

Limit Alarms (potentiometer adj.) A-UNIT

CT ALARM

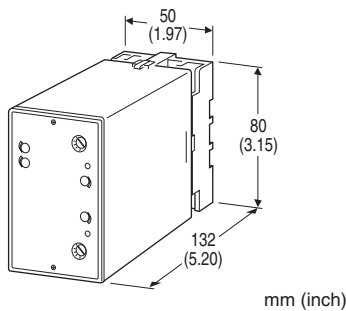
(RMS sensing)

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: ACTE-[1]1[2][3]-[4]

ORDERING INFORMATION

- Code number: ACTE-[1]1[2][3]-[4]
- Specify a code from below for each [1] through [4].
(e.g. ACTE-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:** Up to 15 % of 3rd harmonic content
- 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:** Lights turn 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

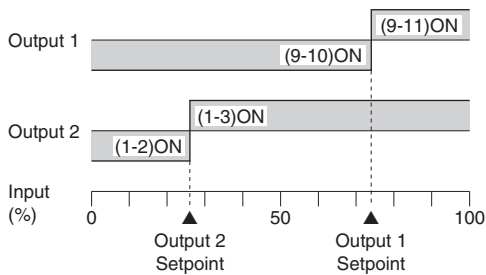
Maximum switching power: 120 VA or 30 W

Minimum load: 5 V DC @ 10 mA

Mechanical life: 5×10^7 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 ± 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 lbs)

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: ≤ 0.5 sec. (0 – 100 % at 90 % setpoint)

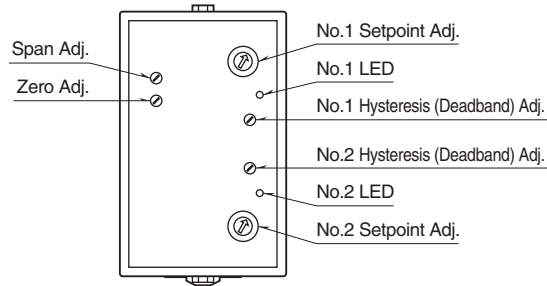
Line voltage effect: $\pm 0.1\%$ over voltage range

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

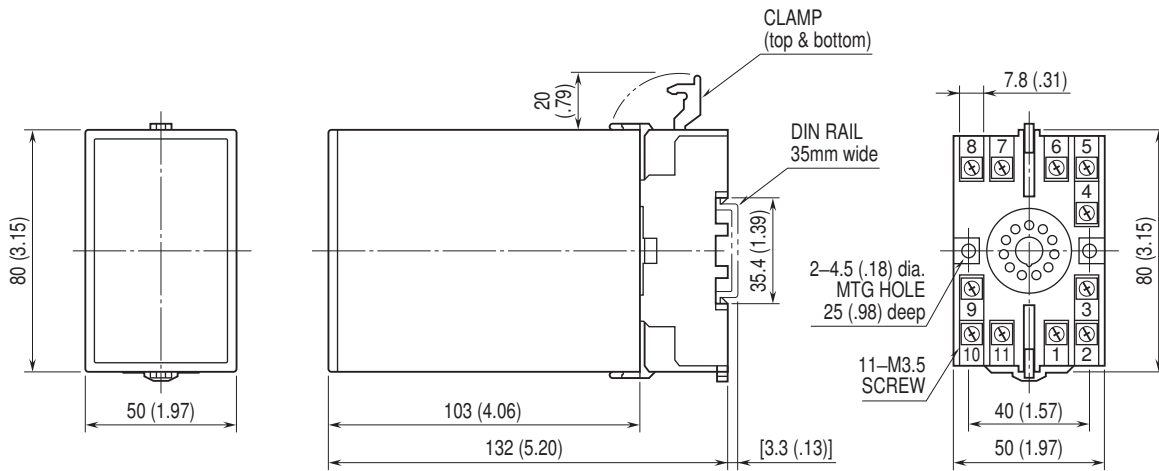
Dielectric strength: 2000 V AC @1 minute (input to output 1 to output 2 to power to ground)



EXTERNAL VIEW

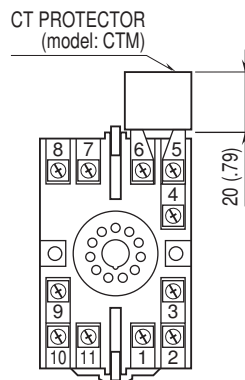


DIMENSIONS unit: mm (inch)

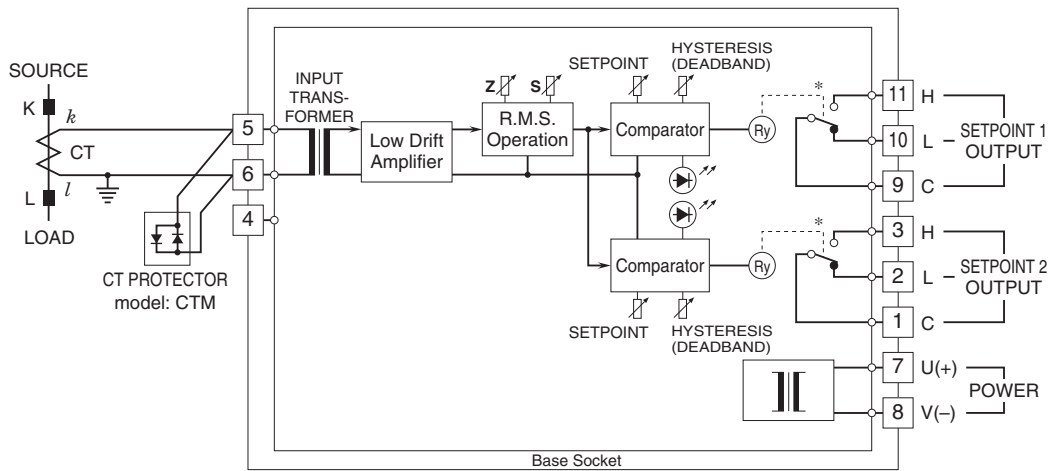


• When mounting, no extra space is needed between units.

TERMINAL ASSIGNMENTS unit: mm (inch)

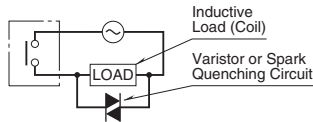


SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

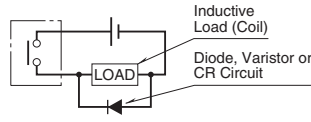


*Relay status for output codes "1" & "4", at power OFF.

Relay Protection
•AC Powered



•DC Powered



Specifications are subject to change without notice.

