DF10 Series Flasher

... Solid-state analog flasher circuitry
... DPDT (2 form C) isolated 10 ampere relay contacts
... Fixed flash rate: Available from 10 to 240 FPM
... 12V to 120V input voltage available - Both AC and DC models
... UL File #E96739 (M)
... CSA File #LR62586-3

Timing Mode:
On/off recycling flasher. The flash rates are fixed and are available from 10 to 240 flashes per minute (FPM). Duty cycle is approximately 50% with custom duty cycles available.

Timing Diagram:

Contact Information:
Arrangement: 2 form C (DPDT) - Diagrams C & D
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. LDF10 version has a black case.
Weight: 4 oz (114g) approx.

**Outline Dimensions:**

Timing Specifications:
Flash Rate - Fixed: Standard - 30, 45, 60, 75, 90 & 120 FPM. Custom rates available from 10 to 240 FPM.
Flash Rate Tolerance: ±10%

**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 input voltages available.

**Power Requirement:**
AC units: 3VA 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>
</tr>
</tbody>
</table>

Wiring Diagrams:

Ordering Information:
Definition of a part number for the Amperite DF10 Series Flasher.
Example:

120 A F 60 L DF10

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 flasher configuration.

D: Denotes flash rate. Standard rates are 30, 45, 60, 75, 90 & 120 FPM. Custom rates are available from 10 to 240 FPM.

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

F: Denotes 10A DPDT (2 form C) flasher - DF10 Series.