

3-phase stepper motor - 6.78Nm - shaft Ø 14mm - L=128 mm - w/o brake - term box

BRS39BWC60ABA

EAN Code: 3606485152974

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	171 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	Terminal box			
Holding brake	Without			
Shaft end	Untapped			
Second shaft	Without second shaft end			
Shaft diameter	14 mm			
Shaft length	30 mm			
nominal torque	6 N.m			
Peak stall torque	5.78 N.m			
Continuous stall torque	5.78 N.m			
Holding torque	6.78 N.m			
Rotor inertia	3.3 kg.cm²			
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	2.25 A			
Resistance	6.5 Ohm (winding)			
Time constant	10 ms			
Maximum radial force Fr	110 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	4.3 kg			

Environment

Standards	IEC 50347 IEC 60072-1			
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	IP56 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	10.4 cm
Package 1 Width	18.0 cm
Package 1 Length	36.5 cm
Package 1 Weight	3.3 kg

Logistical informations

Country of origin DE

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)	1828
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
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

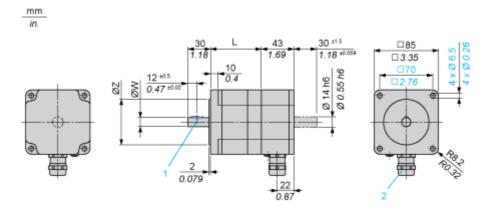
○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

BRS39BWC60ABA

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)
127.5 (+0.6) (-0.8)	14 h6	60 h8	5 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)
5.02 (+0.023) (-0.031)	0.55 h6	2.36 h8	0.20 x 0.25	ISO M20 x 1.5

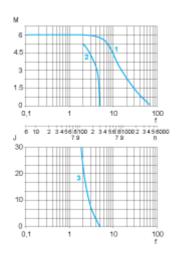
Product datasheet

BRS39BWC60ABA

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