

THERMAL CUTOFFS

A thermal cutoff is an electrical safety device that interrupts electric current when heated to a specific temperature. (Wikipedia) Thermal cutoffs are also known as a thermal switch or TCO.



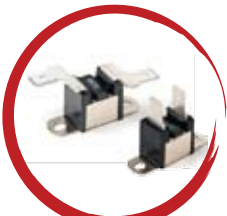
1-5 AMPS ALLOY TYPE 16 AMPS: ORGANIC (PELLET)

A Pellet type thermal cutoff is when ambient temperature of the thermal cutoff rises to its operating temperature, the pellet melts spring A expands moving the slide contact away from lead A, then the electrical circuit is permanently opened. Temp. range 73°C-240°C. Contact rating 16 Amps @ 120V or 10 Amps @ 240V



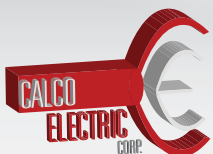
FUSE & THERMAL CUTOFF COMPOSITE DEVICE: CT FUSE

This Thermal Cutoff Fuse can be used as a device for overcurrent protection and for overheating protecting of electrical appliances and others. Temp. range 80°C-190°C. Contact rating 15 Amps @ 250V.



DIRECT RESPONSE (SURFACE SENSING) THERMAL CUTOFFS: DM SERIES

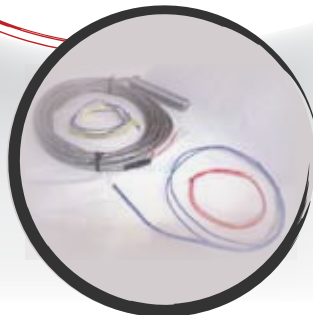
Quick Heat Response and High Accuracy by Direct Contact with Equipment Face. Corresponds to Temperature of Equipment Face. Temp. range 80°C-190°C. Contact rating 15 Amps @ 250V.



PTC THERMISTORS

MOTOR PROTECTORS • PTC RESISTORS

PTC thermistors are temperature sensitive ceramic semi-conductors. Thermistors available from Calco have a very high Positive Temperature Coefficient and hence can be used for over temperature protection in a variety of applications. These are also known as Motor protection sensors or PTC resistors.



Get In Touch with Calco Electric :

We would be happy to answer any questions, provide a quote, or place an order via phone **1-330-966-3796**, fax **1-330-244-0190** or e-mail **SALES@CALCOELECTRIC.COM**



CALCOELECTRIC.COM

Follow us on Facebook & Twitter for new products + updates

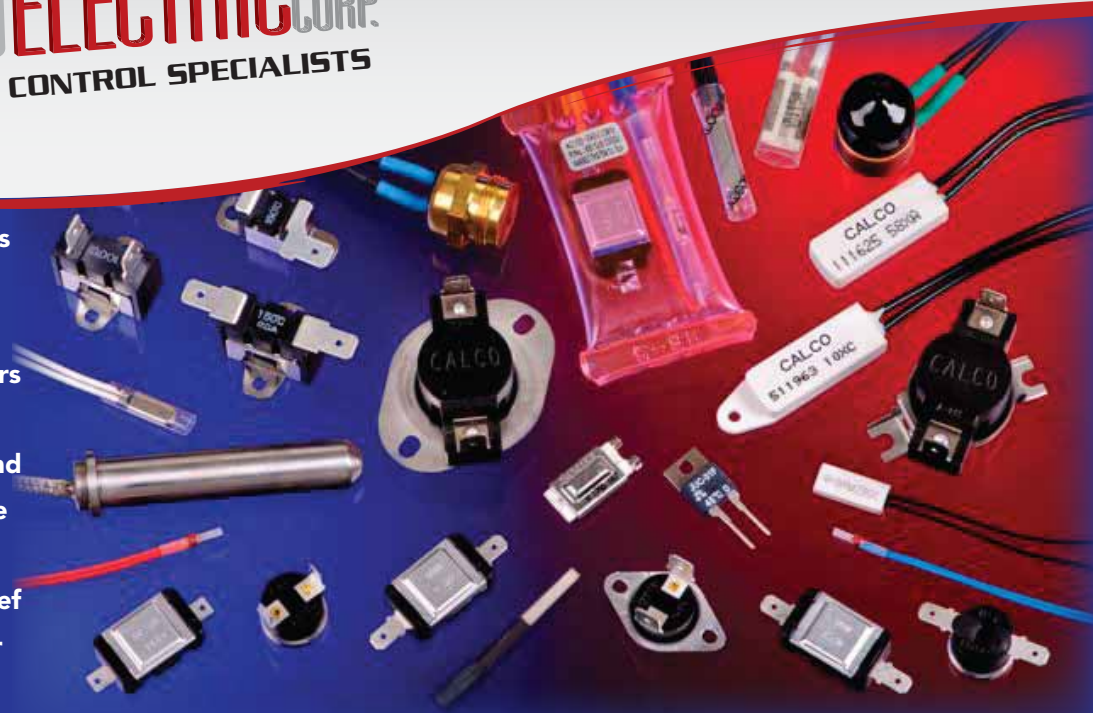
YOUR LOCAL CALCO REPRESENTATIVE:

Form 5/2013/1000



PRODUCT BROCHURE
2013

Calco Electric Corp. offers over 25 years of experience in the area of thermal controls. We offer thermal protectors, thermostats, thermal cutoffs, thermistors and insulated wires. We carry a large inventory of various thermal controls and in most cases we can ship same day. We can custom design our controls to meet your requirements. Please review a brief product overview and visit us online for detailed info CALCOELECTRIC.COM



Phone: **1-330-966-3796** / Fax: **1-330-244-0190**

5758 Foxboro Ave. NW | Canton, Ohio 44718 | sales@calcoelectric.com | www.calcoelectric.com

NEW! Now Offering a Full Line of Insulated Heater Wires!

Call to order to your exact specs:
Take advantage of our wide range of available products, competitive pricing and quality customer service!

SILICONE INSULATED HEATER WIRE:

AWM3342, AWM3323, AWM3350, AWM3219, AWM3270, AWM3589

Use in heating pads, electric blankets, refrigeration, air conditioning and other high watt applications. Isolation voltages ranging from 600 to 6,000, temp. ratings from 150°C to 200°C, voltage ratings from 300V to 600V. Diameters range from 1.6 to 8 mm. Product life on all wires exceed 10,000 hours. Resistance .22 OHMS/ Ft. to 5000 OHMS Ft.

FIBERGLASS BRAID HEATER WIRE: **AWM5147**

Use in hair curlers, small kitchen appliances and other low wattage applications. Resistance .22 OHMS/ Ft. to 5000 OHMS Ft.

PVC / THERMOPLASTIC INSULATED HEATER WIRE:

AWM1080, AWM1285

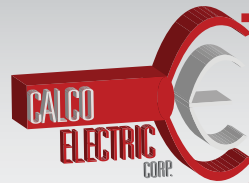
Use in heating pads, electric blankets and other low wattage applications. We offer PVC wires with diameters ranging from 1.8 to 5 mm and the product life on all of our insulated wires exceed 10,000 hours. Resistance .22 OHMS/ Ft. to 5000 OHMS Ft.

CARBON FIBER INSULATED HEATER WIRE:

AWM10543, AWM10480

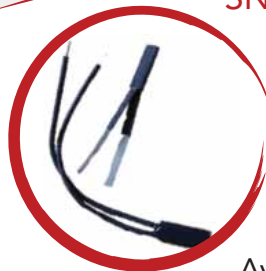
Use in heating pads, electric blankets and other low wattage applications. Diameters ranging from 1.8 to 5 mm and the product life on all wires exceed 10,000 hours. Resistance .22 OHMS/ Ft. to 5000 OHMS Ft.





THERMAL PROTECTORS

A Thermal Protector is a protective device built into a motor that provides over-current or over-temperature protection that disconnects power to the ballast if internal temperatures rise above the trip point. This protects motors from overheating. Types of switches include automatic reset, manual reset and resistance temperature detectors. Also known as motor protectors or thermal motor protectors.



SNAP ACTION THERMAL / BATTERY PROTECTOR: MODEL BRMS

For over temperature and over current protection in battery packs. Designed for easy placement between battery cells. Available with insulated wire leads or a nickel plated strip with an insulation sleeve. Temp. range 40°C-100°C



THERMAL PROTECTORS FOR MOTOR PROTECTION: TP1 SERIES

Features a shape small size, Good pressure resistance, High switching capacity, Minimal contact resistance, is both temperature and current sensitive and has rapid response. Rated voltage : 50/60HZ, 250V, AC. Rated Current : 2.5 (1.6)A, COS 1.0(0.6). Rated Open Temp range : +60°C~+160°C. Resetting temp.: Lower than rated open temp (+5°C ~+70°C).



BIMETAL THERMOSTAT: AMT-P1 SERIES

Open frame self hold thermal protector that offers an open frame design for safer and more reliable protection on circuits. Switch Type : normally closed. Operating Voltage/Current: AC250V/10A AC125V/16A. Operating Temp.: 60-140°C. Standard Tolerance: +/-5°C. Reset Temp.: operating temp. decrease by 15-45°C.



THERMAL PROTECTOR: ST01

The ST01 Series is small and easy to install. It has accurate temperature response, is temperature sensitive, compact & pressure stable and is used in motors, transformers, coils and electronics. Temp. range 60°C-180°C. Contact rating 3 Amps @ 250V.

THERMAL PROTECTOR / MOTOR PROTECTOR: MODEL TP2

Features a miniature size, positive make and break with snap-action disc, repeatable temperature performance over life, suitable for most impregnation processes, good DC/AC performance and a high grade thermoplastic insulated case. Used for HID ballasts, battery packs, motors, heating appliances and transformers. Temp. range 45°C-140°C. Contact rating 12 Amps @ 120V.

THERMAL PROTECTOR: TB-02 SERIES

One of the smallest devices manufactured in the world. It is comprised of a miniature bimetal snap disc that is both current and temperature sensitive. Operation of this thermal protector occurs when the temperature of the bimetal disc reaches its' precalibrated set point by a combination of high current or high temperatures or a combination of both. The TB02 series offers a proven protector for use in battery packs, motors transformers, and ballasts and heating appliances. Temp. range 30°C-135°C. Contact rating 3 Amps @ 120V or 2 Amps @ 250V.

THERMAL PROTECTORS: MODELS CK-01, CK-99

Features a compact and miniature size. Accurate and quick switching snap action. Electrical rate 16VDC at 20Amps; 250VAC, 16A for TCO; 250VAC, 1.5A for TBP. Temp. range 60°C~165°C for TCO; 60 °C~150°C for TBP. Tolerance : +/- 5°C for open action.



THERMOSTATS + THERMAL CUTOUTS

A thermostat is a component of a control system which senses the temperature of a system so that the system's temperature is maintained near a desired setpoint.



CREEP ACTION THERMOSTAT: JRMD SERIES

The JRMD is a bimetallic creep action (slow break / slow make) temperature regulating or thermal limiting device available w/gold diffused contacts for low voltage/current application. Temp. range 5°C to 150°C.



NARROW DIFFERENTIAL THERMOSTAT: HB-5 SERIES

The low profile rectangular type snap action thermostat has a unique dual contact assembly excellent for AC or DC applications. The narrow differential of 10°C or less in a low temperature application makes it an ideal controller for maintaining a constant temperature without a wide temperature swing. This thermostat offers increased sensitivity in a electrically insulated housing. Temp. range -20°C to 150°C.



NARROW DIFFERENTIAL THERMAL SWITCH: 17AME-H

Features Lowest Temp of 0°C - 180°C. Voltage: 120V 230VAC; 12V 24VDC. Current: 5A 3A.



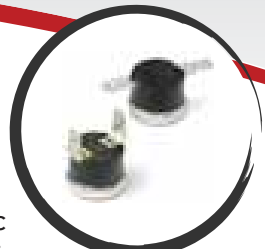
BIMETAL DISC THERMOSTAT: JUC 31 SERIES

RoHS compliant, snap action SPST bimetallic thermostat providing accurate sensing capabilities in a single device. It conforms to IEP standards Y220/ TO220. Therefore they may be automatically placed and soldered in a pick/place applications. Temp. range 0°C to 130°C.



HIGH TEMPERATURE THERMOSTAT: H702

Featuring a unique bimetal type thermostat controls temperature up to 400°C. UL Approved. Contact rating 10 amps @ 120V.



1/2" DISC AUTOMATIC RESET THERMOSTAT: HB-2

Offers proven reliability in a compact, cost- effective design. The snap-action of the bimetal disc provides excellent contact separation resulting in excellent life cycle at electrical loads of 15 amps at 120 volts and 7.5 amps@250 volts, and 10 amps at 240 VAC for 100,000 cycles. Temp. range -20°C to 150°C.



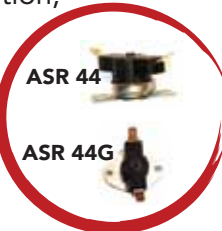
3/4" DISC THERMOSTAT: HB-7

This snap action bimetal disc thermostat is a versatile, cost effective design. The snap action of the temp. sensing bimetal disc provides high speed contact separation resulting in high life characteristics at loads of 25 amps @ 250 VAC. Temp. range 35°C to 150°C.



HIGH PRECISION & LONG LIFE THERMOSTAT: MQT SERIES

Compact, inexpensive narrow differential with an extremely long life! Tolerance +/-2°C. Temp. range -10°C to 110°C.



SELF HOLD THERMAL CUTOUT: ASR

Designed to prevent overheat or fault conditions in a heater. Once activated in fault condition, contacts open and remain open. The only way to reset is to remove power circuit. This adds extra safety over an automatic reset device, working much like a manual reset, but without the push button and problem of remote access to reset the device manually. High switching current 25 AMP/240 volts.



RESETABLE THERMAL CUTOUT: AC02

Small sized cutout for protection of motors and transformers. Rated voltage: 250V; AC. Range of rated switching temp.: 65°C - 180°C. Switching temp. tolerance: ±5°C/±7.5°C/±10°C. Switching differential: 30 ± 15°C. Contact resistance: max <25 m.