

BSH1402T12A1P

AC servo motor BSH - 14.4 Nm - 4000 rpm -
key shaft - without brake - IP50

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	14.4 N.m for LXM05AD42M3X at 200...240 V 3 phases 14.4 N.m for LXM05BD42M3X at 200...240 V 3 phases 14.4 N.m for LXM05CD42M3X at 200...240 V 3 phases
Peak stall torque	24.56 N.m for LXM05AD42M3X at 200...240 V 3 phases 24.56 N.m for LXM05BD42M3X at 200...240 V 3 phases 24.56 N.m for LXM05CD42M3X at 200...240 V 3 phases
Nominal output power	2900 W for LXM05AD42M3X at 200...240 V 3 phases 2900 W for LXM05BD42M3X at 200...240 V 3 phases 2900 W for LXM05CD42M3X at 200...240 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
Maximum mechanical speed	4000 rpm
Product compatibility	LXM05AD42M3X at 200...240 V 3 phases LXM05BD42M3X at 200...240 V 3 phases LXM05CD42M3X at 200...240 V 3 phases
Shaft end	Keyed
IP degree of protection	IP50
Encoder type	Absolute multturn 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	10

Complementary

Range compatibility	Lexium 05
Nominal torque	9.2 N.m for LXM05AD42M3X at 200...240 V 3 phases 9.2 N.m for LXM05BD42M3X at 200...240 V 3 phases 9.2 N.m for LXM05CD42M3X at 200...240 V 3 phases
Maximum current Irms	75.2 A for LXM05AD42M3X 75.2 A for LXM05BD42M3X 75.2 A for LXM05CD42M3X
Switching frequency	4 kHz for LEX05
Torque constant	0.87 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	59 V rms/krpm at 120 °C
Rotor inertia	12.68 kg.cm² without brake
Stator resistance	0.21 Ohm at 20 °C
Stator inductance	2.54 mH at 20 °C

Stator electrical time constant	12.1 ms at 20 °C
Maximum radial force Fr	1680 N at 3000 rpm 1930 N at 2000 rpm 2430 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	16 kg