# HICOOL ELECTRONIC INDUSTRIES

# TECHNICAL SPECIFICATION SHEET MODEL NO. 8P 12H SDC

#### 1.0 Features : General

1.01 Item : DC Axial Fan

1.02 Drive : DC Brush less motor

1.03 Commutation : Electronic ckts.inside motor-hub

## 2.0 Features : Constructional

2.01 Dimensions : 80x80x25mm

2.02 Body material : Glass reinforced PBT

Flame Retardant

2.03 Blade material : Glass reinforced PBT

Flame Retardent

2.04 Bearing type : Sleeve Bearing

2.05 Connecting elements : Fly leads of min.0.5m length,

Red Positive Black Negative

2.06 Weight : 70gms

#### 3.0 Features : Electrical

3.01 Rated nominal voltage 12VDC 3.02 Operational voltage range  $\pm 10\%$ **Operating Current** 3.03 ≤0.20 Amp Rate power consumption 3.04 ≤2.4W Starting in rush current 3.05 ≤0.3 Amp 3.06 Locked rotor current  $\leq 0.4$ Amp

3.07 Locked motor protection : No Burnout Permissible After Rotor Is

Locked For 72Hours At Rated

Voltage 12 With Built In impedance

Protection

3.08Dielectric Strength:  $\geq 0.5$ KV AC for 1 min.3.09Insulation resistance:  $\geq 50$ M  $\Omega$  at 500V DC3.10Protection against: Reverse connection

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#### 4.0 Features Operational at rated voltage

4.01 Duty : Continuous

4.02 Air flow while static pressure = 0 :  $\geq$  38 CFM

4.03 Static pressure while air flow = 0 :  $\geq$  4.5mm of H<sub>2</sub>O 4.04 Speed of Rotation :  $3000 \pm 150 \text{ r.p.m.}$ 

4.05 Noise for free air at a distance of 1m.  $\leq 34dB$ 

4.06 MTBF (Mean Time Between Failure) : 30,000hrs at 40°C

#### 5.0 Feature : Thermal

5.01 Insulation Type : UL Class A

5.02 Winding temp.rise at rated voltage :  $\leq 40^{\circ}$ K

#### **6.0 Features : Mechanical**

6.01 Shock endurance in terms of : ≥90cm

dropping height. For no. of times - 6.

6.02 Vibration endurance in terms of :  $\geq 3$  g

acceleration at frequency 15 Hz.

6.03 Frame strength in terms of screw : ≥10kgfcm

torque

6.04 Lead wire tensile strength : ≥1kgf

## 7.0 <u>Features : Environmental</u>

7.01 Operating temp. range :  $\leq 0^{\circ} \text{c} \sim \geq 70^{\circ} \text{c}$ 

7.02 Operating humidity :  $\leq 10\% \sim \geq 90\%$ 

7.03 Storage temp. range :  $-25^{\circ}c \sim \ge 70^{\circ}c$ 

7.04 Storage humidity :  $\leq 5\% \sim \geq 95\%$