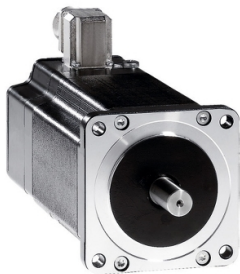


# Product data sheet

Specifications



3-phase stepper motor - 2.26 Nm - shaft  $\varnothing$  12 mm - L = 68 mm - w/o brake - wire

BRS397H370AAA

**Discontinued on:** Oct 9, 2023

**Discontinued**

**Product availability:** Non-Stock - Not normally stocked in distribution facility

## Main

Range Compatibility	Lexium SD3
Product Or Component Type	Motion control motor
Device Short Name	BRS3
Maximum Mechanical Speed	3000 rpm
Motor Type	3-phase stepper motor
Number Of Motor Poles	6
Supply Voltage Limits	34 V AC 48 V DC
Mounting Support	Flange
Motor Flange Size	3.35 in (85 mm)
Length	2.68 in (68 mm)
Centring Collar Diameter	2.87 in (73 mm)

## Complementary

Centring Collar Depth	0.08 in (2 mm)
Number Of Mounting Holes	4
Mounting Holes Diameter	0.26 in (6.5 mm)
Circle Diameter Of The Mounting Holes	3.90 in (98.99 mm)
Electrical Connection	Wires
Holding Brake	Without
Shaft End	Smooth shaft
Second Shaft	Without second shaft end
Shaft Diameter	0.47 in (12 mm)
Shaft Length	1.18 in (30 mm)
Nominal Torque	17.70 lbf.in (2 N.m)
Holding Torque	20.00 lbf.in (2.26 N.m)
Rotor Inertia	1.1 kg.cm <sup>2</sup>
Resolution	1.8 °, 0.9 °, 0.72 °, 0.36 °, 0.18 °, 0.09 °, 0.072 °, 0.036 ° step angle 200, 400, 500, 1000, 2000, 4000, 5000, 10000 steps number of full steps per revolution
Accuracy Error	+/- 6 arc min

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Maximum Starting Frequency	5 kHz
Line Rated Current	5.8 A
Resistance	0.35 Ohm winding)
Time Constant	7 ms
Maximum Radial Force Fr	100 N first shaft end) 75 N second shaft end)
Maximum Axial Force Fa	175 N tensile force) 30 N force pressure)
Service Life In Hours	20000 h bearing)
Angular Acceleration	200000 rad/s²
Net Weight	4.63 lb(US) (2.1 kg)

## Environment

Standards	IEC 50347 IEC 60072-1
Type Of Cooling	Natural convection
Ambient Air Temperature For Operation	-13...104 °F (-25...40 °C)
Ambient Air Temperature For Storage	-13...158 °F (-25...70 °C)
Operating Altitude	<= 3280.84 ft (1000 m) without power derating
Relative Humidity	15...85 % without condensation
Vibration Resistance	20 m/s² maximum A IEC 60034-14
Ip Degree Of Protection	IP56 total except shaft bushing: conforming to IEC 60034-5 IP41 shaft bushing without shaft seal ring: conforming to IEC 60034-5
Temperature Class	F winding IEC 60034-1

## Ordering and shipping details

Category	US1PC5518284
Discount Schedule	PC55
Gtin	3606485150086
Returnability	No
Country Of Origin	DE

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	7.87 in (20.000 cm)
Package 1 Width	8.27 in (21.000 cm)
Package 1 Length	15.75 in (40.000 cm)
Package 1 Weight	6.03 lb(US) (2.736 kg)
Unit Type Of Package 2	P06
Number Of Units In Package 2	8
Package 2 Height	29.53 in (75.000 cm)
Package 2 Width	31.50 in (80.000 cm)

Package 2 Length	23.62 in (60.000 cm)
Package 2 Weight	65.89 lb(US) (29.888 kg)

## Contractual warranty

Warranty	18 months
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Sustainability



**Green Premium™** label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product’s sustainability >](#)



Transparency   RoHS/REACH

## Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information   [Yes](#)

✓ Pvc Free

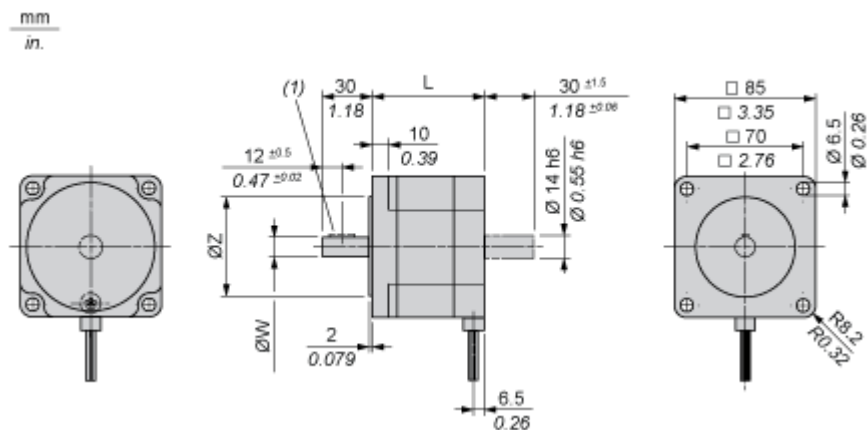
## Certifications & Standards

Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	No need of specific recycling operations
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Dimensions Drawings

## Dimensions

### 3-Phase Stepper Motor in Wires Version



Dimensions in mm

L	Shaft diameter ØW	Centring collar ØZ	Woodruff key DIN 6888 (1)
67.5 (+0.6) (-0.8)	12 h6	73 h8	4 x 6.5

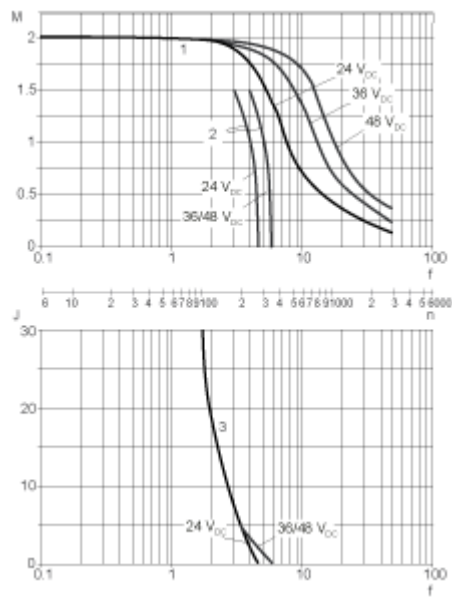
Dimensions in in.

L	Shaft diameter ØW	Centring collar ØZ	Woodruff key DIN 6888 (1)
2.66 (+0.023) (-0.031)	0.47 h6	2.87 h8	0.16 x 0.25

Performance Curves

Torque Characteristics

Measurement at 1000 Steps/Revolution, Nominal Voltage DC Bus  $U_N$  and Phase Current  $I_N$



- M : Torque in Nm
- n : Speed in rpm
- f : Frequency in kHz
- J : Rotor inertia in kg.cm<sup>2</sup>
- 1 : Pull-out torque
- 2 : Pull-in torque
- 3 : Maximum load inertia