

Product datasheet

Specifications



servo motor BMH, Lexium 32, 10.3Nm, 4000rpm, keyed shaft, without brake, IP54, 128bit encoder, straight

BMH1401P11A1A

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	10.3 N.m for LXM32.D30M2 at 10 A, 230 V, single phase 10.3 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 10.3 N.m for LXM32.D30N4 at 10 A, 480 V, three phase
Peak stall torque	30.8 N.m for LXM32.D30M2 at 10 A, 230 V, single phase 30.8 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 30.8 N.m for LXM32.D30N4 at 10 A, 480 V, three phase
Nominal output power	1450 W for LXM32.D30M2 at 10 A, 230 V, single phase 2400 W for LXM32.D30N4 at 10 A, 400 V, three phase 2400 W for LXM32.D30N4 at 10 A, 480 V, three phase
Nominal torque	6.9 N.m for LXM32.D30M2 at 10 A, 230 V, single phase 7.7 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 7.7 N.m for LXM32.D30N4 at 10 A, 480 V, three phase
Nominal speed	2000 rpm for LXM32.D30M2 at 10 A, 230 V, single phase 3000 rpm for LXM32.D30N4 at 10 A, 400 V, three phase 3000 rpm for LXM32.D30N4 at 10 A, 480 V, three phase
Product compatibility	LXM32.D30M2 at 230 V single phase LXM32.D30N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP54 standard
Speed feedback resolution	131072 points/turn
Holding brake	Without
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	8.58 A
Continuous power	2.85 W
Maximum current Irms	29.8 A for LXM32.D30M2 29.8 A for LXM32.D30N4
Maximum permanent current	29.8 A
Second shaft	Without second shaft end

Shaft diameter	24 mm
Shaft length	50 mm
key width	40 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	140 mm
Number of motor stacks	1
Torque constant	1.2 N.m/A at 120 °C
Back emf constant	77.4 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	16.46 kg.cm ²
Stator resistance	0.69 Ohm at 20 °C
Stator inductance	6.7 mH at 20 °C
Stator electrical time constant	9.7 ms at 20 °C
Maximum radial force Fr	1930 N at 1000 rpm 1530 N at 2000 rpm 1340 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
type of cooling	Natural convection
Length	152 mm
Centring collar diameter	130 mm
centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	11 mm
Circle diameter of the mounting holes	165 mm
Product weight	8 kg
Sizing reference	BMH1401P
Network number of phases	3
Accuracy error [angular]	1.4 °
Coefficient 1_1	-0.0009190289556011 N.m/rpm
Coefficient 1_2	0.0000000740962511090787 N.m/rpm ²
Coefficient 1_3	-0.000000000968956741220659 N.m/rpm ³
Coefficient 1_4	0.0000000000000529564392760141 N.m/rpm ⁴
Coefficient 1_5	-0.000000000000000122533440031471 N.m/rpm ⁵
Coefficient 1_6	0.0000000000000000000102111200025244 N.m/rpm ⁶
Saturation coefficient 1	0.00000000000000023003844074
Saturation coefficient 2	-0.00955056179775281
Saturation coefficient 3	-0.00000000000000011789470087
Coefficient 2_1	0.00012875603864735 N.m/rpm
Temperature copper hot	135 °C
Temperature magnet hot	100 °C
Temperature magnet rt	20 °C

Motor voltage drop coefficient	1
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Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	26.0 cm
Package 1 Width	20.0 cm
Package 1 Length	60.0 cm
Package 1 Weight	8.3 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)	2650
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