

## Main

|                           |  |
|---------------------------|--|
| Product or component type | Servo motor  |
| Device short name         | BSH  |
| Maximum mechanical speed  | 4000 rpm   |
| Continuous stall torque   | 224.78 lbf.in (25.4 N.m) LXM05AD57N4 at 380...480 V three phase<br>224.78 lbf.in (25.4 N.m) LXM05BD57N4 at 380...480 V three phase<br>224.78 lbf.in (25.4 N.m) LXM05CD57N4 at 380...480 V three phase<br>196.46 lbf.in (22.2 N.m) LXM15MD40N4 at 230 V three phase<br>196.46 lbf.in (22.2 N.m) LXM15MD40N4 at 400 V three phase<br>196.46 lbf.in (22.2 N.m) LXM15MD40N4 at 480 V three phase<br>246.02 lbf.in (27.8 N.m) LXM15MD56N4 at 230 V three phase<br>246.02 lbf.in (27.8 N.m) LXM15MD56N4 at 400 V three phase<br>246.02 lbf.in (27.8 N.m) LXM15MD56N4 at 480 V three phase    |
| Peak stall torque         | 368.14 lbf.in (41.6 N.m) LXM15MD40N4 at 230 V three phase<br>368.14 lbf.in (41.6 N.m) LXM15MD40N4 at 400 V three phase<br>368.14 lbf.in (41.6 N.m) LXM15MD40N4 at 480 V three phase<br>507.08 lbf.in (57.3 N.m) LXM15MD56N4 at 230 V three phase<br>507.08 lbf.in (57.3 N.m) LXM15MD56N4 at 400 V three phase<br>507.08 lbf.in (57.3 N.m) LXM15MD56N4 at 480 V three phase<br>507.26 lbf.in (57.32 N.m) LXM05AD57N4 at 380...480 V three phase<br>507.26 lbf.in (57.32 N.m) LXM05BD57N4 at 380...480 V three phase<br>507.26 lbf.in (57.32 N.m) LXM05CD57N4 at 380...480 V three phase |
| Nominal output power      | 3400 W LXM15MD56N4 at 480 V three phase<br>3000 W LXM15MD40N4 at 230 V three phase<br>3000 W LXM15MD56N4 at 230 V three phase<br>3400 W LXM15MD40N4 at 480 V three phase<br>3900 W LXM05AD57N4 at 380...480 V three phase<br>3900 W LXM05BD57N4 at 380...480 V three phase<br>3900 W LXM05CD57N4 at 380...480 V three phase<br>3900 W LXM15MD40N4 at 400 V three phase<br>3900 W LXM15MD56N4 at 400 V three phase  |
| Nominal torque            | 109.73 lbf.in (12.4 N.m) LXM15MD40N4 at 400 V three phase<br>109.73 lbf.in (12.4 N.m) LXM15MD56N4 at 400 V three phase<br>110 lbf.in (12.43 N.m) LXM05AD57N4 at 380...480 V three phase<br>110 lbf.in (12.43 N.m) LXM05BD57N4 at 380...480 V three phase<br>110 lbf.in (12.43 N.m) LXM05CD57N4 at 380...480 V three phase<br>166.37 lbf.in (18.8 N.m) LXM15MD40N4 at 230 V three phase<br>166.37 lbf.in (18.8 N.m) LXM15MD56N4 at 230 V three phase<br>71.68 lbf.in (8.1 N.m) LXM15MD40N4 at 480 V three phase<br>71.68 lbf.in (8.1 N.m) LXM15MD56N4 at 480 V three phase              |
| Nominal speed             | 1500 rpm LXM15MD40N4 at 230 V three phase<br>3000 rpm LXM05AD57N4 at 380...480 V three phase<br>3000 rpm LXM05BD57N4 at 380...480 V three phase<br>3000 rpm LXM05CD57N4 at 380...480 V three phase<br>3000 rpm LXM15MD40N4 at 400 V three phase<br>1500 rpm LXM15MD56N4 at 230 V three phase<br>3000 rpm LXM15MD56N4 at 400 V three phase<br>4000 rpm LXM15MD40N4 at 480 V three phase<br>4000 rpm LXM15MD56N4 at 480 V three phase  |
| 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   |
| Holding brake             | Without  |

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.

|                       |                                   |
|-----------------------|-----------------------------------|
| Mounting support      | International standard flange     |
| Electrical connection | Rotatable right-angled connectors |

## Complementary

|                                       |  |
|---------------------------------------|--|
| Range compatibility                   | Lexium 05<br>Lexium 15   |
| [Us] rated supply voltage             | 480 V  |
| Phase                                 | Three phase  |
| Continuous stall current              | 17.6 A   |
| Continuous power                      | 3.3 W  |
| Maximum current I <sub>rms</sub>      | 61 A LXM05AD57N4<br>61 A LXM05BD57N4<br>61 A LXM05CD57N4<br>61 A LXM15MD40N4<br>61 A LXM15MD56N4 |
| Maximum permanent current             | 61 A   |
| Switching frequency                   | 4 kHz  |
| Second shaft                          | Without second shaft end   |
| Shaft diameter                        | 0.94 in (24 mm)  |
| Shaft length                          | 1.97 in (50 mm)  |
| Key width                             | 1.57 in (40 mm)  |
| Feedback type                         | Single turn SinCos Hiperface   |
| Motor flange size                     | 5.51 in (140 mm)   |
| Number of motor stacks                | 3  |
| Torque constant                       | 1.58 N.m/A at 248 °F (120 °C)  |
| Back emf constant                     | 105 V/krpm at 248 °F (120 °C)  |
| Number of motor poles                 | 10   |
| Rotor inertia                         | 17.94 kg.cm <sup>2</sup>   |
| Stator resistance                     | 0.4 Ohm at 68 °F (20 °C)   |
| Stator inductance                     | 5.1 mH at 68 °F (20 °C)  |
| Stator electrical time constant       | 12.75 ms at 68 °F (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                                | 12.89 in (327.5 mm)  |
| Centring collar diameter              | 5.12 in (130 mm)   |
| Centring collar depth                 | 0.14 in (3.5 mm)   |
| Number of mounting holes              | 4  |
| Mounting holes diameter               | 0.43 in (11 mm)  |
| Circle diameter of the mounting holes | 6.5 in (165 mm)  |
| Product weight                        | 46.74 lb(US) (21.2 kg)   |

## Environment

## Offer Sustainability

|  |   |
|--|---|
| Green Premium product  | Green Premium product   |
| Compliant - since 0850 - Schneider Electric declaration of conformity  | Compliant - since 0850 - Schneider Electric declaration of conformity   |
| Reference not containing SVHC above the threshold  | Reference not containing SVHC above the threshold   |
| Available  | Available   |
| Need no specific recycling operations  | Need no specific recycling operations   |
| WARNING: This product can expose you to chemicals including:   | WARNING: This product can expose you to chemicals including:  |
| Lead and lead compounds which is known to the State of California to cause cancer and birth defects or other | Lead and lead compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. |

reproductive harm.

For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov) For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

Contractual warranty

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