

Product datasheet

Specifications



AC servo motors BRH - 4.8 N.m - 6000 rpm - keyed shaft - with brake - IP56

BRH0854P31F1A

Main

Product or component type	Motion servo motors
Component name	BRH
Continuous stall torque	4.8 N.m
Peak stall torque	13 N.m for LXM05AD28F1 13 N.m for LXM05AD28M2 13 N.m for LXM05BD28F1 13 N.m for LXM05BD28M2 13 N.m for LXM05CD28F1 13 N.m for LXM05CD28M2 18.3 N.m for LXM05AD42M3X 18.3 N.m for LXM05BD42M3X 18.3 N.m for LXM05CD42M3X 9.3 N.m for LXM05AD22N4 9.3 N.m for LXM05BD22N4 9.3 N.m for LXM05CD22N4
Nominal output power	1250 W for LXM05AD28M2 1250 W for LXM05BD28M2 1250 W for LXM05CD28M2 1400 W for LXM05AD22N4 1400 W for LXM05BD22N4 1400 W for LXM05CD22N4 1450 W for LXM05AD42M3X 1450 W for LXM05BD42M3X 1450 W for LXM05CD42M3X 740 W for LXM05AD28F1 740 W for LXM05BD28F1 740 W for LXM05CD28F1
Nominal speed	1500 rpm for LXM05AD28F1 1500 rpm for LXM05BD28F1 1500 rpm for LXM05CD28F1 3000 rpm for LXM05AD28M2 3000 rpm for LXM05BD28M2 3000 rpm for LXM05CD28M2 4000 rpm for LXM05AD42M3X 4000 rpm for LXM05BD42M3X 4000 rpm for LXM05CD42M3X 6000 rpm for LXM05AD22N4 6000 rpm for LXM05BD22N4 6000 rpm for LXM05CD22N4
Maximum mechanical speed	6000 rpm
Product compatibility	LXM05AD22N4 at 400/480 V 3 phases LXM05AD28F1 at 115 V single phase LXM05AD28M2 at 230 V single phase LXM05AD42M3X at 230 V 3 phases LXM05BD22N4 at 400/480 V 3 phases LXM05BD28F1 at 115 V single phase LXM05BD28M2 at 230 V single phase LXM05BD42M3X at 230 V 3 phases LXM05CD22N4 at 400/480 V 3 phases LXM05CD28F1 at 115 V single phase LXM05CD28M2 at 230 V single phase LXM05CD42M3X at 230 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	IP56
Encoder type	Single turn SinCos Hiperface
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors
Nominal torque	4 N.m for LXM05AD28M2 4 N.m for LXM05AD42M3X 4 N.m for LXM05BD28M2 4 N.m for LXM05BD42M3X 4 N.m for LXM05CD28M2 4 N.m for LXM05CD42M3X 4.71 N.m for LXM05AD28F1 4.71 N.m for LXM05BD28F1 4.71 N.m for LXM05CD28F1 9.3 N.m for LXM05AD22N4 9.3 N.m for LXM05BD22N4 9.3 N.m for LXM05CD22N4
Number of poles	10
Maximum radial force Fr	230 N at 6000 rpm 234 N at 5000 rpm 241 N at 4000 rpm 248 N at 3000 rpm 256 N at 2000 rpm 300 N at 1000 rpm

Complementary

Range compatibility	Lexium 05
Switching frequency	8 kHz
Maximum current Irms	14 A for LXM05AD22N4 14 A for LXM05BD22N4 14 A for LXM05CD22N4 20 A for LXM05AD28F1 20 A for LXM05AD28M2 20 A for LXM05BD28F1 20 A for LXM05BD28M2 20 A for LXM05CD28F1 20 A for LXM05CD28M2 30 A for LXM05AD42M3X 30 A for LXM05BD42M3X 30 A for LXM05CD42M3X
Torque constant	0.68 N.m/A at 120 °C
Back emf constant	44 V/krpm at 120 °C
Rotor inertia	3.9 kg.cm² without brake 4.44 kg.cm² with brake
Stator resistance	0.9 Ohm
Stator inductance	3.6 mH
Maximum axial force Fa	0.2 x Fr
Net weight	6.1 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