

## Limit Alarms (potentiometer adj.) A-UNIT

### CT ALARM

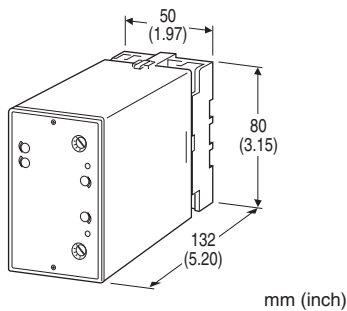
(Average sensing, RMS calibrated)

#### Functions & Features

- Providing SPDT relay outputs at preset AC current levels from a CT
- Dual (Hi/Lo) trip
- CT Protector provided for opencircuit protection
- Energized or de-energized coil at a tripped condition selectable
- Hysteresis (deadband) adjustable
- Enclosed relays
- Relays can be powered 110 V DC
- High-density mounting

#### Typical Applications

- Annunciator
- Various alarm applications



## MODEL: ACTA-[1]1[2][3]-[4]

### ORDERING INFORMATION

- Code number: ACTA-[1]1[2][3]-[4]

Specify a code from below for each of [1] through [4].

(e.g. ACTA-1111-B)

### [1] INPUT

#### Current

1: 0 – 1 A AC

5: 0 – 5 A AC

### [2] SETPOINT 1 OUTPUT

1: Hi (coil energized at alarm)

2: Hi (coil de-energized at alarm)

3: Lo (coil energized at alarm)

4: Lo (coil de-energized at alarm)

### [3] SETPOINT 2 OUTPUT

1: Hi (coil energized at alarm)

2: Hi (coil de-energized at alarm)

3: Lo (coil energized at alarm)

4: Lo (coil de-energized at alarm)

### [4] POWER INPUT

#### AC Power

B: 100 V AC

C: 110 V AC

D: 115 V AC

F: 120 V AC

G: 200 V AC

H: 220 V AC

J: 240 V AC

#### DC Power

S: 12 V DC

R: 24 V DC

V: 48 V DC

P: 110 V DC

### GENERAL SPECIFICATIONS

**Construction:** Plug-in

**Connection:** M3.5 screw terminals

**Housing material:** Flame-resistant resin (black)

**Isolation:** Input to output 1 to output 2 to power

**Input waveform:** Sine wave

**Zero adjustment:** -5 to +5 % (front)

**Span adjustment:** 95 to 105 % (front)

**Setpoint adjustments:** 270°-turn screwdriver adjustments (front); 0 – 100 % independently

**Hysteresis (deadband) adjustments:** 1 – 100 % (front)

**Front LEDs:** LED turns on at a tripped condition; red for output 1, green for output 2

**Power ON timer:** Relays de-energized for approx. 2 seconds after power is turned on.

### INPUT SPECIFICATIONS

**Frequency:** 50 or 60 Hz

**Input burden:** 0.5 VA maximum

**Overload capacity:** 500 % of rating for 5 sec., 120 % continuous

**Operational range:** 0 – 100 % of rating

### OUTPUT SPECIFICATIONS

■ **Relay Contact:** 100 V AC @ 1 A ( $\cos \phi = 1$ )

120 V AC @ 1 A ( $\cos \phi = 1$ )

240 V AC @ 0.5 A ( $\cos \phi = 1$ )

30 V DC @ 1 A (resistive load)

**Maximum switching voltage:** 380 V AC or 125 V DC

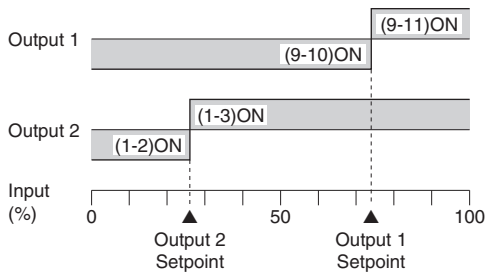
**Maximum switching power:** 120 VA or 30 W

**Minimum load:** 5 V DC @ 10 mA

**Mechanical life:**  $5 \times 10^7$  cycles

For maximum relay life with inductive loads, external protection is recommended.

## Alarm Trip Operation Terminal No. in parentheses



## Trip Operation in Power Failure

- **Output Code: 1 & 4:** Terminals 1 – 2, 9 – 10 turn ON
- **Output Code: 2 & 3:** Terminals 1 – 3, 9 – 11 turn ON

## INSTALLATION

### Power input

- **AC:** Operational voltage range: rating  $\pm 10\%$ , 50/60  $\pm 2$  Hz, approx. 2 VA
- **DC:** Operational voltage range: rating  $\pm 10\%$ , or 85 – 150 V for 110 V rating (ripple 10 % p-p max.) approx. 2 W (80 mA at 24 V)

**Operating temperature:** -5 to +60°C (23 to 140°F)

**Operating humidity:** 30 to 90 %RH (non-condensing)

**Mounting:** Surface or DIN rail

**Weight:** 450 g (0.99 lb)

## PERFORMANCE in percentage of span

**Trip point repeatability:**  $\pm 0.5\%$

**Temp. coefficient:**  $\pm 0.05\%/^{\circ}\text{C}$  ( $\pm 0.03\%/^{\circ}\text{F}$ )

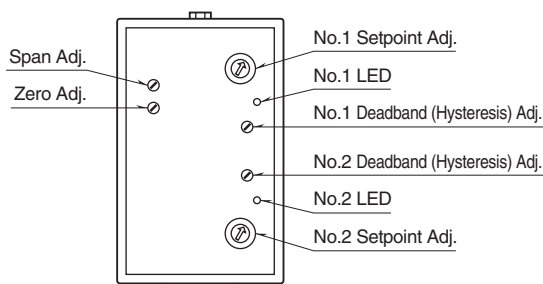
**Response time:**  $\leq 0.7$  sec. (0 – 100 % at 90 % setpoint)

**Line voltage effect:**  $\pm 0.1\%$  over voltage range

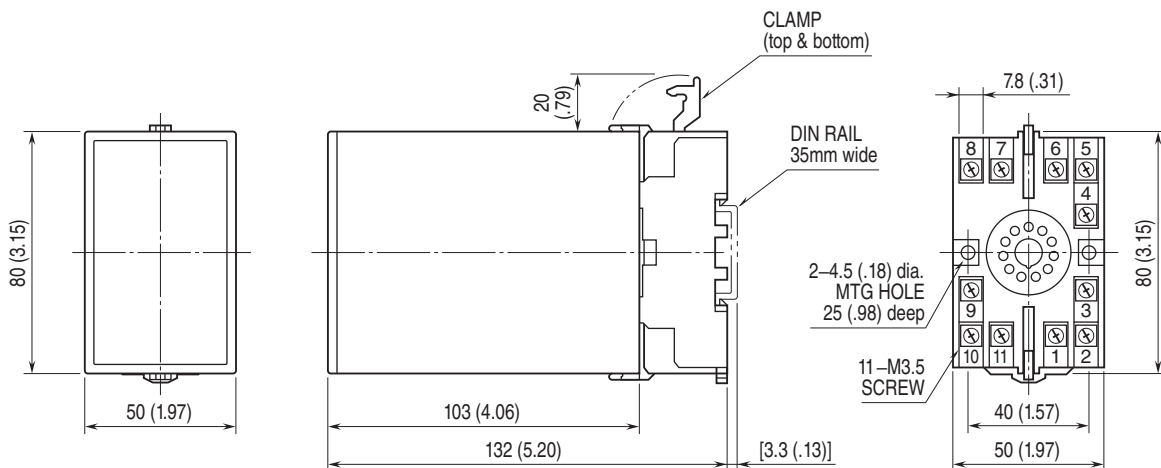
**Insulation resistance:**  $\geq 100\text{ M}\Omega$  with 500 V DC

**Dielectric strength:** 2000 V AC @1 minute (input to output 1 to output 2 to power to ground)

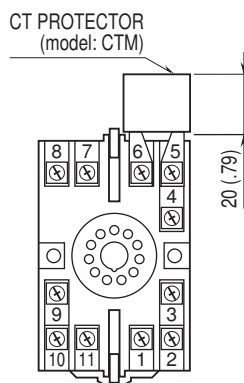
## EXTERNAL VIEW



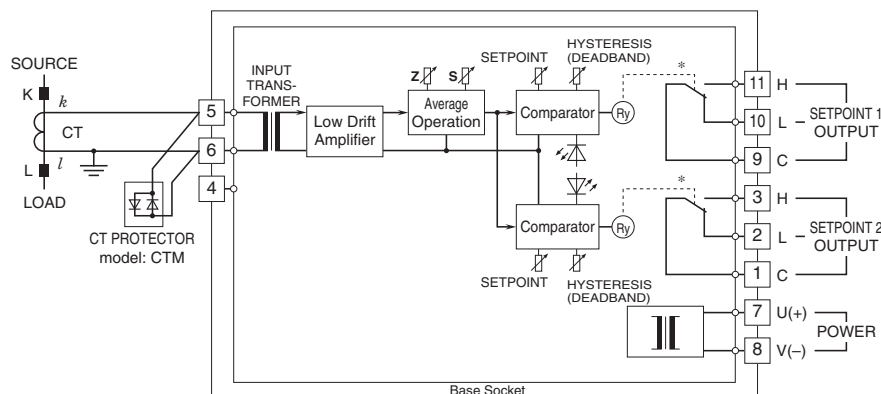
### EXTERNAL DIMENSIONS unit: mm (inch)



- When mounting, no extra space is needed between units.

**TERMINAL ASSIGNMENTS** unit: mm (inch)

## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

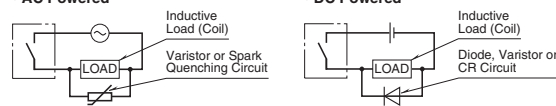


\*Relay status for output codes "1" & "4", at power OFF.

## ■ Relay Protection

- AC Powered

- DC Powered





Specifications are subject to change without notice.