

3-phase stepper motor - 4.52 Nm - shaft Ø 12 mm - L=98 mm - with brake - conn

BRS39AW360FCA

EAN Code: 3389119223881

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	85 mm		
Length	187 mm		
Centring collar diameter	60 mm		

Complementary

centring collar depth	2 mm			
Number of mounting holes	4			
Mounting holes diameter	6.5 mm			
Circle diameter of the mounting holes	98.99 mm			
Electrical connection	Connector			
Holding brake	With			
Shaft end	Untapped			
Second shaft	Without second shaft end			
Shaft diameter	12 mm			
Shaft length	30 mm			
nominal torque	4 N.m			
Peak stall torque	3.82 N.m			
Continuous stall torque	3.82 N.m			
Holding torque	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

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/s²		
Net weight	3.2 kg		

Environment

Standards	IEC 60072-1 IEC 50347		
type of cooling	Natural convection		
Ambient air temperature for operation	-2540 °C		
Ambient air temperature for storage	-2570 °C		
Operating altitude	<= 1000 m without power derating		
Relative humidity	1585 % without condensation		
Vibration resistance	20 m/s² maximum A conforming to IEC 60034-14		
IP degree of protection	IP41 shaft bushing: conforming to IEC 60034-5 IP56 total except shaft bushing: conforming to IEC 60034-5		
Temperature class	F winding conforming to IEC 60034-1		

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22.5 cm
Package 1 Width	19 cm
Package 1 Length	40 cm
Package 1 Weight	5.624 kg
Unit Type of Package 2	S06
Number of Units in Package 2	12
Package 2 Height	73.5 cm
Package 2 Width	60 cm
Package 2 Length	80 cm
Package 2 Weight	74.536 kg
Unit Type of Package 3	P06
Number of Units in Package 3	12
Package 3 Height	77 cm

Package 3 Width	80 cm
Package 3 Length	60 cm
Package 3 Weight	75.988 ka

Contractual warranty

Warranty 18 months



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 >

☑ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	1294
Environmental Disclosure	Product Environmental Profile

Use Better

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACh Regulation	REACh Declaration
PVC free	Yes

Use Again

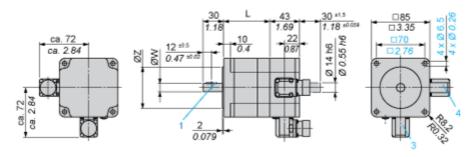
○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Dimensions

3-Phase Stepper Motor in Connector Version



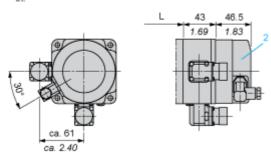


3: Motor connection 6 poles

4: Motor connection (optional) 12 poles

Holding Brake





2: Holding brake (optional)

Dimensions in mm

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

Dimensions in in.

1 Jul 2025

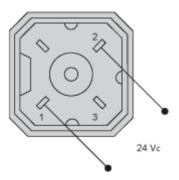
Differisions in in.			
L	Shaft diameter ØW	Centring collar ØZ	Woodruff key DIN 6888 (1)
3.84 (+0.023) (-0.031)	0.47 h6	2.36 h8	0.16 x 0.25

Product datasheet

BRS39AW360FCA

Connections and Schema

Wiring Diagram of Holding Brake

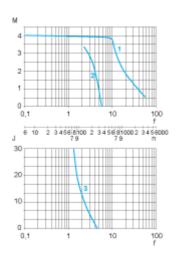


The connector is part of the scope of delivery. Connector designation: Hirschmann type G4 A 5M

Performance Curves

Torque Characteristics

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



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