Product data sheet
Characteristics

BSH0553P11A2A
servo motor BSH, Lexium 05, 1.3N.m, 3000rpm, 55mm, keyed shaft, Sincos single turn, without brake, 3 phases, IP50



Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	9000 Rpm
Continuous stall torque	1.05 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase 1.05 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase 1.3 N.M for LXM05AD10M2, 200...240 V, single phase 1.3 N.M for LXM05BD10M2, 200...240 V, single phase 1.3 N.M for LXM05CD10M2, 200...240 V, single phase 1.3 N.M for LXM05AD10M3X, 200...240 V, three phase 1.3 N.M for LXM05BD10M3X at 1.5 A, 200...240 V, three phase 1.3 N.M for LXM05CD10M3X, 200...240 V, three phase 1.3 N.M for LXM15LD13M3, 230 V, single phase 1.3 N.M for LXM15LD13M3, 230 V, three phase 1.3 N.M for LXM15LD10N4, 400 V, three phase 1.3 N.M for LXM05AD14N4, 380...480 V, three phase 1.3 N.M for LXM05BD14N4, 380...480 V, three phase 1.3 N.M for LXM05CD14N4, 380...480 V, three phase
Peak stall torque	3.5 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase 3.5 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase 2.7 N.M for LXM15LD13M3, 230 V, single phase 3.18 N.M for LXM05AD10M2, 200...240 V, single phase 3.18 N.M for LXM05BD10M2, 200...240 V, single phase 3.18 N.M for LXM05CD10M2, 200...240 V, single phase 2.7 N.M for LXM15LD13M3 at 1.5 A, 230 V, three phase 3.87 N.M for LXM15LD10N4, 400 V, three phase 3.18 N.M for LXM05AD10M3X, 200...240 V, three phase 3.87 N.M for LXM05AD14N4, 380...480 V, three phase 3.18 N.M for LXM05BD10M3X, 200...240 V, three phase 3.87 N.M for LXM05BD14N4, 380...480 V, three phase 3.18 N.M for LXM05CD10M3X, 200...240 V, three phase 3.87 N.M for LXM05CD14N4, 380...480 V, three phase
Nominal output power	400 W for LXM32.U60N4 at 1.5 A, 400 V, three phase 400 W for LXM32.U60N4 at 1.5 A, 480 V, three phase 340 W for LXM15LD13M3, 230 V, three phase 340 W for LXM15LD13M3, 230 V, single phase 350 W for LXM05AD10M2, 200...240 V, single phase 350 W for LXM05BD10M2, 200...240 V, single phase 350 W for LXM05CD10M2 at 1.5 A, 200...240 V, single phase 350 W for LXM05AD10M3X, 200...240 V, three phase 350 W for LXM05AD14N4, 380...480 V, three phase 350 W for LXM05BD10M3X, 200...240 V, three phase 350 W for LXM05BD14N4, 380...480 V, three phase 350 W for LXM05CD10M3X, 200...240 V, three phase 350 W for LXM05CD14N4, 380...480 V, three phase 670 W for LXM15LD10N4, 400 V, three phase

Nominal torque	0.65 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase 0.65 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase 1.08 N.M for LXM15LD13M3, 230 V, single phase 1.1 N.M for LXM05AD10M2, 200...240 V, single phase 1.1 N.M for LXM05BD10M2, 200...240 V, single phase 1.1 N.M for LXM05CD10M2, 200...240 V, single phase 0.8 N.M for LXM15LD10N4 at 1.5 A, 400 V, three phase 1.08 N.M for LXM15LD13M3, 230 V, three phase 1.1 N.M for LXM05AD10M3X, 200...240 V, three phase 1.1 N.M for LXM05AD14N4, 380...480 V, three phase 1.1 N.M for LXM05BD10M3X, 200...240 V, three phase 1.1 N.M for LXM05BD14N4, 380...480 V, three phase 1.1 N.M for LXM05CD10M3X, 200...240 V, three phase 1.1 N.M for LXM05CD14N4, 380...480 V, three phase
Nominal speed	6000 rpm for LXM32.U60N4 at 1.5 A, 400 V, three phase 6000 rpm for LXM32.U60N4 at 1.5 A, 480 V, three phase 3000 rpm for LXM05AD10M2, 200...240 V, single phase 3000 rpm for LXM05BD10M2, 200...240 V, single phase 3000 rpm for LXM05CD10M2, 200...240 V, single phase 3000 rpm for LXM05AD10M3X, 200...240 V, three phase 3000 rpm for LXM05AD14N4 at 1.5 A, 380...480 V, three phase 3000 rpm for LXM05BD10M3X, 200...240 V, three phase 3000 rpm for LXM05BD14N4, 380...480 V, three phase 3000 rpm for LXM05CD10M3X, 200...240 V, three phase 3000 rpm for LXM05CD14N4, 380...480 V, three phase 3000 rpm for LXM15LD13M3, 230 V, single phase 3000 rpm for LXM15LD13M3, 230 V, three phase 8000 rpm for LXM15LD10N4, 400 V, three phase
Product compatibility	LXM05AD10M2 at 200...240 V single phase LXM05BD10M2 at 200...240 V single phase LXM05CD10M2 at 200...240 V single phase LXM15LD13M3 at 230 V single phase LXM32.U60N4 at 400 V three phase LXM32.U60N4 at 480 V three phase LXM05AD10M3X at 200...240 V three phase LXM05BD10M3X at 200...240 V three phase LXM05CD10M3X at 200...240 V three phase LXM15LD13M3 at 230 V three phase LXM05AD14N4 at 380...480 V three phase LXM05BD14N4 at 380...480 V three phase LXM05CD14N4 at 380...480 V three phase LXM15LD10N4 at 400 V three phase
Shaft end	Keyed
IP degree of protection	IP50 standard
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

Complementary

Range compatibility	Lexium 05 Lexium 15 Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	1.7 A
Continuous power	0.97 W
Maximum current Irms	8.7 A for LXM15LD13M3 8.7 A for LXM15LD10N4 6.5 A for LXM05AD10M2 6.5 A for LXM05AD10M3X 6.5 A for LXM05AD14N4 6.5 A for LXM05BD10M2 6.5 A for LXM05BD10M3X 6.5 A for LXM05BD14N4 6.5 A for LXM05CD10M2 6.5 A for LXM05CD10M3X 6.5 A for LXM05CD14N4 6 A for LXM32.U60N4
Maximum permanent current	6.5 A
Switching frequency	8 kHz
Second shaft	Without second shaft end

Shaft diameter	9 Mm
Shaft length	20 Mm
Key width	12 Mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	55 Mm
Number of motor stacks	3
Torque constant	0.7 N.M/A at 120 °C
Back emf constant	41 V/Krpm at 120 °C
Number of motor poles	3.0
Rotor inertia	0.134 Kg.Cm²
Stator resistance	10.4 Ohm at 20 °C
Stator inductance	13.02 MH at 20 °C
Stator electrical time constant	2.4 Ms at 20 °C
Maximum radial force Fr	190 N at 8000 rpm 200 N at 7000 rpm 210 N at 6000 rpm 230 N at 5000 rpm 240 N at 4000 rpm 270 N at 3000 rpm 310 N at 2000 rpm 390 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	176.5 Mm
Centring collar diameter	40 Mm
Centring collar depth	2 Mm
Number of mounting holes	4
Mounting holes diameter	5.5 Mm
Circle diameter of the mounting holes	63 Mm
Net weight	1.76 Kg
Sizing reference	BSH0553P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	120 °C
Temperature magnet hot	100 °C
Temperature magnet rt	20 °C
Output current 3s peak	6.5 A
Inertia	0.0 Kg.Cm² of brake 0.134 Kg.Cm² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	12.3 Cm
Package 1 Width	12.8 Cm
Package 1 Length	37.7 Cm
Package 1 Weight	1.4 Kg

Offer Sustainability

Total lifecycle Carbon footprint	743 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	6.129041769
Carbon footprint of the manufacturing phase [A1 to A3]	6 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1806240786
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0124197543
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	736.0634744947
Carbon footprint of the use phase [B2, B3, B4, B6]	736 kg CO2 eq.

Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	0.1319233415
Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.
Total lifecycle Carbon footprint	743
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	8c11b0c9-e501-4810-83eb-05fc6605ede4
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which
PVC free	Yes
End of life manual availability	No need of specific recycling operations
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised