

Product datasheet

Specifications



MH3 servomotor, 100mm, 2 stacks,
smooth Shaft, SinCos Multiturn 16,
Brake, angular, IP65

MH31002P07F2200

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	5.04 A
Continuous stall torque	6 N.m, 115...480 V, three phase
Continuous power	2270 W
Peak stall torque	18 N.m, 115...480 V, three phase
Nominal output power	0.59 W, 115 V 1.12 W, 230 V 1.95 W, 400 V 2.27 W, 480 V
Nominal torque	5.67 N.m for LXM52 at 4.81 mA, 115 V, three phase 5.33 N.m for LXM52 at 4.58 mA, 230 V, single phase 4.67 N.m for LXM52 at 4.1 mA, 400 V, three phase 4.2 N.m for LXM52 at 3.73 mA, 480 V, three phase 5.67 N.m for LXM62 at 4.81 mA, 115 V, single phase 5.33 N.m for LXM62 at 4.58 mA, 230 V, single phase 4.67 N.m for LXM62 at 4.1 mA, 400 V, three phase 4.2 N.m for LXM62 at 3.73 mA, 480 V, three phase
Nominal speed	1000 rpm for LXM52 at 4.81 mA, 115 V, single phase 2000 rpm for LXM52 at 4.58 mA, 230 V, single phase 4000 rpm for LXM52 at 4.1 mA, 400 V, three phase 5000 rpm for LXM52 at 3.73 mA, 480 V, three phase 1000 rpm for LXM62 at 4.81 mA, 115 V, single phase 2000 rpm for LXM62 at 4.58 mA, 230 V, single phase 4000 rpm for LXM62 at 4.1 mA, 400 V, three phase 5000 rpm for LXM62 at 3.73 mA, 480 V, three phase
Maximum current Irms	17.5 A
Shaft end	Smooth shaft
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm
IP degree of protection	IP65 standard
Encoder type	Multiturn SinCos Hiperface
Speed feedback resolution	16 periods

Holding brake	With
Holding torque	5.5 N.m
Mounting support	International standard flange
Motor flange size	100 mm
Electrical connection	Rotatable right-angled connectors
Torque constant	1.19 N.m/A at 120 °C
Back emf constant	78 V/krpm
Number of motor poles	5.0
Rotor inertia	6.77 kg.cm ²
Stator resistance	1.97 Ohm
Stator inductance	8.24 mH
Stator electrical time constant	5 ms
Maximum radial force Fr	990 N at 1000 rpm 790 N at 2000 rpm 690 N at 3000 rpm 620 N at 4000 rpm 580 N at 5000 rpm
Brake pull-in power	12 W
Type of cooling	Natural convection
Length	202.3 mm
Centring collar diameter	95 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	115 mm
Product weight	6.4 kg
Sizing reference	MH31002P
Temperature copper hot	135 °C
Output current 3s peak	17.5 A
Inertia	0.49 kg.cm ² of brake 6.28 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	15.6 cm
Package 1 Width	22.1 cm
Package 1 Length	44.6 cm
Package 1 Weight	5.62 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	2 212 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	41 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	2 170 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.5 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

End of life manual availability	No need of specific recycling operations
Take-back	Yes