

Single, Dual,
and Triple
Zone Models

CENTRAL CHILLERS

APT-RC SERIES AIR-COOLED 5 - 180 TONS

The **ADVANTAGE APT-RC** central chilling module is designed to be used as part of a central chilled water system.

ADVANTAGE CPTS and **TTK** pump tank stations are used to distribute the chilled water to the process use-points.

Chilling modules are offered in single, dual and triple zone configurations.

PROCESS TEMPERATURES:
• 20°F to 65°F

AVAILABLE CAPACITIES:
• 5 to 180 tons

The **APT-RC**® refrigerant circuits include discus reciprocating, scroll, or rotary screw compressors, braze plate or tube and shell evaporators, capacity control system, and remote air-cooled condensers.

CUSTOM DESIGNS... if one of our standard models does not fit your application, then we can design a custom unit that will.



CC-40APT-RC



Remote Air-Cooled Condenser



APT Instrument

FEATURES - AT A GLANCE:

- Multizone controller
- Air-cooled outdoor condensers
- Refrigerant and coolant pressure gauges
- 1 years parts and labor warranty



SPECIFICATIONS

SPECIFICATIONS		C-5APTRC	C-7.5APTRC	C-10APTRC	C-15APTRC	C-20APTRC	C-25APTRC	C-30APTRC	C-35APTRC	C-40APTRC	C-50APTRC	C-60APTRC			
COMPRESSOR	Capacity ²	5	9.1	11.5	15	19	25	30	36	40	50	60			
	Number	1	1	1	1	2	2	2	1	1	1	1			
	HP each	5	7 1/2	10	15	10	13	15	35	40	50	60			
	Type ⁴	SC	SC	SC	SC	SC	SC	SC	D	D	S	S			
CONNECTION SIZES (inches)	Process (to/from)	1 1/4	1 1/4	1 1/4	2	2	2 1/2	2 1/2	2 1/2	2 1/2	3	3			
	Process (to/from)	1 1/4	1 1/4	1 1/4	2	2	2 1/2	2 1/2	2 1/2	2 1/2	3	3			
FLOW REQUIREMENTS (GPM)	Process	13	22	28	36	47	60	72	86	101	120	138			
	Process	13	22	28	36	47	60	72	86	101	120	138			
FULL LOAD¹ AMPERAGE @ 3ø/60hz²	230 volt	22	31	43	56	66	83	94	107	142	180	224			
	460 volt	10	16	22	28	33	42	47	54	71	90	112			
	575 volt	8	13	17	25	28	34	39	43	57	75	80			
REFRIGERANT DIMENSIONS (inches)	Type HCFC	22	22	22	22	22	22	22	22	22	22	22			
	Height	52	52	52	52	52	57	57	57	57	57	57			
	Width	24	24	24	24	24	29	29	29	36	36	36			
	Depth	62	62	62	70	70	70	70	70	84	84	84			
WEIGHTS (pounds)	Shipping ⁵	450	525	545	845	885	1,040	1,100	1,150	1,200	1,300	1,400			
	Shipping ⁵	450	525	545	845	885	1,040	1,100	1,150	1,200	1,300	1,400			
REMOTE AIR-COOLED CONDENSER															
CONNECTIONS⁶	Liquid	1-1/8"	1-1/8"	1-1/8"	1-3/8	1-3/8	1-5/8	1-5/8	1-5/8	2-1/8	2-1/8	2-1/8			
	Hot Gas	1-3/8"	1-3/8"	1-3/8"	2-1/8	2-1/8	2-1/8	2-5/8	2-5/8	2-5/8	3-1/8	3-1/8			
AIR FLOW⁷	Fan Quantity	1	1	1	2	2	2	3	3	3	4	4			
	Fan Quantity	1	1	1	2	2	2	3	3	3	4	4			
FULL LOAD AMPERAGE¹ @ 3ø/60hz²	230 volt	6.2	6.2	6.2	12.4	12.4	12.4	18.6	18.6	18.6	24.8	24.8			
	460 volt	3.1	3.1	3.1	6.2	6.2	6.2	9.3	9.3	9.3	12.4	12.4			
	575 volt	2.48	2.48	2.48	4.96	4.96	4.96	7.44	7.44	7.44	9.92	9.92			
DIMENSIONS (inches)	Height	49	49	49	49	49	49	49	49	49	49	49			
	Width	46	46	46	46	46	46	46	46	46	46	46			
	Depth	50	50	50	97	97	97	144	144	144	243	243			
	Shipping ⁵	380	380	440	620	690	890	970	1,170	1,310	1,810	1,990			
REMOTE AIR-COOLED CONDENSER															
CONNECTIONS⁶	Liquid	1-1/8"	1-3/8	2-1/8	2-1/8	2-5/8	2-5/8	2-5/8	2-5/8	2-5/8	1-5/8"	1-5/8"	2-1/8"	2-1/8"	2-1/8"
	Hot Gas	1-3/8"	2-1/8	1-3/8	1-5/8	1-5/8	1-5/8	1-5/8	2-1/8	2-1/8	2-5/8	2-5/8	3-1/8	3-1/8	3-1/8
AIR FLOW⁷	Fan Quantity	1	4	4	4	6	6	6	8	10	3	3	3	4	4
	Fan Quantity	1	4	4	4	6	6	6	8	10	3	3	3	4	4
FULL LOAD AMPERAGE¹ @ 3ø/60hz²	230 volt	6.2	24.8	24.8	24.8	37.2	37.2	37.2	49.6	62	18.6	18.6	18.6	24.8	24.8
	460 volt	3.1	12.4	12.4	12.4	18.6	18.6	18.6	24.8	31	9.3	9.3	9.3	12.4	12.4
	575 volt	2.48	9.92	9.92	9.92	14.88	14.88	14.88	19.84	24.8	7.44	7.44	7.44	9.92	9.92
DIMENSIONS (inches)	Height	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	Width	46	88	88	88	88	88	88	88	88	46	46	46	46	46
	Depth	50	97	97	123	144	187	187	243	243	144	144	144	243	243
	Shipping ⁵	440	1,070	1,200	1,590	1,720	2,060	2,340	3,100	4,000	970	1,170	1,310	1,810	1,990

Notes: 1. Full load amps shown. No allowance for inrush. Service disconnect by owner. Full Load amps are higher than run load amps and must be used for sizing disconnects and supply wiring. 2. Consult factory for 50hz operation. 3. Tons capacity at 12,000 BTU/ton @ 50 F LWT @ 115 F condensing temperature. Capacities may be +/- 5% as reserved by the compressor manufacturer. Capacity multipliers are 50 F - 1.00; 40 F - .80; 30 F - .60; 20 F - .40. The minimum recommended operating temperature when no glycol is used is 48 F. 4. D = discus, S = screw, SC = scroll. 5. Unit weight crated for shipment. 6. Field installation and piping connection of condenser by owner. 7. Vertical discharge from condenser. 8. Requires three condensers. Specifications shown for single unit. 9. Requires two condensing units. Specifications shown for single unit.

STANDARD FEATURES

REFRIGERANT CIRCUITS (per zone):

- Discus reciprocal, Scroll or Screw compressors
- Compressor suction service valve
- Compressor discharge service valve
- Brazed plate evaporator or shell and tube evaporator
- Remote air-cooled condenser
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Hot gas by-pass capacity control or compressor unloading
- Liquid receiver
- HCFC - 22 refrigerant

- Oil separator (units with scroll and reciprocating compressors)

LIMIT DEVICES (per zone):

- High refrigerant pressure
- Low refrigerant pressure
- Evaporator flow

PRESSURE GAUGES (per zone):

- Refrigerant high pressure gauge
- Refrigerant low pressure gauge
- Coolant pressure gauge

ELECTRICAL:

- Fused transformer
- Nema rated electrical cabinet

- Power entry terminal block
- Fused compressor motor starter (dual and triple zone models)

CHILLER CONTROL INSTRUMENT:

- Microprocessor, multizone controller
- Intelligent zone boards
- Large temperature display
- °F or °C display
- Large setup display
- Refrigerant circuit indicators
- Water circuit indicators
- SPI communications interface
- Selectable lead/lag mode
- Audible and visual alarm

OPTIONS

REFRIGERANT CIRCUIT:

- Compressor CCPR valve
- Compressor hour meter

INSTRUMENTATION:

- Remote display kit
- Color touch screen PLC

WARRANTIES:

- Extended compressor warranty

ELECTRICAL:

- UL listed electrical panel

WARRANTY... one year parts and labor warranty with a second year free service 'check-up'. Backed by the **ADVANTAGE** nationwide service network, service is only a phone call away. Refer to bulletin ADV-205 for complete warranty details.



ADVANTAGE PRODUCTS: TEMPERATURE CONTROLLERS • PORTABLE CHILLERS • CENTRAL CHILLERS • PUMP TANK STATIONS • TOWER SYSTEMS • FILTERS

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