

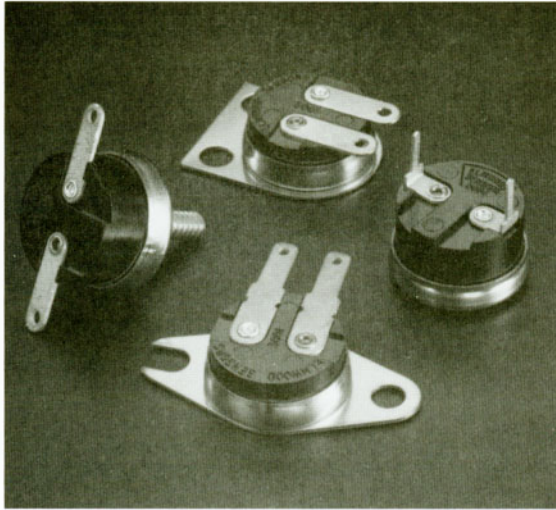
SERIES 3001/3004 NON-HERMETIC THERMOSTATS

Typical Applications:

Computers

Office Equipment

Blood Analyzers



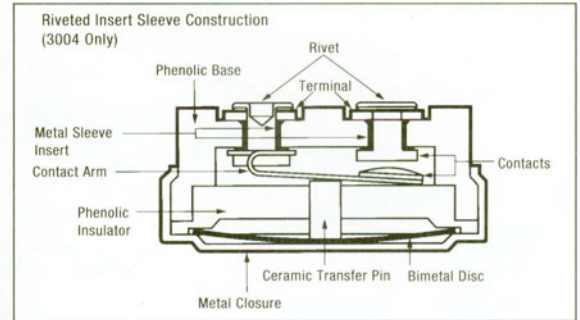
The Series 3001/3004 thermostat offers tight tolerances for applications that require precision control from a low profile device. These reliable, non-hermetic thermostats maintain the same high degree of quality and performance that characterize all Elmwood Sensors' precision thermostats.

The 3001/3004 are factory pre-set, single-pole, single-throw thermal switches available to open and close on temperature rise. Its phenolic base is made dust proof by a metal closure which also provides thermal and electrical isolation for the silver contacts.

The low-silhouette design of the 3001 makes it an excellent choice where a non-hermetic precision unit is required for tight tolerances. Model 3001U is similar to the 3001, but manufactured and tested for applications that require a UL and/or CSA rating.

The 3004 differs from the 3001 by offering a metal sleeve insert-rivet construction and higher spacing to meet European approval agencies' requirements. It is also UL recognized and CSA certified.

To insure that a safe combination of thermostat and application is achieved, the purchaser must determine product suitability for their individual requirements.



Series 3001

LIFE CYCLES	30VAC/DC	120 VAC	240 VAC
5,000	7.0A	6.0A	3.0A
10,000	6.5A	5.0A	2.5A
25,000	6.0A	4.0A	2.0A
50,000	5.5A	3.3A	1.5A
100,000	5.0A	2.0A	1.0A

Model 3001U - UL and CSA Ratings

LIFE CYCLES	120VAC	240VAC	250 VAC
6,000	6.0A	1.5A ¹	1.5A ²
6,000	1/10 HP	–	–
100,000	3.0A	–	–

Model 3004 - UL and CSA Ratings

LIFE CYCLES	120 VAC	250 VAC
6,000	8.0A ^{1,2}	4.0A ^{1,2}
6,000	1/10 HP ¹	–
100,000	4.0A ¹	2.0A ¹

1: UL Ratings

2: CSA Ratings

Consult Elmwood Sensors for additional ratings.

A: Amps

HP: Horsepower

Key Features:

- Narrow or Wide Tolerances or Differentials
- Low Silhouette and Lightweight (Model 3001)
- Environmental Exposure 0° to 350° F (-18° to 177° C)
- UL Recognized and CSA Certified
- Single-Pole, Single-Throw (SPST)
- Pre-set and Tamperproof
- Variety of Mounting Brackets and Terminals Available
- European Approved (Model 3004 Only)

SERIES 3001/3004 NON-HERMETIC THERMOSTATS

Standard Temperature Characteristics

Operating Temperature Range The tightest specification determines the group	Tolerance Allowable ^o ± at mean temperature set points		Standard Mean Differential Nominal degrees between opening and closing set point		Optional Max. Differential Max. number of degrees between opening and closing temperature		Price Group*
	±°F	±°C	°F	°C	°F	°C	

	Open		Close		°F	°C	°F	°C	Price Group*
	±°F	±°C	±°F	±°C					
0 to 31 °F -17.8 to 0°C	7	3.9	9	5.0	30-60	16.7-33.3	-	-	IV
	6	3.3	7	3.9	15-29	8.3-16.1	-	-	V
32 to 79°F 0 to 26.1°C	6	3.3	8	4.4	30-60	16.7-33.3	-	-	III
	5	2.8	7	3.9	15-29	8.3-16.1	-	-	IV
80 to 200°F 26.7 to 93.3°C	5	2.8	5	2.8	10-14	5.6-7.8	-	-	V
	5	2.8	7	3.9	30-60	16.7-33.3	-	-	I
	5	2.8	6	3.3	15-29	8.3-16.1	-	-	II
	5	2.8	5	2.8	10-14	5.6-7.8	-	-	III
	5	2.8	-	-	-	-	10	5.6	IV
	-	-	5	2.8	-	-	10	5.6	IV
	4	2.2	-	-	-	-	8	4.4	V
201 to 300°F 93.9° to 148.9°C	-	-	4	2.2	-	-	8	4.4	V
	7	3.9	8	4.4	30-80	16.7-44.4	-	-	I
	7	3.9	7	3.9	25-29	13.9-16.1	-	-	II
	6	3.3	7	3.9	20-24	11.1-13.3	-	-	III
	7	3.9	-	-	-	-	15	8.3	IV
	-	-	7	3.9	-	-	15	8.3	IV
	6	3.3	-	-	-	-	12	6.7	V
301 to 335°F 149.4° to 168.3°C	-	-	6	3.3	-	-	12	6.7	V
	10	5.6	12	6.7	40-80	22.2-44.5	-	-	I
	10	5.6	10	5.6	35-39	19.5-21.7	-	-	II
	8	4.4	10	5.6	30-34	13.9-16.1	-	-	III
	10	5.6	-	-	-	-	20	11.1	IV
	-	-	10	5.6	-	-	20	11.1	IV
	8	4.4	-	-	-	-	18	10.0	V
	-	-	8	4.4	-	-	18	10.0	V

*Grouped according to level of accuracy required. Group I with greatest latitude is less expensive than Group II, etc. Please consult factory for temperature ranges, tolerances and differentials not noted. The operating temperature ranges include tolerances.

The ± tolerances shown have been established after careful review of many thermostat applications. Attempts should be made to establish the widest acceptable tolerance possible. For example, the chart may list a tolerance of ±5°F (±2.8°C); however, ±6°F (±3.3°C) may be acceptable for the application at reduced cost.

Note: Temperature checking methods may be slightly different, and allowance for a 1.8°F (1°C) variance should be considered.

See Section B of the Terminal and Bracket Guide for dimensional characteristics.

Operating Parameters

Dielectric Strength	Mil-STD-202 Method 301 - 1500 VAC 60 Hz - Terminal to Case (2000 VAC - 3004)
Insulation Resistance	Mil-STD-202 Method 302 Cond. B - 500 Megohms - 500 Volts DC applied
Environmental Exposure	0° to 350°F (-17.8° to 177°C)
Operating Temp. Range	0° to 335°F (-17.8° to 168°C)
Contact Resistance	Mil-STD-202, Method 307 - 50 Milliohms
Weight	4 Grams (Brackets and wire leads not included)
Materials	Base: Phenolic Terminals: Plated Brass or Steel Closure: Aluminum, Stainless Steel, or Brass Brackets: Stainless Steel, or Brass Contacts: Silver

UL and CSA Listings

UL and CSA Listings (3001U and 3004) are for use in equipment where the acceptability of the combination of the thermostat and equipment is determined by Underwriters' Laboratories, Inc. and/or the Canadian Standards Association.

UL File E36103, CSA File LR21048.

Consult factory for European listings.