

# BSH1403P32A1A

AC servo motor BSH, Lexium 32, 22.2N.m,  
1500rpm, keyed shaft, without brake, IP65



## Main

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product or component type | Servo motor                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Device short name         | BSH                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Maximum mechanical speed  | 4000 rpm                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Continuous stall torque   | 25.4 N.M for LXM05AD57N4, 380...480 V, three phase<br>25.4 N.M for LXM05BD57N4, 380...480 V, three phase<br>25.4 N.M for LXM05CD57N4, 380...480 V, three phase<br>22.2 N.M for LXM15MD40N4, 230 V, three phase<br>22.2 N.M for LXM15MD40N4, 400 V, three phase<br>22.2 N.M for LXM15MD40N4, 480 V, three phase<br>27.8 N.M for LXM15MD56N4, 230 V, three phase<br>27.8 N.M for LXM15MD56N4, 400 V, three phase<br>27.8 N.m for LXM15MD56N4, 480 V, three phase    |
| Peak stall torque         | 41.6 N.M for LXM15MD40N4, 230 V, three phase<br>41.6 N.M for LXM15MD40N4, 400 V, three phase<br>41.6 N.M for LXM15MD40N4, 480 V, three phase<br>57.3 N.M for LXM15MD56N4, 230 V, three phase<br>57.3 N.M for LXM15MD56N4, 400 V, three phase<br>57.3 N.M for LXM15MD56N4, 480 V, three phase<br>57.32 N.M for LXM05AD57N4, 380...480 V, three phase<br>57.32 N.M for LXM05BD57N4, 380...480 V, three phase<br>57.32 N.m for LXM05CD57N4, 380...480 V, three phase |
| Nominal output power      | 3400 W for LXM15MD56N4, 480 V, three phase<br>3000 W for LXM15MD40N4, 230 V, three phase<br>3000 W for LXM15MD56N4, 230 V, three phase<br>3400 W for LXM15MD40N4, 480 V, three phase<br>3900 W for LXM05AD57N4, 380...480 V, three phase<br>3900 W for LXM05BD57N4, 380...480 V, three phase<br>3900 W for LXM05CD57N4, 380...480 V, three phase<br>3900 W for LXM15MD40N4, 400 V, three phase<br>3900 W for LXM15MD56N4, 400 V, three phase                      |
| Nominal torque            | 12.4 N.M for LXM15MD40N4, 400 V, three phase<br>12.4 N.M for LXM15MD56N4, 400 V, three phase<br>12.43 N.M for LXM05AD57N4, 380...480 V, three phase<br>12.43 N.M for LXM05BD57N4, 380...480 V, three phase<br>12.43 N.M for LXM05CD57N4, 380...480 V, three phase<br>18.8 N.M for LXM15MD40N4, 230 V, three phase<br>18.8 N.M for LXM15MD56N4, 230 V, three phase<br>8.1 N.M for LXM15MD40N4, 480 V, three phase<br>8.1 N.m for LXM15MD56N4, 480 V, three phase   |
| Nominal speed             | 1500 rpm for LXM15MD40N4, 230 V, three phase<br>3000 rpm for LXM05AD57N4, 380...480 V, three phase<br>3000 rpm for LXM05BD57N4, 380...480 V, three phase<br>3000 rpm for LXM05CD57N4, 380...480 V, three phase<br>3000 rpm for LXM15MD40N4, 400 V, three phase<br>1500 rpm for LXM15MD56N4, 230 V, three phase<br>3000 rpm for LXM15MD56N4, 400 V, three phase<br>4000 rpm for LXM15MD40N4, 480 V, three phase<br>4000 rpm for LXM15MD56N4, 480 V, three phase    |

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|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product compatibility     | LXM15MD40N4 at 400 V three phase<br>LXM15MD40N4 at 480 V three phase<br>LXM05AD57N4 at 380...480 V three phase<br>LXM05BD57N4 at 380...480 V three phase<br>LXM05CD57N4 at 380...480 V three phase<br>LXM15MD40N4 at 230 V three phase<br>LXM15MD56N4 at 230 V three phase<br>LXM15MD56N4 at 400 V three phase<br>LXM15MD56N4 at 480 V three phase |
| Shaft end                 | Keyed                                                                                                                                                                                                                                                                                                                                              |
| IP degree of protection   | IP65 standard<br>IP67 with IP67 kit                                                                                                                                                                                                                                                                                                                |
| Speed feedback resolution | 131072 points/turn x 4096 turns                                                                                                                                                                                                                                                                                                                    |
| Holding brake             | Without                                                                                                                                                                                                                                                                                                                                            |
| Mounting support          | International standard flange                                                                                                                                                                                                                                                                                                                      |
| Electrical connection     | Straight connectors                                                                                                                                                                                                                                                                                                                                |

## Complementary

|                                       |                                                                                                                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Range compatibility                   | Lexium 05<br>Lexium 15                                                                                               |
| Supply voltage max                    | 480 V                                                                                                                |
| Network number of phases              | Three phase                                                                                                          |
| Continuous stall current              | 17.6 A                                                                                                               |
| Maximum continuous power              | 3.3 W                                                                                                                |
| Maximum current Irms                  | 61 A for LXM15MD40N4<br>61 A for LXM15MD56N4<br>61 A for LXM05AD57N4<br>61 A for LXM05BD57N4<br>61 A for LXM05CD57N4 |
| Maximum permanent current             | 61 A                                                                                                                 |
| Switching frequency                   | 4 kHz                                                                                                                |
| Second shaft                          | Without second shaft end                                                                                             |
| Shaft diameter                        | 24 mm                                                                                                                |
| Shaft length                          | 50 mm                                                                                                                |
| Key width                             | 40 mm                                                                                                                |
| Feedback type                         | Multiturn SinCos Hiperface                                                                                           |
| Motor flange size                     | 140 mm                                                                                                               |
| Number of motor stacks                | 3                                                                                                                    |
| Torque constant                       | 1.58 N.m/A at 120 °C                                                                                                 |
| Back emf constant                     | 105 V/krpm at 120 °C                                                                                                 |
| Number of motor poles                 | 10                                                                                                                   |
| Rotor inertia                         | 17.94 kg.cm <sup>2</sup>                                                                                             |
| Stator resistance                     | 0.4 Ohm at 20 °C                                                                                                     |
| Stator inductance                     | 5.1 mH at 20 °C                                                                                                      |
| Stator electrical time constant       | 12.75 ms at 20 °C                                                                                                    |
| Maximum radial force Fr               | 1780 N at 3000 rpm<br>2030 N at 2000 rpm<br>2560 N at 1000 rpm                                                       |
| Maximum axial force Fa                | 0.2 x Fr                                                                                                             |
| Type of cooling                       | Natural convection                                                                                                   |
| Length                                | 327.5 mm                                                                                                             |
| Centring collar diameter              | 130 mm                                                                                                               |
| Centring collar depth                 | 3.5 mm                                                                                                               |
| Number of mounting holes              | 4                                                                                                                    |
| Mounting holes diameter               | 11 mm                                                                                                                |
| Circle diameter of the mounting holes | 165 mm                                                                                                               |
| Net weight                            | 21.2 kg                                                                                                              |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 27.0 cm |
| Package 1 Width              | 27.0 cm |
| Package 1 Length             | 54.4 cm |
| Package 1 Weight             | 15.0 kg |

## Offer Sustainability

|                            |                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                           |
| REACH Regulation           |  <a href="#">REACH Declaration</a>             |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)                                                                      |
| Mercury free               | Yes                                                                                                                             |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>        |
| RoHS exemption information |  <a href="#">Yes</a>                           |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a> |
| Circularity Profile        | No need of specific recycling operations                                                                                        |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins     |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|