

# Product datasheet

Specifications

## Motors



AC servo motor BDH - 3.42 N.m - 6000 rpm - untapped shaft - with brake - IP67

BDH0842E21F2A

⚠ Discontinued on: 8 Jul 2022

⚠ Discontinued

EAN Code: 3389118174658

## Main

|                           |                                                                                                                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product or component type | AC servo motors                                                                                                                                                                                                                        |
| Component name            | BDH                                                                                                                                                                                                                                    |
| Continuous stall torque   | 3.42 N.m for LXM15LD10N4 3 phases<br>3.42 N.m for LXM15LD13M3 3 phases<br>3.42 N.m for LXM15LD13M3 single phase                                                                                                                        |
| Peak stall torque         | 9.41 N.m for LXM15LD10N4 at 230 V 3 phases<br>9.41 N.m for LXM15LD10N4 at 400 V 3 phases<br>9.41 N.m for LXM15LD10N4 at 480 V 3 phases<br>9.72 N.m for LXM15LD13M3 at 230 V 3 phases<br>9.72 N.m for LXM15LD13M3 at 230 V single phase |
| Nominal output power      | 1000 W for LXM15LD10N4 at 480 V 3 phases<br>500 W for LXM15LD10N4 at 230 V 3 phases<br>500 W for LXM15LD13M3 at 230 V 3 phases<br>500 W for LXM15LD13M3 at 230 V single phase<br>900 W for LXM15LD10N4 at 400 V 3 phases               |
| Nominal torque            | 2.8 N.m for LXM15LD10N4 at 480 V 3 phases<br>2.9 N.m for LXM15LD10N4 at 400 V 3 phases<br>3.15 N.m for LXM15LD10N4 at 230 V 3 phases<br>3.15 N.m for LXM15LD13M3 at 230 V 3 phases<br>3.15 N.m for LXM15LD13M3 at 230 V single phase   |
| Nominal speed             | 1500 rpm for LXM15LD10N4 at 230 V 3 phases<br>1500 rpm for LXM15LD13M3 at 230 V 3 phases<br>1500 rpm for LXM15LD13M3 at 230 V single phase<br>3000 rpm for LXM15LD10N4 at 400 V 3 phases<br>3500 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<br>LXM15LD13M3 at 230 V 3 phases<br>LXM15LD13M3 at 230 V single phase                                                                  |
| Shaft end                 | Untapped                                                                                                                                                                                                                               |
| IP degree of protection   | IP67                                                                                                                                                                                                                                   |
| Encoder type              | Absolute single turn SinCos Hiperface                                                                                                                                                                                                  |
| Speed feedback resolution | 1048576 points/turn                                                                                                                                                                                                                    |
| Holding brake             | With                                                                                                                                                                                                                                   |
| Mounting support          | International IEC standard flange                                                                                                                                                                                                      |
| Electrical connection     | Rotatable right-angled connectors                                                                                                                                                                                                      |
| Number of poles           | 10                                                                                                                                                                                                                                     |

## Complementary

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

|                                 |                                                                                                                            |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Range compatibility             | Lexium 15                                                                                                                  |
| Maximum current Irms            | 7.78 A                                                                                                                     |
| Torque constant                 | 1.26 N.m/A at 120 °C                                                                                                       |
| Back emf constant               | 80.9 V/krpm at 120 °C                                                                                                      |
| Stator resistance               | 7.22 Ohm at 20 °C                                                                                                          |
| Stator inductance               | 26.8 mH at 20 °C                                                                                                           |
| Stator electrical time constant | 3.71 ms at 20 °C                                                                                                           |
| Maximum radial force Fr         | 310 N at 6000 rpm<br>340 N at 5000 rpm<br>370 N at 4000 rpm<br>400 N at 3000 rpm<br>430 N at 2000 rpm<br>460 N at 1000 rpm |
| Maximum axial force Fa          | 0.3 x Fr                                                                                                                   |
| Net weight                      | 3.39 kg                                                                                                                    |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## 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 |