

**Standards and Specifications**  
**of**  
**Model: FD8025B12W3-68-2NU**  
**(With IP21)**

**A. General Specification**

| Item  | Specification / Standard / Condition    |   |
|---|---|---|
| Outline Dimension                           | 80 mm x 80 mm x 25 mm                   |   |
| Bearing                                     | Dual Ball Bearing.                      |   |
| Rated Voltage                               | DC 12V                                  |   |
| Operating Voltage                           | DC8.00V ~ DC 13.80V                     |   |
| Starting Voltage                            | DC8.00V                                 | 1. Rated Voltage<br>2. 25°C, 65% RH   |
| Rated Current                               | 0.13A                                   |   |
| Actual Current                              | 0.08A                                   |   |
| Power Consumption                           | 0.96W                                   |   |
| Speed                                       | 1500 R.P.M.                             | 1. Free Air<br>2. Rated Voltage<br>3. 25°C, 65% RH<br>4. Tolerance: $\pm 10\%$                              |
| Maximum Airflow                             | 18.80CFM                                | 1. Rated Voltage<br>2. AMCA Standard<br>3. Rated Current  |
| Maximum Static Pressure                     | 0.91mm-H <sub>2</sub> O                 |   |
| Noise Level                                 | 15.10 dB (A)                            | 1. Rated Voltage<br>2. Measured in a Non-Echo Chamber<br>3. CNS 8753 Standard<br>4. ISO 3744 Test Condition |
| Life  | 60,000 hrs                              | 40°C, L10 at Conf. Level 90%, Rated Voltage   |
| Net Weight                                  | 68g                                     |   |
| Number of Blade                             | 7 Blades                                |   |
| Number of Pole                              | 4 Poles                                 |   |
| Rotating Direction                          | Counter-Clockwise                       |   |
| Plastic Material:<br>Blade, Housing, Bobbin | 1. UL 94V-0<br>2. P.B.T. + 30% GF Black |   |
| Lead Wire                                   | UL 1007, 26AWG                          | Red: (+) Black: (-)   |
| Connector                                   | With INARCA connector                   |   |

**B. Electrical Specification**

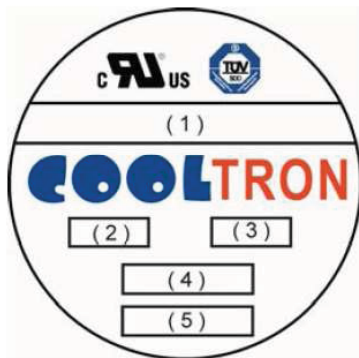
| Item                    | Specification / Condition  |
|-------------------------|--|
| Locked Rotor Protection | No damage done for a continuous 72 hours rotation lock at rated voltage. |
| Polarity Protection     | Circuit is protected when V <sub>CC</sub> & GND are exchanged.           |
| Insulation Resistance   | 10m.Ohm / between unshielded wire and frame at 500 VDC/min.              |
| Dielectric Strength     | 5 mA Maximum. / Measured between lead wire + and frame at 500 VAC/min.   |

**C. Environmental Specification**

| Item                     | Specification / Condition   |
|--------------------------|---|
| Operating Condition      | Temperature: -10°C ~ + 65°C<br>Humidity: 35% ~ 85% RH                         |
| Storage Temperature      | Temperature: -40°C ~ +70°C<br>Humidity: 35% ~ 85% RH                          |
| Humidity                 | Per MIL-STD-202F Method 103B<br>Life: 96 hours<br>Temperature: +40 ± 2°C      |
| Thermal Shock            | Per MIL-STD-202F Method 107D, Condition D                                     |
| Packing Vibration Test   | Packing condition: X, Y, Z 3 directions, 1.1G load vibration test for 30 min. |
| Packing Shock Proof Test | 1 corner, 3 edges, 6 faces natural drop from 60cm high, packed                |

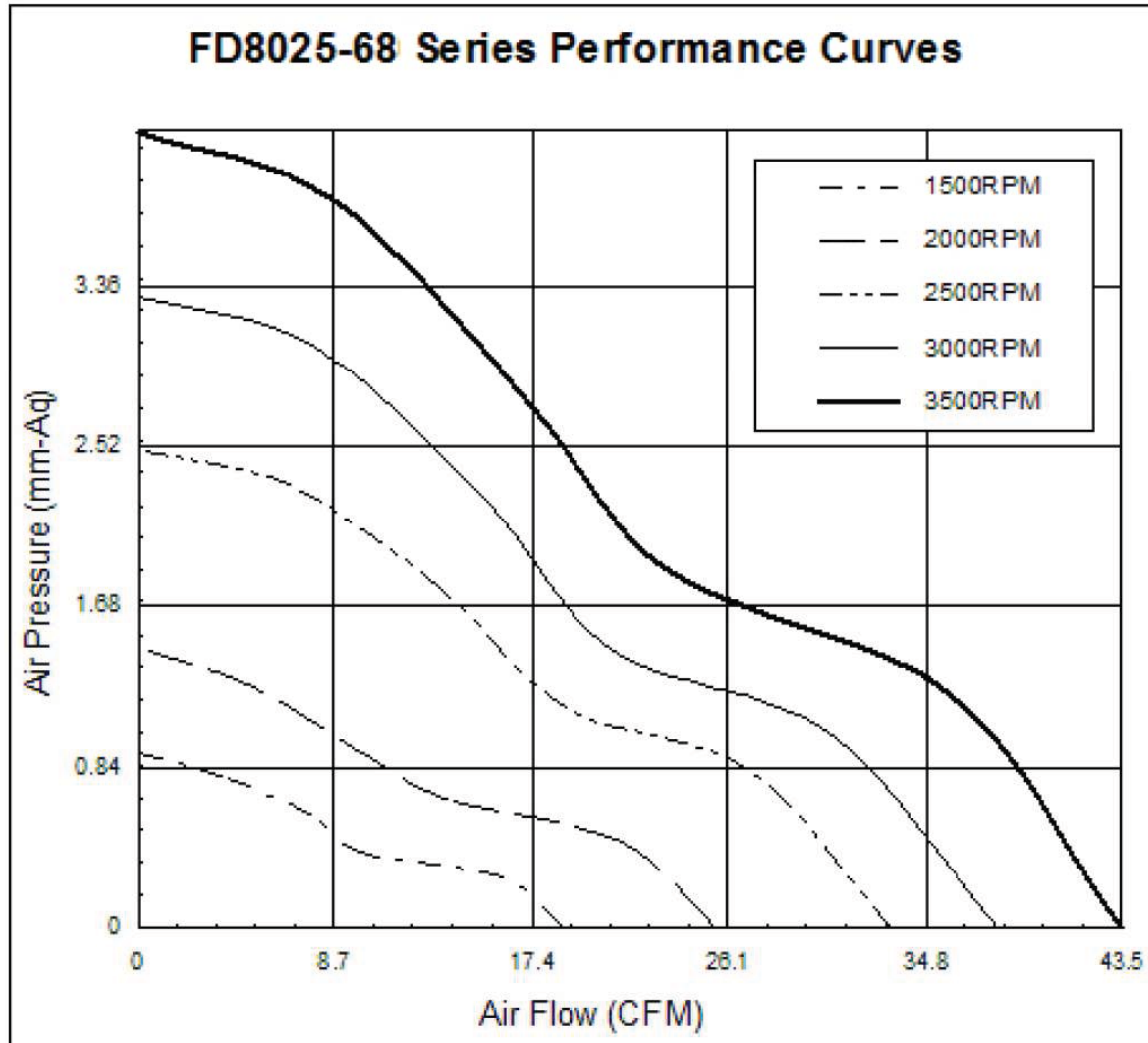
**D. Safety Approvals**

| Safety Approval | File No.  |
|-----------------|-----------|
| UL              | E194726   |
| CUL             | E194726   |
| TUV             | R50048194 |

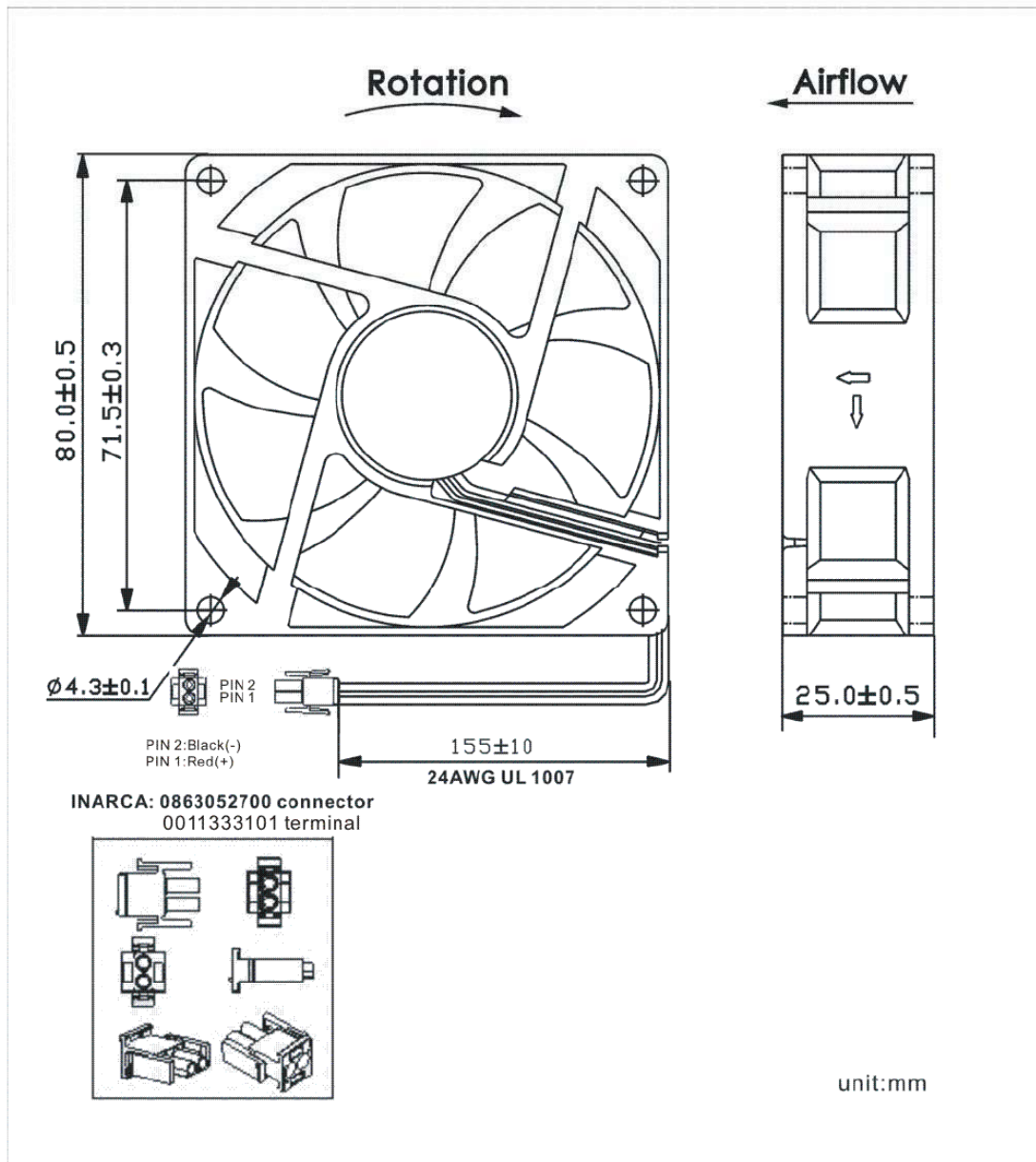
**E. Label Marking**

|     |                   |
|-----|-------------------|
| (1) | Model Number      |
| (2) | Rated Voltage     |
| (3) | Power Consumption |
| (4) | Bearing Type      |
| (5) | Location          |

**Air Flow Performance Curve**



G. Model Drawing



G. Fan Photos



FD8025-68