

# Product data sheet

Specifications



## AC servo motors BRH - 3.1 N.m - 6000 rpm - untapped shaft - without brake - IP56

BRH0851M22A2A

⚠ Discontinued on: 29 Oct 2025

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### Main

Product or component type	Motion servo motors
Component name	BRH
Continuous stall torque	1.86 N.m
Peak stall torque	3.4 N.m for LXM05AD10M2 3.4 N.m for LXM05BD10M2 3.4 N.m for LXM05CD10M2 4.05 N.m for LXM05AD14N4 4.05 N.m for LXM05BD14N4 4.05 N.m for LXM05CD14N4 5.27 N.m for LXM05AD17M3X 5.27 N.m for LXM05BD17M3X 5.27 N.m for LXM05CD17M3X
Nominal output power	520 W for LXM05AD10M2 520 W for LXM05AD17M3X 520 W for LXM05BD10M2 520 W for LXM05BD17M3X 520 W for LXM05CD10M2 520 W for LXM05CD17M3X 910 W for LXM05AD14N4 910 W for LXM05BD14N4 910 W for LXM05CD14N4
Nominal speed	3000 rpm for LXM05AD10M2 3000 rpm for LXM05AD17M3X 3000 rpm for LXM05BD10M2 3000 rpm for LXM05BD17M3X 3000 rpm for LXM05CD10M2 3000 rpm for LXM05CD17M3X 6000 rpm for LXM05AD14N4 6000 rpm for LXM05BD14N4 6000 rpm for LXM05CD14N4
Maximum mechanical speed	6000 rpm
Product compatibility	LXM05AD10M2 at 230 V single phase LXM05AD14N4 at 400/480 V 3 phases LXM05AD17M3X at 230 V 3 phases LXM05BD10M2 at 230 V single phase LXM05BD14N4 at 400/480 V 3 phases LXM05BD17M3X at 230 V 3 phases LXM05CD10M2 at 230 V single phase LXM05CD14N4 at 400/480 V 3 phases LXM05CD17M3X at 230 V 3 phases
Shaft end	Untapped
IP degree of protection	IP56
Encoder type	Multiturn SinCos Hiperface
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange

<b>Electrical connection</b>	Rotatable right-angled connectors
<b>Nominal torque</b>	1.45 N.m for LXM05AD14N4 1.45 N.m for LXM05BD14N4 1.45 N.m for LXM05CD14N4 1.66 N.m for LXM05AD10M2 1.66 N.m for LXM05AD17M3X 1.66 N.m for LXM05BD10M2 1.66 N.m for LXM05BD17M3X 1.66 N.m for LXM05CD10M2 1.66 N.m for LXM05CD17M3X
<b>Number of poles</b>	10
<b>Maximum radial force Fr</b>	173 N at 6000 rpm 176 N at 5000 rpm 181 N at 4000 rpm 187 N at 3000 rpm 193 N at 2000 rpm 226 N at 1000 rpm

## Complementary

<b>Range compatibility</b>	Lexium 05
<b>Switching frequency</b>	8 kHz
<b>Maximum current Irms</b>	11 A for LXM05AD17M3X 11 A for LXM05BD17M3X 11 A for LXM05CD17M3X 6 A for LXM05AD10M2 6 A for LXM05BD10M2 6 A for LXM05CD10M2 7.5 A for LXM05AD14N4 7.5 A for LXM05BD14N4 7.5 A for LXM05CD14N4
<b>Torque constant</b>	0.6 N.m/A at 120 °C
<b>Back emf constant</b>	37.9 V/krpm at 120 °C
<b>Rotor inertia</b>	1.06 kg.cm <sup>2</sup> without brake 1.59 kg.cm <sup>2</sup> with brake
<b>Stator resistance</b>	3.3 Ohm
<b>Stator inductance</b>	12.3 mH
<b>Stator electrical time constant</b>	3.7 ms
<b>Maximum axial force Fa</b>	0.2 x Fr
<b>Product weight</b>	2.2 kg

## 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