

Product datasheet

Specifications



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

BRH0852P31A2A

⚠ Discontinued on: Jun 5, 2024

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Main

Product or component type	Motion servo motors
Component name	BRH
Continuous stall torque	3.1 N.m
Peak stall torque	10.8 N.m for LXM05AD42M3X 10.8 N.m for LXM05BD42M3X 10.8 N.m for LXM05CD42M3X 7.95 N.m for LXM05AD34N4 7.95 N.m for LXM05BD34N4 7.95 N.m for LXM05CD34N4 8.7 N.m for LXM05AD28F1 8.7 N.m for LXM05AD28M2 8.7 N.m for LXM05BD28F1 8.7 N.m for LXM05BD28M2 8.7 N.m for LXM05CD28F1 8.7 N.m for LXM05CD28M2
Nominal output power	1000 W for LXM05AD28M2 1000 W for LXM05AD42M3X 1000 W for LXM05BD28M2 1000 W for LXM05BD42M3X 1000 W for LXM05CD28M2 1000 W for LXM05CD42M3X 1150 W for LXM05AD34N4 1150 W for LXM05BD34N4 1150 W for LXM05CD34N4 440 W for LXM05AD28F1 440 W for LXM05BD28F1 440 W for LXM05CD28F1
Nominal speed	1500 rpm for LXM05AD28F1 1500 rpm for LXM05BD28F1 1500 rpm for LXM05CD28F1 4500 rpm for LXM05AD28M2 4500 rpm for LXM05AD42M3X 4500 rpm for LXM05BD28M2 4500 rpm for LXM05BD42M3X 4500 rpm for LXM05CD28M2 4500 rpm for LXM05CD42M3X 6000 rpm for LXM05AD34N4 6000 rpm for LXM05BD34N4 6000 rpm for LXM05CD34N4
Maximum mechanical speed	6000 rpm
Product compatibility	LXM05AD28F1 at 115 V single phase LXM05AD28M2 at 230 V single phase LXM05AD34N4 at 400/480 V 3 phases LXM05AD42M3X at 230 V 3 phases LXM05BD28F1 at 115 V single phase LXM05BD28M2 at 230 V single phase LXM05BD34N4 at 400/480 V 3 phases LXM05BD42M3X at 230 V 3 phases LXM05CD28F1 at 115 V single phase LXM05CD28M2 at 230 V single phase LXM05CD34N4 at 400/480 V 3 phases LXM05CD42M3X at 230 V 3 phases

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

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	Rotatable right-angled connectors
Nominal torque	1.8 N.m for LXM05AD34N4 1.8 N.m for LXM05BD34N4 1.8 N.m for LXM05CD34N4 2.13 N.m for LXM05AD28M2 2.13 N.m for LXM05AD42M3X 2.13 N.m for LXM05BD28M2 2.13 N.m for LXM05BD42M3X 2.13 N.m for LXM05CD28M2 2.13 N.m for LXM05CD42M3X 2.78 N.m for LXM05AD28F1 2.78 N.m for LXM05BD28F1 2.78 N.m for LXM05CD28F1
Number of poles	10
Maximum radial force Fr	203 N at 6000 rpm 207 N at 5000 rpm 213 N at 4000 rpm 219 N at 3000 rpm 226 N at 2000 rpm 265 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 LXM05AD28F1 20 A for LXM05AD28M2 20 A for LXM05BD28F1 20 A for LXM05BD28M2 20 A for LXM05CD28F1 20 A for LXM05CD28M2 26.4 A for LXM05AD42M3X 26.4 A for LXM05BD42M3X 26.4 A for LXM05CD42M3X
Torque constant	0.47 N.m/A at 120 °C
Back emf constant	30.7 V/krpm at 120 °C
Rotor inertia	2 kg.cm² without brake 2.53 kg.cm² with brake
Stator resistance	1 Ohm
Stator inductance	3.7 mH
Stator electrical time constant	3.7 ms
Maximum axial force Fa	0.2 x Fr
Product weight	3.3 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