CPC3 EVAPORATOR DATA

Rated according to CRMA code of practice

MODEL	CPC3-13	CPC3-17	CPC3-20	CPC3-26	CPC3-33	CPC3-37	CPC3-50	CPC3-60	CPC3-65	CPC3-80
CAPACITY R404A (@ -4°C SST)										
WATTS @ 6 KTD	1310	1700	2000	2680	3370	3790	5090	6060	6590	8070
CAPACITY R134a (@ -4°C SST)										
WATTS @ 6 KTD	1150	1380	1740	2150	2850	3310	4560	5080	5580	6940
* = Basic capacity Watts per degree temperature difference for use with capacity correction factors. Refer to application limits for min KTD allowed.										
CHARGE **										
R404A kg	0.74	1.08	1.41	1.44	2.10	2.15	2.78	4.00	4.42	5.65
R134a kg	0.82	1.21	1.57	1.61	2.33	2.39	3.09	4.45	4.92	6.28
** = 80% liquid and 20% vapour by volume including header and heat exchanger, at -4°C SST										
COIL ROWS	2	3	4	2	3	2	2	4	3	4
FAN DATA (300mm DIA.)										
NO. OF FANS	1	1	1	2	2	3	4	3	4	4
AIR FLOW l/s	380	360	340	760	720	1140	1520	1020	1440	1360
AIR THROW m	7.5	7	6.5	10.5	10	13	14	12	13.5	13
MOTOR DATA (240V 50Hz)										
TOTAL WATTS	73	73	73	146	146	219	292	219	292	292
TOTAL AMPS	0.32	0.32	0.32	0.64	0.64	0.96	1.28	0.96	1.28	1.28
WattHrs/24 Hrs	1752	1752	1752	3504	3504	5256	7008	5256	7008	7008

RECOMMENDED TX VALVE R404A										
DANFOSS	TS2-0.45(01)	TES2-0.45(01)	TES2-0.6(02)	TES2-0.6(02)	TES2-1.2(03)	TES2-1.2(03)	TES2-1.7(04)	TES2-1.7(04)	TES2-1.7(04)	TES2-2.2(05)
RECOMMENDED TX VALVE R134a										
DANFOSS	TN2-0.5(01)	TEN2-0.5(01)	TEN2-0.5(01)	TEN2-0.8(02)	TEN2-1.3(03)	TEN2-1.3(03)	TEN2-1.3(03)	TEN2-1.9(04)	TEN2-1.9(04)	TEN2-2.5(06)

R404A CAPACITY FACTOR AND APPLICATION LIMITS (80% RH)

SST	-10	-8	-6	-4	-2	0	2	4	6	9	12	15
R404A	**0.93**	**0.96**	**0.98**	**1.00**	**1.01**	**1.04**	**1.07**	**1.10**	**1.15**	**1.21**	**1.27**	**1.34**
MAX. KTD	9	9	9	10	10	9	9	9	8	**8**	**8**	**8**
MIN. KTD	3	3	3	3	3	3	3	4	4	**4**	**4**	**4**
max. RSHF	0.9	0.93	0.96	0.97	0.98	--	--	--	--	--	--	--
min. RSHF	0.75	0.72	0.7	0.68	0.66	--	--	--	--	--	--	--
LIMITATION-	NEW CIRCUITS AND/OR DISTRIB NEEDED IF OUTSIDE MAX OR MIN KTD.									NEW DISTRIB. >= 9°SST		

R134a CAPACITY FACTOR AND APPLICATION LIMITS (80% RH)

SST	-10	-8	-6	-4	-2	0	2	4	6	9	12	15
FACTOR	**0.92**	**0.95**	**0.98**	**1.00**	**1.01**	**1.03**	**1.05**	**1.08**	**1.11**	**1.16**	**1.23**	**1.31**
MAX. KTD	9	10	11	11	11	11	11	10	9	**8**	**7**	**6**
MIN. KTD	4	3	3	3	3	3	3	3	4	**4**	**4**	**4**
max. RSHF	0.93	0.96	0.98	0.99	1	--	--	--	--	--	--	--
min. RSHF	0.77	0.74	0.72	0.7	0.68	--	--	--	--	--	--	--
LIMITATION-	NEW CIRCUITS AND/OR DISTRIB NEEDED IF OUTSIDE MAX OR MIN KTD.									NEW DISTRIB. >= 9°SST		

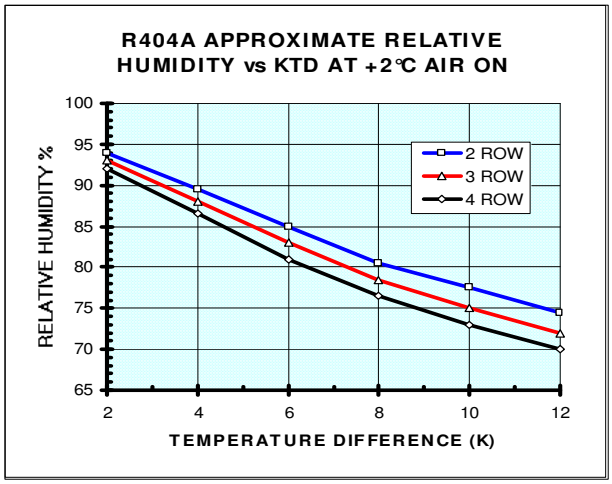
FIN CAPACITY CORRECTION FACTORS			
5FPI	**0.89**	COPPER FIN	1.022

STANDARD COILS ARE 6FPI ALUMINIUM. MULTIPLY RATED CAPACITY BY FACTOR TO FIND CAPACITY WITH REQUIRED FPI & MATERIAL.
APPLICATION LIMITS DO NOT CHANGE FOR 5FPI AND/OR COPPER COILS.

NOTES: CAPACITY FACTOR TABLES

1. CAPACITY FACTOR APPLIES TO SST AT 1KTD. ACTUAL CAPACITY =CAPACITY @ 1 KTD x FACTOR x KTD
2. THE LIMITS ON THIS CHART ARE INTENDED TO INDICATE THE MAXIMUM APPLICATION RANGE OF STANDARD CPC COILS.

CPC RELATIVE HUMIDITY DATA



NOTES: RELATIVE HUMIDITY GRAPHS

1. THE RELATIVE HUMIDITY IS AN EXPRESSION OF THE CONDITION MAINTAINED IN THE ROOM WHEN THE COIL BALANCES THE ROOM SENSIBLE AND LATENT HEAT LOADS, AND WHEN THE PRODUCT IS AT DESIRED TEMPERATURE.IT IS NOT A MEASURE OF THE CONDITION OF THE AIR COMING OFF THE COIL SURFACE.
2. THESE GRAPHS ARE APPROXIMATE, AS FACTORS SUCH AS OUTSIDE CONDITIONS, DOOR USAGE, LEAKAGE ETC WILL AFFECT THE CONDITIONS ACHIEVED.
3. THE GRAPH AND CORRECTIONS ARE ONLY DIRECTLY APPLICABLE AT THE GIVEN AIR ON CONDITION. CORRECTIONS ARE REQUIRED FOR OTHER

CPC3 DIMENSIONAL DATA

MODEL		CPC3-13	CPC3-17	CPC3-20	CPC3-26	CPC3-33	CPC3-37	CPC3-50	CPC3-60	CPC3-65	CPC3-80
DIMENSIONS	A	704	704	704	1084	1084	1084	1464	1464	1844	1844
	B	397	397	397	397	397	397	397	397	397	397
	C	260	260	260	260	260	260	260	260	260	260
	D	300	300	300	300	300	300	300	300	300	300
	E	439	439	439	819	819	819	819	819	1579	1579
SUCTION CONN. mm		9.52	12.7	12.7	15.88	15.88	19.05	19.05	19.05	22.2	22.2
LIQUID CONN. mm		6.35	6.35	6.35	6.35	6.35	9.52	9.52	9.52	12.7	12.7

* =outlet of liquid subcooler -- most recommended valves have 9.5 dia. inlet flare fitting
** = Frost Free flare nut. Distributors are venturi type.
*** = Tube for flaring or brazing. Liquid and Ext. Eq. lines are soldered together for testing and charging and must be separated on installation.
For Brass/Copper coils, add 50% to standard unpacked weight.

PERFORMANCE RATING BASIS OF CPC3 EVAPORATORS

1. CAPACITY- Based on CRMA Guidelines at 40°C entering liquid (inherent subcooling), +2°C air on, 80% RH, and 6KTD.
Capacity figure is Total Capacity (rated with wet fin surfaces).
KTD is defined as entering air temperature - leaving refrigerant Saturation temperature. Coils are in counterflow. 3K useful coil superheat assumed.
Rated Capacity is for 6fpi (standard) coils. Other fpi refer to capacity factor table.
2. AIRFLOW- Rated at standard air conditions (20°C dry air, 101.35kPa atmospheric pressure)
3. AIRTHROW- Based on CRMA guidelines. Measurements taken at 0.5, 0.75, and 1m from the ceiling at 20°C air. The distance at which the average of the 3 values equals 0.5m/s is taken as the limit of airthrow. Correction for +2°C room (0.94) is included.
4. Motor WattHrs per 24 hours- Taken as the total heat input per day (fans run continuously) for equipment selection purposes.
Value is motor wattage x 24.
5. T-X valve selection- Based on coil capacity at -4°C SST & 40°C liquid, 6KTD. , R404A based on 850kPa,
R134a based on 550kPa.