

Product datasheet

Specifications

Motors



AC servo motor BDH - 2.96 N.m - 6000 rpm - key shaft - with brake - IP67

BDH0842G31F2B

EAN Code: 3389118184695

! Discontinued

Main

Product or component type	AC servo motors
Component name	BDH
Continuous stall torque	2.96 N.m for LXM15LD21M3 single phase 3.53 N.m for LXM15LD17N4 3 phases 3.53 N.m for LXM15LD21M3 3 phases
Peak stall torque	6.54 N.m for LXM15LD21M3 at 230 V single phase 8.66 N.m for LXM15LD17N4 at 230 V 3 phases 8.66 N.m for LXM15LD17N4 at 400 V 3 phases 8.66 N.m for LXM15LD17N4 at 480 V 3 phases 9.56 N.m for LXM15LD21M3 at 230 V 3 phases
Nominal output power	1300 W for LXM15LD17N4 at 400 V 3 phases 1500 W for LXM15LD17N4 at 480 V 3 phases 900 W for LXM15LD17N4 at 230 V 3 phases 900 W for LXM15LD21M3 at 230 V 3 phases 900 W for LXM15LD21M3 at 230 V single phase
Nominal torque	2.35 N.m for LXM15LD17N4 at 480 V 3 phases 2.5 N.m for LXM15LD17N4 at 400 V 3 phases 2.94 N.m for LXM15LD21M3 at 230 V single phase 2.96 N.m for LXM15LD17N4 at 230 V 3 phases 2.96 N.m for LXM15LD21M3 at 230 V 3 phases
Nominal speed	3000 rpm for LXM15LD17N4 at 230 V 3 phases 3000 rpm for LXM15LD21M3 at 230 V 3 phases 3000 rpm for LXM15LD21M3 at 230 V single phase 5000 rpm for LXM15LD17N4 at 400 V 3 phases 6000 rpm for LXM15LD17N4 at 480 V 3 phases
Maximum mechanical speed	6000 rpm
Product compatibility	LXM15LD17N4 at 230 V 3 phases LXM15LD17N4 at 400 V 3 phases LXM15LD17N4 at 480 V 3 phases LXM15LD21M3 at 230 V 3 phases LXM15LD21M3 at 230 V single phase
Shaft end	Keyed
IP degree of protection	IP67
Encoder type	Absolute single turn SinCos Hiperface
Speed feedback resolution	1048576 points/turn
Holding brake	With
Mounting support	NEMA flange
Electrical connection	Rotatable right-angled connectors
Number of poles	10

Complementary

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

Range compatibility	Lexium 15
Maximum current Irms	13.58 A
Torque constant	0.74 N.m/A at 120 °C
Back emf constant	47.5 V/krpm at 120 °C
Stator resistance	2.38 Ohm at 20 °C
Stator inductance	9.2 mH at 20 °C
Stator electrical time constant	3.87 ms at 20 °C
Maximum radial force Fr	310 N at 6000 rpm 340 N at 5000 rpm 370 N at 4000 rpm 400 N at 3000 rpm 430 N at 2000 rpm 460 N at 1000 rpm
Maximum axial force Fa	0.3 x Fr
Net weight	3.39 kg



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Use Longer

Lifetime extension	
Repair	No