ADDISON®

SPLIT SYSTEMS

(VC/HC-SERIES)
INDOOR AIR HANDLERS

(RC-SERIES)
OUTDOOR CONDENSING UNITS

- **Environmentally friendly -** Units use R410A refrigerant.
- **Source-side flexibility -** Condensing units available as air-cooled or air-source heat pumps.
- **Supply air configuration options -** Air handlers available in vertical or horizontal orientation to meet a wide range of applications.

www.addison-hvac.com **+1.407.292.4400**

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Intertek

VCC/HCC/RCC/VCH/HCH/RCH: RATED IN ACCORDANCE TO ANSI/AHRI STANDARDS 210/240-2008 OR 340/360-2007.

SPLIT SYSTEMS

ADDISON® split systems are typically installed in new or retrofit commercial and industrial applications, such as hotels, sports arenas, office buildings and manufacturing facilities.

Long-Lasting Construction Provided by:

- Heavy-duty cabinet constructed of galvanized steel panels 1" (25.4 mm) closed cell foam insulation and metal liner to help improve air handler's efficiency.
- Two-coat, primer-paint finish on both interior and exterior of cabinet panels that meets the 1,000 Hour Salt Spray Test as described in ASTM B117, "Standard Practice for Operating Salt Spray (Fog) Apparatus".
- Stainless steel and/or MAGNI 555®-coated hardware to help prevent fastener corrosion.
- Sloped, stainless steel drain pan equipped with drain fittings positioned on the exterior of the cabinet to help facilitate removal of condensate.
- Vinyl-coated condenser fan guards to help ensure long-term durability.
- Evaporator and condenser coils composed of aluminum fins and mechanically-expanded, seamless copper refrigeration tubing to help ensure long-term efficient heat transfer from tube to fin.
- Optional harsh environment protection coating on coils and cabinet that exceeds the 10,000 Hour Salt Spray Test as described in ASTM B117, "Standard Practice for Operating Salt Spray (Fog) Apparatus".

Ease of Maintenance Provided by:

- Direct-drive condenser fans with permanently-lubricated or sealed ball bearings that require little maintenance and no oiling.
- Liquid line shut-off valve to isolate liquid line for upkeep and/or repairs.
- Liquid and suction line service ports that provide hose connections when charging refrigerant into system.
- Suction line accumulators that help eliminate return of liquid refrigerant back to compressor.
- Optional 115V GFCI electric receptacle to provide easy-access power to service technician at unit.

Reliable, Efficient System Operation Provided by:

- High-efficiency scroll compressors with crankcase heaters to help prevent refrigerant migration.
- Supply and condenser fans that are both statically and dynamically balanced in order to provide smooth performance.
- High efficiency, ODP or TEFC supply fan motors to meet EISA2007 (Energy Independence and Security Act) requirements.
- Head pressure control to help ensure proper unit operation at low ambient temperatures.
- Assembly, testing and installation preparation by factory staff, including charging of compressors with oil and charging of circuits with nitrogen holding charge.
- Phase/voltage monitor to help detect abnormalities in electric supply.
- Optional digital scroll compressor assembly that provides continuous capacity modulation for part load conditions.
- Optional liquid line check and relief valves to reduce excessive pressure or reversed refrigerant flow.

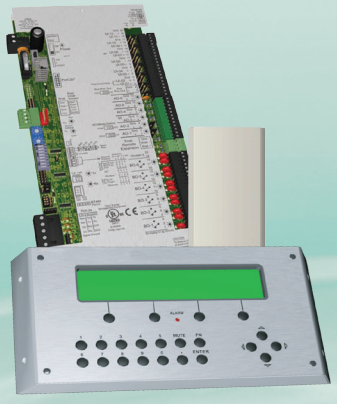
Suit Most Applications with Availability of:

- Optional standard or modulating hot gas reheat to re-warm dehumidified air to a neutral discharge temperature.
- Optional electric supplemental heating to help meet temperature setpoints during cold weather conditions.
- Optional switchable sub-cooling to help increase compressor full-load capacity with no increase in compressor power consumption.
- Optional direct digital or electromechanical controls to meet a wide range of operational needs.
- Optional receiver(s) for long line applications to help facitlitate pump-down during service.

DIRECT DIGITAL CONTROLLER

The ADDISON® ALC Control is a direct digital controller that can efficiently monitor and control ADDISON® equipment. Features and benefits of the ALC Control include:

- Greater control of equipment with ability to monitor room temperature and humidity, outside air temperature and humidity and leaving air temperature, as well as to change a number of setpoints (as applicable depending on equipment type and application).
- Detect problems earlier with ability to monitor status of compressor(s), supply fan and exhaust fan (as applicable depending on equipment type and application).
- Design flexibility as the controller can operate in a stand-alone capacity or in conjunction with a Building Management System (BMS) via the BACnet®, Modbus, Lonworks® and N2 protocols.
- Simple field set-up without the need for additional downloads or technical assistance as the protocol point mapping is pre-set in the factory.
- Customizable with digital outputs, analog outputs and universal inputs. Customized programming to meet a specific application's sequence of operation is also available.



CONFIGURATIONS & CAPACITIES

VCA/HCA/RCA Units (Air-Cooled for 100% Outside Air Cooling Applications)

Design: Heat is transferred from load-side supply air to source-side ambient air via refrigerant.

Function: Provides cooled and dehumidified 100% outside air to the conditioned space.

Application: Ideal for applications requiring cooled and dehumidified100% outdoor air for make-up air cooling.

VCA/HCA MODEL	RCA MODEL	AIRFLOW		COOLING CAPACITY		EER
		CFM	m³/h	Btu/h	kW	
051	051	500	850	45,500	13.3	12.2
071	061	700	1,200	58,100	17.0	12.7
081	071	900	1,500	74,500	21.8	11.2
101	101	1,400	2,400	113,700	33.3	11.3
081	141	1,600	2,700	123,100	36.1	9.8
141	141	1,700	2,900	140,400	41.1	10.7
141	171	2,000	3,400	164,300	48.2	11.6
201	171	2,200	3,700	176,800	51.8	12.2
201	201	2,500	4,200	202,400	59.3	11.8
271	271	3,000	5,100	245,000	71.8	10.7
361	361	3,800	6,500	305,800	89.6	11.7
421	421	5,000	8,500	395,500	115.9	11.1

VCC/HCC/RCC Units (Air-Cooled for Recirculating Air Cooling Applications)

Design: Heat is transferred from load-side supply air to source-side ambient air via refrigerant.

Function: Provides cooled recirculating air to the conditioned space.

Application: Ideal for applications requiring cooled recirculating air.

VCC/HCC MODEL	RCC MODEL	AIRFLOW		COOLING CAPACITY		EER
		CFM	m³/h	Btu/h	kW	
070	044	2,000	3,400	43,100	12.6	13.2
070	054	2,200	3,700	55,400	16.2	13.2
070	064	2,400	4,100	70,600	20.7	13.2
074	074	2,600	4,400	79,300	23.2	12.0
104	104	3,400	5,800	98,100	28.8	11.5
134	134	4,000	6,800	123,732	36.3	11.1
154	154	5,500	9,300	170,100	49.9	11.7
194	194	6,000	10,200	186,300	54.6	11.0
254	254	8,000	13,600	249,000	73.0	10.2
314	314	10,000	17,000	307,100	90.0	11.4
374	374	12,000	20,400	399,558	117.1	11.4
374	414	14,000	23,800	441,600	129.4	10.6

VCH/HCH/RCH Units (Air-Source Heat Pump for Recirculating Air Heating/ Cooling Applications)

Design: Depending on the operation, heat is transferred from load-side supply air to source-side ambient air or from source-side ambient air to load-side supply air via refrigerant.

Function: Provides cooled or heated recirculating air (depending on operation) to the conditioned space.

Application: Ideal for applications requiring cooled or heated recirculating air (depending on operation) for year-round heating and cooling.

VCH/HCH MODEL	RCH MODEL	AIRFLOW		COOLING CAPACITY		EER	HEATING CAPACITY		COP
		CFM	m³/h	Btu/h	kW		Btu/h	kW	
070	044	2,000	3,400	42,700	12.5	13.7	39,000	11.4	4.1
070	054	2,200	3,700	54,800	16.1	13.3	49,300	14.4	3.8
070	064	2,400	4,100	65,700	19.3	13.0	60,700	17.8	4.1
074	074	2,600	4,400	79,200	23.2	12.4	78,600	23.0	3.7
104	104	3,400	5,800	94,500	27.7	11.6	90,900	26.6	3.5
134	134	4,000	6,800	124,700	36.5	11.7	116,500	34.1	3.8
154	154	5,500	9,300	160,200	46.9	11.3	157,300	46.1	3.4
194	194	6,000	10,200	186,000	54.5	11.3	181,800	53.3	3.6
254	254	8,000	13,600	247,400	72.5	10.3	249,200	73.0	3.5
314	314	10,000	17,000	332,400	97.4	11.2	312,100	91.5	3.2
374	374	12,000	20,400	389,400	114.1	10.9	398,700	116.9	3.5
374	414	14,000	23,800	436,100	127.8	10.8	422,400	123.8	3.4

Notes:
1. EER= Energy Efficiency Ratio (SEER=Seasonal Energy Efficiency Ratio for units with cooling capacity below 65,000 Btu/h); COP=Coefficient of Performance.
2. VCA/HCA/RCA net cooling performance is based on 95.0 °F (35.0 °C) db / 78.0 °F (25.6 °C) wb entering air temperature and 95.0 °F (35.0 °C) db / 78.0 °F (25.6 °C) wb ambient temperature.
3. VCC/HCC/RCC net cooling performance is based 80.0 °F (26.7 °C) db / 67.0 °F (19.4 °C) wb entering air temperature and 95.0 °F (35.0 °C) db / 75.0 °F (23.9 °C) wb ambient temperature.
4. VCH/HCH/RCH net cooling performance is based 80.0 °F (26.7 °C) db / 67.0 °F (19.4 °C) wb entering air temperature and 95.0 °F (35.0 °C) db / 75.0 °F (23.9 °C) wb ambient temperature. Net heating performance is based 70.0 °F (21.1 °C) db / 60.0 °F (15.6 °C) wb entering air temperature and 47.0 °F (8.3 °C) db / 43.0 °F (6.1 °C) wb ambient temperature.

THANK YOU FOR YOUR BUSINESS

ADDISON®

7050 Overland Road
Orlando, FL 32810 U.S.A.
Telephone: +1.407.292.4400
Fax: +1.407.299.6178
www.addison-hvac.com

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