Product data sheet

Specifications

servo motor BMH, Lexium 32, 18.5Nm, 4000rpm, untapped shaft, with brake, IP54, 16bit encoder, straight

BMH1402P06F1A

Discontinued

Discontinued on: Jun 30, 2023

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	163.7 lbf.in (18.5 N.m) LXM32.D72N4 24 A, 400 V, three phase 163.7 lbf.in (18.5 N.m) LXM32.D72N4 24 A, 480 V, three phase
Peak stall torque	445.2 lbf.in (50.3 N.m) LXM32.D72N4 24 A, 400 V, three phase 445.2 lbf.in (50.3 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal output power	3500 W LXM32.D72N4 24 A, 400 V, three phase 3500 W LXM32.D72N4 24 A, 480 V, three phase
Nominal torque	108.0 lbf.in (12.2 N.m) LXM32.D72N4 24 A, 400 V, three phase 108.0 lbf.in (12.2 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal speed	3000 rpm LXM32.D72N4 24 A, 400 V, three phase 3000 rpm LXM32.D72N4 24 A, 480 V, three phase
Product compatibility	LXM32.D72N4 400...480 V three phase
Shaft end	Smooth shaft
IP degree of protection	IP54 standard
Speed feedback resolution	32768 points/turn
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	16.83 A
Continuous power	4.44 W
Maximum current Irms	57.4 A LXM32.D72N4
Maximum permanent current	57.4 A
Second shaft	Without second shaft end
Shaft diameter	0.9 in (24 mm)
Shaft length	2.0 in (50 mm)

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

Feedback type	Single turn SinCos Hiperface
Holding torque	159.3 lbf.in (18 N.m) holding brake
Motor flange size	5.5 in (140 mm)
Number of motor stacks	2
Torque constant	1.1 N.m/A 248 °F (120 °C)
Back emf constant	70.7 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	33.5 kg.cm²
Stator resistance	0.23 Ohm 68 °F (20 °C)
Stator inductance	3 mH 68 °F (20 °C)
Stator electrical time constant	13 ms 68 °F (20 °C)
Maximum radial force Fr	2240 N 1000 rpm 1780 N 2000 rpm 1550 N 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	18 W
Type of cooling	Natural convection
Length	8.9 in (227 mm)
Centring collar diameter	5.1 in (130 mm)
Centring collar depth	0.1 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (11 mm)
Circle diameter of the mounting holes	6.5 in (165 mm)
Net weight	31.5 lb(US) (14.3 kg)
Sizing reference	BMH1402P
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
Package 1 Height	10.2 in (26.0 cm)
Package 1 Width	7.9 in (20.0 cm)
Package 1 Length	23.6 in (60.0 cm)
Package 1 Weight	32.2 lb(US) (14.6 kg)

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 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