COOLTRON

PRODUCT SPECIFICATION SHEET

FD6025B24W7-87C-3R
DC Fan, 60x60x25mm, 24VDC,
5800RPM, Dual Ball Bearing
No Connector.
_ A01
9/8/2022

Products will meet the specifications stated on this data sheet for all future production orders unless a revision has been approved by both parties.

COOLTRON Industrial Supply, Inc.

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Standards and Specifications of Model: FD6025B24W7- 87C-3R

(Auto Restart+Speed Sensor)



A. General Specification

Item			Specification / Standard / Condition			
01	Outline Dimension	60 x 60 x 25	5 mm			
02	Bearing	Dual Ball Be	earing			
03	Rated Voltage	DC 24	V			
04	Operating Voltage	DC 12	V ~ DC 26.4	V		
05	Starting Voltage	DC 12	V (At 25°C, Power C	N / OFF)		
06	Rated Current (Max.)	0.2	A	4 Detail Valtage		
07	Actual Current	0.14	A	1. Rated Voltage 2. 25°C, 65% RH		
08	Power Consumption	3.36	W (Max. 4.8W)	2. 23 0, 03/01(11		
09	Rated Speed	5800	RPM ± 10%	 Free Air Rated Voltage After 10 Min. Rotating. 		
10	Max. Air Flow	29.70	CFM	Rated Voltage AMCA Standard		
11	Max. Static Pressure	8.75	mm-H ₂ O	Rated Current		
12	Noise Level(AVG.)	43.2	dB(A)	 Rated Voltage Measured in a Non-Echo Chamber ISO 3745 Test Condition 		
13	Life Expectancy	70,000	Hrs at 40°C	 L10 at Conf. Level 90% Rated Voltage 		
14	Net Weight	57	Gram			
15	Number of Blade	7	Blades			
16	Number of Pole	4	Poles			
17	Rotating Direction	Counter-Clockwise		Looking at Rotor Side		
18	Material:	Housing: Plastic UL 94V-0 P.B.T. Blade: Plastic UL 94V-0 P.B.T.				
19	Lead Wire	UL Type #26 AWG		Red: (+) Black: (-) Yellow (Speed Sensor)		
20	Connector	Without				
21	Special Function	Auto restart	+ Speed Sensor			

B. Electrical Specification

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 a few seconds.		
02	Polarity Protection	√	Circuit is protected when VCC & GND are exchanged, the circuit won't be burned within 5 seconds.		
03	Insulation Resistance	√	10m.Ohm / between unshielded wire and frame at 500 VDC/min.		
04	Dielectric Strength	√	5mA Maximum. / Measured between lead wire (+) and frame at 500 VAC/min.		

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C. Environmental Specification

Item		Specification / Condition
01	Operating Condition	Temperature: -10°C ~ + 70°C
		Humidity: 5% ~ 90% RH
02 Storage Tem	Storage Temperature	Temperature: -40°C ~ + 80°C
		Humidity: 5% ~ 95% RH

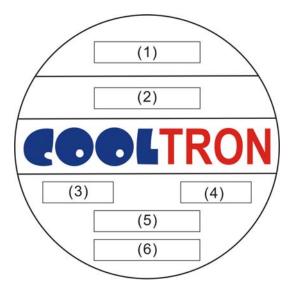
D. Safety Approvals



Safety Approval	File No.	
CE	TB10088262	
UL	E194726	
CUL	E194726	

E. Label Marking

01: Fan Label Marking



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

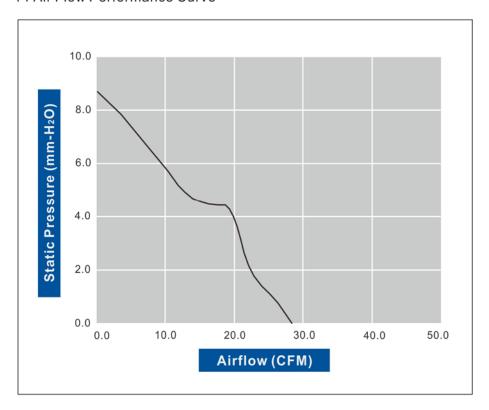
02: RoHS Label Marking:



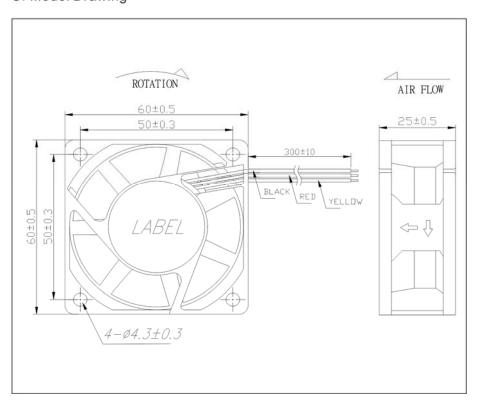
Label	Location
RoHS & Date Code	Fan Outlet Frame

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F. Air Flow Performance Curve



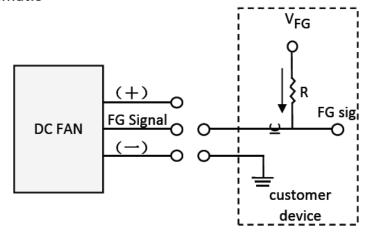
G. Model Drawing



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11. Frequency generator (FG) signal

11-1. Schematic



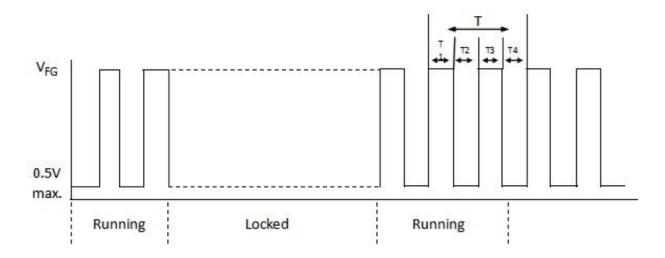
Caution: The lead wire of FG signal can not touch the lead wire of positive or negative.

11-2. Signal specification

Characteristic	conditions/descriptions	min.	type	max.	units
VFG				26.4	V
IC				5	mA
Low level voltage				0.5	V
Remark	R>=VFG/IC				

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11-3. Frequecy generator waveform



N=RPM

- T=T1+T2+T3+T4=60/N(Sec)
- T1=T2=T3=T4=1/4T
- · Voltage level after blade locked

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REMARKS

- 1. COOLTRON will not assume responsibility for the performance of the products if the application conditions fall outside the parameters stated forth in this specification.
- 2. A written request should be submitted to COOLTRON prior to approval if abnormality and deviation from this specification is required.
- 3. Please be cautious when fan is being exercised or handled. Damages may be resulted when apply pressure to the impeller or hold the fan by the lead wires or drop the fans to the production platform.
- 4. With exception of suitability of some particular designs, any failure and problems regarding safety of the product caused by the introduction of powder, droplets of water or encroachment of insert in the hub are not guaranteed.
- 5. All general specifications and quality values are measured under condition of free air and fan vertical set up. COOLTRON highly suggests practicing a test when fan apply to a special application.
- 6. COOLTRON fans are not suitable to be used in an environment that contains aggressive or corrosive fluids.
- 7. Always ensure that fans are stored according to the storage temperatures specified. Do not store in an environment with a high humidity level. If the fans were stored for longer than 6 months, it is highly recommended to apply functional testing before shipping.
- 8. Except for the feature of the Lock Rotor Protection specifically stated, this feature is not applied to all fans. COOLTRON highly suggests not to stop the impellers of the working fans such interruption will cause adverse effect.
- 9. During installation, please be cautious. COOLTRON is not responsible for any excess resonance, vibration and subsequent noise caused by incorrect mounting of fans.
- 10. During testing it is important to consider safety at all times. A suitable guard should be fitted to the fan to prevent personal injury.
- 11. All test environments are conducted under the condition of relative (ambient) temperature and humidity at 25°C, 65%RH. The test result stated above is effective only for unique fan performance.
- 12. The above conditions are examples of extreme application. However they are very important and should receive top priority.

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