

BRH0851M10F1A

AC servo motors BRH - 3.1 N.m - 6000 rpm -
keyed shaft - with brake - IP41

Main

| | |
|-----------------------------|--|
| Product or component type | Motion servo motors |
| Component name | BRH |
| Continuous stall torque | 1.86 N.m |
| Peak stall torque | 3.4 N.m for LXM05AD10M2 3.4 N.m for LXM05BD10M2 3.4 N.m for LXM05CD10M2 4.05 N.m for LXM05AD14N4 4.05 N.m for LXM05BD14N4 4.05 N.m for LXM05CD14N4 5.27 N.m for LXM05AD17M3X 5.27 N.m for LXM05BD17M3X 5.27 N.m for LXM05CD17M3X |
| Nominal output power | 520 W for LXM05BD17M3X 520 W for LXM05CD10M2 520 W for LXM05CD17M3X 520 W for LXM05AD10M2 520 W for LXM05AD17M3X 520 W for LXM05BD10M2 910 W for LXM05BD14N4 910 W for LXM05CD14N4 910 W for LXM05AD14N4 |
| Nominal speed | 3000 rpm for LXM05AD10M2 3000 rpm for LXM05AD17M3X 3000 rpm for LXM05BD10M2 3000 rpm for LXM05BD17M3X 3000 rpm for LXM05CD10M2 3000 rpm for LXM05CD17M3X 6000 rpm for LXM05AD14N4 6000 rpm for LXM05BD14N4 6000 rpm for LXM05CD14N4 |
| Maximum mechanical speed | 6000 rpm |
| Product compatibility | LXM05AD10M2 at 230 V single phase LXM05AD14N4 at 400/480 V 3 phases LXM05AD17M3X at 230 V 3 phases LXM05BD10M2 at 230 V single phase LXM05BD14N4 at 400/480 V 3 phases LXM05BD17M3X at 230 V 3 phases LXM05CD10M2 at 230 V single phase LXM05CD14N4 at 400/480 V 3 phases LXM05CD17M3X at 230 V 3 phases |
| Shaft end | Keyed |
| IP degree of protection | IP41 |
| Encoder type | Single turn SinCos Hiperface |
| Encoder feedback resolution | 16384 points/turn |
| Holding brake | With |
| Mounting support | International standard flange |
| Electrical connection | Straight connectors |
| Number of poles | 10 |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Complementary

| | |
|---------------------------------|---|
| Range compatibility | Lexium 05 |
| Switching frequency | 8 kHz |
| Nominal torque | 1.45 N.m for LXM05AD14N4 1.45 N.m for LXM05BD14N4 1.45 N.m for LXM05CD14N4 1.66 N.m for LXM05AD10M2 1.66 N.m for LXM05AD17M3X 1.66 N.m for LXM05BD10M2 1.66 N.m for LXM05BD17M3X 1.66 N.m for LXM05CD10M2 1.66 N.m for LXM05CD17M3X |
| Maximum current Irms | 6 A for LXM05AD10M2 6 A for LXM05BD10M2 6 A for LXM05CD10M2 7.5 A for LXM05CD14N4 7.5 A for LXM05BD14N4 7.5 A for LXM05AD14N4 11 A for LXM05AD17M3X 11 A for LXM05BD17M3X 11 A for LXM05CD17M3X |
| Torque constant | 0.6 N.m/A rms at 120 °C |
| Back emf constant | 37.9 V rms/krpm at 120 °C |
| Rotor inertia | 1.06 kg.cm ² without brake 1.59 kg.cm ² with brake |
| Stator resistance | 3.3 Ohm |
| Stator inductance | 12.3 mH |
| Stator electrical time constant | 3.7 ms |
| Maximum radial force Fr | 173 N at 6000 rpm 176 N at 5000 rpm 181 N at 4000 rpm 187 N at 3000 rpm 193 N at 2000 rpm 226 N at 1000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Product weight | 2.2 kg |

Environment

| | |
|--------------------------|-------------------|
| RoHS EUR conformity date | 4Q2009 |
| RoHS EUR status | Will be compliant |