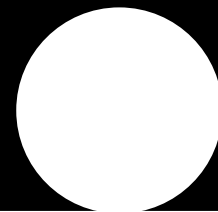


SCT

Specialty Concepts Timer

PHOTOVOLTAIC LIGHT TIMER



DESCRIPTION

The Specialty Concepts Timer (SCT) is a small, low-cost DC timer for the control of outdoor lights, pumps or other photovoltaic powered DC loads. This timer is designed to sense darkness at the PV array or via a photo sensor accessory, and then to automatically turn on the lights or other loads. The loads are then allowed to run for an adjustable period of time up to 15 hours, or until sunrise, whichever occurs first.

The SCT operates in 12 or 24 volt DC systems and is rated for 8 amps. It is housed in an anodized aluminum chassis and encapsulated in a hard epoxy resin. The terminal block accepts up to 12 gauge wire or a spade connector.

FEATURES

LIGHT TIMER

- 8 amp capacity, 12 and 24 volt
- Turns light on at sundown
- Adjustable run time, up to 15 hours
- Can be used as a day/night switch
- Uses PV array for sundown detection
- Photocell sensor assembly available (accessory)

DESIGN FEATURES

- Encapsulated for protection
- 100% solid state
- Input noise suppression
- Reverse polarity protection
- Lightning protection

APPLICATIONS

The SCT is designed as a system component for small to intermediate lighting applications that require more light than provided by a walkway light. The 8 amp capacity allows one SCT to control several small (16-30 watt) lights from a centrally located array and battery, or larger lights can be individually controlled. This allows each lighting system to be custom designed using a main battery bank or several distributed batteries. The SCT can be used to control an external relay for higher capacity, or to turn an inverter on for AC systems.



SCT - Specialty Concepts Timer

APPLICATIONS INCLUDE:

- Outdoor displays and advertising
- Barns, tool sheds and woodpiles
- Patios, gazebos and driveways
- Boat docks and piers
- Porch and security lighting
- Area and walkway lighting

OPERATION

The SCT is designed to work in conjunction with a photovoltaic system that has a charge regulator or blocking diode located between the battery and the array. The timer senses when the sun goes down by monitoring the voltage on the array and turns the light on, then lets it run for the pre-selected period. The "ON" time is adjustable from 10 minutes to 15

hours by turning an adjustment pot, and can be accurately set by timing the flashing time-base light located on the front of the timer. In most locations this unit can also be used as a "DAY/NIGHT" switch by turning the time period to the maximum period of 15 hours. Since the timer shuts the light off after the timer period is up or when the sun rises, whichever occurs first, the timer will turn the light on at dusk and off at dawn.

ACCESSORY

PHOTO CELL SENSOR-

For systems that are not photovoltaic powered, or PV systems that do not have a blocking diode, a photo cell sensor is available to detect night to start the light or other load.



Wiring Diagram SCT

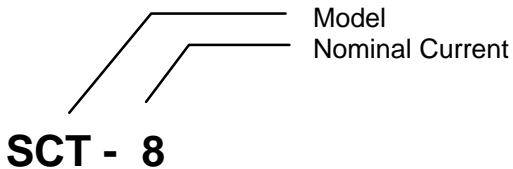
SPECIALTY CONCEPTS TIMER

PARAMETERS	UNITS	VALUE
Nominal Voltage	(Volts)	12 to 24
Load Current, Continuous, (1)	(Amps)	8
Load Current, Max (60 seconds) (2)	(Amps)	10.5
Array Voltage, Max Voc	(Volts)	44
Operating Voltage @ Battery, Maximum	(Volts)	31
Operating Voltage @ Battery, Minimum	(Volts)	10.5
Array Voltage to Reset, Minimum	(Volts)	.5
Quiescent Current Consumption, Day, Typ.	(Milliamps)	16
Quiescent Current Consumption, Night, Load Disconnected	(Milliamps)	7
Quiescent Current Consumption, Night, Load Connected	(Milliamps)	7
Voltage Drop, Battery to Load, @ 8 amps	(Volts)	.4
Adjustable Run Time, Loads, Range	(Minutes/Hours)	10 min. to 15 Hrs.
Time Delay, Typ. (3)	(Minutes)	15
Operating Temp. Range	(°C)	-20 to 50
Storage Temp. Range	(°C)	-55 to 85

Notes:

- (1) Non-inductive.
- (2) Carry only, Non-switching
- (3) Prevents false triggering

PART NUMBERING KEY



DIMENSIONS
In Inches (cm)

ACCESSORIES

PHOTOCELL SENSOR - Assembly

Specifications and product availability subject to change without notice.

Shipping weight: .5 lbs. (.25 Kg.)

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