

## Standards and Specifications of Model: FD6010B12W1-81-3F

### A. General Specification

Item	Specification / Standard / Condition	
Outline Dimension	60 mm x 60 mm x 10 mm	
Bearing	Dual Ball Bearing	
Rated Voltage	DC 12 V	
Operating Voltage	DC 6.0 V ~ DC 13.8 V	
Starting Voltage	DC 6.0 V	1. Rated Voltage 2. 25°C, 65% RH
Rated Current	0.15 A	
Actual Current	0.07 A	
Power Consumption	1.80 W	
Speed	3,000 R.P.M.	1. Free Air 2. Rated Voltage 3. 25°C, 65% RH 4. Tolerance: ± 10%
Maximum Airflow	12.60CFM	1. Rated Voltage 2. AMCA Standard 3. Rated Current
Maximum Static Pressure	1.55 mm-H <sub>2</sub> O	
Noise Level	26.40 dB (A)	1. Rated Voltage 2. Measured in a Non-Echo Chamber 3. CNS 8753 Standard 4. ISO 3744 Test Condition
Life	80,000 hrs	40°C, L10 at Conf. Level 90%, Rated Voltage
Net Weight	31 g	
Number of Blade	11 Blades	
Number of Pole	4 Poles	
Rotating Direction	Counter-Clockwise	
Plastic Material: Blade, Housing, Bobbin	1. UL 94V-0 2. P.B.T. + 30% GF Black	
Lead Wire	UL 1007, 26 AWG	Red: (+) Black: (-) Yellow:(Speed Sensor)
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	10 m.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**

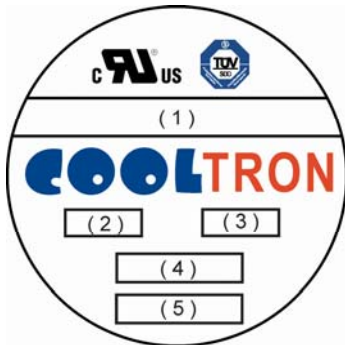
Item	Specification / Condition
Operating Condition	Temperature: -20°C ~ + 70°C Humidity: 15% ~ 90% RH
Storage Temperature	Temperature: -40°C ~ + 85°C Humidity: 15% ~ 90% RH
Humidity	Per MIL-STD-202F Method 103B Life: 96 hours Temperature: +40 ± 2°C
Thermal Shock	Per MIL-STD-202F Method 107D, Condition 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	B 05 11 57907 003

**E. Label Marking**



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



**H. Fan Photos**



**I. Sensor Circuit System:**

**Speed Sensor or Tachometer**

