



# CTV EVAPORATOR

*HOT GAS DEFROST*

**SUBMITTAL**  
**CTV-853A**  
**NOV. 1994**  
 SUPERCEDES  
 CTV-853



## Description:

The CTV model unit coolers are specifically designed for commercial freezer applications. Time tested for many years, these virtually maintenance-free unit coolers are built with Kramer reliability.

These units are suitable for low and medium temperatures in the range of -30°F to +35°F.

## Features:

- Corrosion resistant casing, sturdy construction.
- Coils constructed of copper tubes and aluminum fins.
- Industrial evaporators with 6 FPI.
- Dependable ratings based on laboratory tests.
- Single phase motors have built-in O/L protection.
- Hot Gas heated drain pan for positive condensate drainage.
- Factory wired for quick field installation.
- Optional high pressure propeller fans.

## CAPACITY DATA • BTU/HR @ 10° TD<sup>(1)</sup>

MODEL	EVAPORATOR TEMPERATURE - °F								
	+25°	+20°	+10°	0°	-10°	-20°	-30°	-40°	
6 FPI	CTV-450	51800	51100	49800	48400	47000	45200	42900	40200
	CTV-620	71000	70100	68400	66600	64600	62200	59100	55400
	CTV-850	97700	96200	93200	90700	88100	84800	80600	75500
	CTV-1070	122000	120900	118700	115300	111600	107400	102000	95800
	CTV-1220	139600	137900	134500	130000	126600	122000	115800	108500
	CTV-1360	154300	152600	149200	145100	141000	135600	128800	120700
	CTV-1580	180800	178500	174000	169500	164400	158200	150300	140700
	CTV-1800	204800	203400	200700	194400	188000	180800	171800	161800
	CTV-2110	240200	237300	231700	224900	210200	210270	199400	187000

1. Ratings based on R-22.

## PERFORMANCE DATA

6 FPI	MODEL	CFM (2)	Air Throw (FT) (3)	Motors (4)		Total Fan Motor Amps (4)	
				Qty.	H.P.	230-3-60	460-3-60
				CTV-450D CTV-450PP	8400 11400	50 75	2 2
CTV-620D CTV-620PP	8200 10900	50 50	2 2	1/2 1- 1/2	3.6 9.6	1.8 4.8	
CTV-850D CTV-850PP	12800 17200	100 125	2 2	3/4 3	7.0 17.2	3.5 8.6	
CTV-1070D CTV-1070PP	14600 16400	100 125	2 2	3/4 3	7.0 17.2	3.5 8.6	
CTV-1220D CTV-1220PP	14100 16100	100 125	2 2	3/4 3	7.0 17.2	3.5 8.6	
CTV-1360D CTV-1360PP	19700 22000	100 125	3 3	3/4 3	10.5 25.8	5.3 12.9	
CTV-1580D CTV-1580PP	19000 19000	100 125	3 3	3/4 3	10.5 25.8	5.3 12.9	
CTV-1800D CTV-1800PP	21500 26200	100 125	4 4	3/4 3	14.0 34.4	7.0 17.2	
CTV-2100D CTV-2100PP	31200 30700	100 125	4 4	3/4 3	14.0 34.4	7.0 17.2	

## CONNECTIONS DATA

6 FPI	MODELS	Connections (in) (5)				
		Suction O.D.	Liquid O.D.	Hot Gas O.D.	Ext. Equal O.D.	Drain MPT
CTV-450D CTV-450PP	1-3/8 1-3/8	1-3/8 1-3/8	1-1/8 1-1/8	1/4 1/4	1 1	
CTV-620D CTV-620PP	1-5/8 1-5/8	1-5/8 1-5/8	1-1/8 1-1/8	1/4 1/4	1 1	
CTV-850D CTV-850PP	1-5/8 1-5/8	1-5/8 1-5/8	1-1/8 1-1/8	1/4 1/4	1 1	
CTV-1070D CTV-1070PP	2-1/8 2-1/8	1-5/8 1-5/8	1-1/8 1-1/8	1/4 1/4	1 1	
CTV-1220D CTV-1220PP	2-1/8 2-1/8	1-5/8 1-5/8	1-3/8 1-3/8	1/4 1/4	1-1/2 1-1/2	
CTV-1360D CTV-1360PP	2-1/8 2-1/8	1-5/8 1-5/8	1-3/8 1-3/8	1/4 1/4	1-1/2 1-1/2	
CTV-1580D CTV-1580PP	2-1/8 2-1/8	1-5/8 1-5/8	1-3/8 1-3/8	1/4 1/4	1-1/2 1-1/2	
CTV-1800D CTV-1800PP	2-1/8 2-1/8	1-5/8 1-5/8	1-5/8 1-5/8	1/4 1/4	1-1/2 1-1/2	
CTV-2100D CTV-2100PP	(2) 2-1/8 (2) 2-1/8	(2) 1-1/8 (2) 1-1/8	1-5/8 1-5/8	(2) 1/4 (2) 1/4	1-1/2 1-1/2	

2. "D"-Direct Drive High efficiency propeller fans.  
"PP"-Direct drive with high pressure axial propeller fans.  
Do NOT use "PP" models above +25° box temperature.  
"PP" models can operate with ESP up to 0.5".  
At this condition CFM will drop to "D" model CFM.
3. Unrestricted air flow.
4. Single phase motors available on "D" models only, contact factory.
5. Connection sizes are based on R-22, and may vary from catalog when actual site operating conditions are provided at time of order.

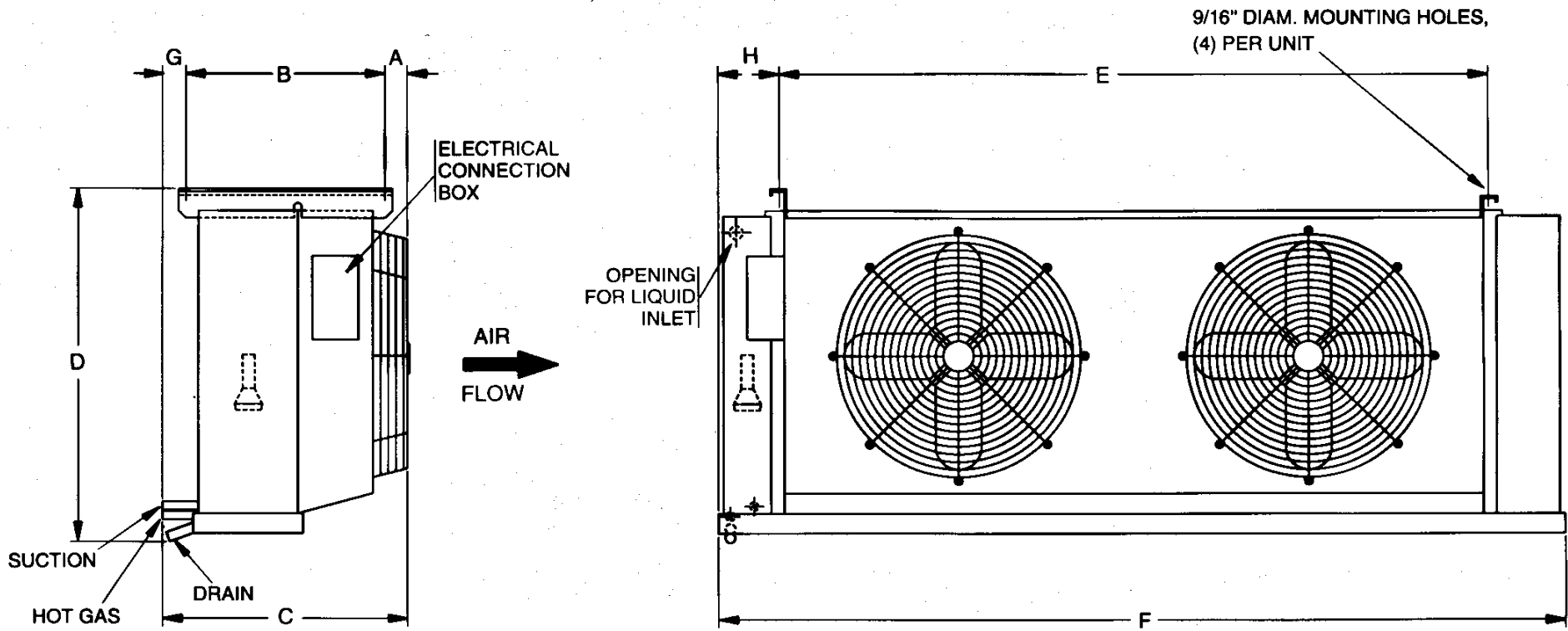
## DIMENSIONAL DATA

MODEL	Dimensions (in)								Ref. Chrg. (lbs.) (6)	Approx. Ship Weight (lbs.)
	A	B	C	D	E	F	G	H		
CTV-450D CTV-450PP	3-1/4 3-1/4	26 26	31-3/4 31-3/4	42-7/8 42-7/8	58 58	75 75	2-1/2 2-1/2	7-1/2 7-1/2	8 8	770 860
CTV-620D CTV-620PP	3-1/4 3-1/4	26 26	31-3/4 31-3/4	42-7/8 42-7/8	58 58	75 75	2-1/2 2-1/2	7-1/2 7-1/2	13 13	880 965
CTV-850D CTV-850PP	3-7/8 3-7/8	26 26	32-3/8 32-3/8	42-7/8 42-7/8	94 94	111 111	2-1/2 2-1/2	7-1/2 7-1/2	17 17	1170 1390
CTV-1070D CTV-1070PP	3-7/8 3-7/8	26 26	32-3/8 32-3/8	42-7/8 42-7/8	94 94	111 111	2-1/2 2-1/2	7-1/2 7-1/2	19 19	1285 1465
CTV-1220D CTV-1220PP	5-3/4 5-3/4	28 28	36-1/8 36-1/8	43-3/4 43-3/4	94 94	111 111	2-3/8 2-3/8	7-1/2 7-1/2	25 25	1380 1610
CTV-1360D CTV-1360PP	7-1/2 7-1/2	28-1/4 28-1/4	41-3/4 41-3/4	47-1/4 47-1/4	113-1/4 113-1/4	136 136	6 6	11-3/8 11-3/8	25 25	2170 2470
CTV-1580D CTV-1580PP	7-1/2 7-1/2	28-1/4 29-1/4	41-3/4 41-3/4	47-1/4 47-1/4	113-1/4 113-1/4	136 136	6 6	11-3/8 11-3/8	33 33	2330 2580
CTV-1800D CTV-1800PP	7-1/2 7-1/2	28-1/4 28-1/4	41-3/4 41-3/4	47-1/4 47-1/4	151-1/4 151-1/4	174 174	6 6	11-3/8 11-3/8	33 33	2420 2720
CTV-2100D CTV-2100PP	7-1/2 7-1/2	28-1/4 28-1/4	41-3/4 41-3/4	47-1/4 47-1/4	151-1/4 151-1/4	174 174	6 6	11-3/8 11-3/8	43 43	2630 2830

6 FPI

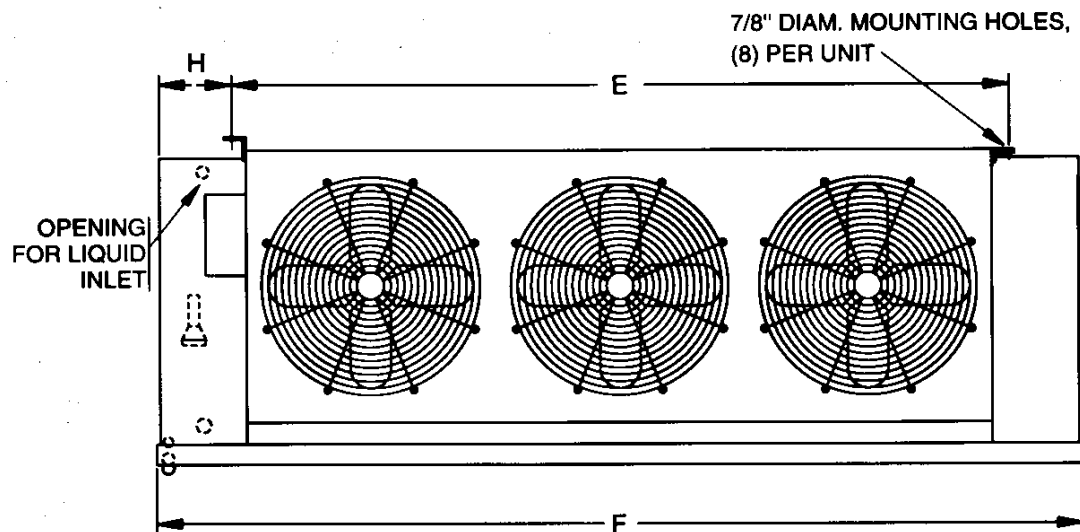
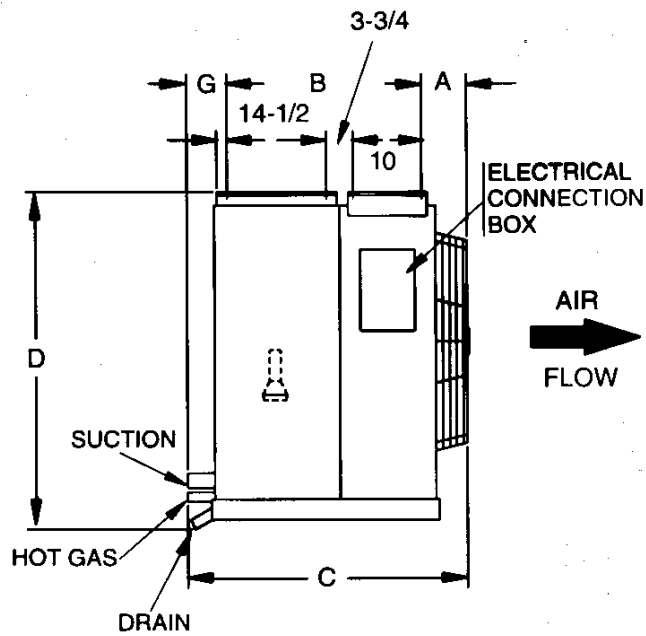
6. Based on R-22.

For your convenience the diagram(s) originally here has(have) been enlarged, and can be found just after this page in the Adobe document.



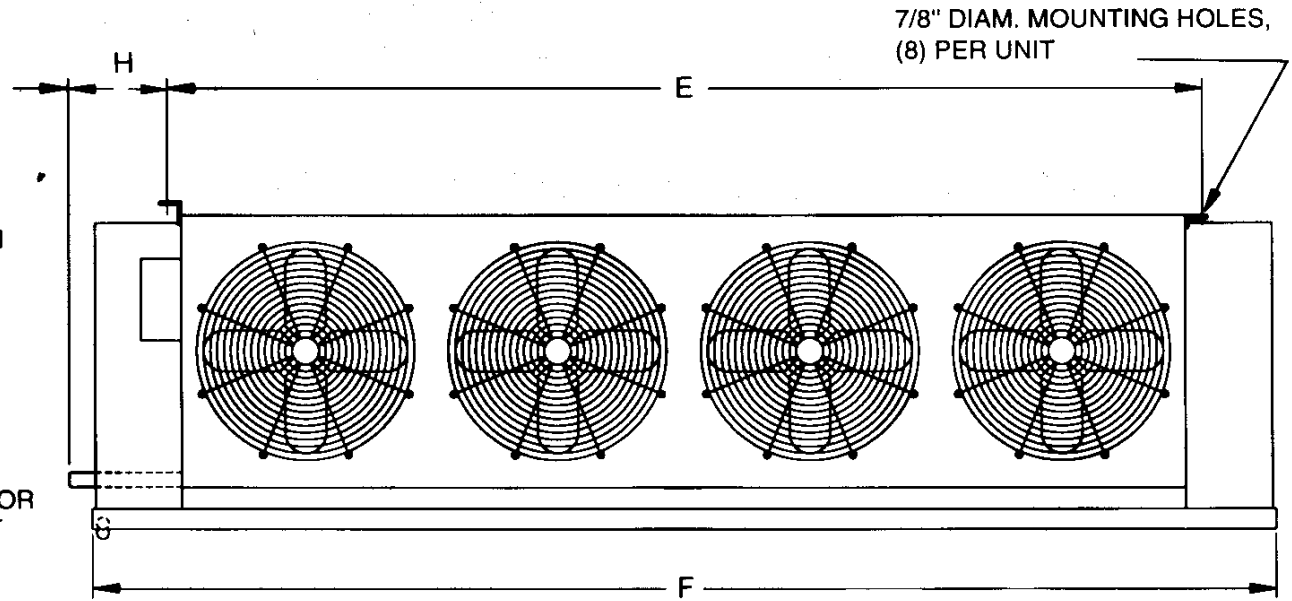
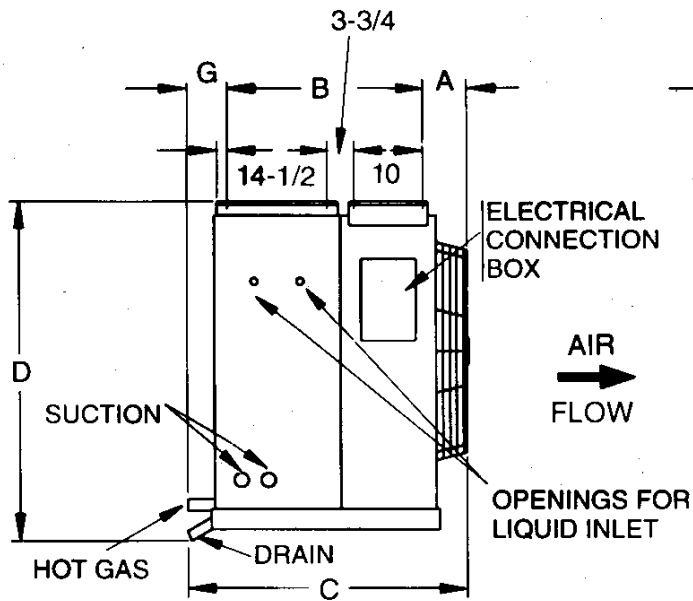
NOTES: LEFT HAND COIL IS SHOWN, AND IS STANDARD. RIGHT HAND COIL MUST BE SPECIFIED WHEN ORDERING. ALL DIMENSIONS ARE IN INCHES.

**MODELS: CTV-450, 620, 850, 1070, AND 1220**



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 ALL DIMENSIONS ARE IN INCHES.

**MODELS: CTV-1360, 1580, AND 1800**



NOTES: LEFT HAND COIL IS SHOWN, AND IS STANDARD. RIGHT HAND COIL MUST BE SPECIFIED WHEN ORDERING.  
ALL DIMENSIONS ARE IN INCHES.

**MODEL: CTV-2100**

Specifications and Dimensions are subject to change without notice.

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