

BSH1402P31F1A

AC servo motor BSH, Lexium 05, 14.9N.m,
1500rpm, untapped shaft, with brake, IP50





Main

Device short name	BSH
Product or Component Type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	172.6 Lbf.In (19.5 N.m) LXM15MD40N4, 400 V, three phase 172.6 Lbf.In (19.5 N.m) LXM15MD40N4, 480 V, three phase 131.9 Lbf.In (14.9 N.m) LXM15LD28M3, 230 V, three phase 131.9 Lbf.In (14.9 N.m) LXM15MD28N4, 230 V, three phase 131.9 Lbf.In (14.9 N.m) LXM15MD28N4, 400 V, three phase 131.9 Lbf.In (14.9 N.m) LXM15MD28N4, 480 V, three phase 172.6 Lbf.In (19.5 N.m) LXM15MD56N4, 230 V, three phase 172.6 Lbf.In (19.5 N.m) LXM15MD56N4, 400 V, three phase 172.6 Lbf.In (19.5 N.m) LXM15MD56N4, 480 V, three phase 169.9 Lbf.In (19.2 N.m) LXM05AD42M3X, 200...240 V, three phase 169.9 Lbf.In (19.2 N.m) LXM05AD57N4, 380...480 V, three phase 169.9 Lbf.In (19.2 N.m) LXM05BD42M3X, 200...240 V, three phase 169.9 Lbf.In (19.2 N.m) LXM05BD57N4, 380...480 V, three phase 169.9 Lbf.In (19.2 N.m) LXM05CD42M3X, 200...240 V, three phase 169.9 lbf.in (19.2 N.m) LXM05CD57N4, 380...480 V, three phase
Peak stall torque	254.10 Lbf.In (28.71 N.m) LXM15LD28M3, 230 V, three phase 254.10 Lbf.In (28.71 N.m) LXM15MD28N4, 230 V, three phase 254.10 Lbf.In (28.71 N.m) LXM15MD28N4, 400 V, three phase 254.10 Lbf.In (28.71 N.m) LXM15MD28N4, 480 V, three phase 347.8 Lbf.In (39.3 N.m) LXM15MD40N4, 230 V, three phase 347.8 Lbf.In (39.3 N.m) LXM15MD40N4, 400 V, three phase 347.8 Lbf.In (39.3 N.m) LXM15MD40N4, 480 V, three phase 420.4 Lbf.In (47.5 N.m) LXM15MD56N4, 230 V, three phase 420.4 Lbf.In (47.5 N.m) LXM15MD56N4, 400 V, three phase 420.4 Lbf.In (47.5 N.m) LXM15MD56N4, 480 V, three phase 371.20 Lbf.In (41.94 N.m) LXM05AD42M3X, 200...240 V, three phase 420.4 Lbf.In (47.5 N.m) LXM05AD57N4, 380...480 V, three phase 371.20 Lbf.In (41.94 N.m) LXM05BD42M3X, 200...240 V, three phase 420.4 Lbf.In (47.5 N.m) LXM05BD57N4, 380...480 V, three phase 371.20 Lbf.In (41.94 N.m) LXM05CD42M3X, 200...240 V, three phase 420.4 lbf.in (47.5 N.m) LXM05CD57N4, 380...480 V, three phase

Nominal output power	2350 W LXM05AD42M3X, 200...240 V, three phase 2350 W LXM05BD42M3X, 200...240 V, three phase 2350 W LXM05CD42M3X, 200...240 V, three phase 2350 W LXM15LD28M3, 230 V, three phase 2350 W LXM15MD28N4, 230 V, three phase 2350 W LXM15MD40N4, 230 V, three phase 2350 W LXM15MD56N4, 230 V, three phase 3350 W LXM15MD28N4, 480 V, three phase 3350 W LXM15MD40N4, 480 V, three phase 3400 W LXM05AD57N4, 380...480 V, three phase 3400 W LXM05BD57N4, 380...480 V, three phase 3400 W LXM05CD57N4, 380...480 V, three phase 3400 W LXM15MD28N4, 400 V, three phase 3400 W LXM15MD40N4, 400 V, three phase 3400 W LXM15MD56N4, 400 V, three phase 3400 W LXM15MD56N4, 480 V, three phase
Nominal torque	70.8 Lbf.In (8 N.m) LXM15MD40N4, 480 V, three phase 95.6 Lbf.In (10.8 N.m) LXM05AD57N4, 380...480 V, three phase 95.6 Lbf.In (10.8 N.m) LXM05BD57N4, 380...480 V, three phase 95.6 Lbf.In (10.8 N.m) LXM05CD57N4, 380...480 V, three phase 95.6 Lbf.In (10.8 N.m) LXM15MD28N4, 400 V, three phase 95.6 Lbf.In (10.8 N.m) LXM15MD40N4, 400 V, three phase 95.6 Lbf.In (10.8 N.m) LXM15MD56N4, 400 V, three phase 95.6 Lbf.In (10.8 N.m) LXM15MD56N4, 480 V, three phase 132.8 Lbf.In (15 N.m) LXM05AD42M3X, 200...240 V, three phase 132.8 Lbf.In (15 N.m) LXM05BD42M3X, 200...240 V, three phase 132.8 Lbf.In (15 N.m) LXM05CD42M3X, 200...240 V, three phase 132.8 Lbf.In (15 N.m) LXM15LD28M3, 230 V, three phase 132.8 Lbf.In (15 N.m) LXM15MD28N4, 230 V, three phase 132.8 Lbf.In (15 N.m) LXM15MD40N4, 230 V, three phase 132.8 Lbf.In (15 N.m) LXM15MD56N4, 230 V, three phase 70.8 lbf.in (8 N.m) LXM15MD28N4, 480 V, three phase
Nominal speed	1500 rpm LXM05AD42M3X, 200...240 V, three phase 1500 rpm LXM05BD42M3X, 200...240 V, three phase 1500 rpm LXM05CD42M3X, 200...240 V, three phase 1500 rpm LXM15MD28N4, 230 V, three phase 1500 rpm LXM15MD40N4, 230 V, three phase 3000 rpm LXM05AD57N4, 380...480 V, three phase 3000 rpm LXM05BD57N4, 380...480 V, three phase 3000 rpm LXM05CD57N4, 380...480 V, three phase 3000 rpm LXM15MD28N4, 400 V, three phase 3000 rpm LXM15MD40N4, 400 V, three phase 4000 rpm LXM15MD28N4, 480 V, three phase 1500 rpm LXM15LD28M3, 230 V, three phase 1500 rpm LXM15MD56N4, 230 V, three phase 3000 rpm LXM15MD56N4, 400 V, three phase 3000 rpm LXM15MD56N4, 480 V, three phase 4000 rpm LXM15MD40N4, 480 V, three phase

Product compatibility	LXM05AD42M3X 200...240 V three phase LXM05BD42M3X 200...240 V three phase LXM05CD42M3X 200...240 V three phase LXM15LD28M3 230 V three phase LXM15MD28N4 400 V three phase LXM15MD28N4 480 V three phase LXM15MD40N4 400 V three phase LXM15MD40N4 480 V three phase LXM05AD57N4 380...480 V three phase LXM05BD57N4 380...480 V three phase LXM05CD57N4 380...480 V three phase LXM15MD28N4 230 V three phase LXM15MD40N4 230 V three phase LXM15MD56N4 230 V three phase LXM15MD56N4 400 V three phase LXM15MD56N4 480 V three phase
Shaft end	Untapped
IP Degree of Protection	IP50 standard
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting Support	International standard flange
Electrical Connection	Straight connectors

Complementary

Range Compatibility	Lexium 15 Lexium 05
Supply voltage max	480 V
Phase	Three phase
Continuous stall current	13.2 A
Maximum continuous power	4.2 W
Maximum current Irms	44.1 A LXM15LD28M3 44.1 A LXM15MD28N4 44.1 A LXM15MD40N4 44.1 A LXM15MD56N4 44.1 A LXM05AD42M3X 44.1 A LXM05AD57N4 44.1 A LXM05BD42M3X 44.1 A LXM05BD57N4 44.1 A LXM05CD42M3X 44.1 A LXM05CD57N4 72 A LXM32.D72N4
Maximum permanent current	44.1 A
Switching frequency	4 kHz
Second shaft	Without second shaft end
Shaft diameter	0.9 in (24 mm)
Shaft length	2.0 in (50 mm)
Feedback type	Single turn SinCos Hiperface
Holding torque	203.6 lbf.in (23 N.m) holding brake
Motor flange size	5.5 in (140 mm)
Number of motor stacks	2
Torque constant	1.47 N.m/A 248.0000000000 °F (120 °C)
Back emf constant	101 V/krpm 248.0000000000 °F (120 °C)
Number of motor poles	10
Rotor inertia	14.48 kg.cm ²
Stator resistance	0.6 Ohm 68.0000000000 °F (20 °C)
Stator inductance	7.4 mH 68.0000000000 °F (20 °C)
Stator electrical time constant	12.33 ms 68.0000000000 °F (20 °C)
Maximum radial force Fr	1680 N 3000 rpm 1930 N 2000 rpm 2430 N 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	24 W
Type of cooling	Natural convection

Length	12.2 in (310.5 mm)
Centring collar diameter	5.1 in (130 mm)
Centring collar depth	0.1 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (11 mm)
Circle diameter of the mounting holes	6.5 in (165 mm)
Net Weight	39.02 lb(US) (17.7 kg)

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3389118141889
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	10.6 in (27.0 cm)
Package 1 Width	10.6 in (27.0 cm)
Package 1 Length	19.0 in (48.2 cm)
Package 1 Weight	29.30 lb(US) (13.29 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
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.

Contractual warranty

Warranty	18 months
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