

Product data sheet

Specifications



servo motor MH3 100 8Nm,no
key,single,brake,IP65/IP67,4kRPM

MH31003P01F2200

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
Network number of phases	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	Single turn SinCos Hiperface
Speed feedback resolution	128 periods

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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	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 1 Weight	16.42 lb(US) (7.45 kg)

Contractual warranty

Warranty (in months)	18
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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	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Circularity Profile	No need of specific recycling operations
Take-back	No