# Product data sheet

Specifications



## servo motor BMH, Lexium 32, 84Nm, 3800rpm, keyed shaft, with brake, IP65, IP67, 128 multiturn encoder

BMH2053P32F2A

## 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<br>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<br>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<br>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<br>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<br>1200 rpm for LXM32.D72N4 at 24 A, 480 V, three phase |
| **Product compatibility** | LXM32.D72N4 at 400...480 V three phase |
| **Shaft end** | Keyed |
| **IP degree of protection** | IP65 standard<br>IP67 with IP67 kit |
| **Speed feedback resolution** | 131072 points/turn x 4096 turns |
| **Holding brake** | With |
| **Mounting support** | International standard flange |
| **Electrical connection** | Rotatable right-angled 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** | 136.1 A for LXM32.D72N4 |
| **Maximum permanent current** | 107.4 A |
| **Second shaft** | Without second shaft end |
| **Shaft diameter** | 38 mm |
| **Shaft length** | 80 mm |
| **Key width** | 70 mm |

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

| | |
|---|---|
| **Feedback type** | Multiturn SinCos Hiperface |
| **Holding torque** | 80 N.m holding brake |
| **Motor flange size** | 205 mm |
| **Number of motor stacks** | 3 |
| **Torque constant** | 2.76 N.m/A at 120 °C |
| **Back emf constant** | 218 V/krpm at 120 °C |
| **Number of motor poles** | 5.0 |
| **Rotor inertia** | 206 kg.cm² |
| **Stator resistance** | 0.32 Ohm at 20 °C |
| **Stator inductance** | 2.15 mH at 20 °C |
| **Stator electrical time constant** | 21.6 ms at 20 °C |
| **Maximum radial force Fr** | 4500 N at 1000 rpm<br>3570 N at 2000 rpm<br>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** | 40 cm |
| **Package 1 Width** | 30 cm |
| **Package 1 Length** | 79.5 cm |
| **Package 1 Weight** | 76 kg |
| **Unit Type of Package 2** | S06 |
| **Number of Units in Package 2** | 2 |
| **Package 2 Height** | 73.5 cm |
| **Package 2 Width** | 60 cm |

| | |
|---|---|
| **Package 2 Length** | 80 cm |
| **Package 2 Weight** | 163 kg |
| **Unit Type of Package 3** | S06 |
| **Number of Units in Package 3** | 2 |
| **Package 3 Height** | 73.5 cm |
| **Package 3 Width** | 60 cm |
| **Package 3 Length** | 80 cm |
| **Package 3 Weight** | 163 kg |

## Contractual warranty

| | |
|---|---|
| **Warranty** | 18 months |

## 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 | 7342 |
| Environmental Disclosure | Product Environmental Profile |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | No |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| SCIP Number | A7df881f-135f-4256-b8c2-ea55d4c9a151 |
| REACh Regulation | REACh Declaration |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| PVC free | Yes |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| End of life manual availability | No need of specific recycling operations |
| Take-back | No |
| WEEE Label | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |