

RETROAIRE

The Right Fit for Comfort

RC85 PACKAGED TERMINAL AIR CONDITIONER

P/N# 240004378, Rev. 1.1 [3/05]

Replacement for CHROMOLOX DOWNFLOW



RC85

STRAIGHT COOL ONLY

Nominal Capacities: 9,000 -
12,000 - 15,000 & 18,000 Btuh

PRODUCT DESCRIPTION

The RetroAire RC85 is designed as a replacement chassis for the Chromolox Downflow. The unit is available in cooling only.

The RC85 also offers an EER rating as high as 10.0 at minimal E.S.P. This can result in immediate energy savings over an older unit. The RC85 features a two speed indoor fan and an outdoor fan that conserves energy by not running in vent or electric heat modes.

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

All Retroaire products are backed by Enviromaster International LLC and are tested and rated in accordance with ari standards 310 & 380 and UL 484. A full service parts inventory is always available.

▲▼ **Capacities** – The RC replacement chassis are available in nominal capacities of 9,000, 12,000, 15,000 and 18,000 Btuh.

▲▼ **Features:**

- **Microprocessor Control Board** for improved efficiency and system protection.
- **Fan Operation** - Auto/On. High or Low speed fan.
- **Fan Purge** - Fan remains on for 60 seconds delay (Auto mode only). Universal control board. Circuit board can be used in either a straight cool or electric heat application.
- **Anti-Short Cycle Compressor** protection.
- **Random Start Timer.**
- **Freeze Protection** – Prevents evaporator freeze ups.
- **Low Ambient Lockout** – Compressor prevented from running when outdoor temperatures are too cold for efficient operation.

▲▼ **Air Systems:**

- Fans: Forward curve type, mounted on motor shafts
- PSC motors with overheat protection
- Air surfaces insulated with 1/4" fiberglass
- Easy access permanent, washable air filter

▲▼ **Heat Exchanger** – Staggered seamless, rifled copper tubing w/aluminum fins tested to 400 psig. Tubing is mechanically expanded for secure bonding to fin shoulders.

▲▼ **Refrigeration Circuit:**

- High efficiency, rotary compressor w/standard 5 year warranty
- Automatic expansion valve metering for low ambient protection, allows cooling down to 35° F.

▲▼ **Standard Factory Installed or Field Supplied Controls and Components:**

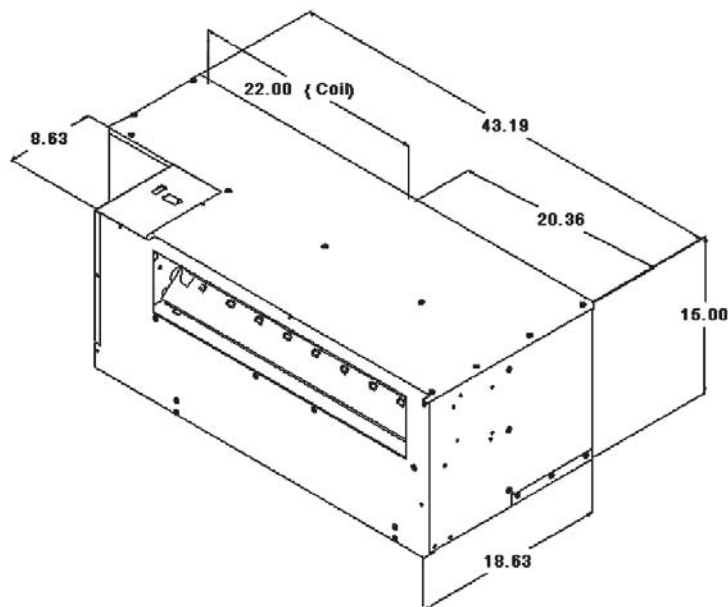
1. Unit mounted operating control
 - Thermostat
 - Fan speed control
 - Heat/cool switch
2. Low ambient protection
3. Weather strip insulation
4. Baffle kit bag (supplied)
 - Foam strip seal for supply air duct
5. Front air intake
6. Sea coast coated drain pans

▲▼ **Optional Controls and Components:**

- Motorized fresh-air damper with positive-pressure seal and override switch.
- Electric heat (2, 3, 4 or 5kw)
- Remote thermostat
- Fan cycle switch
- Sea coast coated coils
- Custom wall sleeves and cabinet enclosures (*consult factory*)

RC85 SPECIFICATIONS AND PERFORMANCE DATA

NOTE: Due to EMI's ongoing product development programs, designs, specifications, and performance may change without notice. For more information, please contact the factory.



RC85 Performance Data

@ 0 external static pressure				
Unit Size	Cooling Btuh	EERs	Evaporator CFM Hi/Lo	Fresh Air CFM
9	9,500	10	445/340	40/35
12	11,900	10	440/340	40/35
15	14,700	9.2	500/440	40/35
18	16,900	9.1	500/440	40/35
@ 0.1 external static pressure				Evaporator CFM Hi
9	9,500	9.2	375	35
12	11,750	9.2	425	40
15	13,200	8.2	425	40
18	15,500	8.2	425	40

RC85 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					
09	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
	208/230/60/1	0.6	0.08	0.71	0.09	7.6	45	8.9	10.8	15	197	6-15P
18	265/60/1	0.67	0.08	0.71	0.09	6.3	32	7.7	9.3	15	240	7-20P

Note: Data will vary if alternate components (including compressor or motor) are used to meet production needs. Consult factory for current electrical specifications.

RC85 Optional Electric Heat Specifications									
Heater No.	Voltage	Watts	Btuh	Amps	Total Heat Amps	MCA	Max Fuse	Line Cord	
2	208	1636	5600	7.9	8.5	10.4	15	6-15P	
	230	2000	6900	8.7	9.3	11.5	15	6-15P	
	265	2655	9100	10.0	10.7	13.2	15	7-20P	
3	208	2454	8400	11.8	12.4	15.3	20	6-20P	
	230	3000	10300	13.0	13.6	16.9	20	6-20P	
	265	3983	13600	15.0	15.7	19.5	20	7-20P	
4	208	3271	11200	15.7	16.3	20.3	25	6-30P	
	230	4000	13700	17.4	18.0	22.3	25	6-30P	
	265	5310	18200	20.0	20.7	25.7	30	7-30P	
5	208	4089	14000	19.7	20.3	25.2	30	6-30P	
	230	5000	17100	21.7	22.3	27.8	30	6-30P	

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)
PLUG								
RECEPTACLE								

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