

# BSH0701M32F1A

AC servo motor BSH - 1.4 Nm - 8000 rpm - key shaft - with brake - IP65

## Main

|                             |   |
|-----------------------------|---|
| Product or component type   | AC servo motors   |
| Component name              | BSH   |
| Continuous stall torque     | 1.4 N.m for LXM05AD10M3X at 200...240 V 3 phases<br>1.4 N.m for LXM05BD10M3X at 200...240 V 3 phases<br>1.4 N.m for LXM05CD10M3X at 200...240 V 3 phases    |
| Peak stall torque           | 2.66 N.m for LXM05AD10M3X at 200...240 V 3 phases<br>2.66 N.m for LXM05BD10M3X at 200...240 V 3 phases<br>2.66 N.m for LXM05CD10M3X at 200...240 V 3 phases |
| Nominal output power        | 210 W for LXM05AD10M3X at 200...240 V 3 phases<br>210 W for LXM05BD10M3X at 200...240 V 3 phases<br>210 W for LXM05CD10M3X at 200...240 V 3 phases          |
| Nominal speed               | 1500 rpm for LXM05AD10M3X at 200...240 V 3 phases<br>1500 rpm for LXM05BD10M3X at 200...240 V 3 phases<br>1500 rpm for LXM05CD10M3X at 200...240 V 3 phases |
| Maximum mechanical speed    | 8000 rpm  |
| Product compatibility       | LXM05AD10M3X at 200...240 V 3 phases<br>LXM05BD10M3X at 200...240 V 3 phases<br>LXM05CD10M3X at 200...240 V 3 phases  |
| Shaft end                   | Keyed   |
| IP degree of protection     | IP65  |
| Encoder type                | Absolute multitrans SinCos Hiperface  |
| Encoder feedback resolution | 131072 points/turn x 4096 turns   |
| Holding brake               | With  |
| Mounting support            | International standard flange   |
| Electrical connection       | Straight connectors   |
| Number of poles             | 6   |

## Complementary

|   |   |
|---|---|
| Range compatibility                         | Lexium 05   |
| Nominal torque                              | 1.36 N.m for LXM05AD10M3X at 200...240 V 3 phases<br>1.36 N.m for LXM05BD10M3X at 200...240 V 3 phases<br>1.36 N.m for LXM05CD10M3X at 200...240 V 3 phases |
| Maximum current Irms                        | 3.1 A for LXM05AD10M3X<br>3.1 A for LXM05BD10M3X<br>3.1 A for LXM05CD10M3X  |
| Switching frequency                         | 4 kHz for LEX05   |
| Torque constant                             | 1.4 N.m/A rms at 120 °C   |
| Back electromagnetical force (emf) constant | 85 V rms/krpm at 120 °C   |
| Rotor inertia                               | 0.322 kg.cm² with brake   |
| Stator resistance                           | 35.4 Ohm at 20 °C   |
| Stator inductance                           | 131.9 mH at 20 °C   |
| Stator electrical time constant             | 3.73 ms at 20 °C  |

|                         |  |
|-------------------------|--|
| Maximum radial force Fr | 360 N at 6000 rpm<br>380 N at 5000 rpm<br>410 N at 4000 rpm<br>460 N at 3000 rpm<br>520 N at 2000 rpm<br>660 N at 1000 rpm |
| Maximum axial force Fa  | 0.2 x Fr   |
| Product weight          | 2.2 kg   |

## Environment

|                          |           |
|--------------------------|-----------|
| RoHS EUR conformity date | 0850      |
| RoHS EUR status          | Compliant |