

**RATING CONDITIONS**

65 °F Return Gas  
 0 °F Subcooling  
 95 °F Ambient Air Over

60 Hz Operation

# HIGH TEMPERATURE

**ZF33K4E-TWD**

HFC-134A  
 COPELAND SCROLL®  
 TWD 460-3-60

**Evaporating Temperature °F (Sat Dew Pt Pressure, psig)**

		-10(1.9)	-5(4.1)	0(6.5)	5(9.1)	10(12)	15(15)	20(18)	25(22)	30(26)	35(30)	40(35)	45(40)
<b>Condensing Temperature °F (Sat Dew Pt Pressure, psig)</b>	140 (229)C				30000	33800	37900	42400	47300	52500	58500	65000	71500
	P				6850	7100	7350	7600	7850	8100	8400	8650	8900
	A				12.2	12.5	12.7	13	13.3	13.6	13.9	14.2	14.5
	M				530	605	685	770	865	965	1080	1200	1340
	E				4.4	4.8	5.2	5.6	6	6.5	7	7.5	8
	%				55.5	57.3	58.7	60	60.9	61.6	62	62.2	62.1
	130 (199)C	22300	25300	28700	32400	36400	40800	45600	51000	56500	63000	69500	76500
	P	5750	5950	6150	6400	6600	6850	7100	7300	7550	7800	8050	8350
	A	11.1	11.3	11.5	11.7	11.9	12.2	12.4	12.7	13	13.2	13.5	13.8
	M	354	411	472	540	610	690	775	865	970	1080	1200	1330
	E	3.9	4.3	4.7	5.1	5.5	6	6.4	6.9	7.5	8	8.6	9.2
	%	50	52.8	55	56.9	58.3	59.5	60.4	60.9	61.2	61.3	60.9	60.4
	120 (171)C	23900	27100	30700	34600	38900	43600	48800	54500	60500	67000	74000	81500
P	5350	5500	5750	5950	6150	6350	6600	6850	7050	7300	7550	7800	
A	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.2	12.4	12.7	13	13.2	
M	360	417	478	545	615	695	775	870	970	1080	1200	1340	
E	4.5	4.9	5.4	5.8	6.3	6.8	7.4	8	8.6	9.2	9.8	10.5	
%	51.7	54.3	56.2	57.8	58.9	59.7	60.2	60.4	60.3	59.8	59.1	58.1	
110 (146)C	25400	28900	32600	36800	41400	46400	52000	57500	64000	71000	78500	86500	
P	4950	5150	5350	5500	5750	5950	6150	6350	6600	6800	7050	7250	
A	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.2	12.4	12.7	
M	365	422	483	550	620	695	780	875	975	1080	1210	1340	
E	5.1	5.6	6.1	6.7	7.2	7.8	8.4	9.1	9.7	10.4	11.2	11.9	
%	52.9	55.2	56.9	58.2	59	59.4	59.5	59.2	58.6	57.8	56.5	54.9	
105 (135)C	26200	29700	33600	37900	42600	47700	53500	59500	66000	73000	81000	89000	
P	4770	4950	5150	5350	5500	5700	5950	6150	6350	6600	6800	7050	
A	10.2	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.2	12.4	
M	367	424	485	550	620	700	785	875	975	1090	1210	1340	
E	5.5	6	6.5	7.1	7.7	8.3	9	9.7	10.4	11.1	11.9	12.7	
%	53.2	55.5	57.1	58.2	58.8	59	58.8	58.4	57.6	56.4	54.9	53	
100 (124)C	26900	30500	34500	38900	43800	49000	55000	61000	68000	75000	83000	91500	
P	4590	4770	4950	5150	5300	5500	5700	5900	6150	6350	6550	6800	
A	10	10.2	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.2	
M	368	425	487	555	625	700	785	875	980	1090	1210	1340	
E	5.9	6.4	7	7.6	8.2	8.9	9.6	10.3	11.1	11.8	12.7	13.5	
%	53.4	55.6	57	58	58.4	58.4	58.1	57.4	56.3	54.8	53	50.8	
90 (104)C	28300	32100	36300	41000	46100	51500	57500	64500	71500	79000	87500	96500	
P	4260	4420	4580	4760	4930	5100	5300	5500	5700	5900	6100	6300	
A	9.7	9.9	10	10.2	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7	
M	368	427	488	555	625	705	790	880	980	1090	1210	1340	
E	6.6	7.3	7.9	8.6	9.3	10.1	10.9	11.7	12.6	13.4	14.3	15.3	
%	53.3	55.3	56.5	57.1	57.1	56.7	55.9	54.7	53	51	48.5	45.6	
80 (87)C	29600	33600	38100	43000	48300	54000	60500	67500	75000	83000	91500		
P	3930	4080	4230	4390	4550	4720	4890	5050	5250	5450	5650		
A	9.5	9.6	9.7	9.8	10	10.1	10.3	10.5	10.6	10.8	11		
M	366	425	488	555	625	705	790	880	980	1090	1210		
E	7.5	8.3	9	9.8	10.6	11.5	12.4	13.3	14.3	15.3	16.3		
%	52.5	54.3	55.2	55.5	55.1	54.3	52.9	51.1	48.8	46	42.8		
70 (71)C	30900	35100	39800	44900	50500	56500	63500	70500	78500	87000			
P	3600	3730	3870	4020	4170	4320	4480	4640	4810	4990			
A	9.2	9.3	9.4	9.5	9.6	9.8	9.9	10.1	10.2	10.4			
M	360	420	484	550	625	705	790	880	980	1090			
E	8.6	9.4	10.3	11.2	12.1	13.1	14.1	15.2	16.3	17.4			
%	50.9	52.5	53.2	53.1	52.3	50.9	48.9	46.4	43.3	39.7			

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice. Current @ 460 V

**C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %:Isentropic Efficiency(%)**