



## RCA SERIES AIR COOLED CONDENSING UNITS

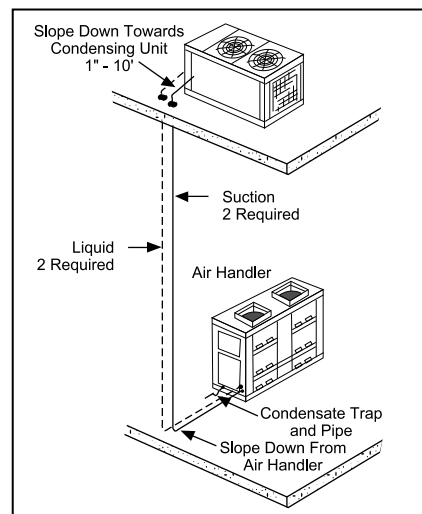
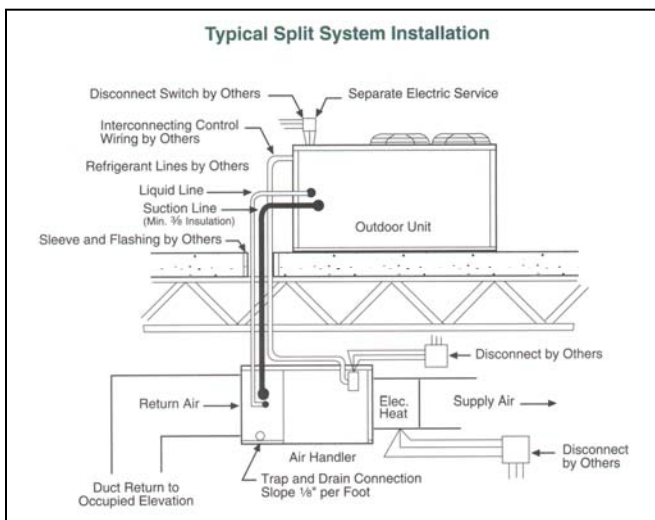
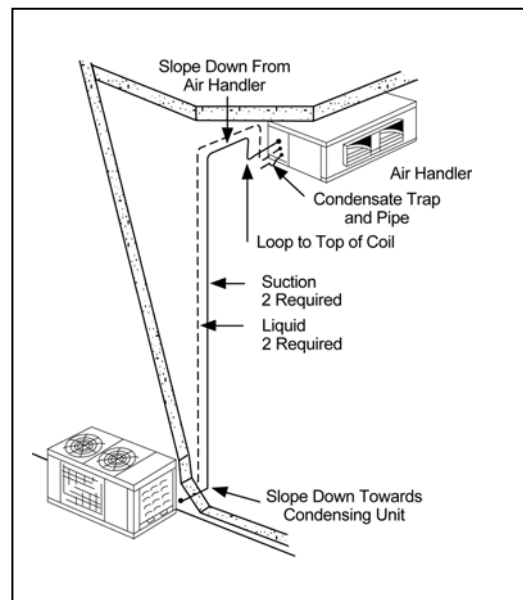
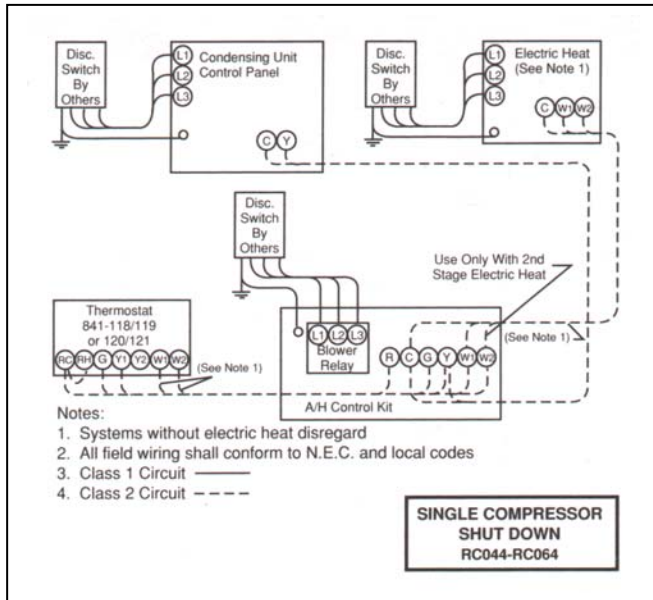
SPECIFICATIONS Rated in Accordance with ARI Standard 210/240		RCA271F						
<b>ELECTRICAL</b>	<b>COOLING</b>	Rated with Optional Air Handler Model		<b>VCA/HCA271 at 4,000 CFM</b>				
		Total BTUH		271,900				
		Sensible BTUH		140,800				
		EER		9.3				
	<b>COMPRESSOR</b>	<b>SERVICE</b>		Voltage-Phase-Hz		—	208/230-3-60	460-3-60
		<b>COMPRESSOR</b>		Type (Qty)		Scroll (1) Tandem configured		
				RLA(ea)		—	37.2	17.3
				LRA(ea)		—	239	125
				IPLV		—		
		Capacity Reduction (Standard)		100/50/25/0				
		<b>CONDENSER FAN MOTOR(S)</b>		Qty		2		
				FLA (ea)		—	6.2	3.1
	Total CFM			11,600				
	<b>UNIT</b>		RLA		—	86.8	40.8	
			Unit Minimum Circuit Ampacity		—	96.1	45.1	
Max. Time Delay Fuse or HACR Breaker			—	125	60			
<b>PHYSICAL DATA</b>	<b>CONDENSER COIL Alum. Fins on Copper Tubes</b>		Face Area (sq.ft.)		23.1			
			Rows Deep — Fins per Inch		4 — 12			
			Suction Line OD		1 5/8			
			Liquid Line OD		5/8			
			Hot Gas Bypass		7/8			
			Optional Hot Gas Reheat to air handler		7/8			
			Optional Hot Gas Return from air handler		5/8			
	<b>WEIGHTS</b>		Unit (lbs)		1,100			
			Shipping Weight (lbs)		1,200			

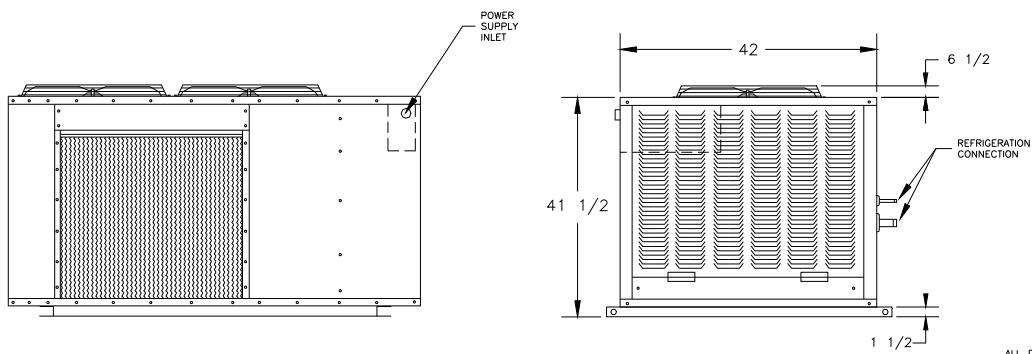
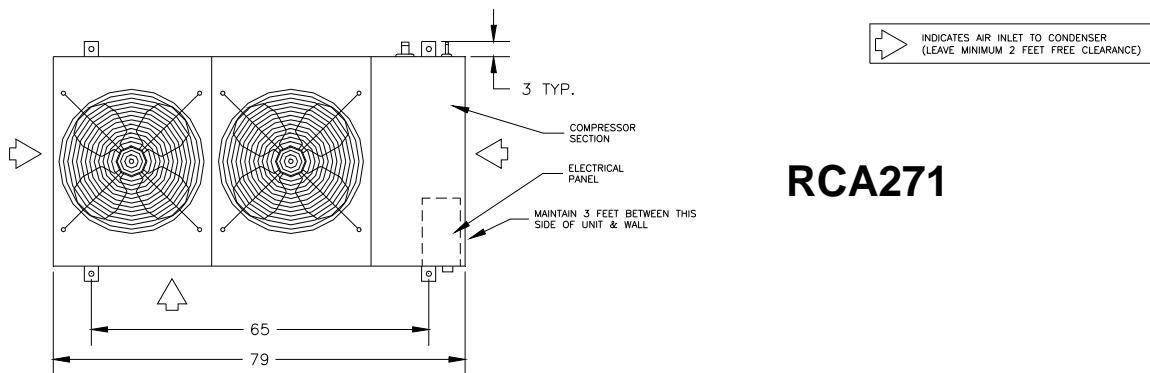
Rated With Air Handler Model	CFM	Capacity	ENTERING AIR DRY BULB TEMPERATURE								
			90° F DB			95° WDB			100° DB		
			76°F WB	78°F WB	80°F WB	76°F WB	78°F WB	80°F WB	76°F WB	78°F WB	80°F WB
<b>VCA/HCA 271</b>	<b>2,500</b>	Total	229,200	237,300	245,600	225,500	233,600	241,700	221,500	229,500	237,600
		Sensible	115,500	109,200	102,600	127,600	121,300	114,700	139,700	133,100	126,800
		Watts	25,100	25,500	26,000	26,000	26,400	26,900	26,900	27,400	27,900
		Lvg. Db/Wb	48.0/48.0	50.3/50.3	52.7/52.7	48.6/48.6	50.9/50.9	53.3/53.3	49.2/49.2	51.6/51.6	53.9/53.9
	<b>3,000</b>	Total	242,600	250,900	259,100	238,300	246,700	254,900	233,900	241,900	250,000
		Sensible	124,400	116,800	108,900	139,300	131,700	123,800	153,800	146,200	138,300
		Watts	26,000	26,400	26,800	26,900	27,300	27,800	27,900	28,400	28,800
		Lvg. Db/Wb	52.3/52.3	54.6/54.6	57.0/57.0	52.8/52.8	55.1/55.1	57.5/57.5	53.4/53.4	55.7/55.7	58.1/58.1
	<b>3,500</b>	Total	252,600	260,800	269,100	248,200	256,400	264,600	243,400	251,500	259,600
		Sensible	132,800	124,000	114,700	150,200	141,300	132,400	167,900	159,000	149,800
		Watts	26,700	27,100	27,500	27,600	28,100	28,500	28,600	29,100	29,500
		Lvg. Db/Wb	55.5/55.5	57.8/57.8	60.2/60.2	56.0/56.0	58.3/58.3	60.6/60.6	56.4/56.4	58.7/58.7	61.1/61.1
	<b>4,000</b>	Total	260,300	268,500	276,700	255,600	263,800	271,900	250,500	258,600	266,700
		Sensible	140,700	130,700	120,100	160,700	150,900	140,800	180,800	171,200	161,000
		Watts	27,300	27,700	28,100	28,200	28,700	29,100	29,200	29,700	30,200
		Lvg. Db/Wb	58.0/58.0	60.3/60.3	62.7/62.7	58.5/58.4	60.7/60.7	63.0/63.0	58.9/58.8	61.1/61.1	63.4/63.4

Note: Above performance data gives gross evaporator capacity with 25' refrigerant lines and full condenser operation at 60 HZ.

Recommended Refrigerant Line Sizes — O.D.														
Equivalent Line Length — Feet														
0 to 25					26 to 50					51 to 75				
					Hot Gas Reheat									
					Hot Gas Reheat									
Suction	Liquid	Hot Gas Bypass	S	R	Suction	Liquid	Hot Gas Bypass	S	R	Suction	Liquid	Hot Gas Bypass	S	R
1 5/8	5/8	3/4	3/4	1/2	1 5/8	3/4	3/4	7/8	1/2	2 1/8	3/4	3/4	7/8	1/2

- Notes:
1. Line lengths are equivalent, including all fittings. Use long radius ells only.
  2. Line sizes are for both vertical and horizontal runs.
  3. Over 75 equivalent feet, **consult factory** for sizing recommendations.
  4. Liquid line sizes and hot gas reheat return line sizes are designed to minimize system refrigerant charge.
  5. Over 75 total feet, a special hot gas bypass system must be installed in the condensing unit with an oil separator. Contact Factory.
  6. "S" = Hot gas supply line from RCA to VCA/HCA; "R" = Hot gas return line from VCA/HCA to RCA unit.
  7. When condensing unit is above air handler, trap suction line at base and every 20 feet of vertical rise. Consult ASHRAE Refrigeration Handbook.





ALL DIMENSIONS ARE IN INCHES

3 ft. clearance must be left for access to compressor and electrical panel

**Installation Code and Annual Inspections:**

All installations and service of ADDISON equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by Addison and conform to all requirements set forth in the ADDISON manuals and all applicable governmental authorities pertaining to the installation, service and operation of the equipment. To help facilitate optimum performance and safety, Addison recommends that a qualified contractor annually inspect your ADDISON equipment and perform service where necessary, using only replacement parts sold and supplied by ADDISON.

**Further Information:** Applications, engineering and detailed guidance on systems design, installation and equipment performance is available through ADDISON representatives. Please contact us for any further information you may require, including the Installation, Operation and Service Manual.

**These products are not for residential use.**

**This document is intended to assist licensed professionals in the exercise of their professional judgment.**



# ADDISON

7050 Overland Road  
Orlando, FL 32810 USA  
Telephone: 407.292.4400  
Fax: 407.290.1329  
[www.addison-hvac.com](http://www.addison-hvac.com)