

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	85 mm
Length	111 mm
Centring collar diameter	60 mm

Complementary

Centring collar depth	2 mm
Number of mounting holes	4
Mounting holes diameter	6.5 mm
Circle diameter of the mounting holes	98.99 mm
Electrical connection	Connector
Holding brake	Without
Shaft end	Woodruff key
Second shaft	Without second shaft end
Shaft diameter	12 mm
Shaft length	30 mm
Nominal torque	2 N.m
Peak stall torque	1.9 N.m
Continuous stall torque	1.9 N.m
Holding torque	2.26 N.m
Rotor inertia	1.1 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	5.3 kHz
[In] rated current	1.75 A
Resistance	6.5 Ohm (winding)
Time constant	7 ms
Maximum radial force Fr	100 N (first shaft end) 50 N (second shaft end)
Maximum axial force Fa	175 N (tensile force) 30 N (force pressure)
Service life in hours	20000 h (bearing)
Angular acceleration	200000 rad/s ²
Net weight	2.1 kg

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.

Environment

Standards	EN 50347 IEC 60072-1
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/s ² 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 winding conforming to IEC/EN 60034-1

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22.5 cm
Package 1 Width	19 cm
Package 1 Length	40 cm
Package 1 Weight	3.056 kg
Unit Type of Package 2	S06
Number of Units in Package 2	12
Package 2 Height	73.5 cm
Package 2 Width	60 cm
Package 2 Length	80 cm
Package 2 Weight	42.568 kg
Unit Type of Package 3	P06
Number of Units in Package 3	12
Package 3 Height	77 cm
Package 3 Width	80 cm
Package 3 Length	60 cm
Package 3 Weight	45.172 kg

Offer Sustainability

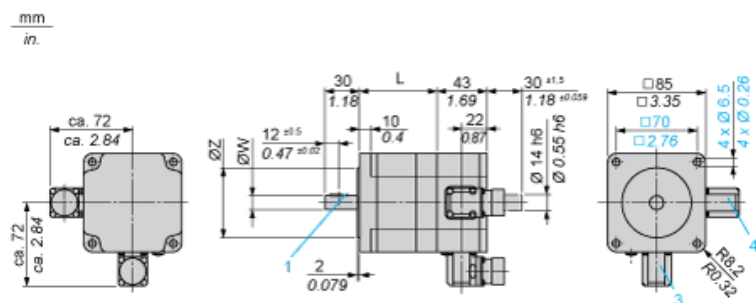
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Contractual warranty

Warranty	18 months
----------	-----------

Dimensions

3-Phase Stepper Motor in Connector Version



- 3 : Motor connection 6 poles
- 4 : Motor connection (optional) 12 poles

Dimensions in mm

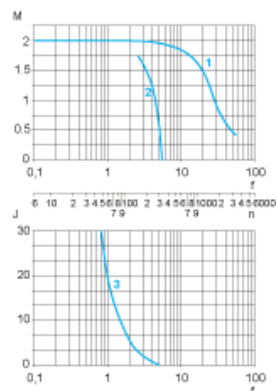
L	Shaft diameter ØW	Centring collar ØZ	Woodruff key DIN 6888 (1)
67.5 (+0.6) (-0.8)	12 h6	60 h8	4 x 6.5

Dimensions in in.

L	Shaft diameter ØW	Centring collar ØZ	Woodruff key DIN 6888 (1)
2.66 (+0.023) (-0.031)	0.47 h6	2.36 h8	0.16 x 0.25

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 $\text{kg}\cdot\text{cm}^2$
- 1 : Pull-out torque
- 2 : Pull-in torque
- 3 : Maximum load inertia