Product datasheet

Specifications

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

BMH2053P37F1A

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 x 4096 turns
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	Multiturn 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.cm²
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
Net 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.cm² of brake 190.0 kg.cm² 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)	18

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**

Use Again

Repack and remanufacture

End of life manual availability	**No need of specific recycling operations**
Take-back	**Yes**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**