

Product datasheet

Specifications



AC servo motors BRH - 5.2 N.m - 6000 rpm - keyed shaft - without brake - IP56

BRH1101P31A1A

Main

Product or component type	Motion servo motors
Component name	BRH
Continuous stall torque	5.2 N.m
Peak stall torque	13 N.m for LXM05AD34N4 13 N.m for LXM05BD34N4 13 N.m for LXM05CD34N4 14 N.m for LXM05AD28M2 14 N.m for LXM05BD28M2 14 N.m for LXM05CD28M2 16.2 N.m for LXM05AD42M3X 16.2 N.m for LXM05BD42M3X 16.2 N.m for LXM05CD42M3X
Nominal output power	1400 W for LXM05AD28M2 1400 W for LXM05AD42M3X 1400 W for LXM05BD28M2 1400 W for LXM05BD42M3X 1400 W for LXM05CD28M2 1400 W for LXM05CD42M3X 1900 W for LXM05AD34N4 1900 W for LXM05BD34N4 1900 W for LXM05CD34N4
Nominal speed	3000 rpm for LXM05AD28M2 3000 rpm for LXM05AD42M3X 3000 rpm for LXM05BD28M2 3000 rpm for LXM05BD42M3X 3000 rpm for LXM05CD28M2 3000 rpm for LXM05CD42M3X 4500 rpm for LXM05AD34N4 4500 rpm for LXM05BD34N4 4500 rpm for LXM05CD34N4
Maximum mechanical speed	6000 rpm
Product compatibility	LXM05AD28M2 at 230 V single phase LXM05AD34N4 at 400/480 V 3 phases LXM05AD42M3X at 230 V 3 phases LXM05BD28M2 at 230 V single phase LXM05BD34N4 at 400/480 V 3 phases LXM05BD42M3X at 230 V 3 phases LXM05CD28M2 at 230 V single phase LXM05CD34N4 at 400/480 V 3 phases LXM05CD42M3X at 230 V 3 phases
Shaft end	Keyed
IP degree of protection	IP56
Encoder type	Single turn SinCos Hiperface
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Straight connectors

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

Nominal torque	4.04 N.m for LXM05AD34N4
	4.04 N.m for LXM05BD34N4
	4.04 N.m for LXM05CD34N4
	4.5 N.m for LXM05AD28M2
	4.5 N.m for LXM05AD42M3X
	4.5 N.m for LXM05BD28M2
	4.5 N.m for LXM05BD42M3X
	4.5 N.m for LXM05CD28M2
	4.5 N.m for LXM05CD42M3X
Number of poles	10
Maximum radial force Fr	629 N at 6000 rpm
	655 N at 5000 rpm
	688 N at 4000 rpm
	697 N at 3000 rpm
	709 N at 2000 rpm
	729 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 LXM05BD42M3X
	30 A for LXM05CD42M3X
Torque constant	0.83 N.m/A at 120 °C
Back emf constant	54.2 V/krpm at 120 °C
Rotor inertia	4.5 kg.cm² without brake
	5.8 kg.cm² with brake
Stator resistance	1.2 Ohm
Stator inductance	8.1 mH
Stator electrical time constant	6.5 ms
Maximum axial force Fa	0.2 x Fr
Net weight	4.9 kg

Contractual warranty

Warranty (in months)	18
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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