

# RETROAIRE

*The Right Fit for Comfort*

## RC/RH90 PACKAGED TERMINAL AIR CONDITIONER/HEAT PUMP

P/N# 240003265, Rev. 1.7 [03/05]

**Replacement For:  
Friedrich Climate Master,  
Cool Heat AD & 700-Series**



Nominal Capacities of 9,000, 12,000,  
15,000 Btuh, and 18,000 Btu (Cooling Only.)

### PRODUCT DESCRIPTION

The RetroAire RC/RH90 replacement chassis is a conditioner designed to allow owners of Friedrich Climate Master and Cool Heat AD and 700-Series packaged terminal units to upgrade room comfort while reducing operating costs through higher efficiency and enhanced reliability.

This unit is available as a cooling-only model or, for those who wish to upgrade to a heat pump, the RH 90 chassis will fit the existing wall sleeve. This heat pump replacement will reduce heating energy costs at outdoor temperatures as low as 30° F.

Energy efficiency ratings are as high as 10.0 E.E.R., which can mean rapid payback of your replacement investment through energy savings. The RetroAire RC/RH90 features two fan speeds. Its separate outdoor fan does not run in venting or heating modes, thereby saving energy.

Whisper-quiet operation improves the room ambiance and a washable, permanent filter makes service a snap. The 20 gauge, galvanized steel construction of the chassis ensures long service life.

**NOTE:** *Chassis is 18 1/4" deep for the 9,000, 12,000, and 15,000 Btuh models. The standard depth for the 18,000 Btuh is 24". However, we can supply it in an 18 1/4" deep chassis as well. Consult factory prior to ordering.*

All RetroAire products are backed by EMI and ECR International and are tested and rated in accordance with ARI Standards 310 & 380 and UL 484. A full service parts inventory is always available.

### STANDARD FEATURES

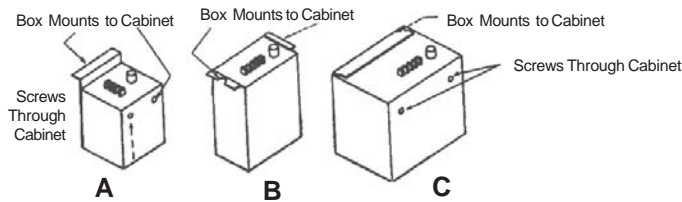
- ▲ **Air Systems**
  - Fans are forward-curved type, directly mounted to the motor shafts.
  - Motors are PSC type with overheat protection.
  - Air-stream surfaces are insulated with 1/4" fiberglass.
  - Filter is permanent, washable, and accessible without tools.
- ▲ **High Efficiency Heat Exchanger** - Coil is seamless, rifled copper tubing, arranged in staggered configuration, with enhanced aluminum fins, tested to 460 psig. The tubes are mechanically expanded for secure bonding to fin shoulders.
- ▲ **Refrigeration Circuit**
  - High efficiency, rotary compressor with a five-year warranty standard.
  - Automatic expansion valve refrigerant metering for low-ambient protection.
- ▲ **Heat Pumps**
  - Heat pump heating operates as low as 30° F outdoor temperature.
  - Heat pumps include adjustable changeover temperature point and emergency heat position.
  - A standard temperature actuated drain pan valve for heat cycle condensate disposal is included.
- ▲ **Options & Accessories**
  - The RC/RH 90 units are designed to fit both the existing wall sleeve and cabinet of the old unit, but when either the sleeve or cabinet must be replaced because of rust or damage, RetroAire can supply custom replacements.
  - Motorized fresh air damper with positive-pressure seal and override switch.
  - Continuous/cycling fan control switch.
  - Electric heat at 3, 4, or 5 KW.
  - Hydronic heat
  - Normally open/normally closed motor valve-switch, hydronic heat only (standard)

### A Note On Wall Thickness

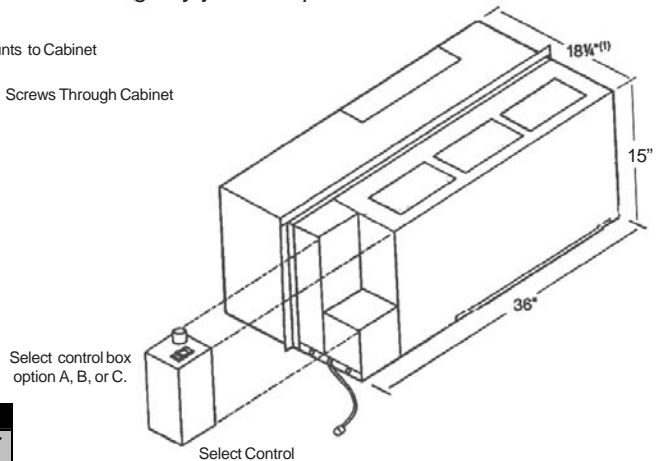
The distance from the condenser coil to the outdoor louver varies with sleeve depth. Each chassis includes two 1 3/8" air baffles to accommodate the most common condenser coils to outdoor louver requirements. In addition, we stock an optional condenser-side air baffle kit for chassis installation in deeper than standard wall sleeves.

# RC/RH90 DIMENSIONS SPECIFICATIONS

**IMPORTANT:** Due to RetroAire's on going development programs, designs and specifications may change without notice. Please consult factory for the latest information and submittal data before making any job site updates.



1. Note: Chassis is 18 1/4" deep for the 9,000, 12,000 and 15,000 Btuh models. The standard depth for the 18,000 Btuh is 24". However, we can supply it in an 18 1/4" deep chassis as well.



RC/RH90 PERFORMANCE DATA*						
Unit Size	Cooling Btuh	EERs	Heat Pump Btuh	COP	Evaporator CFM Hi/Lo	Fresh Air CFM
9	9,500	10	8500	2.8	440/340	40/35
12	11,900	10	11400	2.9	440/340	40/35
15	14,700	9.2	13800	2.8	500/440	40/35
18	16,900	9.1	N/A	N/A	500/440	40/35

\* Due to ongoing product development and occasional use of alternate components (compressors, motors, etc.) to meet production requirements, performance data is subject to change without notice. Consult factory for current performance data.

RC/RH90 Optional Electric Heat Specifications								
Heater No.	Voltage	Watts	Btuh	Amps	Total Heat Amps	MCA	Max Fuse	Line Cord
2	208	1,636	5,600	7.9	8.5	10.4	15	6-15P
	230	2,000	6,900	8.7	9.3	11.5	15	6-15P
	265	2,655	9,100	10	10.7	13.2	15	7-20P
3	208	2,454	8,400	11.8	12.4	15.3	20	6-20P
	230	3,000	10,300	13	13.6	16.9	20	6-20P
	265	3,983	13,600	15	15.7	19.5	20	7-20P
4	208	3,271	11,200	15.7	16.3	20.3	25	6-30P
	230	4,000	13,700	17.4	18	22.3	25	6-30P
	265	5,310	18,200	20	20.7	25.7	30	7-30P
5	208	4,089	14,000	19.7	20.3	25.2	30	6-30P
	230	5,000	17,100	21.7	22.3	27.8	30	6-30P

RC/RH90 Electrical Specifications												
Model Number	Voltage/Hz/Phase	Evap Motor		Cond Motor		Compressor		Total Amps	MCA	Max Fuse	Min Voltage	Line Cord
		FLA	HP	FLA	HP	RLA	LRA					
9	115/60/1	1.4	0.09	1.6	0.125	7.4	44	10.4	12.3	15	104	5-15P
	208/230/60/1	0.6	0.08	0.72	0.125	4.1	20	5.4	6.5	15	197	6-15P
	265/60/1	0.67	0.08	0.7	0.125	3.35	18	4.7	5.6	15	240	7-20P
12	115/60/1	1.4	0.09	1.6	0.125	9.7	54	12.7	15.1	20	104	5-20P
	208/230/60/1	0.6	0.08	0.72	0.125	5.1	28	6.4	7.7	15	197	6-15P
	265/60/1	0.67	0.08	0.7	0.125	4.25	26	5.6	6.7	15	240	7-20P
15	208/230/60/1	0.6	0.08	0.72	0.125	6.4	35	7.7	9.3	15	197	6-15P
	265/60/1	0.67	0.08	0.7	0.125	5.4	32	6.8	8.1	15	240	7-20P
18	208/230/60/1	0.6	0.08	0.71	0.09	7.6	45	8.9	10.8	15	197	6-15P
	265/60/1	0.67	0.08	0.71	0.09	6.3	32	7.7	9.3	15	240	7-20P

NEMA Specifications Non-Locking/Receptacles									
VOLTAGE	125V			250V			265V		
	15(A)	20(A)		15(A)	20(A)	30(A)	15(A)	20(A)	30(A)
PLUS									
RECEPTACLE	5-15 R	5-20 R		6-15 R	6-20 R	6-30 R	7-15 R	7-20 R	7-30 R



An **ECR** International Brand

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