

# Product data sheet

Specifications



## 3-phase stepper motor - 4.52Nm - shaft Ø 9.5mm - L=98 mm - w/o brake - term box

BRS39AWL60ABA

⚠ Discontinued on: Sep 15, 2023

⚠ Discontinued

### 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	3.3 in (85 mm)
Length	5.6 in (141 mm)
Centring collar diameter	2.4 in (60 mm)

### Complementary

Centring collar depth	0.08 in (2 mm)
Number of mounting holes	4
Mounting holes diameter	0.3 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	Woodruff key
Second shaft	Without second shaft end
Shaft diameter	0.5 in (12 mm)
Shaft length	1.2 in (30 mm)
Nominal torque	35.4 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	40.005 lbf.in (4.52 N.m)
Rotor inertia	2.2 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
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 <sup>2</sup>
Net weight	7.05 lb(US) (3.2 kg)

## Environment

Standards	IEC 60072-1 EN 50347
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 <sup>2</sup> maximum A EN/IEC 60034-14
IP degree of protection	IP56 shaft bushing: conforming to EN/IEC 60034-5 IP56 total except shaft bushing: conforming to EN/IEC 60034-5
Temperature class	F winding IEC/EN 60034-1

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.09 in (10.4 cm)
Package 1 Width	7.09 in (18.0 cm)
Package 1 Length	14.4 in (36.5 cm)
Package 1 Weight	9.9 lb(US) (4.5 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 Better



#### Materials and Substances

EU RoHS Directive

[Compliant By Exemption](#)

PVC free

Yes

### Use Longer



#### Lifetime extension

Repair

No

### Use Again



#### Repack and remanufacture

Circularity Profile

No need of specific recycling operations

WEEE Label

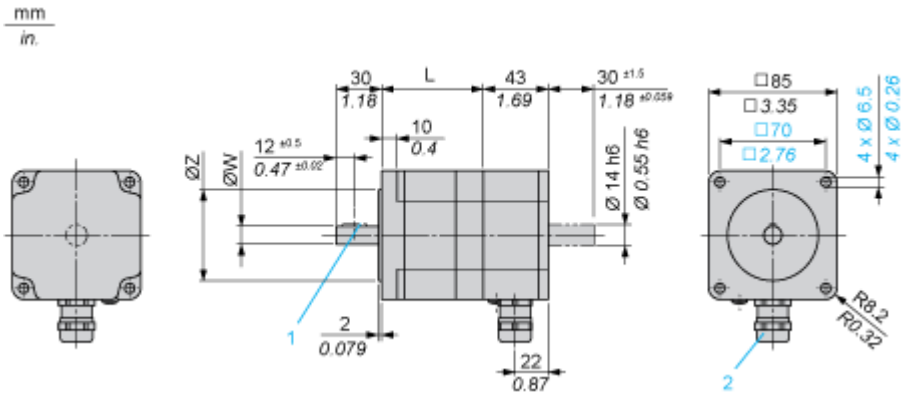


The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

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

