

A M P E R I T E Solving your relay requirements since 1922

# HDFA Series Adjustable Recycling Time Delay Relays (Flashers)



- ... 10 Ampere SPDT (1 form C) Switching
- ... CMOS digital timing circuitry
- ... OFF and ON-Time user adjustable
- ... Timing from milliseconds to hours
- ... UL File # Pending
- ... CSA File #Pending

# **Description:**

The Amperite HDFA Series low cost adjustable recycling timers may be used to alternately switch one or two load circuits with both OFF-Time and ON-Time adjustable by means of two built-in potentiometers. A SPDT 10 ampere contact set alternates continuously as long as power is applied to the relay. Typical applications include OFF/ON cycling for equipment burn-in test, lighting controls, and automatic cycling of electrically operated devices.

### **Contact Information:**

1 form C (SPDT) contact set. 1/2 HP @ 240 VAC, 1/3 HP @ 125 VAC. 10 amperes maximum @ 30 VDC or 250 VAC. Minimum switching load current 10 ma @ 5 VDC.

### **Timing Specifications:**

OFF/ON recycling (flasher) timer. Standard timing ranges are shown below. Custom and fixed timing are available; consult factory.

### Timing ranges:

A: .25 to 10 seconds G: 1 to 4 hours

B: .25 to 25 seconds H: 14.4 minutes to 24 hours

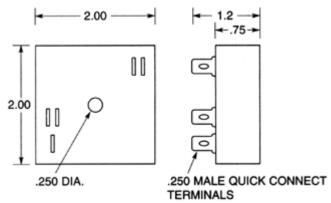
C: .6 to 60 seconds I: .6 to 60 minutes

D: 1.2 to 120 seconds J: .1 to 10 minutes

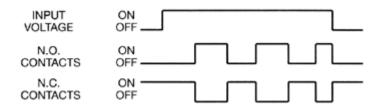
E: 1.8 to 180 seconds K: 10 minutes to 24 hours

F: 1 to 100 minutes M: 1 to 10 hours

### **Outline Dimensions:**



# **Timing Diagram:**



# **Input Information:**

VOLTAGE: AC units- 12V, 24V and 120V AC.

DC units- 12V, 24V, 48V and 110V DC.

Custom voltages are available.

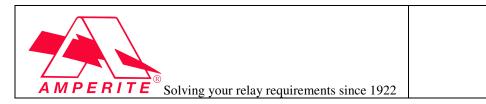
POWER REQUIREMENT: AC units: 3 VA or less;

DC units: 3 watts or less.

Polarity Protection on DC units - Yes.

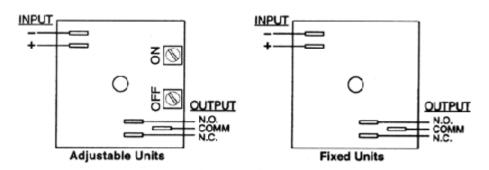
# **Input Voltages & Limits:**

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

# Wiring Diagram:



### **Mechanical Information:**

Enclosure 2 X 2 X 3/4 inch black plastic, epoxy sealed. Center hole mounting. 1/4 inch quick connect male terminals.



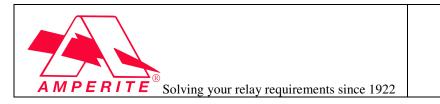
# **Ordering Information:**

Definition of a part number for the Amperite HDFA Series Recycling Relay: Example:



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

**B:** Denotes type of control input power required for operation: A = AC - Alternating Current; D = DC - Direct Current.



**C:** Denotes first timing period which is an "OFF" time delay. See chart above. If fixed time is required, specify time followed by S=seconds; M=minutes; or H=hours.

**D:** Denotes second timing period; see chart above. For fixed timing, specify time followed by S=seconds; M=minutes; H=hours.

**E:** Add "R" only if the "ON" time delay period is to occur first. When using "R" option, enter timing range for ON-Time in "C" & OFF-Time in "D".

**F:** Denotes Amperite HDFA Series 10 ampere SDT recycling timer.

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