



Series 11-800 temperature switches are low-cost, slow-response sensor switches useful for OEM applications where the detection of cold or high temperature limits is required. The product can sense temperature from freezing to 90°C, in six narrow differentials, preset trip points. SPST contacts actuate when the element's case reaches its preset temperature set point.

This is a bi-metallic sensing mechanism packaged in a corrosion-resistant plastic sheath incorporating a sensing section, hex section, and 1/8" NPT thread for mounting purposes. It mates with a large variety of ERECTA SWITCH components so just about any mounting requirement can be satisfied. And it can be combined with our level and flow sensors, making possible many low-cost, efficient solutions to otherwise complex control problems.

ERECTA SWITCH

Series 11-800 Temperature Switches



11-800s are creep mechanisms no built-in differential and are characterized by slow make/break and rapid cycling capability. As a result, they are suited for both control and limit applications. The switch is not a snap-acting device. So, the potential for rapid cycling in certain situations must be taken into account. Similarly, the thermal lag caused by poor thermal conductivity of the plastic sheath limits the device to temperature changes which occur over several seconds/degree change. A time lag of 120 seconds is not uncommon for a 60-degree change when immersed in water. As is the case with all Compac products, final design criteria should be based on your testing of our products in your application at your facility.

Note:

The sketches shown here depict 11-800 temperature and 10-782 liquid level switches assembled to ERECTA SWITCH extension components. Here's a combination that can solve water level control requirements where hot or cold extremes are of concern.

(Pepi Type C) Contacts open on rise		(Pepi Type CR) Contacts close on rise	
Temperature Set Point °C	Identity Code Letter	Temperature Set Point °C	Identity Code Letter
0-5	A	0-5	I
40	B	40	J
50	C	50	K
60	D	60	L
70	E	70	M
80	F	80	N
90	G	90	O
100	H	100	P

ELECTRICAL RATING	
Contact rating	6 AMP, 120V, 60 Hz, Resistive Pepi (R) Models C and CR Portage Electric Products, Inc. North Canton, OH 44720
*UL file E37151	
Reactive Load	5 AMP 120V, 60 Hz Inductive
DC	2 AMP MAX @ 240 VDC Resistive

MATERIALS OF CONSTRUCTION	
11-800-PP-□	(Gray) Polypropylene
11-800-AC-□	(Red) Acetal
11-800-KR-□	(Natural) Kynar PVDF

APPLICATION ENVIRONMENT		
Pressure	50 PSI MAX @ 20°C	Derate, Zero @ 90°C
Temperature	120°C MAX	---

MODES OF OPERATION

Normally open and normally closed versions are available.

Normally open is designated as type "CR" and **closes its contacts on rising temperature.**

Normally closed is designated as type "C" and **opens its contacts on rising temperature.**

Contact form designation and fixed temperature set point code letter is embossed on the hex of the assembly.

THE BAD NEWS

Bi-metallic thermal sensing switches are **not the best choice when fast response sensing is required.**

Even when optimal heat transfer conditions exist, the miniature bi-metal switch sensor element requires **substantial time** to respond to temperature changes.

Response rate is further **slowed** by:

- Plastic sheath insulation
- Internal thermal barriers
- The lag between sheath and switch case

Therefore, 11-800s are best suited for **slow temperature change applications**, such as:

- Freeze protection
- Overheating detection in large-mass mediums

Response time is also influenced by:

- The medium's nature (liquid conducts faster)
- The sheath must heat before switch activation
- Several seconds per °C may pass before actuation
- **Overshoot should be expected and factored into design**

THE GOOD NEWS

- Affordable thermostat for **gas or liquid use**
- Handles **pilot loads at line voltage**
- Can be mounted in a variety of ways
- Compatible with other **ERECTA SWITCH** components
- Supports relay housings, receptacles, level switches, and alarms
- Enables compact, cost-effective control assemblies

Bottom Line:

Despite the response limitations, **11-800s are unmatched** in value. No other switch offers as much functionality for less cost.

Each unit is **100% tested** for quality and performance.

UL component recognition applies to the Pepi switch thermostat. Observe applicable electrical codes when using this product.