

# PORTABLE CHILLERS

- 5 to 40 Tons Capacity
- Microprocessor Based Chiller Control
- Remote Air-Cooled Condenser
- Steel Frame & Lift-Off Cabinetry
- Scroll Compressor
- Brazed Plate Evaporator
- Non Ozone Depleting Refrigerants

The **CF-ARC Series** water chiller provides precision temperature control from an economically affordable and reliable unit. Perfect for applications such as plastic injection molding, blow molding, extrusion and other industrial applications.

The CR-ARC has two components. The Indoor unit sits inside the production facility. The microprocessor controller regulates temperature and all machine functions. The remote air-cooled condenser provides process cooling while rejecting the absorbed heat outside, eliminating heat gain to your building.

## TEMPERATURE RANGE

- 20° - 65°F

## CONSTRUCTION (Interior Unit):

- Powder coated steel upright frame members
- Galvanized steel cross frame members
- Powder coated lift-off enclosure panels
- Lift-off molded front panel

## REFRIGERANT CIRCUIT:

- Hermetic Scroll Compressors
- Remote Air-Cooled Condenser
  - Located outdoors
  - Finned tube
  - Fan generated air flow
  - Ambient control to -20°F
- Filter-drier
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Microprocessor controlled hot gas by-pass capacity control system
- Stainless Steel Brazed Plate evaporator
- Liquid receiver
- Oil separator

## PRESSURE GAUGES:

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

## COOLANT CIRCUIT:

- Coolant pump
  - High flow stainless steel centrifugal pump in 5 to 30 tons models (up to 5 HP)
  - High flow cast iron centrifugal pump on the 40 ton model (above 5 HP)
- Large capacity insulated non-ferrous reservoir

# CF-ARC SERIES

AIR-COOLED UNIT WITH  
REMOTE CONDENSER



CF-10A-RC  
indoor unit



**THERMAL  
PRODUCTS** INC.  
Engineered Solutions To  
Industrial Applications

- Reservoir level sight tube
- Automatic water make-up system
- Standard NPT process fittings

## ELECTRICAL:

- Process pump motor starter
- Compressor motor
- Fused transformer
- Power entry terminal block

## LIMIT DEVICES:

- High refrigerant pressure
- Low refrigerant pressure
- Refrigerant pressure relief valve
- Process pump motor overload
- Instrument control circuit fuse

## WARRANTY:

- 1 Year covering parts and labor

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# TEMPEK

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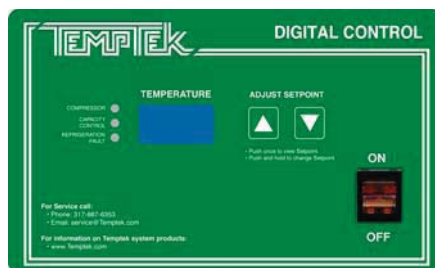
# SPECIFICATIONS

MODEL <sup>1</sup> CF-		5A-RC	7.5A-RC	10A-RC	15A-RC	20A-RC	25A-RC	30A-RC	40A-RC
CAPACITY <sup>2</sup> @ 50°F LWT	Tons <sup>2</sup>	4.9	7.1	9.8	14.5	18.5	23.1	30	36.7
	KW <sup>2</sup>	17.2	24.9	34.4	50.9	64.9	81	105.3	128.8
COMPRESSOR	Type	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Tandem Scrr
REFRIGERANT		410A	410A	410A	410A	410A	410A	410A	410A
PROCESS PUMP	HP	2	2	2	3	3	5	5	7 <sup>1</sup> / <sub>2</sub>
	GPM	12	19	26	36	48	60	72	92
	PSI	52	48	47	55	50	59	57	61
	Type <sup>3</sup>	C	C	C	C	C	C	C	C
	Construction <sup>4</sup>	SS	SS	SS	SS	SS	SS	SS	C
WATER CONNECTION	Process (to/from)	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	2	2	2	2	2 <sup>1</sup> / <sub>2</sub>
SIZES	Make-Up	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>
FULL LOAD <sup>5</sup>	230 volt	28	40	48	70	76	106	134	158
AMPERAGE	460 volt	14	20	24	35	38	53	67	79
	@ 3ø / 60 Hz	575 volt	12	16	20	28	31	43	57
TANK CAPACITY (gallons)	Holding	25	25	25	65	65	65	65	65
	Tank Lid	S	S	S	S	S	S	S	S
	Auto Make Up	S	S	S	S	S	S	S	S
DIMENSIONS <sup>7</sup> (inches)	Height	40	40	40	57	57	57	57	57
	Width	32	32	32	34	34	34	34	34
	Depth	40	40	40	80	80	80	80	80
WEIGHT (pounds)	Shipping <sup>6</sup>	655	740	760	1,500	1,900	2,100	2,200	2,500

## REMOTE AIR-COOLED CONDENSER

CONNECTIONS	Liquid & Hot Gas	1 <sup>1</sup> / <sub>8</sub> & 1 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub> & 1 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub> & 1 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub> & 2 <sup>1</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>8</sub> & 2 <sup>1</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>8</sub> & 2 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub> & 2 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub> & 2 <sup>5</sup> / <sub>8</sub>
AIR FLOW	Fan Quantity	1	1	1	2	2	3	3	3
FULL LOAD <sup>5</sup>	230 Volts	3.6	3.6	3.6	12.4	12.4	18.6	18.6	24.8
AMPERAGE	460 Volt	1.3	1.3	1.3	6.2	6.2	9.3	9.3	12.4
	@ 3ø / 60 Hz	575 Volt	1.0	1.0	1.0	5.0	5.0	7.5	9.9
DIMENSIONS <sup>7</sup> (inches)	Height	54	54	54	54	54	54	54	54
	Width	45	45	45	45	45	45	45	45
	Depth	58	58	58	112.5	112.5	167.5	167.5	167.5
WEIGHT (pounds)	Shipping <sup>6</sup>	400	400	400	680	740	1,050	1,150	1,200
FACTORY ID		012	014	017	025	032	041	050	056

**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. Consult factory for capacity at other conditions. The minimum recommended operating temperature when no glycol is used is 48°F. 3. C = centrifugal. 4. SS = stainless steel. C = cast iron. 5. Full load amps are higher than run load amps and must be used for sizing disconnects and supply wiring. 6. Approximate unit weight crated for shipment. 7. Selection of certain options may change dimensions, weight and amps required. Confirm with factory before starting construction.



## CHILLER CONTROL INSTRUMENT

- Microprocessor based controller
- Large temperature display window
- To process temperature display in °F and °C
- Illuminated Power On switch
- Indicator lights for *Compressor* and *Hot Gas Bypass*
- Diagnostic light for *Refrigerant Fault*
- Soft key setpoint selectors

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