

BSH0701T12A1A

AC servo motor BSH - 0.7 Nm - 8000 rpm - key
shaft - without brake - IP50

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	0.7 N.m for LXM15LU60N4 at 400 V 3 phases 0.7 N.m for LXM15LU60N4 at 480 V 3 phases 0.91 N.m for LXM15LU60N4 at 230 V 3 phases 1.4 N.m for LXM15LD10N4 at 230 V 3 phases 1.4 N.m for LXM15LD10N4 at 400 V 3 phases 1.4 N.m for LXM15LD10N4 at 480 V 3 phases 1.4 N.m for LXM15LD13M3 at 230 V single phase 1.4 N.m for LXM15LD13M3 at 230 V 3 phases 1.4 N.m for LXM15LD21M3 at 230 V 3 phases 1.4 N.m for LXM05AD10F1 at 110...120 V single phase 1.4 N.m for LXM05AD10M3X at 200...240 V 3 phases 1.4 N.m for LXM05AD17M2 at 200...240 V single phase 1.4 N.m for LXM05AD17M3X at 200...240 V 3 phases 1.4 N.m for LXM05BD10F1 at 110...120 V single phase 1.4 N.m for LXM05BD10M3X at 200...240 V 3 phases 1.4 N.m for LXM05BD17M2 at 200...240 V single phase 1.4 N.m for LXM05BD17M3X at 200...240 V 3 phases 1.4 N.m for LXM05CD10F1 at 110...120 V single phase 1.4 N.m for LXM05CD10M3X at 200...240 V 3 phases 1.4 N.m for LXM05CD17M2 at 200...240 V single phase 1.4 N.m for LXM05CD17M3X at 200...240 V 3 phases
Peak stall torque	1.9 N.m for LXM15LU60N4 at 400 V 3 phases 1.9 N.m for LXM15LU60N4 at 480 V 3 phases 1.9 N.m for LXM15LU60N4 at 230 V 3 phases 2.42 N.m for LXM05AD10F1 at 110...120 V single phase 2.42 N.m for LXM05AD10M3X at 200...240 V 3 phases 2.42 N.m for LXM05BD10F1 at 110...120 V single phase 2.42 N.m for LXM05BD10M3X at 200...240 V 3 phases 2.42 N.m for LXM05CD10F1 at 110...120 V single phase 2.42 N.m for LXM05CD10M3X at 200...240 V 3 phases 2.91 N.m for LXM15LD10N4 at 230 V 3 phases 2.91 N.m for LXM15LD10N4 at 400 V 3 phases 2.91 N.m for LXM15LD10N4 at 480 V 3 phases 3.19 N.m for LXM15LD13M3 at 230 V single phase 3.19 N.m for LXM15LD13M3 at 230 V 3 phases 3.19 N.m for LXM15LD21M3 at 230 V 3 phases 3.19 N.m for LXM05AD17M2 at 200...240 V single phase 3.19 N.m for LXM05AD17M3X at 200...240 V 3 phases 3.19 N.m for LXM05BD17M2 at 200...240 V single phase 3.19 N.m for LXM05BD17M3X at 200...240 V 3 phases 3.19 N.m for LXM05CD17M2 at 200...240 V single phase 3.19 N.m for LXM05CD17M3X at 200...240 V 3 phases

Nominal output power	380 W for LXM05AD10F1 at 110...120 V single phase 380 W for LXM05BD10F1 at 110...120 V single phase 380 W for LXM05CD10F1 at 110...120 V single phase 400 W for LXM05AD10M3X at 200...240 V 3 phases 400 W for LXM05AD17M2 at 200...240 V single phase 400 W for LXM05AD17M3X at 200...240 V 3 phases 400 W for LXM05BD10M3X at 200...240 V 3 phases 400 W for LXM05BD17M2 at 200...240 V single phase 400 W for LXM05BD17M3X at 200...240 V 3 phases 400 W for LXM05CD10M3X at 200...240 V 3 phases 400 W for LXM05CD17M2 at 200...240 V single phase 400 W for LXM05CD17M3X at 200...240 V 3 phases 440 W for LXM15LU60N4 at 230 V 3 phases 564 W for LXM15LD10N4 at 230 V 3 phases 586 W for LXM15LU60N4 at 400 V 3 phases 586 W for LXM15LU60N4 at 480 V 3 phases 654 W for LXM15LD13M3 at 230 V single phase 654 W for LXM15LD13M3 at 230 V 3 phases 654 W for LXM15LD21M3 at 230 V 3 phases 1000 W for LXM15LD10N4 at 400 V 3 phases 1000 W for LXM15LD10N4 at 480 V 3 phases
Nominal speed	3000 rpm for LXM05AD10F1 at 110...120 V single phase 3000 rpm for LXM05AD10M3X at 200...240 V 3 phases 3000 rpm for LXM05AD17M2 at 200...240 V single phase 3000 rpm for LXM05AD17M3X at 200...240 V 3 phases 3000 rpm for LXM05BD10F1 at 110...120 V single phase 3000 rpm for LXM05BD10M3X at 200...240 V 3 phases 3000 rpm for LXM05BD17M2 at 200...240 V single phase 3000 rpm for LXM05BD17M3X at 200...240 V 3 phases 3000 rpm for LXM05CD10F1 at 110...120 V single phase 3000 rpm for LXM05CD10M3X at 200...240 V 3 phases 3000 rpm for LXM05CD17M2 at 200...240 V single phase 3000 rpm for LXM05CD17M3X at 200...240 V 3 phases 5000 rpm for LXM15LD10N4 at 230 V 3 phases 5000 rpm for LXM15LD13M3 at 230 V single phase 5000 rpm for LXM15LD13M3 at 230 V 3 phases 5000 rpm for LXM15LD21M3 at 230 V 3 phases 6000 rpm for LXM15LU60N4 at 230 V 3 phases 8000 rpm for LXM15LU60N4 at 400 V 3 phases 8000 rpm for LXM15LU60N4 at 480 V 3 phases 8000 rpm for LXM15LD10N4 at 400 V 3 phases 8000 rpm for LXM15LD10N4 at 480 V 3 phases
Maximum mechanical speed	8000 rpm

Product compatibility	LXM05AD10F1 at 110...120 V single phase LXM05AD10M3X at 200...240 V 3 phases LXM05AD17M2 at 200...240 V single phase LXM05AD17M3X at 200...240 V 3 phases LXM05BD10F1 at 110...120 V single phase LXM05BD10M3X at 200...240 V 3 phases LXM05BD17M2 at 200...240 V single phase LXM05BD17M3X at 200...240 V 3 phases LXM05CD10F1 at 110...120 V single phase LXM05CD10M3X at 200...240 V 3 phases LXM05CD17M2 at 200...240 V single phase LXM05CD17M3X at 200...240 V 3 phases LXM15LD10N4 at 230 V 3 phases LXM15LD10N4 at 400 V 3 phases LXM15LD10N4 at 480 V 3 phases LXM15LD13M3 at 230 V single phase LXM15LD13M3 at 230 V 3 phases LXM15LD21M3 at 230 V 3 phases LXM15LU60N4 at 400 V 3 phases LXM15LU60N4 at 480 V 3 phases LXM15LU60N4 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	Straight connectors
Number of poles	6

Complementary

Range compatibility	Lexium 05 Lexium 15
Nominal torque	0.7 N.m for LXM15LU60N4 at 230 V 3 phases 0.7 N.m for LXM15LU60N4 at 400 V 3 phases 0.7 N.m for LXM15LU60N4 at 480 V 3 phases 1.23 N.m for LXM15LD10N4 at 400 V 3 phases 1.23 N.m for LXM15LD10N4 at 480 V 3 phases 1.25 N.m for LXM15LD13M3 at 230 V 3 phases 1.25 N.m for LXM15LD21M3 at 230 V 3 phases 1.25 N.m for LXM15LD10N4 at 230 V 3 phases 1.25 N.m for LXM15LD13M3 at 230 V single phase
Maximum current Irms	9.9 A for LXM15LD13M3 9.9 A for LXM15LD21M3 9.9 A for LXM15LU60N4 9.9 A for LXM15LD10N4
Switching frequency	8 kHz for LEX05
Torque constant	0.45 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	26 V rms/krpm at 120 °C
Rotor inertia	0.25 kg.cm ² without brake
Stator resistance	3.4 Ohm at 20 °C
Stator inductance	12.3 mH at 20 °C 14.1 mH at 20 °C
Stator electrical time constant	3.73 ms at 20 °C 4.15 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
Product weight	2.2 kg

Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant