

# Product datasheet

Specifications



## AC servo motors BRH - 5.2 N.m - 6000 rpm - untapped shaft - with brake - IP41

BRH1101P02F1A

### 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	Untapped
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	Straight connectors

<b>Nominal torque</b>	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

<b>Number of poles</b>	10
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<b>Maximum radial force Fr</b>	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

<b>Range compatibility</b>	Lexium 05
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<b>Switching frequency</b>	8 kHz
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<b>Maximum current Irms</b>	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

<b>Torque constant</b>	0.83 N.m/A at 120 °C
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<b>Back emf constant</b>	54.2 V/krpm at 120 °C
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<b>Rotor inertia</b>	4.5 kg.cm <sup>2</sup> without brake
	5.8 kg.cm <sup>2</sup> with brake

<b>Stator resistance</b>	1.2 Ohm
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<b>Stator inductance</b>	8.1 mH
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<b>Stator electrical time constant</b>	6.5 ms
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<b>Maximum axial force Fa</b>	0.2 x Fr
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<b>Net weight</b>	4.9 kg
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## Contractual warranty

<b>Warranty (in months)</b>	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