

# BSH1003P31A2A

AC servo motor BSH - 7.8 N.m - 2500 rpm -  
keyed shaft - without brake - IP65

Product availability : Non-Stock - Not normally stocked in distribution facility



Price\* : 1,775.00 USD



## Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000 rpm
Continuous stall torque	70.8 lbf.in (8 N.m) LXM32.D30N4 10 A at 400 V three phase 70.8 lbf.in (8 N.m) LXM32.D30N4 10 A at 480 V three phase 69.03 lbf.in (7.8 N.m) LXM05CD28M2 at 200...240 V single phase 69.03 lbf.in (7.8 N.m) LXM05AD28M2 at 200...240 V single phase 69.03 lbf.in (7.8 N.m) LXM05BD28M2 at 200...240 V single phase 69.03 lbf.in (7.8 N.m) LXM05BD34N4 at 380...480 V three phase 69.03 lbf.in (7.8 N.m) LXM05BD42M3X at 200...240 V three phase 69.03 lbf.in (7.8 N.m) LXM05CD34N4 at 380...480 V three phase 69.03 lbf.in (7.8 N.m) LXM05CD42M3X at 200...240 V three phase 59.29 lbf.in (6.7 N.m) LXM15LD21M3 at 230 V three phase 59.29 lbf.in (6.7 N.m) LXM15LD17N4 at 230 V three phase 59.29 lbf.in (6.7 N.m) LXM15LD17N4 at 400 V three phase 59.29 lbf.in (6.7 N.m) LXM15LD17N4 at 480 V three phase 69.03 lbf.in (7.8 N.m) LXM15LD28M3 at 230 V three phase 69.03 lbf.in (7.8 N.m) LXM15MD28N4 at 400 V three phase 69.03 lbf.in (7.8 N.m) LXM15MD28N4 at 480 V three phase 69.03 lbf.in (7.8 N.m) LXM15MD40N4 at 400 V three phase 69.03 lbf.in (7.8 N.m) LXM15MD40N4 at 480 V three phase 69.03 lbf.in (7.8 N.m) LXM05AD34N4 at 380...480 V three phase 69.03 lbf.in (7.8 N.m) LXM05AD42M3X at 200...240 V three phase
Peak stall torque	250.44 lbf.in (28.3 N.m) LXM32.D30N4 10 A at 400 V three phase 250.44 lbf.in (28.3 N.m) LXM32.D30N4 10 A at 480 V three phase 174.25 lbf.in (19.69 N.m) LXM05AD28M2 at 200...240 V single phase 174.25 lbf.in (19.69 N.m) LXM05BD28M2 at 200...240 V single phase 174.25 lbf.in (19.69 N.m) LXM05CD28M2 at 200...240 V single phase 137.17 lbf.in (15.5 N.m) LXM15LD21M3 at 230 V three phase 110.62 lbf.in (12.5 N.m) LXM15LD17N4 at 230 V three phase 110.62 lbf.in (12.5 N.m) LXM15LD17N4 at 400 V three phase 110.62 lbf.in (12.5 N.m) LXM15LD17N4 at 480 V three phase 174.25 lbf.in (19.69 N.m) LXM15LD28M3 at 230 V three phase 174.25 lbf.in (19.69 N.m) LXM15MD28N4 at 400 V three phase 174.25 lbf.in (19.69 N.m) LXM15MD28N4 at 480 V three phase 205.04 lbf.in (23.17 N.m) LXM15MD40N4 at 400 V three phase

Disclaimer: 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

	<p>205.04 lbf.in (23.17 N.m) LXM15MD40N4 at 480 V three phase  203.63 lbf.in (23.01 N.m) LXM05AD34N4 at 380...480 V three phase  205.04 lbf.in (23.17 N.m) LXM05AD42M3X at 200...240 V three phase  203.63 lbf.in (23.01 N.m) LXM05BD34N4 at 380...480 V three phase  205.04 lbf.in (23.17 N.m) LXM05BD42M3X at 200...240 V three phase  203.63 lbf.in (23.01 N.m) LXM05CD34N4 at 380...480 V three phase  205.04 lbf.in (23.17 N.m) LXM05CD42M3X at 200...240 V three phase</p>
Nominal output power	<p>2000 W LXM32.D30N4 10 A at 400 V three phase  2600 W LXM32.D30N4 10 A at 480 V three phase  1100 W LXM05AD28M2 at 200...240 V single phase  1100 W LXM05BD28M2 at 200...240 V single phase  1100 W LXM05CD28M2 at 200...240 V single phase  1100 W LXM05AD42M3X at 200...240 V three phase  1100 W LXM05BD42M3X at 200...240 V three phase  1100 W LXM05CD42M3X at 200...240 V three phase  1300 W LXM15LD28M3 at 230 V three phase  1700 W LXM15LD17N4 at 230 V three phase  1700 W LXM15LD21M3 at 230 V three phase  1800 W LXM05AD34N4 at 380...480 V three phase  1800 W LXM05BD34N4 at 380...480 V three phase  1800 W LXM05CD34N4 at 380...480 V three phase  2000 W LXM15MD28N4 at 400 V three phase  2000 W LXM15MD40N4 at 400 V three phase  2200 W LXM15LD17N4 at 400 V three phase  2200 W LXM15MD28N4 at 480 V three phase  2200 W LXM15MD40N4 at 480 V three phase  2300 W LXM15LD17N4 at 480 V three phase</p>
Nominal torque	<p>55.75 lbf.in (6.3 N.m) LXM32.D30N4 10 A at 400 V three phase  55.75 lbf.in (6.3 N.m) LXM32.D30N4 10 A at 480 V three phase  59.56 lbf.in (6.73 N.m) LXM05AD28M2 at 200...240 V single phase  59.56 lbf.in (6.73 N.m) LXM05BD28M2 at 200...240 V single phase  59.56 lbf.in (6.73 N.m) LXM05CD28M2 at 200...240 V single phase  32.74 lbf.in (3.7 N.m) LXM15LD17N4 at 480 V three phase  40.71 lbf.in (4.6 N.m) LXM15MD28N4 at 480 V three phase  40.71 lbf.in (4.6 N.m) LXM15MD40N4 at 480 V three phase  41.59 lbf.in (4.7 N.m) LXM15LD17N4 at 400 V three phase  44.25 lbf.in (5 N.m) LXM15MD28N4 at 400 V three phase  44.25 lbf.in (5 N.m) LXM15MD40N4 at 400 V three phase  50.44 lbf.in (5.7 N.m) LXM05AD34N4 at 380...480 V three phase  50.44 lbf.in (5.7 N.m) LXM05BD34N4 at 380...480 V three phase  50.44 lbf.in (5.7 N.m) LXM05CD34N4 at 380...480 V three phase  53.1 lbf.in (6 N.m) LXM15LD17N4 at 230 V three phase  53.1 lbf.in (6 N.m) LXM15LD21M3 at 230 V three phase  55.75 lbf.in (6.3 N.m) LXM15LD28M3 at 230 V three phase  59.56 lbf.in (6.73 N.m) LXM05AD42M3X at 200...240 V three phase  59.56 lbf.in (6.73 N.m) LXM05BD42M3X at 200...240 V three phase  59.56 lbf.in (6.73 N.m) LXM05CD42M3X at 200...240 V three phase</p>
Nominal speed	<p>4000 rpm LXM32.D30N4 10 A at 480 V three phase  3000 rpm LXM32.D30N4 10 A at 400 V three phase  1500 rpm LXM05AD28M2 at 200...240 V single phase  1500 rpm LXM05BD28M2 at 200...240 V single phase  1500 rpm LXM05CD28M2 at 200...240 V single phase  4500 rpm LXM15LD17N4 at 400 V three phase  6000 rpm LXM15LD17N4 at 480 V three phase  1500 rpm LXM05AD42M3X at 200...240 V three phase  1500 rpm LXM05BD42M3X at 200...240 V three phase  1500 rpm LXM05CD42M3X at 200...240 V three phase  2000 rpm LXM15LD28M3 at 230 V three phase  2500 rpm LXM15LD17N4 at 230 V three phase  2500 rpm LXM15LD21M3 at 230 V three phase  3000 rpm LXM05AD34N4 at 380...480 V three phase  3000 rpm LXM05BD34N4 at 380...480 V three phase  3000 rpm LXM05CD34N4 at 380...480 V three phase  4000 rpm LXM15MD28N4 at 400 V three phase  4000 rpm LXM15MD40N4 at 400 V three phase  4500 rpm LXM15MD28N4 at 480 V three phase  4500 rpm LXM15MD40N4 at 480 V three phase</p>
Product compatibility	<p>LXM05AD28M2 at 200...240 V single phase  LXM05BD28M2 at 200...240 V single phase  LXM05CD28M2 at 200...240 V single phase  LXM15LD21M3 at 230 V three phase  LXM05AD42M3X at 200...240 V three phase  LXM05BD42M3X at 200...240 V three phase  LXM05CD42M3X at 200...240 V three phase</p>

LXM15LD17N4 at 230 V three phase  
 LXM15LD17N4 at 400 V three phase  
 LXM15LD17N4 at 480 V three phase  
 LXM15LD28M3 at 230 V three phase  
 LXM05AD34N4 at 380...480 V three phase  
 LXM05BD34N4 at 380...480 V three phase  
 LXM05CD34N4 at 380...480 V three phase  
 LXM15MD28N4 at 400 V three phase  
 LXM15MD28N4 at 480 V three phase  
 LXM15MD40N4 at 400 V three phase  
 LXM15MD40N4 at 480 V three phase  
 LXM32.D30N4 at 400 V three phase  
 LXM32.D30N4 at 480 V three phase

Shaft end	Keyed
IP degree of protection	IP65 (standard) IP67 (with IP67 kit)
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

### Complementary

Range compatibility	Lexium 05 Lexium 15 Lexium 32
Supply voltage max	480 V
Phase	Three phase
Continuous stall current	6.6 A
Maximum continuous power	3.14 W
Maximum current Irms	28.3 A LXM05AD28M2 28.3 A LXM05AD34N4 28.3 A LXM05AD42M3X 28.3 A LXM05BD28M2 28.3 A LXM05BD34N4 28.3 A LXM05BD42M3X 28.3 A LXM05CD28M2 28.3 A LXM05CD34N4 28.3 A LXM05CD42M3X 28.3 A LXM15LD17N4 28.3 A LXM15LD21M3 28.3 A LXM15LD28M3 28.3 A LXM15MD28N4 28.3 A LXM15MD40N4 28.3 A LXM32.D30N4
Maximum permanent current	28.3 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	0.75 in (19 mm)
Shaft length	1.57 in (40 mm)
Key width	1.18 in (30 mm)
Feedback type	Single turn SinCos Hiperface
Motor flange size	3.94 in (100 mm)
Number of motor stacks	3
Torque constant	1.22 N.m/A at 248 °F (120 °C)
Back emf constant	77 V/krpm at 248 °F (120 °C)
Number of motor poles	8
Rotor inertia	3.22 kg.cm <sup>2</sup>
Stator resistance	1.43 Ohm at 68 °F (20 °C)
Stator inductance	8.8 mH at 68 °F (20 °C)
Stator electrical time constant	6.15 ms at 68 °F (20 °C)
Maximum radial force Fr	1050 N at 1000 rpm 660 N at 4000 rpm

	730 N at 3000 rpm 830 N at 2000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	9.47 in (240.5 mm)
Centring collar diameter	3.74 in (95 mm)
Centring collar depth	0.14 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.35 in (9 mm)
Circle diameter of the mounting holes	4.53 in (115 mm)
Product weight	16.31 lb(US) (7.4 kg)

## Ordering and shipping details

Category	18282 - LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	00785901272977
Nbr. of units in pkg.	1
Package weight(Lbs)	16.5
Returnability	N
Country of origin	DE

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0850 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations
California proposition 65	WARNING: This product can expose you to chemicals including:
----- Substance 1	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
----- More information	For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>

## Contractual warranty

Warranty period	18 months
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