

**Power Transducer Series L-UNIT**

**PT TRANSDUCER**

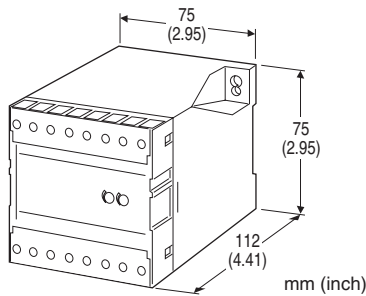
(self-powered, RMS sensing)

**Functions & Features**

- Converting an alternating voltage from a potential (voltage) 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 power line and power supply voltages measured at switch boards
- Monitoring abnormal voltage drops for detecting overload



**MODEL: LPNE-[1][2][3]**

**ORDERING INFORMATION**

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

**[1] INPUT**

- Voltage
- 5: 0 - 150 V AC (used within 90 - 150 V)
  - 6: 0 - 300 V AC (used within 180 - 300 V)

**[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**

- blank: none
- /Q: With options (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**

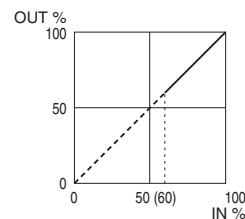
- Construction:** Stand-alone; terminal access at the front
- Connection:** M3.5 screw terminals (torque 0.8 N·m)
- Screw terminal:** Nickel-plated steel (standard) or stainless steel
- Housing material:** Flame-resistant resin (black)
- Isolation:** Input to output
- Input waveform:** Up to 15 % of 3rd harmonic content
- Overrange output:** 60 - 120 % at 0 - 5 V
- Span adjustment:** 95 to 105 % (front)

**INPUT SPECIFICATIONS**

- Frequency:** 50 or 60 Hz
- Input burden:** 2 VA
- Overload capacity:** 150 % of rating for 10 sec., 120 % continuous
- Operational range:** 60 - 120 % of rating

**OUTPUT SPECIFICATIONS**

■ OPERATION DIAGRAM



Note: The described accuracy is not assured within 0 - 60% 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:** 200 g (0.44 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)

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

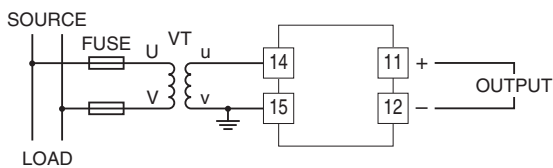
**Ripple:** 1 %p-p max.

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

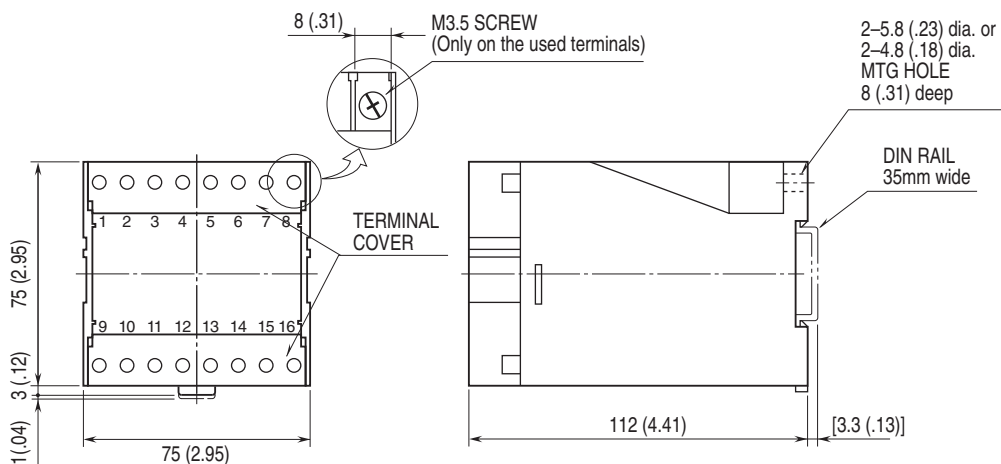
**Dielectric strength:** 2000 V AC @1 minute  
(input to output to ground)

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

## CONNECTION DIAGRAM



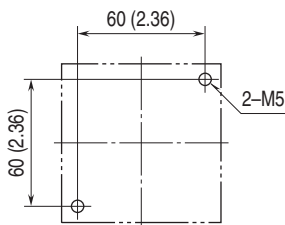
## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



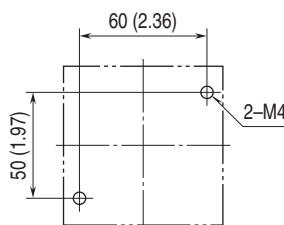
•When mounting, no extra space is needed between units.

## MOUNTING REQUIREMENTS unit: mm [inch]

### ■ M5 SCREWS



### ■ M4 SCREWS



Specifications are subject to change without notice.