

BSH0703P02A1A

AC servo motor BSH - 1.1 Nm - 8000 rpm -
untapped shaft - without brake - IP50

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	1.1 N.m for LXM15LU60N4 at 480 V 3 phases 1.1 N.m for LXM15LU60N4 at 400 V 3 phases 1.5 N.m for LXM15LU60N4 at 230 V 3 phases 2.23 N.m for LXM15LD13M3 at 230 V 3 phases 2.4 N.m for LXM15LD10N4 at 230 V 3 phases 2.4 N.m for LXM15LD10N4 at 400 V 3 phases 2.4 N.m for LXM15LD10N4 at 480 V 3 phases 2.8 N.m for LXM05AD17M2 at 200...240 V single phase 2.8 N.m for LXM05AD17M3X at 200...240 V 3 phases 2.8 N.m for LXM05AD22N4 at 380...480 V 3 phases 2.8 N.m for LXM05AD28M2 at 200...240 V single phase 2.8 N.m for LXM05BD17M2 at 200...240 V single phase 2.8 N.m for LXM05BD17M3X at 200...240 V 3 phases 2.8 N.m for LXM05BD22N4 at 380...480 V 3 phases 2.8 N.m for LXM05BD28M2 at 200...240 V single phase 2.8 N.m for LXM05CD17M2 at 200...240 V single phase 2.8 N.m for LXM05CD17M3X at 200...240 V 3 phases 2.8 N.m for LXM05CD22N4 at 380...480 V 3 phases 2.8 N.m for LXM05CD28M2 at 200...240 V single phase 2.83 N.m for LXM15LD21M3 at 230 V single phase 2.83 N.m for LXM15LD17N4 at 230 V 3 phases 2.83 N.m for LXM15LD17N4 at 400 V 3 phases 2.83 N.m for LXM15LD17N4 at 480 V 3 phases 2.83 N.m for LXM15LD21M3 at 230 V 3 phases
Peak stall torque	3.3 N.m for LXM15LU60N4 at 480 V 3 phases 3.3 N.m for LXM15LU60N4 at 400 V 3 phases 3.3 N.m for LXM15LU60N4 at 230 V 3 phases 5.3 N.m for LXM15LD10N4 at 230 V 3 phases 5.3 N.m for LXM15LD10N4 at 400 V 3 phases 5.3 N.m for LXM15LD10N4 at 480 V 3 phases 5.99 N.m for LXM15LD21M3 at 230 V single phase 6 N.m for LXM15LD13M3 at 230 V 3 phases 7.16 N.m for LXM05AD17M2 at 200...240 V single phase 7.16 N.m for LXM05AD17M3X at 200...240 V 3 phases 7.16 N.m for LXM05BD17M2 at 200...240 V single phase 7.16 N.m for LXM05BD17M3X at 200...240 V 3 phases 7.16 N.m for LXM05CD17M2 at 200...240 V single phase 7.16 N.m for LXM05CD17M3X at 200...240 V 3 phases 7.71 N.m for LXM15LD17N4 at 230 V 3 phases 7.71 N.m for LXM15LD17N4 at 400 V 3 phases 7.71 N.m for LXM15LD17N4 at 480 V 3 phases 8.75 N.m for LXM05AD22N4 at 380...480 V 3 phases 8.75 N.m for LXM05BD22N4 at 380...480 V 3 phases 8.75 N.m for LXM05CD22N4 at 380...480 V 3 phases 9.28 N.m for LXM15LD21M3 at 230 V 3 phases 10.3 N.m for LXM05AD28M2 at 200...240 V single phase 10.3 N.m for LXM05BD28M2 at 200...240 V single phase 10.3 N.m for LXM05CD28M2 at 200...240 V single phase

Nominal output power	350 W for LXM15LU60N4 at 230 V 3 phases 700 W for LXM15LU60N4 at 400 V 3 phases 700 W for LXM15LD13M3 at 230 V 3 phases 750 W for LXM15LD10N4 at 230 V 3 phases 750 W for LXM15LD21M3 at 230 V single phase 750 W for LXM15LD17N4 at 230 V 3 phases 750 W for LXM15LD21M3 at 230 V 3 phases 750 W for LXM05AD17M2 at 200...240 V single phase 750 W for LXM05AD17M3X at 200...240 V 3 phases 750 W for LXM05AD22N4 at 380...480 V 3 phases 750 W for LXM05AD28M2 at 200...240 V single phase 750 W for LXM05BD17M2 at 200...240 V single phase 750 W for LXM05BD17M3X at 200...240 V 3 phases 750 W for LXM05BD22N4 at 380...480 V 3 phases 750 W for LXM05BD28M2 at 200...240 V single phase 750 W for LXM05CD17M2 at 200...240 V single phase 750 W for LXM05CD17M3X at 200...240 V 3 phases 750 W for LXM05CD22N4 at 380...480 V 3 phases 750 W for LXM05CD28M2 at 200...240 V single phase 950 W for LXM15LU60N4 at 480 V 3 phases 1250 W for LXM15LD10N4 at 400 V 3 phases 1300 W for LXM15LD17N4 at 400 V 3 phases 1400 W for LXM15LD17N4 at 480 V 3 phases 1500 W for LXM15LD10N4 at 480 V 3 phases
Nominal speed	3000 rpm for LXM15LD21M3 at 230 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 LXM05AD22N4 at 380...480 V 3 phases 3000 rpm for LXM05AD28M2 at 200...240 V single phase 3000 rpm for LXM05BD17M2 at 200...240 V single phase 3000 rpm for LXM05BD17M3X at 200...240 V 3 phases 3000 rpm for LXM05BD22N4 at 380...480 V 3 phases 3000 rpm for LXM05BD28M2 at 200...240 V single phase 3000 rpm for LXM05CD17M2 at 200...240 V single phase 3000 rpm for LXM05CD17M3X at 200...240 V 3 phases 3000 rpm for LXM05CD22N4 at 380...480 V 3 phases 3000 rpm for LXM05CD28M2 at 200...240 V single phase 3000 rpm for LXM15LU60N4 at 230 V 3 phases 3000 rpm for LXM15LD13M3 at 230 V 3 phases 3000 rpm for LXM15LD10N4 at 230 V 3 phases 3000 rpm for LXM15LD21M3 at 230 V single phase 3000 rpm for LXM15LD17N4 at 230 V 3 phases 6000 rpm for LXM15LU60N4 at 400 V 3 phases 6000 rpm for LXM15LD10N4 at 400 V 3 phases 6000 rpm for LXM15LD17N4 at 400 V 3 phases 7000 rpm for LXM15LD17N4 at 480 V 3 phases 8000 rpm for LXM15LU60N4 at 480 V 3 phases 8000 rpm for LXM15LD10N4 at 480 V 3 phases
Maximum mechanical speed	8000 rpm

Product compatibility	LXM05AD17M2 at 200...240 V single phase LXM05AD17M3X at 200...240 V 3 phases LXM05AD22N4 at 380...480 V 3 phases LXM05AD28M2 at 200...240 V single phase LXM05BD17M2 at 200...240 V single phase LXM05BD17M3X at 200...240 V 3 phases LXM05BD22N4 at 380...480 V 3 phases LXM05BD28M2 at 200...240 V single phase LXM05CD17M2 at 200...240 V single phase LXM05CD17M3X at 200...240 V 3 phases LXM05CD22N4 at 380...480 V 3 phases LXM05CD28M2 at 200...240 V single phase LXM15LD10N4 at 230 V 3 phases LXM15LD10N4 at 400 V 3 phases LXM15LD10N4 at 480 V 3 phases LXM15LD13M3 at 230 V 3 phases LXM15LD17N4 at 230 V 3 phases LXM15LD17N4 at 400 V 3 phases LXM15LD17N4 at 480 V 3 phases LXM15LD21M3 at 230 V single phase LXM15LD21M3 at 230 V 3 phases LXM15LU60N4 at 480 V 3 phases LXM15LU60N4 at 400 V 3 phases LXM15LU60N4 at 230 V 3 phases
Shaft end	Untapped
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	1.12 N.m for LXM15LU60N4 at 230 V 3 phases 1.12 N.m for LXM15LU60N4 at 400 V 3 phases 1.12 N.m for LXM15LU60N4 at 480 V 3 phases 1.8 N.m for LXM15LD10N4 at 480 V 3 phases 1.96 N.m for LXM15LD17N4 at 480 V 3 phases 2 N.m for LXM15LD17N4 at 400 V 3 phases 2 N.m for LXM15LD10N4 at 400 V 3 phases 2.23 N.m for LXM15LD13M3 at 230 V 3 phases 2.4 N.m for LXM15LD21M3 at 230 V single phase 2.4 N.m for LXM15LD21M3 at 230 V 3 phases 2.4 N.m for LXM15LD17N4 at 230 V 3 phases 2.4 N.m for LXM15LD10N4 at 230 V 3 phases 2.4 N.m for LXM05AD17M2 at 200...240 V single phase 2.4 N.m for LXM05AD28M2 at 200...240 V single phase 2.4 N.m for LXM05AD17M3X at 200...240 V 3 phases 2.4 N.m for LXM05AD22N4 at 380...480 V 3 phases 2.4 N.m for LXM05BD17M2 at 200...240 V single phase 2.4 N.m for LXM05BD28M2 at 200...240 V single phase 2.4 N.m for LXM05BD17M3X at 200...240 V 3 phases 2.4 N.m for LXM05BD22N4 at 380...480 V 3 phases 2.4 N.m for LXM05CD17M2 at 200...240 V single phase 2.4 N.m for LXM05CD28M2 at 200...240 V single phase 2.4 N.m for LXM05CD17M3X at 200...240 V 3 phases 2.4 N.m for LXM05CD22N4 at 380...480 V 3 phases
Maximum current I _{rms}	15.2 A for LXM15LD13M3 15.2 A for LXM15LD21M3 15.2 A for LXM15LD17N4 15.2 A for LXM15LU60N4 15.2 A for LXM15LD10N4 17 A for LXM05AD17M2 17 A for LXM05AD28M2 17 A for LXM05AD17M3X 17 A for LXM05AD22N4 17 A for LXM05BD17M2 17 A for LXM05BD28M2 17 A for LXM05BD17M3X 17 A for LXM05BD22N4 17 A for LXM05CD17M2 17 A for LXM05CD28M2 17 A for LXM05CD17M3X 17 A for LXM05CD22N4
Switching frequency	8 kHz for LEX05
Torque constant	0.78 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	49 V rms/krpm at 120 °C
Rotor inertia	0.58 kg.cm ² without brake
Stator resistance	2.7 Ohm at 20 °C
Stator inductance	13 mH at 20 °C 14.6 mH at 20 °C
Stator electrical time constant	4.81 ms at 20 °C 5.41 ms at 20 °C
Maximum radial force Fr	400 N at 6000 rpm 430 N at 5000 rpm 460 N at 4000 rpm 510 N at 3000 rpm 580 N at 2000 rpm 730 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	3.62 kg

Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant