

# Delay On Break (OFF Delay) CT-AHD Timer Relay Output



- 17.5 mm Wide, 35 mm DIN Rail Mounting
- Universal Voltage  
24 ... 240 V AC; 24...48 V DC
- 7 Time Ranges From 0.05s ... 100 h
- Repeat Accuracy  $\leq \pm 0.5\%$
- 6 A Isolated SPDT Relay Output
- 2 LED's Indicate Status

Approvals:  **UL** **US**  
LISTED

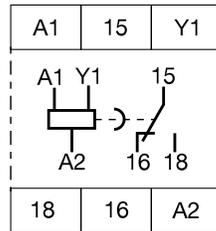
## Operation

**Delay On Break (OFF-delay with auxiliary voltage):** Supply voltage must be applied before and during timing; the green LED glows. Upon closure of the initiate switch S1, the output relay energizes and the red LED glows. The time delay begins when S1 is opened. The output remains energized during timing and the green LED flashes. At the end of the time delay, the output de-energizes and the red LED is OFF. The output will energize if S1 is closed when supply voltage is applied.

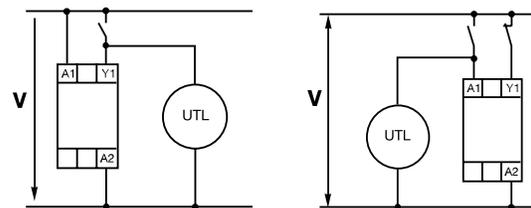
**Reset:** Re-closing S1 during timing resets the time delay. Removing supply voltage resets the time delay and the output relay.

| LED Operation   | Green LED | Red LED |
|-----------------|-----------|---------|
| Voltage Applied | ON        | N/A     |
| Relay Energized | ON        | ON      |
| Timing          | Flashing  | ON      |
| Voltage Removed | OFF       | OFF     |

## Connection

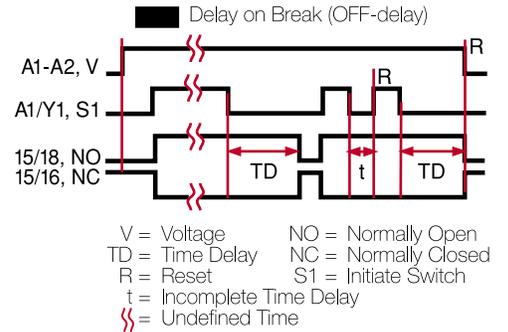


## Wiring Diagrams



**NOTE:** An optional untimed parallel load can be connected to A1 or Y1 as shown.

## Function



## Accessories



See accessory pages for specifications.

## Ordering Table

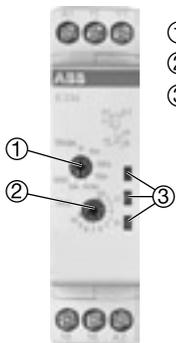
| Supply Voltage  | Time Ranges   | Part Number         |
|-----------------|---------------|---------------------|
|                 | 0.05 ... 1 s  |                     |
|                 | 0.5 ... 10 s  |                     |
| 24 ... 240 V AC | 5.0 ... 100 s | 1SVR 500 110 R 0000 |
| 24...48 V DC    | 0.5 ... 10 m  |                     |
|                 | 5.0 ...100 m  |                     |
|                 | 0.5 ... 10 h  |                     |
|                 | 0.5 ... 10 h  |                     |
|                 | 5.0 ... 100 h |                     |

# Delay On Break (OFF Delay) CT-AHD Timer Relay Output

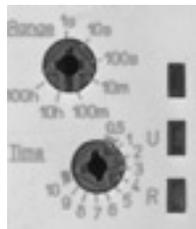
## Technical Data

|   |                                |  |
|---|--------------------------------|--|
| <b>Input</b>                              |                                |  |
| Voltage/Power Consumption                 | A1-A2                          | 24 ... 240 V AC; 24...48 V DC/ $\approx$ 2.0 VA / W  |
| Tolerance                                 |                                | -15% ... +10%  |
| Frequency                                 |                                | 50 ... 60 Hz   |
| Initiate Time                             |                                | $\geq$ 20 ms   |
| <b>Time Delay</b>                         |                                |  |
| Range                                     |                                | 0.05 s ... 100 h in 7 ranges   |
| Reset Time                                |                                | $\leq$ 50 ms   |
| Repeat Accuracy                           |                                | $\leq$ +/- 0.5%  |
| Time Delay vs Input Voltage Tolerance     |                                | $\leq$ 0.5%  |
| Time Delay vs Temperature                 |                                | $\leq$ 0.06%/°C  |
| <b>Status Display</b>                     |                                |  |
| Supply Voltage                            |                                | LED green  |
| Output Relay Energized                    |                                | LED red  |
| <b>Output</b>                             |                                |  |
| Rated Voltage                             | 15-16/18<br>VDE 0100, IEC947-1 | Isolated SPDT Relay<br>250 V   |
| Rating                                    |                                | 6 A resistive @ 230 V AC (AC 12)<br>3 A inductive @ 230 V AC (AC 15)<br>6 A resistive @ 24 V DC (DC 12)<br>2 A inductive @ 24 V DC (DC 13) |
| Switching Voltage                         |                                | $\leq$ 240 V AC  |
| Mechanical Life                           |                                | $\leq$ 30 x 10 <sup>6</sup> operations   |
| Electrical Life (4A resistive @ 230 V AC) |                                | $\leq$ 1 x 10 <sup>5</sup> operations  |
| External Fuse For (NO) Contact Protection |                                | $\leq$ 10 A fast acting  |
| <b>General</b>                            |                                |  |
| Rated Impulse Withstand Voltage (Vimp)    |                                | 4 kV/1.2 ... 50 $\mu$ S  |
| Operating/Storage Temperature             |                                | -20°C ... +60°C / -40°C ... +85°C  |
| Mounting on DIN Rail (EN 50022)           |                                | Snap-on mounting/Screw mounting with adaptor   |
| Wire Size Stranded with Wire End Ferrule  |                                | 2 x 14 AWG (2 x 2.5 mm <sup>2</sup> )  |
| Weight                                    |                                | $\approx$ 2.1 oz (60 g)  |
| Dimensions (W x H x D)                    |                                | 0.69 x 2.76 x 2.48 in. (17.5 x 70 x 63 mm)   |

## Face View



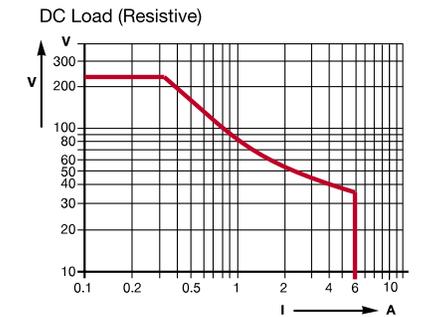
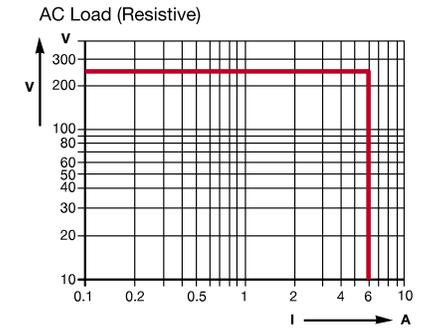
- ① - Time range selection switch, 7 ranges
- ② - Time delay adjustment
- ③ - LED Indicators  
R-Red - Output relay energized  
U-Green - Voltage applied  
U-Green (Flashing) - Timing



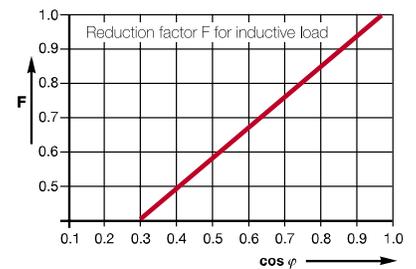
The time range selection switch displays the longest time delay in the range in seconds, minutes, or hours.

The time delay adjustment has a 0.5 to 10 reference dial. Use the time range setting as a multiplier, 1s = x0.1, 100s = x10.

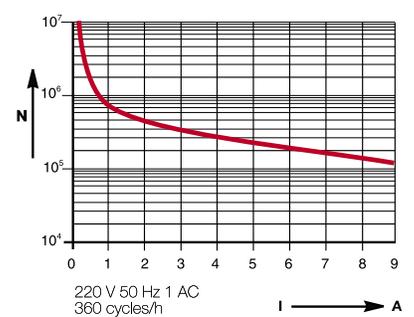
## Load Limit Curves



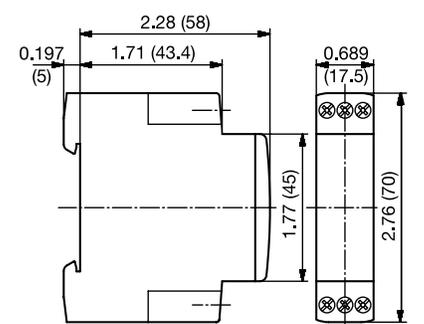
## Reduction Factor for Inductive AC Load



## Contact Lifetime



## Mechanical View



Inches (Millimeters)

5.87