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NTE8065 thru NTE8242
Thermal Cutoff
(Thermal Fuse)

Description:

Twenty One Thermal Cut–offs (also known as Thermal Fuses) are now included in the NTE product line. They are miniature, NON–RESETTABLE temperature sensitive devices designed to prevent appliances and electronic equipment from overheating. NTE thermal cutoffs are UL and CSA listed.

Literally thousands of different applications have been devised for thermal–cutoffs, thus providing a large replacement market. Such applications include:

- Hair Dryers
- Irons
- Electric Motors
- Microwave Ovens
- Toasters
- Refrigerators
- Hot Plates
- Window Fans
- Popcorn Poppers
- UPS
- Battery Chargers
- Glue Guns
- Coffee Makers
- Dishwashers
- And hundreds of others

The TCO (Thermal Cut–Off) responds to temperature by interrupting an electrical circuit when the operating and/or environmental temperature exceeds the thermal rating of the device. This is accomplished when the internal organic pellet experiences a phase change, allowing the spring activated contacts to permanently open the circuit.

NTE Type No.	Diag. No.	Functioning Temperature		Holding Temperature		Maximum Temperature	
		°C	°F	°C	°F	°C	°F
8065	193	66	151	42	108	130	266
8070	193	72	162	50	122	115	239
8076	193	77	171	–	–	–	–
8081	193	84	184	60	140	125	257
8085	193	87	189	–	–	–	–
8090	193	93	200	–	–	–	–
8096	193	98	209	76	169	140	284
8098	193	100	212	–	–	–	–
8103	193	104	220	80	176	150	302
8108	193	109	228	88	190	140	284
8115	193	117	243	–	–	–	–

NTE Type No.	Diag. No.	Functioning Temperature		Holding Temperature		Maximum Temperature	
		°C	°F	°C	°F	°C	°F
8118	193	121	250	94	201	170	338
8125	193	128	263	106	223	155	311
8139	193	141	286	117	243	171	340
8149	193	152	306	128	262	176	349
8167	193	170	338	146	295	300	572
8181	193	184	364	160	320	300	572
8182	193	192	378	162	324	290	554
8213	193	216	421	191	376	241	466
8226	193	228	443	–	–	–	–
8242	193	240	464	200	392	290	554

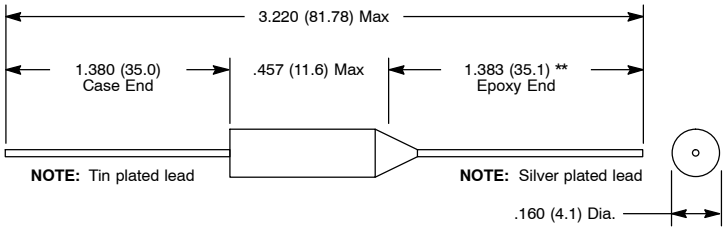
Electrical Rating Volts	Interrupting	Continuous
120/250 VAC	15A	10A
240 VAC	25A RES	16.7 RES
277 VAC	20A RES	15A RES

Electrical Rating Volts	Interrupting	Continuous
120–277 VAC	125VA Pilot Duty	
180 VAC	3A Motor Rating	

FEATURES:

- Maximum Current Rating: 15 Amps
- Typical Opening Temperature Tolerance: +0°C, –5°C
- 18 Gauge Solid Copper Wire
- Full 1 1/3 " leads to fit all replacement configurations
- All types meet the requirements of Underwriters Laboratories Specifications, CSA, and VDE.
- Each device comes packaged with 2 crimp splices for solderless connection.
- UL File No. E212625
- UL File No. E126429
- UL File No. E117626 (Guide # XCMQ2)
- C–UL File No. E117626 (Guide # XCMQ8)
- CSA File No. LR43279
- VDE File No. 115369

Diagram 193



** Some devices may have a lead length of .660 (12.8)

Note 1: Temperature sensitive devices. **Do not** store above +48°C (+120°F).

Note 2: Color Band does not denote temperature group.

Note 3: The electrical resistance of the NTE series thermal cut–off is comparable to that found in an equal length of 18 gauge solid copper wire. With proper air flow, heat generation below 15 Amps is minimal, above 15Amps the upper limit on the currentcapacity will depend on the environment for each specific application.

Note 4: A general rule of thumb for continuous operating temperature for thermal cut–offs is 30°C **less** than the Maximum Opening Temperature.