

Power Transducer Series LT-UNIT

AC CURRENT TRANSDUCER

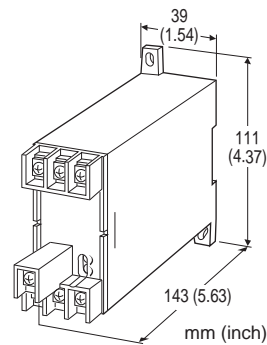
(self-powered, RMS sensing)

Functions & Features

- Converts alternating current from a current transformer into a standard process signal
- Minimum ripple
- No auxiliary power source required
- Isolation up to 2000 V AC
- High-density mounting
- Conforms to IEC 60688

Typical Applications

- Centralized monitoring and control of motors, pumps or heaters by DCS
- Monitoring power line and power supply current



MODEL: LTCNE-[1][2][3]

ORDERING INFORMATION

- Code number: LTCNE-[1][2][3]
- Specify a code from below for each [1] through [3].
(e.g. LTCNE-1G/T)

[1] INPUT

Current

- 1: 0 - 1 A AC (used within 0.1 - 1 A)
- 2: 0 - 2A AC (used within 0.2 - 2 A)
- 5: 0 - 5 A AC (used within 0.5 - 5 A)

[2] OUTPUT

Current

G: 0 - 1 mA DC (Load resistance 5000 Ω max.)

Voltage

- 3: 0 - 1 V DC (Load resistance 2000 Ω min.)
- 4: 0 - 10 V DC (Load resistance 20 kΩ min.)
- 5: 0 - 5 V DC (Load resistance 10 kΩ min.)

[3] OPTIONS

Terminal Cover

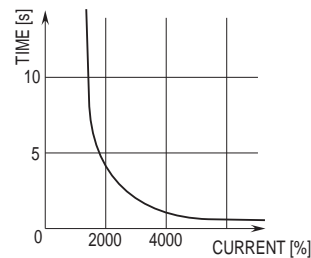
- blank: Without
- /T: With

GENERAL SPECIFICATIONS

- Connection:** M4 screw terminals (torque 1.2 N·m)
- Screw terminal:** Chrome-plated steel
- Housing material:** Flame-resistant resin (black)
- Isolation:** Input to output
- Input waveform:** Up to 15 % of 3rd harmonic content
- Overrange output:** 10 - 120 % at 0 - 5 V
- Span adjustment:** 95 to 105 % (front)

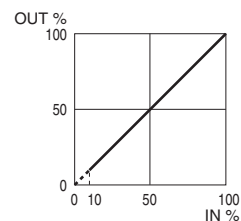
INPUT SPECIFICATIONS

- Frequency:** 50 or 60 Hz
- Operational range:** 10 - 120 % of rating
- Overload capacity:** 4000 % of rating for 1 sec., 2000 % for 4 sec., 120 % continuous
- Input burden:** 2 VA
- **Overload Capacity**



OUTPUT SPECIFICATIONS

■ OPERATION DIAGRAM



Note: The described accuracy is not assured within 0 - 10% of the rating, though output signal exists.

INSTALLATION

- Operating temperature:** -10 to +55°C (14 to 131°F)
- Operating humidity:** 30 to 85 %RH (non-condensing)
- Mounting:** Surface or DIN rail
- Weight:** 300 g (0.66 lb)



PERFORMANCE in percentage of span

Accuracy: $\pm 0.5\%$ (at $23^{\circ}\text{C} \pm 10^{\circ}\text{C}$ or $73.4^{\circ}\text{F} \pm 18^{\circ}\text{F}$,
45 - 65 Hz)

Magnetic field (ext. origin) effect: $\pm 0.5\%$ (400 A/m)

Response time: ≤ 2 sec. (0 - 100 % $\pm 1\%$)

Ripple: 0.5 %p-p max.

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

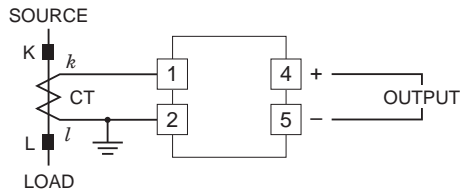
Dielectric strength: 2000 V AC @1 minute
(input to output to ground)

Impulse withstand voltage: 1.2 / 50 $\mu\text{sec.}$, $\pm 5\text{ kV}$
(input to output or ground)

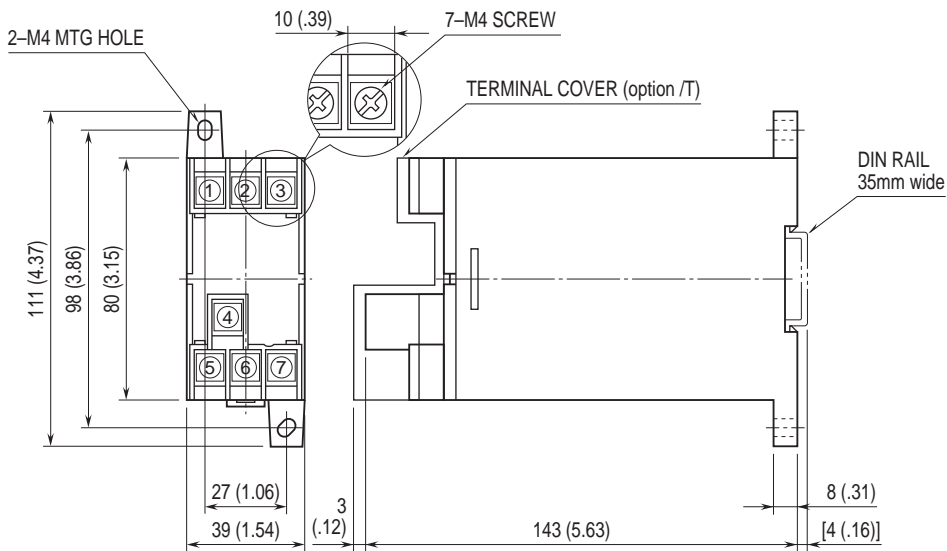
STANDARDS & APPROVALS

IEC Standard: IEC 60688

CONNECTION DIAGRAM



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



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



Specifications are subject to change without notice.