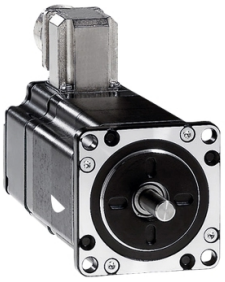
Product datasheet

Specifications



3-phase stepper motor - 1.02 Nm - shaft Ã˜ 6.35 mm - L=56 mm - w/o brake

BRS366H030ABB

Discontinued on: 7 Aug 2023

Discontinued

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	93 mm
Centring collar diameter	38 mm

Complementary

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	Terminal box
Holding brake	Without
Shaft end	Smooth shaft
Second shaft	With second shaft end
Shaft diameter	6.35 mm
Shaft length	21 mm
Nominal torque	0.9 N.m
Holding torque	1.02 N.m
Rotor inertia	0.22 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	8 kHz

[In] rated current	5.8 A
Resistance	0.5 Ohm (winding)
Time constant	3.3 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	1.6 kg

Environment

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

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	1.171 kg
Unit Type of Package 2	S03
Number of Units in Package 2	5
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	6.222 kg
Unit Type of Package 3	P06
Number of Units in Package 3	40
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm

Package 3 Weight	57.776 kg

Contractual warranty

Warranty (in months)	18

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 >

Use Longer

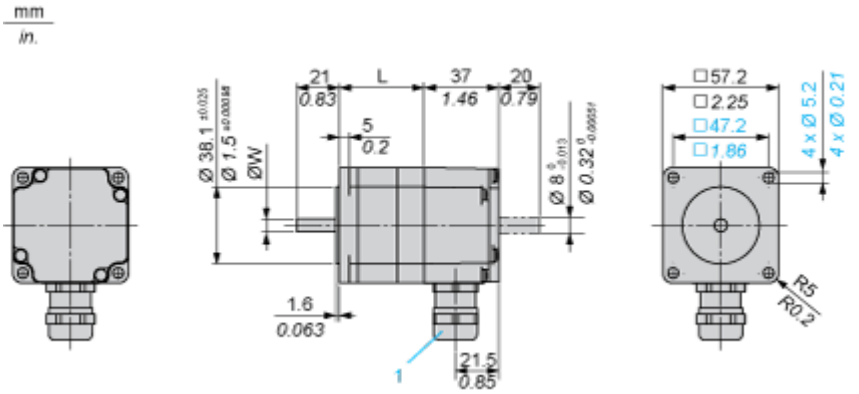
Lifetime extension

Repair	No

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
56 ±0.5	6.35 ±0.013

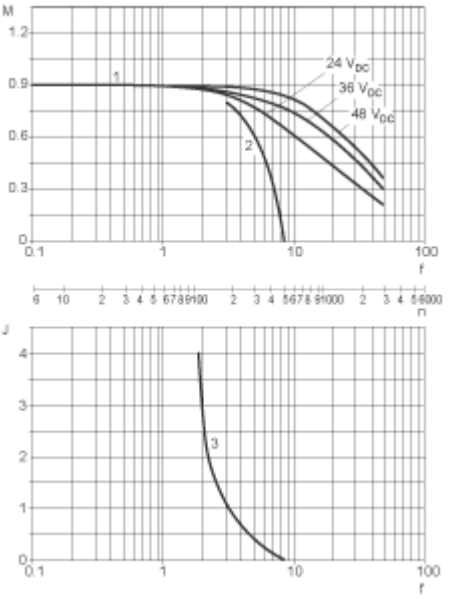
Dimensions in in.

L	Shaft diameter ØW
2.20 ±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 $kg.cm^2$

1 : Pull-out torque

2 : Pull-in torque

3 : Maximum load inertia