

# Product datasheet

Specifications



MH3 servomotor, 140mm, 2 stacks,  
smooth Shaft, SinCos Multiturn 128,  
no Brake, angular, IP65

MH31402P02A2200

## Main

Range compatibility	PacDrive 3
Device short name	MH3
Product or component type	Servo motor

## Complementary

Maximum mechanical speed	4000 rpm
[Us] rated supply voltage	115...480 V
Network number of phases	Three phase
Continuous stall current	16.83 A
Continuous stall torque	18.5 N.m, 115...480 V, three phase
Continuous power	3730 W
Peak stall torque	55.5 N.m, 115...480 V, three phase
Nominal output power	1.71 W, 115 V 2.93 W, 230 V 3.73 W, 400 V 3.73 W, 480 V
Nominal torque	16.34 N.m for LXM52 at 14.87 mA, 115 V, three phase 14.0 N.m for LXM52 at 13.13 mA, 230 V, single phase 10.17 N.m for LXM52 at 9.76 mA, 400 V, three phase 10.17 N.m for LXM52 at 9.76 mA, 480 V, three phase 16.34 N.m for LXM62 at 14.87 mA, 115 V, single phase 14.0 N.m for LXM62 at 13.13 mA, 230 V, single phase 10.17 N.m for LXM62 at 9.76 mA, 400 V, three phase 10.17 N.m for LXM62 at 9.76 mA, 480 V, three phase
Nominal speed	1000 rpm for LXM52 at 14.87 mA, 115 V, single phase 2000 rpm for LXM52 at 13.13 mA, 230 V, single phase 3500 rpm for LXM52 at 9.76 mA, 400 V, three phase 3500 rpm for LXM52 at 9.76 mA, 480 V, three phase 1000 rpm for LXM62 at 14.87 mA, 115 V, single phase 2000 rpm for LXM62 at 13.13 mA, 230 V, single phase 3500 rpm for LXM62 at 9.76 mA, 400 V, three phase 3500 rpm for LXM62 at 9.76 mA, 480 V, three phase
Maximum current Irms	46.22 A
Shaft end	Smooth shaft
Second shaft	Without second shaft end
Shaft diameter	24 mm
Shaft length	50 mm
IP degree of protection	IP65 standard
Encoder type	Multiturn SinCos Hiperface
Speed feedback resolution	128 periods

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

<b>Holding brake</b>	Without
<b>Mounting support</b>	International standard flange
<b>Motor flange size</b>	140 mm
<b>Electrical connection</b>	Rotatable right-angled connectors
<b>Torque constant</b>	1.24 N.m/A at 120 °C
<b>Back emf constant</b>	70.7 V/krpm
<b>Number of motor poles</b>	5.0
<b>Rotor inertia</b>	32 kg.cm <sup>2</sup>
<b>Stator resistance</b>	0.23 Ohm
<b>Stator inductance</b>	2.99 mH
<b>Stator electrical time constant</b>	13 ms
<b>Maximum radial force Fr</b>	2240 N at 1000 rpm 1780 N at 2000 rpm 1550 N at 3000 rpm
<b>Type of cooling</b>	Natural convection
<b>Length</b>	192 mm
<b>Centring collar diameter</b>	130 mm
<b>Centring collar depth</b>	3.5 mm
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	11 mm
<b>Circle diameter of the mounting holes</b>	165 mm
<b>Net weight</b>	12 kg
<b>Sizing reference</b>	MH31402P
<b>Temperature copper hot</b>	135 °C
<b>Output current 3s peak</b>	46.22 A
<b>Inertia</b>	0.0 kg.cm <sup>2</sup> of brake 32.0 kg.cm <sup>2</sup> of motor
<b>Nominal speed</b>	3000 rpm

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	26.000 cm
<b>Package 1 Width</b>	59.000 cm
<b>Package 1 Length</b>	20.000 cm
<b>Package 1 Weight</b>	13.300 kg
<b>Unit Type of Package 2</b>	PAL
<b>Number of Units in Package 2</b>	8
<b>Package 2 Height</b>	70.000 cm
<b>Package 2 Width</b>	80.000 cm
<b>Package 2 Length</b>	64.000 cm
<b>Package 2 Weight</b>	116.400 kg

# Contractual warranty

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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	4 238 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	96 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	2 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]	4 139 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>
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