

# VAPOR TEMPERATURE CHART

R409A		TEMP	
LIQUID	VAPOR	F	C
0.2	9.9	-30	-34.4
1.8	7.0	-25	-31.7
3.9	3.8	-20	-28.9
6.2	0.3	-15	-26.1
8.7	1.7	-10	-23.3
11.4	3.8	-5	-20.6
14.4	6.1	0	-17.8
17.6	8.6	5	-15.0
21.1	11.4	10	-12.2
24.9	14.4	15	-9.4
29.0	17.6	20	-6.7
33.4	21.2	25	-3.9
38.1	25.0	30	-1.1
43.2	29.2	35	1.7
48.6	33.6	40	4.4
54.4	38.5	45	7.2
60.6	43.6	50	10.0
67.2	49.2	55	12.8
74.2	55.2	60	15.6
81.7	61.5	65	18.3
89.6	68.4	70	21.1
98.0	75.6	75	23.9
107	83.4	80	26.7
116	91.6	85	29.4
126	100	90	32.2
137	110	95	35.0
148	120	100	37.8
159	130	105	40.6
172	141	110	43.3
184	153	115	46.1
198	165	120	48.9
212	178	125	51.7
227	192	130	54.4
242	207	135	57.2
258	222	140	60.0

TEMP		R422D	
F	C	LIQUID	VAPOR
-40	-40.0	2.4	1.2
-35	-37.2	4.6	0.8
-30	-34.4	7.1	3.0
-25	-31.7	9.9	5.4
-20	-28.9	12.9	8.1
-15	-26.1	16.2	11.0
-10	-23.3	19.8	14.3
-5	-20.6	23.7	17.8
0	-17.8	27.9	21.7
5	-15.0	32.5	25.8
10	-12.2	37.5	30.4
15	-9.4	42.8	35.3
20	-6.7	48.5	40.7
25	-3.9	54.7	46.4
30	-1.1	61.3	52.6
35	1.7	68.4	59.3
40	4.4	75.9	66.4
45	7.2	84.0	74.0
50	10.0	92.6	82.2
55	12.8	102	90.9
60	15.6	111	100
65	18.3	122	110
70	21.1	133	121
75	23.9	144	132
80	26.7	156	144
85	29.4	169	156
90	32.2	183	170
95	35.0	197	184
100	37.8	212	198
105	40.6	228	214
110	43.3	245	231
115	46.1	262	248
120	48.9	281	266
125	51.7	300	286
130	54.4	320	306
135	57.2	341	327
140	60.0	364	350
145	62.8	387	373
150	65.6	411	398

TEMP		R404A	R507	R502	R402A	R402B	R408A
F	C						
-40	-40.0	4.3	5.5	4.1	6.3	3.6	2.8
-35	-37.2	6.8	8.2	6.5	9.1	6.0	5.1
-30	-34.4	9.5	11.1	9.2	12.1	9.0	7.6
-25	-31.7	12.5	14.3	12.1	15.4	12.0	10.4
-20	-28.9	15.7	17.8	15.3	18.9	15.4	13.5
-15	-26.1	19.3	21.7	18.8	22.9	18.6	16.8
-10	-23.3	23.2	25.8	22.6	27.1	22.6	20.4
-5	-20.6	27.5	30.3	26.7	31.7	27.0	24.4
0	-17.8	32.1	35.2	31.1	36.7	31.0	28.7
5	-15.0	37.0	40.5	35.9	42.1	36.0	33.3
10	-12.2	42.4	46.1	41.0	48.0	42.0	38.3
15	-9.4	48.2	52.2	46.5	54.2	47.0	43.7
20	-6.7	54.5	58.8	52.4	60.9	54.0	49.5
25	-3.9	61.2	65.8	58.8	68.1	60.0	55.8
30	-1.1	68.4	73.3	65.6	75.8	67.0	62.5
35	1.7	76.1	81.3	72.8	84.0	75.0	69.7
40	4.4	84.4	89.8	80.5	92.8	83.4	77.4
45	7.2	93.2	98.9	88.7	102	91.6	85.6
50	10.0	103	109	97.4	112	100	94.3
55	12.8	113	119	107	123	110	104
60	15.6	123	130	116	134	120	114
65	18.3	135	141	127	146	133	124
70	21.1	147	154	138	158	143	135
75	23.9	159	167	149	171	155	147
80	26.7	173	180	161	185	170	159
85	29.4	187	195	174	200	183	173
90	32.2	202	210	187	215	198	186
95	35.0	218	226	201	232	213	201
100	37.8	234	244	216	249	230	217
105	40.6	252	262	232	267	247	233
110	43.3	270	281	248	286	262	250
115	46.1	289	301	265	305	283	268
120	48.9	310	322	283	326	303	287
125	51.7	331	344	301	347	323	307
130	54.4	353	368	321	370	345	327
135	57.2	377	393	341	393	-	349
140	60.0	401	419	363	418	-	372
145	62.8	426	446	-	443	-	-
150	65.6	453	475	-	470	-	-

# VAPOR TEMPERATURE CHART



## HUDSON REFRIGERANTS

PRESSURE TEMPERATURE CHART  
VAPOR TEMPERATURE CHART



# PRESSURE TEMPERATURE CHART

TEMP		R11	R113	R114	R123	R124	R500
F	C						
-20	-28.9	27.0	29.1	22.9	27.8	16.1	3.2
-15	-26.1	26.5	28.9	21.8	27.4	14.1	5.4
-10	-23.3	26.0	28.7	20.6	26.9	12.0	7.8
-5	-20.6	25.4	28.5	19.3	26.4	9.6	10.4
0	-17.8	24.7	28.2	17.8	25.9	6.9	13.3
5	-15.0	23.9	27.9	16.2	25.2	3.9	16.4
10	-12.2	23.1	27.6	14.4	24.5	0.6	19.7
15	-9.4	22.1	27.2	12.4	23.8	1.6	23.4
20	-6.7	21.1	26.8	10.2	22.8	3.5	27.3
25	-3.9	19.9	26.3	7.8	21.8	5.7	31.5
30	-1.1	18.6	25.8	5.2	20.7	8.1	36.0
35	1.7	17.2	25.2	2.3	19.5	10.5	40.9
40	4.4	15.6	24.5	0.4	18.1	13.2	46.1
45	7.2	13.9	23.8	2.0	16.6	16.1	51.6
50	10.0	12.0	22.9	3.8	14.9	19.2	57.6
55	12.8	10.0	22.2	5.8	13.0	22.6	63.9
60	15.6	7.8	21.0	7.9	11.2	26.3	70.6
65	18.3	5.4	19.9	10.1	8.9	30.2	77.8
70	21.1	2.8	18.7	12.6	6.5	34.4	85.4
75	23.9	0.0	17.3	15.2	4.1	38.9	93.5
80	26.7	1.5	15.9	18.0	1.2	43.7	102
85	29.4	3.2	14.3	20.9	0.9	48.8	111
90	32.2	4.9	12.5	24.1	2.5	54.2	121
95	35.0	6.8	10.6	27.5	4.3	60.0	131
100	37.8	8.8	8.6	31.2	6.1	66.1	141
105	40.6	10.9	6.4	35.0	8.1	72.6	152
110	43.3	13.2	4.0	39.1	10.3	79.5	164
115	46.1	15.6	1.4	43.4	12.6	86.8	177
120	48.9	18.2	0.7	48.0	15.1	94.5	189
125	51.7	21.0	2.2	52.8	17.8	103	203
130	54.4	24.0	3.7	58.0	20.6	111	217
135	57.2	27.1	5.4	63.4	23.6	120	232
140	60.0	30.4	7.2	69.1	26.8	130	248
145	62.8	34.0	9.2	75.1	30.2	140	-
150	65.6	37.7	11.2	81.4	33.9	150	-

TEMP		R13	R23	R503	R508B
F	C				
-120	-84.4	4.5	4.0	3.1	3.1
-115	-81.7	0.3	0.3	6.0	6.0
-110	-78.9	2.1	2.9	9.3	9.3
-105	-76.1	4.7	5.8	12.9	12.9
-100	-73.3	7.6	9.0	16.9	16.9
-95	-70.6	10.8	12.7	21.4	21.4
-90	-67.8	14.3	16.7	26.3	26.4
-85	-65.0	18.2	21.3	31.8	31.8
-80	-62.2	22.5	26.3	37.7	37.8
-75	-59.4	27.2	31.8	44.2	44.4
-70	-56.7	32.3	37.9	51.3	51.5
-65	-53.9	37.8	44.6	59.0	59.3
-60	-51.1	43.9	52.0	67.3	67.8
-55	-48.3	50.4	60.0	76.4	76.9
-50	-45.6	57.5	68.7	86.1	86.8
-45	-42.8	65.1	78.1	96.6	97.5
-40	-40.0	73.3	88.3	108	109
-35	-37.2	82.1	99.4	120	121
-30	-34.4	91.6	111	133	135
-25	-31.7	102	124	147	149
-20	-28.9	113	138	161	164

Vapor Pressure-psig  
In Vacuum inches in Hg

TEMP		R22	R407C		R410A
F	C		LIQUID	VAPOR	
-40	-40.0	0.5	3.0	4.4	11.6
-35	-37.2	2.6	5.4	0.6	14.9
-30	-34.4	4.9	8.0	1.8	18.5
-25	-31.7	7.4	10.9	4.1	22.5
-20	-28.9	10.1	14.1	6.6	26.9
-15	-26.1	13.2	17.6	9.4	31.7
-10	-23.3	16.5	21.3	12.5	36.8
-5	-20.6	20.1	25.4	15.9	42.5
0	-17.8	24.0	29.9	19.6	48.6
5	-15.0	28.2	34.7	23.6	55.2
10	-12.2	32.8	39.9	28.0	62.3
15	-9.4	37.7	45.6	32.8	70.0
20	-6.7	43.0	51.6	38.0	78.3
25	-3.9	48.8	58.2	43.6	87.3
30	-1.1	54.9	65.2	49.6	96.8
35	1.7	61.5	72.6	56.1	107
40	4.4	68.5	80.7	63.1	118
45	7.2	76.0	89.2	70.6	130
50	10.0	84.0	98.3	78.7	142
55	12.8	92.6	108	87.3	155
60	15.6	102	118	96.8	170
65	18.3	111	129	106	185
70	21.1	121	141	117	201
75	23.9	132	153	128	217
80	26.7	144	166	140	235
85	29.4	156	180	153	254
90	32.2	168	195	166	274
95	35.0	182	210	181	295
100	37.8	196	226	196	317
105	40.6	211	243	211	340
110	43.3	226	261	229	365
115	46.1	243	280	247	391
120	48.9	260	300	266	418
125	51.7	278	321	286	446
130	54.4	297	342	307	476
135	57.2	317	365	329	507
140	60.0	337	389	353	539
145	62.8	359	-	-	573
150	65.6	382	-	-	608

TEMP		R12	R134A	R401A		R401B	
F	C			LIQUID	VAPOR	LIQUID	VAPOR
-40	-40.0	11.0	14.8	8.1	13.2	6.5	11.8
-35	-37.2	8.4	12.5	5.1	10.7	3.3	9.1
-30	-34.4	5.5	9.9	1.7	7.9	0.2	6.1
-25	-31.7	2.3	6.9	1.0	4.8	2.1	2.8
-20	-28.9	0.6	3.7	3.0	1.4	4.3	0.5
-15	-26.1	2.4	0.6	5.2	1.2	6.6	2.5
-10	-23.3	4.5	1.9	7.7	3.3	9.2	4.7
-5	-20.6	6.7	4.0	10.3	5.5	12.0	7.1
0	-17.8	9.2	6.5	13.2	8.0	15.1	9.7
5	-15.0	11.8	9.1	16.3	10.7	18.4	12.6
10	-12.2	14.6	11.9	19.7	13.7	22.0	15.8
15	-9.4	17.7	15.0	23.4	16.9	25.9	19.2
20	-6.7	21.0	18.4	27.4	20.4	30.1	23.0
25	-3.9	24.6	22.1	31.7	24.2	34.6	27.0
30	-1.1	28.5	26.1	36.4	28.3	39.5	31.4
35	1.7	32.6	30.4	41.3	32.8	44.8	36.1
40	4.4	37.0	35.0	46.6	37.6	50.4	41.1
45	7.2	41.7	40.1	52.4	42.7	56.4	46.6
50	10.0	46.7	45.5	58.5	48.2	62.8	52.4
55	12.8	52.0	51.3	65.0	54.1	69.6	58.7
60	15.6	57.7	57.5	71.9	60.4	76.9	65.4
65	18.3	63.8	64.1	79.3	67.2	84.7	72.5
70	21.1	70.2	71.2	87.1	74.4	92.9	80.1
75	23.9	77.0	78.8	95.4	82.1	102	88.2
80	26.7	84.2	86.8	104	90.2	111	96.8
85	29.4	91.8	95.4	114	98.9	121	106
90	32.2	99.8	104	123	108	131	116
95	35.0	108	114	134	118	142	126
100	37.8	117	124	145	128	153	137
105	40.6	127	135	156	139	166	148
110	43.3	136	147	169	151	178	160
115	46.1	147	159	181	163	192	173
120	48.9	158	171	195	176	206	187
125	51.7	169	185	209	189	220	201
130	54.4	181	199	224	203	236	216
135	57.2	194	214	239	218	252	231
140	60.0	207	229	255	234	269	248
145	62.8	220	246	272	250	287	265
150	65.6	234	263	290	267	305	283

# PRESSURE TEMPERATURE CHART