

# Product data sheet

Specifications



servo motor BMH, Lexium 32,  
84Nm, 3800rpm, keyed shaft,  
without brake, IP65, IP67, 16  
multiturn encoder

BMH2053P37A2A

**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	32768 points/turn x 4096 turns
Holding brake	Without
Mounting Support	International standard flange
Electrical Connection	Rotatable right-angled 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.

Key width	2.8 in (70 mm)
Feedback type	Multiturn SinCos Hiperface
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	190 kg.cm <sup>2</sup>
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
Type of cooling	Natural convection
Length	19.3 in (489 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	147.7 lb(US) (67 kg)
Sizing reference	BMH2053P
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)
Output current 3s peak	136.1 A
Inertia	0.0 kg.cm <sup>2</sup> of brake 190.0 kg.cm <sup>2</sup> of motor

## Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3606485202518
Returnability	No
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
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<b>Nbr. of units in pkg.</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 weight(Lbs)</b>	156.5 lb(US) (71.0 kg)

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## **Contractual warranty**

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<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 >](#)



### Environmental footprint

Total lifecycle Carbon footprint	7 319 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	311 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	9 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.6 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
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
REACH Regulation	<a href="#">REACH Declaration</a>
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
PVC free	Yes

## Use Longer



### Lifetime extension

Repair	No
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## 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.