

## RPCA – Portable Air Cooled Chillers

RPCA-V (vertical)  
 RPCA-H (horizontal)

Refrigerant type: R-410A



	RPCA-1½	RPCA-2	RPCA-3	RPCA-4	RPCA-5	RPCA-6½	RPCA-7½	RPCA-10	RPCA-12½	RPCA-15	RPCA-20
<b>Refrigeration Capacity (Btu/Hr.)</b>											
Capacity @ 50°F LWT	16,344	22,277	34,777	43,627	54,812	66,300	85,100	104,400	133,000	174,800	238,500
Compressor type (qty)	Scroll (1)	Scroll (1)	Scroll (1)	Scroll (1)	Scroll (1)	Scroll (1)	Scroll (1)	Scroll (1)	Scroll (2)	Scroll (2)	Scroll (2)
Condenser fan qty	1	1	1	1	1	1	1	2	2	3	3
Pump HP	3/4	1	1	1	1	1½	1½	2	2	3	3
SS Tank Size (gallons)	20	20	30	30	30	30	30	30	30	30	30
Chilled Water Flow Rate (gpm @ psi)	5gpm @ 31psi	7.5gpm @ 39psi	10gpm @ 41psi	12.5gpm @ 40psi	15gpm @ 40psi	20gpm @ 40psi	25gpm @ 38psi	30gpm @ 52psi	35gpm @ 52psi	45gpm @ 43psi	60gpm @ 48psi
<b>Dimensions (in.) RPCA-V</b>											
Length (A)	36"	41"	45"	45"	45"	43½"	43½"	62¼"	74"	89"	89"
Width (B)	24¼"	28¼"	32"	32"	32"	31½"	31½"	40"	40"	40"	40"
Height (C)	58"	58"	62"	68"	72"	72"	72"	85"	85"	85"	85"
Weight (lbs)	500	510	515	550	570	600	620	950	1110	1340	1510
<b>Dimensions (in.) RPCA-H</b>											
Length (A)	76"	86"	90"	94"	94"	91"	91"	128½"	152"	182"	182"
Width (B)	24¼"	28¼"	32"	32"	32"	31½"	31½"	40"	40"	40"	40"
Height (C)	39"	39"	39"	39"	39"	39"	39"	50"	50"	50"	50"
Weight (lbs)	550	560	565	610	620	650	670	1000	1610	1840	2010
Length (A)	36"	41"	45"	45"	45"	43½"	43½"	62¼"	74"	89"	89"
<b>Electrical Ratings</b>											
FLA @ 208/230-1-60	16.6	21.7	27.4	31.3	35.8	n/a	n/a	n/a	n/a	n/a	n/a
FLA @ 208/230-3-60	n/a	n/a	17.9	18.4	20.3	30.1	32.7	43	57.7	68.7	84.7
FLA @ 460-3-60	n/a	n/a	8.8	8.9	10.5	14.6	16.2	22.8	27.7	33.7	45.1
<b>Connection Sizes</b>											
Chilled Water Conn. (in.)	7/8	7/8	7/8	7/8	1 1/8	1 1/8	1 1/8	1 1/8	1 5/8	1 5/8	1 5/8"
<b>Features</b>											
Hot Gas Bypass	n/a	n/a	n/a	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Casters	RPCA-V only	RPCA-V only	RPCA-V only	RPCA-V only	RPCA-V only	RPCA-V only	RPCA-V only	RPCA-V only	RPCA-V only	RPCA-V only	RPCA-V only

1 ton = 12,000 BTUH  
 Specifications based on: 95°F entering air temp. 50°F supply water temp.

ARI Performance Certified/UL listed condensing unit  
 Chillers are factory tested and fully charged before shipment  
 Warranty: compressor 5 yrs. All other components 1 yr parts

## Basic Construction



### **CONSTRUCTION**

Frame	Sturdy carbon steel base.
Finish	Primed & Painted Enamel
Features	Aluminum composite material (ACM) made of two pre-painted sheets of .012" aluminum with a solid polyethylene core

### **DESIGN CONFIGURATION**

Horizontal	Suitable for outdoor use / Roof top location with height restrictions. No Casters
Vertical	Suitable for indoor use / Small footprint. Mobile on casters

### **CONDENSING UNIT**

Compressor Type	Scroll Compressor
Design Air Temp	95°F
Condenser Construction	Copper tubes with aluminum fins
Unloading	Hot Gas Bypass (RPCA 4-20)
Pressure Control	Fan cycling
Electronics	UL listed

### **EVAPORATOR**

Type	Direct expansion – Brazed plate design
Construction	AISI 316 Stainless Steel plate construction with copper brazing
Insulation	Closed cell foam

### **INLINE WATER FILTER WITH STAINLESS STEEL MESH**

Construction	AISI 304 Stainless Steel filter element with bronze or ABS body
Filter Size	40 mesh

### **REFRIGERANT**

Type	R-410A
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### **TANK**

Construction	Stainless Steel
Insulation	½" foam insulation
Features	Sight Glass    Drain    Auto Water Make-Up

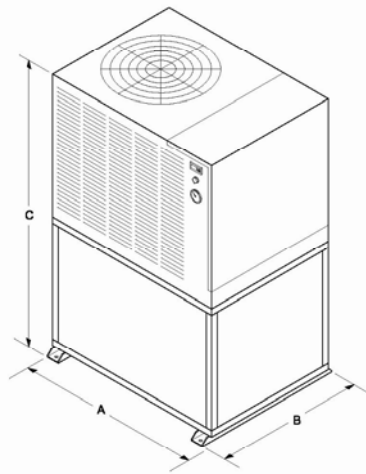
### **ELECTRICAL CONTROLS**

Motor overload protection	Freeze stat protection
High pressure cut-out	Time delay low pressure cut-out
Low flow cut-out	

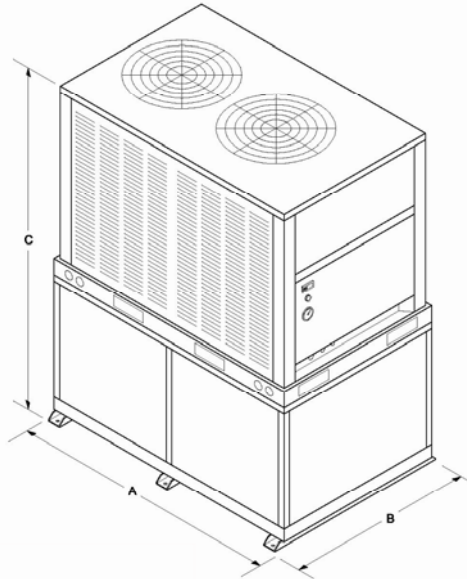
### **REFRIGERATION SPECIALTIES**

Thermal expansion valve	Internal pressure relief in compressor
Service Valves	Sight glass / moisture indicator
High pressure relief valve	Filter Dryer

**RPCA DIMENSIONAL SCHEMATIC**

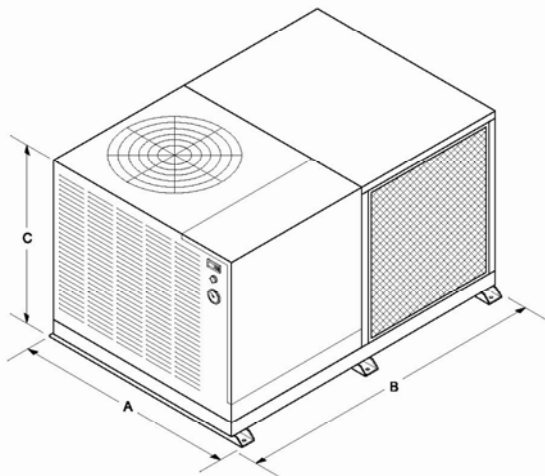


SINGLE FAN CONFIGURATION

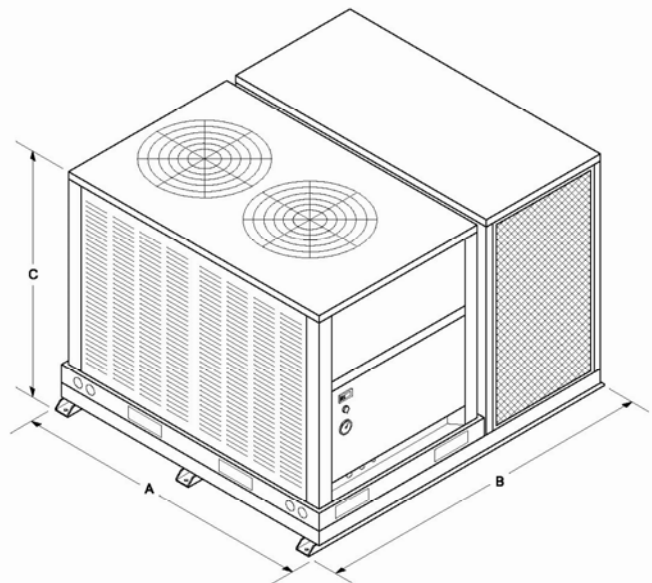


MULTIPLE FAN CONFIGURATION

**RPCA-V (vertical configuration)**



SINGLE FAN CONFIGURATION



MULTIPLE FAN CONFIGURATION

**RPCA-H (horizontal configuration)**

**RPCA TYPICAL PIPING LAYOUT**

