

Product data sheet

Specifications



servo motor BMH - 30 Nm - 5000 rpm - keyed shaft - with brake - IP65/IP67

BMH1901P37F2A

⚠ Discontinued on: Dec 1, 2020

⚠ 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	265.5 lbf.in (30 N.m) LXM32.D72N4 24 A, 400 V, three phase 265.5 lbf.in (30 N.m) LXM32.D72N4 24 A, 480 V, three phase 265.5 lbf.in (30 N.m) LXM32MD85N4 32 A, 400 V, three phase 265.5 lbf.in (30 N.m) LXM32MD85N4 32 A, 480 V, three phase 265.5 lbf.in (30 N.m) LXM32MC10N4 40 A, 400 V, three phase 265.5 lbf.in (30 N.m) LXM32MC10N4 40 A, 480 V, three phase
Peak stall torque	687.7 lbf.in (77.7 N.m) LXM32.D72N4 24 A, 400 V, three phase 687.7 lbf.in (77.7 N.m) LXM32.D72N4 24 A, 480 V, three phase 766.5 lbf.in (86.6 N.m) LXM32MD85N4 32 A, 400 V, three phase 766.5 lbf.in (86.6 N.m) LXM32MD85N4 32 A, 480 V, three phase 793.9 lbf.in (89.7 N.m) LXM32MC10N4 40 A, 400 V, three phase 793.9 lbf.in (89.7 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal output power	4800 W LXM32.D72N4 24 A, 400 V, three phase 4800 W LXM32.D72N4 24 A, 480 V, three phase 5180 W LXM32MD85N4 32 A, 400 V, three phase 5180 W LXM32MD85N4 32 A, 480 V, three phase 5180 W LXM32MC10N4 40 A, 400 V, three phase 5180 W LXM32MC10N4 40 A, 480 V, three phase
Nominal torque	162.9 lbf.in (18.4 N.m) LXM32.D72N4 24 A, 400 V, three phase 162.9 lbf.in (18.4 N.m) LXM32.D72N4 24 A, 480 V, three phase 146.04 lbf.in (16.5 N.m) LXM32MD85N4 32 A, 400 V, three phase 146.04 lbf.in (16.5 N.m) LXM32MD85N4 32 A, 480 V, three phase 146.04 lbf.in (16.5 N.m) LXM32MC10N4 40 A, 400 V, three phase 146.04 lbf.in (16.5 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal speed	2500 rpm LXM32.D72N4 24 A, 400 V, three phase 2500 rpm LXM32.D72N4 24 A, 480 V, three phase 3000 rpm LXM32MD85N4 32 A, 400 V, three phase 3000 rpm LXM32MD85N4 32 A, 480 V, three phase 3000 rpm LXM32MC10N4 40 A, 400 V, three phase 3000 rpm LXM32MC10N4 40 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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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
Phase	Three phase
Continuous stall current	23.2 A
Continuous power	5.24 W
Maximum current Irms	72 A LXM32.D72N4
Maximum permanent current	89.6 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	1
Torque constant	1.3 N.m/A 248 °F (120 °C)
Back emf constant	87.6 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	71.7 kg.cm²
Stator resistance	0.24 Ohm 68 °F (20 °C)
Stator inductance	5.08 mH 68 °F (20 °C)
Stator electrical time constant	21.2 ms 68 °F (20 °C)
Maximum radial force Fr	3730 N 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	9.8 in (250 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	45.2 lb(US) (20.5 kg)
Sizing reference	BMH1901P
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)

Ordering and shipping details

Category	18282-LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	3606485264134
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	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	Pro-active compliance (Product out of EU RoHS legal scope)
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
PVC free	Yes

Use Longer

Lifetime extension	
Repair	No

Use Again

Repack and remanufacture	
Circularity Profile	No need of specific recycling operations