

# BSH1002P11A1A

AC servo motor BSH - 5.5 Nm - 6000 rpm - key  
shaft - without brake - IP50

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## Main

Product or component type	AC servo motors
Component name	BSH
Continuous stall torque	<p>3.4 N.m for LXM15LD13M3 at 230 V 3 phases</p> <p>3.4 N.m for LXM15LD10N4 at 230 V 3 phases</p> <p>3.4 N.m for LXM15LD10N4 at 400 V 3 phases</p> <p>3.4 N.m for LXM15LD10N4 at 480 V 3 phases</p> <p>4.5 N.m for LXM15LD21M3 at 230 V single phase</p> <p>5.5 N.m for LXM05AD17M3X at 200...240 V 3 phases</p> <p>5.5 N.m for LXM05AD22N4 at 380...480 V 3 phases</p> <p>5.5 N.m for LXM05AD28M2 at 200...240 V single phase</p> <p>5.5 N.m for LXM05BD17M3X at 200...240 V 3 phases</p> <p>5.5 N.m for LXM05BD22N4 at 380...480 V 3 phases</p> <p>5.5 N.m for LXM05BD28M2 at 200...240 V single phase</p> <p>5.5 N.m for LXM05CD17M3X at 200...240 V 3 phases</p> <p>5.5 N.m for LXM05CD22N4 at 380...480 V 3 phases</p> <p>5.5 N.m for LXM05CD28M2 at 200...240 V single phase</p> <p>5.8 N.m for LXM15LD17N4 at 400 V 3 phases</p> <p>5.8 N.m for LXM15LD17N4 at 480 V 3 phases</p> <p>5.8 N.m for LXM15LD21M3 at 230 V 3 phases</p>
Peak stall torque	<p>5.6 N.m for LXM15LD13M3 at 230 V 3 phases</p> <p>8 N.m for LXM15LD10N4 at 230 V 3 phases</p> <p>8 N.m for LXM15LD10N4 at 400 V 3 phases</p> <p>8 N.m for LXM15LD10N4 at 480 V 3 phases</p> <p>9.39 N.m for LXM15LD21M3 at 230 V single phase</p> <p>11.23 N.m for LXM05AD17M3X at 200...240 V 3 phases</p> <p>11.23 N.m for LXM05BD17M3X at 200...240 V 3 phases</p> <p>11.23 N.m for LXM05CD17M3X at 200...240 V 3 phases</p> <p>12.13 N.m for LXM15LD17N4 at 400 V 3 phases</p> <p>12.13 N.m for LXM15LD17N4 at 480 V 3 phases</p> <p>13.92 N.m for LXM05AD22N4 at 380...480 V 3 phases</p> <p>13.92 N.m for LXM05BD22N4 at 380...480 V 3 phases</p> <p>13.92 N.m for LXM05CD22N4 at 380...480 V 3 phases</p> <p>14.79 N.m for LXM15LD21M3 at 230 V 3 phases</p> <p>16 N.m for LXM05AD28M2 at 200...240 V single phase</p> <p>16 N.m for LXM05BD28M2 at 200...240 V single phase</p> <p>16 N.m for LXM05CD28M2 at 200...240 V single phase</p>
Nominal output power	<p>780 W for LXM05AD17M3X at 200...240 V 3 phases</p> <p>780 W for LXM05AD28M2 at 200...240 V single phase</p> <p>780 W for LXM05BD17M3X at 200...240 V 3 phases</p> <p>780 W for LXM05BD28M2 at 200...240 V single phase</p> <p>780 W for LXM05CD17M3X at 200...240 V 3 phases</p> <p>780 W for LXM05CD28M2 at 200...240 V single phase</p> <p>840 W for LXM15LD13M3 at 230 V 3 phases</p> <p>890 W for LXM15LD10N4 at 230 V 3 phases</p> <p>950 W for LXM15LD21M3 at 230 V single phase</p> <p>950 W for LXM15LD21M3 at 230 V 3 phases</p> <p>1400 W for LXM05AD22N4 at 380...480 V 3 phases</p> <p>1400 W for LXM05BD22N4 at 380...480 V 3 phases</p> <p>1400 W for LXM05CD22N4 at 380...480 V 3 phases</p> <p>1600 W for LXM15LD10N4 at 400 V 3 phases</p> <p>1700 W for LXM15LD17N4 at 400 V 3 phases</p> <p>1950 W for LXM15LD17N4 at 480 V 3 phases</p> <p>2150 W for LXM15LD10N4 at 480 V 3 phases</p>

Nominal speed	1500 rpm for LXM05AD17M3X at 200...240 V 3 phases 1500 rpm for LXM05AD28M2 at 200...240 V single phase 1500 rpm for LXM05BD17M3X at 200...240 V 3 phases 1500 rpm for LXM05BD28M2 at 200...240 V single phase 1500 rpm for LXM05CD17M3X at 200...240 V 3 phases 1500 rpm for LXM05CD28M2 at 200...240 V single phase 2000 rpm for LXM15LD21M3 at 230 V single phase 2000 rpm for LXM15LD21M3 at 230 V 3 phases 2500 rpm for LXM15LD13M3 at 230 V 3 phases 2500 rpm for LXM15LD10N4 at 230 V 3 phases 3000 rpm for LXM05AD22N4 at 380...480 V 3 phases 3000 rpm for LXM05BD22N4 at 380...480 V 3 phases 3000 rpm for LXM05CD22N4 at 380...480 V 3 phases 4000 rpm for LXM15LD17N4 at 400 V 3 phases 4500 rpm for LXM15LD10N4 at 400 V 3 phases 5000 rpm for LXM15LD17N4 at 480 V 3 phases 6000 rpm for LXM15LD10N4 at 480 V 3 phases
Maximum mechanical speed	6000 rpm
Product compatibility	LXM05AD17M3X at 200...240 V 3 phases LXM05AD22N4 at 380...480 V 3 phases LXM05AD28M2 at 200...240 V single phase LXM05BD17M3X at 200...240 V 3 phases LXM05BD22N4 at 380...480 V 3 phases LXM05BD28M2 at 200...240 V single phase LXM05CD17M3X at 200...240 V 3 phases LXM05CD22N4 at 380...480 V 3 phases LXM05CD28M2 at 200...240 V single phase LXM15LD10N4 at 230 V 3 phases LXM15LD10N4 at 400 V 3 phases LXM15LD10N4 at 480 V 3 phases LXM15LD13M3 at 230 V 3 phases LXM15LD17N4 at 400 V 3 phases LXM15LD17N4 at 480 V 3 phases LXM15LD21M3 at 230 V single phase LXM15LD21M3 at 230 V 3 phases
Shaft end	Keyed
IP degree of protection	IP50
Encoder type	Absolute single turn SinCos Hiperface
Encoder feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Straight connectors
Number of poles	8

## Complementary

Range compatibility	Lexium 05 Lexium 15
Nominal torque	3.4 N.m for LXM15LD10N4 at 230 V 3 phases 3.4 N.m for LXM15LD10N4 at 400 V 3 phases 3.4 N.m for LXM15LD10N4 at 480 V 3 phases 3.4 N.m for LXM15LD13M3 at 230 V 3 phases 3.7 N.m for LXM15LD17N4 at 480 V 3 phases 4 N.m for LXM15LD17N4 at 400 V 3 phases 4.4 N.m for LXM05AD22N4 at 380...480 V 3 phases 4.4 N.m for LXM05BD22N4 at 380...480 V 3 phases 4.4 N.m for LXM05CD22N4 at 380...480 V 3 phases 4.5 N.m for LXM15LD21M3 at 230 V single phase 4.96 N.m for LXM05AD28M2 at 200...240 V single phase 4.96 N.m for LXM05AD17M3X at 200...240 V 3 phases 4.96 N.m for LXM05BD28M2 at 200...240 V single phase 4.96 N.m for LXM05BD17M3X at 200...240 V 3 phases 4.96 N.m for LXM05CD28M2 at 200...240 V single phase 4.96 N.m for LXM05CD17M3X at 200...240 V 3 phases 5.8 N.m for LXM15LD21M3 at 230 V 3 phases
Maximum current Irms	17.1 A for LXM15LD13M3 17.1 A for LXM15LD21M3 17.1 A for LXM15LD10N4 17.1 A for LXM15LD17N4 17.1 A for LXM05AD28M2 17.1 A for LXM05AD17M3X 17.1 A for LXM05AD22N4 17.1 A for LXM05BD28M2 17.1 A for LXM05BD17M3X 17.1 A for LXM05BD22N4 17.1 A for LXM05CD28M2 17.1 A for LXM05CD17M3X 17.1 A for LXM05CD22N4
Switching frequency	8 kHz for LEX05
Torque constant	1.21 N.m/A rms at 120 °C
Back electromagnetical force (emf) constant	77 V rms/krpm at 120 °C
Rotor inertia	2.31 kg.cm <sup>2</sup> without brake
Stator resistance	2.4 Ohm at 20 °C
Stator inductance	12.7 mH at 20 °C 13.5 mH at 20 °C
Stator electrical time constant	5.29 ms at 20 °C 5.63 ms at 20 °C
Maximum radial force Fr	620 N at 4000 rpm 690 N at 3000 rpm 790 N at 2000 rpm 990 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Product weight	5.9 kg

## Environment

RoHS EUR conformity date	0850
RoHS EUR status	Compliant