



## RPCA – Portable Air Cooled Chillers



RPCA is a fully self contained, portable chiller and available from 1½ to 20 tons.

The RPCA comes complete with pump and tank, is fully wired, charged with R-410A refrigerant and tested under simulated load conditions at the factory before shipment to ensure easy installation and start-up.

### **SUPERIOR BY DESIGN**

Our use of the highest quality components and a superior design assures a dependable, long lasting, trouble free machine and clean corrosion free water environment. All components are bolted to a sturdy structural steel frame. The attractive aluminum composite panels provide a better appearance and reduce sound levels while allowing for easy maintenance.

### **HIGHEST QUALITY COMPONENTS**

At the heart of the RPCA air cooled chiller is an industry respected Copeland scroll compressor. The compressor comes with a 5 year warranty. The condensing units chosen are the most reliable, energy efficient and durable units. They come complete with fan cycling head pressure control and an integrated sub-cooler for higher efficiency.

High efficiency designs use high efficiency components, reducing operation costs and help meet upcoming energy regulation. Long life components are selected for dependability and reduced warranty costs.

A solid-state temperature controller monitors and regulates system temperature. All electrical components are UL listed. They are wired and numbered to correspond with the electrical schematic diagrams.

### **FULL FEATURED**

To monitor the RPCA's operation, we include digital readout of the set point and actual temperatures, power, pump and compressor indicator lights.

### **HOST OF SAFETIES**

Standard safeties include high and low pressure controls and freeze protection, low flow cut-off, high refrigerant pressure relief valve.

### **DESIGN CONFIGURATIONS**

RPCA-V - Vertical design configuration is available with the condensing unit placed above the pump/tank frame allowing for a smaller footprint for those locations where floor space is a premium. Casters included.

RPCA-H - Horizontal configuration is available with the condensing unit to the side of the pump/tank frame for those locations with height restrictions.

### **STAINLESS STEEL EVAPORATOR**

The RPCA uses a highly efficient, stainless steel brazed plate evaporator. Each of the type 304 stainless steel plate has ridged patterns. The plates are brazed together to form two separate channel systems that allow the refrigerant and fluid to flow in counter directions. Since all the plate material performs heat transfer, it has a large surface area per volume and with the vigorous turbulence created by the ridged pattern, the brazed plate design allows for closer approach temperatures and efficient heat transfer properties that are three time more efficient than shell and tube models. For ease of maintenance, an inline strainer with removable stainless steel screen in the evaporator's coolant supply line protects it from solids.

### **NON-FERROUS WATER PATH CONSTRUCTION**

All chilled water piping is of a non-ferrous material to help ensure clean process water. All water lines are completely insulated with closed cell foam to prevent condensation and conserve energy.

### **TANK AND PUMP**

A generously sized stainless steel insulated tank in this chiller includes a drain, water make-up, sight glass and vent.

The non-ferrous, stainless steel, centrifugal pump is selected to run at 3500 rpm and is of a closed-coupled design and selected to provide high pressure, flow to your process. The pump is trimmed with a discharge, throttling valve to allow adjustment of the flow rate. A valved, water-by pass line prevents dead heading the pump if the water loop is interrupted downstream. We also include a liquid filled pressure gauge for reliable pump pressure readings without fluctuations.

### **AVAILABLE OPTIONS**

High and low temperature alarms, low water level alarm, auto make-up valve. Optional outdoor weather proofing is also available.