General characteristics

Motor characteristics at (1) Vdc 90

At no load - A
- Speed rpm 3 700 ± 10%
- Current A 0.56
- EMC (55022) class B
- Life (2) h 20 000

At max efficiency - B
- Speed rpm 3 410 ± 10%
- Torque (4) mNm 218
- Power output W 78
- Current A 1.03
- Efficiency % 84
- EMC (55022) class B
- Life (2) h 10 000

At nominal load - C
- Speed rpm 3 320 ± 10%
- Torque (4) mNm 290
- Power output W 101
- Current A 1.34
- Efficiency % 84
- EMC (55022) class B
- Life (2) h 5 000

Motor parameters (1)
- Allowed speed rpm 10 000 max
- Rated torque mNm 290
- Electrical time constant ms 1.6
- Mechanical time constant ms 9
- Factor torque / speed mNm/rpm 0.76316
- Dry friction mNm 10
- Viscous friction mNm/rpm 2.4
- Rotor inertia gcm² 650
- Thermal Resistance °C/W 5
- Slator poles
- Collector blades 12
- Cogging torque mNm 9
- Weight (g) g 1 600
- Noise level dBA 35

Winding parameters (1)
- Torque constant mNm/A 232.0 ± 10%
- Constant electromotive force Volts/(rad/s) 0.232 ± 10%
- Resistance Ohms 7.4 ± 10%
- Inductance mH 12
- Start voltage Volts 6
- Current demagnetization (magnets at 150 °C) A 28

Generic parameters
- Motor for direct current supply
- Efficiency %
- Output shaft with ball bearings
- EMC (55022) class
- Max. Radial force (20mm from front face) N
- Life (2) h
- Max. axial force(5) N
- At nominal load - C
- Temperature range CEI60068-2-1 °C
- Storage temperature °C
- Dielectric  (1min 2mA 50Hz) CEI60335 Vdc
- Power output W Motor insulation CEI60085 class
- Current A Enameled wire insulation class
- Efficiency % Salt spray CEI60068-2-58 severity 2
- EMC Degree of protection CEI60529 IP
- Life (2) h

EMC
- Electrostatic Discharge CEI61000-4-2 level 3
- Electrical fast transient / burst test CEI61000-4-4 level 3
- Surge test CEI61000-4-5 level 2
- Without EMC filter

Approvals
- Designed in accordance with UL
- ROHS 2002/95/CE 1004
- EC

Values without tolerances, are average production values.

(1) Rated speed, 20 °C ambient temperature
(2) Continuous operation, one direction
(3) Max. load, 20 °C ambient temperature
(4) Max torque for continuous operation at 20 °C, decrease this value for higher ambient temperature
(5) Pinion or pulley fitting are done at the Crouzet factory, before final assembly.

Curves

Specifications subject to change without notice. Updated February 29, 2012.