



Solving your relay requirements since 1922

Amperite Co.

(800) 752-2329  
www.Amperite.com

## DFA Series Adjustable Recycling Timer



- ... Solid state CMOS digital recycle (flasher) timer circuitry
- ... DPDT (2 form C) isolated 10 ampere relay contacts
- ... Off and On time-user adjustable over a 100:1 span
- ... 12V to 120V input voltage available-both AC and DC models
- ... UL File #E96739 (M)
- ... CSA File #LR62586-5


The Amperite DFA series adjustable recycling timers provide a continuously operating off/on cycle as long as power is applied to the input terminals. Two knob operated potentiometers provide user adjustment of both the flash rate and duty cycle. One knob sets the Off time; the other sets the On time. Standard models allow both the Off time and On time to be adjusted over a 100:1 range. Custom timing is available.

### Timing Mode:

Off/On recycling (flasher) timer. The initial timing period, after application of power, is "off". An option allows the unit to cycle "on" upon application of power. Standard timing ranges (Off and On time) are as follows:

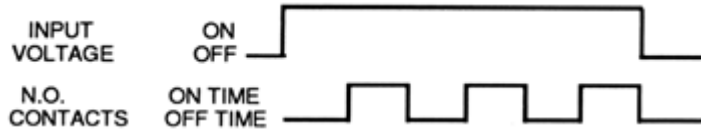
|                              |                             |
|------------------------------|-----------------------------|
| A: 0.1 second to 10 seconds  | G: 1 - 4 hours              |
| B: 0.25 second to 25 seconds | H: 14.4 minutes to 24 hours |
| C: 0.6 second to 60 seconds  | I: .6 minutes to 60 minutes |
| D: 1.2 second to 120 seconds | J: .1 minute to 10 minutes  |
| E: 1.8 second to 180 seconds | K: 10 minutes to 24 hours   |
| F: 1 minute to 100 minutes   | M: 1 - 10 hours             |

**Custom Timing Is Available.** Fixed timing is available from 0.1 secs thru 240 Hrs. If

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fixed timing is desired, please indicate S for secs., M for mins., & H for hours.

**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: -45°C to +70°C (-49°F to +158°F)


**Mechanical Information:**

Termination: 8 pin Octal Style Plug or 11-pin spade terminals (Diagram C & D)  
 Enclosure: White plastic case. Knob adjustable models have a dial scale for reference only. LDFFA version has a black case.  
 Weight: 4 oz (114g) approx.

**Timing Specifications:**

Timing - Fixed: 0.1 secs thru 240 Hrs.  
 Timing Adjustment: Two (2) knob adjustable potentiometers.  
 Timing Ranges: See Above.  
 Timing Tolerance: Fixed Units: ± 5%; 1% units are available at extra cost. Adjustable Units: -0 to +10% of maximum specified delay time. Minimum specified value or less at low end.  
 Repeatability: ± 1%  
 Release Time: 60 ms typical, 100 ms maximum  
 Timing Cycle Interrupt Transfer: None  
 Reset: Upon interruption of power

**Initial Dielectric Strength:**

|  |  |
|--|--|
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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. Custom 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:**

| Nominal | Minimum | Maximum |
|---------|---------|---------|
| 12V AC  | 10V     | 14V     |
| 24V AC  | 20V     | 28V     |
| 120V AC | 105V    | 130V    |
| 12V DC  | 11V     | 14V     |
| 24V DC  | 20V     | 32V     |
| 48V DC  | 41V     | 55V     |
| 110V DC | 95V     | 125V    |

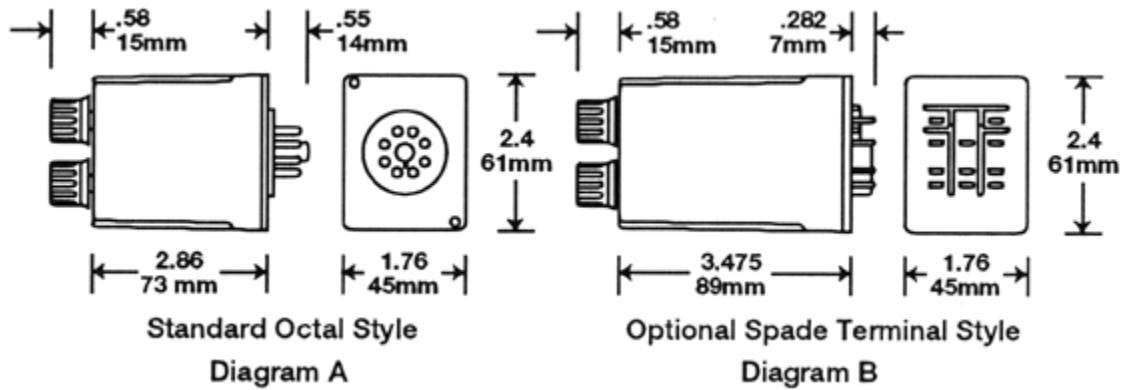
**Outline Dimensions:**



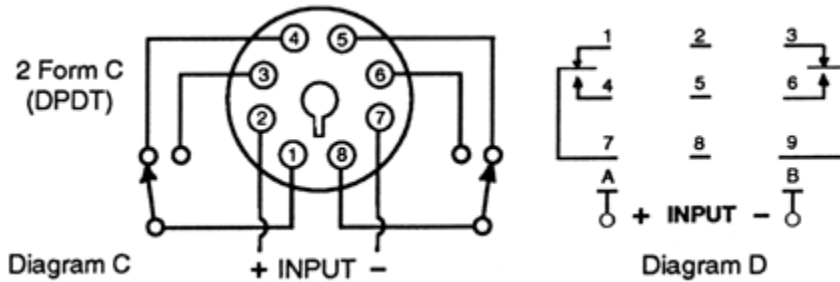
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**Wiring Diagrams:**



**Ordering Information:**

Definition of a part number for the Amperite DFA Series recycling Flasher.

Example:




**A:** Denotes nominal input voltage. Voltages Available: 12, 24, & 120V AC; 12, 24, 48 & 110V DC. Custom Voltages are available.

**B:** Denotes type of input current required for operation:

A = AC - Alternating Current

D = DC - Direct Current

**C:** Denotes first timing period. See timing mode chart above for proper code letter. For standard units this is an "OFF" time delay. Fixed timing available. If fixed timing is desired, please indicate S for secs., M for mins., or H for hours.

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**D:** Denotes second timing period. For standard units this is an "ON" timing period. Fixed timing available.

\*Note: If the ON time delay period is desired to occur first upon application of input power, place an "R" after the second timing period code letter, and enter range for ON-TIME in "C" & OFF-TIME in "D".

**E:** Enter "L" if optional 11-pin spade terminals are required (Diagrams B & D).

**F:** Denotes 10 ampere 2 form C adjustable recycle flasher - DFA Series.

