

Product datasheet

Specifications



servo motor BCH, Lexium 23 Plus,
smooth, 20 bit encoder, straight
connection

BCH1801N31A1C

⚠ Discontinued on: 9 Feb 2023

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Main

Range compatibility	Lexium 23 Plus
Device short name	BCH
Product or component type	Servo motor

Complementary

Maximum mechanical speed	5000 rpm
[Us] rated supply voltage	220 V
Network number of phases	Single phase
Continuous stall current	0.9 A
Continuous power	0.1 kW
Shaft end	Smooth shaft
Second shaft	Without second shaft end
Shaft diameter	8 mm
Shaft length	20 mm
Feedback type	20 bits incremental encoder
Holding brake	Without
Mounting support	Asian standard flange
Motor flange size	40 mm
Torque constant	0.36 N.m/A
Back emf constant	13.6 V/krpm at 20 °C
Rotor inertia	0.037 kg.cm ²
Stator resistance	18.6 Ohm at 20 °C
Stator inductance	48 mH at 20 °C
Stator electrical time constant	2.58 ms at 20 °C
Maximum radial force Fr	78.4 N
Maximum axial force Fa	39.2 N
Brake pull-in power	7.3 W
Type of cooling	Natural convection
Length	100.6 mm
Number of motor stacks	1

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

Centring collar diameter	30 mm
Centring collar depth	2.5 mm
Number of mounting holes	4
Mounting holes diameter	4.5 mm
Circle diameter of the mounting holes	46 mm
Distance shaft shoulder-flange	20 mm
Net weight	0.5 kg

Environment

IP degree of protection	IP65
Ambient air temperature for operation	0...40 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	30.4 cm
Package 1 Width	36.5 cm
Package 1 Length	40.9 cm
Package 1 Weight	13.8 kg

Contractual warranty

Warranty (in months)	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