

Main

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|---------------------------|-----------------------|
| 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 | 2.25 in (57.2 mm) |
| Length | 3.11 in (79 mm) |
| Centring collar diameter | 1.50 in (38 mm) |

Complementary

| | |
|---------------------------------------|---|
| Centring collar depth | 0.06 in (1.6 mm) |
| Number of mounting holes | 4 |
| Mounting holes diameter | 0.20 in (5.2 mm) |
| Circle diameter of the mounting holes | 2.62 in (66.6 mm) |
| Electrical connection | Terminal box |
| Holding brake | Without |
| Shaft end | Smooth shaft |
| Second shaft | With second shaft end |
| Shaft diameter | 0.25 in (6.35 mm) |
| Shaft length | 0.83 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 |
| Line Rated Current | 5.2 A |
| 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/s ² |
| Net weight | 2.87 lb(US) (1.3 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

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|---------------------------------------|--|
| Standards | IEC 60072-1 EN 50347 |
| 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/s ² maximum A EN/IEC 60034-14 |
| IP degree of protection | Total except shaft bushing IP56 EN/IEC 60034-5 IP41 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5 |
| Temperature class | F winding IEC/EN 60034-1 |

Ordering and shipping details

| | |
|-----------------------|------------------------|
| Category | 18284 - STEPPER MOTORS |
| Discount Schedule | PC55 |
| GTIN | 03606485152400 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 1.56 lb(US) (0.71 kg) |
| Returnability | No |
| Country of origin | DE |

Packing Units

| | |
|------------------------|-------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 3.94 in (10 cm) |
| Package 1 width | 6.30 in (16 cm) |
| Package 1 Length | 8.46 in (21.5 cm) |

Offer Sustainability

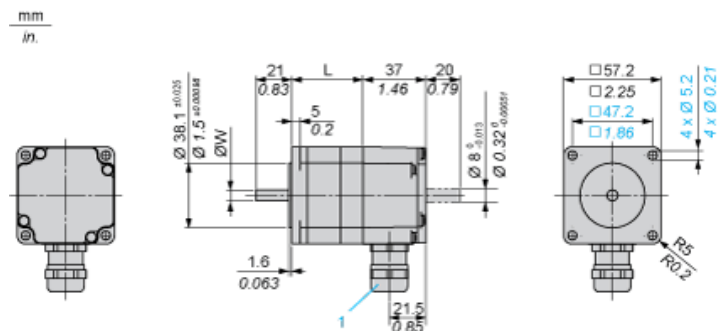
| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| 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

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

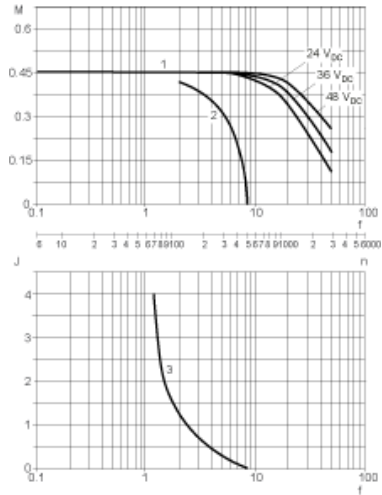
| | |
|---------|-------------------|
| L | Shaft diameter ØW |
| 42 ±0.5 | 6.35 ±0.013 |

Dimensions in in.

| | |
|-------------|-------------------|
| L | Shaft diameter ØW |
| 1.65 ±0.020 | 0.25 ±0.00051 |

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