# Product datasheet Characteristics

# BSH1403P01F2A



#### Main

Main Product or component type	Servo motor	
Product or component type Device short name	BSH	
Maximum mechanical speed Continuous stall torque	4000 rpm 224.78 lbf.in (25.4 N.m) LXM05AD57N4 at 380480 V three phase 224.78 lbf.in (25.4 N.m) LXM05BD57N4 at 380480 V three phase 224.78 lbf.in (25.4 N.m) LXM05CD57N4 at 380480 V three phase 196.46 lbf.in (22.2 N.m) LXM15MD40N4 at 230 V three phase 196.46 lbf.in (22.2 N.m) LXM15MD40N4 at 400 V three phase 196.46 lbf.in (22.2 N.m) LXM15MD40N4 at 480 V three phase 246.02 lbf.in (27.8 N.m) LXM15MD56N4 at 230 V three phase 246.02 lbf.in (27.8 N.m) LXM15MD56N4 at 480 V three phase 246.02 lbf.in (27.8 N.m) LXM15MD56N4 at 480 V three phase 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 368.14 lbf.in (41.6 N.m) LXM15MD40N4 at 400 V three phase 368.14 lbf.in (41.6 N.m) LXM15MD40N4 at 480 V three phase 507.08 lbf.in (57.3 N.m) LXM15MD56N4 at 230 V three phase 507.08 lbf.in (57.3 N.m) LXM15MD56N4 at 400 V three phase 507.08 lbf.in (57.3 N.m) LXM15MD56N4 at 480 V three phase 507.26 lbf.in (57.32 N.m) LXM05AD57N4 at 380480 V three phase 507.26 lbf.in (57.32 N.m) LXM05BD57N4 at 380480 V three phase 507.26 lbf.in (57.32 N.m) LXM05BD57N4 at 380480 V three phase	
Nominal output power	3400 W LXM15MD56N4 at 480 V three phase 3000 W LXM15MD40N4 at 230 V three phase 3000 W LXM15MD56N4 at 230 V three phase 3400 W LXM15MD40N4 at 480 V three phase 3900 W LXM05AD57N4 at 380480 V three phase 3900 W LXM05BD57N4 at 380480 V three phase 3900 W LXM05CD57N4 at 380480 V three phase 3900 W LXM05CD57N4 at 380480 V three phase 3900 W LXM15MD40N4 at 400 V three phase 3900 W LXM15MD40N4 at 400 V three phase	
Nominal torque	109.73 lbf.in (12.4 N.m) LXM15MD40N4 at 400 V three phase 109.73 lbf.in (12.4 N.m) LXM15MD56N4 at 400 V three phase 110 lbf.in (12.43 N.m) LXM05AD57N4 at 380480 V three phase 110 lbf.in (12.43 N.m) LXM05BD57N4 at 380480 V three phase 110 lbf.in (12.43 N.m) LXM05CD57N4 at 380480 V three phase 166.37 lbf.in (18.8 N.m) LXM15MD40N4 at 230 V three phase 166.37 lbf.in (18.8 N.m) LXM15MD56N4 at 230 V three phase 168.37 lbf.in (18.8 N.m) LXM15MD56N4 at 230 V three phase 168.37 lbf.in (8.1 N.m) LXM15MD40N4 at 480 V three phase 71.68 lbf.in (8.1 N.m) LXM15MD56N4 at 480 V three phase	
Nominal speed	1500 rpm LXM15MD40N4 at 230 V three phase 3000 rpm LXM05AD57N4 at 380480 V three phase 3000 rpm LXM05BD57N4 at 380480 V three phase 3000 rpm LXM05CD57N4 at 380480 V three phase 3000 rpm LXM15MD40N4 at 400 V three phase 1500 rpm LXM15MD56N4 at 230 V three phase 3000 rpm LXM15MD56N4 at 400 V three phase 4000 rpm LXM15MD56N4 at 480 V three phase 4000 rpm LXM15MD56N4 at 480 V three phase	
Product compatibility	LXM15MD40N4 at 400 V three phase LXM15MD40N4 at 480 V three phase LXM05AD57N4 at 380480 V three phase LXM05BD57N4 at 380480 V three phase LXM05CD57N4 at 380480 V three phase LXM15MD40N4 at 230 V three phase LXM15MD56N4 at 230 V three phase LXM15MD56N4 at 400 V three phase LXM15MD56N4 at 400 V three phase LXM15MD56N4 at 480 V three phase	
Shaft end	Untapped	
IP degree of protection	IP50 (standard)	
Speed feedback resolution	131072 points/turn	
Holding brake	With	



## Complementary

Range compatibility	Lexium 05 Lexium 15
[Us] rated supply voltage	480 V
Phase	Three phase
Continuous stall current	17.6 A
Continuous power	3.3 W
Maximum current Irms	61 A LXM05AD57N4 61 A LXM05BD57N4 61 A LXM05CD57N4 61 A LXM15MD40N4 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	Single turn 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 2030 N at 2000 rpm 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
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.



For more information go to www.p65warnings.ca.gov For more information go to www.p65warnings.ca.gov

### Contractual warranty

Warranty period

18 months

