

Product datasheet

Specifications



servo motor BMH, Lexium 32,
84Nm, 3800rpm, untapped shaft,
with brake, IP54, 128 multiturn
encoder, straight

BMH2053P02F1A

! Discontinued

! Discontinued on: 9 Feb 2023

Main

| | |
|---------------------------|--|
| Device short name | BMH |
| Product or component type | Servo motor |
| Maximum mechanical speed | 3800 rpm |
| Continuous stall torque | 84 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 84 N.m for LXM32.D72N4 at 24 A, 480 V, three phase |
| Peak stall torque | 232 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 232 N.m for LXM32.D72N4 at 24 A, 480 V, three phase |
| Nominal output power | 6500 W for LXM32.D72N4 at 24 A, 400 V, three phase 6500 W for LXM32.D72N4 at 24 A, 480 V, three phase |
| Nominal torque | 52.2 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 52.2 N.m for LXM32.D72N4 at 24 A, 480 V, three phase |
| Nominal speed | 1200 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 1200 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 | IP54 standard |
| Speed feedback resolution | 131072 points/turn x 4096 turns |
| Holding brake | With |
| 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 | 25.2 A |
| Continuous power | 9.6 W |
| Maximum current Irms | 72 A for LXM32.D72N4 |
| Maximum permanent current | 107.4 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 38 mm |
| Shaft length | 80 mm |

| | |
|---------------------------------------|--|
| Feedback type | Multiturn SinCos Hiperface |
| Holding torque | 80 N.m holding brake |
| Motor flange size | 205 mm |
| Number of motor stacks | 3 |
| Torque constant | 3.5 N.m/A at 120 °C |
| Back emf constant | 218 V/krpm at 120 °C |
| Number of motor poles | 10 |
| Rotor inertia | 206 kg.cm ² |
| Stator resistance | 0.32 Ohm at 20 °C |
| Stator inductance | 6.9 mH at 20 °C |
| Stator electrical time constant | 21.6 ms at 20 °C |
| Maximum radial force Fr | 4500 N at 1000 rpm 3570 N at 2000 rpm 3120 N at 3000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 40 W |
| Type of cooling | Natural convection |
| Length | 538.5 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 | 71.9 kg |
| Sizing reference | BMH2053P |
| 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 |

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 | 73.0 cm |
| Package 1 Weight | 75.0 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 >](#)

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

WEEE Label



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