

## Power Transducer Series L-UNIT

### CT TRANSDUCER

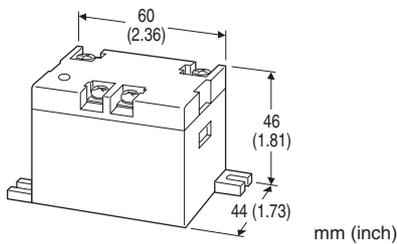
(super-miniature size; self-powered; RMS sensing)

#### Functions & Features

- Converting an 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

#### Typical Applications

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



## MODEL: LDCE-[1][2][3]

### ORDERING INFORMATION

- Code number: LDCE-[1][2][3]
- Specify a code from below for each of [1] through [3].  
(e.g. LDCE-55/D/Q)
- Specify the specification for option code /Q  
(e.g. /C01/S01)

### [1] INPUT

Current

- 1:** 0 - 1 A AC (used within 0.1 - 1 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)

Mounting

**blank:** Surface

**/D:** DIN rail

Other Options

**blank:** none

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

### SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to our web site.)

**/C01:** Silicone coating

**/C02:** Polyurethane coating

**/C03:** Rubber coating

TERMINAL SCREW MATERIAL

**/S01:** Stainless steel

### GENERAL SPECIFICATIONS

**Construction:** Stand-alone; terminal access at the front

**Connection:** M4 screw terminals (torque 1.2 N·m)

**Screw terminal:** Nickel-plated brass (standard) or stainless 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

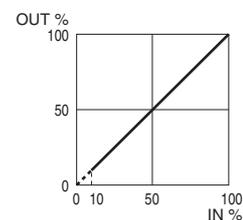
**Input burden:** 2 VA

**Overload capacity:** 1000 % of rating for 3 sec., 200 % for 10 sec., 120 % continuous

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

### 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:** 150 g (0.33 lb) for surface mounting

170 g (0.37 lb) for DIN rail mounting

## 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)

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

**Ripple:** 1 %p-p max.

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

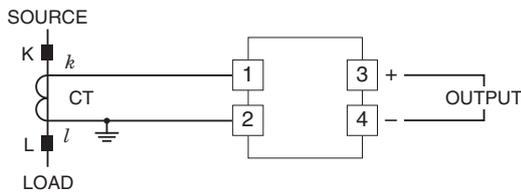
**Dielectric strength:** 2000 V AC @1 minute

(input to output to ground)

**Impulse withstand voltage:** 1.2 / 50  $\mu\text{sec.}$ ,  $\pm 5\text{ kV}$

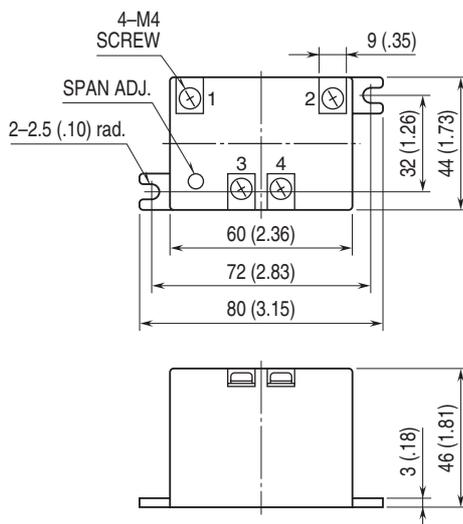
(input to output or ground)

## CONNECTION DIAGRAM

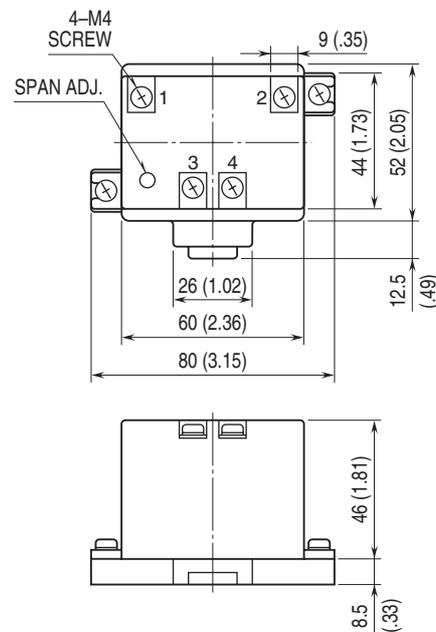


## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]

### ■ SURFACE MOUNTING

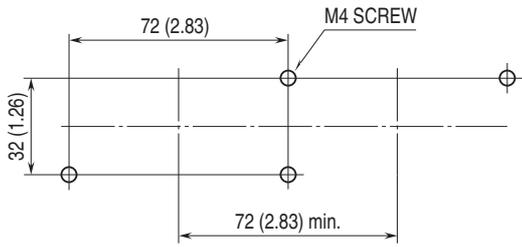


### ■ DIN RAIL MOUNTING

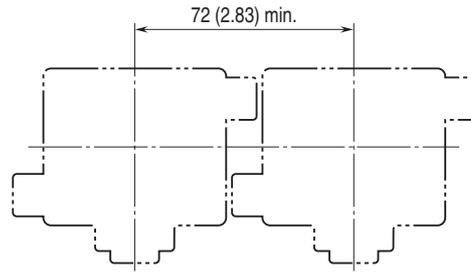


**MOUNTING REQUIREMENTS** unit: mm [inch]

■ SURFACE MOUNTING



■ DIN RAIL MOUNTING



Specifications are subject to change without notice.