Product datasheet

Specifications

AC servo motors BRH - 12 N.m - 4500 rpm - keyed shaft - with brake - IP41

BRH1103P12F2A

Main

Product or component type	Motion servo motors
Component name	BRH
Continuous stall torque	12 N.m
Peak stall torque	18.9 N.m for LXM05AD34N4 18.9 N.m for LXM05BD34N4 18.9 N.m for LXM05CD34N4 21 N.m for LXM05AD28M2 21 N.m for LXM05BD28M2 21 N.m for LXM05CD28M2 30.3 N.m for LXM05AD42M3X 30.3 N.m for LXM05AD57N4 30.3 N.m for LXM05BD42M3X 30.3 N.m for LXM05BD57N4 30.3 N.m for LXM05CD42M3X 30.3 N.m for LXM05CD57N4
Nominal output power	1550 W for LXM05AD28M2 1550 W for LXM05AD42M3X 1550 W for LXM05BD28M2 1550 W for LXM05BD42M3X 1550 W for LXM05CD28M2 1550 W for LXM05CD42M3X 2360 W for LXM05AD34N4 2360 W for LXM05AD57N4 2360 W for LXM05BD34N4 2360 W for LXM05BD57N4 2360 W for LXM05CD34N4 2360 W for LXM05CD57N4
Nominal speed	1500 rpm for LXM05AD28M2 1500 rpm for LXM05AD42M3X 1500 rpm for LXM05BD28M2 1500 rpm for LXM05BD42M3X 1500 rpm for LXM05CD28M2 1500 rpm for LXM05CD42M3X 3000 rpm for LXM05AD34N4 3000 rpm for LXM05AD57N4 3000 rpm for LXM05BD34N4 3000 rpm for LXM05BD57N4 3000 rpm for LXM05CD34N4 3000 rpm for LXM05CD57N4
Maximum mechanical speed	4500 rpm
Product compatibility	LXM05AD28M2 at 230 V single phase LXM05AD34N4 at 400/480 V 3 phases LXM05AD42M3X at 230 V 3 phases LXM05AD57N4 at 400/480 V 3 phases LXM05BD28M2 at 230 V single phase LXM05BD34N4 at 400/480 V 3 phases LXM05BD42M3X at 230 V 3 phases LXM05BD57N4 at 400/480 V 3 phases LXM05CD28M2 at 230 V single phase LXM05CD34N4 at 400/480 V 3 phases LXM05CD42M3X at 230 V 3 phases LXM05CD57N4 at 400/480 V 3 phases
Shaft end	Keyed

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

IP degree of protection	IP41
Encoder type	Multiturn SinCos Hiperface
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	With
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors
Nominal torque	10 N.m for LXM05AD28M2 10 N.m for LXM05AD42M3X 10 N.m for LXM05BD28M2 10 N.m for LXM05BD42M3X 10 N.m for LXM05CD28M2 10 N.m for LXM05CD42M3X 7.5 N.m for LXM05AD34N4 7.5 N.m for LXM05AD57N4 7.5 N.m for LXM05BD34N4 7.5 N.m for LXM05BD57N4 7.5 N.m for LXM05CD34N4 7.5 N.m for LXM05CD57N4
Number of poles	10
Maximum radial force Fr	857 N at 4000 rpm 869 N at 3000 rpm 883 N at 2000 rpm 908 N at 1000 rpm

Complementary

Range compatibility	Lexium 05
Switching frequency	8 kHz
Maximum current Irms	18 A for LXM05AD34N4 18 A for LXM05BD34N4 18 A for LXM05CD34N4 20 A for LXM05AD28M2 20 A for LXM05BD28M2 20 A for LXM05CD28M2 30 A for LXM05AD42M3X 30 A for LXM05AD57N4 30 A for LXM05BD42M3X 30 A for LXM05BD57N4 30 A for LXM05CD42M3X 30 A for LXM05CD57N4
Torque constant	1.06 N.m/A at 120 °C
Back emf constant	68.5 V/krpm at 120 °C
Rotor inertia	13.1 kg.cm² without brake 14.4 kg.cm² with brake
Stator resistance	0.5 Ohm
Stator inductance	3.9 mH
Stator electrical time constant	7.2 ms
Maximum axial force Fa	0.2 x Fr
Net weight	10.5 kg

Contractual warranty

Warranty (in months)	18

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**