Product data sheet
Characteristics

BSH1002T02A1A
AC servo motor BSH - 5.5 Nm - 6000 rpm - untapped shaft - without brake - IP50

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	5.5 N.m for LXM15LD28M3 at 230 V 3 phases 5.5 N.m for LXM05AD42M3X at 200...240 V 3 phases 5.5 N.m for LXM05BD42M3X at 200...240 V 3 phases 5.5 N.m for LXM05CD42M3X at 200...240 V 3 phases
Peak stall torque	11.59 N.m for LXM15LD28M3 at 230 V 3 phases 16 N.m for LXM05AD42M3X at 200...240 V 3 phases 16 N.m for LXM05BD42M3X at 200...240 V 3 phases 16 N.m for LXM05CD42M3X at 200...240 V 3 phases
Nominal output power	1400 W for LXM05AD42M3X at 200...240 V 3 phases 1400 W for LXM05BD42M3X at 200...240 V 3 phases 1400 W for LXM05CD42M3X at 200...240 V 3 phases 1700 W for LXM15LD28M3 at 230 V 3 phases
Nominal speed	3000 rpm for LXM05AD42M3X at 200...240 V 3 phases 3000 rpm for LXM05BD42M3X at 200...240 V 3 phases 3000 rpm for LXM05CD42M3X at 200...240 V 3 phases 4000 rpm for LXM15LD28M3 at 230 V 3 phases
Maximum mechanical speed	6000 rpm
Product compatibility	LXM05AD42M3X at 200...240 V 3 phases LXM05BD42M3X at 200...240 V 3 phases LXM05CD42M3X at 200...240 V 3 phases LXM15LD28M3 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	8

Complementary

Range compatibility	Lexium 05 Lexium 15
Nominal torque	4 N.m for LXM15LD28M3 at 230 V 3 phases 4.4 N.m for LXM05AD42M3X at 200...240 V 3 phases 4.4 N.m for LXM05BD42M3X at 200...240 V 3 phases 4.4 N.m for LXM05CD42M3X at 200...240 V 3 phases
Maximum current Irms	31.2 A for LXM15LD28M3 35.4 A for LXM05AD42M3X 35.4 A for LXM05BD42M3X 35.4 A for LXM05CD42M3X
Switching frequency	8 kHz for LEX05
Torque constant	0.59 N.m/A rms at 120 °C 0.64 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	33 V rms/krpm at 120 °C 37 V rms/krpm at 120 °C
Rotor inertia	2.31 kg.cm² without brake
Stator resistance	0.56 Ohm at 20 °C 0.6 Ohm at 20 °C
Stator inductance	2.9 mH at 20 °C 3 mH at 20 °C
Stator electrical time constant	4.83 ms at 20 °C 5.26 ms at 20 °C
Maximum radial force Fr	620 N at 4000 rpm 690 N at 3000 rpm 790 N at 2000 rpm 990 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	5.9 kg

Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant