The Series SC1290 & SC1490 Thermocouple Limit/Alarm Switch Modules are on-off or limit switches with selectable, ther mocouple, or RTD inputs. Input type, scale range, output action, and output type are all selectable by the user in the field. All selections are made through easily accessible switches without the need to open the product. Each unit has two form C (SPDT) relays which can operate independently, or be logically connected to operate as a DPDT output. A two color LED indicator indicates the status of each output relay. These units mount easily on a standard 35mm DIN rail. Low voltage (SCL XXXX) units are also available.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC1290</td>
<td>T/C Input</td>
</tr>
<tr>
<td>SC1490</td>
<td>RTD Input</td>
</tr>
<tr>
<td>SCL1290*</td>
<td>RTD Input</td>
</tr>
<tr>
<td>SCL1490*</td>
<td>RTD Input</td>
</tr>
</tbody>
</table>

* Low voltage supply

**SPECIFICATIONS**

**Input:** SC1290: Thermocouple type J, K, R, S, T, E; SC1490: RTD Pt1000, Ni100, Ni120, Cu10, Ni-Fe1000, Ni-Fe2000.

**Power Supply:** (SC units) 85 to 265 VDC/VAC 50 to 400 Hz (12-24 VDC, VAC 50-400 Hz for low voltage option, SCL units).

**Isolation:** 1500 V rms between inputs, output, and power.

**Set Points:** Adjustable 0 to 100% of span.

**Deadband:** Adjustable 0.25% to 100% of span.

**Drift:** ±0.02%/°C typical ±0.05%/°C maximum.

**Temperature Limits:** Ambient (operating) 32 to 131°F (0 to 55°C); (storage) -40 to +176°F (-40 to +80°C).

**Excitation Current:** (SC1490) Cu10Ω = 5mA; Pt1000Ω = 50µA; Pt5000Ω; NiFe1000Ω = 100 µA; Pt10000Ω = 50 µA.

**Lead Compensation Error:** (SC1490) ≈ 0.02%/Ω.

**Open Lead Protection:** (SC1490) upscale only.

**Sensor Burnout Protection:** Selectable, upscale or downscale on 1290.

**Relay Output:** Form C, SPDT, one per set point, 5A @ 250 VAC, resistive.

**Latch Circuit Reset:** Automatic at power up. Manual with reset switch on front of module.

**Indicators:** One dual color LED per set point. Red = relay on, green = relay off.

**Wiring Terminals:** Screw driven compression type.

---

**Explosion-proof, Heavy-Duty Thermostat**

**Model 862E**

Explosion-proof, heavy duty, the Model 862E Thermostat is designed for hazardous location temperature control. It is the most dependable, smallest, lightest and most durable thermostat available. The 862E is designed to control heating, cooling, or ventilation systems and features an adjustable set point knob for easy and convenient setpoint adjustment. The thermostat incorporates reliable snap action switch operation in SPDT configuration rated to 480 VAC max.

**APPLICATIONS**

Oil refineries, petrochemical plants, pulp and paper mills, coal mines, grain elevators, hazardous waste water storage facilities, other hazardous locations where specific explosive gases or dusts are present.

**Model 862E**, Explosion-Proof, Heavy-Duty Thermostat

---

**SPECIFICATIONS**

**Service:** Compatible gases.

**Temperature Limit:** -49 to 176°F (-45 to 80°C).

**Enclosure Rating:** Explosion-proof NEMA 7 & 9, Class I, Divisions 1 & 2, Groups C & D; Class II, Division 1, Groups E, F & G; Class II, Division 2, Groups F & G; Class III, Class I, Zones 1 & 2, Groups II A & IB.

**Switch Type:** SPDT snap action switch.

**Electrical Rating:** 22A @ 480 VAC (res.), 1/2 HP @ 125 VAC, 1 HP @ 250 VAC.

**Electrical Connection:** Screw terminal.

**Conduit Connection:** 3/4” female NPT.

**Set Point Adjustment:** External knob.

**Adjustable Range:** 36 to 82°F (2 to 28°C).

**Deadband:** 2.5°F (1.5°C).

**Weight:** 2.1 lb (0.95 kg).

**Approval:** UL and CSA.