

# Product data sheet

Specifications



servo motor BMH, Lexium 32,  
84Nm, 3800rpm, untapped shaft,  
with brake, IP54, 16 multturn  
encoder, straight

BMH2053P07F1A

⚠ Discontinued on: Jun 30, 2023

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## 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	Smooth shaft
IP degree of protection	IP54 standard
Speed feedback resolution	32768 points/turn x 4096 turns
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	25.2 A
Continuous power	9.6 W
Maximum current Irms	72 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)

<b>Feedback type</b>	Multiturn SinCos Hiperface
<b>Holding torque</b>	708.06 lbf.in (80 N.m) holding brake
<b>Motor flange size</b>	8.07 in (205 mm)
<b>Number of motor stacks</b>	3
<b>Torque constant</b>	3.5 N.m/A 248 °F (120 °C)
<b>Back emf constant</b>	218 V/krpm 248 °F (120 °C)
<b>Number of motor poles</b>	10
<b>Rotor inertia</b>	206 kg.cm <sup>2</sup>
<b>Stator resistance</b>	0.32 Ohm 68 °F (20 °C)
<b>Stator inductance</b>	6.9 mH 68 °F (20 °C)
<b>Stator electrical time constant</b>	21.6 ms 68 °F (20 °C)
<b>Maximum radial force Fr</b>	4500 N 1000 rpm 3570 N 2000 rpm 3120 N 3000 rpm
<b>Maximum axial force Fa</b>	0.2 x Fr
<b>Brake pull-in power</b>	40 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	21.2 in (538.5 mm)
<b>Centring collar diameter</b>	7.09 in (180 mm)
<b>Centring collar depth</b>	0.2 in (4 mm)
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	0.6 in (14 mm)
<b>Circle diameter of the mounting holes</b>	8.5 in (215 mm)
<b>Net weight</b>	158.5 lb(US) (71.9 kg)
<b>Sizing reference</b>	BMH2053P
<b>Network number of phases</b>	3
<b>Accuracy error [angular]</b>	4.8 °
<b>Temperature copper hot</b>	275 °F (135 °C)
<b>Temperature magnet hot</b>	212 °F (100 °C)
<b>Temperature magnet rt</b>	68 °F (20 °C)

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	14.2 in (36.0 cm)
<b>Package 1 Width</b>	12.2 in (31.0 cm)
<b>Package 1 Length</b>	28.7 in (73.0 cm)
<b>Package 1 Weight</b>	165.3 lb(US) (75.0 kg)

## Contractual warranty

<b>Warranty (in months)</b>	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