

BSH2051M02F1A

AC servo motor BSH - 36 Nm - 3800 rpm -
untapped shaft - with brake - IP50

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	34.4 N.m for LXM05AD57N4 at 380...480 V 3 phases 34.4 N.m for LXM05BD57N4 at 380...480 V 3 phases 34.4 N.m for LXM05CD57N4 at 380...480 V 3 phases 36 N.m for LXM15MD40N4 at 400 V 3 phases 36 N.m for LXM15MD40N4 at 480 V 3 phases 36 N.m for LXM15MD56N4 at 400 V 3 phases 36 N.m for LXM15MD56N4 at 480 V 3 phases 36 N.m for LXM15HC11N4X at 400 V 3 phases 36 N.m for LXM15HC11N4X at 480 V 3 phases
Peak stall torque	68.33 N.m for LXM15MD40N4 at 400 V 3 phases 68.33 N.m for LXM15MD40N4 at 480 V 3 phases 68.33 N.m for LXM15MD56N4 at 400 V 3 phases 68.33 N.m for LXM15MD56N4 at 480 V 3 phases 68.33 N.m for LXM15HC11N4X at 400 V 3 phases 68.33 N.m for LXM15HC11N4X at 480 V 3 phases 110 N.m for LXM05AD57N4 at 380...480 V 3 phases 110 N.m for LXM05BD57N4 at 380...480 V 3 phases 110 N.m for LXM05CD57N4 at 380...480 V 3 phases
Nominal output power	4500 W for LXM05AD57N4 at 380...480 V 3 phases 4500 W for LXM05BD57N4 at 380...480 V 3 phases 4500 W for LXM05CD57N4 at 380...480 V 3 phases 5000 W for LXM15MD40N4 at 400 V 3 phases 5000 W for LXM15MD56N4 at 400 V 3 phases 5000 W for LXM15HC11N4X at 400 V 3 phases 5500 W for LXM15MD40N4 at 480 V 3 phases 5500 W for LXM15MD56N4 at 480 V 3 phases 5500 W for LXM15HC11N4X at 480 V 3 phases
Nominal speed	1500 rpm for LXM15MD40N4 at 400 V 3 phases 1500 rpm for LXM15MD56N4 at 400 V 3 phases 1500 rpm for LXM15HC11N4X at 400 V 3 phases 1500 rpm for LXM05AD57N4 at 380...480 V 3 phases 1500 rpm for LXM05BD57N4 at 380...480 V 3 phases 1500 rpm for LXM05CD57N4 at 380...480 V 3 phases 1700 rpm for LXM15MD40N4 at 480 V 3 phases 1700 rpm for LXM15MD56N4 at 480 V 3 phases 1700 rpm for LXM15HC11N4X at 480 V 3 phases
Maximum mechanical speed	3800 rpm
Product compatibility	LXM05AD57N4 at 380...480 V 3 phases LXM05BD57N4 at 380...480 V 3 phases LXM05CD57N4 at 380...480 V 3 phases LXM15HC11N4X at 400 V 3 phases LXM15HC11N4X at 480 V 3 phases LXM15MD40N4 at 400 V 3 phases LXM15MD40N4 at 480 V 3 phases LXM15MD56N4 at 400 V 3 phases LXM15MD56N4 at 480 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	With

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Mounting support	International standard flange
Electrical connection	Straight connectors
Number of poles	10

Complementary

Range compatibility	Lexium 05 Lexium 15
Nominal torque	28.2 N.m for LXM05AD57N4 at 380...480 V 3 phases 28.2 N.m for LXM05BD57N4 at 380...480 V 3 phases 28.2 N.m for LXM05CD57N4 at 380...480 V 3 phases 31.2 N.m for LXM15MD40N4 at 480 V 3 phases 31.2 N.m for LXM15MD56N4 at 480 V 3 phases 31.2 N.m for LXM15HC11N4X at 480 V 3 phases 32 N.m for LXM15MD40N4 at 400 V 3 phases 32 N.m for LXM15MD56N4 at 400 V 3 phases 32 N.m for LXM15HC11N4X at 400 V 3 phases
Maximum current I _{rms}	40.4 A for LXM15MD40N4 40.4 A for LXM15MD56N4 40.4 A for LXM15HC11N4X 40.4 A for LXM05AD57N4 40.4 A for LXM05BD57N4 40.4 A for LXM05CD57N4
Switching frequency	4 kHz for LEX05
Torque constant	3.3 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	208 V rms/krpm at 120 °C
Rotor inertia	93 kg.cm ² with brake
Stator resistance	1.1 Ohm at 20 °C
Stator inductance	21.3 mH at 20 °C
Stator electrical time constant	19.36 ms at 20 °C 19.4 ms at 20 °C
Maximum radial force Fr	2580 N at 3000 rpm 2960 N at 2000 rpm 3730 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	35 kg

Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant