

# 3-phase stepper motor - 1.70 Nm - shaft Ã~8 mm - L=79 mm - without brake - wire

BRS368H130AAA

Product availability: Non-Stock - Not normally stocked in distribution facility

#### 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	2.3 in (57.2 mm)
Length	3.1 in (79 mm)
Centring collar diameter	1.5 in (38 mm)

### Complementary

centring collar depth	0.06 in (1.6 mm)	
Number of mounting holes	4	
Mounting holes diameter	0.2 in (5.2 mm)	
Circle diameter of the mounting holes	2.6 in (66.6 mm)	
Electrical Connection	Flying leads	
Holding brake	Without	
Shaft end	Smooth shaft	
Second shaft	Without second shaft end	
Shaft diameter	0.3 in (8 mm)	
Shaft length	0.8 in (21 mm)	
nominal torque	13.3 lbf.in (1.5 N.m)	
Holding torque	15.05 lbf.in (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	

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Line 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	4.4 lb(US) (2 kg)	

# **Environment**

Standards	IEC 50347 IEC 60072-1	
type of cooling	Natural convection	
Ambient air temperature for operation	-13104 °F (-2540 °C)	
Ambient Air Temperature for Storage	-13158 °F (-2570 °C)	
Operating altitude	<= 3280.84 ft (1000 m) without power derating	
Relative humidity	1585 % without condensation	
Vibration resistance	20 m/s² maximum A 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 IEC 60034-1	

# Ordering and shipping details

Category	US1PC5518284	
Discount Schedule	PC55	
GTIN	3606485149431	
Returnability	No	
Country of origin	DE	

# **Packing Units**

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Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	4.13 in (10.500 cm)
Package 1 Width	6.69 in (17.000 cm)
Package 1 Length	9.65 in (24.500 cm)
Package weight(Lbs)	3.042 lb(US) (1.380 kg)
Unit Type of Package 2	P06
Number of Units in Package 2	36
Package 2 Height	29.53 in (75.000 cm)
Package 2 Width	23.62 in (60.000 cm)
Package 2 Length	31.50 in (80.000 cm)

Package 2 Weight

130.011 lb(US) (58.972 kg)

# **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 CO2 eq, 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
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
PVC free	Yes

#### **Use Again**

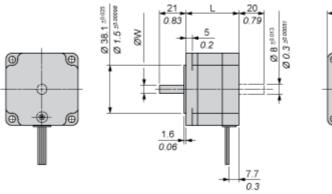
○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No

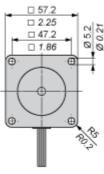
#### **Dimensions Drawings**

#### **Dimensions**

#### 3-Phase Stepper Motor in Wire Version







#### Dimensions in mm

L	Shaft diameter ØW
79 ±0.5	8 ±0.013

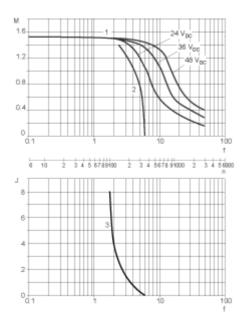
#### Dimensions in in.

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