## Product data sheet Characteristics

## BSH1401P02A1A

AC servo motor BSH - 11.4 Nm - 4000 rpm - untapped shaft - without brake - IP50

Product or component	AC servo motors
type	
Component name	BSH
Continuous stall torque	11.1 N.m for LXM15MD28N4 at 230 V 3 phases 11.1 N.m for LXM15MD28N4 at 400 V 3 phases 11.1 N.m for LXM15MD28N4 at 480 V 3 phases 11.1 N.m for LXM15MD40N4 at 400 V 3 phases 11.1 N.m for LXM15MD40N4 at 480 V 3 phases 11.1 N.m for LXM15LD28M3 at 230 V 3 phases 11.4 N.m for LXM05AD34N4 at 380480 V 3 phases 11.4 N.m for LXM05BD34N4 at 380480 V 3 phases 11.4 N.m for LXM05D34N4 at 380480 V 3 phases
Peak stall torque	23.33 N.m for LXM15MD28N4 at 230 V 3 phases 23.33 N.m for LXM15MD28N4 at 400 V 3 phases 23.33 N.m for LXM15MD28N4 at 480 V 3 phases 23.33 N.m for LXM15MD40N4 at 400 V 3 phases 23.33 N.m for LXM15MD40N4 at 480 V 3 phases 23.33 N.m for LXM05AD34N4 at 380480 V 3 phases 23.33 N.m for LXM05BD34N4 at 380480 V 3 phases 23.33 N.m for LXM05BD34N4 at 380480 V 3 phases 23.33 N.m for LXM05CD34N4 at 380480 V 3 phases 23.8 N.m for LXM15LD28M3 at 230 V 3 phases
Nominal output power	1400 W for LXM15MD28N4 at 230 V 3 phases 1400 W for LXM15LD28M3 at 230 V 3 phases 2000 W for LXM15MD28N4 at 400 V 3 phases 2000 W for LXM15MD40N4 at 400 V 3 phases 2150 W for LXM15MD28N4 at 480 V 3 phases 2150 W for LXM15MD40N4 at 480 V 3 phases 2200 W for LXM05AD34N4 at 380480 V 3 phases 2200 W for LXM05BD34N4 at 380480 V 3 phases 2200 W for LXM05CD34N4 at 380480 V 3 phases
Nominal speed	1500 rpm for LXM15MD28N4 at 230 V 3 phases 1500 rpm for LXM15LD28M3 at 230 V 3 phases 2500 rpm for LXM15MD28N4 at 400 V 3 phases 2500 rpm for LXM15MD40N4 at 400 V 3 phases 3000 rpm for LXM15MD28N4 at 480 V 3 phases 3000 rpm for LXM15MD40N4 at 480 V 3 phases 3000 rpm for LXM15MD40N4 at 480 V 3 phases 3000 rpm for LXM05AD34N4 at 380480 V 3 phases 3000 rpm for LXM05BD34N4 at 380480 V 3 phases 3000 rpm for LXM05BD34N4 at 380480 V 3 phases
Maximum mechanical speed	4000 rpm
Product compatibility	LXM05AD34N4 at 380480 V 3 phases LXM05BD34N4 at 380480 V 3 phases LXM05CD34N4 at 380480 V 3 phases LXM15LD28M3 at 230 V 3 phases LXM15MD28N4 at 230 V 3 phases LXM15MD28N4 at 400 V 3 phases LXM15MD28N4 at 480 V 3 phases LXM15MD40N4 at 400 V 3 phases LXM15MD40N4 at 480 V 3 phases LXM15MD40N4 at 480 V 3 phases
Shaft end	Untapped
IP degree of protection	IP50
Encoder type	Absolute multiturn SinCos Hiperface
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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
	Lexium 15
Nominal torque	6.8 N.m for LXM15MD28N4 at 480 V 3 phases 6.8 N.m for LXM15MD40N4 at 480 V 3 phases 6.9 N.m for LXM05AD34N4 at 380480 V 3 phases
	6.9 N.m for LXM05BD34N4 at 380480 V 3 phases 6.9 N.m for LXM05CD34N4 at 380480 V 3 phases 7.63 N.m for LXM15MD28N4 at 400 V 3 phases
	7.63 N.m for LXM15MD40N4 at 400 V 3 phases
	9.1 N.m for LXM15LD28M3 at 230 V 3 phases 9.1 N.m for LXM15MD28N4 at 230 V 3 phases
Maximum current Irms	20.8 A for LXM15LD28M3 20.8 A for LXM15MD28N4 20.8 A for LXM15MD40N4 20.8 A for LXM05AD34N4 20.8 A for LXM05BD34N4 20.8 A for LXM05CD34N4
Switching frequency	4 kHz for LEX05
Torque constant	1.43 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	100 V rms/krpm at 120 °C
Rotor inertia	7.41 kg.cm² without brake
Stator resistance	1.41 Ohm at 20 °C
Stator inductance	15.6 mH at 20 °C 16.34 mH at 20 °C
Stator electrical time constant	11.06 ms at 20 °C 11.59 ms at 20 °C
Maximum radial force Fr	1530 N at 3000 rpm 1760 N at 2000 rpm 2210 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	11.2 kg

## Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant

