Product datasheet

Specifications

servo motor BMH, Lexium 32, 24Nm, 4000rpm, keyed shaft, with brake, IP65, IP67, 16bit encoder, straight

BMH1403P36F1A

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	24 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 24 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Peak stall torque	71.8 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 71.8 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal output power	4700 W for LXM32.D72N4 at 24 A, 400 V, three phase 4700 W for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal torque	13.92 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 13.92 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal speed	3000 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 3000 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	18 A
Continuous power	4.8 W
Maximum current Irms	57.66 A for LXM32.D72N4
Maximum permanent current	62.3 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
Holding torque	23 N.m holding brake
Motor flange size	140 mm
Number of motor stacks	3
Torque constant	1.3 N.m/A at 120 °C
Back emf constant	85.9 V/krpm at 120 °C
Number of motor poles	5.0
Rotor inertia	50.27 kg.cm²
Stator resistance	0.22 Ohm at 20 °C
Stator inductance	2.165 mH at 20 °C
Stator electrical time constant	13.6 ms at 20 °C
Maximum radial force Fr	2420 N at 1000 rpm 1920 N at 2000 rpm 1680 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	19 W
Type of cooling	Natural convection
Length	267 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
Net weight	18.5 kg
Sizing reference	BMH1403P
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	57.66 A
Inertia	2.73 kg.cm² of brake 47.543 kg.cm² of motor

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	18.83 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	**5 196 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**136 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**2 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.1 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**5 056 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**2 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**