

**Standards and Specifications  
of  
Model: FBD6025B12W3-81-4JC1  
(Auto Restart Protection + F/G + PWM)**

**A. General Specification**

Item		Specification / Standard / Condition	
01	Outline Dimension	60 x 60 x 25	mm
02	Bearing	Dual Ball Bearing	
03	Rated Voltage	DC 12	V
04	Operating Voltage	DC 6.0	V ~ DC 13.8 V
05	Starting Voltage	DC 6.0	V
06	Rated Current (Max.)	0.13	A
07	Actual Current	0.10	A
08	Power Consumption (Max.)	1.20	W
09	Rated Speed	2,500	R.P.M. ± 10%
10	Maximum Airflow	7.10	CFM
11	Maximum Static Pressure	8.50	mm-H <sub>2</sub> O
12	Noise Level	25.50	dB (A)
13	Life Expectancy	80,000	hrs at 40°C
14	Net Weight	52	Gram
15	Number of Blade	Blades	
16	Number of Pole	4	Poles
17	Rotating Direction	Counter-Clockwise	Looking at Rotor Side
18	Plastic Material: Blade, Housing, Bobbin	Housing: Plastic UL 94V-0 P.B.T. Blade: Plastic UL 94V-0 P.B.T.	
19	Lead Wire	UL Type #28 AWG	Yellow: (+)    Black: (-) Green: (Speed sensor)    Blue: (PWM)
20	Connector	With JWT #A2548H00-4P	

**B. Electrical Specification**

# COOLTRON Industrial Supply, Inc.

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Item		Specification / Condition	
01	Locked Rotor Protection	✓	Safety Condition
		✓	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.
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.

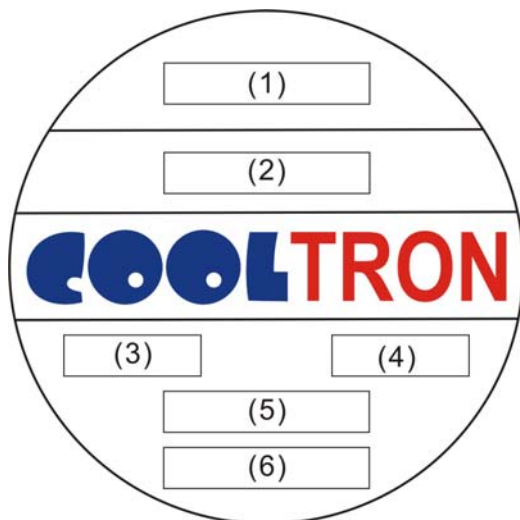
### C. Environmental Specification

Item		Specification / Condition
01	Operating Condition	Temperature: -20°C ~ + 70°C Humidity: 15% ~ 90% RH
02	Storage Temperature	Temperature: -40°C ~ + 85°C 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

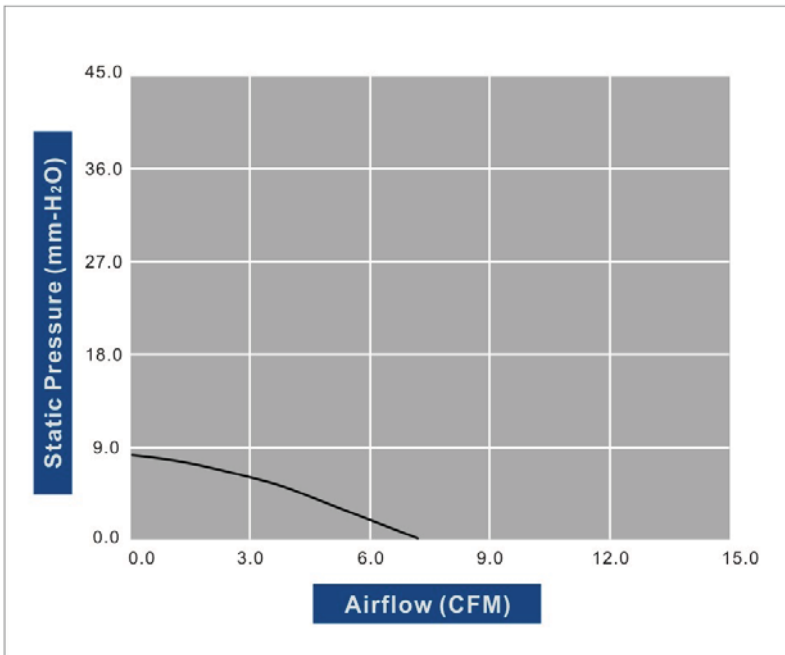
Safety Approval	File No.
UL	E194726
CUL	E194726

### E. Label Marking

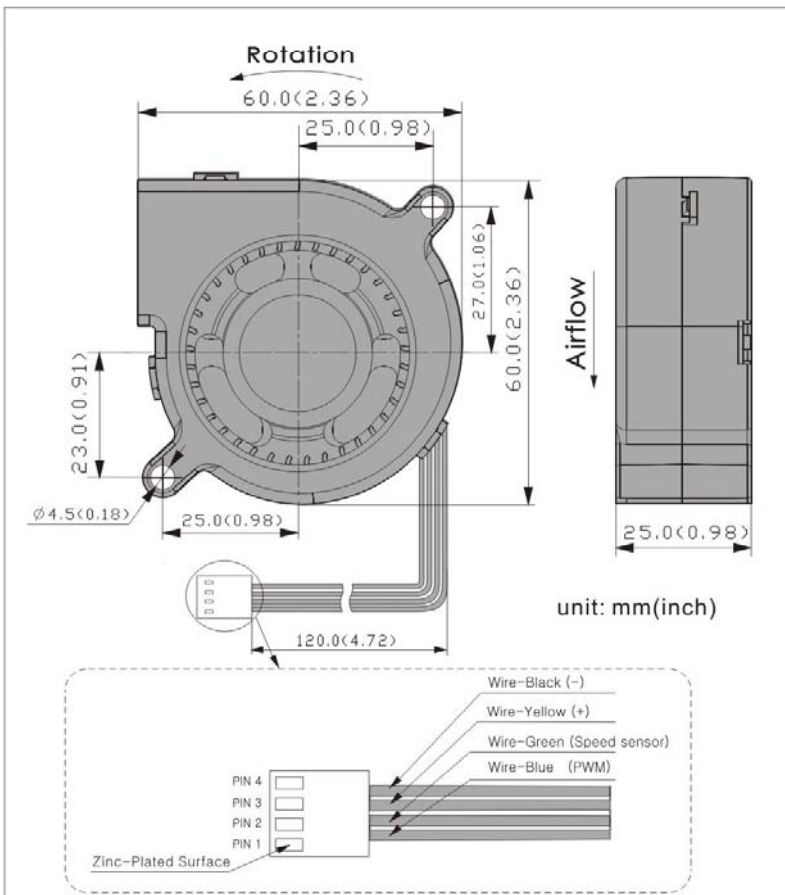


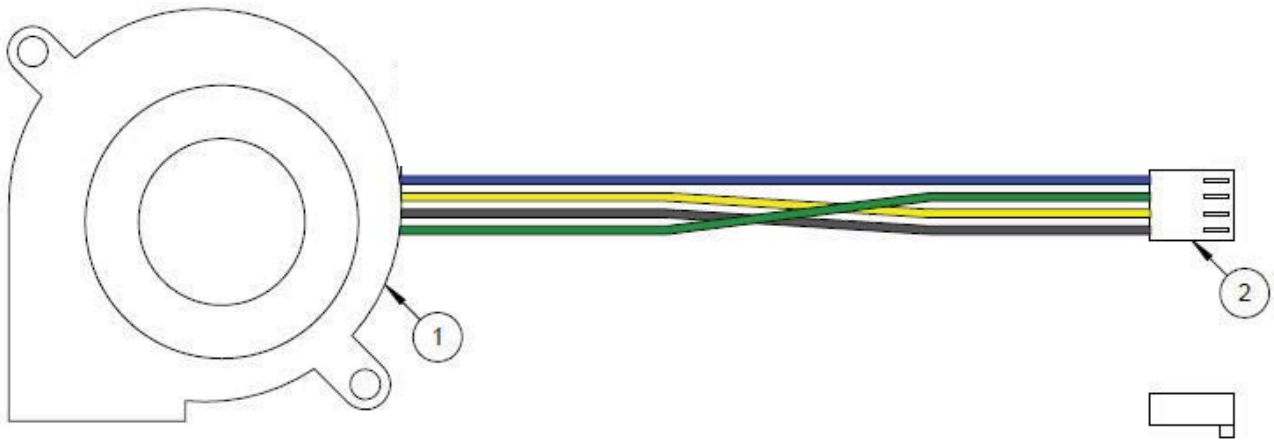
(1)	Safety Approval
(2)	Model Number & Appendix Code
(3)	Rated Voltage
(4)	Power Consumption
(5)	Bearing Type
(6)	Location

## F. Air Flow Performance Curve



## G. Model Drawing





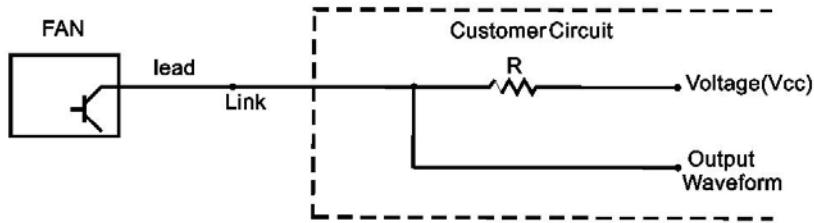
**H. Fan Photos**



**FBD6025-81**

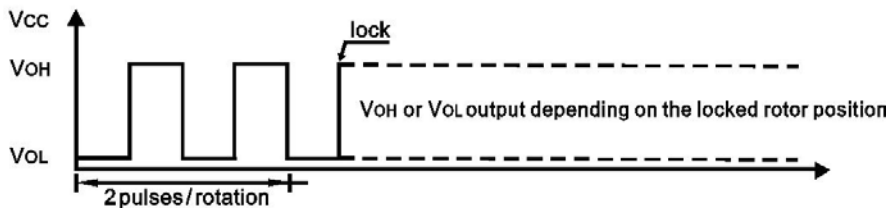
## I. Sensor Circuit System:

### Speed Sensor or Tachometer



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

OutputWaveform



## J. PWM (Pulse Width Modulation) Control Input.

PWM Signal function design is decided by customer

