Product data sheet

Specifications

AC servo motor BSH, Lexium 32, 22.2N.m, 1500rpm, untapped shaft, with brake, IP50

BSH1403P02F1A

Discontinued on: Oct 9, 2023

Discontinued

Main

Device short name	BSH
product or component type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	224.8 lbf.in (25.4 N.m) LXM05AD57N4, 380...480 V, three phase 224.8 lbf.in (25.4 N.m) LXM05BD57N4, 380...480 V, three phase 224.8 lbf.in (25.4 N.m) LXM05CD57N4, 380...480 V, three phase 196.5 lbf.in (22.2 N.m) LXM15MD40N4, 230 V, three phase 196.5 lbf.in (22.2 N.m) LXM15MD40N4, 400 V, three phase 196.5 lbf.in (22.2 N.m) LXM15MD40N4, 480 V, three phase 246.05 lbf.in (27.8 N.m) LXM15MD56N4, 230 V, three phase 246.05 lbf.in (27.8 N.m) LXM15MD56N4, 400 V, three phase 246.05 lbf.in (27.8 N.m) LXM15MD56N4, 480 V, three phase
Peak stall torque	368.2 lbf.in (41.6 N.m) LXM15MD40N4, 230 V, three phase 368.2 lbf.in (41.6 N.m) LXM15MD40N4, 400 V, three phase 368.2 lbf.in (41.6 N.m) LXM15MD40N4, 480 V, three phase 507.1 lbf.in (57.3 N.m) LXM15MD56N4, 230 V, three phase 507.1 lbf.in (57.3 N.m) LXM15MD56N4, 400 V, three phase 507.1 lbf.in (57.3 N.m) LXM15MD56N4, 480 V, three phase 507.32 lbf.in (57.32 N.m) LXM05AD57N4, 380...480 V, three phase 507.32 lbf.in (57.32 N.m) LXM05BD57N4, 380...480 V, three phase 507.32 lbf.in (57.32 N.m) LXM05CD57N4, 380...480 V, three phase
Nominal output power	3400 W LXM15MD56N4, 480 V, three phase 3000 W LXM15MD40N4, 230 V, three phase 3000 W LXM15MD56N4, 230 V, three phase 3400 W LXM15MD40N4, 480 V, three phase 3900 W LXM05AD57N4, 380...480 V, three phase 3900 W LXM05BD57N4, 380...480 V, three phase 3900 W LXM05CD57N4, 380...480 V, three phase 3900 W LXM15MD40N4, 400 V, three phase 3900 W LXM15MD56N4, 400 V, three phase
Nominal torque	109.7 lbf.in (12.4 N.m) LXM15MD40N4, 400 V, three phase 109.7 lbf.in (12.4 N.m) LXM15MD56N4, 400 V, three phase 110.01 lbf.in (12.43 N.m) LXM05AD57N4, 380...480 V, three phase 110.01 lbf.in (12.43 N.m) LXM05BD57N4, 380...480 V, three phase 110.01 lbf.in (12.43 N.m) LXM05CD57N4, 380...480 V, three phase 166.4 lbf.in (18.8 N.m) LXM15MD40N4, 230 V, three phase 166.4 lbf.in (18.8 N.m) LXM15MD56N4, 230 V, three phase 71.7 lbf.in (8.1 N.m) LXM15MD40N4, 480 V, three phase 71.7 lbf.in (8.1 N.m) LXM15MD56N4, 480 V, three phase
Nominal speed	1500 rpm LXM15MD40N4, 230 V, three phase 3000 rpm LXM05AD57N4, 380...480 V, three phase 3000 rpm LXM05BD57N4, 380...480 V, three phase 3000 rpm LXM05CD57N4, 380...480 V, three phase 3000 rpm LXM15MD40N4, 400 V, three phase 1500 rpm LXM15MD56N4, 230 V, three phase 3000 rpm LXM15MD56N4, 400 V, three phase 4000 rpm LXM15MD40N4, 480 V, three phase 4000 rpm LXM15MD56N4, 480 V, three phase

Product compatibility	LXM15MD40N4 400 V three phase LXM15MD40N4 480 V three phase LXM05AD57N4 380...480 V three phase LXM05BD57N4 380...480 V three phase LXM05CD57N4 380...480 V three phase LXM15MD40N4 230 V three phase LXM15MD56N4 230 V three phase LXM15MD56N4 400 V three phase LXM15MD56N4 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
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 15 Lexium 05
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 LXM15MD40N4 61 A LXM15MD56N4 61 A LXM05AD57N4 61 A LXM05BD57N4 61 A LXM05CD57N4
Maximum permanent current	61 A
switching frequency	4 kHz
Second shaft	Without second shaft end
Shaft diameter	0.9 in (24 mm)
Shaft length	2.0 in (50 mm)
Feedback type	Multiturn SinCos Hiperface
Holding torque	318.6 lbf.in (36 N.m) holding brake
Motor flange size	5.5 in (140 mm)
Number of motor stacks	3
Torque constant	1.58 N.m/A 248.0000000000 °F (120 °C)
Back emf constant	105 V/krpm 248.0000000000 °F (120 °C)
Number of motor poles	10
Rotor inertia	23.44 kg.cm²
Stator resistance	0.4 Ohm 68.0000000000 °F (20 °C)
Stator inductance	5.1 mH 68.0000000000 °F (20 °C)
Stator electrical time constant	12.75 ms 68.0000000000 °F (20 °C)
Maximum radial force Fr	1780 N 3000 rpm 2030 N 2000 rpm 2560 N 1000 rpm
Maximum axial force Fa	0.2 x Fr

Brake pull-in power	26 W
Type of cooling	Natural convection
Length	14.4 in (365.5 mm)
Centring collar diameter	5.1 in (130 mm)
Centring collar depth	0.1 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (11 mm)
Circle diameter of the mounting holes	6.5 in (165 mm)
net weight	50.7 lb(US) (23 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	10.6 in (27.0 cm)
Package 1 Width	10.6 in (27.0 cm)
Package 1 Length	21.4 in (54.4 cm)
Package 1 Weight	37.02 lb(US) (16.79 kg)

Contractual warranty

Warranty	18 months

Sustainability

Green Premium^{TM} label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency

RoHS/REACh

Well-being performance

Mercury Free	
Rohs Exemption Information	Yes

Certifications & Standards

Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	No need of specific recycling operations