RETROAIRE

The Right Fit for Comfort

**RC/RH10
PACKAGED TERMINAL
AIR CONDITIONER/HEAT PUMP**

P/N# 240003250, Rev. 1.5 [02/05]

SPECIFICATIONS AND PERFORMANCE

Replacement **for:**

for American Standard 45, RC 45, Nelson Air 16, AAF American Air Filter Series 16 & Others

Cooling Only/Heat Pump
Nominal Capacities:
9,000, 12,000, 15,000, and 18,000 Btuh

DESCRIPTION

The RetroAire RC/RH10 replacement chassis is a conditioner designed to allow owners of American Standard 45, Singer Type 45, Nelson Air 16, AAF Series 16 and other packaged terminal units to upgrade room comfort while reducing costs through higher efficiency and enhanced reliability.

This unit is available as a cooling-only model, for those who wish to upgrade to a heat pump, the RH10 chassis will fit the existing wall sleeve. This heat pump version will reduce heating energy costs at outdoor temperatures as low as 35°F.

Energy Efficiency Ratings run as high as 10.0, which can mean rapid payback of your replacement investment through energy savings. The RetroAire RC/RH 10 features two fan speeds. Its separate outdoor fan does not run in venting or electric heat modes, thereby saving energy.

Whisper-quiet operation improves room ambiance and the chassis is 20 gauge, galvanized steel construction ensures long service life.

All RetroAire products are backed by EMI and by 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.

▲▼ *Air Systems:*
- Forward-curved type fans, directly mounted to motor shafts.
- PSC type motors with overheat protection.
- ¼" fiberglass insulated air-stream surfaces.

▲▼ *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 5 year warranty standard.
- Automatic expansion valve refrigerant metering for low-ambient cooling protection.

▲▼ *Heat Pumps:*
- Heat pump heating operates as low as 35°F outdoor temperature.
- Heat pumps include a changeover thermostat with emergency heat position.
- A standard temperature actuated drain pan valve for heat pump condensate disposal is included.

▲▼ *Accessories:*
- Motorized fresh air damper with positive-pressure seal and override switch.
- Continuous/cycling fan control switch.
- Electric heat at 3, 4, or 5KW.
- 1 or 2 row hydronic heat coil.
- Remote thermostat.
- Filter (contact factory for specifics)
- Custom Sleeves kits*
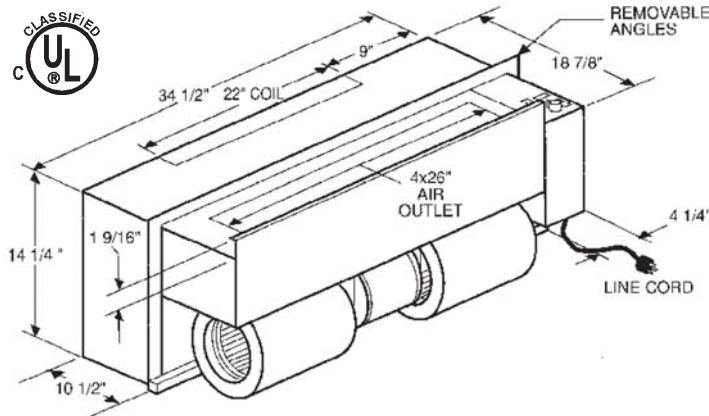- Hydronic Heat (high Volt normally open/closed valve-switch)

*The RC/RH 10 is designed to fit the existing sleeve kit of the old unit but can be replaced if necessary due to rust or damage.

▲▼ *Wall Thickness* –
The distance from the condenser coil to the outdoor louver varies with sleeve depth, unit(s) ship standard with 1 3/8" & 1 1/2" baffles. In addition, EMI stocks an optional condenser-side air baffle kit for chassis installation in deeper-than-standard wall sleeves. For fast, trouble-free installation, know your wall sleeve depth when ordering.

* NOTE: Due to EMI's ongoing development programs, design, specifications, and performance data may change without notice.
** For more detailed Hydronic Heat performance information contact EMI's customer service: 1-800-228-9364

RC10 Hydronic Heat ** Performance 104-130 (Single Row Coil)			
GPM	EWT (°F)	Capacities	P.D.
3.0	180°F Hi	11,948	2.6
	180°F Lo	11,227	2.6
	140°F Hi	7,526	2.6
	140°F Lo	7,077	2.6

RC10 Hydronic Heat ** Performance 104-305 (Double Row Coil)			
GPM	EWT (°F)	Capacities	P.D.
3.0	180°F Hi	25,407	1.4
	180°F Lo	23,858	1.4
	140°F Hi	15,884	1.4
	140°F Lo	14,935	1.4

RC/RH 10 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/RH 10 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	6.4	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

RC/RH 10 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

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