

Temperature vs. Resistance (°F & °C vs. ohms)
 3,000 ohm thermistor @ 77°F

Resistance			Resistance			Resistance		
°F	°C	ohms	°F	°C	ohms	°F	°C	ohms
1.4	-17	24,500	95	35	1,960	188.6	87	303
3.2	-16	23,200	96.8	36	1,880	190.4	88	293
5	-15	21,900	98.6	37	1,800	192.2	89	284
6.8	-14	20,700	100.4	38	1,730	194	90	275
8.6	-13	19,600	102.2	39	1,670	195.8	91	267
10.4	-12	18,500	104	40	1,600	197.6	92	259
12.2	-11	17,500	105.8	41	1,540	199.4	93	251
14	-10	16,600	107.6	42	1,480	201.2	94	243
15.8	-9	15,700	109.4	43	1,420	203	95	236
17.6	-8	14,900	111.2	44	1,360	204.8	96	220
19.4	-7	14,100	113	45	1,310	206.6	97	223
21.2	-6	13,400	114.8	46	1,260	208.4	98	215
23	-5	12,700	116.6	47	1,210	210.2	99	210
24.8	-4	12,060	118.4	48	1,170	212	100	204
26.6	-3	11,430	120.2	49	1,120	213.8	101	198
28.4	-2	10,860	122	50	1,080	215.6	102	192
30.2	-1	10,320	123.8	51	1,040	217.4	103	187
32	0	9,810	125.6	52	1,002	219.2	104	182
33.8	1	9,300	127.4	53	966	221	105	176
35.6	2	8,850	129.2	54	930	222.8	106	171
37.4	3	8,430	131	55	879	224.6	107	167
39.2	4	8,010	132.8	56	864	226.4	108	162
41	5	7,620	134.6	57	831	228.2	109	158
42.8	6	7,260	136.4	58	801	230	110	153
44.6	7	6,900	138.2	59	774	231.8	111	149
46.4	8	6,570	140	60	747	233.6	112	145
48.2	9	6,270	141.8	61	720	235.4	113	141
50	10	5,970	143.6	62	696	237.2	114	137
51.8	11	5,700	145.4	63	672	239	115	134
53.6	12	5,430	147.2	64	648	240.8	116	130
55.4	13	5,190	149	65	624	242.6	117	127
57.2	14	4,950	150.8	66	603	244.4	118	123
59	15	4,710	152.6	67	582	246.2	119	120
60.8	16	4,500	154.4	68	564	248	120	117
62.6	17	4,290	156.2	69	543	249.8	121	114
64.4	18	4,110	158	70	525	251.6	122	111
66.2	19	3,930	159.8	71	507	253.4	123	108
68	20	3,750	161.6	72	492	255.2	124	105
69.8	21	3,570	163.4	73	474	257	125	103
71.6	22	3,420	165.2	74	459	258.8	126	99.9

73.4	23	3,270	167	75	444	260.6	127	97.2
75.2	24	3,150	168.8	76	429	262.4	128	94.8
77	25	3,000	170.6	77	417	264.2	129	92.4
78.8	26	2,870	172.4	78	402	266	130	90.3
80.6	27	2,750	174.2	79	390	267.8	131	87.9
82.4	28	2,630	176	80	378	269.6	132	85.8
84.2	29	2,520	177.8	81	366	271.4	133	83.7
86	30	2,420	179.6	82	354	273.2	134	81.6
87.8	31	2,320	181.4	83	342	275	135	79.5
89.6	32	2,220	183.2	84	333	276.8	136	77.7
91.4	33	2,130	185	85	321	278.6	137	75.9
93.2	34	2,040	186.8	86	312	280.4	138	73.8

Note: Sensor wires must be removed from the terminal strip when making resistance measurements.

Temperature vs. Resistance (°F vs. ohms)
10,000 ohm thermistor @ 77°F

°F	Ohms	°F	Ohms	°F	Ohms	°F	Ohms	°F	Ohms
-30	234314	23	42333	75	10502	127	3244	179	1191
-29	226140	24	41113	76	10248	128	3177	180	1170
-28	218281	25	39933	77	10000	129	3112	181	1150
-27	210723	26	38791	78	9760	130	3048	182	1129
-26	203454	27	37685	79	9526	131	2986	183	1110
-25	196462	28	36614	80	9299	132	2925	184	1090
-24	189735	29	35577	81	9078	133	2866	185	1071
-23	183263	30	34574	82	8862	134	2808	186	1053
-22	177035	31	33602	83	8653	135	2752	187	1035
-21	171041	32	32660	84	8449	136	2697	188	1017
-20	165271	33	31748	85	8250	137	2643	189	999
-19	159716	34	30864	86	8057	138	2590	190	982
-18	154368	35	30008	87	7869	139	2538	191	965
-17	149218	36	29179	88	7685	140	2488	192	949
-16	144258	37	28375	89	7507	141	2439	193	933
-15	139481	38	27597	90	7333	142	2391	194	917
-14	134878	39	26841	91	7165	143	2344	195	901
-13	130444	40	26109	92	7000	144	2298	196	886
-12	126172	41	25400	93	6839	145	2253	197	871
-11	122054	42	24712	94	6683	146	2209	198	857
-10	11 8085	43	24045	99	6531	147	2166	199	842
-9	11 4260	44	23399	96	6383	148	2124	200	828
-8	110571	45	22771	97	6238	149	2083	201	814
-7	107015	46	22163	98	6098	150	2043	202	801
-6	103586	47	21573	99	5961	151	2004	203	788
-5	100278	48	21000	100	5827	152	1966	204	775

-4	97088	49	20445	101	5697	153	1928	205	762
-3	94010	50	19906	102	5570	154	1891	206	749
-2	91041	51	19383	103	5446	155	1856	207	737
-1	88176	52	18876	104	5326	156	1820	208	725
0	85410	53	18383	105	5208	157	1786	209	713
1	82742	54	17905	106	5094	158	1753	210	702
2	80166	55	17440	107	4982	159	1720	211	690
3	77679	56	16990	108	4873	160	1688	212	679
4	75277	57	16553	109	4767	161	1656	213	668
5	72959	58	16128	110	4663	162	1625	214	658
6	70719	59	15715	111	4562	163	1595	215	647
7	68557	60	15314	112	4464	164	1566	216	637
8	66467	61	14925	113	4368	165	1537	217	627
9	64449	62	14548	114	4274	166	1509	218	617
10	62499	63	14180	115	4183	167	1481	219	607
11	60614	64	13823	116	4094	168	1454	220	597
12	58793	65	13477	117	4006	169	1427	221	588
13	57033	66	13140	118	3922	170	1402	222	579
14	55332	67	12812	119	3839	171	1376	223	570
15	53687	68	12494	120	3758	172	1351	224	561
16	52096	69	12185	121	3679	173	1327	225	552
17	50558	70	11884	122	3602	174	1303	226	543
18	49071	71	11592	123	3527	175	1280	227	535
19	47633	72	11308	124	3453	176	1257	228	527
20	46241	73	11032	125	3382	177	1235	229	519
21	44895	74	10763	126	3312	178	1213	230	510

Note: Sensor wires must be removed from the terminal strip when making resistance measurements.

The Honeywell R7412 series of controllers used a C773 series of positive temperature coefficient sensors. The sensor temperature vs. resistance relationship can be given by the following equation. $R = 2835 + (4.95)(T+50.8)$ where R is in ohms and T is in degrees F.

The Johnson Controls R34 series of controllers used an A41 series of positive temperature coefficient sensors. The sensor temperature vs. resistance relationship can be given by the following equation. $R = 1000 + (3)(T-70)$ where R is in ohms and T is in degrees F.

The Natural Power S25 thru 28 series of controllers used a positive temperature coefficient sensor (S91, S92, and S93). The sensor temperature vs. resistance relationship can be given by the following equation. $R = 1000 + (3.06)(T-77)$ where R is in ohms and T is in degrees F.