

#### REMOTE CONDENSERS



Desert Aire's Remote Condensers are designed with a commitment to excellence that will provide you with years of reliable service.

All Desert Aire equipment is consistently manufactured to high performance standards for efficient, reliable service. Our Remote Condensers are easy to install too.

# H IGH PERFORMANCE, DURABILITY AND EFFICIENCY

**COILS** - Round Tube Coils-Enhanced tubing, advanced sinusoidal fin design for optimal performance. Extensive use of 5/16" and 3/8" diameter tubing keeps refrigerant charge to a minimum.

Optional, ElectroFin E-Coat provides a uniform, flexible coating over the entire coil with immeasurable impact on thermal conductivity. 100% coverage is assured by the application process, even in the hard to reach center portions of the coil, without bridging between the fins. We recommend the application anytime a remote condenser is located near a salt water coast or a potential source of corrosive airborne particles.

**FANS -** Swept fan blades are designed as part of the motor, not an addition to it. Precise matching of these two components increases energy efficiency and reduces sound pressure to lower levels.

**MOTORS** - Direct drive external rotor motors offer uncompromised energy efficiency, low sound, and the longest trouble free life available. The RC8 series has fully enclosed motor lead raceways to protect wiring.

**CABINETS** - G90 galvanized steel cabinet provides years of durable finish protection and aesthetics. The RC8 and RCU series have tall venturi fan panels to add to our uncompromised energy efficiency and ultra-low sound. Fully baffled fan cells prevent "wind milling" and enhance performance.



#### **E** ASY INSTALLATION

After uncrating, the condenser easily lifts into place with the use of eye bolts located on top of the unit. At ground level, the condenser can rest on a solid surface such as a concrete slab. On roofs, the unit should be placed on channels or an I-beam frame.

Desert Aire has a condenser for every application. Our complete line of direct-drive condensers complements the wide range of our dehumidification offerings.

Head pressure controls automatically maintain condensing pressure at ambient temperatures as low as -20°F.

#### M ULTIPLE REFRIGERATION CIRCUITS

Desert Aire's large commercial condensers are available in single or dual-circuit designs to match the needs of the dehumidifier. Each condenser fan is independently controlled to limit refrigeration migration and maintain design condensing temperatures.

Elevation above sea level has an effect on the performance of air-cooled condensers. The unit capacities shown in the Performance Table must be multiplied by the correction factors in Table 1 to correct for various elevations.

NOTES: All data contained in this document is subject to change without notice. Please consult factory for most current data. Condensers in this brochure are limited to an elevation difference of 10 feet (RC below) and a maximum linear distance of 50 feet. Consult factory for high-lift model options.

## S OUND AND POWER

#### **RC SERIES**

Desert Aire's RC series of condensers are for customers seeking the most economical solution for their capacity requirements. This series of condensers offer quality sound and power benefits. Enhanced motor technology using an 1100 RPM blower/fan combination affords lower noise levels and significant energy savings.

#### **FEATURES**

Equipment includes a door interlock and a main terminal block for motor lead termination. The RC8 series includes a main disconnect switch. Standard control panels are rated at 10 kA SCCR when power is supplied with class J fuses.

## **E** LEVATION CORRECTION FACTORS

ELEVATION (FEET)	1,000	2,000	3,000	4,000	5,000	6,000	7,000
CORRECTION FACTOR	0.98	0.96	0.93	0.91	0.89	0.87	0.85

Table 1

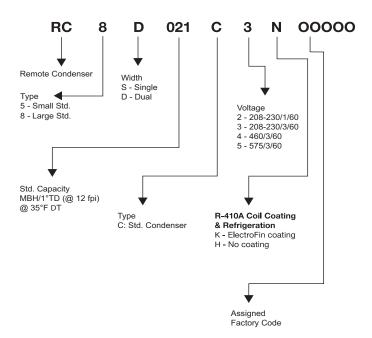


Figure 1 - ROC Model Matrix

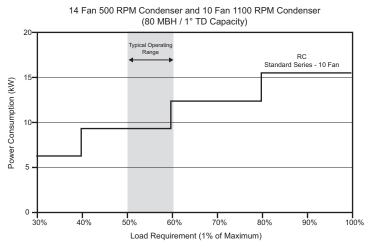
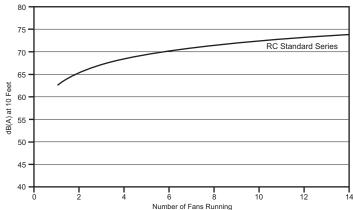


Figure 2 - Power Consumption Comparison



\* Graphed DBA values are sound ratings for the maximum number of fans in operation per ROC measured at 10 ft.

Figure 3 - Unit Sound Data\*

## E LECTRICAL DATA

		208-230/1/60 208-230/3/60 460/3/60													
	Model	CFM	FLA	MCA	MOPD**	Unit kW 1 PHASE / 3 PHASE									
	SINGLE STANDARD														_
	RC5S008C	2,792	0.9	1.1	15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.2 / n/a
	RC5S013C	2,589	0.9	1.1	15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.2 / n/a
	RC5S018C	2,383	0.9	1.1	15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.2 / n/a
	RC5S024C	5,773	4.6	5.8	15	3.3	4.1	15	2.0	2.5	15	1.6	2	15	0.9 / 1.0
	RC5S032C	5,557	4.6	5.8	15	3.3	4.1	15	2.0	2.5	15	1.6	2	15	0.9 / 1.0
	RC5S039C	5,352	4.6	5.8	15	3.3	4.1	15	2.0	2.5	15	1.6	2	15	0.9 / 1.1
t	RC5S051C	10,259	9.2	10.4	15	6.6	7.4	15	4.0	4.5	15	3.2	3.6	15	1.9 / 2.2
Width	RC5S063C	9,670	9.2	10.4	15	6.6	7.4	15	4.0	4.5	15	3.2	3.6	15	1.9 / 2.2
<u>e</u>	RC5S067C	11,235	9.2	10.4	15	6.6	7.4	15	4.0	4.5	15	3.2	3.6	15	1.9 / 2.1
Single	RC5S079C	10,850	9.2	10.4	15	6.6	7.4	15	4.0	4.5	15	3.2	3.6	15	1.9 / 2.1
	RC5S099C	16,672	13.8	15	15	9.9	10.7	15	6.0	6.5	15	4.8	5.2	15	2.8 / 3.1
	RC5S113C	16,045	13.8	15	15	9.9	10.7	15	6.0	6.5	15	4.8	5.2	15	2.8 / 3.2
	RC8S007C	11,376	n/a	n/a	n/a	6.8	8.5	15	3.6	4.5	15	3.4	4.3	15	n/a / 1.4
	RC8S009C	11,033	n/a	n/a	n/a	6.8	8.5	15	3.6	4.5	15	3.4	4.3	15	n/a / 1.4
	RC8S011C	23,496	n/a	n/a	n/a	13.6	15.3	20	7.2	8.1	15	6.8	7.7	15	n/a / 2.7
	RC8S015C	22,752	n/a	n/a	n/a	13.6	15.3	20	7.2	8.1	15	6.8	7.7	15	n/a / 2.8
	RC8S018C	22,067	n/a	n/a	n/a	13.6	15.3	20	7.2	8.1	15	6.8	7.7	15	n/a / 2.9
	RC8S022C	33,668	n/a	n/a	n/a	20.4	22.1	25	10.8	11.7	15	10.2	11.1	15	n/a / 4.2
	RC8S026C	32,522	n/a	n/a	n/a	20.4	22.1	25	10.8	11.7	15	10.2	11.1	15	n/a / 4.3
	RC8S030C	44,897	n/a	n/a	n/a	27.2	28.9	35	14.4	15.3	20	13.6	14.5	15	n/a / 5.6
	RC8S035C	43,370	n/a	n/a	n/a	27.2	28.9	35	14.4	15.3	20	13.6	14.5	15	n/a / 5.8
t	DUAL STANDARD														
Width	RC8D022C	46,101	n/a	n/a	n/a	27.2	28.9	35	14.4	15.3	20	13.6	14.5	15	n/a / 5.4
Dual	RC8D029C	44,319	n/a	n/a	n/a	27.2	28.9	35	14.4	15.3	20	13.6	14.5	15	n/a / 5.6
۵	RC8D035C	42,714	n/a	n/a	n/a	27.2	28.9	35	14.4	15.3	20	13.6	14.5	15	n/a / 5.8

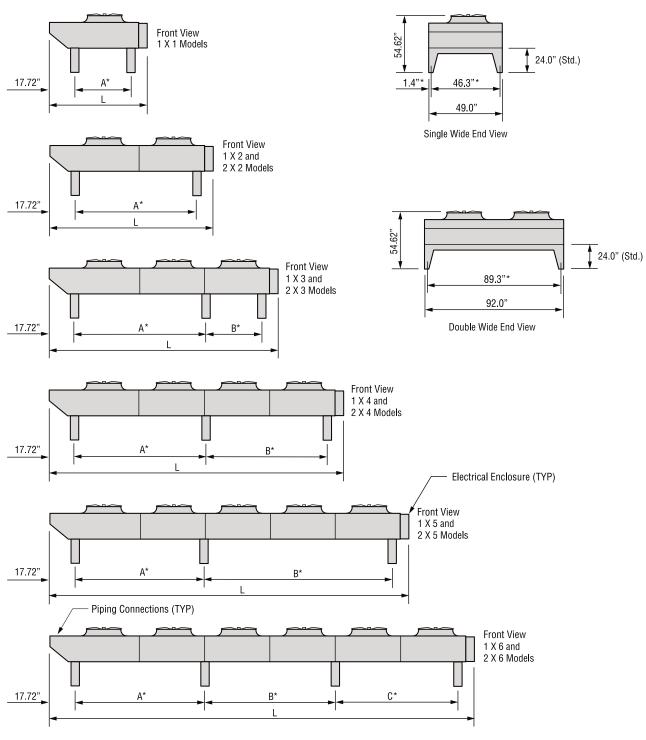
<sup>\*</sup>Standard control panels are rated at 10 kA SCCR when power is supplied with class J fuses.
\*\* MOPD - Maximum Overcurrent Protection Device

## PERFORMANCE, SPECIFICATIONS AND DIMENSIONS TABLE

	Model	Std. Capacity	Single Circ. Conn (in)**		Dual Circ. Conn (in)**		Fan	Overall	Moun	ting Dimensio	Approx.	DBA*	
	Model	MBH/1F 1φ/3φ	Disch. Line	Liq. Line	Disch. Line	Liq. Line	Layout	Length (L) (inches)	Α	В	С	Net Wt. (lbs	DBA
	SINGLE STANDARD												
	RC5S008C	0.8 / n/a	1/2	1/2	1/2	1/2	1 x 1	50.4	31.8	-	-	199	49.5
	RC5S013C	1.4 / n/a	5/8	1/2	5/8	1/2	1 x 1	50.4	31.8	-	-	208	48.8
	RC5S018C	1.6 / n/a	5/8	1/2	5/8	1/2	1 x 1	50.4	31.8	-	-	215	48
	RC5S024C	2.6 / 2.7	3/4	5/8	3/4	1/2	1 x 1	50.4	31.8	-	-	236	60.5
	RC5S032C	3.3 / 3.6	7/8	3/4	7/8	1/2	1 x 1	50.4	31.8	-	-	243	60
	RC5S039C	3.7 / 4.1	7/8	3/4	7/8	1/2	1 x 1	50.4	31.8	-	-	253	59.5
	RC5S051C	5.5 / 6.1	7/8	3/4	7/8	1/2	1 x 2	86.4	67.8	-	-	315	62
£	RC5S063C	6.3 / 7.1	1-1/8	3/4	1-1/8	1/2	1 x 2	86.4	67.8	-	-	329	61.5
3	RC5S067C	6.7 / 7.3	1-1/8	7/8	1-1/8	1/2	1 x 2	90.4	71.8	-	-	369	63
Single Width	<b>P</b> RC5S079C	7.6 / 8.4	1-1/8	7/8	1-1/8	1/2	1 x 2	90.4	71.8	-	-	390	62.5
	RC5S099C	9.8 / 10.7	1-1/8	7/8	1-1/8	1/2	1 x 3	122.4	51.9	-	-	480	65
STANDARD	RC5S113C	11.1 / 12.4	1-3/8	1-1/8	1-3/8	1/2	1 x 3	122.4	51.9	-	-	509	64.5
2	RC8S007C	n/a / 8.1	1-1/8	7/8	1-1/8	5/8	1 x 1	80.9	48.1	-	-	529	62.5
M	RC8S009C	n/a / 9.3	1-1/8	7/8	1-1/8	3/4	1 x 1	80.9	48.1	-	-	551	62.5
S	RC8S011C	n/a / 12	1-3/8	1-1/8	1-3/8	3/4	1 x 2	139.1	106.2	-	-	710	65.5
	RC8S015C	n/a / 15.6	1-3/8	1-1/8	1-3/8	7/8	1 x 2	139.1	106.2	-	-	829	65.5
	RC8S018C	n/a / 18	1-5/8	1-1/8	1-3/8	7/8	1 x 2	139.1	106.2	-	-	869	65.5
	RC8S022C	n/a / 24.7	1-5/8	1-3/8	1-5/8	1-1/8	1 x 3	197.1	111.1	53.1	-	1186	67.3
	RC8S026C	n/a / 28.2	1-5/8	1-3/8	1-5/8	1-1/8	1 x 3	197.1	111.1	53.1	-	1246	67.3
	RC8S030C	n/a / 33.5	1-5/8	1-3/8	1-5/8	1-1/8	1 x 4	255.1	111.1	111.1	-	1497	68.5
	RC8S035C	n/a / 37.7	1-5/8	1-3/8	1-5/8	1-1/8	1 x 4	255.1	111.1	111.1	-	1574	68.5
ءِ.	DUAL STANDARD												
N.	RC8D022C	n/a / 23.2	1-5/8	1-3/8	1-5/8	1-1/8	2 x 2	139.1	106.2	-	-	1301	68.5
Width	RC8D029C	n/a / 30.2	1-5/8	1-3/8	1-5/8	1-1/8	2 x 2	139.1	106.2	-	-	1537	68.5
-	RC8D035C	n/a / 34.8	1-5/8	1-3/8	1-5/8	1-1/8	2 x 2	139.1	106.2	-	-	1614	68.5

<sup>\*</sup> Listed DBA values are sound ratings for the maximum number of fans in operation per RC at 3m in accordance with AHRI standard 370-2001.
\*\* Line sizes are based on 50 ft. line set / max. 10 ft. elevation difference at 35°F \( \Delta T. \) Line connections may vary with different application ratings so consult the I/O manual.

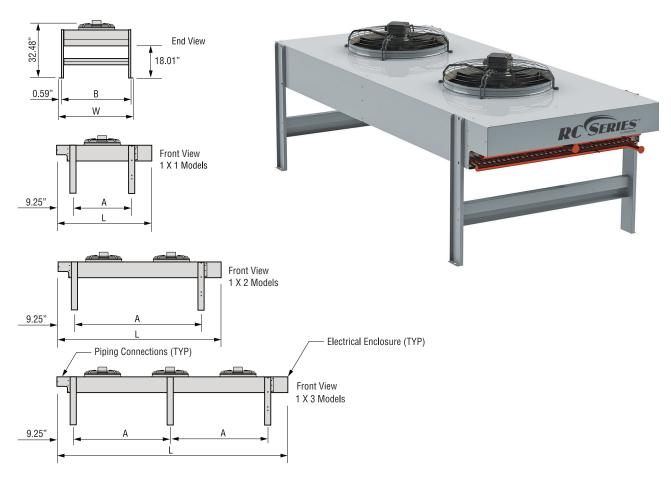
## D IMENSIONAL DATA RC8



<sup>\*</sup> Mounting fastener hole center

## D IMENSIONAL DATA RC5 SERIES

	Fan	Overall	Overall	Mounting Dimensions (in)				
Model	Layout	Length (L) (inches)	Width (W) (inches)	A	В			
RC5								
RC5S008	1 x 1	50.4	30.5	31.8	29.3			
RC5S013	1 x 1	50.4	30.5	31.8	29.3			
RC5S018	1 x 1	50.4	30.5	31.8	29.3			
RC5S024	1 x 1	50.4	39.5	31.8	38.3			
RC5S032	1 x 1	50.4	39.5	31.8	38.3			
RC5S039	1 x 1	50.4	39.5	31.8	38.3			
RC5S051	1 x 2	86.4	30.5	67.8	29.3			
RC5S063	1 x 2	86.4	30.5	67.8	29.3			
RC5S067	1 x 2	90.4	39.5	71.8	38.3			
RC5S079	1 x 2	90.4	39.5	71.8	38.3			
RC5S099	1 x 3	122.4	39.5	51.9	38.3			
RC5S113	1 x 3	122.4	39.5	51.9	38.3			



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