

BSH1402P12A2A

AC servo motor BSH - 19.2 Nm - 4000 rpm -
key shaft - without brake - IP50

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	14.9 N.m for LXM15LD28M3 at 230 V 3 phases 14.9 N.m for LXM15MD28N4 at 230 V 3 phases 14.9 N.m for LXM15MD28N4 at 400 V 3 phases 14.9 N.m for LXM15MD28N4 at 480 V 3 phases 19.2 N.m for LXM05AD42M3X at 200...240 V 3 phases 19.2 N.m for LXM05AD57N4 at 380...480 V 3 phases 19.2 N.m for LXM05BD42M3X at 200...240 V 3 phases 19.2 N.m for LXM05BD57N4 at 380...480 V 3 phases 19.2 N.m for LXM05CD42M3X at 200...240 V 3 phases 19.2 N.m for LXM05CD57N4 at 380...480 V 3 phases 19.5 N.m for LXM15MD40N4 at 230 V 3 phases 19.5 N.m for LXM15MD40N4 at 400 V 3 phases 19.5 N.m for LXM15MD40N4 at 480 V 3 phases 19.5 N.m for LXM15MD56N4 at 230 V 3 phases 19.5 N.m for LXM15MD56N4 at 400 V 3 phases 19.5 N.m for LXM15MD56N4 at 480 V 3 phases
Peak stall torque	28.71 N.m for LXM15LD28M3 at 230 V 3 phases 28.71 N.m for LXM15MD28N4 at 230 V 3 phases 28.71 N.m for LXM15MD28N4 at 400 V 3 phases 28.71 N.m for LXM15MD28N4 at 480 V 3 phases 39.3 N.m for LXM15MD40N4 at 230 V 3 phases 39.3 N.m for LXM15MD40N4 at 400 V 3 phases 39.3 N.m for LXM15MD40N4 at 480 V 3 phases 41.94 N.m for LXM05AD42M3X at 200...240 V 3 phases 41.94 N.m for LXM05BD42M3X at 200...240 V 3 phases 41.94 N.m for LXM05CD42M3X at 200...240 V 3 phases 47.5 N.m for LXM15MD56N4 at 230 V 3 phases 47.5 N.m for LXM15MD56N4 at 400 V 3 phases 47.5 N.m for LXM15MD56N4 at 480 V 3 phases 47.5 N.m for LXM05AD57N4 at 380...480 V 3 phases 47.5 N.m for LXM05BD57N4 at 380...480 V 3 phases 47.5 N.m for LXM05CD57N4 at 380...480 V 3 phases
Nominal output power	2350 W for LXM15LD28M3 at 230 V 3 phases 2350 W for LXM15MD28N4 at 230 V 3 phases 2350 W for LXM15MD40N4 at 230 V 3 phases 2350 W for LXM15MD56N4 at 230 V 3 phases 2350 W for LXM05AD42M3X at 200...240 V 3 phases 2350 W for LXM05BD42M3X at 200...240 V 3 phases 2350 W for LXM05CD42M3X at 200...240 V 3 phases 3350 W for LXM15MD28N4 at 480 V 3 phases 3350 W for LXM15MD40N4 at 480 V 3 phases 3400 W for LXM15MD28N4 at 400 V 3 phases 3400 W for LXM15MD40N4 at 400 V 3 phases 3400 W for LXM15MD56N4 at 400 V 3 phases 3400 W for LXM15MD56N4 at 480 V 3 phases 3400 W for LXM05AD57N4 at 380...480 V 3 phases 3400 W for LXM05BD57N4 at 380...480 V 3 phases 3400 W for LXM05CD57N4 at 380...480 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	1500 rpm for LXM15LD28M3 at 230 V 3 phases 1500 rpm for LXM15MD28N4 at 230 V 3 phases 1500 rpm for LXM15MD40N4 at 230 V 3 phases 1500 rpm for LXM15MD56N4 at 230 V 3 phases 1500 rpm for LXM05AD42M3X at 200...240 V 3 phases 1500 rpm for LXM05BD42M3X at 200...240 V 3 phases 1500 rpm for LXM05CD42M3X at 200...240 V 3 phases 3000 rpm for LXM15MD28N4 at 400 V 3 phases 3000 rpm for LXM15MD40N4 at 400 V 3 phases 3000 rpm for LXM15MD56N4 at 400 V 3 phases 3000 rpm for LXM15MD56N4 at 480 V 3 phases 3000 rpm for LXM05AD57N4 at 380...480 V 3 phases 3000 rpm for LXM05BD57N4 at 380...480 V 3 phases 3000 rpm for LXM05CD57N4 at 380...480 V 3 phases 4000 rpm for LXM15MD28N4 at 480 V 3 phases 4000 rpm for LXM15MD40N4 at 480 V 3 phases
Maximum mechanical speed	4000 rpm
Product compatibility	LXM05AD42M3X at 200...240 V 3 phases LXM05AD57N4 at 380...480 V 3 phases LXM05BD42M3X at 200...240 V 3 phases LXM05BD57N4 at 380...480 V 3 phases LXM05CD42M3X at 200...240 V 3 phases LXM05CD57N4 at 380...480 V 3 phases LXM15LD28M3 at 230 V 3 phases LXM15MD28N4 at 230 V 3 phases LXM15MD28N4 at 400 V 3 phases LXM15MD28N4 at 480 V 3 phases LXM15MD40N4 at 230 V 3 phases LXM15MD40N4 at 400 V 3 phases LXM15MD40N4 at 480 V 3 phases LXM15MD56N4 at 230 V 3 phases LXM15MD56N4 at 400 V 3 phases LXM15MD56N4 at 480 V 3 phases
Shaft end	Untapped
IP degree of protection	IP50
Encoder type	Absolute multiturn SinCos Hiperface
Encoder feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Straight connectors
Number of poles	10

Complementary

Range compatibility	Lexium 05 Lexium 15
Nominal torque	8 N.m for LXM15MD28N4 at 480 V 3 phases 8 N.m for LXM15MD40N4 at 480 V 3 phases 10.8 N.m for LXM05BD57N4 at 380...480 V 3 phases 10.8 N.m for LXM05CD57N4 at 380...480 V 3 phases 10.8 N.m for LXM15MD28N4 at 400 V 3 phases 10.8 N.m for LXM15MD40N4 at 400 V 3 phases 10.8 N.m for LXM15MD56N4 at 400 V 3 phases 10.8 N.m for LXM15MD56N4 at 480 V 3 phases 10.8 N.m for LXM05AD57N4 at 380...480 V 3 phases 15 N.m for LXM05BD42M3X at 200...240 V 3 phases 15 N.m for LXM05CD42M3X at 200...240 V 3 phases 15 N.m for LXM15LD28M3 at 230 V 3 phases 15 N.m for LXM15MD28N4 at 230 V 3 phases 15 N.m for LXM15MD40N4 at 230 V 3 phases 15 N.m for LXM15MD56N4 at 230 V 3 phases 15 N.m for LXM05AD42M3X at 200...240 V 3 phases
Maximum current I _{rms}	44.1 A for LXM15LD28M3 44.1 A for LXM15MD28N4 44.1 A for LXM15MD40N4 44.1 A for LXM15MD56N4 44.1 A for LXM05AD42M3X 44.1 A for LXM05AD57N4 44.1 A for LXM05BD42M3X 44.1 A for LXM05BD57N4 44.1 A for LXM05CD42M3X 44.1 A for LXM05CD57N4
Switching frequency	4 kHz for LEX05
Torque constant	1.47 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	101 V rms/krpm at 120 °C
Rotor inertia	12.68 kg.cm ² without brake
Stator resistance	0.6 Ohm at 20 °C
Stator inductance	7.4 mH at 20 °C 7.71 mH at 20 °C
Stator electrical time constant	12.33 ms at 20 °C 12.85 ms at 20 °C
Maximum radial force Fr	1680 N at 3000 rpm 1930 N at 2000 rpm 2430 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	16 kg

Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant