

Product data sheet

Specifications



servo motor BMH - 65 Nm - 3500 rpm - keyed shaft - without brake - IP65/IP67

BMH1903P37A2A

! Discontinued

! Discontinued on: Nov 30, 2015

! End-of-service on: Dec 31, 2023

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	3500 rpm
Continuous stall torque	382.4 lbf.in (43.2 N.m) LXM32.D72N4 24 A, 400 V, three phase 382.4 lbf.in (43.2 N.m) LXM32.D72N4 24 A, 480 V, three phase 509.8 lbf.in (57.6 N.m) LXM32MD85N4 32 A, 400 V, three phase 509.8 lbf.in (57.6 N.m) LXM32MD85N4 32 A, 480 V, three phase 575.3 lbf.in (65 N.m) LXM32MC10N4 40 A, 400 V, three phase 575.3 lbf.in (65 N.m) LXM32MC10N4 40 A, 480 V, three phase
Peak stall torque	1086.9 lbf.in (122.8 N.m) LXM32.D72N4 24 A, 400 V, three phase 1086.9 lbf.in (122.8 N.m) LXM32.D72N4 24 A, 480 V, three phase 1250.6 lbf.in (141.3 N.m) LXM32MD85N4 32 A, 400 V, three phase 1250.6 lbf.in (141.3 N.m) LXM32MD85N4 32 A, 480 V, three phase 1440.01 lbf.in (162.7 N.m) LXM32MC10N4 40 A, 400 V, three phase 1440.01 lbf.in (162.7 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal output power	5700 W LXM32.D72N4 24 A, 400 V, three phase 5700 W LXM32.D72N4 24 A, 480 V, three phase 7330 W LXM32MD85N4 32 A, 400 V, three phase 7330 W LXM32MD85N4 32 A, 480 V, three phase 7750 W LXM32MC10N4 40 A, 400 V, three phase 7750 W LXM32MC10N4 40 A, 480 V, three phase
Nominal torque	318.6 lbf.in (36 N.m) LXM32.D72N4 24 A, 400 V, three phase 318.6 lbf.in (36 N.m) LXM32.D72N4 24 A, 480 V, three phase 309.8 lbf.in (35 N.m) LXM32MD85N4 32 A, 400 V, three phase 309.8 lbf.in (35 N.m) LXM32MD85N4 32 A, 480 V, three phase 327.5 lbf.in (37 N.m) LXM32MC10N4 40 A, 400 V, three phase 327.5 lbf.in (37 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal speed	1500 rpm LXM32.D72N4 24 A, 400 V, three phase 1500 rpm LXM32.D72N4 24 A, 480 V, three phase 2000 rpm LXM32MC10N4 40 A, 400 V, three phase 2000 rpm LXM32MC10N4 40 A, 480 V, three phase 2000 rpm LXM32MD85N4 32 A, 400 V, three phase 2000 rpm LXM32MD85N4 32 A, 480 V, three phase
Product compatibility	LXM32.D72N4 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	32768 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	36.1 A
Continuous power	7.95 W
Maximum current Irms	72 A LXM32.D72N4
Maximum permanent current	124.5 A
Second shaft	Without second shaft end
Shaft diameter	1.5 in (38 mm)
Shaft length	3.1 in (80 mm)
Key width	2.8 in (70 mm)
Feedback type	Multiturn SinCos Hiperface
Motor flange size	7.5 in (190 mm)
Number of motor stacks	3
Torque constant	1.8 N.m/A 248 °F (120 °C)
Back emf constant	129.2 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	194.1 kg.cm ²
Stator resistance	0.13 Ohm 68 °F (20 °C)
Stator inductance	3.62 mH 68 °F (20 °C)
Stator electrical time constant	27.8 ms 68 °F (20 °C)
Maximum radial force Fr	4500 N 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	12.2 in (310 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	94.8 lb(US) (43 kg)
Sizing reference	BMH1903P
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)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

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 >](#)

Use Better



Materials and Substances

EU RoHS Directive

[Compliant](#)

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins