

Figure 4. 3001/3004 Series Non-Hermetic Thermostats


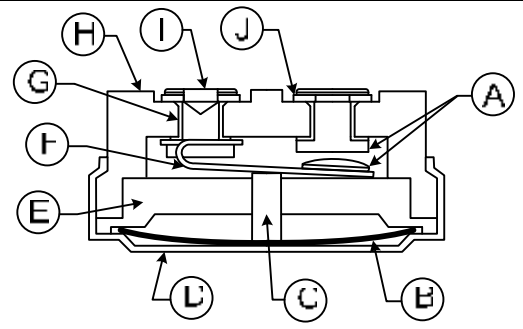
											
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">A Contacts</td> <td style="width: 50%; border: none;">F Contact arm</td> </tr> <tr> <td style="border: none;">B Bimetal disc</td> <td style="border: none;">G Metal sleeve (3004 only)</td> </tr> <tr> <td style="border: none;">C Ceramic transfer pin</td> <td style="border: none;">H Phenolic base</td> </tr> <tr> <td style="border: none;">D Metal closure</td> <td style="border: none;">I Rivet (3004 only)</td> </tr> <tr> <td style="border: none;">E Phenolic insulator</td> <td style="border: none;">J Terminal</td> </tr> </table>	A Contacts	F Contact arm	B Bimetal disc	G Metal sleeve (3004 only)	C Ceramic transfer pin	H Phenolic base	D Metal closure	I Rivet (3004 only)	E Phenolic insulator	J Terminal
A Contacts	F Contact arm										
B Bimetal disc	G Metal sleeve (3004 only)										
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D Metal closure	I Rivet (3004 only)										
E Phenolic insulator	J Terminal										
<p>The 3001/3004 Series is factory pre-set, single-pole, single-throw thermal switch available to open and close on temperature rise. The 3001 has a low-profile that allows it to be used in most applications where a non-hermetic precision thermostat is required for tight tolerances and the 3004 has a metal sleeve rivet construction. A metal closure makes the phenolic base dustproof and also provides thermal and electrical isolation for the silver contacts.</p>	<p>3001: Not UL/CSA approved. 3001U Vac only: UL/CSA approved. 3004 Vac and hp only: UL/CSA approved.</p> <p>Potential applications:</p> <ul style="list-style-type: none"> • Computers • Office equipment • Blood analyzers 										

Table 4. 3001/3004 Series Standard Temperature Characteristics

Operating Temperature Range °C [°F]	Tolerance		Standard Mean Differential °C [°F]	Optional Max. Differential °C [°F]
	Open °C [°F]	Close °C [°F]		
-17,8 °C to 0 °C [0 °F to 31 °F]	±3,9 [±7]	±5,0 [±9]	16,7 to 33,3 [30 to 60]	-
	±3,3 [±6]	±3,9 [±7]	8,3 to 16,1 [15 to 29]	-
0 °C to 26,1 °C [32 °F to 79 °F]	±3,3 [±6]	±4,4 [±8]	16,7 to 33,3 [30 to 60]	-
	±2,8 [±5]	±3,9 [±7]	8,3 to 16,1 [15 to 29]	-
	±2,8 [±5]	±2,8 [±5]	5,6 to 7,8 [10 to 14]	-
26,7 °C to 93,3 °C [80 °F to 200 °F]	±2,8 [±5]	±3,9 [±7]	16,7 to 33,3 [30 to 60]	-
	±2,8 [±5]	±3,3 [±6]	8,3 to 16,1 [15 to 29]	-
	±2,8 [±5]	±2,8 [±5]	5,6 to 7,8 [10 to 14]	-
	±2,8 [±5]	-	-	5,6 [10]
	-	±2,8 [±5]	-	5,6 [10]
	±2,2 [±4]	-	-	4,4 [8]
93,9 °C to 148,9 °C [201 °F to 300 °F]	±3,9 [±7]	±4,4 [±8]	16,7 to 44,4 [30 to 80]	-
	±3,9 [±7]	±3,9 [±7]	13,9 to 16,1 [25 to 29]	-
	±3,3 [±6]	±3,9 [±7]	11,1 to 13,3 [20 to 24]	-
	±3,9 [±7]	-	-	8,3 [15]
	-	±3,9 [±7]	-	8,3 [15]
	±3,3 [±6]	-	-	6,7 [12]
149,4 °C to 168,3 °C [301 °F to 335 °F]	±5,6 [±10]	±6,7 [±12]	22,2 to 44,5 [40 to 80]	-
	±5,6 [±10]	±5,6 [±10]	19,5 to 21,7 [35 to 39]	-
	±4,4 [±8]	±5,6 [±10]	13,9 to 16,1 [30 to 34]	-
	±5,6 [±10]	-	-	11,1 [20]
	-	±5,6 [±10]	-	11,1 [20]
	±4,4 [±8]	-	-	10,0 [18]
	-	±4,4 [±8]	-	10,0 [18]

Table 5. 3001/3004 Series Specifications

Characteristic	Parameter
Switch type	SPST
Reset type	automatic
Amperage	see Tables 6, 7, 8
Voltage	120 Vac
Operating temperature range	-17,8 °C to 150 °C [0 °F to 302 °F]
Environmental exposure range	-17,8 °C to 177 °C [0 °F to 350 °F]
Dielectric strength	MIL-STD-202 Method 301 3001: 1500 Vac 60 Hz, terminal to case 3004: 2000 Vac 60 Hz, terminal to case
Insulation resistance	MIL-STD-202 Method 302 Cond. B – 500 MOhm, 500 Vdc applied
Contact resistance	MIL-STD-202 Method 307 – 50 mOhm
Housing material:	
Base	phenolic
Contacts	silver alloy
Terminals	plated brass or steel
Closure	aluminum, stainless steel or brass
Brackets	stainless steel or brass
Approvals	UL File E36103, CSA File LR21048
Weight	4 g [0.14 oz] (brackets and wire leads not included)

Table 6. 3001 Contact Ratings

Life Cycles	30 Vac/dc	120 Vac	240 Vac
5,000	7 A	6 A	3 A
10,000	6.5 A	5 A	2.5 A
25,000	6 A	4 A	2 A
50,000	5.5 A	3.3 A	1.5 A
100,000	5 A	2 A	1 A

Table 7. 3001U Contact Ratings

Life Cycles	120 Vac	240 Vac	250 Vac
6,000	6 A	1.5 A	1.5 A
6,000	1/10 hp	-	-
100,000	3 A	-	-

Table 8. 3004 Contact Ratings

Life Cycles	120 Vac	250 Vac
6,000	8 A	1.5 A
6,000	1/10 hp	-
100,000	4.0 A	-