Product data sheet
Characteristics

BSH0552P01A2A
AC servo motor BSH - 0.9 Nm - 8000 rpm - untapped shaft - without brake - IP50

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	0.9 N.m for LXM15LD13M3 at 230 V single phase 0.9 N.m for LXM15LD13M3 at 230 V 3 phases 0.9 N.m for LXM15LU60N4 at 230 V 3 phases 0.9 N.m for LXM05CU70M2 at 200...240 V single phase 0.9 N.m for LXM05AD10M2 at 200...240 V single phase 0.9 N.m for LXM05AD10M3X at 200...240 V 3 phases 0.9 N.m for LXM05AD14N4 at 380...480 V 3 phases 0.9 N.m for LXM05BD10M2 at 200...240 V single phase 0.9 N.m for LXM05BD10M3X at 200...240 V 3 phases 0.9 N.m for LXM05BD14N4 at 380...480 V 3 phases 0.9 N.m for LXM05CD10M2 at 200...240 V single phase 0.9 N.m for LXM05CD10M3X at 200...240 V 3 phases 0.9 N.m for LXM05CD14N4 at 380...480 V 3 phases
Peak stall torque	2.17 N.m for LXM05CU70M2 at 200...240 V single phase 2.26 N.m for LXM15LU60N4 at 230 V 3 phases 2.5 N.m for LXM15LD13M3 at 230 V single phase 2.5 N.m for LXM15LD13M3 at 230 V 3 phases 2.7 N.m for LXM05AD10M2 at 200...240 V single phase 2.7 N.m for LXM05AD10M3X at 200...240 V 3 phases 2.7 N.m for LXM05AD14N4 at 380...480 V 3 phases 2.7 N.m for LXM05BD10M2 at 200...240 V single phase 2.7 N.m for LXM05BD10M3X at 200...240 V 3 phases 2.7 N.m for LXM05BD14N4 at 380...480 V 3 phases 2.7 N.m for LXM05CD10M2 at 200...240 V single phase 2.7 N.m for LXM05CD10M3X at 200...240 V 3 phases 2.7 N.m for LXM05CD14N4 at 380...480 V 3 phases
Nominal output power	250 W for LXM05CU70M2 at 200...240 V single phase 250 W for LXM05AD10M2 at 200...240 V single phase 250 W for LXM05AD10M3X at 200...240 V 3 phases 250 W for LXM05AD14N4 at 380...480 V 3 phases 250 W for LXM05BD10M2 at 200...240 V single phase 250 W for LXM05BD10M3X at 200...240 V 3 phases 250 W for LXM05BD14N4 at 380...480 V 3 phases 250 W for LXM05CD10M2 at 200...240 V single phase 250 W for LXM05CD10M3X at 200...240 V 3 phases 250 W for LXM05CD14N4 at 380...480 V 3 phases 310 W for LXM15LD13M3 at 230 V single phase 310 W for LXM15LD13M3 at 230 V 3 phases 310 W for LXM15LU60N4 at 230 V 3 phases

Nominal speed	3000 rpm for LXM05CU70M2 at 200...240 V single phase 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 4000 rpm for LXM15LD13M3 at 230 V single phase 4000 rpm for LXM15LD13M3 at 230 V 3 phases 4000 rpm for LXM15LU60N4 at 230 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 LXM05CU70M2 at 200...240 V single phase LXM15LD13M3 at 230 V single phase LXM15LD13M3 at 230 V 3 phases LXM15LU60N4 at 230 V 3 phases
Shaft end	Untapped
IP degree of protection	IP50
Encoder type	Absolute single turn SinCos Hiperface
Encoder feedback resolution	131072 points/turn
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	0.75 N.m for LXM15LD13M3 at 230 V single phase 0.75 N.m for LXM15LD13M3 at 230 V 3 phases 0.75 N.m for LXM15LU60N4 at 230 V 3 phases 2.17 N.m for LXM05CU70M2 at 200...240 V single phase 2.7 N.m for LXM05AD10M2 at 200...240 V single phase 2.7 N.m for LXM05AD10M3X at 200...240 V 3 phases 2.7 N.m for LXM05AD14N4 at 380...480 V 3 phases 2.7 N.m for LXM05BD10M2 at 200...240 V single phase 2.7 N.m for LXM05BD10M3X at 200...240 V 3 phases 2.7 N.m for LXM05BD14N4 at 380...480 V 3 phases 2.7 N.m for LXM05CD10M2 at 200...240 V single phase 2.7 N.m for LXM05CD10M3X at 200...240 V 3 phases 2.7 N.m for LXM05CD14N4 at 380...480 V 3 phases
Maximum current Irms	4.8 A for LXM05CU70M2 4.8 A for LXM05AD10M2 4.8 A for LXM05AD10M3X 4.8 A for LXM05AD14N4 4.8 A for LXM05BD10M2 4.8 A for LXM05BD10M3X 4.8 A for LXM05BD14N4 4.8 A for LXM05CD10M2 4.8 A for LXM05CD10M3X 4.8 A for LXM05CD14N4 5.9 A for LXM15LD13M3 5.9 A for LXM15LU60N4
Switching frequency	8 kHz for LEX05
Torque constant	0.56 N.m/A rms at 120 °C 0.7 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	37 V rms/krpm at 120 °C 40 V rms/krpm at 120 °C
Rotor inertia	0.14 kg.cm² without brake
Stator resistance	15.5 Ohm at 20 °C 17.4 Ohm at 20 °C
Stator inductance	19.2 mH at 20 °C 35.3 mH at 20 °C
Stator electrical time constant	1.24 ms at 20 °C 2.03 ms at 20 °C
Maximum radial force Fr	190 N at 7000 rpm 190 N at 8000 rpm 200 N at 6000 rpm 220 N at 5000 rpm 230 N at 4000 rpm 260 N at 3000 rpm 290 N at 2000 rpm 370 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	1.47 kg

Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant