Product data sheet

Specifications

servo motor BMH, Lexium 32, 62.5Nm, 3800rpm, keyed shaft, with brake, IP65, IP67, 128bit encoder

BMH2052P31F2A

Discontinued on: Jun 30, 2023

Discontinued

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	3800 rpm
Continuous stall torque	553.2 lbf.in (62.5 N.m) LXM32.D72N4 24 A, 400 V, three phase 553.2 lbf.in (62.5 N.m) LXM32.D72N4 24 A, 480 V, three phase
Peak stall torque	1504.6 lbf.in (170 N.m) LXM32.D72N4 24 A, 400 V, three phase 1504.6 lbf.in (170 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	368.2 lbf.in (41.6 N.m) LXM32.D72N4 24 A, 400 V, three phase 368.2 lbf.in (41.6 N.m) LXM32.D72N4 24 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
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	Rotatable right-angled connectors

Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	24.2 A
Continuous power	7.85 W
Maximum current Irms	96.8 A LXM32.D72N4
Maximum permanent current	96.8 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	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	2
Torque constant	2.58 N.m/A 248 °F (120 °C)
Back emf constant	161 V/krpm 248 °F (120 °C)
Number of motor poles	5.0
Rotor inertia	145 kg.cm²
Stator resistance	0.3 Ohm 68 °F (20 °C)
Stator inductance	2.8 mH 68 °F (20 °C)
Stator electrical time constant	18.7 ms 68 °F (20 °C)
Maximum radial force Fr	4200 N 1000 rpm 3330 N 2000 rpm 2910 N 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	17.9 in (454.5 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)
Net weight	107.8 lb(US) (48.9 kg)
Sizing reference	BMH2052P
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	96.8 A
Inertia	16.0 kg.cm² of brake 129.0 kg.cm² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	14.173 in (36.000 cm)
Package 1 Width	12.205 in (31.000 cm)
Package 1 Length	28.740 in (73.000 cm)
Package 1 Weight	127.868 lb(US) (58.000 kg)

Unit Type of Package 2	P06
Number of Units in Package 2	2
Package 2 Height	28.937 in (73.500 cm)
Package 2 Width	31.496 in (80.000 cm)
Package 2 Length	23.622 in (60.000 cm)
Package 2 Weight	284.397 lb(US) (129.000 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	**7 259 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**254 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**7 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.5 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]	**5 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**
PVC free	**Yes**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Circularity Profile	**No need of specific recycling operations**
Take-back	**Nej**