Product datasheet Characteristics

BSH1401T01F2A

AC servo motor BSH - 11.1 N.m - 2500 rpm - untapped shaft - with brake - IP50





Main		
Product or component type	Servo motor	
Device short name	BSH	
Maximum mechanical speed	4000 rpm	
Continuous stall torque	11.1 N.m for LXM15MD56N4, 230 V, three phase 11.4 N.m for LXM05AD42M3X, 200240 V, three phase 11.4 N.m for LXM05BD42M3X, 200240 V, three phase 11.4 N.m for LXM05CD42M3X, 200240 V, three phase	
Peak stall torque	23.33 N.m for LXM15MD56N4, 230 V, three phase 23.33 N.m for LXM05AD42M3X, 200240 V, three phase 23.33 N.m for LXM05BD42M3X, 200240 V, three phase 23.33 N.m for LXM05CD42M3X, 200240 V, three phase	:
Nominal output power	2000 W for LXM15MD56N4, 230 V, three phase 2200 W for LXM05AD42M3X, 200240 V, three phase 2200 W for LXM05BD42M3X, 200240 V, three phase 2200 W for LXM05CD42M3X, 200240 V, three phase	
Nominal torque	6.9 N.m for LXM05AD42M3X, 200240 V, three phase 6.9 N.m for LXM05BD42M3X, 200240 V, three phase 6.9 N.m for LXM05CD42M3X, 200240 V, three phase 7.63 N.m for LXM15MD56N4, 230 V, three phase	:
Nominal speed	3000 rpm for LXM05AD42M3X, 200240 V, three phase 3000 rpm for LXM05BD42M3X, 200240 V, three phase 3000 rpm for LXM05CD42M3X, 200240 V, three phase 2500 rpm for LXM15MD56N4, 230 V, three phase	
Product compatibility	LXM05AD42M3X at 200240 V three phase LXM05BD42M3X at 200240 V three phase LXM05CD42M3X at 200240 V three phase LXM15MD56N4 at 230 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	Rotatable right-angled connectors	

Complementary

Complementary	
Range compatibility	Lexium 15 Lexium 05
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	13.9 A
Maximum continuous power	3.6 W
Maximum current Irms	37.1 A for LXM15MD56N4 37.1 A for LXM05AD42M3X 37.1 A for LXM05BD42M3X 37.1 A for LXM05CD42M3X
Maximum permanent current	37.1 A
Switching frequency	4 kHz
Second shaft	Without second shaft end
Shaft diameter	24 mm
Shaft length	50 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	23 N.m holding brake
Motor flange size	140 mm
Number of motor stacks	1
Torque constant	0.83 N.m/A at 120 °C
Back emf constant	56 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	8.56 kg.cm²
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
Brake pull-in power	24 W
Type of cooling	Natural convection
Length	255.5 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
Product weight	13 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) EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration	
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