

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	1. Rated Voltage 2. 25°C, 65% RH
07	Actual Current	0.10 A	
08	Power Consumption (Max.)	1.20 W	
09	Rated Speed	2,500 R.P.M. ± 10%	1. Free Air 2. Rated Voltage 3. 25°C, 65% RH 4. After 10 Min. Rotating.
10	Maximum Airflow	7.10 CFM	1. Rated Voltage 2. AMCA Standard 3. Rated Speed
11	Maximum Static Pressure	8.50 mm-H ₂ O	
12	Noise Level	25.50 dB (A)	1. Rated Voltage 2. Measured in a Non-Echo Chamber 3. CNS 8753 Standard 4. ISO 3744 Test Condition
13	Life Expectancy	80,000 hrs at 40°C	1. L10 at Conf. Level 90%, 2. Rated Voltage
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.

275 Paseo Tesoro, Walnut, CA 91789 Tel: 909-598-6033 Fax: 909-598-6043 www.cooltron.com

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.

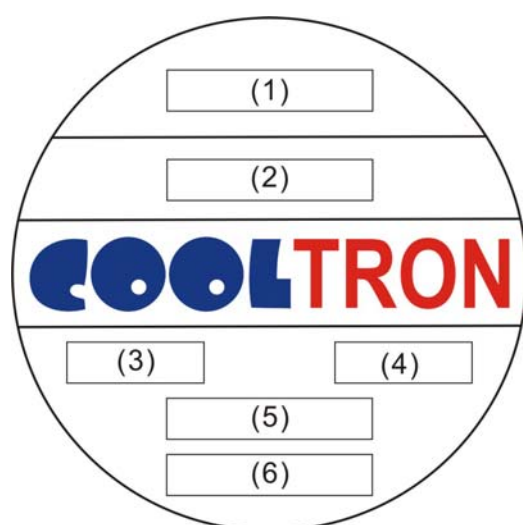
C. Environmental Specification

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

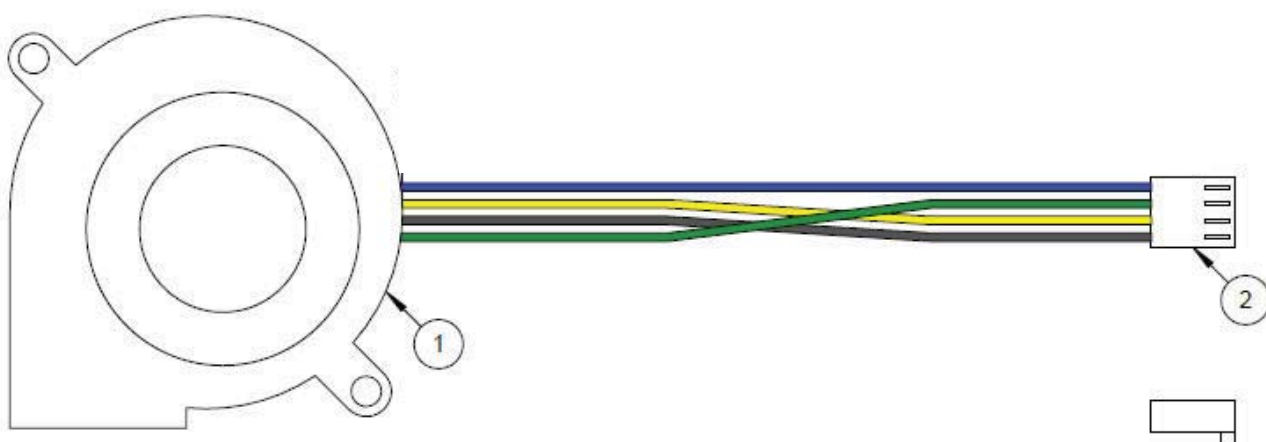


(1)	Safety Approval
(2)	Model Number & Appendix Code
(3)	Rated Voltage
(4)	Power Consumption
(5)	Bearing Type
(6)	Location

The technical drawing illustrates the dimensions and specifications of the HX-0600-A01 ultrasonic flowmeter. It includes three main views:

- Front View:** Shows the circular sensor head with a diameter of 60.0 mm (2.36 inches). The mounting bracket has a width of 25.0 mm (0.98 inches) at the top and bottom. The distance between the two mounting holes is 27.0 mm (1.06 inches). The distance from the center of the sensor to the mounting hole centers is 23.0 mm (0.91 inches). A small hole has a diameter of $\phi 4.5$ mm (0.18 inches).
- Side View:** Shows the profile of the device with a total height of 60.0 mm (2.36 inches) and a base width of 25.0 mm (0.98 inches). An arrow indicates the direction of "Airflow".
- Wiring View:** Shows the cable length as 120.0 mm (4.72 inches). The cable has four wires: Black (-), Yellow (+), Green (Speed sensor), and Blue (PWM). The connector pins are labeled PIN 1 through PIN 4.

All dimensions are in millimeters (mm) and inches (inch). The unit is specified as "unit: mm(inch)".



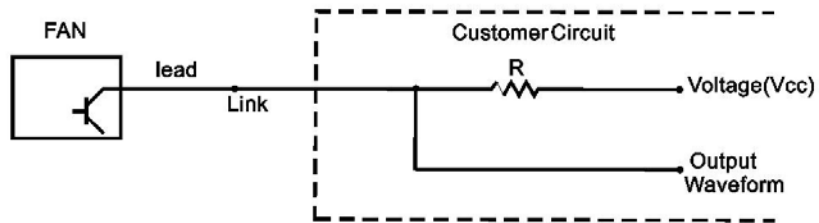
H. Fan Photos



FBD6025-81

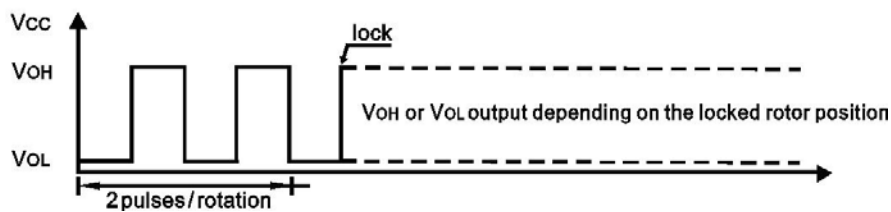
I. Sensor Circuit System:

Speed Sensor or Tachometer



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

Output Waveform



J. PWM (Pulse Width Modulation) Control Input.

PWM Signal function design is decided by customer

