

Product datasheet

Specifications



servo motor BMH - 100 Nm - 3000 rpm - untapped shaft - without brake - IP20/IP65

BMH1904P21A2B

EAN Code: 3606481041944

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	3000 rpm
Continuous stall torque	100 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 100 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Peak stall torque	230 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 230 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal output power	9800 W for LXM32MC10N4 at 40 A, 400 V, three phase 9800 W for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal torque	46.8 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 46.8 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal speed	2000 rpm for LXM32MC10N4 at 40 A, 400 V, three phase 2000 rpm for LXM32MC10N4 at 40 A, 480 V, three phase
Shaft end	Smooth shaft
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 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
Network number of phases	Three phase
Continuous stall current	40 A
Maximum current Irms	100 A for LXM32MC10N4 100 A
Maximum permanent current	100 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 mm
key width	10 mm
Feedback type	Multiturn SinCos Hiperface
Motor flange size	190 mm

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

Number of motor stacks	4
Torque constant	2.5 N.m/A at 120 °C
Back emf constant	168 V/krpm at 120 °C
Number of motor poles	5.0
Rotor inertia	276.7 kg.cm²
Stator resistance	0.16 Ohm at 20 °C
Stator inductance	2.37 mH at 20 °C
Stator electrical time constant	29.6 ms at 20 °C
Maximum radial force Fr	3800 N at 1000 rpm 3700 N at 2000 rpm 3600 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
type of cooling	Natural convection
Length	383 mm
Centring collar diameter	180 mm
centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	14 mm
Circle diameter of the mounting holes	215 mm
Net weight	55.8 kg
Sizing reference	BMH1904P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	135 °C
Temperature magnet hot	130 °C
Temperature magnet rt	20 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	40.0 cm
Package 1 Width	30.0 cm
Package 1 Length	79.5 cm
Package 1 Weight	57.4 kg

Contractual warranty

Warranty	18 months
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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	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	10797
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
REACH Regulation	REACH Declaration
PVC free	Yes

Use Again

Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins