

**Standards and Specifications**  
**of**  
**Model: FD9225B24W11-81-3H**  
**(Alarm High w/Auto Restart)**

**A. General Specification**

| Item |                                             | Specification / Standard / Condition                               |                                                                                                             |
|------|---------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 01   | Outline Dimension                           | 92 x 92 x 25 mm                                                    |                                                                                                             |
| 02   | Bearing                                     | Dual Ball Bearing                                                  |                                                                                                             |
| 03   | Rated Voltage                               | DC 24 V                                                            |                                                                                                             |
| 04   | Operating Voltage                           | DC 12.0 V ~ DC 27.6 V                                              |                                                                                                             |
| 05   | Starting Voltage                            | DC 12.0 V                                                          |                                                                                                             |
| 06   | Rated Current (Max.)                        | 0.35 A                                                             | 1. Rated Voltage<br>2. 25°C, 65% RH                                                                         |
| 07   | Actual Current                              | 0.34 A                                                             |                                                                                                             |
| 08   | Power Consumption (Max.)                    | 8.40 W                                                             |                                                                                                             |
| 09   | Rated Speed                                 | 3,600 R.P.M. ± 10%                                                 | 1. Free Air<br>2. Rated Voltage<br>3. 25°C, 65% RH<br>4. After 10 Min. Rotating.                            |
| 10   | Maximum Airflow                             | 69.80 CFM                                                          | 1. Rated Voltage<br>2. AMCA Standard<br>3. Rated Speed                                                      |
| 11   | Maximum Static Pressure                     | 5.50 mm-H <sub>2</sub> O                                           |                                                                                                             |
| 12   | Noise Level                                 | 41.20 dB (A)                                                       | 1. Rated Voltage<br>2. Measured in a Non-Echo Chamber<br>3. CNS 8753 Standard<br>4. ISO 3744 Test Condition |
| 13   | Life Expectancy                             | 80,000 hrs at 40°C                                                 | 1. L10 at Conf. Level 90%,<br>2. Rated Voltage                                                              |
| 14   | Net Weight                                  | 98 Gram                                                            |                                                                                                             |
| 15   | Number of Blade                             | 7 Blades                                                           |                                                                                                             |
| 16   | Number of Pole                              | 4 Poles                                                            |                                                                                                             |
| 17   | Rotating Direction                          | Counter-Clockwise                                                  | Looking at Rotor Side                                                                                       |
| 18   | Plastic Material:<br>Blade, Housing, Bobbin | Housing: Plastic UL 94V-0 P.B.T.<br>Blade: Plastic UL 94V-0 P.B.T. |                                                                                                             |
| 19   | Lead Wire                                   | UL Type #24 AWG                                                    | Red: (+) Black: (-) Yellow:(Alarm High)                                                                     |
| 20   | Connector                                   | Without                                                            |                                                                                                             |

**B. Electrical Specification**

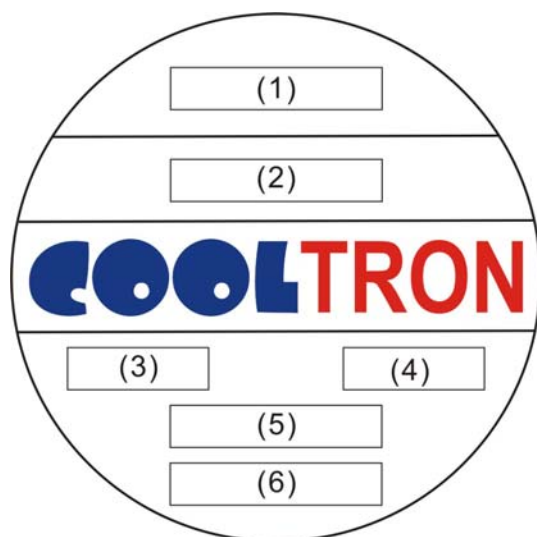
| Item |                         | Specification / Condition |                                                                                                                               |
|------|-------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 01   | Locked Rotor Protection | ✓                         | Safety Condition                                                                                                              |
|      |                         | ✓                         | a. Auto power off after locked at rated voltage for 1 sec.<br>b. After auto power off, circuit attempt to restart in 2-6 sec. |
| 02   | Polarity Protection     | ✓                         | Circuit is protected when VCC & GND are exchanged, the circuit won't be burned within 10 seconds.                             |
| 03   | Insulation Resistance   | ✓                         | 10 m.Ohm / between unshielded wire and frame at 500 VDC/min.                                                                  |
| 04   | Dielectric Strength     | ✓                         | 5 mA Maximum. / Measured between lead wire (+) and frame at 500 VAC/min.                                                      |

**C. Environmental Specification**

| Item |                                | Specification / Condition                                                     |
|------|--------------------------------|-------------------------------------------------------------------------------|
| 01   | Operating Condition            | Temperature: -20°C ~ + 70°C<br>Humidity: 15% ~ 90% RH                         |
| 02   | Storage Temperature            | Temperature: -40°C ~ + 85°C<br>Humidity: 15% ~ 90% RH                         |
| 03   | Test of high & low Temperature | Test Circulation at -10°C & 70°C two times per 4 hours                        |
| 04   | Packing Vibration Test         | Packing condition: X, Y, Z 3 directions, 1.1G load vibration test for 30 min. |
| 05   | Packing Shock Proof Test       | 1 corner, 3 edges, 6 faces natural drop from 60cm high, packed                |

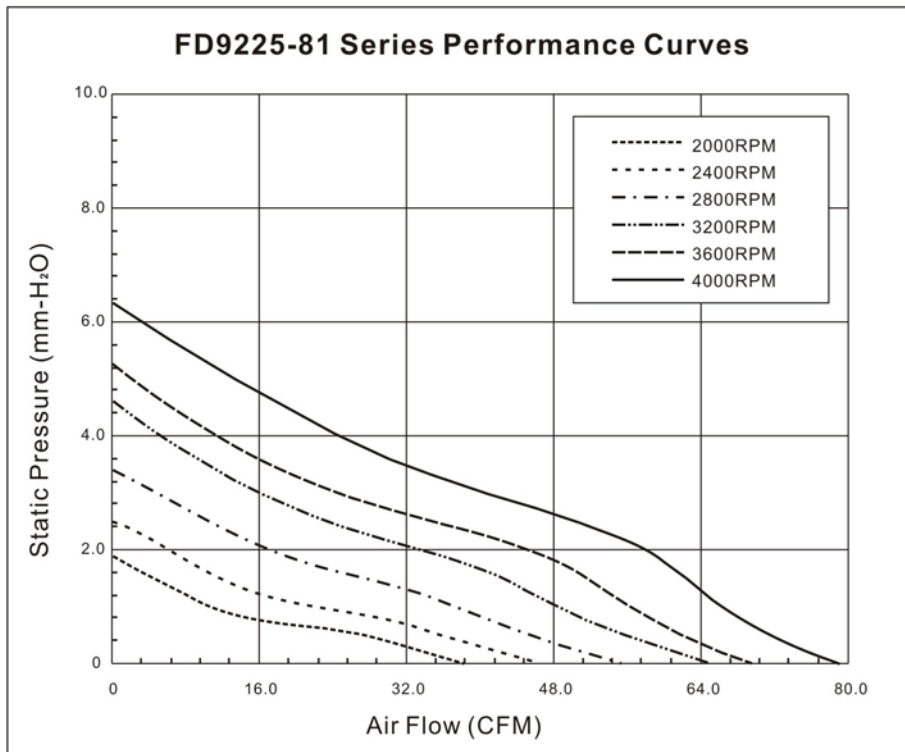
**D. Safety Approvals**

| Safety Approval | File No.      |
|-----------------|---------------|
| UL              | E194726       |
| CUL             | E194726       |
| TUV             | B 05 11 57907 |

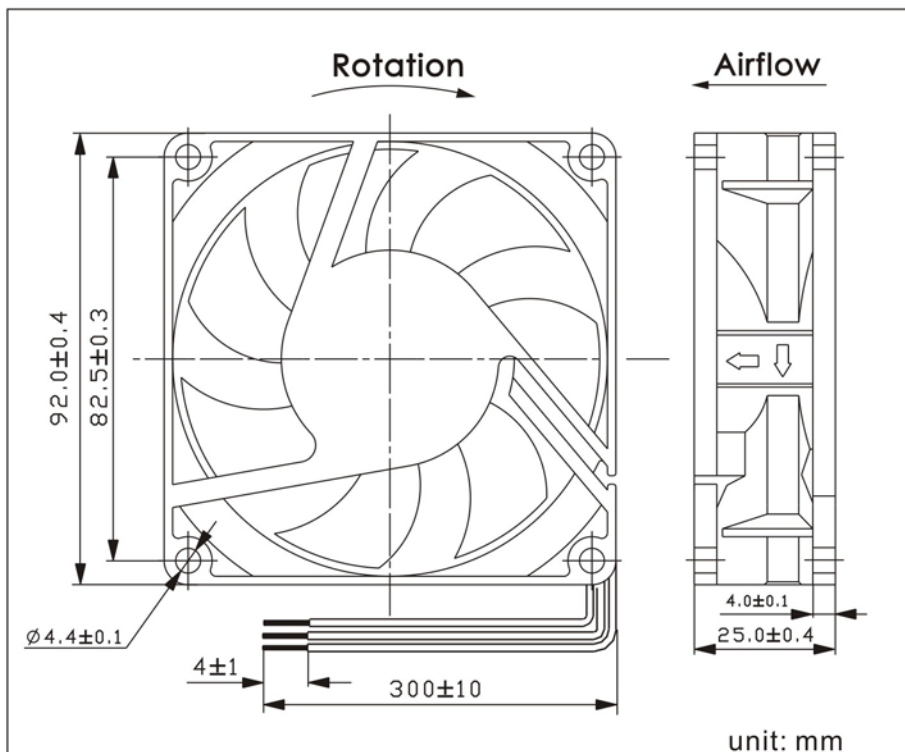
**E. Label Marking**

|     |                              |
|-----|------------------------------|
| (1) | Safety Approval              |
| (2) | Model Number & Appendix Code |
| (3) | Rated Voltage                |
| (4) | Power Consumption            |
| (5) | Bearing Type                 |
| (6) | Location                     |

## F. Air Flow Performance Curve



## G. Model Drawing



## H. Fan Photos



FD9225-81

## I. Sensor Circuit System:

Alarm High w/Auto restart

