

Product datasheet

Specifications



AC servo motor BSH - 88 N.m - 2000 rpm - keyed shaft - without brake - IP65

BSH2053P31A3A

! Discontinued

! Discontinued on: 11 Sept 2019

! To be end-of-service on: 31 Dec 2026

Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	3800 rpm
Continuous stall torque	88 N.m for LXM15HC20N4X, 400 V, three phase 88 N.m for LXM15HC20N4X, 480 V, three phase 90 N.m for LXM15HC20N4X, 230 V, three phase
Peak stall torque	330 N.m for LXM15HC20N4X, 480 V, three phase 330 N.m for LXM15HC20N4X, 400 V, three phase 202.96 N.m for LXM15HC20N4X, 230 V, three phase
Nominal output power	7400 W for LXM15HC20N4X, 230 V, three phase 9400 W for LXM15HC20N4X, 400 V, three phase 9400 W for LXM15HC20N4X, 480 V, three phase
Nominal torque	45 N.m for LXM15HC20N4X, 400 V, three phase 45 N.m for LXM15HC20N4X, 480 V, three phase 70.45 N.m for LXM15HC20N4X, 230 V, three phase
Nominal speed	1000 rpm for LXM15HC20N4X, 230 V, three phase 2000 rpm for LXM15HC20N4X, 400 V, three phase 2000 rpm for LXM15HC20N4X, 480 V, three phase
Product compatibility	LXM15HC20N4X at 230 V three phase LXM15HC20N4X at 400 V three phase LXM15HC20N4X at 480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors Power connection terminal

Complementary

Range compatibility	Lexium 15
supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	31.9 A
maximum continuous power	2.5 W
Maximum current Irms	136.1 A for LXM15HC20N4X

Maximum permanent current	136.1 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
Motor flange size	205 mm
Number of motor stacks	3
Torque constant	2.76 N.m/A at 120 °C
Back emf constant	172 V/krpm at 120 °C
Rotor inertia	182 kg.cm ²
Stator resistance	0.2 Ohm at 20 °C
Stator inductance	4.2 mH at 20 °C
Stator electrical time constant	21 ms at 20 °C
Maximum radial force Fr	3120 N at 3000 rpm 3570 N at 2000 rpm 4500 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	489 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	67 kg
Sizing reference	BSH2053P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	120 °C
Temperature magnet hot	100 °C
Temperature magnet rt	20 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	41 cm
Package 1 Width	31 cm
Package 1 Length	72 cm
Package 1 Weight	69 kg

Contractual warranty



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 >](#)

Use Better



Materials and Substances

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