SWDC Series
Delay-On-MakeTimers

Timing Mode:
Delay on operate timing cycle begins upon application of input power. The relay contacts transfer at the end of the delay period and will remain transferred until input voltage is removed. Reset occurs when input voltage is removed.

Timing Diagram:

Contact Information:
Arrangement: 2 form C (DPDT) - Diagram C
Contact Material: Silver - Cadmium Oxide
Rating (Resistive):
10A @ 240V AC Resistive
15A @ 30V DC Resistive
15A @ 120V AC Resistive
1/3 HP @ 120V AC
1/2 HP @ 250V AC

Expected Life @ 25°C:
10 Million operations, Mechanical
100,000 operations minimum at rated loads.

Environmental Information:
Temperature Range:
Storage: -60°C to +105°C (-76°F to +221°F)
Operating: -40°C to +65°C (-49°F to +149°F)

**Mechanical Information:**
Termination: 8 pin Octal Style Plug or 11 pin spade terminals (Dia. C&D)
Enclosure: White plastic case. "L" version has a black case.
Weight: 4 oz (114g) approx.

**Outline Dimensions:**

![Diagram A](image1)

![Diagram B](image2)

**Timing Specifications:**
Timing: Three timing ranges, each covering a 1023:1 span, are standard. These are:
- A: 0.1 second to 102 seconds
- B: 1 second to 1023 seconds (17 minutes)
- C: 10 second to 10230 seconds (2.84 hours)

**Custom timing ranges are available.**

Timing Adjustment:
User operated 10 position DIP switch encoded in binary format.
Adjustment Resolution: Equal to minimum time delay.

Timing Tolerance: +/- 2%
Timing Repeatability: +/-1%
Timing Cycle Interrupt Transfer: None
Reset: Upon interruption of input power

**Initial Dielectric Strength:**
Between open contacts: 1000V RMS, Between adjacent contacts: 1500V RMS, Between contacts & coil: 1500V RMS.

**Input Information:**
Voltage: AC units -12V, 24V and 120V  
DC units - 12V, 24V, 48V and 110V  
Other voltages are available

Power Requirement:

AC units: 3 VA or less  
DC units: 3 Watts or less  
Transient Protection: 1 JOULE MOV  
Polarity Protection: On DC units - Yes

**Input Voltages & Limits:**

<table>
<thead>
<tr>
<th>Nominal</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V AC</td>
<td>10V</td>
<td>14V</td>
</tr>
<tr>
<td>24V AC</td>
<td>20V</td>
<td>28V</td>
</tr>
<tr>
<td>120V AC</td>
<td>105V</td>
<td>130V</td>
</tr>
<tr>
<td>12V DC</td>
<td>11V</td>
<td>14V</td>
</tr>
<tr>
<td>24V DC</td>
<td>20V</td>
<td>32V</td>
</tr>
<tr>
<td>48V DC</td>
<td>41V</td>
<td>55V</td>
</tr>
<tr>
<td>110V DC</td>
<td>95V</td>
<td>125V</td>
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**Wiring Diagrams:**
Ordering Information:
Definition of a part number for the Amperite SWDC Series Time Delay Relay:

Example:

120 A 1-1023 S L SWDC

A: Denotes nominal input voltage. Standard voltages are 12V, 24V and 120V AC; 12V, 24V, 48V and 110V DC. Custom Voltages are available.

B: Denotes type of input current required for operation:
A = AC - Alternate Current
D = DC - Direct Current

C&D: Denotes timing range of adjustability in seconds, minutes, or hours.

E: Denotes unit of time delay: S = seconds; M = minutes; H = hours.

F: Denotes form of termination: Leave blank for standard octal plug-in; Enter "L" if optional spade terminals are required (Diagrams B & D).

G: Denotes use of solid state digital circuitry of SWDC Series.