Product datasheet

Specifications

Discontinued

servo motor BSH, Lexium 05, 1.4N.m, 1500rpm, 70mm, keyed shaft, Sincos single turn, without brake, IP65

BSH0701M31A2A

Discontinued on: 18 Apr 2024

To be end-of-service on: 18 Apr 2026

Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	1.4 N.m for LXM05AD10M3X, 200...240 V, three phase 1.4 N.m for LXM05BD10M3X, 200...240 V, three phase 1.4 N.m for LXM05CD10M3X, 200...240 V, three phase
Peak stall torque	2.66 N.m for LXM05AD10M3X, 200...240 V, three phase 2.66 N.m for LXM05BD10M3X, 200...240 V, three phase 2.66 N.m for LXM05CD10M3X, 200...240 V, three phase
Nominal output power	210 W for LXM05AD10M3X, 200...240 V, three phase 210 W for LXM05BD10M3X, 200...240 V, three phase 210 W for LXM05CD10M3X, 200...240 V, three phase
Nominal torque	1.36 N.m for LXM05AD10M3X, 200...240 V, three phase 1.36 N.m for LXM05BD10M3X, 200...240 V, three phase 1.36 N.m for LXM05CD10M3X, 200...240 V, three phase
Nominal speed	1500 rpm for LXM05AD10M3X, 200...240 V, three phase 1500 rpm for LXM05BD10M3X, 200...240 V, three phase 1500 rpm for LXM05CD10M3X, 200...240 V, three phase
Product compatibility	LXM05AD10M3X at 200...240 V three phase LXM05BD10M3X at 200...240 V three phase LXM05CD10M3X at 200...240 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

Complementary

Range compatibility	Lexium 05
supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	1 A
maximum continuous power	1.06 W

Maximum current Irms	3.1 A for LXM05AD10M3X 3.1 A for LXM05BD10M3X 3.1 A for LXM05CD10M3X
Maximum permanent current	3.1 A
Switching frequency	4 kHz
Second shaft	Without second shaft end
Shaft diameter	11 mm
Shaft length	23 mm
Key width	18 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	70 mm
Torque constant	1.4 N.m/A at 120 °C
Back emf constant	85 V/krpm at 120 °C
Rotor inertia	0.25 kg.cm²
Stator resistance	35.4 Ohm at 20 °C
Stator inductance	131.9 mH at 20 °C
Stator electrical time constant	3.73 ms at 20 °C
Maximum radial force Fr	360 N at 6000 rpm 380 N at 5000 rpm 410 N at 4000 rpm 460 N at 3000 rpm 520 N at 2000 rpm 660 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	154 mm
Centring collar diameter	60 mm
Centring collar depth	2.5 mm
Number of mounting holes	4
Mounting holes diameter	5.5 mm
Circle diameter of the mounting holes	82 mm
Net weight	2.2 kg
Sizing reference	BSH0701M
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

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