



Comair Rotron Specification Sheet

Specification Date: Jan 19, 2018

Specification Version: 04

RoHS Compliant

COMMSCOPE CODE: 860443159 Ver 07
COMAIR ROTRON PART NUMBER: 16002542A
COMAIR ROTRON MODEL NUMBER: PQD48B6D3-E2

A.) MOTOR:

RATED VOLTAGE:	48 VDC
OPERATING VOLTAGE RANGE:	36 VDC – 72 VDC
LOW-START VOLTAGE:	36 VDC
NOMINAL RUNNING CURRENT:	0.45 Amps
RATED POWER:	22 Watts
LOCKED ROTOR CURRENT:	1.0 Amps
FULL SPEED:	3600 RPM \pm 10% (At Free Delivery)
MOTOR TYPE:	Brushless DC Motor
LOCKED ROTOR PROTECTION:	Electronic
POLARITY PROTECTION:	Yes
AUTOMATIC RESTART CAPABILITY:	Yes
ROTATION:	Counterclockwise When Viewed From the strut side
AIR FLOW DIRECTION:	Exhaust/struts

B.) MECHANICAL

DIMENSIONS:	171.5 mm x 50.8mm Schematic Figure 1
MOUNTING HOLES:	4 x M5 x 0.8 on propeller side 4 x \varnothing 4.37mm on struts side
WEIGHT:	0.84Kg
BEARING TYPE:	Permanently Lubricated Ball Bearings
VENTURI:	Die Cast Aluminum, Black
PROPELLER:	Polycarbonate, Black, UL 94V-0



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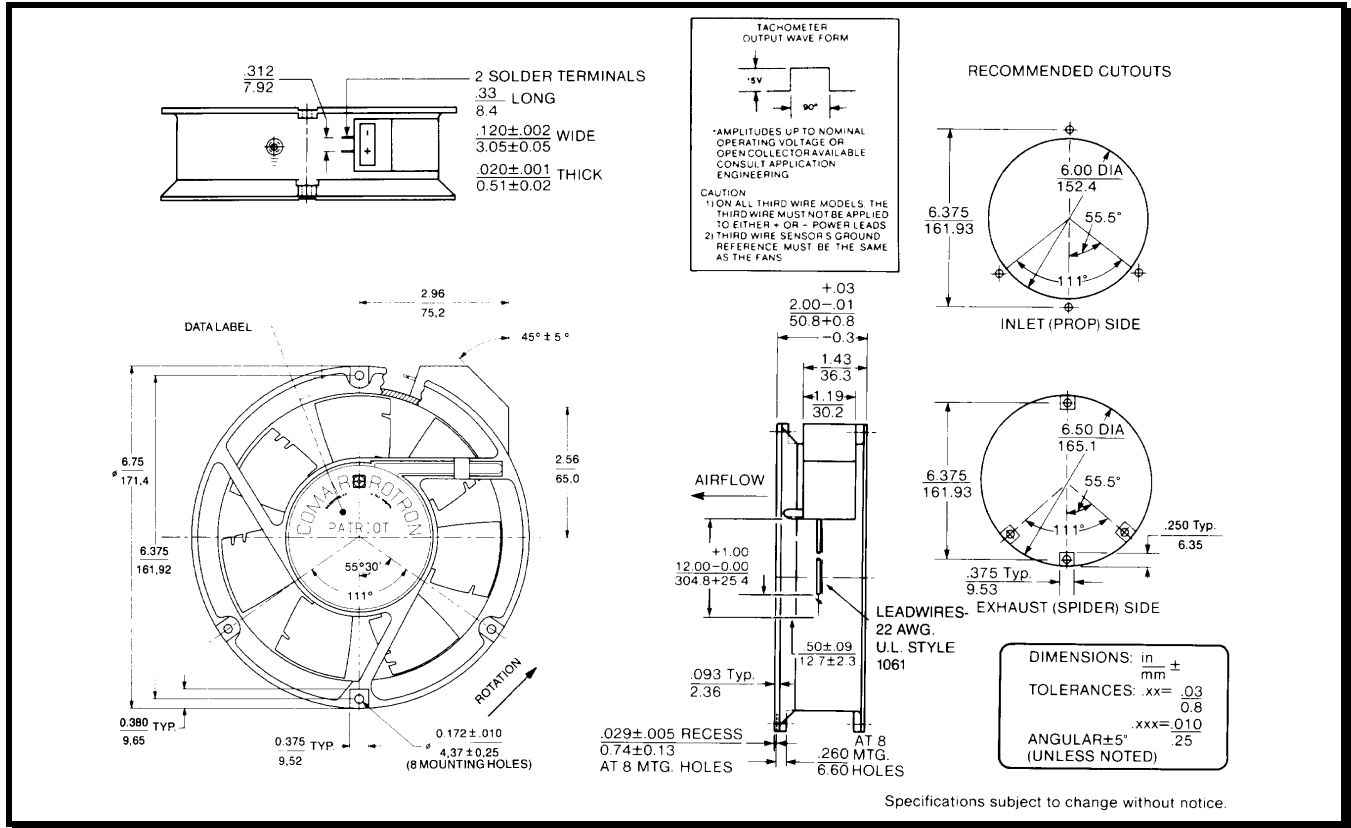
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(Schematic) Figure 1

C.) ENVIRONMENTAL

OPERATING TEMPERATURE: -10° C to +70° C

STORAGE TEMPERATURE: -40° C to +85° C

ENVIRONMENTAL SHIELD: Type 2

D.) PERFORMANCE CHARACTERISTICS

AIR FLOW: 240 CFM ± 10% (Figure 2)
(At Free Delivery and 48VDC Nominal)

STATIC PRESSURE: 0.8" Inches of H₂O (Figure 2)
(At Shut-Off and 48VDC Nominal)

ACOUSTIC LEVEL: 52dBA. @ 48Vdc
(Measured Freely Suspended at 1 meter per ANSI S1.31-1980)



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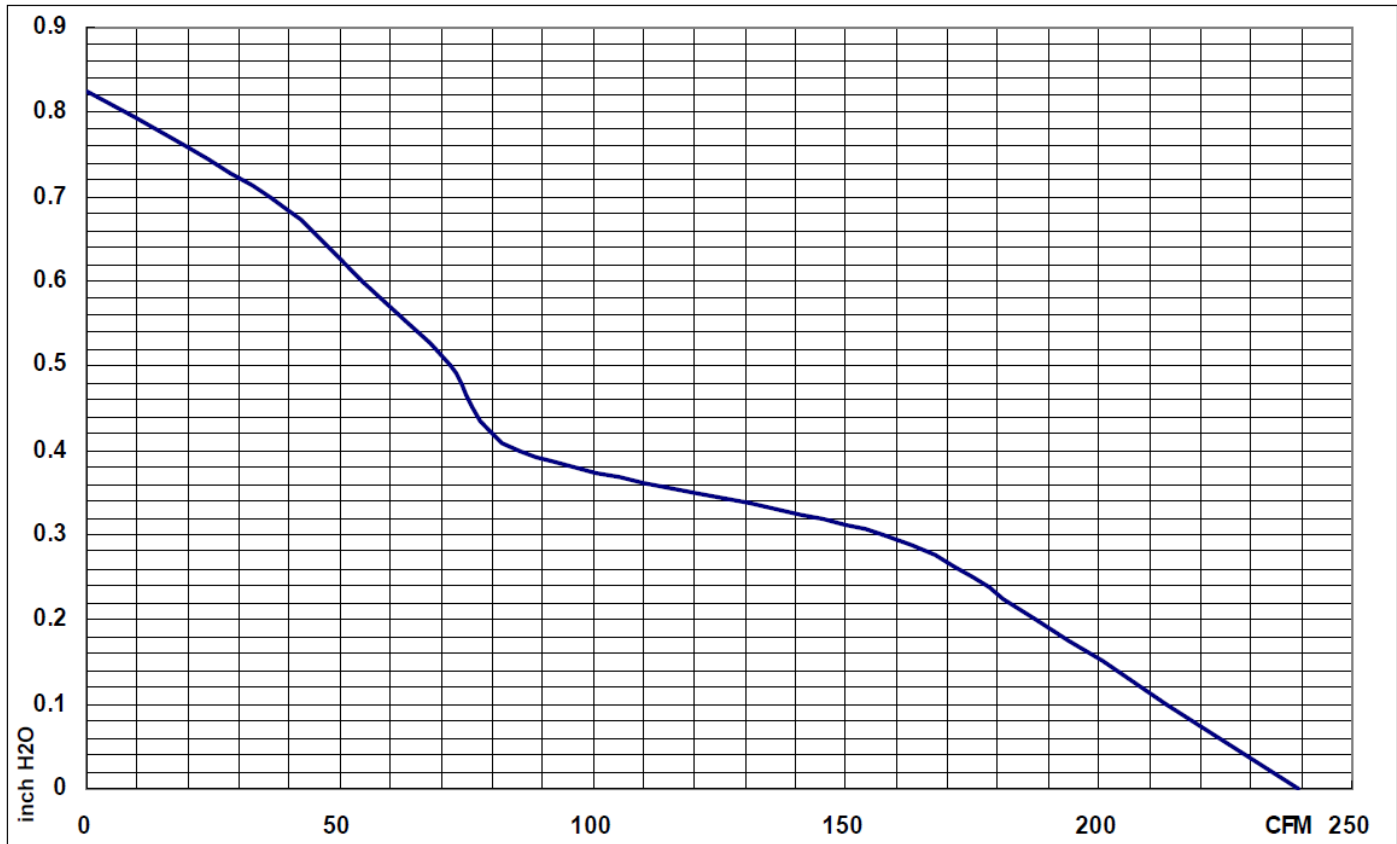


Figure 2

E.) ADDITIONAL FEATURES

FAN PERFORMANCE SENSOR:

Output:	Open Collector
Ic:	80 mA max.
Vcc:	60 Vdc max.
Icbo:	1uA @ 80V
Logic Level:	High on pass, low on fail
Isolated:	No
Latching:	No
Delay:	10 ± 4 seconds



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F.) SPEED PROFILE (Figure 3)

The thermistor is on the control board of customer side.

Fan Speed Control Settings	
Temperature (°C)	Speed (rpm)
-40	0
15	0
15 ~ 58	1900
> 60	3600

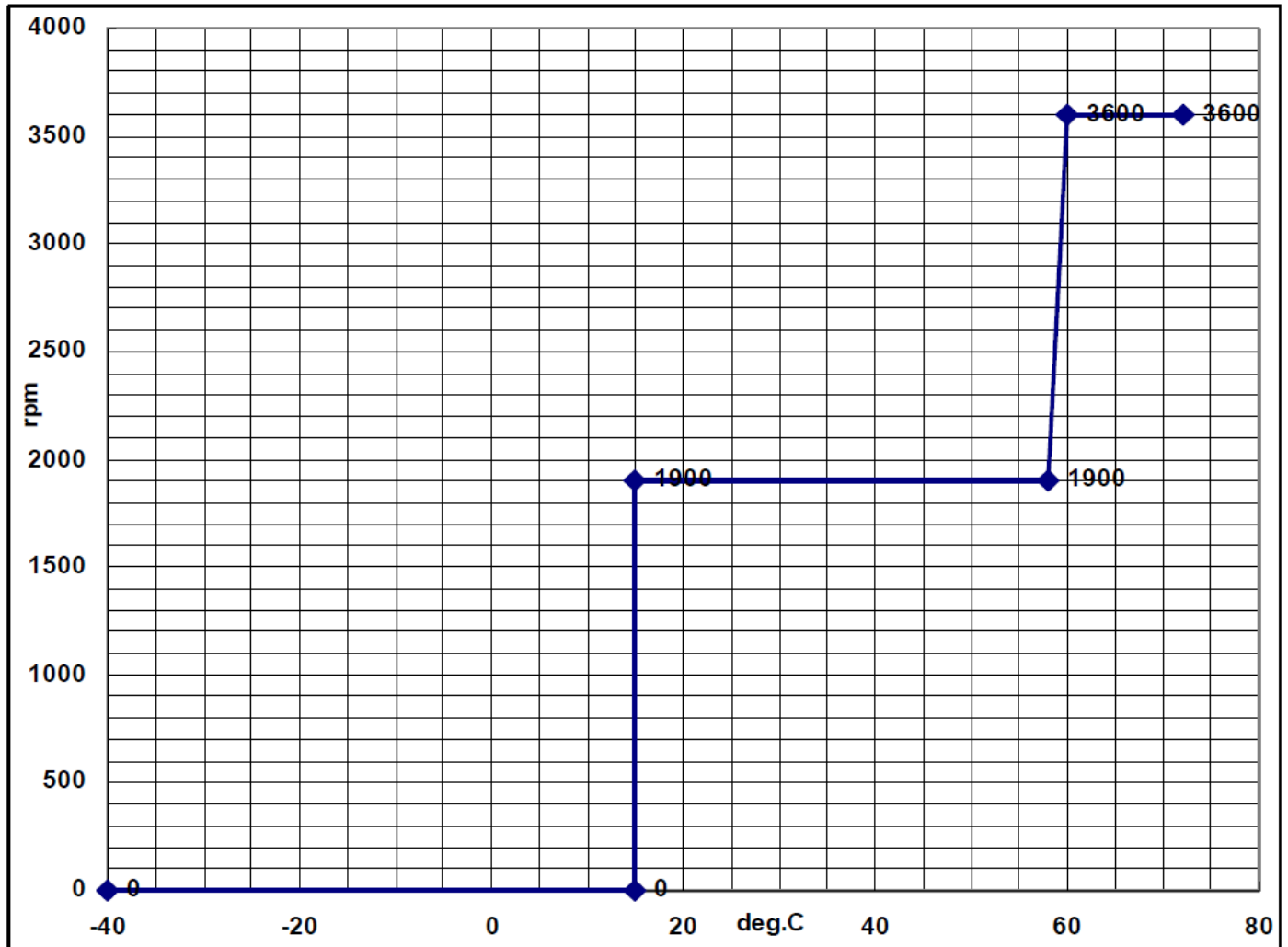


Figure 3



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G.) TERMINATION

HARNES:	58" ± 1", (From the edge of the venturi to the tip of the connector), 22 AWG, UL 1007
SLEEVE TUBE:	PVC (UL or CSA approved) (Sleeve tube to extend 0.35 inch max beyond the edge of the venturi)
CONNECTOR:	MOLEX 39-01-2065
CONTACTS:	Molex 39-00-0059
COLOR DESIGNATION:	Pin 1: Black -Power (-) Pin 2: Blue/White- FPS Pin 3: Red- Return (+) Pin 4: NOT USED Pin 5: Thermistor lead Pin 6: Thermistor lead

H.) RELIABILITY

This fan is designed for continuous duty life of 58,000 Hours at 70°C (L10).

I.) SAFETY AGENCIES

UL, CUL, CE

J.) RADIATED AND CONDUCTED EMISSIONS

EMI: Complies with FCC Part 15, Subpart J, Class A and B Emissions.

K.) FLAMMABILITY

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