

# PORTABLE CHILLERS

# CF-A SERIES

AIR-COOLED

- 5 to 30 Tons Capacity
- Microprocessor Based Chiller Control
- Air-Cooled Condenser
- Steel Frame & Lift-Off Cabinetry
- Scroll Compressor
- Brazed Plate Evaporator
- Non Ozone Depleting Refrigerants

The **CF-A Series** portable 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.

## TEMPERATURE RANGE

- 20° - 65°F

## REFRIGERANT CIRCUIT

- Scroll compressor
- Air-cool condenser
- Fan induced air flow
- Filter-drier
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Hot gas by-pass capacity control
- Braze plate evaporator
- Full component insulation
- Environmentally friendly refrigerants

## COOLANT CIRCUIT

- Stainless steel process pump on 5-20 ton models
- Cast iron process pump on 25 - 40 ton models
- Insulated non-ferrous reservoir
- All non-ferrous construction

## LIMIT DEVICES

- Compressor motor overload protection
- Refrigerant high pressure switch
- Refrigerant low pressure switch
- Instrument control circuit fuse
- Refrigerant Pressure Relief

## ELECTRICAL

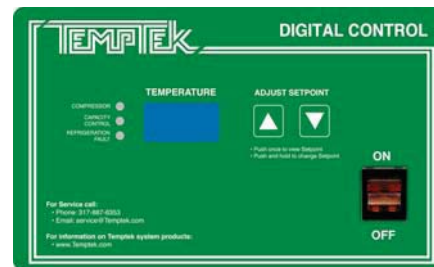
- Nema rated electrical cabinet
- Process pump motor starter
- Compressor motor starter
- Fused transformer
- Power entry terminal block

## WARRANTY & SERVICE

- 1 year on parts & labor
- Nationwide network of service contractors



CF-10A shown



## 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

## FRAME

- Female NPT process connections
- Powder coated steel frame
- 4" bearing casters

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# TEMPEK

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# SPECIFICATIONS

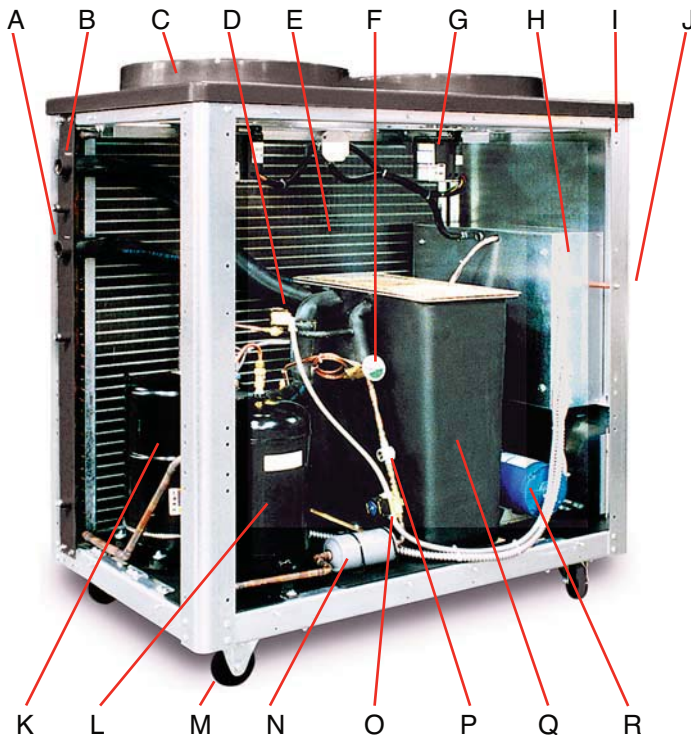
| MODEL CF-                          |                            | 5A   | 7.5A  | 10A   | 15AF  | 15AB  | 20AF  | 20AB  | 25A   | 30A   |
|------------------------------------|----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| CAPACITY @ 50°F LWT                | Tons <sup>2</sup>          | 4.9  | 7.2   | 9.8   | 14.5  | 14.5  | 18.5  | 18.5  | 23.1  | 30    |
|                                    | KW <sup>2</sup>            | 17.2 | 25.3  | 34.4  | 50.9  | 50.9  | 65.0  | 65.0  | 81.0  | 105.3 |
| COMPRESSOR                         | HP                         | 5    | 7½    | 10    | 15    | 15    | 20    | 20    | 25    | 30    |
|                                    | Type <sup>3</sup>          | SC   | SC    | SC    | SC    | SC    | SC    | SC    | SC    | SC    |
| REFRIGERANT                        |                            | 410A | 410A  | 410A  | 410A  | 410A  | 410A  | 410A  | 410A  | 410A  |
| PROCESS PUMP                       | HP                         | 2    | 2     | 2     | 3     | 3     | 3     | 3     | 5     | 5     |
|                                    | GPM                        | 12   | 18    | 24    | 36    | 36    | 48    | 48    | 60    | 72    |
|                                    | PSI                        | 52   | 50    | 48    | 55    | 55    | 50    | 50    | 59    | 57    |
|                                    | Type <sup>4</sup>          | C    | C     | C     | C     | C     | C     | C     | C     | C     |
|                                    | Construction <sup>5</sup>  | SS   | SS    | SS    | SS    | SS    | SS    | SS    | SS    | SS    |
| CONNECTION                         | Process (to/from)          | 1¼   | 1¼    | 1¼    | 2     | 2     | 2     | 2     | 2     | 2     |
| SIZES                              | Make-Up                    | ½    | ½     | ½     | ½     | ½     | ½     | ½     | ½     | ½     |
| AIR-COOLED                         | Type <sup>6</sup>          | F    | F     | F     | F     | B     | F     | B     | B     | B     |
| CONDENSER                          | CFM x 1000                 | 5    | 10    | 10    | 15    | 15    | 20    | 20    | 20    | 30    |
|                                    | S.P. <sup>7</sup>          | --   | --    | --    | --    | 1.35  | --    | 1.35  | 1.35  | 1.35  |
|                                    | Ambient <sup>8</sup>       | 95   | 95    | 95    | 95    | 95    | 95    | 95    | 95    | 95    |
| FULL LOAD <sup>9</sup><br>AMPERAGE | 230/3/60 volt              | 34   | 48    | 56    | 80    | 87    | 92    | 103   | 148   | 184   |
|                                    | 460/3/60 volt              | 17   | 24    | 28    | 40    | 44    | 46    | 51.5  | 74    | 92    |
|                                    | 575/3/60 volt              | 14   | 19    | 23    | 32    | 31    | 37    | 42    | 60    | 74    |
| TANK CAPACITY<br>(gallons)         | Holding                    | 25   | 25    | 25    | 65    | 65    | 65    | 65    | 65    | 65    |
|                                    | Tank Lid <sup>10</sup>     | S    | S     | S     | S     | S     | S     | S     | s     | S     |
|                                    | Auto Make Up <sup>10</sup> | S    | S     | S     | S     | S     | S     | S     | s     | S     |
| DIMENSIONS<br>(inches)             | Height                     | 60   | 60    | 60    | 66    | 96    | 66    | 96    | 96    | 96    |
|                                    | Width                      | 34   | 34    | 34    | 59    | 58    | 59    | 58    | 58    | 58    |
|                                    | Depth                      | 40   | 56    | 56    | 58    | 70    | 58    | 70    | 70    | 70    |
| WEIGHTS (pounds)                   | Shipping <sup>11</sup>     | 800  | 1,100 | 1,100 | 1,600 | 2,300 | 2,000 | 2,600 | 3,200 | 3,400 |



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#### Notes

- 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.
- 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.
- R = hermetic reciprocating. SC = hermetic scroll.
- P = positive displacement. C = centrifugal.
- B = brass. SS = stainless steel. C = cast iron.
- F = fan. B = blower.
- Static pressure in inches of water.
- Design ambient conditions. Loss of capacity and/or difficulty operating will occur at higher ambient.
- Full load amps are higher than run load amps and must be used for sizing disconnects and supply wiring.
- S = standard. O = optional.
- Approximate unit weight crated for shipment.



#### MECHANICAL COMPONENTS

- A - From Process Connection
- B - To Process Connection
- C - Protective Fan Shroud
- D - Hot Gas Bypass Valve
- E - Air-Cooled Condenser
- F - Expansion Valve
- G - Fan Motor
- H - Electrical Cabinet
- I - Steel Frame
- J - Instrument (not viewed in picture)
- K - Liquid Receiver
- L - Compressor
- M - Castor
- N - Filter-drier
- O - Liquid Line Solenoid Valve
- P - Refrigerant Sight Glass
- Q - Insulated reservoir
- R - Centrifugal pump

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