

REMOTE CONDENSERS

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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.

HIGH PERFORMANCE, DURABILITY & 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 & RCU series have fully enclosed motor lead raceways to protect wiring.

CABINETS - G90 galvanized steel cabinet provides years of durable finish protection and aesthetics. The RC8 & 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.

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.



EASY 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.

MULTIPLE 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.



SOUND AND POWER

RC STANDARD 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.

RCU QUIET SERIES

The RCU series offers exceptional sound, energy and capacity solutions. Featuring 500 RPM motors coupled with specially designed blades that are precisely mounted in a venturi to provide unprecedented low sound levels. While RCU condensers may require more fans, these units actually require significantly lower power consumption through their optimized blower efficiency. (See Figures 2 and 3 for comparisons.)

STANDARD FEATURES

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

ELEVATION 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

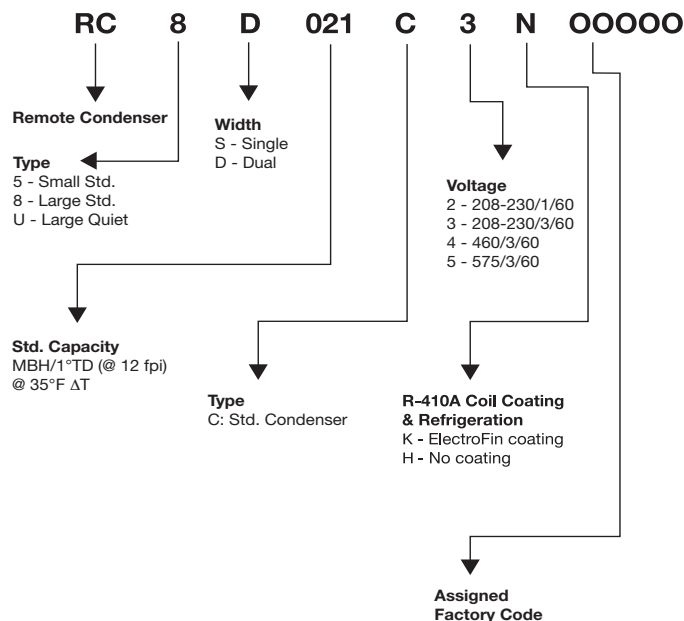


Figure 2 - Power Consumption Comparison
14 Fan 500 RPM Condenser and 10 Fan 1100 RPM Condenser
(80 MBH / 1° TD Capacity)

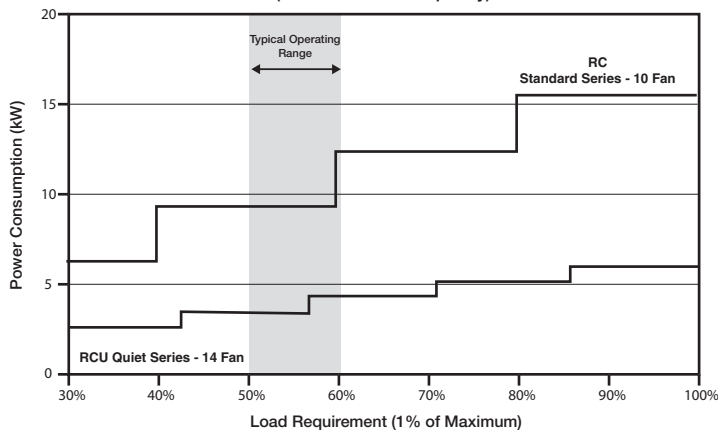
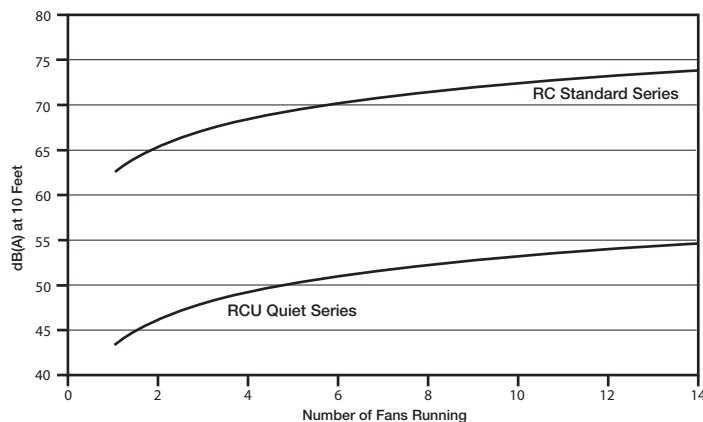


Figure 3 - Unit Sound Data*



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

ELECTRICAL DATA

	Model	CFM	208-230/1/60			208-230/3/60			460/3/60			575/3/60			Unit kW 1 PHASE / 3 PHASE
			FLA	MCA	MOPD**	FLA	MCA	MOPD**	FLA	MCA	MOPD**	FLA	MCA	MOPD**	
STANDARD	SINGLE STANDARD														
	RC5S008C	2,792	0.9	2	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.7 / n/a
	RC5S013C	2,589	0.9	2	3	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	2	3	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	4.5	7	11	3.3	5	9	2.0	4	6	1.6	3	5	0.9 / 1.0
	RC5S032C	5,557	4.5	7	11	3.3	5	9	2.0	4	6	1.6	3	5	0.9 / 1.0
	RC5S039C	5,352	4.5	7	11	3.3	5	9	2.0	4	6	1.6	3	5	0.9 / 1.1
	RC5S051C	10,259	9.2	11	16	6.6	9	9	4.0	6	8	3.2	5	6	1.9 / 2.2
	RC5S063C	9,670	9.0	11	16	6.6	9	9	4.0	6	8	3.2	5	6	1.9 / 2.2
	RC5S067C	11,235	9.0	11	16	6.6	9	12	4.0	6	8	3.2	5	6	1.9 / 2.1
	RC5S079C	10,850	9.0	11	16	6.6	9	12	4.0	6	8	3.2	5	6	1.9 / 2.1
	RC5S099C	16,672	13.5	16	20	9.9	12	15	6.0	8	10	4.8	6	8	2.8 / 3.1
	RC5S113C	16,045	13.5	16	20	9.9	12	15	6.0	8	10	4.8	6	8	2.8 / 3.2
	RC8S007C	11,376	n/a	n/a	n/a	6.8	10	16	3.6	5	9	3.1	5	8	n/a / 1.4
	RC8S009C	11,033	n/a	n/a	n/a	6.8	10	16	3.6	5	9	3.1	5	8	n/a / 1.4
	RC8S011C	23,496	n/a	n/a	n/a	13.6	16.8	23	7.2	9	13	6.2	9	12	n/a / 2.7
	RC8S015C	22,752	n/a	n/a	n/a	13.6	16.8	23	7.2	9	13	6.2	9	12	n/a / 2.8
	RC8S018C	22,067	n/a	n/a	n/a	13.6	16.8	23	7.2	9	13	6.2	9	12	n/a / 2.9
	RC8S022C	33,668	n/a	n/a	n/a	20.4	23.6	30	10.8	13	17	9.4	12	15	n/a / 4.2
	RC8S026C	32,522	n/a	n/a	n/a	20.4	23.6	30	10.8	13	17	9.4	12	15	n/a / 4.4
RC8S030C	44,897	n/a	n/a	n/a	27.2	30.4	37	14.4	16	20	12.5	15	18	n/a / 5.6	
RC8S035C	43,370	n/a	n/a	n/a	27.2	30.4	37	14.4	16	20	12.5	15	18	n/a / 5.8	
Dual Width	DUAL STANDARD														
	RC8D022C	46,101	n/a	n/a	n/a	27.2	30.4	37	14.4	16	20	6.2	9	12	n/a / 5.5
	RC8D029C	44,319	n/a	n/a	n/a	27.2	30.4	37	14.4	16	20	6.2	9	12	n/a / 5.7
	RC8D035C	42,714	n/a	n/a	n/a	27.2	30.4	37	14.4	16	20	6.2	9	12	n/a / 5.9
QUIET	SINGLE QUIET														
	RCUS005C	6,591	n/a	n/a	n/a	2.1	4	6	1.2	2	3	0.8	2	3	n/a / 0.4
	RCUS006C	6,253	n/a	n/a	n/a	2.1	4	6	1.2	2	3	0.8	2	3	n/a / 0.4
	RCUS008C	13,748	n/a	n/a	n/a	4.2	6.1	9	2.4	4	5	1.6	3	4	n/a / 0.8
	RCUS010C	12,899	n/a	n/a	n/a	4.2	6.1	9	2.4	4	5	1.6	3	4	n/a / 0.8
	RCUS012C	12,167	n/a	n/a	n/a	4.2	6.1	9	2.4	4	5	1.6	3	4	n/a / 0.8
	RCUS016C	19,252	n/a	n/a	n/a	6.3	8.2	11	3.6	5	6	2.4	4	5	n/a / 1.2
	RCUS018C	18,094	n/a	n/a	n/a	6.3	8.2	11	3.6	5	6	2.4	4	5	n/a / 1.2
	RCUS021C	25,669	n/a	n/a	n/a	8.4	10.3	13	4.8	6	7	3.2	5	6	n/a / 1.6
	RCUS023C	24,125	n/a	n/a	n/a	8.4	10.3	13	4.8	6	7	3.2	5	6	n/a / 1.6
	RCUS027C	29,538	n/a	n/a	n/a	10.5	12.4	15	6.0	7	8	4.0	6	7	n/a / 2.0
	RCUS030C	27,310	n/a	n/a	n/a	10.5	12.4	15	6.0	7	8	4.0	6	7	n/a / 2.0
	RCUS036C	32,771	n/a	n/a	n/a	12.6	14.5	17	7.2	8	9	4.8	6	7	n/a / 2.4
	Dual Width	DUAL QUIET													
RCUD015C		27,030	n/a	n/a	n/a	8.4	10.3	13	4.8	6	7	1.6	3	4	n/a / 1.5
RCUD020C		34,888	n/a	n/a	n/a	8.4	10.3	13	4.8	6	7	1.6	3	4	n/a / 1.6
RCUD031C		37,818	n/a	n/a	n/a	12.6	14.5	17	7.2	8	9	2.4	4	5	n/a / 2.3
	RCUD036C	35,339	n/a	n/a	n/a	12.6	14.5	17	7.2	8	9	2.4	4	5	n/a / 2.4

*Standard control panels are rated at 10 kA SCCR when power is supplied with class J fuses.

** MOPD - Maximum Overcurrent Protection Device

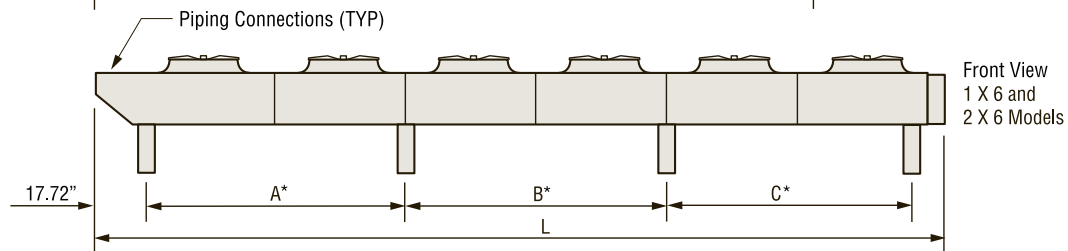
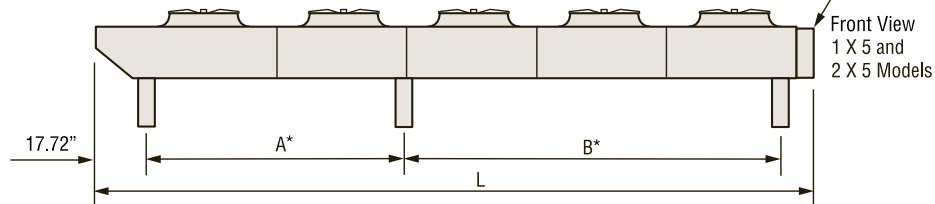
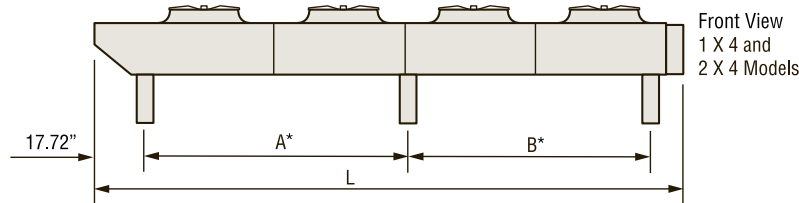
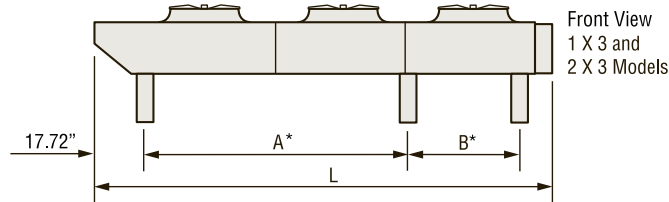
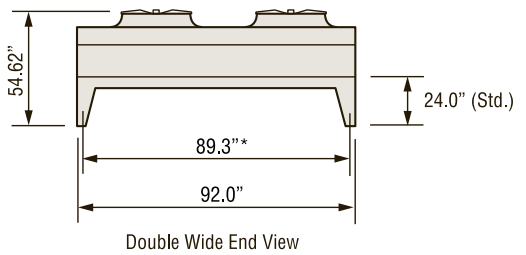
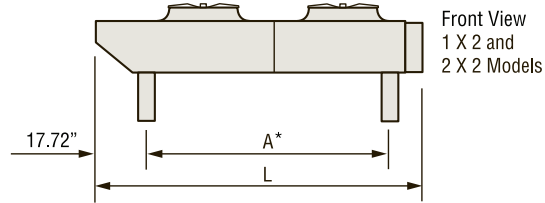
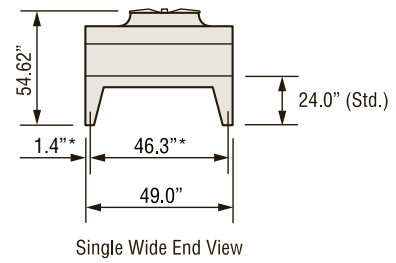
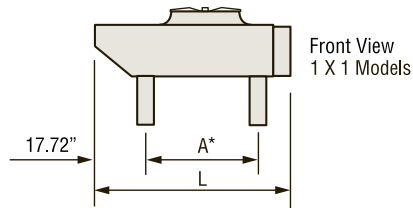
P PERFORMANCE, SPECIFICATIONS AND DIMENSIONS TABLE

	Model	Std. Capacity MBH/1F 1φ / 3φ	Single Circ. Conn (in)**		Dual Circ. Conn (in)**		Fan Layout	Overall Length (L) (inches)	Mounting Dimensions (in)			Approx. Net Wt. (lbs)	DBA*
			Disch. Line	Liq. Line	Disch. Line	Liq. Line			A	B	C		
STANDARD	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
	RC5S067C	6.7 / 7.3	1-1/8	7/8	1-1/8	1/2	1 x 2	90.4	71.8	-	-	369	63
	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
	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
	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
	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
	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	
DUAL	DUAL STANDARD												
	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
	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
	SINGLE QUIET												
	RCUS005C	n/a / 5.6	7/8	3/4	7/8	5/8	1 x 1	80.9	48.1	-	-	529	43.5
	RCUS006C	n/a / 6.1	7/8	3/4	1-1/8	5/8	1 x 1	80.9	48.1	-	-	551	43.5
	RCUS008C	n/a / 8.8	1-1/8	7/8	1-1/8	3/4	1 x 2	139.1	106.2	-	-	710	46.5
	RCUS010C	n/a / 10.7	1-1/8	7/8	1-1/8	3/4	1 x 2	139.1	106.2	-	-	829	46.5
	RCUS012C	n/a / 11.6	1-3/8	1-1/8	1-3/8	3/4	1 x 2	139.1	106.2	-	-	869	46.5
RCUS016C	n/a / 16.9	1-3/8	1-1/8	1-3/8	7/8	1 x 3	197.1	111.1	53.1	-	1186	48.3	
RCUS018C	n/a / 18	1-5/8	1-1/8	1-3/8	7/8	1 x 3	197.1	111.1	53.1	-	1246	48.3	
RCUS021C	n/a / 22.9	1-5/8	1-1/8	1-5/8	1-1/8	1 x 4	255.1	111.1	111.1	-	1497	49.5	
RCUS023C	n/a / 24.1	1-5/8	1-3/8	1-5/8	1-1/8	1 x 4	255.1	111.1	111.1	-	1574	49.5	
RCUS027C	n/a / 28.1	1-5/8	1-3/8	1-5/8	1-1/8	1 x 5	312.9	111.1	169.1	-	1658	50.5	
RCUS030C	n/a / 28.7	1-5/8	1-3/8	1-5/8	1-1/8	1 x 5	312.9	111.1	169.1	-	1746	50.5	
RCUS036C	n/a / 34.7	1-5/8	1-3/8	1-5/8	1-1/8	1 x 6	371.1	111.1	116.0	111.1	2068	51.3	
DUAL	DUAL QUIET												
	RCUD015C	n/a / 16.9	1-3/8	1-1/8	1-3/8	7/8	2 x 2	139.1	106.2	-	-	1301	49.5
	RCUD020C	n/a / 20.6	1-5/8	1-1/8	1-5/8	7/8	2 x 2	139.1	106.2	-	-	1537	49.5
	RCUD031C	n/a / 32.7	1-5/8	1-3/8	1-5/8	1-1/8	2 x 3	197.1	111.1	53.1	-	2086	51.3
RCUD036C	n/a / 34.7	1-5/8	1-3/8	1-5/8	1-1/8	2 x 3	197.1	111.1	53.1	-	2196	51.3	

* 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 ΔT. Line connections may vary with different application ratings so consult the I/O manual.

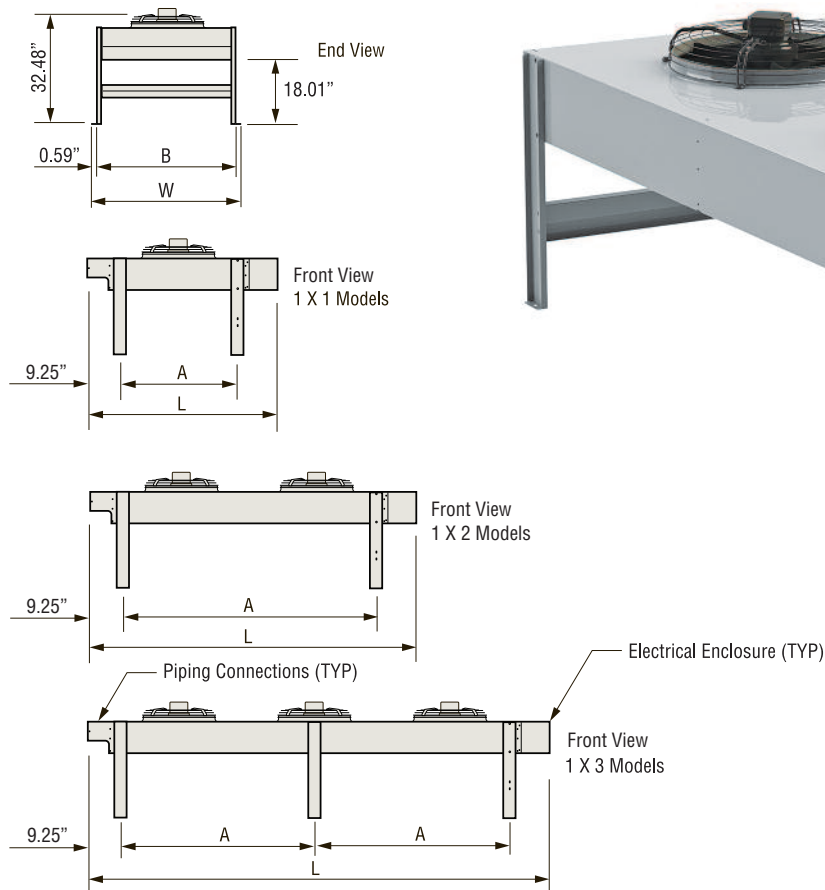
DIMENSIONAL DATA RC8 AND RCU SERIES



* Mounting fastener hole center

DIMENSIONAL DATA RC5 SERIES

Model	Fan Layout	Overall Length (L) (inches)	Overall Width (W) (inches)	Mounting Dimensions (in)	
				A	B
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 <td 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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