

# Product datasheet

Specifications



## AC servo motors BRH - 0.46 N.m - 6000 rpm - untapped shaft - with brake - IP41

BRH0571P01F2A

### Main

|                                  |  |
|----------------------------------|--|
| <b>Product or component type</b> | Motion servo motors  |
| <b>Component name</b>            | BRH  |
| <b>Continuous stall torque</b>   | 0.46 N.m   |
| <b>Peak stall torque</b>         | 1.26 N.m for LXM05CU70M2<br>1.39 N.m for LXM05AD14N4<br>1.39 N.m for LXM05BD14N4<br>1.39 N.m for LXM05CD14N4                                     |
| <b>Nominal output power</b>      | 135 W for LXM05CU70M2<br>260 W for LXM05AD14N4<br>260 W for LXM05BD14N4<br>260 W for LXM05CD14N4   |
| <b>Nominal speed</b>             | 3000 rpm for LXM05CU70M2<br>6000 rpm for LXM05AD14N4<br>6000 rpm for LXM05BD14N4<br>6000 rpm for LXM05CD14N4                                     |
| <b>Maximum mechanical speed</b>  | 8000 rpm   |
| <b>Product compatibility</b>     | LXM05AD14N4 at 400/480 V 3 phases<br>LXM05BD14N4 at 400/480 V 3 phases<br>LXM05CD14N4 at 400/480 V 3 phases<br>LXM05CU70M2 at 230 V single phase |
| <b>Shaft end</b>                 | Untapped   |
| <b>IP degree of protection</b>   | IP41   |
| <b>Encoder type</b>              | Single turn SinCos Hiperface   |
| <b>Speed feedback resolution</b> | 131072 points/turn   |
| <b>Holding brake</b>             | With   |
| <b>Mounting support</b>          | International standard flange  |
| <b>Electrical connection</b>     | Rotatable right-angled connectors  |
| <b>Nominal torque</b>            | 0.41 N.m for LXM05AD14N4<br>0.41 N.m for LXM05BD14N4<br>0.41 N.m for LXM05CD14N4<br>0.43 N.m for LXM05CU70M2                                     |
| <b>Number of poles</b>           | 10   |
| <b>Maximum radial force Fr</b>   | 109 N at 1000 rpm<br>72 N at 6000 rpm<br>73 N at 5000 rpm<br>74 N at 4000 rpm<br>76 N at 3000 rpm<br>81 N at 2000 rpm                            |

### Complementary

|                            |           |
|----------------------------|-----------|
| <b>Range compatibility</b> | Lexium 05 |
|----------------------------|-----------|

|  |  |
|--|--|
| <b>Switching frequency</b>             | 8 kHz  |
| <b>Maximum current Irms</b>            | 4.3 A for LXM05CU70M2<br>5.4 A for LXM05AD14N4<br>5.4 A for LXM05BD14N4<br>5.4 A for LXM05CD14N4 |
| <b>Torque constant</b>                 | 0.34 N.m/A at 120 °C   |
| <b>Back emf constant</b>               | 20.9 V/krpm at 120 °C  |
| <b>Rotor inertia</b>                   | 0.18 kg.cm <sup>2</sup> with brake<br>0.18 kg.cm <sup>2</sup> without brake                      |
| <b>Stator resistance</b>               | 12.7 Ohm   |
| <b>Stator inductance</b>               | 24.1 mH  |
| <b>Stator electrical time constant</b> | 1.9 ms   |
| <b>Maximum axial force Fa</b>          | 0.2 x Fr   |
| <b>Net weight</b>                      | 1.1 kg   |



## 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