

RS-53 (R470A) PRESSURE & TEMPERATURE TABLE : ABSOLUTE



TEMPERATURE	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)
	(kPa)	(kPa)	(bara)	(bara)	(psia)	(psia)
-80.00	103.53	22.04	1.04	0.22	15.01	3.20
-78.00	109.22	23.71	1.09	0.24	15.84	3.44
-76.00	115.15	25.48	1.15	0.25	16.70	3.69
-74.00	121.33	27.36	1.21	0.27	17.59	3.97
-72.00	127.76	29.35	1.28	0.29	18.53	4.26
-70.00	134.45	31.46	1.34	0.31	19.50	4.56
-68.00	141.40	33.69	1.41	0.34	20.50	4.89
-66.00	148.63	36.05	1.49	0.36	21.55	5.23
-64.00	156.14	38.54	1.56	0.39	22.64	5.59
-62.00	163.94	41.17	1.64	0.41	23.77	5.97
-60.00	172.03	43.95	1.72	0.44	24.94	6.37
-58.00	180.42	46.87	1.80	0.47	26.16	6.80
-56.00	189.12	49.95	1.89	0.50	27.42	7.24
-54.00	198.14	53.19	1.98	0.53	28.73	7.71
-52.00	207.48	56.60	2.07	0.57	30.08	8.21
-50.00	217.15	60.18	2.17	0.60	31.49	8.73
-48.00	227.15	63.94	2.27	0.64	32.94	9.27
-46.00	237.51	67.89	2.38	0.68	34.44	9.84
-44.00	248.21	72.04	2.48	0.72	35.99	10.45
-42.00	259.27	76.38	2.59	0.76	37.59	11.08
-40.00	270.70	80.94	2.71	0.81	39.25	11.74
-38.00	282.51	85.70	2.83	0.86	40.96	12.43
-36.00	294.69	90.69	2.95	0.91	42.73	13.15
-34.00	307.27	95.91	3.07	0.96	44.55	13.91
-32.00	320.24	101.36	3.20	1.01	46.43	14.70
-30.00	333.62	107.06	3.34	1.07	48.37	15.52
-28.00	347.41	113.01	3.47	1.13	50.37	16.39
-26.00	361.62	119.22	3.62	1.19	52.43	17.29
-24.00	376.25	125.70	3.76	1.26	54.56	18.23
-22.00	391.32	132.45	3.91	1.32	56.74	19.21
-20.00	406.83	139.49	4.07	1.39	58.99	20.23
-18.00	422.80	146.82	4.23	1.47	61.31	21.29
-16.00	439.22	154.45	4.39	1.54	63.69	22.40
-14.00	456.10	162.39	4.56	1.62	66.13	23.55
-12.00	473.46	170.65	4.73	1.71	68.65	24.74
-10.00	491.30	179.24	4.91	1.79	71.24	25.99
-8.00	509.63	188.16	5.10	1.88	73.90	27.28
-6.00	528.46	197.43	5.28	1.97	76.63	28.63
-4.00	547.78	207.05	5.48	2.07	79.43	30.02
-2.00	567.62	217.04	5.68	2.17	82.30	31.47
0.00	587.98	227.39	5.88	2.27	85.26	32.97
2.00	608.87	238.14	6.09	2.38	88.29	34.53
4.00	630.29	249.27	6.30	2.49	91.39	36.14
6.00	652.25	260.81	6.52	2.61	94.58	37.82
8.00	674.76	272.75	6.75	2.73	97.84	39.55
10.00	697.83	285.13	6.98	2.85	101.19	41.34
12.00	721.46	297.93	7.21	2.98	104.61	43.20
14.00	745.67	311.18	7.46	3.11	108.12	45.12
16.00	770.46	324.88	7.70	3.25	111.72	47.11
18.00	795.83	339.04	7.96	3.39	115.40	49.16
20.00	821.80	353.68	8.22	3.54	119.16	51.28
22.00	848.37	368.81	8.48	3.69	123.01	53.48
24.00	875.56	384.43	8.76	3.84	126.96	55.74
26.00	903.36	400.56	9.03	4.01	130.99	58.08
28.00	931.78	417.21	9.32	4.17	135.11	60.50
30.00	960.84	434.39	9.61	4.34	139.32	62.99
32.00	990.53	452.12	9.91	4.52	143.63	65.56
34.00	1020.90	470.39	10.21	4.70	148.03	68.21
36.00	1051.90	489.24	10.52	4.89	152.53	70.94
38.00	1083.50	508.66	10.84	5.09	157.11	73.76
40.00	1115.90	528.67	11.16	5.29	161.81	76.66
42.00	1148.90	549.29	11.49	5.49	166.59	79.65
44.00	1182.60	570.52	11.83	5.71	171.48	82.73
46.00	1216.90	592.37	12.17	5.92	176.45	85.89
48.00	1252.00	614.87	12.52	6.15	181.54	89.16
50.00	1287.80	638.02	12.88	6.38	186.73	92.51
52.00	1324.30	661.84	13.24	6.62	192.02	95.97
54.00	1361.50	686.34	13.62	6.86	197.42	99.52
56.00	1399.40	711.53	13.99	7.12	202.91	103.17
58.00	1438.10	737.42	14.38	7.37	208.52	106.93
60.00	1477.50	764.04	14.78	7.64	214.24	110.79
62.00	1517.70	791.40	15.18	7.91	220.07	114.75
64.00	1558.60	819.50	15.59	8.20	226.00	118.83
66.00	1600.20	848.37	16.00	8.48	232.03	123.01
68.00	1642.70	878.01	16.43	8.78	238.19	127.31
70.00	1685.90	908.45	16.86	9.08	244.46	131.73

72.00	1729.80	939.70	17.30	9.40	250.82	136.26
74.00	1774.60	971.77	17.75	9.72	257.32	140.91
76.00	1820.10	1004.70	18.20	10.05	263.91	145.68
78.00	1866.50	1038.40	18.67	10.38	270.64	150.57
80.00	1913.60	1073.10	19.14	10.73	277.47	155.60
82.00	1961.60	1108.60	19.62	11.09	284.43	160.75
84.00	2010.40	1145.00	20.10	11.45	291.51	166.03
86.00	2059.90	1182.40	20.60	11.82	298.69	171.45
88.00	2110.30	1220.70	21.10	12.21	305.99	177.00
90.00	2161.60	1260.00	21.62	12.60	313.43	182.70
92.00	2213.70	1300.20	22.14	13.00	320.99	188.53
94.00	2266.60	1341.40	22.67	13.41	328.66	194.50
96.00	2320.30	1383.60	23.20	13.84	336.44	200.62
98.00	2374.90	1426.90	23.75	14.27	344.36	206.90
100.00	2430.40	1471.20	24.30	14.71	352.41	213.32
102.00	2486.70	1516.60	24.87	15.17	360.57	219.91
104.00	2543.80	1563.10	25.44	15.63	368.85	226.65
106.00	2601.90	1610.70	26.02	16.11	377.28	233.55
108.00	2660.80	1659.40	26.61	16.59	385.82	240.61
110.00	2720.60	1709.30	27.21	17.09	394.49	247.85
112.00	2781.20	1760.40	27.81	17.60	403.27	255.26
114.00	2842.70	1812.70	28.43	18.13	412.19	262.84
116.00	2905.10	1866.20	29.05	18.66	421.24	270.60
118.00	2968.40	1921.00	29.68	19.21	430.42	278.55
120.00	3032.50	1977.10	30.33	19.77	439.71	286.68
122.00	3097.50	2034.40	30.98	20.34	449.14	294.99
124.00	3163.40	2093.10	31.63	20.93	458.69	303.50
126.00	3230.20	2153.20	32.30	21.53	468.38	312.21
128.00	3297.90	2214.70	32.98	22.15	478.20	321.13
130.00	3366.40	2277.60	33.66	22.78	488.13	330.25
132.00	3435.80	2342.00	34.36	23.42	498.19	339.59
134.00	3506.00	2407.80	35.06	24.08	508.37	349.13
136.00	3577.10	2475.30	35.77	24.75	518.68	358.92
138.00	3649.00	2544.30	36.49	25.44	529.11	368.92
140.00	3721.80	2614.90	37.22	26.15	539.66	379.16
142.00	3795.40	2687.10	37.95	26.87	550.33	389.63
144.00	3869.80	2761.10	38.70	27.61	561.12	400.36
146.00	3945.00	2836.90	39.45	28.37	572.03	411.35
148.00	4021.00	2914.50	40.21	29.15	583.05	422.60
150.00	4097.70	2993.90	40.98	29.94	594.17	434.12
152.00	4175.10	3075.30	41.75	30.75	605.39	445.92
154.00	4253.20	3158.70	42.53	31.59	616.71	458.01
156.00	4332.00	3244.20	43.32	32.44	628.14	470.41
158.00	4411.30	3331.90	44.11	33.32	639.64	483.13
160.00	4491.20	3421.80	44.91	34.22	651.22	496.16
162.00	4571.60	3514.10	45.72	35.14	662.88	509.54
164.00	4652.40	3608.90	46.52	36.09	674.60	523.29
166.00	4733.40	3706.30	47.33	37.06	686.34	537.41
168.00	4814.60	3806.50	48.15	38.07	698.12	551.94
170.00	4895.90	3909.70	48.96	39.10	709.91	566.91
172.00	4977.00	4016.00	49.77	40.16	721.67	582.32
174.00	5057.70	4125.80	50.58	41.26	733.37	598.24
176.00	5137.70	4239.40	51.38	42.39	744.97	614.71
178.00	5216.60	4357.30	52.17	43.57	756.41	631.81
180.00	5293.90	4479.90	52.94	44.80	767.62	649.59

RS-53 (R470A) PRESSURE & TEMPERATURE TABLE : GAUGE



TEMPERATURE	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)
	(kPag)	(kPag)	(barg)	(barg)	(psig)	(psig)
(oF)						
-80.00	3.53	-77.96	0.04	-0.78	0.31	-11.50
-78.00	9.22	-76.29	0.09	-0.76	1.14	-11.26
-76.00	15.15	-74.52	0.15	-0.75	2.00	-11.01
-74.00	21.33	-72.64	0.21	-0.73	2.89	-10.73
-72.00	27.76	-70.65	0.28	-0.71	3.83	-10.44
-70.00	34.45	-68.54	0.34	-0.69	4.80	-10.14
-68.00	41.40	-66.31	0.41	-0.66	5.80	-9.81
-66.00	48.63	-63.95	0.49	-0.64	6.85	-9.47
-64.00	56.14	-61.46	0.56	-0.61	7.94	-9.11
-62.00	63.94	-58.83	0.64	-0.59	9.07	-8.73
-60.00	72.03	-56.05	0.72	-0.56	10.24	-8.33
-58.00	80.42	-53.13	0.80	-0.53	11.46	-7.90
-56.00	89.12	-50.05	0.89	-0.50	12.72	-7.46
-54.00	98.14	-46.81	0.98	-0.47	14.03	-6.99
-52.00	107.48	-43.40	1.07	-0.43	15.38	-6.49
-50.00	117.15	-39.82	1.17	-0.40	16.79	-5.97
-48.00	127.15	-36.06	1.27	-0.36	18.24	-5.43
-46.00	137.51	-32.11	1.38	-0.32	19.74	-4.86
-44.00	148.21	-27.96	1.48	-0.28	21.29	-4.25
-42.00	159.27	-23.62	1.59	-0.24	22.89	-3.62
-40.00	170.70	-19.07	1.71	-0.19	24.55	-2.96
-38.00	182.51	-14.30	1.83	-0.14	26.26	-2.27
-36.00	194.69	-9.31	1.95	-0.09	28.03	-1.55
-34.00	207.27	-4.09	2.07	-0.04	29.85	-0.79
-32.00	220.24	1.36	2.20	0.01	31.73	0.00
-30.00	233.62	7.06	2.34	0.07	33.67	0.82
-28.00	247.41	13.01	2.47	0.13	35.67	1.69
-26.00	261.62	19.22	2.62	0.19	37.73	2.59
-24.00	276.25	25.70	2.76	0.26	39.86	3.53
-22.00	291.32	32.45	2.91	0.32	42.04	4.51
-20.00	306.83	39.49	3.07	0.39	44.29	5.53
-18.00	322.80	46.82	3.23	0.47	46.61	6.59
-16.00	339.22	54.45	3.39	0.54	48.99	7.70
-14.00	356.10	62.39	3.56	0.62	51.43	8.85
-12.00	373.46	70.65	3.73	0.71	53.95	10.04
-10.00	391.30	79.24	3.91	0.79	56.54	11.29
-8.00	409.63	88.16	4.10	0.88	59.20	12.58
-6.00	428.46	97.43	4.28	0.97	61.93	13.93
-4.00	447.78	107.05	4.48	1.07	64.73	15.32
-2.00	467.62	117.04	4.68	1.17	67.60	16.77
0.00	487.98	127.39	4.88	1.27	70.56	18.27
2.00	508.87	138.14	5.09	1.38	73.59	19.83
4.00	530.29	149.27	5.30	1.49	76.69	21.44
6.00	552.25	160.81	5.52	1.61	79.88	23.12
8.00	574.76	172.75	5.75	1.73	83.14	24.85
10.00	597.83	185.13	5.98	1.85	86.49	26.64
12.00	621.46	197.93	6.21	1.98	89.91	28.50
14.00	645.67	211.18	6.46	2.11	93.42	30.42
16.00	670.46	224.88	6.70	2.25	97.02	32.41
18.00	695.83	239.04	6.96	2.39	100.70	34.46
20.00	721.80	253.68	7.22	2.54	104.46	36.58
22.00	748.37	268.81	7.48	2.69	108.31	38.78
24.00	775.56	284.43	7.76	2.84	112.26	41.04
26.00	803.36	300.56	8.03	3.01	116.29	43.38
28.00	831.78	317.21	8.32	3.17	120.41	45.80
30.00	860.84	334.39	8.61	3.34	124.62	48.29
32.00	890.53	352.12	8.91	3.52	128.93	50.86
34.00	920.90	370.39	9.21	3.70	133.33	53.51
36.00	951.90	389.24	9.52	3.89	137.83	56.24
38.00	983.50	408.66	9.84	4.09	142.41	59.06
40.00	1015.90	428.67	10.16	4.29	147.11	61.96
42.00	1048.90	449.29	10.49	4.49	151.89	64.95
44.00	1082.60	470.52	10.83	4.71	156.78	68.03
46.00	1116.90	492.37	11.17	4.92	161.75	71.19
48.00	1152.00	514.87	11.52	5.15	166.84	74.46
50.00	1187.80	538.02	11.88	5.38	172.03	77.81
52.00	1224.30	561.84	12.24	5.62	177.32	81.27
54.00	1261.50	586.34	12.62	5.86	182.72	84.82
56.00	1299.40	611.53	12.99	6.12	188.21	88.47
58.00	1338.10	637.42	13.38	6.37	193.82	92.23
60.00	1377.50	664.04	13.78	6.64	199.54	96.09
62.00	1417.70	691.40	14.18	6.91	205.37	100.05
64.00	1458.60	719.50	14.59	7.20	211.30	104.13

66.00	1500.20	748.37	15.00	7.48	217.33	108.31
68.00	1542.70	778.01	15.43	7.78	223.49	112.61
70.00	1585.90	808.45	15.86	8.08	229.76	117.03
72.00	1629.80	839.70	16.30	8.40	236.12	121.56
74.00	1674.60	871.77	16.75	8.72	242.62	126.21
76.00	1720.10	904.70	17.20	9.05	249.21	130.98
78.00	1766.50	938.40	17.67	9.38	255.94	135.87
80.00	1813.60	973.10	18.14	9.73	262.77	140.90
82.00	1861.60	1008.60	18.62	10.09	269.73	146.05
84.00	1910.40	1045.00	19.10	10.45	276.81	151.33
86.00	1959.90	1082.40	19.60	10.82	283.99	156.75
88.00	2010.30	1120.70	20.10	11.21	291.29	162.30
90.00	2061.60	1160.00	20.62	11.60	298.73	168.00
92.00	2113.70	1200.20	21.14	12.00	306.29	173.83
94.00	2166.60	1241.40	21.67	12.41	313.96	179.80
96.00	2220.30	1283.60	22.20	12.84	321.74	185.92
98.00	2274.90	1326.90	22.75	13.27	329.66	192.20
100.00	2330.40	1371.20	23.30	13.71	337.71	198.62
102.00	2386.70	1416.60	23.87	14.17	345.87	205.21
104.00	2443.80	1463.10	24.44	14.63	354.15	211.95
106.00	2501.90	1510.70	25.02	15.11	362.58	218.85
108.00	2560.80	1559.40	25.61	15.59	371.12	225.91
110.00	2620.60	1609.30	26.21	16.09	379.79	233.15
112.00	2681.20	1660.40	26.81	16.60	388.57	240.56
114.00	2742.70	1712.70	27.43	17.13	397.49	248.14
116.00	2805.10	1766.20	28.05	17.66	406.54	255.90
118.00	2868.40	1821.00	28.68	18.21	415.72	263.85
120.00	2932.50	1877.10	29.33	18.77	425.01	271.98
122.00	2997.50	1934.40	29.98	19.34	434.44	280.29
124.00	3063.40	1993.10	30.63	19.93	443.99	288.80
126.00	3130.20	2053.20	31.30	20.53	453.68	297.51
128.00	3197.90	2114.70	31.98	21.15	463.50	306.43
130.00	3266.40	2177.60	32.66	21.78	473.43	315.55
132.00	3335.80	2242.00	33.36	22.42	483.49	324.89
134.00	3406.00	2307.80	34.06	23.08	493.67	334.43
136.00	3477.10	2375.30	34.77	23.75	503.98	344.22
138.00	3549.00	2444.30	35.49	24.44	514.41	354.22
140.00	3621.80	2514.90	36.22	25.15	524.96	364.46
142.00	3695.40	2587.10	36.95	25.87	535.63	374.93
144.00	3769.80	2661.10	37.70	26.61	546.42	385.66
146.00	3845.00	2736.90	38.45	27.37	557.33	396.65
148.00	3921.00	2814.50	39.21	28.15	568.35	407.90
150.00	3997.70	2893.90	39.98	28.94	579.47	419.42
152.00	4075.10	2975.30	40.75	29.75	590.69	431.22
154.00	4153.20	3058.70	41.53	30.59	602.01	443.31
156.00	4232.00	3144.20	42.32	31.44	613.44	455.71
158.00	4311.30	3231.90	43.11	32.32	624.94	468.43
160.00	4391.20	3321.80	43.91	33.22	636.52	481.46
162.00	4471.60	3414.10	44.72	34.14	648.18	494.84
164.00	4552.40	3508.90	45.52	35.09	659.90	508.59
166.00	4633.40	3606.30	46.33	36.06	671.64	522.71
168.00	4714.60	3706.50	47.15	37.07	683.42	537.24
170.00	4795.90	3809.70	47.96	38.10	695.21	552.21
172.00	4877.00	3916.00	48.77	39.16	706.97	567.62
174.00	4957.70	4025.80	49.58	40.26	718.67	583.54
176.00	5037.70	4139.40	50.38	41.39	730.27	600.01
178.00	5116.60	4257.30	51.17	42.57	741.71	617.11
180.00	5193.90	4379.90	51.94	43.80	752.92	634.89