

Single, Dual,
and Triple
Zone Models

CENTRAL CHILLERS

APT-RC SERIES AIR-COOLED 5 - 180 TONS



CC-40APT-RC

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

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



APT Instrument

FEATURES - AT A GLANCE:

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



DELIVERED
READY TO
RUN

CENTRAL CHILLERS

WPT SERIES WATER-COOLED 5 - 180 TONS



CC-40WPT



WPT Instrument

FEATURES - AT A GLANCE:

- Microprocessor control instrument
- Delivered ready to run - not a kit
- Water-cooled condensers
- Condenser water regulator valves
- Refrigerant and coolant pressure gauges
- 1 years parts and labor warranty

The **ADVANTAGE WPT** central chilling module is designed to be used as part of a central chilled water system. **ADVANTAGE CPTS** 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

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



SPECIFICATIONS

WPT WATER-COOLED SPECIFICATIONS		C-5	C-7.5	C-10	C-15	C-20	C-25	C-30	C-35	C-40	C-50	C-60
COMPRESSOR	Capacity ³	5.5	9.1	11.5	15	19	25	30	36	40	49.8	57.6
	Number	1	1	1	1	1	1	1	1	1	1	1
	HP each	5	7½	10	15	(2)10	(2)13	(2)15	35	40	50	60
	Style ⁴	H	H	H	H	H	H	H	S	S	S	S
	EER Rating ⁵	c/f	c/f	13.1	15.4	16.4	15.6	14.8	14.5	14.1	14.2	13
CONNECTION SIZES (inches)	Process	1¼	1¼	1¼	2	2	2½	2½	2½	3	3	3
	Condensing	¾	1	1	1¼	1¼	1½	2	2	3	3	3
WATER FLOW (GPM) REQUIREMENTS	Process	13	22	28	36	47	60	72	86	101	120	138
	City ⁴ condensing	9	15	18	23	29	38	45	54	63	75	87
	Tower ⁵ condensing	18	30	36	45	58	75	90	108	126	149	173
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	Type HCFC	22	22	22	22	22	22	22	22	22	22	22
DIMENSIONS (inches)	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 ⁸	450	525	545	845	885	1,040	1,100	1,150	1,200	1,300	1,400

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 @ 105°F condensing temperature. Capacities may be +/- 5% as reserved by the compressor manufacturer. Capacities 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. Flow rate based on 60°F city water source at 20 PSI with a clean condenser. 5. Flow rate based on 85°F tower water source at 20 PSI with a clean condenser. 6. Unit weight crated for shipment.

WPT WATER-COOLED SPECIFICATIONS		CC-20	CC-30	CC-40	CC-50	CC-60	CC-70	CC-80	CC-100	CC-120	CCC-90	CCC-105	CCC-120	CCC-150	CCC-180
COMPRESSOR	Capacity ³	23	30	38	50	60	70	80	100	115.2	90	103	120	149.5	172.8
	Number	2	2	4	4	4	2	2	2	2	6	3	3	3	3
	HP each	10	15	10	13	15	35	40	50	60	15	35	40	50	60
	Process	2	2½	2½	3	3	4	4	4	4	4	4	4	6	6
CONNECTION SIZES (inches)	Condenser	1½	3	3	3	3	3	4	4	4	4	4	6	6	6
	Process	55	72	96	120	144	168	192	240	277	216	260	288	359	415
WATER FLOW (GPM) REQUIREMENTS	City ⁴ condensing	36	45	57	75	90	105	120	150	173	135	162	180	224	259
	Tower ⁵ condensing	72	90	115	150	180	210	240	300	346	270	324	360	443	518
	Process	85	113	152	196	232	214	284	360	448	347	321	426	540	672
FULL LOAD¹ AMPERAGE @ 3ø/60hz²	230 Volt	43	56	76	98	117	107	142	180	224	174	161	213	270	336
	460 Volt	34	46	53	68	75	86	113.8	144	180	115	130	170	216	269
	575 volt	22	22	22	22	22	22	22	22	22	22	22	22	22	22
REFRIGERANT	Type HCFC	22	22	22	22	22	22	22	22	22	22	22	22	22	22
DIMENSIONS (inches)	Height	57	57	57	57	57	57	57	70	70	85	85	85	85	85
	Width	48	48	48	52	52	72	72	90	90	73	73	73	73	73
	Depth	76	76	76	79	79	84	84	115	115	130	130	130	130	130
WEIGHT (pounds)	Shipping ⁶	1,200	1,800	1,900	2,200	2,350	2,500	2,600	3,450	3,700	3,300	3,450	3,600	3,900	4,200

STANDARD FEATURES

REFRIGERANT CIRCUITS (per zone):

- Hermetic scroll compressors on:
 - 5-30 ton single zone models
 - 20-60 ton dual zone models
 - 90-105 ton triple zone models
- Semi-hermetic discus compressors on:
 - 35-60 ton single zone models
 - 70-120 ton dual zone models
 - 120-180 ton triple zone models
- Compressor suction service valve
- Compressor discharge service valve
- Brazed plate evaporator on:
 - 5-40 ton single zone models
 - 20-80 ton dual zone models
 - 90-120 ton triple zone models
- Shell and tube evaporator on:
 - 50-60 ton single zone models
 - 100-120 ton dual zone models
 - 150-180 ton triple zone models
- Water-cooled condenser:
 - regulator valve
 - manifolded (dual and triple zone models)
 - removable heads
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator

- Thermostatic expansion valve
- Hot gas by-pass capacity control system (all models expect 50 & 60 ton single, 100-120 ton dual, and 150-180 ton triple zone models)
- Cylinder Unloading on 50-60 ton single, 100-120 ton dual and 150-180 ton triple zone models

SAFETY DEVICES (per zone):

- Refrigerant circuit:
 - high pressure safety
 - low pressure safety
 - evaporator flow safety
- Instrument control circuit fuse

PRESSURE GAUGES (per zone):

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

WARRANTY:

- 1 year on parts and labor
- 2nd year complementary preventative maintenance visit

ELECTRICAL:

- Fused transformer
- Nema rated electrical cabinet
- Power entry terminal block
- Fused compressor motor starter (dual and triple zone models)

CHILLER CONTROL INSTRUMENT:

- Microprocessor based multizone controller
- Intelligent zone boards
- Compressors are staged individually (dual & triple zone models)
- Large temperature display in °F or °C for *to process* and *from process*
- Large setup display
- Refrigerant circuit indicators per zone: *probe, low flow, high pressure, low pressure, compressor, freezestat, capacity*
- Water circuit indicators: *temperature deviation, low pressure, flow, probe,*
- SPI communications interface
- Selectable lead/lag mode
- Audible and visual alarm

OPTIONS

FRAME CONSTRUCTION:

- Special paint

REFRIGERANT CIRCUIT:

- Compressor CCPR valve
- Compressor hour meter
- Screw compressors

CHILLER CONTROL INSTRUMENT:

- Remote display kit

WARRANTIES:

- Extended compressor warranty

ELECTRICAL:

- UL listed electrical panel

WARRANTY and SERVICE... a comprehensive one year factory warranty. Refer to bulletin ADV-205 for complete details. The **ADVANTAGE** service department is staffed with experience technicians, and supported by a nation wide network of independent service contractors. With **ADVANTAGE**, service is only a phone call away.



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

ADVANTAGE ENGINEERING, INC. 525 East Stop 18 Road Greenwood, IN 46142 phone: 317-887-0729 fax: 317-881-1277

web site: <http://www.advantageengineering.com> email: sales@advantageengineering.com ©2003 ADVANTAGE ENGINEERING, INC. Form #ADV-377 8/00 updated 9/03

SINCE PRODUCT INNOVATION AND IMPROVEMENT IS OUR CONSTANT GOAL, ALL FEATURES AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY.

SPECIFICATIONS

APT AIR-COOLED SPECIFICATIONS		C-5APT-RC	C-7.5APT-RC	C-10APT-RC	C-15APT-RC	C-20APT-RC	C-25APT-RC	C-30APT-RC	C-35APT-RC	C-40APT-RC	C-50APT-RC	C-60APT-RC			
COMPRESSOR	Capacity ³	5	8	10	15	21	26	30	35	40	49.8	57.6			
	Number	1	1	1	1	2	2	2	1	1	1	1			
	HP each	5	7½	10	15	2(10)	2(13)	2(15)	35	40	50	60			
	Type ⁴	SC	SC	SC	SC	SC	SC	SC	D	D	S	S			
CONNECTION SIZES (inches)	Process (to/from)	1¼	1¼	1¼	2	2	2½	2½	2½	2½	3	3			
	Flow Requirements (GPM)	13	22	28	42	54	63	81	86	101	120	138			
FULL LOAD¹	230 Volt	22	33	39	56	76	100	109	107	142	140	216			
	460 Volt	10	17	20	28	38	50	55	54	71	70	108			
DIMENSIONS (inches)	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			
	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 / Hot Gas	7/8 / 1½	7/8 / 1½ ¹⁰	7/8 / 1½ ¹⁰	1¾	1½	1½	2½	2½	2½	2½	2½			
	Fan Quantity	1	2	2	2	2	2	3	3	4	4	5			
AIR FLOW⁷	230 volt	2.6	5.2	5.2	14	14	14	21	21	28	28	35			
	460 Volt	1.3	2.6	2.6	7	7	7	11	11	14	14	17			
DIMENSIONS (inches)	Height	40	40	40	50	50	50	50	50	50	50	50			
	Width	43	43	43	46	46	46	46	46	46	46	46			
	Depth	50	70	70	125	125	125	180	125	235	235	290			
	Shipping	260	450	470	770	770	790	1,190	1,210	1,690	1,760	2,225			
APT AIR-COOLED SPECIFICATIONS															
COMPRESSOR	Capacity ³	23	30	38	48	56	70	80	100	115.2	90	103	120	149.5	172.8
	Number	2	2	4	4	4	2	2	2	2	6	3	3	3	3
	HP each	10	15	10	13	15	35	40	50	60	15	35	40	50	60
	Type ⁴	SC	SC	SC	SC	SC	D	D	S	S	SC	D	S	S	S
CONNECTION SIZES (inches)	Process (to/from)	2	2½	2½	3	3	4	4	4	4	4	4	4	6	6
	Flow Requirements (GPM)	72	85	109	126	134	168	192	240	277	195	260	288	359	415
FULL LOAD¹	230 Volt	77	109	152	200	218	218	284	276	432	327	321	426	414	648
	460 Volt	39	55	76	100	109	109	142	138	216	164	161	213	207	324
DIMENSIONS (inches)	Height	57	57	57	57	57	57	70	70	85	85	85	85	85	
	Width	48	48	48	52	52	72	72	90	90	73	73	73	73	
	Depth	76	76	76	79	79	84	84	115	115	130	130	130	130	
	Shipping ⁵	1,200	1,800	1,900	2,200	2,350	2,500	2,600	3,450	3,700	3,300	3,450	3,600	3,900	4,200
REMOTE AIR-COOLED CONDENSER															
CONNECTIONS⁶	Liquid / Hot Gas	7/8 / 1½ ^{9,10}	2@1¾	2@1½	2@1½	2@2½	2@2½	2@2½	2½ ⁹	2½ ⁹	2½ ⁸	2½ ⁸	2½ ⁸	2½ ⁸	2½ ⁸
	Fan Quantity	2	4	4	4	6	6	6	4	5	3	3	4	4	5
AIR FLOW⁷	230 volt	10.4	28.0	28.0	28.0	42.0	42.0	42.0	28	35	21	21	28	28	35
	460 Volt	5.2	14.0	14.0	14.0	21.0	21.0	21.0	14	17	11	11	14	14	17
DIMENSIONS (inches)	Height	40	50	50	50	50	50	50	50	50	50	50	50	50	
	Width	43.0	88	88	88	88	88	88	46	46	46	46	46	46	
	Depth	70	125	125	125	180	180	180	235	290	180	125	235	235	
	Shipping	470	1,495	1,495	1,695	1,845	2,420	2,690	1,760	2,225	1,190	1,210	1,690	1,760	2,225

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 condensing units. Specifications shown for single unit. 9. Requires two condensing units. Specifications shown for single unit. 10. Two each of liquid and hot gas connections included on this condenser. Field manifolding required.

STANDARD FEATURES

REFRIGERANT CIRCUITS (per zone):

- Discus reciprocation, Scroll or Screw compressors
- Compressor suction service valve
- Compressor discharge service valve
- Brazed plate evaporator or shell and tube evaporator
- Outdoor 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
- Oil separator
- HCFC - 22

SAFETY DEVICES (per zone):

- high pressure safety
- low pressure safety
- evaporator flow safety

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 in °F or °C
- 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.



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ADVANTAGE ENGINEERING, INC. 525 East Stop 18 Road Greenwood, IN 46142 phone: 317-887-0729 fax: 317-881-1277
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