Product data sheet Characteristics

BSH1404M02F1P

AC servo motor BSH - 32.1 Nm - 4000 rpm - untapped shaft - with brake - IP50

Product or component	AC servo motors
type Component name	BSH
· · · · · · · · · · · · · · · · · · ·	32.1 N.m for LXM05AD57N4 at 380480 V 3 phas-
Continuous stall torque	es
	32.1 N.m for LXM05BD57N4 at 380480 V 3 phas-
	es 32.1 N.m for LXM05CD57N4 at 380480 V 3 phases
	33.4 N.m for LXM15MD40N4 at 400 V 3 phases 33.4 N.m for LXM15MD40N4 at 480 V 3 phases 33.4 N.m for LXM15MD56N4 at 400 V 3 phases 33.4 N.m for LXM15MD56N4 at 480 V 3 phases
Peak stall torque	82.32 N.m for LXM15MD40N4 at 400 V 3 phases 82.32 N.m for LXM15MD40N4 at 480 V 3 phases 95 N.m for LXM15MD56N4 at 400 V 3 phases 95 N.m for LXM15MD56N4 at 480 V 3 phases 95 N.m for LXM05AD57N4 at 380480 V 3 phases 95 N.m for LXM05BD57N4 at 380480 V 3 phases 95 N.m for LXM05CD57N4 at 380480 V 3 phases
Nominal output power	2800 W for LXM15MD40N4 at 400 V 3 phases 2800 W for LXM15MD56N4 at 400 V 3 phases 3900 W for LXM15MD40N4 at 480 V 3 phases 3900 W for LXM15MD56N4 at 480 V 3 phases 3900 W for LXM05AD57N4 at 380480 V 3 phases 3900 W for LXM05BD57N4 at 380480 V 3 phases 3900 W for LXM05CD57N4 at 380480 V 3 phases
Nominal speed	1000 rpm for LXM15MD40N4 at 400 V 3 phases 1000 rpm for LXM15MD56N4 at 400 V 3 phases 1500 rpm for LXM15MD40N4 at 480 V 3 phases 1500 rpm for LXM15MD56N4 at 480 V 3 phases 1500 rpm for LXM05AD57N4 at 380480 V 3 phases es 1500 rpm for LXM05BD57N4 at 380480 V 3 phases 1500 rpm for LXM05BD57N4 at 380480 V 3 phases
Maximum mechanical	4000 rpm
speed	
Product compatibility	LXM05AD57N4 at 380480 V 3 phases LXM05BD57N4 at 380480 V 3 phases LXM05CD57N4 at 380480 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
Mounting support	International standard flange
E	Straight connectors
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 05
	Lexium 15
Nominal torque	24.9 N.m for LXM05AD57N4 at 380480 V 3 phases
	24.9 N.m for LXM05BD57N4 at 380480 V 3 phases
	24.9 N.m for LXM05CD57N4 at 380480 V 3 phases
	25 N.m for LXM15MD40N4 at 480 V 3 phases
	25 N.m for LXM15MD56N4 at 480 V 3 phases
	27 N.m for LXM15MD40N4 at 400 V 3 phases
	27 N.m for LXM15MD56N4 at 400 V 3 phases
Maximum current Irms	47.8 A for LXM15MD40N4
	47.8 A for LXM15MD56N4
	47.8 A for LXM05AD57N4
	47.8 A for LXM05BD57N4
	47.8 A for LXM05CD57N4
Switching frequency	4 kHz for LEX05
Torque constant	3.12 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	208 V rms/krpm at 120 °C
Rotor inertia	29.2 kg.cm² with brake
Stator resistance	1.12 Ohm at 20 °C
Stator inductance	15.6 mH at 20 °C
	16.28 mH at 20 °C
Stator electrical time constant	13.93 ms at 20 °C
	14.54 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

