

# Product datasheet

Specifications



servo motor BMH - 84 Nm - 3800 rpm - untapped shaft - with brake - IP54

BMH2053P06F1A

❗ Discontinued on: 9 Feb 2023

❗ Discontinued

EAN Code: 3606485202280

## 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                 | Smooth shaft   |
| IP degree of protection   | IP54 standard  |
| Speed feedback resolution | 32768 points/turn  |
| 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             | Single turn SinCos Hiperface |

|  |  |
|--|--|
| <b>Holding torque</b>                        | 80 N.m holding brake   |
| <b>Motor flange size</b>                     | 205 mm   |
| <b>Number of motor stacks</b>                | 3  |
| <b>Torque constant</b>                       | 3.5 N.m/A at 120 °C  |
| <b>Back emf constant</b>                     | 218 V/krpm at 120 °C   |
| <b>Number of motor poles</b>                 | 10   |
| <b>Rotor inertia</b>                         | 206 kg.cm <sup>2</sup>   |
| <b>Stator resistance</b>                     | 0.32 Ohm at 20 °C  |
| <b>Stator inductance</b>                     | 6.9 mH at 20 °C  |
| <b>Stator electrical time constant</b>       | 21.6 ms at 20 °C   |
| <b>Maximum radial force Fr</b>               | 4500 N at 1000 rpm<br>3570 N at 2000 rpm<br>3120 N at 3000 rpm |
| <b>Maximum axial force Fa</b>                | 0.2 x Fr   |
| <b>Brake pull-in power</b>                   | 40 W   |
| <b>Type of cooling</b>                       | Natural convection   |
| <b>Length</b>                                | 538.5 mm   |
| <b>Centring collar diameter</b>              | 180 mm   |
| <b>Centring collar depth</b>                 | 4 mm   |
| <b>Number of mounting holes</b>              | 4  |
| <b>Mounting holes diameter</b>               | 14 mm  |
| <b>Circle diameter of the mounting holes</b> | 215 mm   |
| <b>Net weight</b>                            | 71.9 kg  |

## Packing Units

|                                     |         |
|-------------------------------------|---------|
| <b>Unit Type of Package 1</b>       | PCE     |
| <b>Number of Units in Package 1</b> | 1       |
| <b>Package 1 Height</b>             | 36.0 cm |
| <b>Package 1 Width</b>              | 31.0 cm |
| <b>Package 1 Length</b>             | 73.0 cm |
| <b>Package 1 Weight</b>             | 75.0 kg |

## Contractual warranty

|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 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<sub>2</sub> 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

 Pvc Free

## 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