

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	4.33 in (110 mm)
Length	8.98 in (228 mm)
Centring collar diameter	2.2 in (56 mm)

Complementary

Centring collar depth	0.12 in (3 mm)
Number of mounting holes	4
Mounting holes diameter	0.35 in (9 mm)
Circle diameter of the mounting holes	4.96 in (125.86 mm)
Electrical connection	Connector
Holding brake	Without
Shaft end	Parallel key
Second shaft	Without second shaft end
Shaft diameter	0.75 in (19 mm)
Shaft length	1.57 in (40 mm)
Nominal torque	146.02 lbf.in (16.5 N.m)
Peak stall torque	145.58 lbf.in (16.45 N.m)
Continuous stall torque	145.58 lbf.in (16.45 N.m)
Holding torque	174.34 lbf.in (19.7 N.m)
Rotor inertia	16 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	4.7 kHz
Line Rated Current	4.75 A
Resistance	1.9 Ohm (winding)
Time constant	22 ms
Maximum radial force Fr	150 N (second shaft end) 300 N (first shaft end)
Maximum axial force Fa	330 N (tensile force) 60 N (force pressure)
Service life in hours	20000 h (bearing)
Angular acceleration	200000 rad/s ²
Product weight	24.69 lb(US) (11.2 kg)

Environment

standards	EN 50347 IEC 60072-1
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The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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	<= 3280.84 ft (1000 m) without power derating
relative humidity	15...85 % without condensation
vibration resistance	20 m/s² maximum A conforming to EN/IEC 60034-14
IP degree of protection	IP41 shaft bushing conforming to EN/IEC 60034-5 IP56 total except shaft bushing conforming to EN/IEC 60034-5
temperature class	F class winding conforming to IEC/EN 60034-1

Offer Sustainability

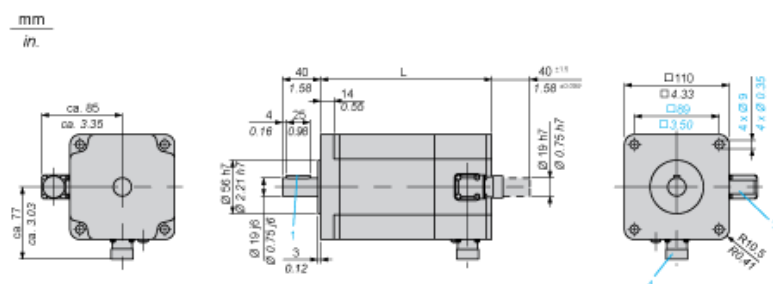
Green Premium product	Green Premium product
Compliant - since 0623 - Schneider Electric declaration of conformity	Compliant - since 0623 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Need no specific recycling operations	Need no specific recycling operations

Contractual warranty

Warranty period	18 months
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Dimensions

3-Phase Stepper Motor in Connector Version



3 : Plug connection encoder (optional) 12 poles

4 : Plug connection motor 6 poles

Dimensions in mm

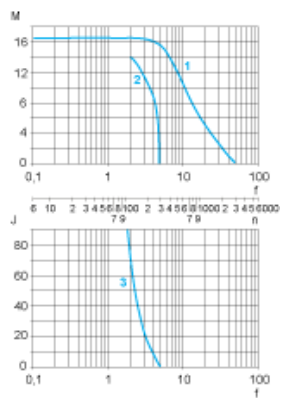
L	Parallel key DIN 6885 (1)
228 ±1	6 x 6 x 25

Dimensions in in.

L	Parallel key DIN 6885 (1)
8.98 ±0.039	0.24 x 0.24 x 0.98

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