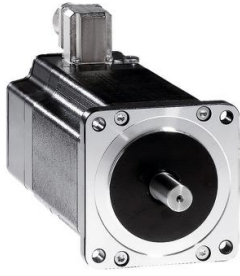


Product data sheet

Specifications



3-phase stepper motor - 4.52 Nm - shaft 12mm - L=98 mm - w/o brake - term box

BRS39AW360ABA

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	230 V AC 325 V DC
Mounting Support	Flange
Motor Flange Size	3.35 in (85 mm)
Length	5.55 in (141 mm)
Centring Collar Diameter	2.36 in (60 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	Terminal box
Holding Brake	Without
Shaft End	Untapped
Second Shaft	Without second shaft end
Shaft Diameter	0.47 in (12 mm)
Shaft Length	1.18 in (30 mm)
Nominal Torque	35.40 lbf.in (4 N.m)
Peak Stall Torque	33.81 lbf.in (3.82 N.m)
Continuous Stall Torque	33.81 lbf.in (3.82 N.m)
Holding Torque	40.01 lbf.in (4.52 N.m)
Rotor Inertia	2.2 kg.cm ²
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

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

Accuracy Error	+/- 6 arc min
Maximum Starting Frequency	5.3 kHz
[In] Rated Current	2 A
Resistance	5.8 Ohm winding)
Time Constant	9 ms
Maximum Radial Force Fr	100 N first shaft end) 50 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/s ²
Net Weight	7.05 lb(US) (3.2 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	<= 1000 m without power derating
Relative Humidity	15...85 % without condensation
Vibration Resistance	20 m/s ² maximum A IEC 60034-14
Ip Degree Of Protection	Shaft bushing IP41 IEC 60034-5 Total except shaft bushing IP56 IEC 60034-5
Temperature Class	F winding IEC 60034-1

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	7.48 in (19 cm)
Package 1 Width	8.86 in (22.5 cm)
Package 1 Length	15.75 in (40 cm)
Package 1 Weight	9.10 lb(US) (4.128 kg)
Unit Type Of Package 2	S06
Number Of Units In Package 2	12
Package 2 Height	28.94 in (73.5 cm)
Package 2 Width	23.62 in (60 cm)
Package 2 Length	31.50 in (80 cm)
Package 2 Weight	123.66 lb(US) (56.092 kg)
Unit Type Of Package 3	P06
Number Of Units In Package 3	12
Package 3 Height	30.31 in (77 cm)

Package 3 Width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)
Package 3 Weight	127.95 lb(US) (58.036 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-CO₂ 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

[REACH Declaration](#)

Eu Rohs Directive

Pro-active compliance (Product out of EU RoHS legal scope)

China Rohs Regulation

[China RoHS declaration](#)

Environmental Disclosure

[Product Environmental Profile](#)

Weee

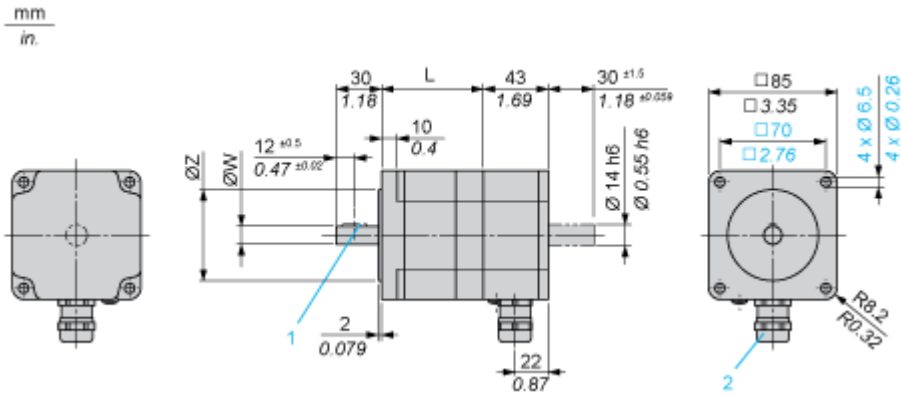
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile

No need of specific recycling operations

Dimensions

3-Phase Stepper Motor in Terminal Box Version



Dimensions in mm

L	Shaft diameter ØW	Centring collar ØZ	Woodruff key DIN 6888 (1)	Cable gland (2)
97.5 (+0.6) (-0.8)	12 h6	60 h8	4 x 6.5	ISO M20 x 1.5

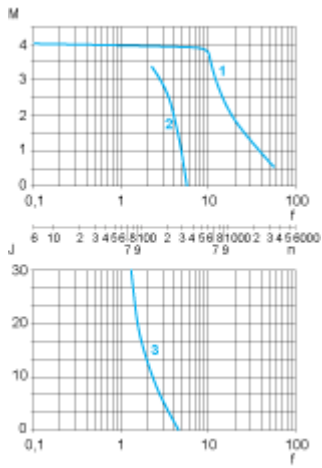
Dimensions in in.

L	Shaft diameter ØW	Centring collar ØZ	Woodruff key DIN 6888 (1)	Cable gland (2)
3.84 (+0.023) (-0.031)	0.47 h6	2.36 h8	0.16 x 0.25	ISO M20 x 1.5

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.cm²
- 1 : Pull-out torque
- 2 : Pull-in torque
- 3 : Maximum load inertia