APCET Temperature Controller



Specs

Input voltage	120 Volts AC
Maximum amperage	14.5 amps @ 120 VAC
Temperature control range	45º to 95º F
Separate Day & Night settings	*photocell control
Temperature accuracy	+/- 5 ºF
Temperature dead-band (hysteresis)	3 ºF
Weight	< 1 lbs
Dimensions	3" x 6" x 3.5"

Basic Description

The APCET is a temperature controller that can be used as a Cooling OR a Heating controller. Once the APCET is connected to a power source, and the cooling or heating device is connected to the APCET power outlet, the device connected will be automatically controlled by the settings on the APCET.

The user can choose to have different Day and Night temperature settings which will be automatically switched to the correct mode by the built-in photocell. The knobs make it easy to adjust the settings and provide a quick visual verification of the current setpoints. The LEDs on the front of the unit will turn ON and OFF to show the user the current conditions of the APCET.

NOTE: This unit is water-resistant however...

Keep it away from water!!! It is NOT WATER PROOF.

Installation

Plug the unit into a standard NEMA 5-15 wall outlet. A 120 volt power supply is required. For more permanent installations, the mounting tab at the top of the unit can be secured to a wall.

Ensure that the device being connected to the APCET has the proper voltage and will not exceed the maximum amperage rating of this unit. Connect the device to be controller into the power outlet on the front of the unit.

NOTE: If you are trying to control multiple devices, a power expansion module can be used to increase the amount of power load that can be controlled.

DO NOT EXCEED THE MAXIMUM RATING!!!

Selecting Cooling or Heating Mode

Before using the unit, the user must decide if they are using it for a Cooling or a Heating control. The 2 knobs on the unit are used to select the desired mode.

To select Cooling: Connect the unit to power. Rotate both knobs fully COUNTER-clockwise. After a couple seconds the LEDs on the front of the unit will start flashing On / Off. After the LEDs stop flashing, the selected mode is indicated by the LED that remains illuminated. (*Verify the **Cool** mode is ON.)

To select Heating: Connect the unit to power. Rotate both knobs fully clockwise. After a couple seconds the LEDs on the front of the unit will start flashing On / Off. After the LEDs stop flashing, the selected mode is indicated by the LED that remains illuminated. (*Verify the **Heat** mode is ON.)

* Once the correct mode is selected, the user can now set the desired temperature settings using the two knobs normally.

Changing Settings

Use the knobs on the front of the unit to adjust the DAY and the NIGHT temperature settings*. The photocell will automatically use the correct setting depending on the lighting level. When the temperature of the area exceeds the temperature set-point, the device connected to the power outlet will be activated. Since the temperature control has a dead-band setting of 3° F, the power outlet will remain activated until the temperature is lowered by 3 degrees F. When the outlet is powered, the **Output ON** LED will be ON.

*This example describes the Cool mode. When in Cool mode, the setting is the maximum temperature of the area to be controlled. For Heat mode, it is the minimum temperature of the area to be controlled.

Q & A

How can I tell if the photocell is working? There is a built-in 20 second time delay for the photocell to change status. A green LED on the top RIGHT edge of the unit that says "Daytime" will light up when the photocell is in Daytime mode.

Can I connect more than one device to the unit. Yes... As long as the total amperage of the devices connected to the unit do not exceed the maximum rating of the unit. We recommend the total amps not to exceed 75% of the rating.

The temperature of the area does not seem to be correct? The sensor is located on the bottom on the unit in the protective plastic "cage". Ensure the unit is not being affected by other factors such as direct sunlight exposure or areas that may not have good air movement.

What if there is no power? Ensure the unit is getting power. Check the device that is connected to the unit by plugging it directly into a known power supply. If the unit will not turn on and no LEDs will illuminate, contact your distributor for repair and warranty issues.

Why are the red and yellow LED lights blinking and no power? The blinking lights tell user the unit is in over current protection mode. It may be caused by large load current. Please unplug the unit and plug in again to resume the normal operation. If the user does not re-plug the unit, it will attempt to re-power itself after 10 minutes. After the error is reset, the unit will resume the normal operation.