HDOD Series Delay-On-Dropout Time Delay Relay

- Solid state CMOS digital circuitry
- True delay on dropout: Timing cycle after power removal
- DPDT (2 form C) isolated 4 ampere relay contacts
- Built-in timing adjust potentiometer
- Numerous models from 0.1 seconds to hours

**Timing Mode**

Upon the application of input voltage the relay immediately energizes. The timing cycle begins when input voltage is removed. When the timing cycle is complete, the relay will de-energize.

**Timing Diagram:**

![Timing Diagram](image)

**Contact Information**

- **Arrangement:** 2 form C (DPDT)
- **Contact material:** Gold Clad Silver Alloy
- **Rating:**
  - Maximum Switching Power: 1000 VA, 90W (Resistive)
  - Maximum Switching Voltage: 250V AC, 48V DC
  - Maximum Switching Current: 4 Amperes
  - Nominal Switching Capacity: 4A 250V AC, 3A 30V DC
  - UL/CSA Rating: 4 A 1/20 HP 125, 250V AC, 3A 30V DC
- **Expected Life @ 25°C**
  - Mechanical: 100 Million operations
  - Electrical 100,000 operation at 4A 250V AC
  - 200,000 operations at 3A 30V DC

**Environmental Information**

- Temperature Range: Ambient: -40°C to 65°C (-40° to +149°F)

**Outline Dimensions**

![Outline Dimensions](image)
**Timing Specifications**

Fixed timing: 0.1 seconds to hour, tolerance 5%
consult factory for availability.
Adjustable Timing Ranges: .1 to 1 sec; 1 to 10 sec;
10 to 100 sec; 1 to 10 min; 10 to 100 min.
Availability of long delay time depends upon voltage;
consult factory for details.

**INITIAL DIELECTRIC STRENGTH:**

Between open contacts: 750V RMS
Between adjacent contacts: 1000V RMS
Between contacts & coil: 1500V RMS

**INPUT INFORMATION**

Voltage: 12, 24, 48, 120 volts AC or DC
Custom voltages are available
Power requirements: 2 VA or Watts
Transient: protection: 1 Joule MOV
Polarity protection DC units

**INPUT VOLTAGES & LIMITS:**

<table>
<thead>
<tr>
<th>Nominal</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>10V</td>
<td>11V</td>
<td>15V</td>
</tr>
<tr>
<td>24V</td>
<td>20V</td>
<td>28V</td>
</tr>
<tr>
<td>48V</td>
<td>20V</td>
<td>28V</td>
</tr>
<tr>
<td>110V</td>
<td>41V</td>
<td>55V</td>
</tr>
<tr>
<td>120V</td>
<td>95V</td>
<td>125V</td>
</tr>
</tbody>
</table>

**WRING DIAGRAM**

N.C.  COM  N.O.

TERMINAL VIEW SHOWN

POWER INPUT

**MECHANICAL INFORMATION**

Termination: 1/4 inch quick-connect male terminals
Enclosure: 2 1/2 by 3/4 inch, epoxy sealed
Single 1/4 inch hole flat panel mounting.
### Ordering Information

Definition of a part number for the Amperite HDOD Series Time Delay Relay

Example:

<table>
<thead>
<tr>
<th>120</th>
<th>A</th>
<th>1 - 10</th>
<th>M</th>
<th>HDOD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
</tbody>
</table>

**A:** Denotes nominal input voltage. Voltages: 12, 24 and 120V AC; 12, 24, 48, and 110V DC.

**B:** Denotes type of input power: A = AC, D = DC

**C & D:** Denotes timing range if knob adjustability. See Standard ranges. For fixed units specify a single number. Costume timing available.

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

**F:** Denotes Amperite HDOD Series DPDT 4 ampere delay-on-dropout TDR.