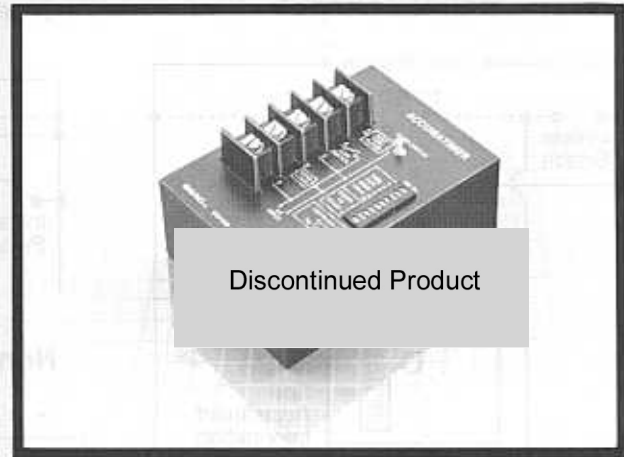


## GWT/GVT Series (Coin Totalizer/Timer)

- Accumulates from 1 to 15 Coins
- Programmable Number of Coins to Start
- Last Coin Alarm Output
- Time Delays from 1 Second to over 60 Minutes per Coin
- High and Low Current Solid State Output, up to 25 Amperes
- All Functions are Switch Setable
- 24, 120, and 230 Volts Operation



Discontinued Product

## DESCRIPTION

The GWT and GVT Series Accuma-Timer has a combination of features that satisfies a number of coin vending applications. Ideal for vending compressed air, self service car wash, vacuum cleaners, laundry equipment, tanning booths, or any operation that requires accumulated time for each coin deposited. These controls also provide programmable number of coins to start a vend and has the option of providing a last coin alarm. The output is solid state and is capable of handling loads such as contactors, motors, heaters, transformers, and valves. The molded housing with encapsulated circuitry makes the GWT and GVT suitable for the toughest environments. Rugged, reliable, and cost effective.

## SPECIFICATIONS

### 1. Time Delay

- 1.1 Type: Digital integrated circuitry
- 1.2 Range (Time Delay per Coin Switch Closure):
  - a. 1 to 63 seconds adjustable in 1 second increments
  - b. 2 to 126 seconds adjustable in 2 second increments
  - c. 0.1 to 6.3 minutes adjustable in 0.1 min. increments
  - d. 1 to 63 minutes adjustable in 1 min. increments
- 1.3 Adjustment: Six binary coded switches located on top of the control allows for setting of the time delay for each coin switch closure
- 1.4 Accumulation: The time delay (see 1.2) is accumulated on each coin switch closure. Example: If the time delay adjustment is set for 60 seconds and five coin switch closures occur, the total accumulated time delay is 300 seconds. The GWT and GVT will accumulate from 1 to 15 coin switch closures. During operation, additional closures can be accumulated to further extend the operating period.
- 1.5 Setting Accuracy:  $\pm 1\%$
- 1.6 Repeat Accuracy:  $\pm 0.1\%$  or 16 milliseconds, whichever is greater

### 2. Counts to Start

- 2.1 Type: Digital integrated circuitry
- 2.2 Description: The number of coin switch closures required before the load is energized and the time delay initiated
- 2.3 Count Range: 1 to 15 coin switch closures
- 2.4 Adjustment: Four binary coded switches located on top

### 3. Last Coin Output

- (Optional, available on GWT Series only)
- 3.1 Description: Near the end of the timing cycle when the remaining time equals that of one coin, an output will appear at terminal five (5) on the GWT. This output will continue until the end of the cycle or until one or more coin switch closures occur. (Output flashes at 60 FPM)

### 4. Input

- 4.1 Operating Voltage: 24, 120, or 230 volts AC
- 4.2 Tolerance:  $\pm 20\%$  of nominal
- 4.3 Line Frequency: 50 or 60 Hertz

### 5. Outputs

- 5.1 Load Output
  - a. Type: Solid state
  - b. Form: Single pole single throw, normally open
  - c. Maximum Load Currents:

Model	Steady State	Inrush
A	6 amperes	60 amperes
B	10 amperes	100 amperes
C	25 amperes	200 amperes
D	1 ampere	10 amperes

NOTE: The back mounting surface of the GWT is metallized to provide a method of transferring heat from the package to a metal mounting surface. Heat sink compound is provided with each unit.

- 5.2 Alarm Output (Optional, GWT only):
  - a. Type: Solid state
  - b. Single pole single throw, normally open
  - c. Rating: 1 ampere steady state, 10 amperes inrush
- 5.3 Allowable Plate Temperature: 90°C maximum
- 5.4 Voltage Drop: 2 volts typical at rated current

### 6. Protection

- 6.1 Transient protected
- 6.2 Encapsulated circuitry
- 6.3 Dielectric: 1500 volts RMS
- 6.4 Insulation Resistance: 100 megohms minimum

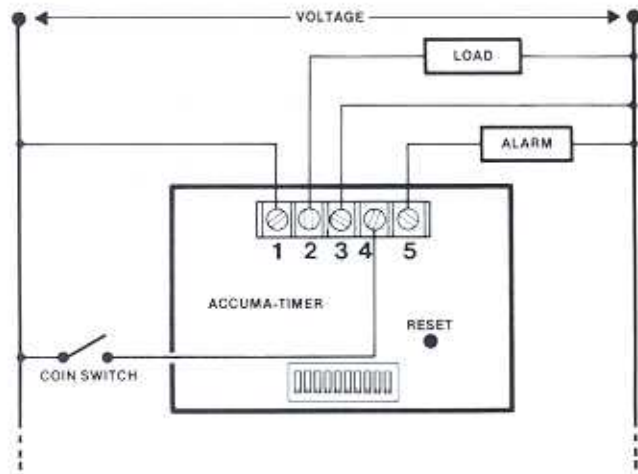
### 7. Mechanical

- 7.1 Package: Molded housing with metallized back for heat transfer. Encapsulated circuitry
- 7.2 Mounting: Surface mount with two #10 screws (must be mounted to metal surface for proper heat dissipation)
- 7.3 Terminations: 1/4 inch male quick connect terminals or screw terminals with barrier

### 8. Environmental

- 8.1 Operating Temperature: -40°C to +60°C
- 8.2 Storage Temperature: -40°C to +85°C
- 8.3 Humidity: 95% relative

# CONNECTION



# OPERATION

## PROGRAMMING

ON ← OFF Example: The switches are set as follows:

Time Delay per Coin (combine for total delay)	1	2	3	4	5	6	7	8	9	10	15	30	60
Coins to Start (combine for total)	1	2	3	4	5	6	7	8	9	10	15	30	60

Coins to start	6
Time Delay Per each coin (up to 15)	30

\* This could be seconds or minutes. See Ordering Information.

Set *time delay* and *coins to start* as shown. With all switches set and input voltage applied, the control is ready to operate.

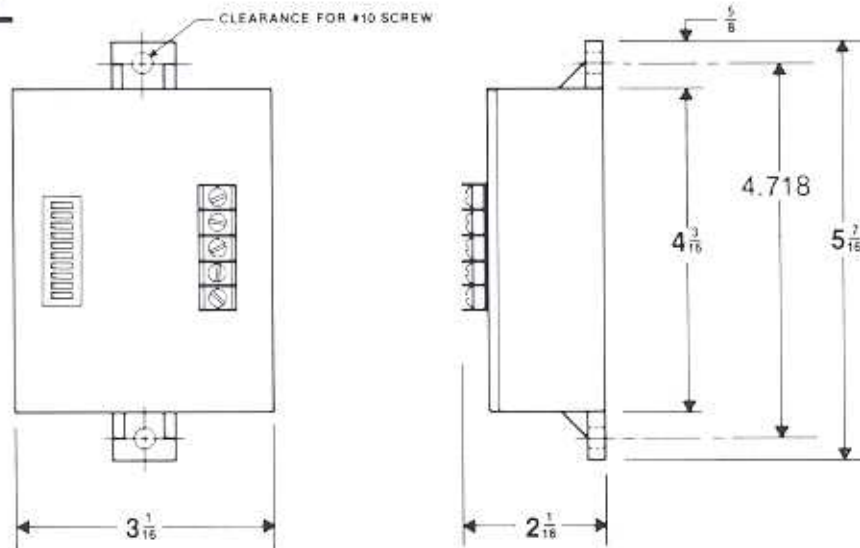
When the coin switch is activated, the GWT or GVT will count and accumulate. Upon reaching the number of coin closures to start, the load energizes and the time delay begins.

Additional coins up to 15 total, can be inserted and their time delays accumulated. Coins can be added anytime during the cycle. On completion of the total time, the load is de-energized. The control is then ready for another operation.

The cycle can be terminated at any point by actuation of the reset button located on the face of the control.

**Last Coin Alarm** (optional, GWT only): When the remaining time in a cycle equals that of one coin, an output will appear at terminal five (5). This output will continue until the end of the cycle or until one or more coin switch closures occur.

# MECHANICAL



Note: All dimensions in inches.

# ORDERING INFORMATION

Series	Operating Voltage	Time Range	Output Rating	Termination
<ul style="list-style-type: none"> <li>◇ GWT</li> <li>◇ GVT</li> </ul>	<ul style="list-style-type: none"> <li>◇ 2—24VAC 60Hz</li> <li>◇ 4—120VAC 60 Hz</li> <li>◇ 6—230VAC 60 Hz</li> <li>◇ 7—24VAC 50 Hz</li> <li>◇ 8—120VAC 50 Hz</li> <li>◇ 9—230VAC 50 Hz</li> </ul>	<ul style="list-style-type: none"> <li>◇ 1—1 to 63 seconds</li> <li>◇ 2—2 to 126 seconds</li> <li>◇ 3—0.1 to 6.3 minutes</li> <li>◇ 4—1 to 63 minutes</li> </ul>	<ul style="list-style-type: none"> <li>◇ A—6 amperes</li> <li>◇ B—10 amperes</li> <li>◇ C—25 amperes</li> <li>◇ D—1 ampere</li> </ul>	<ul style="list-style-type: none"> <li>◇ 1—1/4 inch quick connect</li> <li>◇ 2—Screw Terminals</li> </ul>

◇ Example Part Number: GWT21A2 is an Accuma-timer with an operating voltage of 24 volts AC and a selectable/accumulating time delay of 1 to 63 seconds. The solid state output is rated at 6 amperes. Terminations are made via screw terminals. The GWT has the optional last coin alarm output.