

Product data sheet

Specifications



MH3 servomotor, 100mm, 3 stacks, smooth Shaft, SinCos Multiturn 128, Brake, angular, IP65

MH31003P02F2200

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

Main

| | |
|---------------------------|-------------|
| Range Compatibility | PacDrive 3 |
| Device short name | MH3 |
| Product or Component Type | Servo motor |

Complementary

| | |
|---------------------------|---|
| Maximum mechanical speed | 6000 rpm |
| [Us] rated supply voltage | 115...480 V |
| Phase | Three phase |
| Continuous stall current | 7.69 A |
| Continuous stall torque | 79.7 lbf.in (9 N.m), 115...480 V, three phase |
| Continuous power | 3270 W |
| Peak stall torque | 239.0 lbf.in (27 N.m), 115...480 V, three phase |
| Nominal output power | 0.88 W, 115 V 2 W, 230 V 2.85 W, 400 V 3.27 W, 480 V |
| Nominal torque | 74.79 lbf.in (8.45 N.m) LXM52 7.3 mA, 115 V, three phase 67.53 lbf.in (7.63 N.m) LXM52 6.7 mA, 230 V, single phase 60.2 lbf.in (6.8 N.m) LXM52 6.07 mA, 400 V, three phase 55.32 lbf.in (6.25 N.m) LXM52 5.64 mA, 480 V, three phase 74.79 lbf.in (8.45 N.m) LXM62 7.3 mA, 115 V, single phase 67.53 lbf.in (7.63 N.m) LXM62 6.7 mA, 230 V, single phase 60.2 lbf.in (6.8 N.m) LXM62 6.07 mA, 400 V, three phase 55.32 lbf.in (6.25 N.m) LXM62 5.64 mA, 480 V, three phase |
| Nominal speed | 1000 rpm LXM52 7.3 mA, 115 V, single phase 2500 rpm LXM52 6.7 mA, 230 V, single phase 4000 rpm LXM52 6.07 mA, 400 V, three phase 5000 rpm LXM52 5.64 mA, 480 V, three phase 1000 rpm LXM62 7.3 mA, 115 V, single phase 2500 rpm LXM62 6.7 mA, 230 V, single phase 4000 rpm LXM62 6.07 mA, 400 V, three phase 5000 rpm LXM62 5.64 mA, 480 V, three phase |
| Maximum current Irms | 26.71 A |
| Shaft end | Smooth shaft |
| Second shaft | Without second shaft end |
| Shaft diameter | 0.7 in (19 mm) |
| Shaft length | 1.6 in (40 mm) |
| IP Degree of Protection | IP65 standard |
| Encoder type | Multiturn SinCos Hiperface |
| Speed feedback resolution | 128 periods |

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

| | |
|--|---|
| Holding brake | With |
| Holding torque | 79.7 lbf.in (9 N.m) |
| Mounting Support | International standard flange |
| Motor flange size | 3.9 in (100 mm) |
| Electrical Connection | Rotatable right-angled connectors |
| Torque constant | 1.17 N.m/A 248 °F (120 °C) |
| Back emf constant | 77.95 V/krpm |
| Number of motor poles | 5.0 |
| Rotor inertia | 10.3 kg.cm ² |
| Stator resistance | 1.08 Ohm |
| Stator inductance | 5.23 mH |
| Stator electrical time constant | 6.3 ms |
| Maximum radial force Fr | 1050 N 1000 rpm 830 N 2000 rpm 730 N 3000 rpm 660 N 4000 rpm 610 N 5000 rpm |
| Brake pull-in power | 18 W |
| Type of cooling | Natural convection |
| Length | 9.2 in (234.3 mm) |
| Centring collar diameter | 3.7 in (95 mm) |
| Centring collar depth | 0.1 in (3.5 mm) |
| Number of mounting holes | 4 |
| Mounting holes diameter | 0.4 in (9 mm) |
| Circle diameter of the mounting holes | 4.5 in (115 mm) |
| Net Weight | 17.97 lb(US) (8.15 kg) |
| Sizing reference | MH31003P |
| Temperature copper hot | 275 °F (135 °C) |
| Output current 3s peak | 26.71 A |
| Inertia | 0.93 kg.cm ² of brake 9.37 kg.cm ² of motor |
| Nominal speed | 4000 rpm |

Ordering and shipping details

| | |
|--------------------------|---------------|
| Category | US1PC5218359 |
| Discount Schedule | PC52 |
| GTIN | 3606485396446 |
| Returnability | Yes |
| Country of origin | DE |

Packing Units

| | |
|-------------------------------|-----|
| Unit Type of Package 1 | PCE |
| Nbr. of units in pkg. | 1 |

| | |
|----------------------------|------------------------|
| Package 1 Height | 8.3 in (21.0 cm) |
| Package 1 Width | 7.09 in (18.0 cm) |
| Package 1 Length | 14.02 in (35.6 cm) |
| Package weight(Lbs) | 16.42 lb(US) (7.45 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 | 3 221 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 54 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 1 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.1 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 3 165 kg CO2 eq. |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.6 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) |
| 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 |