

Product data sheet

Characteristics

BSH1404P31F1P

AC servo motor BSH - 32.1 Nm - 4000 rpm -
key shaft - with brake - IP65

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	32.1 N.m for LXM05AD57N4 at 380...480 V 3 phases 32.1 N.m for LXM05BD57N4 at 380...480 V 3 phases 32.1 N.m for LXM05CD57N4 at 380...480 V 3 phases
Peak stall torque	63.09 N.m for LXM05AD57N4 at 380...480 V 3 phases 63.09 N.m for LXM05BD57N4 at 380...480 V 3 phases 63.09 N.m for LXM05CD57N4 at 380...480 V 3 phases
Nominal output power	3400 W for LXM05AD57N4 at 380...480 V 3 phases 3400 W for LXM05BD57N4 at 380...480 V 3 phases 3400 W for LXM05CD57N4 at 380...480 V 3 phases
Nominal speed	3000 rpm for LXM05AD57N4 at 380...480 V 3 phases 3000 rpm for LXM05BD57N4 at 380...480 V 3 phases 3000 rpm for LXM05CD57N4 at 380...480 V 3 phases
Maximum mechanical speed	4000 rpm
Product compatibility	LXM05AD57N4 at 380...480 V 3 phases LXM05BD57N4 at 380...480 V 3 phases LXM05CD57N4 at 380...480 V 3 phases
Shaft end	Keyed
IP degree of protection	IP65
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	10

Complementary

Range compatibility	Lexium 05
Nominal torque	10.8 N.m for LXM05AD57N4 at 380...480 V 3 phases 10.8 N.m for LXM05BD57N4 at 380...480 V 3 phases 10.8 N.m for LXM05CD57N4 at 380...480 V 3 phases
Maximum current Irms	95.6 A for LXM05AD57N4 95.6 A for LXM05BD57N4 95.6 A for LXM05CD57N4
Switching frequency	4 kHz for LEX05
Torque constant	1.57 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	104 V rms/krpm at 120 °C
Rotor inertia	29.2 kg.cm² with brake
Stator resistance	0.28 Ohm at 20 °C
Stator inductance	3.9 mH at 20 °C
Stator electrical time constant	13.93 ms at 20 °C

Maximum radial force Fr	1840 N at 3000 rpm 2110 N at 2000 rpm 2660 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	26.5 kg
