

# TEMPERATURE - PRESSURE CHART AIR CONDITIONING & CHILLER



www.sporlanonline.com

At Sea Level, psig

TEMP.		REFRIGERANT TYPE (SAFETY CLASS) REFRIGERANT (SPORLAN LETTER CODE)							
°F	°C	HCFC (A1) 22(V)	HFC (A1) 407C(N)	HFC (A1) 410A(N)	HFC (A2L) 32(H)	HFC (A1) 134a(J)	HFO (A1) 450A(Q)	HFO (A1) 513A(J)	HFC (A2L) 1234ze(C)
-50	-45.6	6.1	<b>11.0</b>	4.9	5.2	18.7	20.3	16.2	21.9
-45	-42.8	2.7	<b>8.0</b>	7.6	8.0	16.9	18.8	14.0	20.6
-40	-40.0	0.6	<b>4.6</b>	10.7	11.0	14.8	17.0	11.6	19.1
-35	-37.2	2.6	<b>0.9</b>	14.0	14.4	12.5	15.0	9.0	17.4
-30	-34.4	4.9	<b>1.6</b>	17.7	18.2	9.8	12.7	6.0	15.4
-29	-33.9	5.4	<b>2.1</b>	18.5	19.0	9.3	12.2	5.4	15.0
-28	-33.3	5.9	<b>2.5</b>	19.3	19.8	8.7	11.7	4.7	14.6
-27	-32.8	6.4	<b>3.0</b>	20.1	20.6	8.1	11.2	4.1	14.2
-26	-32.2	6.9	<b>3.5</b>	20.9	21.5	7.5	10.7	3.4	13.7
-25	-31.7	7.4	<b>3.9</b>	21.8	22.3	6.9	10.2	2.7	13.3
-24	-31.1	8.0	<b>4.4</b>	22.6	23.2	6.3	9.6	2.0	12.8
-23	-30.6	8.5	<b>4.9</b>	23.5	24.1	5.7	9.1	1.3	12.4
-22	-30.0	9.1	<b>5.4</b>	24.4	25.0	5.0	8.5	0.6	11.9
-21	-29.4	9.6	<b>5.9</b>	25.3	25.9	4.3	7.9	0.1	11.4
-20	-28.9	10.2	<b>6.5</b>	26.2	26.8	3.7	7.4	0.5	10.9
-19	-28.3	10.8	<b>7.0</b>	27.1	27.8	3.0	6.8	0.8	10.4
-18	-27.8	11.4	<b>7.6</b>	28.1	28.7	2.3	6.1	1.2	9.9
-17	-27.2	12.0	<b>8.1</b>	29.0	29.7	1.5	5.5	1.6	9.3
-16	-26.7	12.6	<b>8.7</b>	30.0	30.7	0.8	4.9	2.0	8.8
-15	-26.1	13.2	<b>9.3</b>	31.0	31.7	0.1	4.2	2.4	8.2
-14	-25.6	13.9	<b>9.9</b>	32.0	32.8	0.4	3.6	2.8	7.7
-13	-25.0	14.5	<b>10.5</b>	33.1	33.8	0.7	2.9	3.3	7.1
-12	-24.4	15.2	<b>11.1</b>	34.1	34.9	1.1	2.2	3.7	6.5
-11	-23.9	15.9	<b>11.7</b>	35.2	36.0	1.5	1.5	4.2	5.9
-10	-23.3	16.5	<b>12.3</b>	36.3	37.1	1.9	0.8	4.6	5.3
-9	-22.8	17.2	<b>13.0</b>	37.4	38.2	2.4	0.0	5.1	4.6
-8	-22.2	17.9	<b>13.7</b>	38.5	39.4	2.8	0.8	5.5	4.0
-7	-21.7	18.7	<b>14.3</b>	39.7	40.5	3.2	1.1	6.0	3.4
-6	-21.1	19.4	<b>15.0</b>	40.8	41.7	3.6	1.5	6.5	2.7
-5	-20.6	20.1	<b>15.7</b>	42.0	42.9	4.1	1.9	7.0	2.0
-4	-20.0	20.9	<b>16.4</b>	43.2	44.2	4.6	2.3	7.5	1.3
-3	-19.4	21.7	<b>17.2</b>	44.4	45.4	5.0	2.8	8.0	0.6
-2	-18.9	22.4	<b>17.9</b>	45.7	46.7	5.5	3.2	8.5	0.1
-1	-18.3	23.2	<b>18.7</b>	46.9	47.9	6.0	3.6	9.0	0.4
0	-17.8	24.0	<b>19.4</b>	48.2	49.3	6.5	3.6	9.6	0.8
1	-17.2	24.9	<b>20.2</b>	49.5	50.6	7.0	4.0	10.1	1.2
2	-16.7	25.7	<b>21.0</b>	50.8	51.9	7.5	4.4	10.7	1.5
3	-16.1	26.5	<b>21.8</b>	52.2	53.3	8.0	4.9	11.3	1.9
4	-15.6	27.4	<b>22.6</b>	53.5	54.7	8.5	5.3	11.8	2.3
5	-15.0	28.3	<b>23.5</b>	54.9	56.1	9.1	5.8	12.4	2.7
6	-14.4	29.2	<b>24.3</b>	56.3	57.5	9.6	6.3	13.0	3.1
7	-13.9	30.1	<b>25.2</b>	57.8	59.0	10.2	6.8	13.6	3.5
8	-13.3	31.0	<b>26.1</b>	59.2	60.5	10.8	7.3	14.2	4.0
9	-12.8	31.9	<b>27.0</b>	60.7	62.0	11.3	7.8	14.9	4.4

TEMP.		REFRIGERANT TYPE (SAFETY CLASS) REFRIGERANT (SPORLAN LETTER CODE)							
°F	°C	HCFC (A1) 22(V)	HFC (A1) 407C(N)	HFC (A1) 410A(N)	HFC (A2L) 32(H)	HFC (A1) 134a(J)	HFO (A1) 450A(Q)	HFO (A1) 513A(J)	HFC (A2L) 1234ze(C)
10	-12.2	32.8	27.9	62.2	63.5	11.9	8.3	15.5	4.8
11	-11.7	33.8	28.8	63.7	65.0	12.5	8.8	16.2	5.3
12	-11.1	34.8	29.8	65.2	66.6	13.1	9.3	16.8	5.8
13	-10.6	35.8	30.7	66.8	68.2	13.8	9.9	17.5	6.2
14	-10.0	36.8	31.7	68.4	69.8	14.4	10.4	18.2	6.7
15	-9.4	37.8	32.7	70.0	71.4	15.0	11.0	18.9	7.2
16	-8.9	38.8	33.7	71.6	73.1	15.7	11.6	19.6	7.7
17	-8.3	39.9	34.7	73.3	74.8	16.4	12.1	20.3	8.2
18	-7.8	40.9	35.7	74.9	76.5	17.0	12.7	21.0	8.7
19	-7.2	42.0	36.8	76.6	78.3	17.7	13.3	21.7	9.2
20	-6.7	43.1	37.9	78.4	80.0	18.4	13.9	22.5	9.7
21	-6.1	44.2	39.0	80.1	81.8	19.1	14.6	23.3	10.2
22	-5.6	45.3	40.1	81.9	83.6	19.9	15.2	24.0	10.8
23	-5.0	46.5	41.2	83.7	85.5	20.6	15.8	24.8	11.3
24	-4.4	47.6	42.3	85.5	87.3	21.3	16.5	25.6	11.9
25	-3.9	48.8	43.5	87.4	89.2	22.1	17.1	26.4	12.5
26	-3.3	50.0	44.7	89.2	91.1	22.9	17.8	27.2	13.0
27	-2.8	51.2	45.9	91.1	93.1	23.7	18.5	28.1	13.6
28	-2.2	52.4	47.1	93.1	95.1	24.5	19.2	28.9	14.2
29	-1.7	53.7	48.3	95.0	97.1	25.3	19.9	29.8	14.8
30	-1.1	55.0	49.6	97.0	99.1	26.1	20.6	30.7	15.4
31	-0.6	56.2	50.8	99.0	101.2	26.9	21.3	31.5	16.1
32	0.0	57.5	52.1	101.1	103.2	27.8	22.1	32.4	16.7
33	0.6	58.8	53.4	103.1	105.3	28.6	22.8	33.4	17.4
34	1.1	60.2	54.8	105.2	107.5	29.5	23.6	34.3	18.0
35	1.7	61.5	56.1	107.3	109.7	30.4	24.4	35.2	18.7
36	2.2	62.9	57.5	109.5	111.9	31.3	25.1	36.2	19.4
37	2.8	64.3	58.9	111.7	114.1	32.2	25.9	37.2	20.1
38	3.3	65.7	60.3	113.9	116.3	33.1	26.7	38.1	20.8
39	3.9	67.1	61.7	116.1	118.6	34.1	27.6	39.1	21.5
40	4.4	68.6	63.2	118.4	121.0	35.0	28.4	40.1	22.2
41	5.0	70.0	64.6	120.6	123.3	36.0	29.2	41.2	22.9
42	5.6	71.5	66.1	123.0	125.7	37.0	30.1	42.2	23.7
43	6.1	73.0	67.6	125.3	128.1	38.0	31.0	43.3	24.4
44	6.7	74.5	69.2	127.7	130.5	39.0	31.9	44.3	25.2
45	7.2	76.1	70.7	130.1	133.0	40.1	32.8	45.4	26.0
46	7.8	77.6	72.3	132.6	135.5	41.1	33.7	46.5	26.8
48	8.9	80.8	75.5	137.5	140.6	43.2	35.5	48.8	28.4
50	10.0	84.1	78.8	142.6	145.8	45.4	37.5	51.1	30.0
52	11.1	87.4	101.7	148.4	151.2	47.7	40.6	53.4	31.7
54	12.2	90.8	105.6	153.8	156.7	50.0	42.7	55.9	33.5
55	12.8	92.6	107.6	156.5	159.5	51.2	43.7	57.1	34.4
56	13.3	94.4	109.6	159.3	162.4	52.4	44.8	58.4	35.3
58	14.4	98.0	113.7	164.9	168.1	54.9	47.0	60.9	37.2

TEMP.		REFRIGERANT TYPE (SAFETY CLASS) REFRIGERANT (SPORLAN LETTER CODE)							
°F	°C	HCFC (A1) 22(V)	HFC (A1) 407C(N)	HFC (A1) 410A(N)	HFC (A2L) 32(H)	HFC (A1) 134a(J)	HFO (A1) 450A(Q)	HFO (A1) 513A(J)	HFC (A2L) 1234ze(C)
60	15.6	101.6	117.9	170.7	174.0	57.4	49.2	63.5	39.1
62	16.7	105.4	122.3	176.6	180.1	60.0	51.5	66.2	41.1
64	17.8	109.3	126.7	182.7	186.3	62.7	53.9	69.0	43.1
65	18.3	111.2	128.9	185.8	189.5	64.0	55.1	70.4	44.1
66	18.9	113.2	131.2	188.9	192.7	65.4	56.3	71.9	45.2
68	20.0	117.3	135.8	195.3	199.2	68.2	58.8	74.8	47.3
70	21.1	121.4	140.5	201.8	205.8	71.1	61.4	77.7	49.5
72	22.2	125.7	145.4	208.4	212.6	74.1	64.0	80.8	51.7
74	23.3	130.0	150.3	215.2	219.6	77.1	66.7	83.9	54.0
75	23.9	132.2	152.8	218.7	223.2	78.7	68.1	85.5	55.2
76	24.4	134.5	155.4	222.2	226.7	80.2	69.5	87.2	56.4
78	25.6	139.0	160.5	229.3	234.0	83.4	72.3	90.4	58.8
80	26.7	143.6	165.8	236.5	241.5	86.7	75.2	93.8	61.3
82	27.8	148.4	171.2	244.0	249.1	90.0	78.2	97.3	63.9
84	28.9	153.2	176.8	251.6	256.9	93.5	81.2	100.8	66.5
85	29.4	155.7	179.6	255.4	260.9	95.2	82.8	102.6	67.8
86	30.0	158.2	182.4	259.3	264.9	97.0	84.4	104.4	69.2
88	31.1	163.2	188.2	267.3	273.0	100.6	87.6	108.1	71.9
90	32.2	168.4	194.1	275.4	281.3	104.3	90.9	111.9	74.8
92	33.3	173.7	200.1	283.6	289.8	108.1	94.2	115.7	77.6
94	34.4	179.1	206.3	292.1	298.5	112.0	97.7	119.7	80.6
95	35.0	181.8	209.4	296.4	302.9	114.0	99.4	121.7	82.1
96	35.6	184.6	212.5	300.7	307.4	115.9	101.2	123.8	83.6
98	36.7	190.2	219.0	309.5	316.4	120.0	104.8	127.9	86.7
100	37.8	195.9	225.5	318.5	325.7	124.2	108.5	132.1	89.9
102	38.9	201.8	232.2	327.7	335.1	128.4	112.2	136.4	93.1
104	40.0	207.7	239.0	337.1	344.8	132.7	116.1	140.9	96.5
105	40.6	210.8	242.4	341.9	349.6	135.0	118.1	143.1	98.2
106	41.1	213.8	245.9	346.7	354.6	137.2	120.0	145.4	99.9
108	42.2	220.0	253.0	356.5	364.6	141.7	124.1	150.0	103.3
110	43.3	226.4	260.3	366.4	374.9	146.4	128.2	154.7	106.9
112	44.4	232.8	267.6	376.6	385.3	151.1	132.4	159.5	110.5
114	45.6	239.4	275.1	387.0	396.0	156.0	13		