

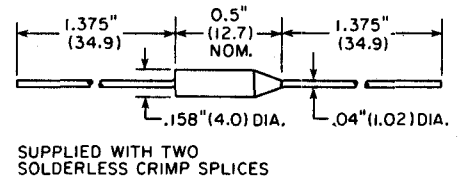
Thermal Cutoffs

Maximum Current Rating: 15 Amperes

Typical Operating Temperature Tolerance: +0°C, -4°C

ECG Type	Maximum Opening Temperature		ECG Type	Maximum Opening Temperature	
	°C	°F		°C	°F
ECG8063	66	151	ECG8115	117	243
ECG8070	72	162	ECG8118	121	250
ECG8076	77	171	ECG8125	128	263
ECG8081	84	184	ECG8139	141	286
ECG8085	87	189	ECG8149	152	306
ECG8090	93	200	ECG8167	171	340
ECG8096	98	209	ECG8181	184	364
ECG8098	100	212	ECG8213	216	421
ECG8103	104	220	ECG8226	228	443
ECG8108	109	229	ECG8242	240	464

Fig. C1



Replacement Procedures and Precautions

Proper Identification Of Part To Be Replaced.

It is important to determine the correct cut-off temperature from any available information. The original part may be marked with a part number, a cut-off temperature (in °C or °F), three resistor-type color bands (starting at seal end, bands represent opening temperature in degrees C) or any combination of these three markings.

The color of the plastic on the end of a TCO is not a reliable indication of the cut-off temperature. **There is no industry standard.**

Frequently the last three digits of the part number are the same as the cut-off temperature in either degrees Fahrenheit or degrees Celsius. The table below lists Celsius to Fahrenheit temperature conversions for your reference. When replacing a thermal cut-off with a trip temperature less than 120°C, the replacement part should have a trip temperature within 4°C of the original part. If the original part has a trip temperature greater than 120°C, the replacement should be within 8°C of the original part.

°C to °F Temperature Equivalents

°C	°F	°C	°F	°C	°F	°C	°F
60	140	95	203	140	284	210	410
65	149	100	212	150	302	220	428
70	158	105	221	160	320	230	446
75	167	110	230	170	338	240	464
80	176	115	239	180	356	250	482
85	185	120	248	190	374		
90	194	130	266	200	392		

Replacement Techniques

THE THERMAL CUT-OFF CAN FAIL TO OPEN IF ONE OR MORE OF THE FOLLOWING CONDITIONS ARE PRESENT:

- A. - Cracked or broken end seal due to improper lead bending, over-temperature soldering or excessive temperatures in use.
- B. - Compression on the end seal lead during use that could re-establish continuity with the case after tripping.
- C. - Distorted case caused by damage or clamping during the replacement operation.

The replacement thermal cut-off should have the same lead orientation as the original part to maintain proper heat flow characteristics and to avoid possible shock hazard from failed device case.

If it is necessary to bend the leads of the replacement device, care must be exercised to support the leads near the seal or body with a hand tool or bending fixture as illustrated in Fig. A.

Because these devices are temperature sensitive, we recommend solderless crimp splices or crimp terminations be used as shown in Fig. B. If the leads of the original device are long enough, cut the defective part out at the seal and body. The replacement part can then be installed to the original part leads using the seamless crimp splices supplied with the ECG replacement.

Thermal cut-off leads can be soldered using a heat sink between the thermal cut-off body and the point of connection as shown in Fig. C. Excessive heat could shorten the thermal cut-off life, causing a nuisance trip.

