

## Power Transducer Series LT-UNIT

### AC CURRENT TRANSDUCER

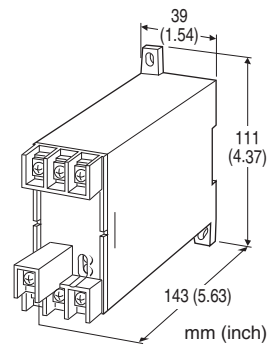
(self-powered, RMS sensing)

#### 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 of [1] through [3].

- (e.g. LTCNE-1G/T/Q)
- Specify the specification for option code /Q (e.g. /C01)

#### [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 (multiple selections)

##### Terminal Cover

blank: Without

/T: With

##### Other Options

blank: none

/Q: Option other than the above (specify the specification)

#### SPECIFICATIONS OF OPTION: Q

**COATING (For the detail, refer to M-System's web site.)**

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

#### 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

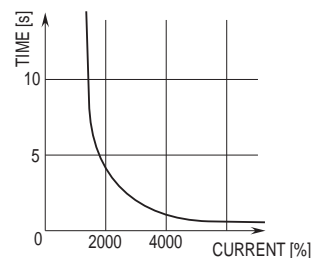
**Frequency:** 50 or 60 Hz

**Operational range:** 10 - 120 % of rating

**Overload capacity:** 4000 % of rating for 1 sec., 2000 % for 4 sec., 120 % continuous

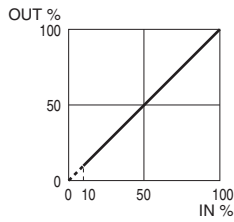
**Input burden:** 2 VA

- **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°C  $\pm 10^\circ\text{C}$  or 73.4°F  $\pm 18^\circ\text{F}$ , 45 - 65 Hz)

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

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

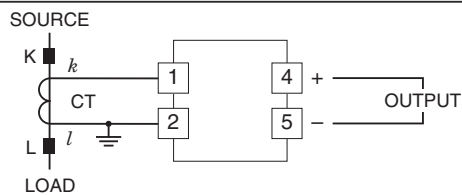
**Ripple:** 0.5 %p-p max.

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

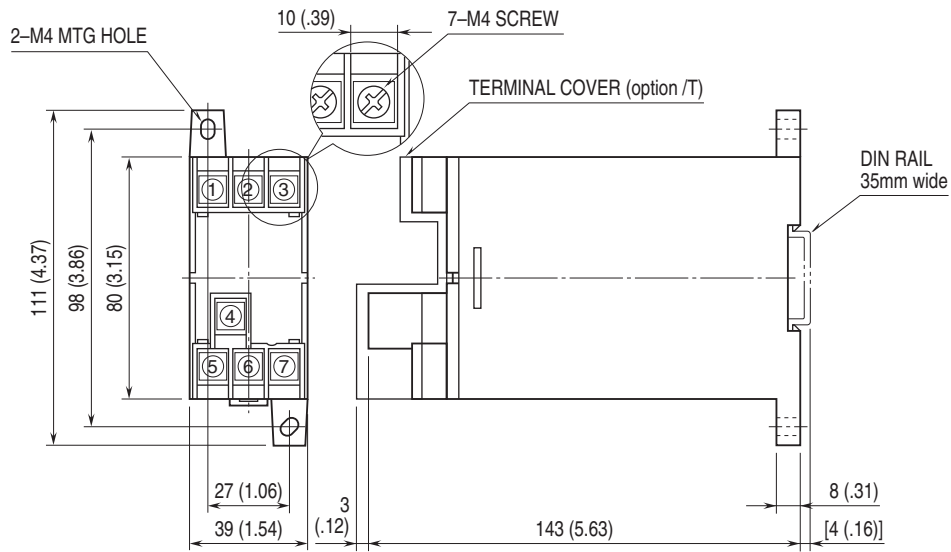
**Dielectric strength:** 2000 V AC @1 minute  
(input to output to ground)

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

## 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.