

Product datasheet

Specifications



servo motor BSH, Lexium 15,
88N.m, 1000rpm, 205mm, untapped
shaft, Sincos single turn, with brake,
IP65

BSH2053M21F3A

! Discontinued

Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	3800 rpm
Continuous stall torque	88 N.m for LXM15HC11N4X, 400 V, three phase 88 N.m for LXM15HC20N4X, 400 V, three phase 88 N.m for LXM15HC11N4X, 480 V, three phase 88 N.m for LXM15HC20N4X, 480 V, three phase 90 N.m for LXM15HC11N4X, 230 V, three phase 90 N.m for LXM15HC20N4X, 230 V, three phase
Peak stall torque	330 N.m for LXM15HC11N4X, 480 V, three phase 330 N.m for LXM15HC20N4X, 480 V, three phase 227.18 N.m for LXM15HC11N4X, 230 V, three phase 300 N.m for LXM15HC20N4X, 230 V, three phase 330 N.m for LXM15HC11N4X, 400 V, three phase 330 N.m for LXM15HC20N4X, 400 V, three phase
Nominal output power	4200 W for LXM15HC11N4X, 230 V, three phase 4200 W for LXM15HC20N4X, 230 V, three phase 7400 W for LXM15HC11N4X, 400 V, three phase 7400 W for LXM15HC20N4X, 400 V, three phase 8800 W for LXM15HC11N4X, 480 V, three phase 8800 W for LXM15HC20N4X, 480 V, three phase
Nominal torque	64.6 N.m for LXM15HC11N4X, 480 V, three phase 64.6 N.m for LXM15HC20N4X, 480 V, three phase 70.45 N.m for LXM15HC11N4X, 400 V, three phase 70.45 N.m for LXM15HC20N4X, 400 V, three phase 80.2 N.m for LXM15HC11N4X, 230 V, three phase 80.2 N.m for LXM15HC20N4X, 230 V, three phase
Nominal speed	1000 rpm for LXM15HC11N4X, 400 V, three phase 1000 rpm for LXM15HC20N4X, 400 V, three phase 500 rpm for LXM15HC11N4X, 230 V, three phase 500 rpm for LXM15HC20N4X, 230 V, three phase 1300 rpm for LXM15HC11N4X, 480 V, three phase 1300 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	Untapped
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting support	International standard flange

Electrical connection	Power connection terminal Rotatable right-angled connectors
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Complementary

Range compatibility	Lexium 15
supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	16 A
maximum continuous power	8.5 W
Maximum current Irms	68 A for LXM15HC11N4X 68 A for LXM15HC20N4X
Maximum permanent current	68 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 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	5.5 N.m/A at 120 °C
Back emf constant	344 V/krpm at 120 °C
Rotor inertia	196 kg.cm ²
Stator resistance	0.8 Ohm at 20 °C
Stator inductance	16.8 mH at 20 °C
Stator electrical time constant	20 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
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	70.6 kg
Sizing reference	BSH2053M
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
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Packing Units

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Contractual warranty

Warranty (in months)	18
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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 >](#)

Use Longer



Lifetime extension

Repair

No