Product data sheet

Specifications



servo motor BMH, Lexium 32, 84Nm, 3800rpm, keyed shaft, with brake, IP65, IP67, 128bit encoder, straight

BMH2053P31F1A

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Device short name	BMH
Product or Component Type	Servo motor
Maximum mechanical speed	3800 rpm
Continuous stall torque	743.5 lbf.in (84 N.m) LXM32.D72N4 24 A, 400 V, three phase 743.5 lbf.in (84 N.m) LXM32.D72N4 24 A, 480 V, three phase
Peak stall torque	2053.4 lbf.in (232 N.m) LXM32.D72N4 24 A, 400 V, three phase 2053.4 lbf.in (232 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal output power	6500 W LXM32.D72N4 24 A, 400 V, three phase 6500 W LXM32.D72N4 24 A, 480 V, three phase
Nominal torque	462.008 lbf.in (52.2 N.m) LXM32.D72N4 24 A, 400 V, three phase 462.008 lbf.in (52.2 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal speed	1200 rpm LXM32.D72N4 24 A, 400 V, three phase 1200 rpm LXM32.D72N4 24 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	131072 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
Phase	Three phase
Continuous stall current	25.2 A
Continuous power	9.6 W
Maximum current Irms	136.1 A LXM32.D72N4
Maximum permanent current	107.4 A
Second shaft	Without second shaft end
Shaft diameter	1.5 in (38 mm)
Shaft length	3.1 in (80 mm)

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

Key width	2.8 in (70 mm)
Feedback type	Single turn SinCos Hiperface
Holding torque	708.06 lbf.in (80 N.m) holding brake
Motor flange size	8.07 in (205 mm)
Number of motor stacks	3
Torque constant	2.76 N.m/A 248 °F (120 °C)
Back emf constant	218 V/krpm 248 °F (120 °C)
Number of motor poles	5.0
Rotor inertia	206 kg.cm²
Stator resistance	0.32 Ohm 68 °F (20 °C)
Stator inductance	2.15 mH 68 °F (20 °C)
Stator electrical time constant	21.6 ms 68 °F (20 °C)
Maximum radial force Fr	4500 N 1000 rpm 3570 N 2000 rpm 3120 N 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	21.2 in (538.5 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)
Product Weight	158.5 lb(US) (71.9 kg)
Sizing reference	BMH2053P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	275 °F (135 °C)
Temperature magnet hot	212 °F (100 °C)
Temperature magnet rt	68 °F (20 °C)
Output current 3s peak	136.1 A
Inertia	16.0 kg.cm² of brake 190.0 kg.cm² of motor

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3606485201993
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	14.2 in (36.0 cm)
Package 1 Width	12.2 in (31.0 cm)
Package 1 Length	28.7 in (73.0 cm)
Package weight(Lbs)	165.3 lb(US) (75.0 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 >

Environmental footprint

Total lifecycle Carbon footprint	**7 337 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**328 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**10 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.7 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**6 992 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**7 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**A7df881f-135f-4256-b8c2-ea55d4c9a151**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
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**
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.**