

# BSH0553P12A2A

AC servo motor BSH - 1.3 Nm - 8000 rpm - key shaft - without brake - IP50

## Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	1.3 N.m for LXM15LD13M3 at 230 V single phase 1.3 N.m for LXM15LD13M3 at 230 V 3 phases 1.3 N.m for LXM15LD10N4 at 400 V 3 phases 1.3 N.m for LXM05AD10M2 at 200...240 V single phase 1.3 N.m for LXM05AD10M3X at 200...240 V 3 phases 1.3 N.m for LXM05AD14N4 at 380...480 V 3 phases 1.3 N.m for LXM05BD10M2 at 200...240 V single phase 1.3 N.m for LXM05BD10M3X at 200...240 V 3 phases 1.3 N.m for LXM05BD14N4 at 380...480 V 3 phases 1.3 N.m for LXM05CD10M2 at 200...240 V single phase 1.3 N.m for LXM05CD10M3X at 200...240 V 3 phases 1.3 N.m for LXM05CD14N4 at 380...480 V 3 phases
Peak stall torque	2.7 N.m for LXM15LD13M3 at 230 V single phase 2.7 N.m for LXM15LD13M3 at 230 V 3 phases 3.18 N.m for LXM05AD10M2 at 200...240 V single phase 3.18 N.m for LXM05AD10M3X at 200...240 V 3 phases 3.18 N.m for LXM05BD10M2 at 200...240 V single phase 3.18 N.m for LXM05BD10M3X at 200...240 V 3 phases 3.18 N.m for LXM05CD10M2 at 200...240 V single phase 3.18 N.m for LXM05CD10M3X at 200...240 V 3 phases 3.87 N.m for LXM15LD10N4 at 400 V 3 phases 3.87 N.m for LXM05AD14N4 at 380...480 V 3 phases 3.87 N.m for LXM05BD14N4 at 380...480 V 3 phases 3.87 N.m for LXM05CD14N4 at 380...480 V 3 phases
Nominal output power	340 W for LXM15LD13M3 at 230 V single phase 340 W for LXM15LD13M3 at 230 V 3 phases 350 W for LXM05AD10M2 at 200...240 V single phase 350 W for LXM05AD10M3X at 200...240 V 3 phases 350 W for LXM05AD14N4 at 380...480 V 3 phases 350 W for LXM05BD10M2 at 200...240 V single phase 350 W for LXM05BD10M3X at 200...240 V 3 phases 350 W for LXM05BD14N4 at 380...480 V 3 phases 350 W for LXM05CD10M2 at 200...240 V single phase 350 W for LXM05CD10M3X at 200...240 V 3 phases 350 W for LXM05CD14N4 at 380...480 V 3 phases 670 W for LXM15LD10N4 at 400 V 3 phases

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Nominal speed	3000 rpm for LXM15LD13M3 at 230 V single phase 3000 rpm for LXM15LD13M3 at 230 V 3 phases 3000 rpm for LXM05AD10M2 at 200...240 V single phase 3000 rpm for LXM05AD10M3X at 200...240 V 3 phases 3000 rpm for LXM05AD14N4 at 380...480 V 3 phases 3000 rpm for LXM05BD10M2 at 200...240 V single phase 3000 rpm for LXM05BD10M3X at 200...240 V 3 phases 3000 rpm for LXM05BD14N4 at 380...480 V 3 phases 3000 rpm for LXM05CD10M2 at 200...240 V single phase 3000 rpm for LXM05CD10M3X at 200...240 V 3 phases 3000 rpm for LXM05CD14N4 at 380...480 V 3 phases 8000 rpm for LXM15LD10N4 at 400 V 3 phases
Maximum mechanical speed	8000 rpm
Product compatibility	LXM05AD10M2 at 200...240 V single phase LXM05AD10M3X at 200...240 V 3 phases LXM05AD14N4 at 380...480 V 3 phases LXM05BD10M2 at 200...240 V single phase LXM05BD10M3X at 200...240 V 3 phases LXM05BD14N4 at 380...480 V 3 phases LXM05CD10M2 at 200...240 V single phase LXM05CD10M3X at 200...240 V 3 phases LXM05CD14N4 at 380...480 V 3 phases LXM15LD10N4 at 400 V 3 phases LXM15LD13M3 at 230 V single phase LXM15LD13M3 at 230 V 3 phases
Shaft end	Keyed
IP degree of protection	IP50
Encoder type	Absolute multiturn SinCos Hiperface
Encoder feedback resolution	131072 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors
Number of poles	6

## Complementary

Range compatibility	Lexium 05 Lexium 15
Nominal torque	0.8 N.m for LXM15LD10N4 at 400 V 3 phases 1.08 N.m for LXM15LD13M3 at 230 V single phase 1.08 N.m for LXM15LD13M3 at 230 V 3 phases 1.1 N.m for LXM05AD10M2 at 200...240 V single phase 1.1 N.m for LXM05AD10M3X at 200...240 V 3 phases 1.1 N.m for LXM05AD14N4 at 380...480 V 3 phases 1.1 N.m for LXM05BD10M2 at 200...240 V single phase 1.1 N.m for LXM05BD10M3X at 200...240 V 3 phases 1.1 N.m for LXM05BD14N4 at 380...480 V 3 phases 1.1 N.m for LXM05CD10M2 at 200...240 V single phase 1.1 N.m for LXM05CD10M3X at 200...240 V 3 phases 1.1 N.m for LXM05CD14N4 at 380...480 V 3 phases
Maximum current Irms	6.5 A for LXM05AD10M2 6.5 A for LXM05AD10M3X 6.5 A for LXM05AD14N4 6.5 A for LXM05BD10M2 6.5 A for LXM05BD10M3X 6.5 A for LXM05BD14N4 6.5 A for LXM05CD10M2 6.5 A for LXM05CD10M3X 6.5 A for LXM05CD14N4 8.7 A for LXM15LD13M3 8.7 A for LXM15LD10N4
Switching frequency	8 kHz for LEX05
Torque constant	0.59 N.m/A rms at 120 °C 0.7 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	39 V rms/krpm at 120 °C 41 V rms/krpm at 120 °C
Rotor inertia	0.19 kg.cm <sup>2</sup> without brake
Stator resistance	8 Ohm at 20 °C 10.4 Ohm at 20 °C
Stator inductance	12 mH at 20 °C 25 mH at 20 °C
Stator electrical time constant	1.5 ms at 20 °C 2.4 ms at 20 °C
Maximum radial force Fr	190 N at 8000 rpm 200 N at 7000 rpm 210 N at 6000 rpm 230 N at 5000 rpm 240 N at 4000 rpm 270 N at 3000 rpm 310 N at 2000 rpm 390 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	1.76 kg

## Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant