| | |
|--|------------------|
| Total lifecycle Carbon footprint | 5 991 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 171 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 5 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.3 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 5 811 kg CO2 eq. |
| Carbon footprint of the end-of-life phase [C1 to C4] | 4 kg CO2 eq. |

Use Better



Materials and Substances

| | |
|--|--|
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | No |
| SCIP Number | A7df881f-135f-4256-b8c2-ea55d4c9a151 |
| EU RoHS Directive | Compliant By Exemption |
| REACH Regulation | Reference contains Substances of Very High Concern above the threshold |
| 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 |
| Take-back | Yes |
| WEEE Label |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |