

## 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                 | Untapped                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| IP degree of protection   | IP50 (standard)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Speed feedback resolution | 131072 points/turn x 4096 turns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Holding brake             | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mounting support          | International standard flange                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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|                       |                                   |
|-----------------------|-----------------------------------|
| 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)                                                                                  |
| Feedback type                         | Multiturn SinCos Hiperface                                                                       |
| Holding torque                        | 318.58 lbf.in (36 N.m) (holding brake)                                                           |
| 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                         | 23.44 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                                                                                         |
| Brake pull-in power                   | 26 W                                                                                             |
| Type of cooling                       | Natural convection                                                                               |
| Length                                | 14.39 in (365.5 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                        | 50.71 lb(US) (23 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                                 |

## Contractual warranty

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

