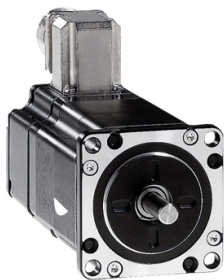


Product data sheet

Specifications



3-phase stepper motor - 0.51 Nm - shaft $\varnothing$ 6.35 mm - L=42 mm - w/o brake

BRS364H030ABA

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	Terminal box
Holding brake	Without
Shaft end	Smooth shaft
Second shaft	Without second shaft end
Shaft diameter	0.25 in (6.35 mm)
Shaft length	0.8 in (21 mm)
Nominal torque	3.98 lbf.in (0.45 N.m)
Holding torque	4.51 lbf.in (0.51 N.m)
Rotor inertia	0.1 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	8.5 kHz
[In] rated current	5.2 A

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Resistance	0.42 Ohm winding)
Time constant	2.1 ms
Maximum radial force Fr	25 N second shaft end) 24 N first 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	2.9 lb(US) (1.3 kg)

Environment

Standards	IEC 50347 IEC 60072-1
Type of cooling	Natural convection
Ambient air temperature for operation	-13...104 °F (-25...40 °C)
Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Operating altitude	<= 1000 m without power derating
Relative humidity	15...85 % 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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.331 in (11.000 cm)
Package 1 Width	9.724 in (24.700 cm)
Package 1 Length	6.732 in (17.100 cm)
Package 1 Weight	31.887 oz (904.000 g)

Contractual warranty

Warranty (in months)	18
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Environmental Data

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

Total lifecycle Carbon footprint	603 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	5 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	598 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.
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	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



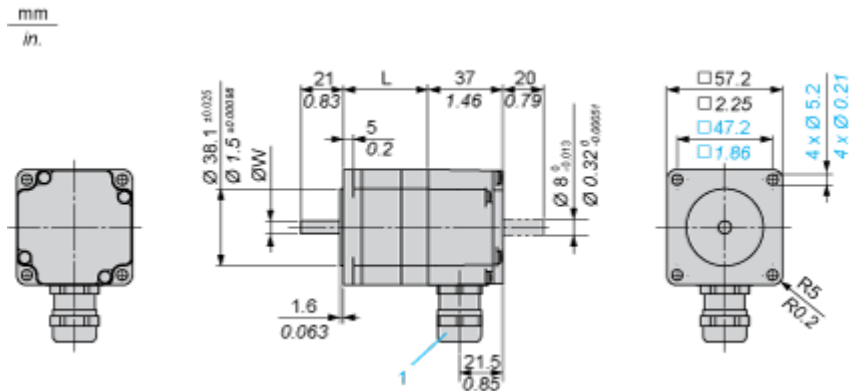
Repack and remanufacture

Circularity Profile	No need of specific recycling operations
Take-back	Nej
WEEE Label	 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 Terminal Box Version



1 : Cable gland M20 x 1.5 for cable Ø 9 ... 13 mm / 0.35 ... 0.51 in.

Dimensions in mm

L	Shaft diameter ØW
42 ±0.5	6.35 ±0.013

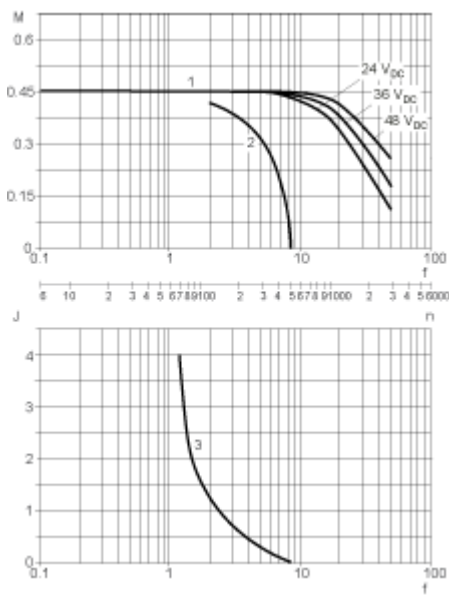
Dimensions in in.

L	Shaft diameter ØW
1.65 ±0.020	0.25 ±0.00051

Performance Curves

Torque Characteristics

Measurement at 1000 Steps/Revolution, Nominal Voltage DC Bus U_N and Phase Current 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