

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	0.77 N.m for LXM05CU70M2 at 200...240 V single phase 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 LXM05AD10F1 at 110...120 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 LXM05AD17F1 at 110...120 V single phase 0.9 N.m for LXM05BD10F1 at 110...120 V single phase 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 LXM05BD17F1 at 110...120 V single phase 0.9 N.m for LXM05CD10F1 at 110...120 V single phase 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 LXM05CD17F1 at 110...120 V single phase
Peak stall torque	1.31 N.m for LXM05CU70M2 at 200...240 V single phase 1.5 N.m for LXM15LD13M3 at 230 V single phase 1.5 N.m for LXM15LD13M3 at 230 V 3 phases 1.77 N.m for LXM05AD10F1 at 110...120 V single phase 1.77 N.m for LXM05AD10M2 at 200...240 V single phase 1.77 N.m for LXM05AD10M3X at 200...240 V 3 phases 1.77 N.m for LXM05BD10F1 at 110...120 V single phase 1.77 N.m for LXM05BD10M2 at 200...240 V single phase 1.77 N.m for LXM05BD10M3X at 200...240 V 3 phases 1.77 N.m for LXM05CD10F1 at 110...120 V single phase 1.77 N.m for LXM05CD10M2 at 200...240 V single phase 1.77 N.m for LXM05CD10M3X at 200...240 V 3 phases 2.7 N.m for LXM05AD17F1 at 110...120 V single phase 2.7 N.m for LXM05BD17F1 at 110...120 V single phase 2.7 N.m for LXM05CD17F1 at 110...120 V single phase

Nominal output power	240 W for LXM05CU70M2 at 200...240 V single phase 250 W for LXM05AD10F1 at 110...120 V single phase 250 W for LXM05AD17F1 at 110...120 V single phase 250 W for LXM05BD10F1 at 110...120 V single phase 250 W for LXM05BD17F1 at 110...120 V single phase 250 W for LXM05CD10F1 at 110...120 V single phase 250 W for LXM05CD17F1 at 110...120 V single phase 450 W for LXM15LD13M3 at 230 V single phase 450 W for LXM05AD10M2 at 200...240 V single phase 450 W for LXM05AD10M3X at 200...240 V 3 phases 450 W for LXM05BD10M2 at 200...240 V single phase 450 W for LXM05BD10M3X at 200...240 V 3 phases 450 W for LXM05CD10M2 at 200...240 V single phase 450 W for LXM05CD10M3X at 200...240 V 3 phases 570 W for LXM15LD13M3 at 230 V 3 phases
Nominal speed	3000 rpm for LXM05CU70M2 at 200...240 V single phase 3000 rpm for LXM05AD10F1 at 110...120 V single phase 3000 rpm for LXM05AD17F1 at 110...120 V single phase 3000 rpm for LXM05BD10F1 at 110...120 V single phase 3000 rpm for LXM05BD17F1 at 110...120 V single phase 3000 rpm for LXM05CD10F1 at 110...120 V single phase 3000 rpm for LXM05CD17F1 at 110...120 V single phase 6000 rpm for LXM15LD13M3 at 230 V single phase 6000 rpm for LXM05AD10M2 at 200...240 V single phase 6000 rpm for LXM05AD10M3X at 200...240 V 3 phases 6000 rpm for LXM05BD10M2 at 200...240 V single phase 6000 rpm for LXM05BD10M3X at 200...240 V 3 phases 6000 rpm for LXM05CD10M2 at 200...240 V single phase 6000 rpm for LXM05CD10M3X at 200...240 V 3 phases 8000 rpm for LXM15LD13M3 at 230 V 3 phases
Maximum mechanical speed	8000 rpm
Product compatibility	LXM05AD10F1 at 110...120 V single phase LXM05AD10M2 at 200...240 V single phase LXM05AD10M3X at 200...240 V 3 phases LXM05AD17F1 at 110...120 V single phase LXM05BD10F1 at 110...120 V single phase LXM05BD10M2 at 200...240 V single phase LXM05BD10M3X at 200...240 V 3 phases LXM05BD17F1 at 110...120 V single phase LXM05CD10F1 at 110...120 V single phase LXM05CD10M2 at 200...240 V single phase LXM05CD10M3X at 200...240 V 3 phases LXM05CD17F1 at 110...120 V single phase LXM05CU70M2 at 200...240 V single phase 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	With

Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors
Number of poles	6

Complementary

Range compatibility	Lexium 05 Lexium 15
Nominal torque	0.68 N.m for LXM15LD13M3 at 230 V 3 phases 0.72 N.m for LXM15LD13M3 at 230 V single phase 0.77 N.m for LXM05CU70M2 at 200...240 V single phase 0.9 N.m for LXM05AD17F1 at 110...120 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 LXM05BD10F1 at 110...120 V single phase 0.9 N.m for LXM05BD17F1 at 110...120 V single phase 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 LXM05CD10F1 at 110...120 V single phase 0.9 N.m for LXM05CD17F1 at 110...120 V single phase 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 LXM05AD10F1 at 110...120 V single phase
Maximum current Irms	8.8 A for LXM05AD10F1 8.8 A for LXM05AD17F1 8.8 A for LXM05CU70M2 8.8 A for LXM05AD10M2 8.8 A for LXM05AD10M3X 8.8 A for LXM05BD10F1 8.8 A for LXM05BD17F1 8.8 A for LXM05BD10M2 8.8 A for LXM05BD10M3X 8.8 A for LXM05CD10F1 8.8 A for LXM05CD17F1 8.8 A for LXM05CD10M2 8.8 A for LXM05CD10M3X 10.3 A for LXM15LD13M3
Switching frequency	8 kHz for LEX05
Torque constant	0.32 N.m/A rms at 120 °C 0.36 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	21 V rms/krpm at 120 °C 22 V rms/krpm at 120 °C
Rotor inertia	0.1613 kg.cm ² with brake
Stator resistance	5 Ohm at 20 °C 5.2 Ohm at 20 °C
Stator inductance	6.2 mH at 20 °C 10.6 mH at 20 °C
Stator electrical time constant	1.24 ms at 20 °C 2.04 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