

Product datasheet

Specifications



servo motor BMH, Lexium 32,
84Nm, 3800rpm, keyed shaft, with
brake, IP65, IP67, 16bit encoder,
straight

BMH2053P36F1A

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	3800 rpm
Continuous stall torque	84 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 84 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Peak stall torque	232 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 232 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal output power	6500 W for LXM32.D72N4 at 24 A, 400 V, three phase 6500 W for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal torque	52.2 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 52.2 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal speed	1200 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 1200 rpm for LXM32.D72N4 at 24 A, 480 V, three phase
Product compatibility	LXM32.D72N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	32768 points/turn
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	136.1 A for LXM32.D72N4
Maximum permanent current	107.4 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 mm
Key width	70 mm

Feedback type	Single turn SinCos Hiperface
Holding torque	80 N.m holding brake
Motor flange size	205 mm
Number of motor stacks	3
Torque constant	2.76 N.m/A at 120 °C
Back emf constant	218 V/krpm at 120 °C
Number of motor poles	5.0
Rotor inertia	206 kg.cm ²
Stator resistance	0.32 Ohm at 20 °C
Stator inductance	2.15 mH at 20 °C
Stator electrical time constant	21.6 ms at 20 °C
Maximum radial force Fr	4500 N at 1000 rpm 3570 N at 2000 rpm 3120 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	538.5 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
Product weight	71.9 kg
Sizing reference	BMH2053P
Network number of phases	3
Accuracy error [angular]	4.8 °
Temperature copper hot	135 °C
Temperature magnet hot	100 °C
Temperature magnet rt	20 °C
Output current 3s peak	136.1 A
Inertia	16.0 kg.cm ² of brake 190.0 kg.cm ² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	36.0 cm
Package 1 Width	31.0 cm
Package 1 Length	73.0 cm
Package 1 Weight	75.0 kg

Contractual warranty

Warranty (in 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

Total lifecycle Carbon footprint	7 337 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	328 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	10 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.7 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
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
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

End of life manual availability	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