

3-phase stepper motor - 1.7 Nm - shaft Ø8mm - L=79mm - without brake - connector

BRS368W131ACA

EAN Code: 3389119223553

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	57.2 mm
Length	116 mm
Centring collar diameter	38 mm

Complementary

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centring collar depth	1.6 mm
Number of mounting holes	4
Mounting holes diameter	5.2 mm
Circle diameter of the mounting holes	66.6 mm
Electrical connection	Connector
Feedback type	Single turn encoder
Speed feedback resolution	10000 points/turn
Holding brake	Without
Shaft end	Smooth shaft
Second shaft	Without second shaft end
Shaft diameter	8 mm
Shaft length	21 mm
nominal torque	1.5 N.m
Peak stall torque	1.53 N.m
Continuous stall torque	1.53 N.m
Holding torque	1.7 N.m
Rotor inertia	0.38 kg.cm ²

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	
+/- 6 arc min	
8.5 kHz	
0.9 A	
25 Ohm (winding)	
4.6 ms	
25 N (second shaft end) 50 N (first shaft end)	
100 N (tensile force) 8.4 N (force pressure)	
20000 h (bearing)	
200000 rad/s²	
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	22.000 cm
Package 1 Width	19.500 cm
Package 1 Length	40.000 cm
Package 1 Weight	2.346 kg
Unit Type of Package 2	P06
Number of Units in Package 2	12
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	36.652 kg

Logistical informations

Country of origin

Contractual warranty

Warranty 18 months

DE



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)	607
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

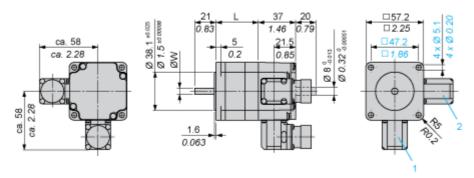
BRS368W131ACA

Dimensions Drawings

Dimensions

3-Phase Stepper Motor in Connector Version





- 1: Plug connection encoder (optional) 12 poles
- 2: Plug connection motor 6 poles

Dimensions in mm

L	Shaft diameter ØW
79 ±0.5	8 ±0.013

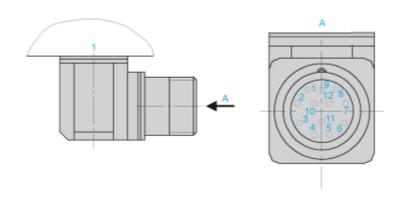
Dimensions in in.

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L	Shaft diameter ØW
3.11 ±0.020	0.31 ±0.00051

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Connections and Schema

Wiring Diagram of Encoder Plug on BRS3••



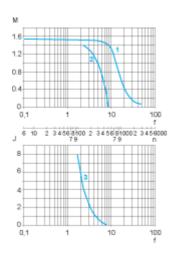
1: Motor housing

Pin	Designation
1	А
2	A negated
3	В
4	B negated
5	C, I
6	C negated, I negated
7	5 V _{GND}
8	+ 5
9	-SENSE
10	+SENSE
11	Temperature sensor
12	Not connected

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