

Product data sheet

Characteristics

BSH1402T22A2P

AC servo motor BSH - 14.4 Nm - 4000 rpm -
untapped shaft - without brake - IP65

Main

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| Product or component type | AC servo motors |
| Component name | BSH |
| Continuous stall torque | 14.4 N.m for LXM05AD42M3X at 200...240 V 3 phases 14.4 N.m for LXM05BD42M3X at 200...240 V 3 phases 14.4 N.m for LXM05CD42M3X at 200...240 V 3 phases |
| Peak stall torque | 24.56 N.m for LXM05AD42M3X at 200...240 V 3 phases 24.56 N.m for LXM05BD42M3X at 200...240 V 3 phases 24.56 N.m for LXM05CD42M3X at 200...240 V 3 phases |
| Nominal output power | 2900 W for LXM05AD42M3X at 200...240 V 3 phases 2900 W for LXM05BD42M3X at 200...240 V 3 phases 2900 W for LXM05CD42M3X at 200...240 V 3 phases |
| Nominal speed | 3000 rpm for LXM05AD42M3X at 200...240 V 3 phases 3000 rpm for LXM05BD42M3X at 200...240 V 3 phases 3000 rpm for LXM05CD42M3X at 200...240 V 3 phases |
| Maximum mechanical speed | 4000 rpm |
| Product compatibility | LXM05AD42M3X at 200...240 V 3 phases LXM05BD42M3X at 200...240 V 3 phases LXM05CD42M3X at 200...240 V 3 phases |
| Shaft end | Untapped |
| IP degree of protection | IP65 |
| Encoder type | Absolute multturn SinCos Hiperface |
| Encoder feedback resolution | 131072 points/turn x 4096 turns |
| Holding brake | Without |
| Mounting support | International standard flange |
| Electrical connection | Rotatable right-angled connectors |
| Number of poles | 10 |

Complementary

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| Range compatibility | Lexium 05 |
| Nominal torque | 9.2 N.m for LXM05AD42M3X at 200...240 V 3 phases 9.2 N.m for LXM05BD42M3X at 200...240 V 3 phases 9.2 N.m for LXM05CD42M3X at 200...240 V 3 phases |
| Maximum current Irms | 75.2 A for LXM05AD42M3X 75.2 A for LXM05BD42M3X 75.2 A for LXM05CD42M3X |
| Switching frequency | 4 kHz for LEX05 |
| Torque constant | 0.87 N.m/A rms at 120 °C |
| Back electromagnetical force (emf) constant | 59 V rms/krpm at 120 °C |
| Rotor inertia | 12.68 kg.cm² without brake |
| Stator resistance | 0.21 Ohm at 20 °C |
| Stator inductance | 2.54 mH at 20 °C |

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|---------------------------------|--|
| Stator electrical time constant | 12.1 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 |
| Product weight | 16 kg |