



TA33



Single Set Point Temperature Alarm W/Digital Display And Battery Backup

Designed specifically for...

- REFRIGERATORS • FREEZERS • ENVIRONMENTAL CHAMBERS

...or any area where temperature change is critical.

SPECIFICATIONS

Power	12 V Adapter 120 VAC with 6 ft. cable included (220V available). 24 Hrs 9V Battery backup.
Probe	Precision Thermistor with 6 ft. cable (21301)
Alarm Adjustment Range	-40°F to 160°F (-40° to 71°C)
Temperature Accuracy	+/- 2°F (+/- 1°C)
Temperature Units	°F or °C, User Selectable
Remote Connections	Screw type, 120VAC, 10 Amps.
Unit Operating Temperature Range	-10°F to 130°F (-23°C to 54°C)
Mounting	Flat Surface, external holes provided
Dimensions	4.8" x 3.2" x 1.4" (12.2cm x 8.1cm x 3.6cm)
Case	Hi Impact Thermoplastic



Rev 08152013
P/N 21383

ACCESSORIES

21301	Probe
21387	10' Probe Extension
21392	50' Probe Extension
ADTA	Phone Dialer



TA33

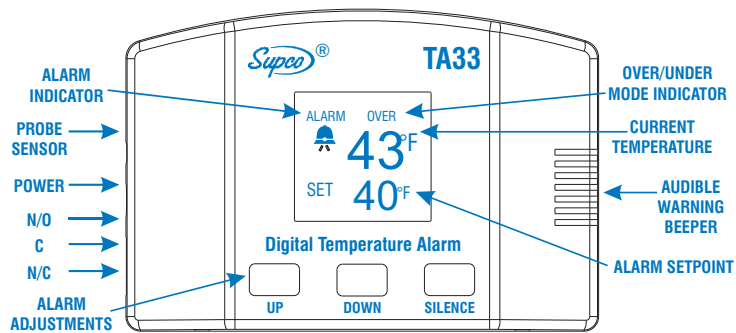
Digital Temperature Alarm with Display and Battery Backup

- Adjustable range from -40°F to 160°F (-40°C to 71°C)
- Back Lit Display
- 90 db audible alarm
- Adjustable alarm temperature ranges
- Built-in terminals for remote alarm or telephone dialer connection
- Switch for 'No delay' or '1 hour delay'



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The TA33 Temperature Alarm is a single point or threshold type of temperature alarm. This type of temperature alarm monitors the temperature at the sensor probe tip and when this temperature passes above (or below) the set point, the unit will execute a preset operation.

DISPLAY

The unit's display shows the current temperature, the alarm set point temperature, the alarm state and the mode of operation of the unit (over temperature or under temperature alarm).

When the probe temperature reaches the set point, the unit will display its state as follows:

In delayed alarm state the **ALARM** icon and the Bell will flash.

In the alarm state the **ALARM** icon and the Bell will remain solid. The Bell clapper will flash.

Audible alarm will sound and the N.O. relay contacts will close.

If the Silence button is pressed during alarm condition, the audible alarm will turn off and the N.O. relay contacts will open.

NOTE: This unit also has a slide switch that allows for the alarm to be activated immediately when the temperature has met the alarm threshold.

INSTALLATION

The TA33 may be mounted on any flat surface, in any position, using the two holes provided at the back of the case. Avoid mounting in areas of excessive humidity or temperatures outside the operating range of the TA33.

SENSOR EXTENSION

The TA33 sensor probe is designed to measure air temperature and may be mounted in any convenient location in the area to be monitored. The sensor probe may be extended up to 200 feet.

RELAY CONTACTS

The TA33 may be connected to a remote alarm using the relay contacts provided. Connections are provided for Normally Open or Normally Closed Dry Contacts. Dry Contacts mean that no electrical power is supplied to the contacts and power for a remote alarm or other device must be supplied externally. When an alarm occurs the N.O. relay contacts will close and remain closed as long as the alarm condition exists. Under battery backup, the relay contacts will only remain closed for 30 seconds under alarm condition. The relay contacts will open if the user hits the Silence Alarm button.

OPERATION

Plug the TA33 into a 120VAC (220V available) outlet and verify that the display shows the current temperature and the alarm set point. If the display is not on, the TA33 is not receiving power and is not operating. For continued protection, this requires immediate attention.

Connect a 9V battery if battery backup is required. When the unit is on battery power, the display will flash on and off slowly. When the unit is on battery backup and the battery is low, the display will flash on and off quickly.

Set the temperature alarm threshold to the temperature the TA33 must respond to, using the Up and Down buttons. Typical values will be between 35°F to 45°F degrees for a refrigerator and 0° to 15°F degrees for a freezer. The setting of this adjustment will depend on the type of protection the TA33 is being used for and it is up to the judgment of the user to select an appropriate alarm temperature.

The TA33 is set at the factory to alarm on a RISE above the set temperature, after a one-hour delay. The OVER/UNDER Switch is in the OVER position and the DELAY/NO DELAY switch is set to the DELAY position.

Over/Under and Delay/No Delay operation can be changed using the slide switches on the back of the unit. Setting the switch to NO DELAY will activate the audible alarm and the N.O. relay switch as soon as the probe temperature reaches the set point temperature. Setting the switch to OVER will cause the alarm to be activated when the sensor temperature rises ABOVE the temperature set point. Setting the switch to UNDER will cause the alarm to activate when the sensor temperature falls BELOW the temperature set point. An additional switch on the back of the unit controls the temperature units (°F or °C).

Setting the switch to DELAY will cause the TA33 to blink the ALARM and BELL ICONS when the Sensor temperature reaches the threshold set by the Front Panel Adjustment. When approximately one hour has passed and the Sensor temperature has remained past the threshold set by the Front Panel Adjustment, the TA33 will sound the audible alarm and close the N.O. relay contacts. Should the temperature return to its normal value before this period has elapsed, the one-hour delay will be reset. Setting the switch to NO DELAY will cause the TA33 to sound an immediate alarm and display the ALARM and BELL ICONS (Solid) when the temperature reaches the threshold set by the Front Panel Adjustment. Should the temperature return to its normal value, the TA33 will automatically reset.

CONNECTIONS

Locate the terminal strip at the back of the unit. These are the relay contacts. The relay contacts can be used with external devices, such as remote alarms or automatic dialers. Since each installation has different requirements, it is suggested you consult the instructions supplied with any remote device prior to making any connections to the TA33. Note the 10 Amp 120VAC rating of the relay contacts. PERMANENT DAMAGE will result if these limits are exceeded.

