

BSH0551T01F1A

AC servo motor BSH - 0.5 Nm - 8000 rpm -
untapped shaft - with brake - IP50

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	0.5 N.m for LXM15LD13M3 at 230 V 3 phases 0.5 N.m for LXM05CU70M2 at 200...240 V single phase 0.5 N.m for LXM05AD10F1 at 110...120 V single phase 0.5 N.m for LXM05AD10M2 at 200...240 V single phase 0.5 N.m for LXM05AD10M3X at 200...240 V 3 phases 0.5 N.m for LXM05BD10F1 at 110...120 V single phase 0.5 N.m for LXM05BD10M2 at 200...240 V single phase 0.5 N.m for LXM05BD10M3X at 200...240 V 3 phases 0.5 N.m for LXM05CD10F1 at 110...120 V single phase 0.5 N.m for LXM05CD10M2 at 200...240 V single phase 0.5 N.m for LXM05CD10M3X at 200...240 V 3 phases
Peak stall torque	1.08 N.m for LXM05CU70M2 at 200...240 V single phase 1.24 N.m for LXM15LD13M3 at 230 V 3 phases 1.4 N.m for LXM05AD10F1 at 110...120 V single phase 1.4 N.m for LXM05AD10M2 at 200...240 V single phase 1.4 N.m for LXM05AD10M3X at 200...240 V 3 phases 1.4 N.m for LXM05BD10F1 at 110...120 V single phase 1.4 N.m for LXM05BD10M2 at 200...240 V single phase 1.4 N.m for LXM05BD10M3X at 200...240 V 3 phases 1.4 N.m for LXM05CD10F1 at 110...120 V single phase 1.4 N.m for LXM05CD10M2 at 200...240 V single phase 1.4 N.m for LXM05CD10M3X at 200...240 V 3 phases
Nominal output power	150 W for LXM05CU70M2 at 200...240 V single phase 150 W for LXM05AD10F1 at 110...120 V single phase 150 W for LXM05BD10F1 at 110...120 V single phase 150 W for LXM05CD10F1 at 110...120 V single phase 270 W for LXM05AD10M2 at 200...240 V single phase 270 W for LXM05AD10M3X at 200...240 V 3 phases 270 W for LXM05BD10M2 at 200...240 V single phase 270 W for LXM05BD10M3X at 200...240 V 3 phases 270 W for LXM05CD10M2 at 200...240 V single phase 270 W for LXM05CD10M3X at 200...240 V 3 phases 340 W for LXM15LD13M3 at 230 V 3 phases

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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 LXM05BD10F1 at 110...120 V single phase 3000 rpm for LXM05CD10F1 at 110...120 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 LXM05BD10F1 at 110...120 V single phase LXM05BD10M2 at 200...240 V single phase LXM05BD10M3X at 200...240 V 3 phases LXM05CD10F1 at 110...120 V single phase LXM05CD10M2 at 200...240 V single phase LXM05CD10M3X at 200...240 V 3 phases LXM05CU70M2 at 200...240 V single phase LXM15LD13M3 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	With
Mounting support	International standard flange
Electrical connection	Straight connectors
Number of poles	6

Complementary

Range compatibility	Lexium 05 Lexium 15
Nominal torque	0.41 N.m for LXM15LD13M3 at 230 V 3 phases 0.43 N.m for LXM05AD10M2 at 200...240 V single phase 0.43 N.m for LXM05AD10M3X at 200...240 V 3 phases 0.43 N.m for LXM05BD10M2 at 200...240 V single phase 0.43 N.m for LXM05BD10M3X at 200...240 V 3 phases 0.43 N.m for LXM05CD10M2 at 200...240 V single phase 0.43 N.m for LXM05CD10M3X at 200...240 V 3 phases 0.46 N.m for LXM05AD10F1 at 110...120 V single phase 0.46 N.m for LXM05CU70M2 at 200...240 V single phase 0.46 N.m for LXM05BD10F1 at 110...120 V single phase 0.46 N.m for LXM05CD10F1 at 110...120 V single phase
Maximum current Irms	5.4 A for LXM05AD10F1 5.4 A for LXM05CU70M2 5.4 A for LXM05AD10M2 5.4 A for LXM05AD10M3X 5.4 A for LXM05BD10F1 5.4 A for LXM05BD10M2 5.4 A for LXM05BD10M3X 5.4 A for LXM05CD10F1 5.4 A for LXM05CD10M2 5.4 A for LXM05CD10M3X 6.2 A for LXM15LD13M3
Switching frequency	8 kHz for LEX05
Torque constant	0.28 N.m/A rms at 120 °C 0.36 N.m/A rms at 120 °C

Back electromagnetical force (emf) constant	18 V rms/krpm at 120 °C 22 V rms/krpm at 120 °C
Rotor inertia	0.1113 kg.cm ² with brake
Stator resistance	11 Ohm at 20 °C 12.2 Ohm at 20 °C
Stator inductance	12 mH at 20 °C 20.8 mH at 20 °C
Stator electrical time constant	1.09 ms at 20 °C 1.7 ms at 20 °C
Maximum radial force Fr	170 N at 8000 rpm 180 N at 7000 rpm 190 N at 6000 rpm 200 N at 5000 rpm 220 N at 4000 rpm 240 N at 3000 rpm 270 N at 2000 rpm 340 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	1.16 kg

Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant