

**RATING CONDITIONS**

11.1 K Superheat  
 8.3 K Subcooling  
 35 C Ambient Air Over

50 Hz Operation

# AIR CONDITIONING

**ZR310KCE-TWD**

HFC-407C - Dew Pt  
 COPELAND SCROLL®  
 TWD 380/420-3-50

**Evaporating Temperature C (Sat Dew Pt Pressure, bar)**

		-20(2.2)	-15(2.6)	-10(3.2)	-5(3.9)	0(4.6)	5(5.5)	7(5.8)	10(6.4)	12.5(7)
<b>Condensing Temperature C (Sat Dew Pt Pressure, bar)</b>	65 (28) C						55500	60500	68500	76000
	P						28800	28800	28700	28800
	A						46.6	46.6	46.6	46.6
	M						398	430	482	528
	E						1.9	2.1	2.4	2.6
	%						59	61.1	64	66.1
	60 (25) C					49000	61000	66000	74500	82000
	P					25500	25400	25500	25500	25600
	A					42.1	42.1	42.1	42.1	42.2
	M					334	408	440	492	538
E					1.9	2.4	2.6	2.9	3.2	
%					58	63.5	65.4	67.8	69.4	
55 (22) C				42500	53500	66000	71500	80500	88500	
P				22600	22600	22600	22600	22700	22800	
A				38.1	38.2	38.2	38.3	38.3	38.4	
M				279	344	418	450	501	547	
E				1.9	2.4	2.9	3.2	3.5	3.9	
%				56.8	62.7	67.5	69	70.8	71.8	
50 (20) C			36500	46500	57500	71000	77000	86000	94500	
P			20000	19900	20000	20100	20200	20300	20500	
A			34.7	34.8	34.9	35	35.1	35.2	35.3	
M			231	288	352	426	459	510	556	
E			1.8	2.3	2.9	3.5	3.8	4.2	4.6	
%			55.3	61.6	66.8	70.6	71.6	72.5	72.7	
45 (18) C		31000	40000	50000	62000	76000	82000	92000	100500	
P		17600	17600	17700	17800	18000	18100	18300	18500	
A		31.8	32	32.1	32.2	32.4	32.5	32.6	32.8	
M		190	239	295	360	434	467	518	564	
E		1.8	2.3	2.8	3.5	4.2	4.5	5	5.5	
%		53.4	60.1	65.7	69.9	72.3	72.7	72.6	71.9	
40 (15) C	26100	34000	43000	53500	66000	80500	87000	97500	106500	
P	15600	15600	15700	15800	16000	16200	16400	16600	16800	
A	29.2	29.5	29.7	29.8	30	30.2	30.3	30.5	30.8	
M	155	197	246	303	368	442	474	526	571	
E	1.7	2.2	2.7	3.4	4.1	5	5.3	5.9	6.4	
%	51.1	58.1	64.1	68.7	71.6	72.3	72	70.6	68.8	
35 (13) C	28400	36500	46000	57500	70500	85500	92000	103000	112500	
P	13800	13900	14000	14200	14500	14800	14900	15100	15300	
A	27.3	27.6	27.8	28	28.2	28.5	28.6	28.8	29.1	
M	161	203	253	309	374	448	481	532	578	
E	2.1	2.6	3.3	4	4.9	5.8	6.2	6.8	7.3	
%	55.7	62	67	70.3	71.5	70.2	69	66.3	63.2	
30 (12) C	30500	39000	49000	61000	74500	90000	97000	108000	118000	
P	12300	12500	12700	12900	13200	13500	13700	13900	14100	
A	25.7	26	26.2	26.4	26.7	27	27.2	27.5	27.7	
M	166	209	258	315	380	455	487	539	585	
E	2.5	3.1	3.9	4.7	5.7	6.7	7.1	7.8	8.4	
%	59.4	64.7	68.4	70	69.2	65.7	63.5	59.2	54.7	
27 (11) C	32000	40500	51000	63000	77000	93000	100000	111500	121500	
P	11600	11700	12000	12200	12500	12900	13000	13200	13500	
A	24.9	25.2	25.4	25.6	25.9	26.2	26.4	26.7	27	
M	169	212	261	318	384	458	491	542	588	
E	2.8	3.5	4.3	5.2	6.1	7.2	7.7	8.4	9	
%	61	65.6	68.3	68.8	66.7	61.7	58.9	53.6	48.2	

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice. Current @ 400 V

**C:Capacity(Watts), P:Power(W), A:Current(Amps), M:Mass Flow(g/s), E:COP(W/W), %:Isentropic Efficiency(%)**