

# BSH1404P02F2P

AC servo motor BSH - 32.1 Nm - 4000 rpm -  
untapped shaft - with brake - IP50

## Main

|                             |                                                                                                                                                             |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product or component type   | AC servo motors                                                                                                                                             |
| Component name              | BSH                                                                                                                                                         |
| Continuous stall torque     | 32.1 N.m for LXM05AD57N4 at 380...480 V 3 phases<br>32.1 N.m for LXM05BD57N4 at 380...480 V 3 phases<br>32.1 N.m for LXM05CD57N4 at 380...480 V 3 phases    |
| Peak stall torque           | 63.09 N.m for LXM05AD57N4 at 380...480 V 3 phases<br>63.09 N.m for LXM05BD57N4 at 380...480 V 3 phases<br>63.09 N.m for LXM05CD57N4 at 380...480 V 3 phases |
| Nominal output power        | 3400 W for LXM05AD57N4 at 380...480 V 3 phases<br>3400 W for LXM05BD57N4 at 380...480 V 3 phases<br>3400 W for LXM05CD57N4 at 380...480 V 3 phases          |
| Nominal speed               | 3000 rpm for LXM05AD57N4 at 380...480 V 3 phases<br>3000 rpm for LXM05BD57N4 at 380...480 V 3 phases<br>3000 rpm for LXM05CD57N4 at 380...480 V 3 phases    |
| Maximum mechanical speed    | 4000 rpm                                                                                                                                                    |
| Product compatibility       | LXM05AD57N4 at 380...480 V 3 phases<br>LXM05BD57N4 at 380...480 V 3 phases<br>LXM05CD57N4 at 380...480 V 3 phases                                           |
| Shaft end                   | Untapped                                                                                                                                                    |
| IP degree of protection     | IP50                                                                                                                                                        |
| 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       | Rotatable right-angled connectors                                                                                                                           |
| Number of poles             | 10                                                                                                                                                          |

## Complementary

|                                             |                                                                                                                                                          |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range compatibility                         | Lexium 05                                                                                                                                                |
| Nominal torque                              | 10.8 N.m for LXM05AD57N4 at 380...480 V 3 phases<br>10.8 N.m for LXM05BD57N4 at 380...480 V 3 phases<br>10.8 N.m for LXM05CD57N4 at 380...480 V 3 phases |
| Maximum current Irms                        | 95.6 A for LXM05AD57N4<br>95.6 A for LXM05BD57N4<br>95.6 A for LXM05CD57N4                                                                               |
| Switching frequency                         | 4 kHz for LEX05                                                                                                                                          |
| Torque constant                             | 1.57 N.m/A rms at 120 °C                                                                                                                                 |
| Back electromagnetical force (emf) constant | 104 V rms/krpm at 120 °C                                                                                                                                 |
| Rotor inertia                               | 29.2 kg.cm <sup>2</sup> with brake                                                                                                                       |
| Stator resistance                           | 0.28 Ohm at 20 °C                                                                                                                                        |
| Stator inductance                           | 3.9 mH at 20 °C                                                                                                                                          |
| Stator electrical time constant             | 13.93 ms at 20 °C                                                                                                                                        |

|                         |                                                                |
|-------------------------|----------------------------------------------------------------|
| Maximum radial force Fr | 1840 N at 3000 rpm<br>2110 N at 2000 rpm<br>2660 N at 1000 rpm |
| Maximum axial force Fa  | 0.2 x Fr                                                       |
| Product weight          | 26.5 kg                                                        |