

General Description & Applications

The TAL-2000 series wall mount temperature alarm provides temperature display with audible and visual alarms, high and low temperature alarm points, high and low temperature logging, calibration and alarm relay output. Applications for use include heating, cooling, refrigeration, HVAC, food service, medical and industrial equipment.

Features

- Membrane touch-pad programming
- 0.56" high red LED display
- Programmable alarm set points
- High and Low Temperature data logging
- Auto/Manual alarm reset options

Specifications

Power requirements: 24 VAC standard

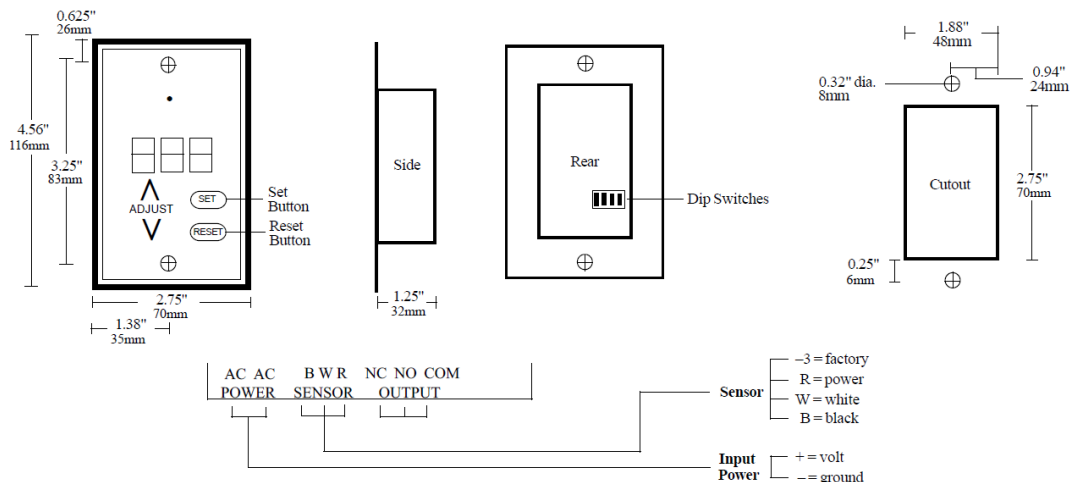
Relay status indicator: Lit while relay is activated

Alarm relay contact rating: SPDT relay, 1 amp (24 VAC resistive)

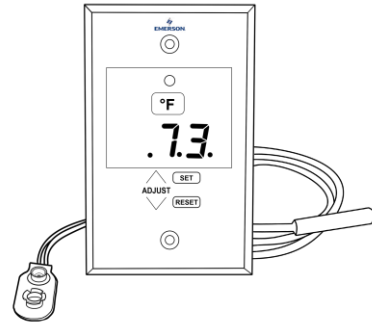
Ambient operating temperature range: 20° to 158° F, -6° to 70° C

Ambient operating humidity range: 90% non-condensing

Dimensions & Wiring



TAL-2000D Temperature Alarm Logger



- Alarm relay output
- Battery Backup
- Adjustable alarm silence feature
- Temperature Sensor included
- Uses model TS-10-3 sensor

Accuracy: $\pm 1^\circ \text{F}$, $\pm 1^\circ \text{C}$

Alarm Triac output: 12 or 24 VAC depending on model

Temperature sensor range: TS-10-3 sensor standard -40° F to 199° F (-40° C to 93° C). Sensor is on a 36" (.91m) 26 AWG wire and sensor is encased in a vinyl cap. Sensor can be extended up to 1000ft (30.5m) using 18-26 gauge, three conductor wire.

Battery Backup: 9 volt battery not included

Programming Instructions

A. HIGH AND LOW ALARM SET POINTS, HIGH/LOW LOGGING VALUES AND CALIBRATION

- High Alarm Limit “HSP” - To set the high alarm limit, press the SET button to display HSP. Press set again to display HSP value. Use Adjust arrows to select our desired value.
- Low Alarm Limit “LSP” - To set the low alarm limit, press the SET button to display LSP. Press set again to display LSP value. Use Adjust arrows to select our desired value.
- High Logged Temp “HI” - To view the highest logged temperature since the last reset, press SET button to display value. Press reset to clear HI value.
- Low Logged Temp “LO” - To view the lowest logged temperature since the last reset, press SET button to display value. Press reset to clear LO value.
- Calibration “CAL” - To calibrate the unit press SET then use adjust arrows to select desired calibration. Unit reads 00 from the factory and can be calibrated. ± 30 degrees.

IMPORTANT: If the programming sequence is interrupted for more than 15 seconds or not completed to the blank screen stage, the unit will automatically revert to the previous settings. (tamper resistant feature).

ALARM DELAYS, ALARM SILENCING – All dip switch functions should be set before powering the unit.

Dip Switch	On	Off
1	45 minute alarm delay	No alarm delay
2	Manual reset	Auto reset
3 & 4	No audible alarm	Disable silence
3	With 4 Off – 45 minute alarm silence	With 4 On – 5 minute alarm silence

Manual reset option – User must press RESET button to stop audible alarm even if temperature has returned to normal.

Battery Backup – A 9 volt battery (NOT INCLUDED) will transmit an audible alarm and allow you to read the display by pressing the RESET button during a power failure. Three decimal points indicate a low battery.

Ordering Information

The TAL-2000D Series Temperature Alarm Logger is available in a 12 or 24VAC model. Input voltage refers to the voltage required for the unit to operate.

The following part numbers are generally stocked and ready for shipment.

<u>Model</u>	<u>Alarm Relay Output</u>	<u>°F or °C</u>	<u>Sensor Type</u>	<u>Input Voltage</u>
TAL-2000D-24	1amp relay (24VAC resistive)	°F	TS-10-3	24 VAC
TAL-2000D-12	1amp relay (24VAC resistive)	°F	TS-10-3	12 VAC
TAL-2001D-24	1amp relay (24VAC resistive)	°C	TS-10-3	24 VAC

Custom Design & Modifications

In addition to standard models, Emerson Control Products specializes in complete custom design and manufacture of electronic controls. Modifications of our standard controls are also available. Please contact our Customer Service department to arrange for a consultation of your specific project and application.

Warranty

Emerson Control Products warrants its products to be free from defects in material and workmanship under normal use for one year and is not responsible for consequential damages or installation costs of any nature. Exposure to contaminants and

extreme environmental conditions such as moisture, temperature, chemicals, etc. may cause the unit to degrade or fail.
Emerson Control Products accepts no liability for product applications or customer application testing.

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