

Product data sheet

Specifications



servo motor BMH, Lexium 32,
34.4Nm, 3800rpm, untapped shaft,
with brake, IP65, IP67, 16 multturn
encoder

BMH2051P27F2A

**Product availability: Non-Stock - Not normally stocked in
distribution facility**

Main

| | |
|---------------------------|--|
| Device short name | BMH |
| Product or Component Type | Servo motor |
| Maximum mechanical speed | 3800 rpm |
| Continuous stall torque | 304.5 lbf.in (34.4 N.m) LXM32.D72N4 24 A, 400 V, three phase 304.5 lbf.in (34.4 N.m) LXM32.D72N4 24 A, 480 V, three phase |
| Peak stall torque | 915.2 lbf.in (103.4 N.m) LXM32.D72N4 24 A, 400 V, three phase 915.2 lbf.in (103.4 N.m) LXM32.D72N4 24 A, 480 V, three phase |
| Nominal output power | 5400 W LXM32.D72N4 24 A, 400 V, three phase 5400 W LXM32.D72N4 24 A, 480 V, three phase |
| Nominal torque | 228.3 lbf.in (25.8 N.m) LXM32.D72N4 24 A, 400 V, three phase 228.3 lbf.in (25.8 N.m) LXM32.D72N4 24 A, 480 V, three phase |
| Nominal speed | 2000 rpm LXM32.D72N4 24 A, 400 V, three phase 2000 rpm LXM32.D72N4 24 A, 480 V, three phase |
| Product compatibility | LXM32.D72N4 400...480 V three phase |
| Shaft end | Smooth shaft |
| IP Degree of Protection | IP65 standard IP67 with IP67 kit |
| Speed feedback resolution | 32768 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 |
| Phase | Three phase |
| Continuous stall current | 21.5 A |
| Continuous power | 6.8 W |
| Maximum current Irms | 78.1 A LXM32.D72N4 |
| Maximum permanent current | 78.1 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 1.5 in (38 mm) |
| Shaft length | 3.1 in (80 mm) |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| | |
|--|--|
| Feedback type | Multiturn SinCos Hiperface |
| Holding torque | 708.06 lbf.in (80 N.m) holding brake |
| Motor flange size | 8.07 in (205 mm) |
| Number of motor stacks | 1 |
| Torque constant | 1.6 N.m/A |
| Back emf constant | 104 V/krpm 248 °F (120 °C) |
| Number of motor poles | 5.0 |
| Rotor inertia | 87.4 kg.cm ² |
| Stator resistance | 0.3 Ohm 68 °F (20 °C) |
| Stator inductance | 2.95 mH 68 °F (20 °C) |
| Stator electrical time constant | 19.7 ms 68 °F (20 °C) |
| Maximum radial force Fr | 3730 N 1000 rpm 2960 N 2000 rpm 2580 N 3000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 40 W |
| Type of cooling | Natural convection |
| Length | 14.6 in (370.5 mm) |
| Centring collar diameter | 7.09 in (180 mm) |
| Centring collar depth | 0.2 in (4 mm) |
| Number of mounting holes | 4 |
| Mounting holes diameter | 0.6 in (14 mm) |
| Circle diameter of the mounting holes | 8.5 in (215 mm) |
| Net Weight | 83.6 lb(US) (37.9 kg) |
| Sizing reference | BMH2051P |
| Network number of phases | 3 |
| Accuracy error [angular] | 4.8 ° |
| Temperature copper hot | 275 °F (135 °C) |
| Temperature magnet hot | 212 °F (100 °C) |
| Temperature magnet rt | 68 °F (20 °C) |
| Output current 3s peak | 78.1 A |
| Inertia | 16.0 kg.cm ² of brake 71.4 kg.cm ² of motor |

Ordering and shipping details

| | |
|--------------------------|---------------|
| Category | US1PC5318282 |
| Discount Schedule | PC53 |
| GTIN | 3606485203027 |
| Returnability | No |
| Country of origin | DE |

Packing Units

| | |
|-------------------------------|-----------------------|
| Unit Type of Package 1 | PCE |
| Nbr. of units in pkg. | 1 |
| Package 1 Height | 14.2 in (36.0 cm) |
| Package 1 Width | 12.2 in (31.0 cm) |
| Package 1 Length | 22.8 in (58.0 cm) |
| Package weight(Lbs) | 94.8 lb(US) (43.0 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 | 6 009 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 188 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 6 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.4 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 |
| 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 Longer



Lifetime extension

| | |
|--------|----|
| Repair | No |
|--------|----|

Use Again



Repack and remanufacture

| | |
|---------------------|--|
| Circularity Profile | 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. |