

Product data sheet

Specifications



servo motor BMH, Lexium 32,
100Nm, 3000rpm, keyed shaft, with
brake, IP65, IP67, 128bit encoder

BMH1904P31F2A

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

Main

Device short name	BMH
Product or Component Type	Servo motor
Maximum mechanical speed	3000 rpm
Continuous stall torque	885.07 lbf.in (100 N.m) LXM32MC10N4 40 A, 400 V, three phase 885.07 lbf.in (100 N.m) LXM32MC10N4 40 A, 480 V, three phase
Peak stall torque	2035.7 lbf.in (230 N.m) LXM32MC10N4 40 A, 400 V, three phase 2035.7 lbf.in (230 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal output power	16000 W LXM32MC10N4 40 A, 400 V, three phase 16000 W LXM32MC10N4 40 A, 480 V, three phase
Nominal torque	676.2 lbf.in (76.4 N.m) LXM32MC10N4 40 A, 400 V, three phase 676.2 lbf.in (76.4 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal speed	2000 rpm LXM32MC10N4 40 A, 400 V, three phase 2000 rpm LXM32MC10N4 40 A, 480 V, three phase
Shaft end	Smooth shaft
IP Degree of Protection	IP65 standard IP20 with fan module
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
Phase	Three phase
Continuous stall current	40 A
Maximum current Irms	100 A LXM32MC10N4 100 A
Maximum permanent current	100 A
Second shaft	Without second shaft end
Shaft diameter	1.5 in (38 mm)
Shaft length	3.1 in (80 mm)
Key width	0.4 in (10 mm)
Feedback type	Single turn SinCos Hiperface
Holding torque	708.06 lbf.in (80 N.m) holding brake

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

Motor flange size	7.5 in (190 mm)
Number of motor stacks	4
Torque constant	2.5 N.m/A 248 °F (120 °C)
Back emf constant	168 V/krpm 248 °F (120 °C)
Number of motor poles	5.0
Rotor inertia	298.2 kg.cm²
Stator resistance	0.16 Ohm 68 °F (20 °C)
Stator inductance	2.37 mH 68 °F (20 °C)
Stator electrical time constant	29.6 ms 68 °F (20 °C)
Maximum radial force Fr	3800 N 1000 rpm 3700 N 2000 rpm 3600 N 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Fan
Length	20.6 in (523 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	141.5 lb(US) (64.2 kg)
Sizing reference	BMH1904P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	275 °F (135 °C)
Temperature magnet hot	266 °F (130 °C)
Temperature magnet rt	68 °F (20 °C)
Output current 3s peak	100.0 A
Inertia	21.5 kg.cm² of brake 276.7 kg.cm² of motor

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3606481041999
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1

Package 1 Height	15.748 in (40.000 cm)
Package 1 Width	31.299 in (79.500 cm)
Package 1 Length	11.811 in (30.000 cm)
Package weight(Lbs)	160.938 lb(US) (73.000 kg)

Contractual warranty

Warranty (in months)	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	17 473 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	274 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	8 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]	17 185 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	6 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
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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.