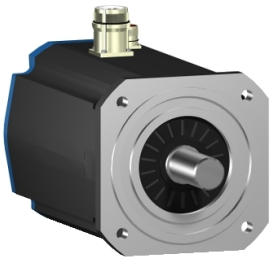
Product datasheet

Specifications



Discontinued

AC servo motor BSH - 22.4 N.m - 1500 rpm - untapped shaft - with brake - IP50

BSH2051P01F1A

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	22.4 N.m for LXM15MD40N4, 230 V, three phase 22.4 N.m for LXM15MD40N4, 400 V, three phase 22.4 N.m for LXM15MD40N4, 480 V, three phase 32 N.m for LXM15MD56N4, 230 V, three phase 32 N.m for LXM15MD56N4, 400 V, three phase 32 N.m for LXM15MD56N4, 480 V, three phase 34 N.m for LXM15HC11N4X, 400 V, three phase 34 N.m for LXM15HC11N4X, 480 V, three phase 36 N.m for LXM15HC11N4X, 230 V, three phase
Peak stall torque	43.8 N.m for LXM15MD40N4, 230 V, three phase 43.8 N.m for LXM15MD40N4, 400 V, three phase 43.8 N.m for LXM15MD40N4, 480 V, three phase 61.2 N.m for LXM15MD56N4, 230 V, three phase 61.2 N.m for LXM15MD56N4, 400 V, three phase 61.2 N.m for LXM15MD56N4, 480 V, three phase 110 N.m for LXM15HC11N4X, 400 V, three phase 110 N.m for LXM15HC11N4X, 480 V, three phase 82 N.m for LXM15HC11N4X, 230 V, three phase
Nominal output power	3500 W for LXM15HC11N4X, 230 V, three phase 3500 W for LXM15MD40N4, 230 V, three phase 3500 W for LXM15MD56N4, 230 V, three phase 6600 W for LXM15HC11N4X, 400 V, three phase 6600 W for LXM15HC11N4X, 480 V, three phase 6600 W for LXM15MD40N4, 400 V, three phase 6600 W for LXM15MD40N4, 480 V, three phase 6600 W for LXM15MD56N4, 400 V, three phase 6600 W for LXM15MD56N4, 480 V, three phase
Nominal torque	21 N.m for LXM15HC11N4X, 400 V, three phase 21 N.m for LXM15HC11N4X, 480 V, three phase 21 N.m for LXM15MD40N4, 400 V, three phase 21 N.m for LXM15MD40N4, 480 V, three phase 21 N.m for LXM15MD56N4, 400 V, three phase 21 N.m for LXM15MD56N4, 480 V, three phase 22.4 N.m for LXM15HC11N4X, 230 V, three phase 22.4 N.m for LXM15MD40N4, 230 V, three phase 22.4 N.m for LXM15MD56N4, 230 V, three phase
Nominal speed	1500 rpm for LXM15MD40N4, 230 V, three phase 3000 rpm for LXM15MD40N4, 400 V, three phase 3000 rpm for LXM15MD40N4, 480 V, three phase 1500 rpm for LXM15MD56N4, 230 V, three phase 3000 rpm for LXM15MD56N4, 400 V, three phase 3000 rpm for LXM15MD56N4, 480 V, three phase 1500 rpm for LXM15HC11N4X, 230 V, three phase 3000 rpm for LXM15HC11N4X, 400 V, three phase 3000 rpm for LXM15HC11N4X, 480 V, three phase

Product compatibility	LXM15MD40N4 at 400 V three phase LXM15MD40N4 at 480 V three phase LXM15MD40N4 at 230 V three phase LXM15MD56N4 at 230 V three phase LXM15MD56N4 at 400 V three phase LXM15MD56N4 at 480 V three phase LXM15HC11N4X at 400 V three phase LXM15HC11N4X at 480 V three phase LXM15HC11N4X at 230 V three phase
Shaft end	Untapped
IP degree of protection	IP50 standard
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 15
supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	21.5 A
maximum continuous power	6.93 W
Maximum current Irms	78.1 A for LXM15MD40N4 78.1 A for LXM15MD56N4 78.1 A for LXM15HC11N4X
Maximum permanent current	87.2 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	1
Torque constant	1.1 N.m/A at 120 °C
Back emf constant	104 V/krpm at 120 °C
Rotor inertia	93 kg.cm²
Stator resistance	0.3 Ohm at 20 °C
Stator inductance	5.7 mH at 20 °C
Stator electrical time constant	19 ms at 20 °C
Maximum radial force Fr	2580 N at 3000 rpm 2960 N at 2000 rpm 3730 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	370.5 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	38.6 kg
Sizing reference	BSH2051P
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	38.6 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 Longer

Lifetime extension

Repair	No