



Dimensions in mm.

| Electrical Data | Symbol | 30ECT64-10B-xxx.01 | | | Unit |
|---|-------------|--------------------|-------------|-------------|--|
| | | 7 | 11 | 14 | |
| 1 Nominal Voltage | U_N | 24 | 36 | 48 | Volt |
| 2 Optimization Direction | - | Symetrical | Symetrical | Symetrical | - |
| 3 No-Load Speed | n_0 | 21,930 | 21,150 | 22,425 | rpm |
| 4 Typical No-Load Current | I_0 | 575 | 425 | 300 | mA |
| 5 Max Continuous Mechanical Power (@25°C) | P_{max} | 187.0 | 187.0 | 187.0 | W |
| 6 Max Continuous Current | $I_{e,max}$ | 12.9 | 8.1 | 6.5 | A |
| 7 Max Continuous Torque | $M_{e,max}$ | 136 (19.26) | 134 (18.98) | 133 (18.84) | mNm (oz-in) |
| 8 Back EMF Constant | k_E | 1.10 | 1.74 | 2.14 | V/1000 rpm |
| 9 Torque Constant | k_M | 10.5 | 16.6 | 20.5 | mNm/A |
| 10 Motor Regulation | R/k^2 | 0.6 | 0.6 | 0.6 | $10^3/Nms$ |
| 11 Motor Regulation | $k/R^{1/2}$ | 41.8 (5.92) | 41.2 (5.85) | 40.8 (5.78) | mNm/W ^{1/2} (oz-in/W ^{1/2}) |
| 12 Internal Resistance - phase to phase | R_i | 0.06 | 0.16 | 0.25 | ohms |
| 13 Line to Line Resistance at Connectors | R_L | 0.08 | 0.18 | 0.27 | ohms |
| 14 Inductance Phase to Phase | L | 0.02 | 0.04 | 0.06 | mH |
| 15 Mechanical Time Constant | τ_m | 1.6 | 1.6 | 1.7 | ms |
| 16 Electrical Time Constant | τ_e | 0.23 | 0.22 | 0.23 | ms |

| General Data | | | | |
|---|-----------|--|-----------------------------|-------------------|
| 17 Maximum Motor Speed | n_{max} | | 30,000 | rpm |
| 18 Ambient Working Temperature Range | - | | -30 to + 100 (-22 to + 212) | °C (°F) |
| 19 Ambient Storage Temperature Range | - | | -40 to + 100 (-40 to + 212) | °C (°F) |
| 20 Ball Bearings Preload | - | | 13.5 | N |
| 21 Axial Static Force w/o Shaft Support (max) | - | | 134 | N |
| 22 Maximum Winding Temperature | - | | 150 (302) | °C (°F) |
| 23 Thermal Resistance | R_{th} | | 0.9/7 | °C/W |
| 24 Thermal Time Constant | τ_w | | 1,327 | s |
| 25 Weight | - | | 263 (9.28) | g (oz) |
| 26 Rotor Inertia | J | | 28.00 | g-cm ² |
| 27 Hall Sensor Electrical Phasing* | - | | 120 | Electrical ° |

*Available without hall sensor

| Wire | Description |
|--------|----------------|
| Gray | Phase 1 |
| Violet | Phase 2 |
| Blue | Phase 3 |
| Green | 4 to 24V DC |
| Yellow | GND |
| Orange | Sensor 1 |
| Red | Sensor 2 |
| Brown | Sensor 3 |
| Black | Thermistor (+) |
| White | Thermistor (-) |

with hall effect sensor

