

Product datasheet

Specifications



servo motor BSH, Lexium 15,
62.5N.m, 2000rpm, 205mm, keyed
shaft, Sincos single turn, without
brake, IP65

BSH2052P31A3A

! Discontinued

! End-of-service on: 13 Jan 2021

Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	3800 rpm
Continuous stall torque	62.5 N.m for LXM15HC11N4X, 400 V, three phase 62.5 N.m for LXM15HC11N4X, 480 V, three phase 62.5 N.m for LXM15HC20N4X, 230 V, three phase 62.5 N.m for LXM15HC20N4X, 400 V, three phase 62.5 N.m for LXM15HC20N4X, 480 V, three phase 65 N.m for LXM15HC11N4X, 230 V, three phase
Peak stall torque	220 N.m for LXM15HC20N4X, 400 V, three phase 220 N.m for LXM15HC20N4X, 480 V, three phase 193.45 N.m for LXM15HC20N4X, 230 V, three phase 118.54 N.m for LXM15HC11N4X, 230 V, three phase 189.9 N.m for LXM15HC11N4X, 400 V, three phase 189.9 N.m for LXM15HC11N4X, 480 V, three phase
Nominal output power	5400 W for LXM15HC11N4X, 230 V, three phase 5400 W for LXM15HC20N4X, 230 V, three phase 7120 W for LXM15HC11N4X, 400 V, three phase 7120 W for LXM15HC11N4X, 480 V, three phase 7120 W for LXM15HC20N4X, 400 V, three phase 7120 W for LXM15HC20N4X, 480 V, three phase
Nominal torque	34 N.m for LXM15HC11N4X, 400 V, three phase 34 N.m for LXM15HC11N4X, 480 V, three phase 34 N.m for LXM15HC20N4X, 400 V, three phase 34 N.m for LXM15HC20N4X, 480 V, three phase 51.7 N.m for LXM15HC11N4X, 230 V, three phase 51.7 N.m for LXM15HC20N4X, 230 V, three phase
Nominal speed	1000 rpm for LXM15HC11N4X, 230 V, three phase 1000 rpm for LXM15HC20N4X, 230 V, three phase 2000 rpm for LXM15HC11N4X, 400 V, three phase 2000 rpm for LXM15HC11N4X, 480 V, three phase 2000 rpm for LXM15HC20N4X, 400 V, three phase 2000 rpm for LXM15HC20N4X, 480 V, three phase
Product compatibility	LXM15HC11N4X at 400 V three phase LXM15HC11N4X at 480 V three phase LXM15HC11N4X at 230 V three phase 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	Power connection terminal Rotatable right-angled connectors
-----------------------	--

Complementary

Range compatibility	Lexium 15
supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	24.2 A
maximum continuous power	3.32 W
Maximum current Irms	96.8 A for LXM15HC11N4X 96.8 A for LXM15HC20N4X
Maximum permanent current	96.8 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	2
Torque constant	2.58 N.m/A at 120 °C
Back emf constant	161 V/krpm at 120 °C
Rotor inertia	129 kg.cm ²
Stator resistance	0.3 Ohm at 20 °C
Stator inductance	5.4 mH at 20 °C
Stator electrical time constant	18 ms at 20 °C
Maximum radial force Fr	2910 N at 3000 rpm 3330 N at 2000 rpm 4200 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	405 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	50 kg
Sizing reference	BSH2052P
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	58.5 cm
Package 1 Weight	46 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 >](#)

Use Better



Materials and Substances

EU RoHS Directive

[Compliant By Exemption](#)

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

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins