

# Product datasheet

Specifications



## AC servo motor BDH - 4.7 N.m - 6000 rpm - key shaft - with brake - IP54

BDH1081E12F2B

EAN Code: 3389118185609

! Discontinued

### Main

|                           |                                                                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Product or component type | AC servo motors                                                                                                                           |
| Component name            | BDH                                                                                                                                       |
| Continuous stall torque   | 4.7 N.m for LXM15LD10N4 3 phases                                                                                                          |
| Peak stall torque         | 10.71 N.m for LXM15LD10N4 at 230 V 3 phases<br>10.71 N.m for LXM15LD10N4 at 400 V 3 phases<br>10.71 N.m for LXM15LD10N4 at 480 V 3 phases |
| Nominal output power      | 1000 W for LXM15LD10N4 at 400 V 3 phases<br>1200 W for LXM15LD10N4 at 480 V 3 phases<br>700 W for LXM15LD10N4 at 230 V 3 phases           |
| Nominal torque            | 3.85 N.m for LXM15LD10N4 at 480 V 3 phases<br>4 N.m for LXM15LD10N4 at 400 V 3 phases<br>4.35 N.m for LXM15LD10N4 at 230 V 3 phases       |
| Nominal speed             | 1500 rpm for LXM15LD10N4 at 230 V 3 phases<br>2500 rpm for LXM15LD10N4 at 400 V 3 phases<br>3000 rpm for LXM15LD10N4 at 480 V 3 phases    |
| Maximum mechanical speed  | 6000 rpm                                                                                                                                  |
| Product compatibility     | LXM15LD10N4 at 230 V 3 phases<br>LXM15LD10N4 at 400 V 3 phases<br>LXM15LD10N4 at 480 V 3 phases                                           |
| Shaft end                 | Keyed                                                                                                                                     |
| IP degree of protection   | IP54                                                                                                                                      |
| Encoder type              | Absolute multitrn SinCos Hiperface                                                                                                        |
| Speed feedback resolution | 1048576 points/turn x 4096 turns                                                                                                          |
| Holding brake             | With                                                                                                                                      |
| Mounting support          | NEMA flange                                                                                                                               |
| Electrical connection     | Rotatable right-angled connectors                                                                                                         |
| Number of poles           | 10                                                                                                                                        |

### Complementary

|                      |                      |
|----------------------|----------------------|
| Range compatibility  | Lexium 15            |
| Maximum current Irms | 5.83 A               |
| Torque constant      | 1.72 N.m/A at 120 °C |
| Back emf constant    | 110 V/krpm at 120 °C |
| Stator resistance    | 8.47 Ohm at 20 °C    |
| Stator inductance    | 36.6 mH at 20 °C     |

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

|                                 |                                                                                                                            |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Stator electrical time constant | 4.32 ms at 20 °C                                                                                                           |
| Maximum radial force Fr         | 300 N at 6000 rpm<br>325 N at 5000 rpm<br>350 N at 4000 rpm<br>375 N at 3000 rpm<br>400 N at 2000 rpm<br>425 N at 1000 rpm |
| Maximum axial force Fa          | 0.3 x Fr                                                                                                                   |
| Net weight                      | 4.2 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 |