CENTRAL CHILLER

TTI-AC SERIES

with Remote Air-Cooled Condenser

- ***20°F - 65°F Process Fluid***
- ***20 - 180 Tons Capacity***
- ***Multiple Refrigerant Zones***
- ***Integral Pump Distribution System***
- ***Remote Air-Cooled Condenser***
- ***Microprocessor Control***

Central Chiller and Pump Station Package

Typical Remote Air-Cooled Condenser

The **CM-TI Series** central chiller is a multiple zone chiller and pump tank station on a single platform. This allows the greatest flexibility in installation and operation. The refrigerant zones can precisely match the process load without over extending compressor life, and the dual pump distribution system provides full flow to the plant, while maintain 100% evaporator flow at all time. Product features include:

RESERVOIR CONSTRUCTION:
- Seamless, rotationally molded, non-rusting polyethylene
- Tank insulation
- Drain valve
- Overflow port
- Hot/cold section partition (baffle)
- Structural base
- Automatic water-level control
- Pump decking
- Spare pump ports
- Hinged tank lid

REFRIGERANT CIRCUITS:
- Hermetic scroll or rotary screw compressors
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Brazed plate or shell & tube evaporator
- Hot gas by-pass or unloading capacity control systems
- Removable heads
- HFC-407C & HFC-410A refrigerant
- Air-cooled Condenser
  - Remote, outdoor condenser
  - Variable speed fan
  - Pressure staging

COOLANT CIRCUIT:
- Large capacity process pump:
  - Suction service valve
  - Discharge service valve
- Evaporator pump:
  - Suction service valve
  - Discharge service valve
  - Discharge basket strainers (models with brazed plate evaporators)

LIMIT DEVICES: (per zone)
- Refrigerant circuit:
  - High pressure limit
  - Low pressure limit
  - Evaporator flow limit
- Coolant circuit:
  - Pump motor overload relay
  - Coolant freezestat
- Instrument control circuit fuse

ELECTRICAL:
- Nema rated electrical cabinet
- Fused pump motor starters
- Fused compressor motor starters
- Fused transformer
- Power entry terminal block

WARRANTY:
- 1 year on parts and labor

PRESSURE GAUGES (per zone):
- Refrigerant high pressure
- Refrigerant low pressure
- Coolant pressure

OPTIONS

TANK CONSTRUCTION:
- Epoxy coated mild steel
- Stainless steel wetted surfaces

REFRIGERANT CIRCUIT:
- Compressor hour meter
- Oversized condensers

COOLANT CIRCUIT:
- Larger process pumps
- Standby pumps and manifolding

ELECTRICAL:
- UL listed electrical panel
- Disconnects

INSTRUMENTATION:
- Remote display kit
- PLC instrument with color touch screen
- Modbus RTU or TCP interface

WARRANTIES:
- Extended compressor warranty

TEMPTEK®

Specifications

ODEL [1]		TTI-20A	TTI-30A	TTI-40A	TTI-50A	TTI-60A	TTI-80A	TTI-100A	TI-120AD	TTI-90A	TTI-120A	TTI-150A	TTI-180A
EFRIGERANT CIRCUITS	Quantity	2	2	2	2	2	2	2	2	3	3	3	3
APACITY [2] @ 50°F LWT	Tons	19.6	29.0	37.0	46.2	60	80	90.0	119.5	85.5	119.5	146.0	180.0
	kW	68.8	101.8	129.8	162.1	210.5			419.3		419.3	513.4	
OMPRESSOR	Quantity	2	2	2	2	2	4	4	4	3	3	6	6
	HP	10	15	20	25	30	20	25	30	30	40	25	30
	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
VAPORATOR	Type	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Shell & Tube	Shell & Tube	Shell & Tube	Shell & Tube
EFRIGERANT [3]	Type	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
ROCESS PUMP [4 5]	HP	5	5	7.5	7.5	10	15	15	20	15	20	20	25
	GPM	48	72	96	120	144	240	300	360	270	360	450	540
	PSI	60	60	60	63	60	70	60	70	65	65	55	55
VAPORATOR PUMP	HP	1.5	3	3	3	3	5	5	5	5	5	10	15
	GPM	50	70	96	120	144	192	225	260	192	288	338	390
ESERVOIR	Operating (gallons)	340	340	340	340	340	1,200	1,200	1,200	1,200	1,200	1,200	1,200
	Holding (gallons)	400	400	400	400	400	1,475	1,475	1,475	1,475	1,475	1,475	1,475
	Construction [6]	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE
ONTROL	Standard	MZC	MZC	MZC	MZC	MZC	MZC	MZC	MZC	MZC	MZC	MZC	MZC
ULL LOAD AMPERAGE [7]	230 volt	110	160	190	230	300	390	470	590	450	560	690	880
) 3ø / 60 Hz [8]	460 volt	55	80	95	115	150	195	235	295	225	280	345	440
	575 volt	44	64	76	92	120	156	188	236	180	147	276	352
ONNECTION	Process [9]	2	3	3	4	4	4	4	6	4	4	6	6
IZES (inches)	Make-Up	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½
	Overflow	4	4	4	4	4	4	4	4	4	4	4	4
IMENSIONS (inches)	Height	82	82	82	82	82	112	112	114	114	114	114	114
	Width	87	87	92	92	92	136	136	147	147	147	147	147
	Depth	96	96	96	96	96	128	128	147	147	147	147	147
EIGHTS (pounds)	Shipping [10]	3,550	4,170	4,350	4,990	5,155	6,300	6,505	6,705	6,505	8,600	9,600	10,500
	Operating	7,925	8,530	8,710	9,650	9,515	17,300	17,705	17,905	20,705	22,820	23,820	23,700

EMOTE AIR-COOLED CONDENSER [11]													
dvantage Model		RCSZ-10LK	RCSZ-30LK	RCDZ-40LK	RCDZ-50LK	RCDZ-60LK	RCDZ-80LK	RCDZ-100LK	RCDZ-120LK	RCSZ-30LK	RCDZ-40LK	RCSZ-50LK	RCSZ-60LK
UANTITY		1	1	1	1	1	1	1	1	3	3	3	3
APACITY R410A @ 1° TD	MBT/hr	8.0	23.4	30.2	38.3	46.1	58.9	76.7	92.1	23.4	30.2	38.3	41.3
R410A @ 20° TD	Tons	10.6	31.2	41.6	51.0	62.4	79.8	102.2	122.8	31.2	41.6	51	55
ANS [12]	Quantity	1	3	4	4	6	6	8	10	3	4	4	5
	RPM	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140
ONNECTIONS [11]	Hot Gas	1 3/8	2 1/8	2@1 5/8	2@2 1/8	2@2 1/8	2@2 1/8	2@2 5/8	2@2 5/8	2 1/8	2@1 5/8	2 5/8	2 5/8
	Liquid	1 3/8	2 1/8	2@1 5/8	2@2 1/8	2@2 1/8	2@2 1/8	2@2 5/8	2@2 5/8	2 1/8	2@1 5/8	2 5/8	2 5/8
ULL LOAD AMPERAGE [13]	4603/60	3.5	12.0	14.0	14.0	21.0	21.0	28.0	35.0	12.0	14.0	14.0	17.5
ONSTRUCTION	Tube Material	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper
	Fin Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
	Fins Per Inch	14	14	14	14	14	14	14	14	14	14	14	14
	Coating	None	None	None	None	None	None	None	None	None	None	None	None
IMENSIONS (inches)	Height	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1
	Width	45.4	45.4	88.0	88.0	88.0	88.0	88.0	88.0	45.4	88.0	45.4	45.4
	Depth	73.0	180.0	127.0	127.0	180.0	180.0	233.0	286.0	180.0	127.0	233.0	286.0
EIGHT (pounds)	Shipping [10]	330	930	1,340	1,440	1,990	2,140	2,830	3,540	930	1,340	1,310	1,510

Notes

1. Since product innovation and improvement is our constant goal, all features and specifications are subject to change without notice or liability. Selection of certain optional features may change listed specifications.
2. Tons or Kilowatts capacity at 12,000 Btu/hr/ton @ 50°F LWT, 95°F ambient and 115°F condensing. 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.
3. This is a non ozone depleting refrigerant.
4. Consult FYI #4-C-38 and 5-A-261 for characteristics relating to pump curves.
5. Selection of optional pumps for higher flow rates will raise the minimum recommended operating temperature when no glycol is used.
6. P = polyethylene reservoir. Mild steel and stainless steel are optional.
7. Full Load amps are higher than run load amps and must be used for sizing disconnects and supply wiring.
8. Consult factory for 50hz operation.
9. Process connections may vary based on unique pump flow requirements of your process. Confirm you connection size requirement with your Advantage sales representative.
10. Approximate unit weight crated for shipment.
11. Connection sizes shown per refrigerent zone. Connection size does not indicate proper line size between indoor and outdoor units. Consult factory for proper line size.
12. Vertical air discharge from condenser.
13. Full load amperage shown for single condenser. Some models use multiple condensers.

For More Information ... call 317-887-6352

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525 East Stop 18 Road Greenwood, IN 46142 317-887-6352 fax: 317-881-1277 Web site: www.Temptek.com Email: sales@Temptek.com