

Product data sheet

Characteristics

BSH1401T01F1A

AC servo motor BSH - 11.4 Nm - 4000 rpm -
untapped shaft - with brake - IP50

Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	11.1 N.m for LXM15MD56N4 at 230 V 3 phases 11.4 N.m for LXM05AD42M3X at 200...240 V 3 phases 11.4 N.m for LXM05BD42M3X at 200...240 V 3 phases 11.4 N.m for LXM05CD42M3X at 200...240 V 3 phases
Peak stall torque	23.33 N.m for LXM15MD56N4 at 230 V 3 phases 23.33 N.m for LXM05AD42M3X at 200...240 V 3 phases 23.33 N.m for LXM05BD42M3X at 200...240 V 3 phases 23.33 N.m for LXM05CD42M3X at 200...240 V 3 phases
Nominal output power	2000 W for LXM15MD56N4 at 230 V 3 phases 2200 W for LXM05AD42M3X at 200...240 V 3 phases 2200 W for LXM05BD42M3X at 200...240 V 3 phases 2200 W for LXM05CD42M3X at 200...240 V 3 phases
Nominal speed	2500 rpm for LXM15MD56N4 at 230 V 3 phases 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 LXM15MD56N4 at 230 V 3 phases
Shaft end	Untapped
IP degree of protection	IP50
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

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Complementary

Range compatibility	Lexium 05 Lexium 15
Nominal torque	6.9 N.m for LXM05AD42M3X at 200...240 V 3 phases 6.9 N.m for LXM05BD42M3X at 200...240 V 3 phases 6.9 N.m for LXM05CD42M3X at 200...240 V 3 phases 7.63 N.m for LXM15MD56N4 at 230 V 3 phases
Maximum current Irms	37.1 A for LXM15MD56N4 37.1 A for LXM05AD42M3X 37.1 A for LXM05BD42M3X 37.1 A for LXM05CD42M3X
Switching frequency	4 kHz for LEX05
Torque constant	0.83 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	56 V rms/krpm at 120 °C
Rotor inertia	8.56 kg.cm² with brake
Stator resistance	0.4 Ohm at 20 °C 0.44 Ohm at 20 °C
Stator inductance	4.9 mH at 20 °C 5.15 mH at 20 °C
Stator electrical time constant	11.14 ms at 20 °C 12.88 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