F 2140

Ø 40 mm, Graphite brushes, 6 Watt

Order no.

Motor data

- Power rating: 6.0 W
- Nominal voltage: 24.0 Volt
- No load speed: 3990 min⁻¹
- Stall torque: 31.9 mNm
- Speed/torque gradient: 130 min⁻¹ mNm⁻¹
- No load current: 15 mA
- Starting current: 578 mA
- Terminal resistance: 41.5 Ohm
- Max. permissible speed: 11000 min⁻¹
- Max. continuous current: 244 mA
- Max. continuous torque: 13.5 mNm
- Max. power output at nominal voltage: 3250 W
- Max. efficiency: 70.0%
- Torque constant: 55.2 mNm A⁻¹
- Speed constant: 173 min⁻¹ V⁻¹
- Mechanical time constant: 30 ms
- Rotor inertia: 22.1 gcm²
- Terminal inductance: 5.02 mH
- Thermal resistance housing-ambient: 10 KW⁻¹
- Thermal resistance rotor-housing: 8.8 KW⁻¹
- Thermal time constant winding: 42 s

Specifications

- Axial play: 0.2-0.3 mm
- Max. load of sleeve bearings
  - axial (dynamic): 0.50 N
  - radial (5 mm from flange): 2.5 N
  - Press-fit force (static): 50 N
- Max. load of ball bearings
  - axial (dynamic): 1.5 N
  - radial (5 mm from flange): 7.5 N
  - Press-fit force (static): 50 N
- Radial play sleeve bearings: 0.014 mm
- Radial play ball bearings: 0.025 mm
- Ambient temperature range: -20/+65 °C
- Max. rotor temperature: +85° C
- Number of commutator segments: 7
- Weight of motor: 190 g

Operating range

- Continuous operation: 11000/3990
- Short-term operation: 13.5/244
- Recommended operating range: 31.9/578

Dimensions in mm.
This schematic is not drawn to scale.

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http://www.maxonmotor.com/page030111d.cfm?dcmotitem=4444