

# **Comair Rotron Specification Sheet** Specification Date: Nov 30, 2017

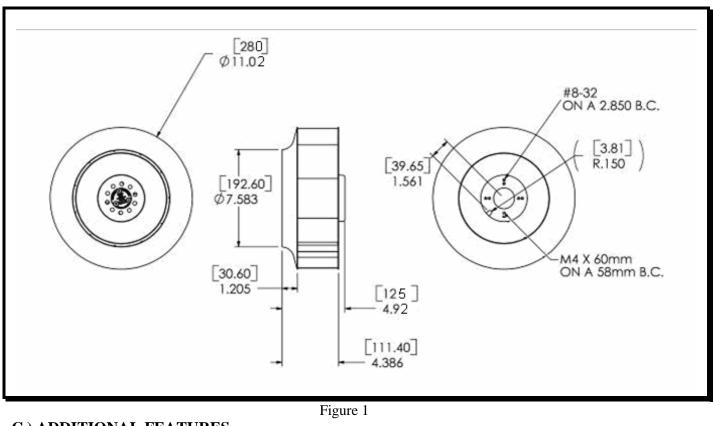
Version: 03

| COMAIR ROTRON PART NUMBER:<br>COMAIR ROTRON MODEL NUMBER: | 19040962A<br>DDE114924K1E                                   |
|---|---|
| A.) MOTOR:  |   |
| RATED VOLTAGE:  | 24 Vdc  |
| OPERATING VOLTAGE RANGE:                                  | 16 Vdc – 32 Vdc   |
| LOW-START VOLTAGE:  | 16 Vdc  |
| RUNNING CURRENT:  | 5.2 Amps  |
| LOCKED ROTOR CURRENT:                                     | 7.0 Amps  |
| RATED POWER:  | 125 Watts   |
| NOMINAL SPEED:  | 1900 RPM<br>(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  |
| WEIGHT:   | (11.0" Dia. x 4.90") <i>Figure 1</i><br>2.50 Kg (5.52 Lbs.) |
| BEARING TYPE:   | Ball Bearing, Permanently Lubricated,                       |
| MOTOR BASE:   | Shielded<br>Die Cast Aluminum                               |
| PROPELLER:  | Metal, plated   |



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#### **C.) ADDITIONAL FEATURES**

TACHOMETER OUTPUT:

**D.) SPEED CONTROL** 

Voltage: Response:

**E.) ENVIRONMENTAL** 

**OPERATING TEMPERATURE:** 

STORAGE TEMPERATURE:

HUMIDITY:

**VIBRATION:** 

**Open Collector**  $I_C = 10 \text{ mA. Max.}$ Pulses per Revolution: 3 Isolated: No

0~10V <1V or open ctrl lead, off 1V, start 1~9V, linear ramp >9V, full speed

-10°C to +70°C

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

5% to 95% RH, non-condensing

3G's (20 to 200 Hz)



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## **E.) PERFORMANCE CHARACTERISTICS**

AIR FLOW:

STATIC PRESSURE:

1070 CFM ± 10% (Measuring at zero 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)

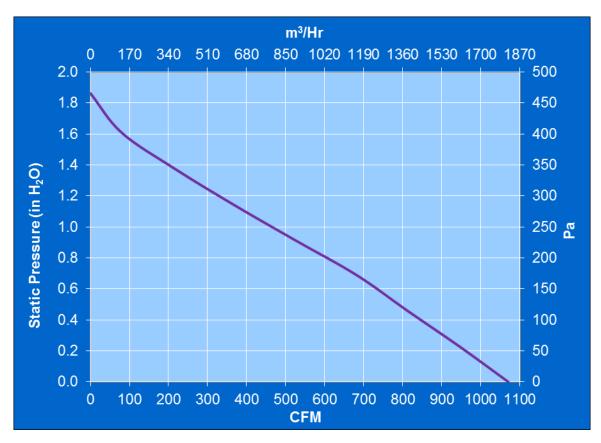


Figure 2



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## F.) TERMINATION

HARNESS:

 $\begin{array}{l} 457.2\text{mm}\pm25.4\text{mm}~(18"\pm1")\\ 18~\text{AWG, UL}~1007~\text{Style}\\ (From the edge of the motor base to the tip of the connector. )\\ Connector: Molex~39-01-2040\\ Terminals: Molex~39-00-0059\\ \end{array}$ 

COLOR DESIGNATION:

Red= Power (+)Black= Return (-)Blue/White= Tachometer OutputYellow= Speed control

# 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%.