



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") <i>Figure 1</i> |
| 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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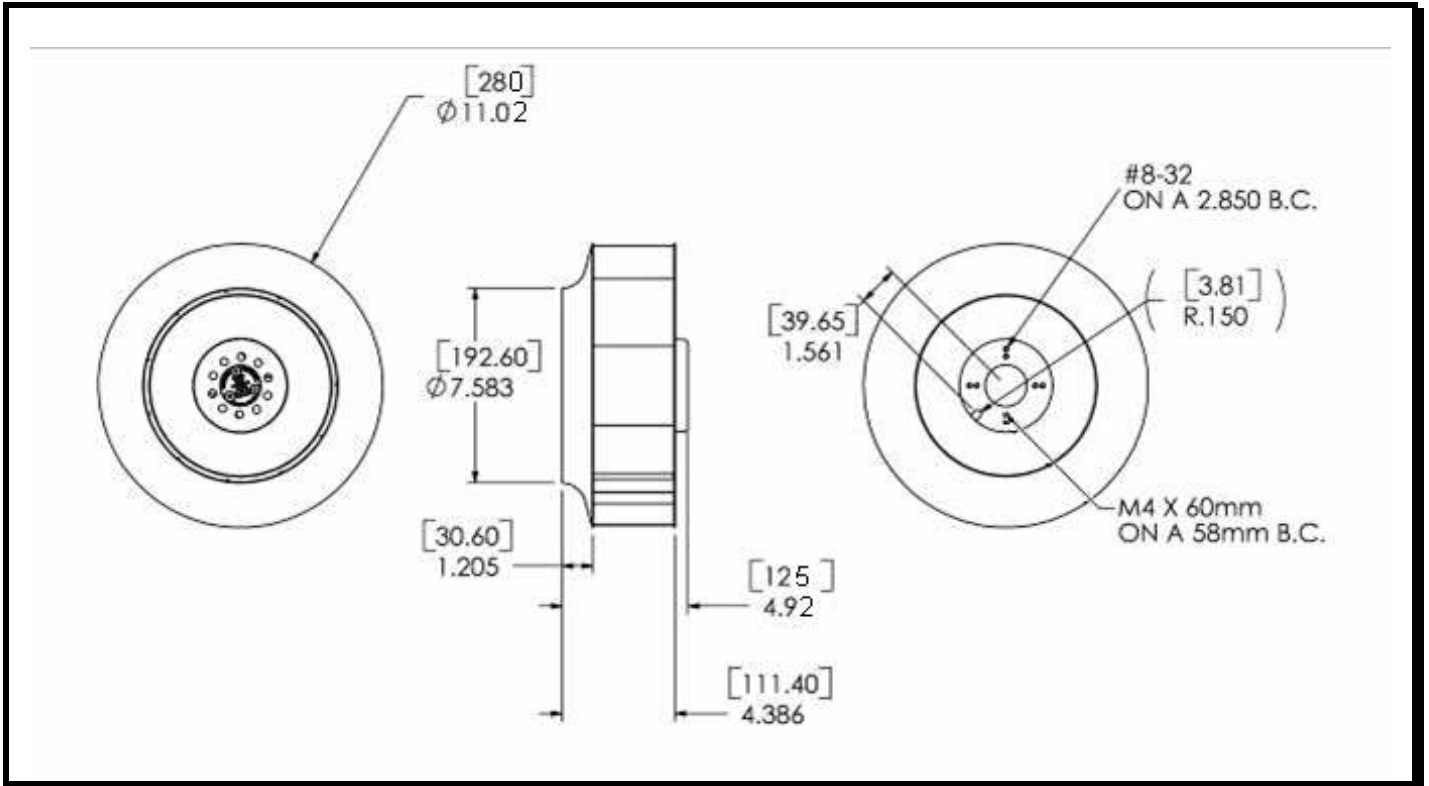


Figure 1

C.) ADDITIONAL FEATURES

TACHOMETER OUTPUT:

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

D.) SPEED CONTROL

Voltage:
 Response:

0~10V
 <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°C to +85° C, 65% ± 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 CFM \pm 10%
(Measuring at zero static pressure)

STATIC PRESSURE: 1.86" Inches of H₂O
(Measuring at zero air flow)

ACOUSTIC LEVEL: 78.0 dBA
(Freely Suspended at 1 meter per ANSI S12.11-1987)

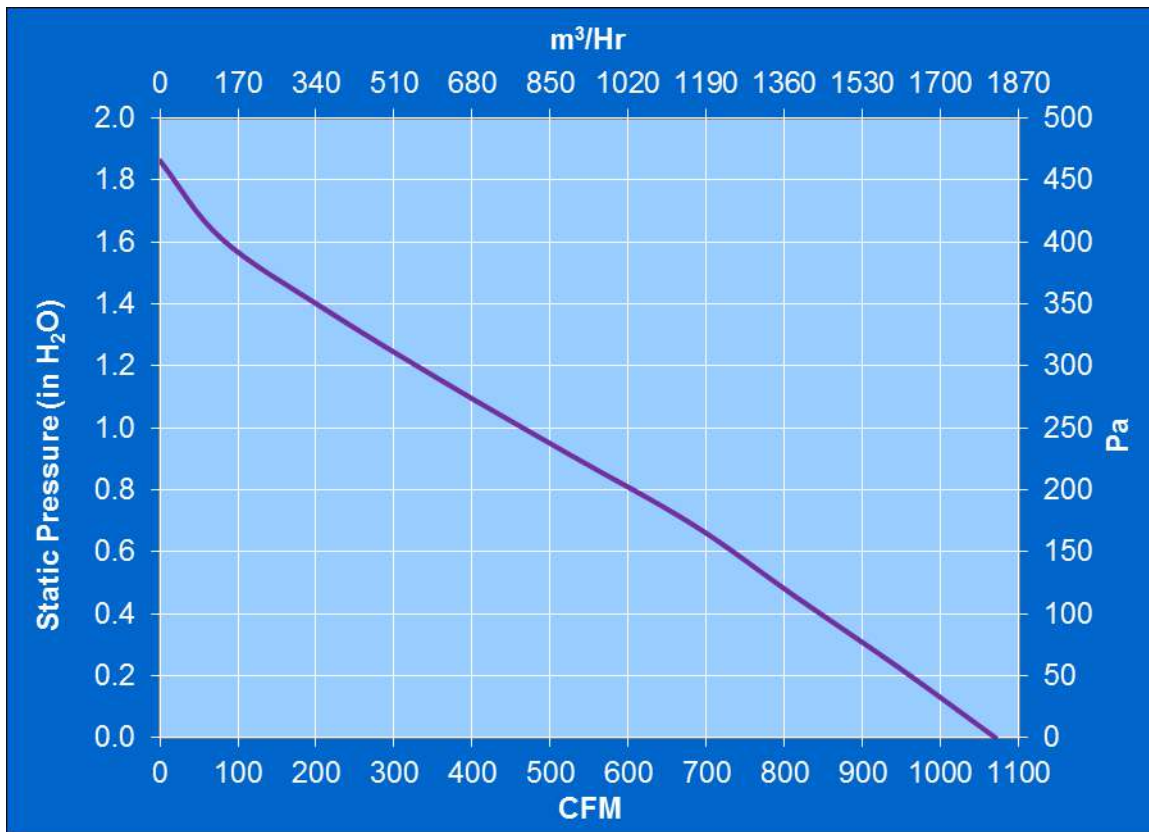


Figure 2



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F.) TERMINATION

HARNESS:

457.2mm \pm 25.4mm (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

COLOR DESIGNATION:

| | |
|------------|---------------------|
| Red | = Power (+) |
| Black | = Return (-) |
| Blue/White | = Tachometer Output |
| Yellow | = 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%.