Series
1290
1490

Loop Alarms™

Accepts Inputs from Thermocouples, RTDs

Loop Alarms™ Accept inputs from thermocouples (1290), RTDs (1490). SPDT relay outputs can be set for latching or non-latching, direct or reverse action and high or low function. Output behavior is easily programmable via switches. Mount in standard 11-pin sockets.

Dimensions: Including socket pins, 2⅜" W x 3⅞₁₆" H x 1¾" D (60.3 W x 87.3 H x 44.4 D mm).

Model 1290 Input Type and Ranges	
Type E Thermocouple	**Type J Thermocouple**
-454 to +302°F (-270 to +150°C)	-346 to +374°F (-210 to 190°C)
-454 to +554°F (-270 to +290°C)	-346 to +680°F (-210 to 360°C)
32 to +302°F (0 to +150°C)	32 to +374°F (0 to190°C)
32 to +554°F (0 to +290°C)	32 to +680°F (0 to 360°C)
32 to +1220°F (0 to +660°C)	32 to +1400°F (0 to 760°C)
32 to +1832°F (0 to +1000°C)	**Type K Thermocouple**
Type S Thermocouple	-454 to +482°F (-270 to +250°C)
32 to 1922°F (0 to +1050°C)	-454 to +896°F (-270 to +480°C)
32 to 3200°F (0 to +1760°C)	32 to 482°F (0 to 250°C)
Type T Thermocouple	32 to 896°F (0 to 480°C)
-454 to +410°F (-270 to +210°C)	32 to 2501°F (0 to 1372°C)
-454 to +734°F (-270 to +390°C)	**Type R Thermocouple**
32 to 410°F (0 to 210°C)	32 to 1778°F (0 to 970°C)
32 to 734°F (0 to 390°C)	32 to 3200°F (0 to 1760°C)
Model 1490 Input Type and Ranges	
Pt 100, 500,1000 RTDs	**Ni120 RTDs**
32 to 212°F (0 to 100°C)	-58 to +482°F (-50 to +250°C)
32 to 572°F (0 to 300°C)	**Cu10 RTDs**
32 to 932°F (0 to 500°C)	32 to 482°F (0 to 250°C)
Ni100 RTDs	**NiFe 1000, 2000 RTDs**
-58 to +302°F (-50 to +150°C)	-58 to +392°F (-50 to +200°C)

SPECIFICATIONS

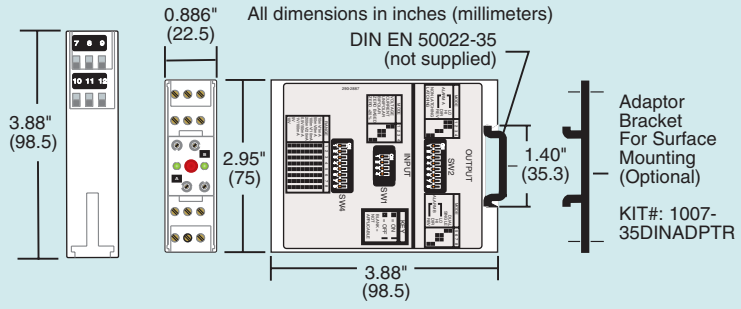
Isolation: 1500 Volts RMS between input, outputs and power.
Power Supply: 85-265 VDC/VAC, 50-400 Hz.
Setpoints: Adjustable from 0-100% of span.
Deadband: Adjustable from 0.25-100% of span.
Drift: ±0.02% /°C typical, ±0.05% /°C maximum.
Ambient Operating Temperature: 32-131°F (0-55°C) non-condensing.
Input Impedance: (1290) 3 megohms, Current input=10 ohms.
Search Current (1490): Cu 10K = 5 mA. Plt 100K, Ni100K, Ni120K =500µA. Plt 500K, NiFe 1000K, NiFe 2000K = 100 µA. Plt 1000K = 50µA.
Relay Output: SPDT, one set per setpoint, 5A @ 250 VAC resistive.
Latch Circuit Reset: Automatic at power up. Manual with reset switch.
Lead Compensation Error (1490): 0.02%/K.
Indicators: One dual color LED per setpoint; red = On, green = Off.
Open Thermocouple Protection (1290): Selectable upscale or downscale.

Model 1490
Model 1290
No. 481-0164 Socket

Series
SC1290
SC1490

Thermocouple & RTD Limit/Alarm Switch Module

Two Form C (SPDT) Switches, Small Size, Mounts Easily on 35 mm DIN Rail



The Series SC1290 & SC1490 Thermocouple Limit/Alarm Switch Modules are on-off or limit switches with selectable, thermocouple, 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.

MODELS

Model Number	Description
SC1290	T/C Input
SC1490	RTD Input
SCL1290*	T/C Input
SCL1490*	RTD Input

*** Low Voltage Supply**

SPECIFICATIONS

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 outputs, input, 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.
Ambient Temperature Range: (operating) 32 to 131°F (0 to 55°C). (storage) -40 to +176°F (-40 to +80°C).
Excitation Current: (SC1490) Cu10K = 5mA; Plt 100K, Ni 100K, Ni 120K = 500µA; Plt 500K, NiFe 1000K = 100 µA; Plt 1000K = 50 µA.
Lead Compensation Error: (SC1490) Ξ 0.02%/K.
Open Lead Protection: (SC 1490) Upscale only.
Input Impedance: (1290) 3 megohms.
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.
Dimensions: 2.95˝ H x 0.89˝ W x 3.89˝ D (75 x 22.5 x 98.5 mm).