

# BSH1402T01A2P

AC servo motor BSH - 14.4 Nm - 4000 rpm -  
untapped shaft - without brake - IP50

## Main

|                             |  |
|-----------------------------|--|
| 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<br>14.4 N.m for LXM05BD42M3X at 200...240 V 3 phases<br>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<br>24.56 N.m for LXM05BD42M3X at 200...240 V 3 phases<br>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<br>2900 W for LXM05BD42M3X at 200...240 V 3 phases<br>2900 W for LXM05CD42M3X at 200...240 V 3 phases          |
| Nominal speed               | 3000 rpm for LXM05AD42M3X at 200...240 V 3 phases<br>3000 rpm for LXM05BD42M3X at 200...240 V 3 phases<br>3000 rpm for LXM05CD42M3X at 200...240 V 3 phases    |
| Maximum mechanical speed    | 4000 rpm   |
| Product compatibility       | LXM05AD42M3X at 200...240 V 3 phases<br>LXM05BD42M3X at 200...240 V 3 phases<br>LXM05CD42M3X at 200...240 V 3 phases   |
| Shaft end                   | Untapped   |
| IP degree of protection     | IP50   |
| Encoder type                | Absolute single turn SinCos Hiperface  |
| Encoder feedback resolution | 131072 points/turn   |
| Holding brake               | Without  |
| Mounting support            | International standard flange  |
| Electrical connection       | Rotatable right-angled connectors  |
| Number of poles             | 10   |

## Complementary

|   |  |
|---|--|
| Range compatibility                         | Lexium 05  |
| Nominal torque                              | 9.2 N.m for LXM05AD42M3X at 200...240 V 3 phases<br>9.2 N.m for LXM05BD42M3X at 200...240 V 3 phases<br>9.2 N.m for LXM05CD42M3X at 200...240 V 3 phases |
| Maximum current Irms                        | 75.2 A for LXM05AD42M3X<br>75.2 A for LXM05BD42M3X<br>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.cm <sup>2</sup> without brake   |
| Stator resistance                           | 0.21 Ohm at 20 °C  |
| Stator inductance                           | 2.54 mH at 20 °C   |

|                                 |  |
|---------------------------------|--|
| Stator electrical time constant | 12.1 ms at 20 °C   |
| Maximum radial force Fr         | 1680 N at 3000 rpm<br>1930 N at 2000 rpm<br>2430 N at 1000 rpm |
| Maximum axial force Fa          | 0.2 x Fr   |
| Product weight                  | 16 kg  |