

Product data sheet

Specifications



servo motor BMH - 48 Nm - 4000 rpm - keyed shaft - with brake - IP65/IP67

BMH1902P37F2A

⚠ Discontinued on: Nov 30, 2015

⚠ End-of-service on: Dec 31, 2023

⚠ Discontinued

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	331.02 lbf.in (37.4 N.m) LXM32.D72N4 24 A, 400 V, three phase 331.02 lbf.in (37.4 N.m) LXM32.D72N4 24 A, 480 V, three phase 424.8 lbf.in (48 N.m) LXM32MD85N4 32 A, 400 V, three phase 424.8 lbf.in (48 N.m) LXM32MD85N4 32 A, 480 V, three phase 424.8 lbf.in (48 N.m) LXM32MC10N4 40 A, 400 V, three phase 424.8 lbf.in (48 N.m) LXM32MC10N4 40 A, 480 V, three phase
Peak stall torque	893.9 lbf.in (101 N.m) LXM32.D72N4 24 A, 400 V, three phase 893.9 lbf.in (101 N.m) LXM32.D72N4 24 A, 480 V, three phase 1022.3 lbf.in (115.5 N.m) LXM32MD85N4 32 A, 400 V, three phase 1022.3 lbf.in (115.5 N.m) LXM32MD85N4 32 A, 480 V, three phase 1156.8 lbf.in (130.7 N.m) LXM32MC10N4 40 A, 400 V, three phase 1156.8 lbf.in (130.7 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal output power	5900 W LXM32.D72N4 24 A, 400 V, three phase 5900 W LXM32.D72N4 24 A, 480 V, three phase 6070 W LXM32MD85N4 32 A, 400 V, three phase 6070 W LXM32MD85N4 32 A, 480 V, three phase 6070 W LXM32MC10N4 40 A, 400 V, three phase 6070 W LXM32MC10N4 40 A, 480 V, three phase
Nominal torque	197.4 lbf.in (22.3 N.m) LXM32.D72N4 24 A, 400 V, three phase 197.4 lbf.in (22.3 N.m) LXM32.D72N4 24 A, 480 V, three phase 256.7 lbf.in (29 N.m) LXM32MD85N4 32 A, 400 V, three phase 256.7 lbf.in (29 N.m) LXM32MD85N4 32 A, 480 V, three phase 256.7 lbf.in (29 N.m) LXM32MC10N4 40 A, 400 V, three phase 256.7 lbf.in (29 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal speed	2000 rpm LXM32MC10N4 40 A, 400 V, three phase 2000 rpm LXM32MC10N4 40 A, 480 V, three phase 2500 rpm LXM32.D72N4 24 A, 400 V, three phase 2500 rpm LXM32.D72N4 24 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	With
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

Complementary

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

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	30.8 A
Continuous power	6.1 W
Maximum current Irms	72 A LXM32.D72N4
Maximum permanent current	114 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
Holding torque	708.06 lbf.in (80 N.m) holding brake
Motor flange size	7.5 in (190 mm)
Number of motor stacks	2
Torque constant	1.56 N.m/A 248 °F (120 °C)
Back emf constant	108.3 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	144.8 kg.cm²
Stator resistance	0.15 Ohm 68 °F (20 °C)
Stator inductance	3.86 mH 68 °F (20 °C)
Stator electrical time constant	25.7 ms 68 °F (20 °C)
Maximum radial force Fr	4200 N 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
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	71.7 lb(US) (32.5 kg)
Sizing reference	BMH1902P
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
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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 >](#)

Use Better

Materials and Substances	
EU RoHS Directive	Compliant By Exemption
PVC free	Yes

Use Longer

Lifetime extension	
Repair	No

Use Again

Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins