

# 3-phase stepper motor - 1.70 Nm - shaft Ø8 mm - L=79 mm - without brake - wire

BRS368H130AAB

EAN Code: 3606485149882

## 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	34 V DC 48 V DC
Mounting support	Flange
Motor flange size	57.2 mm
Length	79 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	Flying leads
Holding brake	Without
Shaft end	Smooth shaft
Second shaft	With second shaft end
Shaft diameter	8 mm
Shaft length	21 mm
nominal torque	1.5 N.m
Holding torque	1.7 N.m
Rotor inertia	0.38 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	6 kHz

[In] rated current	5.8 A	
Resistance	0.7 Ohm (winding)	
Time constant	4.6 ms	
Maximum radial force Fr	50 N (first shaft end) 40 N (second shaft end)	
Maximum axial force Fa	100 N (tensile force) 8.4 N (force pressure)	
Service life in hours	20000 h (bearing)	
Angular acceleration	200000 rad/s²	
Net weight	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	IP56 total except shaft bushing: conforming to IEC 60034-5 IP41 shaft bushing without shaft seal ring: conforming to IEC 60034-5	
Temperature class	F winding conforming to IEC 60034-1	

# **Packing Units**

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	10.500 cm
Package 1 Width	17.000 cm
Package 1 Length	24.500 cm
Package 1 Weight	1.402 kg
Unit Type of Package 2	P06
Number of Units in Package 2	36
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	58.972 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)	605
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**

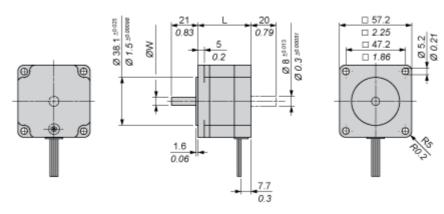
○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## **Dimensions Drawings**

## **Dimensions**

## 3-Phase Stepper Motor in Wire Version





#### Dimensions in mm

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L	Shaft diameter ØW
79 ±0.5	8 ±0.013

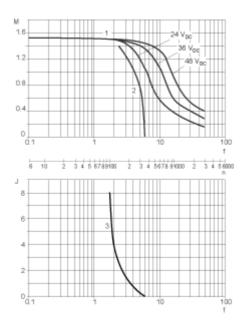
#### Dimensions in in.

L	Shaft diameter ØW
3.11 ±0.020	0.31 ±0.00051

#### 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.cm<sup>2</sup>

1: Pull-out torque

2: Pull-in torque

3: Maximum load inertia