Limit Controls

FM Approved, Large Dual Display, Universal Input

The 16L Series Temperature/Process FM Approved Limit Controls set a new standard in 1/16 DIN limit controls. The 16L offers universal input (10 thermocouple types, 4 RTD types, voltage, and current), single set point or dual set point. Standard features include remote reset capability, peak/valley indication, open sensor protection, input rate protection and adjustable differential. Outputs include normally open (form A) and normally closed (form B) relays. Form A and form B relays can be setup one for each set point output and logically linked to emulate a form C output.

Designed and built in the USA, the 16L family of controls offers the highest levels of features, function, and quality available today.

**STANDARD FEATURES**
- FM approved limit
- Large dual display
- Universal input
- Dedicated, illuminated reset key
- Four password protected security levels

**SPECIFICATIONS**
- Selectable Inputs: 10 thermocouple, 4 RTD, DC voltage, or DC current selectable.
- Display: Two 4 digit, 7 segment 0.3” (7.62 mm) high LEDs.
- Accuracy: ±0.25% of span, ±1 least significant digit.
- Supply Voltage: 100 to 240 VAC, nominal, +10 -15%, 50 to 400 Hz. single phase; 132 to 240 VDC, nominal, +10 -20%.
- Power Consumption: 5 VA maximum.
- Operating Temperature: 14 to 131°F (-10 to 55°C).
- Memory Backup: Nonvolatile memory. No batteries required.
- Control Output Ratings: Relay: SPST, 3A @ 240 VAC resistive; 1.5A @ 240 VAC inductive.
- Weight: 8 oz (227 g).
- Agency Approvals: FM, cUL, UL.

**OPTIONS (Add as a suffix to model number)**
-934, Process Signal Output, Isolated 0 to 20 mADC
-936, Process Signal Output, Isolated 0 to 10 VDC
-992, RS-RS-485 Serial Communications
-993, RS-RS-232 Serial Communications

**ACCESSORY**
A-600, R/C snubber

**TSF Series Thermocouple Limit Control**

The Series TSF Thermocouple FM Approved Limit Control provides audible alarm status along with a robust 16 amp relay output. Unit allows the user to easily select automatic or manual reset along with 10 other parameters. The TSF series has a built in reset button on the front panel or can accept an external reset.

**STANDARD FEATURES**
- Remote reset capability standard
- Dedicated, illuminated reset key
- Universal input
- Four password protected security levels

**SPECIFICATIONS**
- Probe Range: 0 to 700°C (32 to 999°F) for thermocouple J type. 0 to 999°C (32 to 999°F) for thermocouples K or S type.
- Input: Type J, K or S thermocouple.
- Output: 16A SPDT relay @ 250 VAC resistive.
- Horsepower Rating (HP): 1 HP.
- Control Type: ON/OFF; manual/automatic reset.
- Power Requirements: 110 VAC, 230 VAC, 12 VAC/VDC or 24 VAC/VDC (depending on model).

**OPTIONS**
-934, Process Signal Output, Isolated 0 to 20 mADC
-936, Process Signal Output, Isolated 0 to 10 VDC
-992, RS-RS-485 Serial Communications
-993, RS-RS-232 Serial Communications

**ACCESSORY**
A-600, R/C snubber

**MOUNTING COLLAR**
(Chown in Position)

**ALL DIMENSIONS IN INCHES (MILLIMETERS). PANEL CUT OUT IS 1.77+0.02˝ (45+0.6) SQUARE.**

**TSF-1000**

**Model**
- 16L2030
- 16L2034

**Output A**
- N.O. Relays
- N.O. Relays

**Output B**
- None
- N. C. Relays

**Price**
- $280.00
- $303.25

**ACCESSORY**
A-600, R/C snubber

**Price**
$17.75

**Model**
- TSF-4010
- TSF-4011
- TSF-4012
- TSF-4040

**Description**
- Type J/K/S input, 110 V, °F
- Type J/K/S input, 230 V, °C
- Type J/K/S input, 110 V, °F
- Type J/K/S input, 230 V, °C

**Price**
- $98.00
- $90.00
- $90.00
- $89.00

**TSF-4040**

**Model**
- Type J/K/S input, 24 VAC/VDC, °F

**Price**
- $89.00

**ACCESSORIES**
- TCS-J, J type thermocouple, 4" probe, 48" extension
- TCS-K, K type thermocouple, 4" probe, 48" extension
- TS2-K, Configuration Key

**Price**
- $14.00
- $14.00
- $89.00