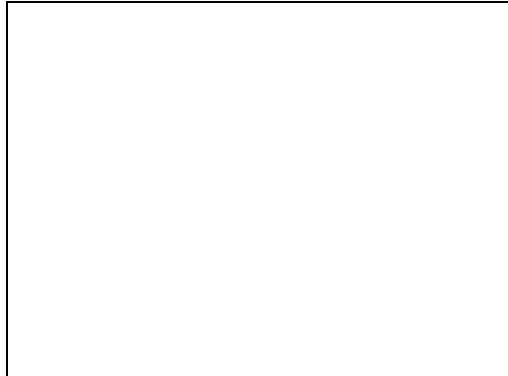


ACTIVA INC.

SPECIFICATION SHEET



MODEL NO. :	DSB5952V24HBEX-TK
DESCRIPTION :	DC Blower Fan
VERSION :	A
RELEASED DATE :	2022.08.16

APPROVED BY	PREPARED BY
<i>Clouder Hsia</i>	<i>Ken Lee</i>
2022.08.16	2022.08.16

SYMBANG



ACTIVA INC.

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PRODUCT SPECIFICATION

A. General Specification

Item		Specification		Condition
1	Model No.	DSB5952V24HBEX-TK		
2	Outline Dimension	∅ 59x59	mm	
3	Rated Voltage	DC 24	V	
4	Operating Voltage Range	DC 18~26	V	
5	Start Voltage	DC 18	V	
6	Rated Current	4.2	A	At Rated Voltage, 25°C, 65% RH, Free Air
7	Power Consumption	100.8	W	
8	Rotating Speed	31000	RPM ±10%	At Rated Voltage, 25°C, 65% RH, Free Air
9	Max. Airflow	13.97	CFM	At Rated Voltage AMCA 210 Standard
		0.395	m ³ /min	
10	Max. Static Pressure	859.5	mmH ₂ O	At Rated Current
		33.8	inchH ₂ O	
11	Noise Level	71.3	dB(A)	At Rated Voltage Measured in a non-echo Chamber CNS 8753 Standard ISO 3744 Test Condition
12	No. of Pole	2	Poles	
13	Weight	260	g	
14	Motor Type	DC Brushless Blower		

B. Main Materials / Parts Specification

Materials / Parts		Specification	
1	Housing	PLASTIC	
2	Blade	PLASTIC	
3	Bearing	Ball Bearing	
4	Termination	Lead wires	Red(+), Black(-), UL1007 AWG#20 Blue(PWM), Yellow(FG), UL1007 AWG#22
y	Connector	N/A	

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C. Safety Approvals

Safety Approvals	UL	TUV	
File Number	N/A	N/A	

D. Environmental Specification

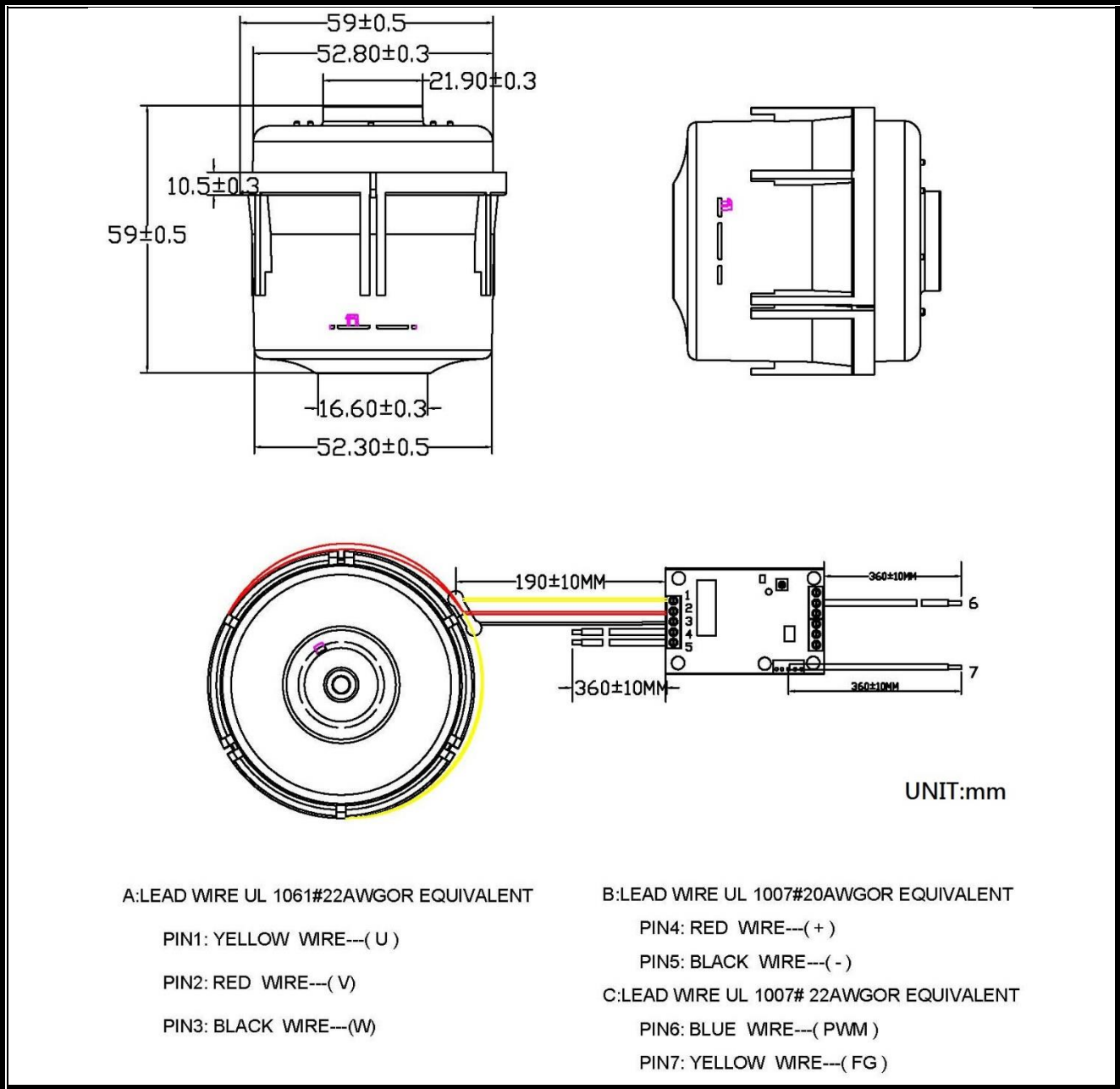
	Item	Specification / Condition
1	Operating Temp. Range	Temperature : -10°C ~ + 60°C
2	Storage Temperature	All function shall be normal after 500 hours storage at -40°C to +80°C with a 24 hours recovery period at room temperature.
3	Humidity Test	After 96 hours, 95% RH, 40+/-2°C per MIL-STD-202F, method 103B humidity test, the measured data on insulation resistance and dielectric strength shall meet the specification.
4	Thermal Shock	Per MIL-STD 202F Method 107D, Condition D
5	Insulation Shock	Class A

E. Electrical Specification

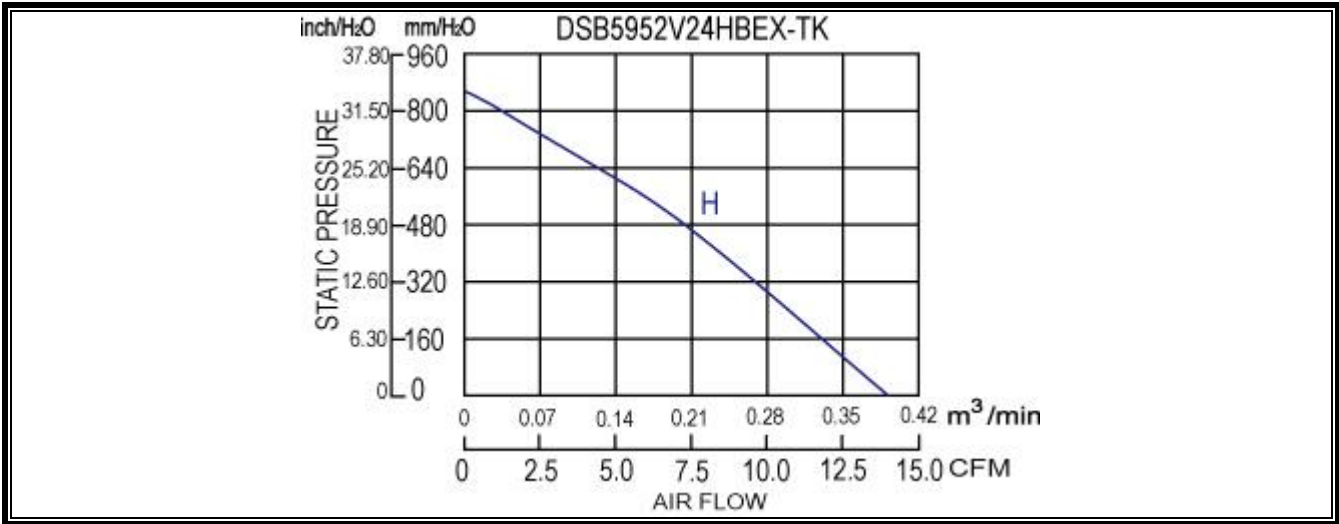
	Item	Specification/Condition
1	Insulation Resistance	10MΩ/Between unshielded wire and frame at 500 VDC\min
2	Dielectric Strength	5mA Max./Measured b\w lead wire (+) and frame at 500 VAC\ min

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F. Outline Dimension



G. Air Performance

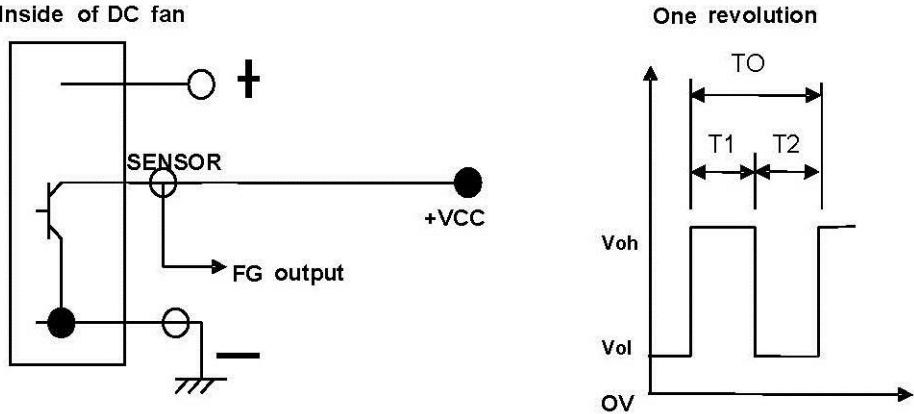


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H. Frequency Generator (FG) Signal:

Fan with FG function will create a square wave output. You can know fan speed by sensing the output wave frequency. Most dc fan have four pole. So when fan run for one round, there will be two high level pulse. About other Multipole brushless fan, high level pulse will be different.

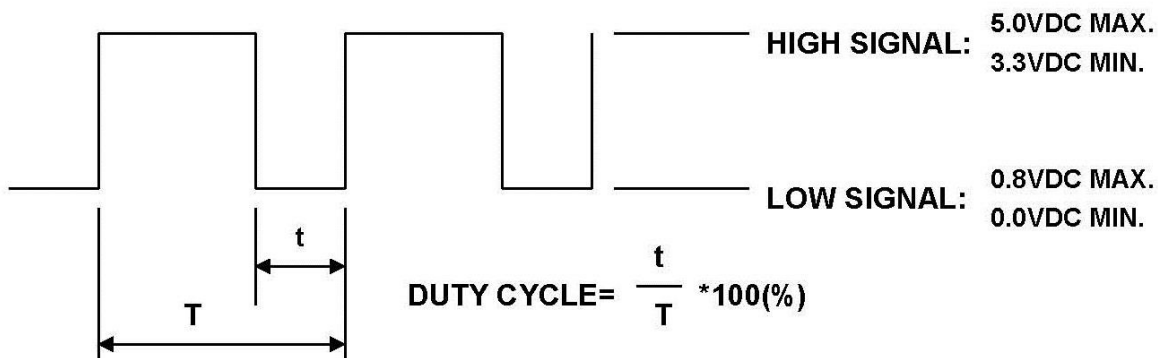
But please notice if you want to sense its output wave, there is an external circuit. Please check the circuit diagram below. There is no pull-up and VCC value limit. But please notice the Max I_{in} has to be smaller than 20mA.



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I. PWM SPEED CONTROL

SIGNAL VOLTAGE RANGE :



- THE FREQUENCY FOR CONTROL SIGNAL OF THE FAN SHALL BE ABLE TO ACCEPT 16K~32 KHZ.
- THE PREFERRED OPERATING POINT FOR THE FAN IS 25K HZ.
- AT 100% DUTY CYCLE,THE ROTOR WILL SPIN AT MAXIMUM SPEED.
- AT 0% DUTY CYCLE,THE ROTOR WILL STOP.
- WHEN CONTROL SIGNAL LEAD DISCONNECTED,THE FAN WILL MAXIMUM SPEED.
- AT 25K 3%~5% DUTY CYCLE,THE FAN WILL BE ABLE TO START FROM A DEAD STOP.
- THE FAN SPEED CONTROL IS CLOSED-LOOP.