SPECIFICATION

Seller	PowerNex
Manufacturer	CCHV
MODEL NO.	CHA6012BH-25C

1.PRODUCT SAFETY

1. CCHV will not guarantee this product if it is used in conditions other than the parameters outlinedcifications.
2. Please contact CCHV to confirm any customer requirements not specified in the specification.
3. Please handle fans carefully. Damage may result from pressure to the impeller, carrying by the lead wires, or dropping fans on a hard surface.

4. The introduction of power, dust water insects or other erosion elements into the HUB will result in safety problems or product failure, except in products designed for special environments.

5. Items 1-4, mentioned above, are generally pertinent to our products, and should be a first point of reference.
6. It is very important to establish the correct polarity before connecting the fan to the power source, Positive (+) and Negative (-). Damage may be cause by connecting with reverse polarity.

7. Avoid operating our products in environments where poisonous or corrosive elements are present (organic, silicon, cyanogens, formal in phenol, H2S, SO2, NO2, Cl2, etc)

8. Please ensure that fans are stored according to the storage temperature specified. Do not store in a high humidity environment. If fans are stored for more than 6 months, CCHV recommends testing of fans before using.

9. Not all series fans are provided with the lock rotor protection feature. Damage or failure will result from operating fans without this feature, if the impeller for the fan is in any way hindered or impaired.

10. Install fans carefully. Incorrect mounting or installation may result in excessive resonance, vibration and subsequent noise.

11. Safety is a top priority. Please utilize guard accessories to prevent injury to personnel. 。
12. Unless otherwise noted, all tests are conducted at 25°C ambient temperature, and 65% relative humidity.

13. When using multiple fans in parallel, connect an 'over 4.7μF 'capacitor externally to the fan to prevent abnormal resulting from unstable power.

14. Any change to the parameters specified in this specification will be determined by mutual agreement between both parties. Parameters not specified will be identical to the final sample approved by your company.

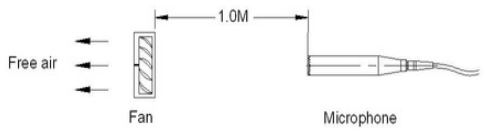
2.1 Electrical Characters:

No.	Item	Specification	Remark
2-1	Rated Voltage	D.C. 12.0V	
2-2	Operating voltage	D.C. 6.0V~13.2V	
2-3	Starting voltage	D.C. 6.0V	At 25℃ Power ON/OFF in free air
2-4	Operating Current	0.08A(Max.0.12)A	Free Air at Rated voltage
2-5	Current on label	0.23A	
2-6	Power	0.96 W(Max.1.44)W	
2-7	Operating temperature and humidity range	-10℃ to 70℃,5% to 90% RH	
2-8	Storage temperature and humidity range	-40℃ to 70℃,5% to 95% RH	

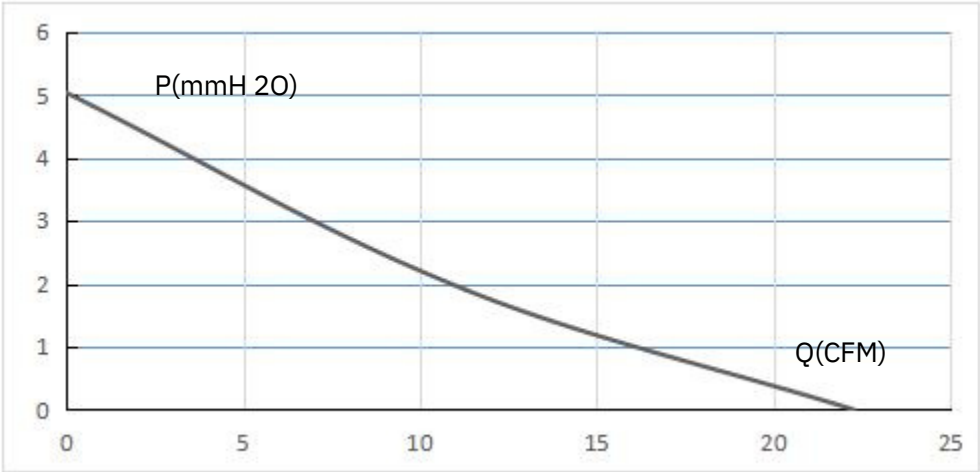
2.2 Mechanical Characters

No.	Item	Specification	Remark
2-9	Bearing System	Ball Bearing	
2-10	Motor Design	Single Phase 4 Poles Brush-less DC Motor	

2.3 Performance Characters

No.	Item	Specification	Remark
2-11	Speed	4500±450rpm	At 25℃,To record speed after fan running normal, This time about 3~5minutes
2-12	Air flow	23.00 CFM / Min20.07 CFM	At zero static pressure
2-13	Air pressure	5.03 mmH2O / Min:4.07 mmH2O	At zero air flow
2-14	Acoustical noise	31.2 dB-A(Max:34.2)dB-A 1.0 meter from Air intake side Background noise max. 10.0dB-A 	According to ISO10302 Free Air at Rated voltage
2-15	Insulation Class	UL: Class A	
2-16	Insulation resistance	Min 10Meg Ohm	between frame and lead wire (+) at 500VDC
2-17	Dielectric strength	700VAC 60Hz 1 second	5mA max at between frame and lead wire
2-18	Life expectancy	L10>=70,000hrs continuous at 25℃	
2-19	Ingress Protection		The stator moistureproof
2-20	Automatic Restart	Yes	
2-21	Reverse connection Protection	Yes	

3. PQ curve: (Rated Voltage)



4. Reliability Test

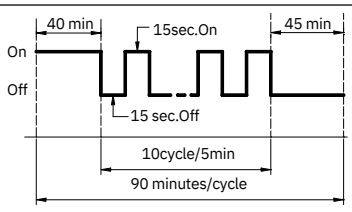
4 Drop test:

Fans are packed in a standard shipping size box and dropped to the wooden board from certain heights
and angles depending on the weight of particular box

4.2 Impeller Lock Test: (IEC 60950)

1. Test temperature	under 25 ℃ or room temperature 25 ℃
2. Input rated voltage	Maximum operating voltage
3. Coil temperature	< 150 ℃
4. Duration	72 hours 72
5. After lock testing	Perform 700VAC / 60sec dielectric strength test

4.3 Temperature Cycling & High Humidity / On/Off Test : (IEC 60068-2-2)

1.Test condition	Maximum operating voltage & maximum operating temperature & Maximum operating humidity
2. Power On / Off Profile	
3. Total cycle	48 cycles for 72 hours

4.4 Thermal shock: (IEC 60068-2-14)

1. Low Temperature	-40 ℃/15min
2. High Temperature	+75 ℃/15min
3. Transition time	less than 5 minutes
4. Number of cycle	20

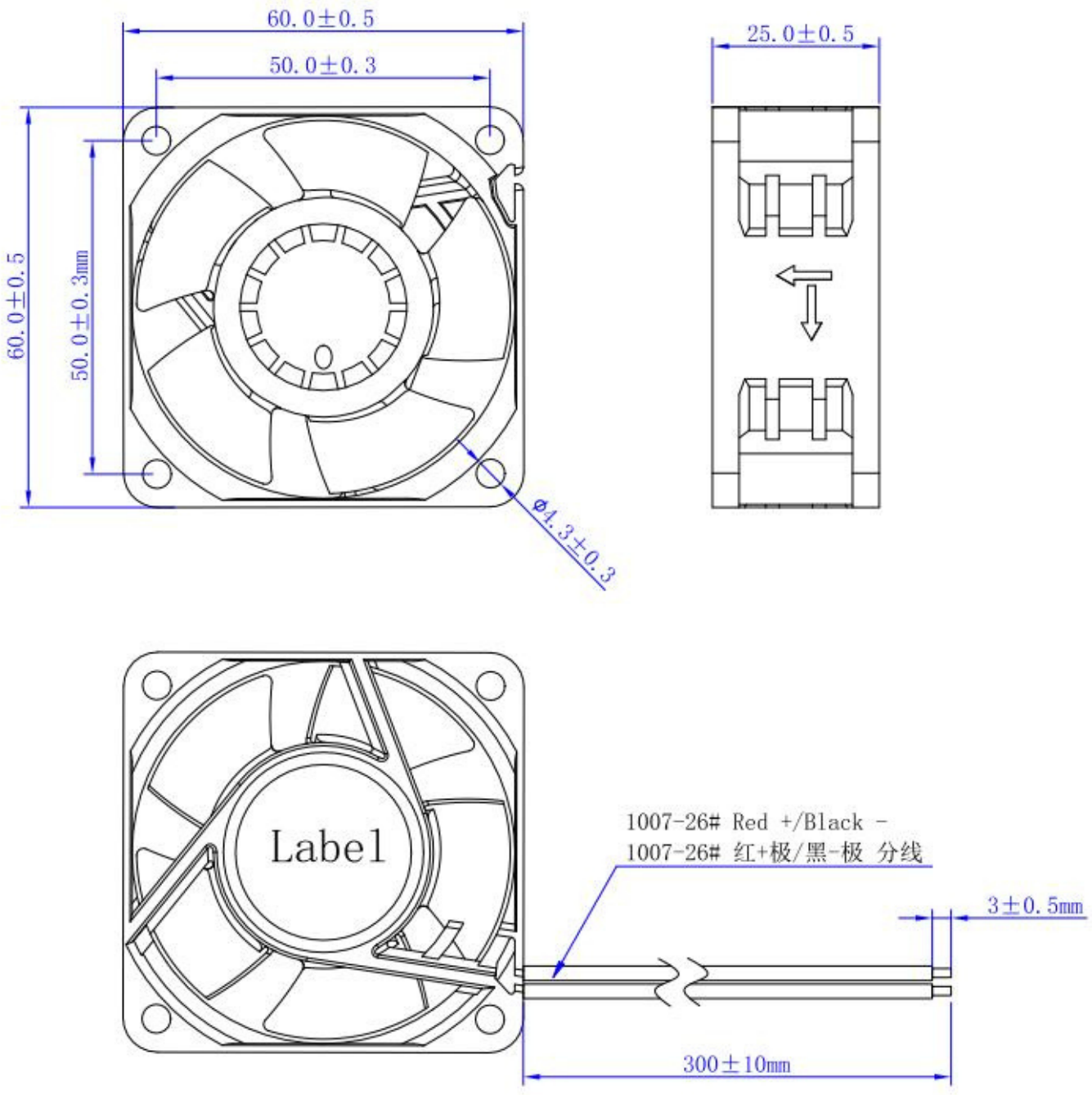
4.5 RoHS compliance: RoHS
see RoHS standard

4.6 Life expectancy:
The “Life expectancy”of CCHV fans is determined in CCHV’s laboratory of reliability test by using temperature chamber with high acceleration life time test method. Therefor the life expectancy “L10 report”based on calculation according to ALT.

ALT: t = 1.036×MTTF×[(Br;c)÷ n]0.91÷AF , and AF = 2(Ts-Tu)/10

5. Label: (28mm)

6. Drawing (： mm)


60.0±0.5
50.0±0.3
60.0±0.5
50.0±0.3mm
Ø4.3±0.3
25.0±0.5
Label
1007-26# Red +/Black -
1007-26# 红+极/黑-极 分线
3±0.5mm
300±10mm