

BSH1402P21A2A

servo motor BSH, Lexium 05, 14.9 Nm,
4000rpm, 140mm, smooth shaft, Sincos single
turn, without brake, IP65, IP67





Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	4000 rpm
Continuous stall torque	19.5 N.M for LXM15MD40N4, 400 V, three phase 19.5 N.M for LXM15MD40N4, 480 V, three phase 14.9 N.M for LXM15LD28M3, 230 V, three phase 14.9 N.M for LXM15MD28N4, 230 V, three phase 14.9 N.M for LXM15MD28N4, 400 V, three phase 14.9 N.M for LXM15MD28N4, 480 V, three phase 19.5 N.M for LXM15MD56N4, 230 V, three phase 19.5 N.M for LXM15MD56N4, 400 V, three phase 19.5 N.M for LXM15MD56N4, 480 V, three phase 19.2 N.M for LXM05AD42M3X, 200...240 V, three phase 19.2 N.M for LXM05AD57N4, 380...480 V, three phase 19.2 N.M for LXM05BD42M3X, 200...240 V, three phase 19.2 N.M for LXM05BD57N4, 380...480 V, three phase 19.2 N.M for LXM05CD42M3X, 200...240 V, three phase 19.2 N.m for LXM05CD57N4, 380...480 V, three phase
Peak stall torque	28.71 N.M for LXM15LD28M3, 230 V, three phase 28.71 N.M for LXM15MD28N4, 230 V, three phase 28.71 N.M for LXM15MD28N4, 400 V, three phase 28.71 N.M for LXM15MD28N4, 480 V, three phase 39.3 N.M for LXM15MD40N4, 230 V, three phase 39.3 N.M for LXM15MD40N4, 400 V, three phase 39.3 N.M for LXM15MD40N4, 480 V, three phase 47.5 N.M for LXM15MD56N4, 230 V, three phase 47.5 N.M for LXM15MD56N4, 400 V, three phase 47.5 N.M for LXM15MD56N4, 480 V, three phase 41.94 N.M for LXM05AD42M3X, 200...240 V, three phase 47.5 N.M for LXM05AD57N4, 380...480 V, three phase 41.94 N.M for LXM05BD42M3X, 200...240 V, three phase 47.5 N.M for LXM05BD57N4, 380...480 V, three phase 41.94 N.M for LXM05CD42M3X, 200...240 V, three phase 47.5 N.m for LXM05CD57N4, 380...480 V, three phase
Nominal output power	2350 W for LXM05AD42M3X, 200...240 V, three phase 2350 W for LXM05BD42M3X, 200...240 V, three phase 2350 W for LXM05CD42M3X, 200...240 V, three phase 2350 W for LXM15LD28M3, 230 V, three phase 2350 W for LXM15MD28N4, 230 V, three phase 2350 W for LXM15MD40N4, 230 V, three phase 2350 W for LXM15MD56N4, 230 V, three phase 3350 W for LXM15MD28N4, 480 V, three phase 3350 W for LXM15MD40N4, 480 V, three phase 3400 W for LXM05AD57N4, 380...480 V, three phase 3400 W for LXM05BD57N4, 380...480 V, three phase 3400 W for LXM05CD57N4, 380...480 V, three phase 3400 W for LXM15MD28N4, 400 V, three phase 3400 W for LXM15MD40N4, 400 V, three phase 3400 W for LXM15MD56N4, 400 V, three phase 3400 W for LXM15MD56N4, 480 V, three phase

Nominal torque	8 N.M for LXM15MD40N4, 480 V, three phase 10.8 N.M for LXM05AD57N4, 380...480 V, three phase 10.8 N.M for LXM05BD57N4, 380...480 V, three phase 10.8 N.M for LXM05CD57N4, 380...480 V, three phase 10.8 N.M for LXM15MD28N4, 400 V, three phase 10.8 N.M for LXM15MD40N4, 400 V, three phase 10.8 N.M for LXM15MD56N4, 400 V, three phase 10.8 N.M for LXM15MD56N4, 480 V, three phase 15 N.M for LXM05AD42M3X, 200...240 V, three phase 15 N.M for LXM05BD42M3X, 200...240 V, three phase 15 N.M for LXM05CD42M3X, 200...240 V, three phase 15 N.M for LXM15LD28M3, 230 V, three phase 15 N.M for LXM15MD28N4, 230 V, three phase 15 N.M for LXM15MD40N4, 230 V, three phase 15 N.M for LXM15MD56N4, 230 V, three phase 8 N.m for LXM15MD28N4, 480 V, three phase
Nominal speed	1500 rpm for LXM05AD42M3X, 200...240 V, three phase 1500 rpm for LXM05BD42M3X, 200...240 V, three phase 1500 rpm for LXM05CD42M3X, 200...240 V, three phase 1500 rpm for LXM15MD28N4, 230 V, three phase 1500 rpm for LXM15MD40N4, 230 V, three phase 3000 rpm for LXM05AD57N4, 380...480 V, three phase 3000 rpm for LXM05BD57N4, 380...480 V, three phase 3000 rpm for LXM05CD57N4, 380...480 V, three phase 3000 rpm for LXM15MD28N4, 400 V, three phase 3000 rpm for LXM15MD40N4, 400 V, three phase 4000 rpm for LXM15MD28N4, 480 V, three phase 1500 rpm for LXM15LD28M3, 230 V, three phase 1500 rpm for LXM15MD56N4, 230 V, three phase 3000 rpm for LXM15MD56N4, 400 V, three phase 3000 rpm for LXM15MD56N4, 480 V, three phase 4000 rpm for LXM15MD40N4, 480 V, three phase
Product compatibility	LXM05AD42M3X at 200...240 V three phase LXM05BD42M3X at 200...240 V three phase LXM05CD42M3X at 200...240 V three phase LXM15LD28M3 at 230 V three phase LXM15MD28N4 at 400 V three phase LXM15MD28N4 at 480 V three phase LXM15MD40N4 at 400 V three phase LXM15MD40N4 at 480 V three phase LXM05AD57N4 at 380...480 V three phase LXM05BD57N4 at 380...480 V three phase LXM05CD57N4 at 380...480 V three phase LXM15MD28N4 at 230 V three phase LXM15MD40N4 at 230 V three phase LXM15MD56N4 at 230 V three phase LXM15MD56N4 at 400 V three phase LXM15MD56N4 at 480 V three phase
Shaft end	Untapped
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 15 Lexium 05
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	13.2 A
Maximum continuous power	4.2 W
Maximum permanent current	44.1 A
Second shaft	Without second shaft end
Shaft diameter	24 mm
Shaft length	50 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	140 mm
Number of motor stacks	2
Torque constant	1.47 N.m/A at 120 °C
Back emf constant	101 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	12.68 kg.cm ²
Stator resistance	0.6 Ohm at 20 °C
Stator inductance	7.4 mH at 20 °C 7.71 mH at 20 °C
Stator electrical time constant	12.33 Ms at 20 °C 12.85 ms at 20 °C
Maximum radial force Fr	1680 N at 3000 rpm 1930 N at 2000 rpm 2430 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	272.5 mm
Centring collar diameter	130 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	11 mm
Circle diameter of the mounting holes	165 mm
Net weight	16.6 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	27.0 cm
Package 1 Width	27.0 cm
Package 1 Length	48.2 cm
Package 1 Weight	11.5 kg
Unit Type of Package 2	P06
Number of Units in Package 2	8
Package 2 Height	77.0 cm
Package 2 Width	80.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	149.716 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Contractual warranty

Warranty	18 months
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