# COMAIR ROTRON

# **Comair Rotron Specification Sheet**

Specification Date: Nov 30, 2017

Version: 03

COMAIR ROTRON PART NUMBER: 19040965A COMAIR ROTRON MODEL NUMBER: DDE114948K1E

A.) MOTOR:

RATED VOLTAGE: 48 Vdc

OPERATING VOLTAGE RANGE: 36 Vdc – 60 Vdc

LOW-START VOLTAGE: 36 Vdc

RUNNING CURRENT: 2.6 Amps

LOCKED ROTOR CURRENT: 4.0 Amps

RATED POWER: 125 Watts

NOMINAL SPEED: 1900 RPM

(At Free Delivery)

START UP TIME: 8 Seconds Maximum

MOTOR TYPE: Brushless DC

MOTOR PROTECTION: By Integrated Circuit, Fuse

LOCKED ROTORT PROTECTION: Electronic

POLARITY PROTECTION: Yes

AUTOMATIC RESTART CAPABILITY: By Integrated Circuit

ROTATION: Clockwise when viewed from Inlet

**B.) MECHANICAL** 

DIMENSIONS: 281mm Dia. x 125mm

(11.0" Dia. x 4.90") Figure 1

WEIGHT: 2.50 Kg (5.52 Lbs.)

BEARING TYPE: Ball Bearing, Permanently Lubricated,

Shielded

MOTOR BASE: Die Cast Aluminum

PROPELLER: Metal, plated

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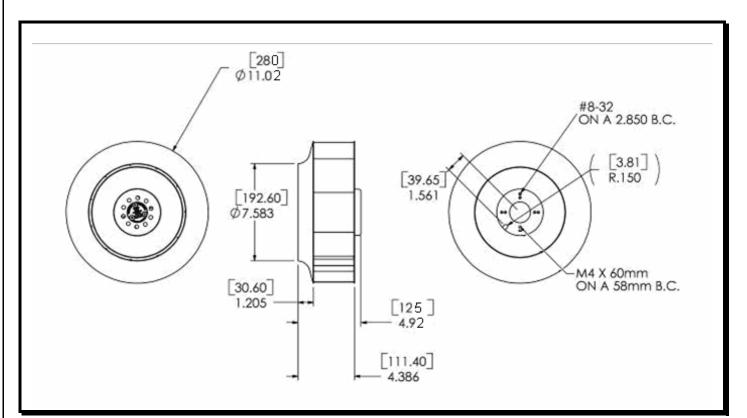


Figure 1

## **C.) ADDITIONAL FEATURES**

TACHOMETER OUTPUT: Open Collector

 $I_C = 10 \text{ mA. Max.}$ 

Pulses per Revolution: 3

Isolated: No

D.) SPEED CONTROL

Voltage: 0~10V

Response: <1V or open ctrl lead, off

1V , start

1~9V, linear ramp >9V, full speed

E.) ENVIRONMENTAL

OPERATING TEMPERATURE: -10°C to +70°C

STORAGE TEMPERATURE:  $-40^{\circ}$ C to  $+85^{\circ}$  C,  $65\% \pm 20\%$  RH

HUMIDITY: 5% to 95% RH, non-condensing

VIBRATION: 3G's (20 to 200 Hz)



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### E.) PERFORMANCE CHARACTERISTICS

AIR FLOW:  $1070 \text{ CFM} \pm 10\%$ 

(Measuring at zero static pressure)

STATIC PRESSURE: 1.86" Inches of H<sub>2</sub>O

(Measuring at zero air flow)

ACOUSTIC LEVEL: 78.0 dBA

(Freely Suspended at 1 meter per

ANSI S12.11-1987)

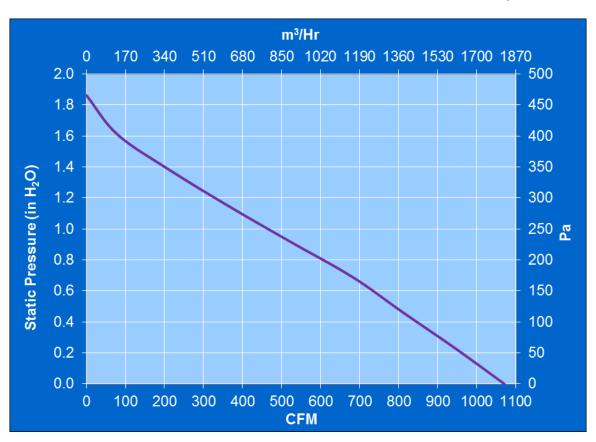


Figure 2



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### F.) TERMINATION

HARNESS: 457.2mm  $\pm 25.4$ mm  $(18" \pm 1")$ 

18 AWG, UL 1007 Style

(From the edge of the motor base to the tip

of the connector.)

Connector: Molex 39-01-2040 Terminals: Molex 39-00-0059

= Power (+) COLOR DESIGNATION: Red Black = Return (-)

> Blue/White = Tachometer Output

= Speed control Yellow

# **G.) RELIABILITY**

This fan is designed for continuous duty life of 42,000 Hours at 40°C, (L10)

### H.) SAFETY

UL, CUL, CE

### I.) Flammability

The blower including all components meets an UL94V-0 rating or better.

#### **Notes:**

All parameters will perhaps fluctuate with the speed tolerance by  $\pm$  10%.