

**Standards and Specifications**  
of  
**Model: FD1238B24W3-61-3RY**  
(with Auto Restart Protection, IP55)

**A. General Specification**

Item	Specification / Standard / Condition	
Outline Dimension	120 x 120 x 38 mm	
Bearing	Dual Ball Bearing	
Rated Voltage	DC 24 V	
Operating Voltage	DC12.00 V ~ DC 27.60 V	
Starting Voltage	DC 12.00 V	1. Rated Voltage 2. 25°C, 65% RH
Rated Current	0.30A	
Actual Current	0.17A	
Power Consumption	4.08W	
Speed	2,400 R.P.M.	1. Free Air 2. Rated Voltage 3. 25°C, 65% RH 4. Tolerance: ± 10%
Maximum Airflow	103.50CFM	1. Rated Voltage 2. AMCA Standard 3. Rated Current
Maximum Static Pressure	5.40 mm-H <sub>2</sub> O	
Noise Level	39.80 dB (A)	1. Rated Voltage 2. Measured in a Non-Echo Chamber 3. CNS 8753 Standard 4. ISO 3744 Test Condition
Life	70,000 hrs	40°C, L10 at Conf. Level 90%, Rated Voltage
Net Weight	290.00 g	
Number of Blade	7 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, 24 AWG	Red: (+) Black: (-) Yellow:(Speed Sensor)
Connector		

**B. Electrical Specification**

Item	Specification / Condition
Locked Rotor Protection	a. Auto power off after locked at rated voltage for 1 sec. b. After auto power off, circuit attempt to restart in 2-6 sec
Polarity Protection	Circuit is protected when V <sub>CC</sub> & GND are exchanged, the circuit won't be burned within 10 seconds.
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**

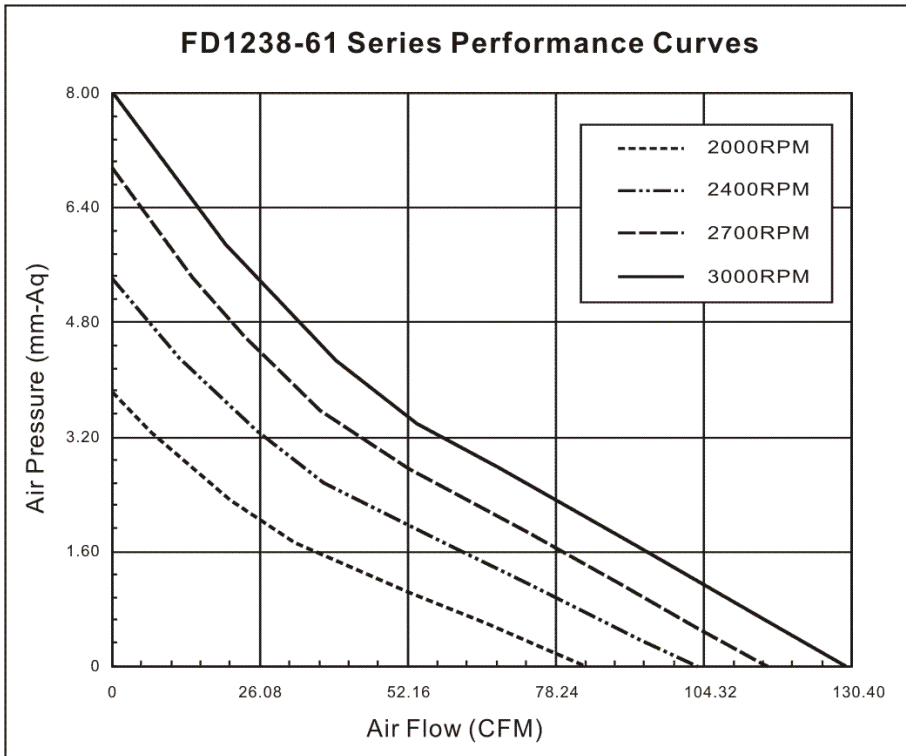
Item	Specification / Condition
Operating Condition	Temperature: -10°C ~ + 70°C Humidity: 35% ~ 85% RH
Storage Temperature	Temperature: -40°C ~ + 70°C Humidity: 35% ~ 85% RH
Packing Vibration Test	Packing condition: X, Y, Z 3 directions, 1.1G load vibration test for 30 min.
Packing Shock Proof Test	1 corner, 3 edges, 6 faces natural drop from 60cm high, packed

**D. Safety Approvals**

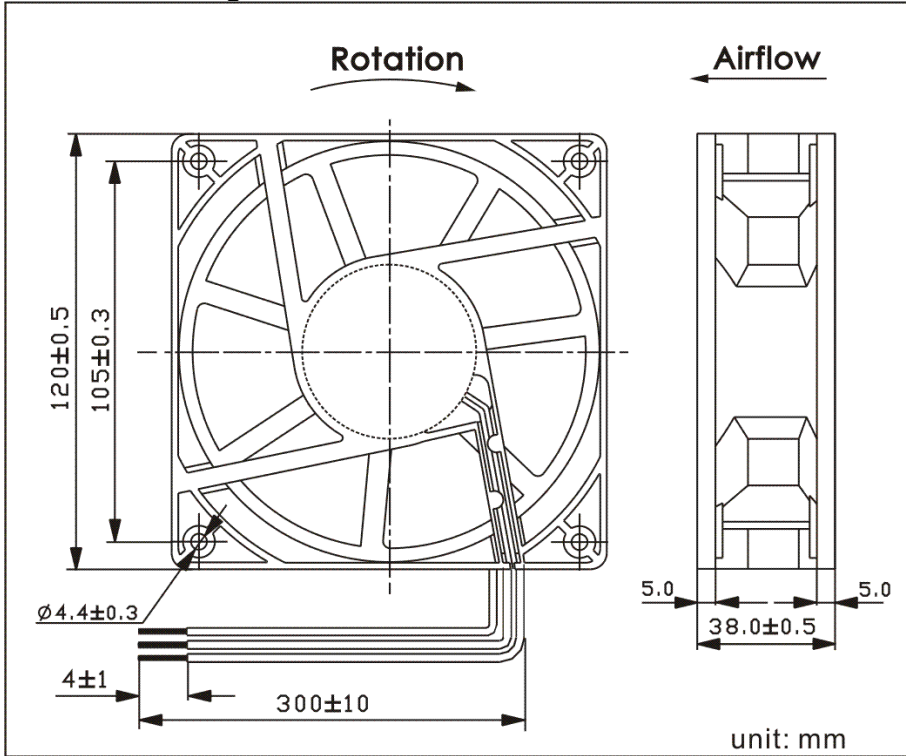


Safety Approval	File No.
UL	E194726
CUL	E194726
TUV	R 5004 8194

**E. Air Flow Performance Curve**



**F. Model Drawing**

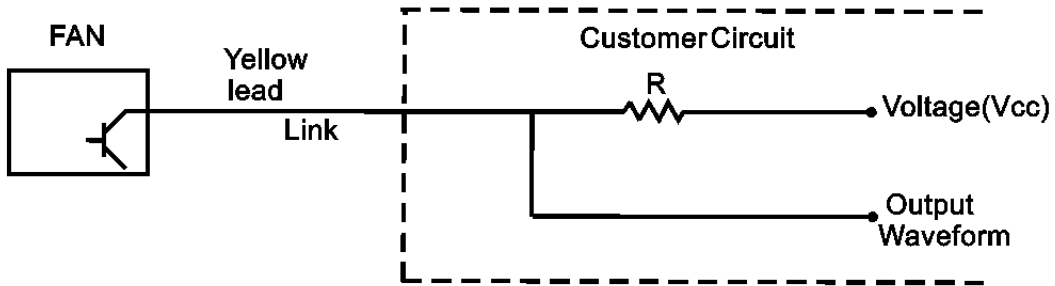


**G. Fan Photos**



**FD1238-61**

**H · Sensor Circuit System:  
Speed Sensor w/Auto restart**



\*\* Please select "R" to make "Link" less than 10mA \* Vcc:30V MAX, Link:10mAMAX

Output Waveform

