

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



TEMPERATURE (°C)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)
	(kPa)	(kPa)	(bara)	(bara)	(psia)	(psia)
-60	115.15	25.48	1.1515	0.2548	16.70	3.69
-59	120.70	27.17	1.2070	0.2717	17.50	3.94
-58	126.45	28.95	1.2645	0.2895	18.34	4.20
-57	132.41	30.82	1.3241	0.3082	19.20	4.47
-56	138.59	32.79	1.3859	0.3279	20.10	4.75
-55	144.98	34.86	1.4498	0.3486	21.02	5.05
-54	151.60	37.03	1.5160	0.3703	21.98	5.37
-53	158.45	39.32	1.5845	0.3932	22.98	5.70
-52	165.53	41.72	1.6553	0.4172	24.00	6.05
-51	172.85	44.23	1.7285	0.4423	25.06	6.41
-50	180.42	46.87	1.8042	0.4687	26.16	6.80
-49	188.24	49.63	1.8824	0.4963	27.29	7.20
-48	196.31	52.53	1.9631	0.5253	28.46	7.62
-47	204.64	55.56	2.0464	0.5556	29.67	8.06
-46	213.24	58.73	2.1324	0.5873	30.92	8.52
-45	222.11	62.04	2.2211	0.6204	32.21	9.00
-44	231.25	65.50	2.3125	0.6550	33.53	9.50
-43	240.68	69.12	2.4068	0.6912	34.90	10.02
-42	250.39	72.89	2.5039	0.7289	36.31	10.57
-41	260.40	76.83	2.6040	0.7683	37.76	11.14
-40	270.70	80.94	2.7070	0.8094	39.25	11.74
-39	281.31	85.22	2.8131	0.8522	40.79	12.36
-38	292.22	89.68	2.9222	0.8968	42.37	13.00
-37	303.45	94.32	3.0345	0.9432	44.00	13.68
-36	315.00	99.15	3.1500	0.9915	45.68	14.38
-35	326.88	104.18	3.2688	1.0418	47.40	15.11
-34	339.08	109.41	3.3908	1.0941	49.17	15.86
-33	351.62	114.85	3.5162	1.1485	50.98	16.65
-32	364.51	120.50	3.6451	1.2050	52.85	17.47
-31	377.74	126.36	3.7774	1.2636	54.77	18.32
-30	391.32	132.45	3.9132	1.3245	56.74	19.21
-29	405.26	138.78	4.0526	1.3878	58.76	20.12
-28	419.57	145.33	4.1957	1.4533	60.84	21.07
-27	434.24	152.13	4.3424	1.5213	62.96	22.06
-26	449.29	159.18	4.4929	1.5918	65.15	23.08
-25	464.72	166.48	4.6472	1.6648	67.38	24.14
-24	480.54	174.05	4.8054	1.7405	69.68	25.24
-23	496.75	181.88	4.9675	1.8188	72.03	26.37
-22	513.36	189.99	5.1336	1.8999	74.44	27.55
-21	530.37	198.37	5.3037	1.9837	76.90	28.76
-20	547.78	207.05	5.4778	2.0705	79.43	30.02
-19	565.62	216.02	5.6562	2.1602	82.01	31.32
-18	583.87	225.29	5.8387	2.2529	84.66	32.67
-17	602.55	234.87	6.0255	2.3487	87.37	34.06
-16	621.66	244.77	6.2166	2.4477	90.14	35.49
-15	641.20	254.99	6.4120	2.5499	92.97	36.97
-14	661.19	265.54	6.6119	2.6554	95.87	38.50
-13	681.62	276.42	6.8162	2.7642	98.83	40.08
-12	702.51	287.65	7.0251	2.8765	101.86	41.71
-11	723.86	299.23	7.2386	2.9923	104.96	43.39
-10	745.67	311.18	7.4567	3.1118	108.12	45.12
-9	767.95	323.49	7.6795	3.2349	111.35	46.91
-8	790.71	336.17	7.9071	3.3617	114.65	48.74
-7	813.95	349.24	8.1395	3.4924	118.02	50.64
-6	837.67	362.70	8.3767	3.6270	121.46	52.59
-5	861.89	376.56	8.6189	3.7656	124.97	54.60
-4	886.60	390.82	8.8660	3.9082	128.56	56.67
-3	911.82	405.50	9.1182	4.0550	132.21	58.80
-2	937.54	420.61	9.3754	4.2061	135.94	60.99
-1	963.78	436.14	9.6378	4.3614	139.75	63.24
0	990.53	452.12	9.9053	4.5212	143.63	65.56
1	1017.80	468.54	10.1780	4.6854	147.58	67.94
2	1045.60	485.42	10.4560	4.8542	151.61	70.39
3	1074.00	502.77	10.7400	5.0277	155.73	72.90
4	1102.90	520.60	11.0290	5.2060	159.92	75.49
5	1132.30	538.90	11.3230	5.3890	164.18	78.14
6	1162.30	557.70	11.6230	5.5770	168.53	80.87
7	1192.80	577.01	11.9280	5.7701	172.96	83.67
8	1223.90	596.82	12.2390	5.9682	177.47	86.54
9	1255.60	617.16	12.5560	6.1716	182.06	89.49
10	1287.80	638.02	12.8780	6.3802	186.73	92.51
11	1320.60	659.43	13.2060	6.5943	191.49	95.62
12	1354.00	681.38	13.5400	6.8138	196.33	98.80
13	1388.00	703.90	13.8800	7.0390	201.26	102.07
14	1422.60	726.98	14.2260	7.2698	206.28	105.41
15	1457.70	750.64	14.5770	7.5064	211.37	108.84

16	1493.50	774.89	14.9350	7.7489	216.56	112.36
17	1529.90	799.75	15.2990	7.9975	221.84	115.96
18	1566.80	825.21	15.6680	8.2521	227.19	119.66
19	1604.40	851.30	16.0440	8.5130	232.64	123.44
20	1642.70	878.01	16.4270	8.7801	238.19	127.31
21	1681.50	905.37	16.8150	9.0537	243.82	131.28
22	1721.00	933.38	17.2100	9.3338	249.55	135.34
23	1761.10	962.06	17.6110	9.6206	255.36	139.50
24	1801.80	991.42	18.0180	9.9142	261.26	143.76
25	1843.20	1021.50	18.4320	10.2150	267.26	148.12
26	1885.20	1052.20	18.8520	10.5220	273.35	152.57
27	1927.90	1083.70	19.2790	10.8370	279.55	157.14
28	1971.30	1115.80	19.7130	11.1580	285.84	161.79
29	2015.30	1148.70	20.1530	11.4870	292.22	166.56
30	2059.90	1182.40	20.5990	11.8240	298.69	171.45
31	2105.30	1216.80	21.0530	12.1680	305.27	176.44
32	2151.30	1252.00	21.5130	12.5200	311.94	181.54
33	2197.90	1288.00	21.9790	12.8800	318.70	186.76
34	2245.30	1324.80	22.4530	13.2480	325.57	192.10
35	2293.30	1362.40	22.9330	13.6240	332.53	197.55
36	2342.10	1400.80	23.4210	14.0080	339.60	203.12
37	2391.50	1440.10	23.9150	14.4010	346.77	208.81
38	2441.60	1480.20	24.4160	14.8020	354.03	214.63
39	2492.40	1521.20	24.9240	15.2120	361.40	220.57
40	2543.80	1563.10	25.4380	15.6310	368.85	226.65
41	2596.00	1605.90	25.9600	16.0590	376.42	232.86
42	2648.90	1649.60	26.4890	16.4960	384.09	239.19
43	2702.50	1694.20	27.0250	16.9420	391.86	245.66
44	2756.80	1739.80	27.5680	17.3980	399.74	252.27
45	2811.80	1786.40	28.1180	17.8640	407.71	259.03
46	2867.60	1834.00	28.6760	18.3400	415.80	265.93
47	2924.00	1882.50	29.2400	18.8250	423.98	272.96
48	2981.10	1932.10	29.8110	19.3210	432.26	280.15
49	3039.00	1982.70	30.3900	19.8270	440.66	287.49
50	3097.50	2034.40	30.9750	20.3440	449.14	294.99
51	3156.80	2087.20	31.5680	20.8720	457.74	302.64
52	3216.80	2141.10	32.1680	21.4110	466.44	310.46
53	3277.50	2196.10	32.7750	21.9610	475.24	318.43
54	3338.90	2252.30	33.3890	22.5230	484.14	326.58
55	3401.00	2309.60	34.0100	23.0960	493.15	334.89
56	3463.80	2368.10	34.6380	23.6810	502.25	343.37
57	3527.20	2427.90	35.2720	24.2790	511.44	352.05
58	3591.40	2488.90	35.9140	24.8890	520.75	360.89
59	3656.30	2551.20	36.5630	25.5120	530.16	369.92
60	3721.80	2614.90	37.2180	26.1490	539.66	379.16
61	3788.00	2679.80	37.8800	26.7980	549.26	388.57
62	3854.90	2746.20	38.5490	27.4620	558.96	398.20
63	3922.40	2814.00	39.2240	28.1400	568.75	408.03
64	3990.50	2883.20	39.9050	28.8320	578.62	418.06
65	4059.30	2954.00	40.5930	29.5400	588.60	428.33
66	4128.60	3026.20	41.2860	30.2620	598.65	438.80
67	4198.50	3100.10	41.9850	31.0010	608.78	449.51
68	4268.90	3175.70	42.6890	31.7570	618.99	460.48
69	4339.90	3252.90	43.3990	32.5290	629.29	471.67
70	4411.30	3331.90	44.1130	33.3190	639.64	483.13
71	4483.20	3412.70	44.8320	34.1270	650.06	494.84
72	4555.50	3495.40	45.5550	34.9540	660.55	506.83
73	4628.10	3580.20	46.2810	35.8020	671.07	519.13
74	4701.00	3667.00	47.0100	36.6700	681.65	531.72
75	4774.00	3756.00	47.7400	37.5600	692.23	544.62
76	4847.10	3847.40	48.4710	38.4740	702.83	557.87
77	4920.30	3941.20	49.2030	39.4120	713.44	571.47
78	4993.20	4037.70	49.9320	40.3770	724.01	585.47
79	5065.70	4137.00	50.6570	41.3700	734.53	599.87
80	5137.70	4239.40	51.3770	42.3940	744.97	614.71

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



TEMPERATURE (oC)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)
	(kPag)	(kPag)	(barg)	(barg)	(psig)	(psig)
-60	15.15	-74.52	0.15	-0.75	2.00	-11.01
-59	20.70	-72.83	0.21	-0.73	2.80	-10.76
-58	26.45	-71.06	0.26	-0.71	3.64	-10.50
-57	32.41	-69.18	0.32	-0.69	4.50	-10.23
-56	38.59	-67.22	0.39	-0.67	5.40	-9.95
-55	44.98	-65.15	0.45	-0.65	6.32	-9.65
-54	51.60	-62.97	0.52	-0.63	7.28	-9.33
-53	58.45	-60.68	0.58	-0.61	8.28	-9.00
-52	65.53	-58.29	0.66	-0.58	9.30	-8.65
-51	72.85	-55.77	0.73	-0.56	10.36	-8.29
-50	80.42	-53.13	0.80	-0.53	11.46	-7.90
-49	88.24	-50.37	0.88	-0.50	12.59	-7.50
-48	96.31	-47.47	0.96	-0.47	13.76	-7.08
-47	104.64	-44.44	1.05	-0.44	14.97	-6.64
-46	113.24	-41.27	1.13	-0.41	16.22	-6.18
-45	122.11	-37.96	1.22	-0.38	17.51	-5.70
-44	131.25	-34.50	1.31	-0.34	18.83	-5.20
-43	140.68	-30.88	1.41	-0.31	20.20	-4.68
-42	150.39	-27.11	1.50	-0.27	21.61	-4.13
-41	160.40	-23.17	1.60	-0.23	23.06	-3.56
-40	170.70	-19.07	1.71	-0.19	24.55	-2.96
-39	181.31	-14.78	1.81	-0.15	26.09	-2.34
-38	192.22	-10.33	1.92	-0.10	27.67	-1.70
-37	203.45	-5.68	2.03	-0.06	29.30	-1.02
-36	215.00	-0.85	2.15	-0.01	30.98	-0.32
-35	226.88	4.18	2.27	0.04	32.70	0.41
-34	239.08	9.41	2.39	0.09	34.47	1.16
-33	251.62	14.85	2.52	0.15	36.28	1.95
-32	264.51	20.50	2.65	0.21	38.15	2.77
-31	277.74	26.36	2.78	0.26	40.07	3.62
-30	291.32	32.45	2.91	0.32	42.04	4.51
-29	305.26	38.78	3.05	0.39	44.06	5.42
-28	319.57	45.33	3.20	0.45	46.14	6.37
-27	334.24	52.13	3.34	0.52	48.26	7.36
-26	349.29	59.18	3.49	0.59	50.45	8.38
-25	364.72	66.48	3.65	0.66	52.68	9.44
-24	380.54	74.05	3.81	0.74	54.98	10.54
-23	396.75	81.88	3.97	0.82	57.33	11.67
-22	413.36	89.99	4.13	0.90	59.74	12.85
-21	430.37	98.37	4.30	0.98	62.20	14.06
-20	447.78	107.05	4.48	1.07	64.73	15.32
-19	465.62	116.02	4.66	1.16	67.31	16.62
-18	483.87	125.29	4.84	1.25	69.96	17.97
-17	502.55	134.87	5.03	1.35	72.67	19.36
-16	521.66	144.77	5.22	1.45	75.44	20.79
-15	541.20	154.99	5.41	1.55	78.27	22.27
-14	561.19	165.54	5.61	1.66	81.17	23.80
-13	581.62	176.42	5.82	1.76	84.13	25.38
-12	602.51	187.65	6.03	1.88	87.16	27.01
-11	623.86	199.23	6.24	1.99	90.26	28.69
-10	645.67	211.18	6.46	2.11	93.42	30.42
-9	667.95	223.49	6.68	2.23	96.65	32.21
-8	690.71	236.17	6.91	2.36	99.95	34.04
-7	713.95	249.24	7.14	2.49	103.32	35.94
-6	737.67	262.70	7.38	2.63	106.76	37.89
-5	761.89	276.56	7.62	2.77	110.27	39.90
-4	786.60	290.82	7.87	2.91	113.86	41.97
-3	811.82	305.50	8.12	3.06	117.51	44.10
-2	837.54	320.61	8.38	3.21	121.24	46.29
-1	863.78	336.14	8.64	3.36	125.05	48.54
0	890.53	352.12	8.91	3.52	128.93	50.86
1	917.80	368.54	9.18	3.69	132.88	53.24
2	945.60	385.42	9.46	3.85	136.91	55.69
3	974.00	402.77	9.74	4.03	141.03	58.20
4	1002.90	420.60	10.03	4.21	145.22	60.79
5	1032.30	438.90	10.32	4.39	149.48	63.44
6	1062.30	457.70	10.62	4.58	153.83	66.17
7	1092.80	477.01	10.93	4.77	158.26	68.97
8	1123.90	496.82	11.24	4.97	162.77	71.84
9	1155.60	517.16	11.56	5.17	167.36	74.79
10	1187.80	538.02	11.88	5.38	172.03	77.81
11	1220.60	559.43	12.21	5.59	176.79	80.92
12	1254.00	581.38	12.54	5.81	181.63	84.10

13	1288.00	603.90	12.88	6.04	186.56	87.37
14	1322.60	626.98	13.23	6.27	191.58	90.71
15	1357.70	650.64	13.58	6.51	196.67	94.14
16	1393.50	674.89	13.94	6.75	201.86	97.66
17	1429.90	699.75	14.30	7.00	207.14	101.26
18	1466.80	725.21	14.67	7.25	212.49	104.96
19	1504.40	751.30	15.04	7.51	217.94	108.74
20	1542.70	778.01	15.43	7.78	223.49	112.61
21	1581.50	805.37	15.82	8.05	229.12	116.58
22	1621.00	833.38	16.21	8.33	234.85	120.64
23	1661.10	862.06	16.61	8.62	240.66	124.80
24	1701.80	891.42	17.02	8.91	246.56	129.06
25	1743.20	921.50	17.43	9.22	252.56	133.42
26	1785.20	952.20	17.85	9.52	258.65	137.87
27	1827.90	983.70	18.28	9.84	264.85	142.44
28	1871.30	1015.80	18.71	10.16	271.14	147.09
29	1915.30	1048.70	19.15	10.49	277.52	151.86
30	1959.90	1082.40	19.60	10.82	283.99	156.75
31	2005.30	1116.80	20.05	11.17	290.57	161.74
32	2051.30	1152.00	20.51	11.52	297.24	166.84
33	2097.90	1188.00	20.98	11.88	304.00	172.06
34	2145.30	1224.80	21.45	12.25	310.87	177.40
35	2193.30	1262.40	21.93	12.62	317.83	182.85
36	2242.10	1300.80	22.42	13.01	324.90	188.42
37	2291.50	1340.10	22.92	13.40	332.07	194.11
38	2341.60	1380.20	23.42	13.80	339.33	199.93
39	2392.40	1421.20	23.92	14.21	346.70	205.87
40	2443.80	1463.10	24.44	14.63	354.15	211.95
41	2496.00	1505.90	24.96	15.06	361.72	218.16
42	2548.90	1549.60	25.49	15.50	369.39	224.49
43	2602.50	1594.20	26.03	15.94	377.16	230.96
44	2656.80	1639.80	26.57	16.40	385.04	237.57
45	2711.80	1686.40	27.12	16.86	393.01	244.33
46	2767.60	1734.00	27.68	17.34	401.10	251.23
47	2824.00	1782.50	28.24	17.83	409.28	258.26
48	2881.10	1832.10	28.81	18.32	417.56	265.45
49	2939.00	1882.70	29.39	18.83	425.96	272.79
50	2997.50	1934.40	29.98	19.34	434.44	280.29
51	3056.80	1987.20	30.57	19.87	443.04	287.94
52	3116.80	2041.10	31.17	20.41	451.74	295.76
53	3177.50	2096.10	31.78	20.96	460.54	303.73
54	3238.90	2152.30	32.39	21.52	469.44	311.88
55	3301.00	2209.60	33.01	22.10	478.45	320.19
56	3363.80	2268.10	33.64	22.68	487.55	328.67
57	3427.20	2327.90	34.27	23.28	496.74	337.35
58	3491.40	2388.90	34.91	23.89	506.05	346.19
59	3556.30	2451.20	35.56	24.51	515.46	355.22
60	3621.80	2514.90	36.22	25.15	524.96	364.46
61	3688.00	2579.80	36.88	25.80	534.56	373.87
62	3754.90	2646.20	37.55	26.46	544.26	383.50
63	3822.40	2714.00	38.22	27.14	554.05	393.33
64	3890.50	2783.20	38.91	27.83	563.92	403.36
65	3959.30	2854.00	39.59	28.54	573.90	413.63
66	4028.60	2926.20	40.29	29.26	583.95	424.10
67	4098.50	3000.10	40.99	30.00	594.08	434.81
68	4168.90	3075.70	41.69	30.76	604.29	445.78
69	4239.90	3152.90	42.40	31.53	614.59	456.97
70	4311.30	3231.90	43.11	32.32	624.94	468.43
71	4383.20	3312.70	43.83	33.13	635.36	480.14
72	4455.50	3395.40	44.56	33.95	645.85	492.13
73	4528.10	3480.20	45.28	34.80	656.37	504.43
74	4601.00	3567.00	46.01	35.67	666.95	517.02
75	4674.00	3656.00	46.74	36.56	677.53	529.92
76	4747.10	3747.40	47.47	37.47	688.13	543.17
77	4820.30	3841.20	48.20	38.41	698.74	556.77
78	4893.20	3937.70	48.93	39.38	709.31	570.77
79	4965.70	4037.00	49.66	40.37	719.83	585.17
80	5037.70	4139.40	50.38	41.39	730.27	600.01