

Power Transducer Series LT-UNIT

AC VOLTAGE TRANSDUCER

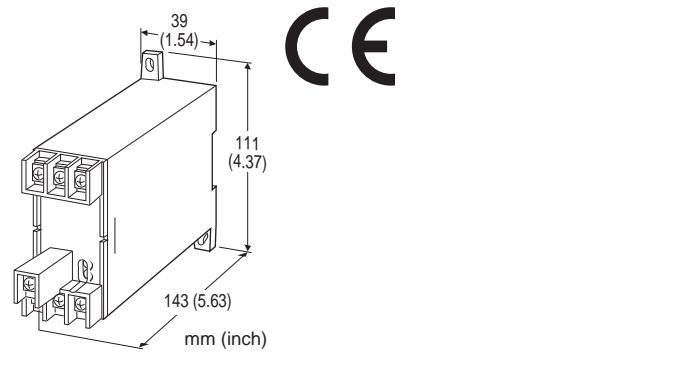
(RMS sensing)

Functions & Features

- Converts alternating voltage from a voltage transformer into a standard process signal
- Minimum ripple
- Isolation up to 2000 V AC
- High-density mounting
- Conforms to IEC 60688

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

ORDERING INFORMATION

- Code number: LTPE-[1][2]-[3][4]
- Specify a code from below for each [1] through [4]. (e.g. LTPE-5A-K3/T)
- Special input range (For code 0)
- Special output range (For codes Z & 0)

[1] INPUT

Voltage

- 008: 0 - 8 V AC (CE not available)
- 012: 0 - 12 V AC (CE not available)
- 1: 0 - 110 V AC
- 2: 0 - 220 V AC
- 4: 0 - 90 V AC
- 5: 0 - 150 V AC
- 6: 0 - 300 V AC
- 7: 0 - 550 V AC
- 0: Specify voltage (See INPUT SPECIFICATIONS)
- (0 % input must be 0 V.)
- (CE not available)

[2] OUTPUT

Current

- A: 4 - 20 mA DC (Load resistance 500 Ω max.)
- D: 0 - 20 mA DC (Load resistance 500 Ω max.)
- F: 0 - 10 mA DC (Load resistance 1000 Ω max.)
- G: 0 - 1 mA DC (Load resistance 10 kΩ max.)
- J: 0 - 5 mA DC (Load resistance 2000 Ω max.)
- Z: Specify current (See OUTPUT SPECIFICATIONS)

Voltage

- 1: 0 - 10 mV DC (Load resistance 10 kΩ min.)
- 2: 0 - 100 mV DC (Load resistance 100 kΩ min.)
- 3: 0 - 1 V DC (Load resistance 1000 Ω min.)
- 4: 0 - 10 V DC (Load resistance 10 kΩ min.)
- 5: 0 - 5 V DC (Load resistance 5000 Ω min.)
- 6: 1 - 5 V DC (Load resistance 5000 Ω min.)
- 0: Specify voltage (See OUTPUT SPECIFICATIONS)

[3] AUXILIARY POWER SUPPLY

AC Power

- K3: 100 - 120V AC (Operational voltage range 85 - 132 V, 47 - 66 Hz)
- L3: 200 - 240V AC (Operational voltage range 170 - 264 V, 47 - 66 Hz)

DC Power

- R: 24 V DC (Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)
- V: 48 V DC (Operational voltage range 48 V ± 10 % , ripple 10 % p-p max.)
- P: 110 V DC (Operational voltage range 85 - 150 V, ripple 10 %p-p max.)
- (CE not available)

[4] 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 to power
- Input waveform: Up to 15 % of 3rd harmonic content
- Overrange output: 0 to 120 % at 1 - 5 V
- Zero adjustment: -5 to +5 % (front)
- Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

- AC Voltage: 0 - 550 V AC
- Minimum span: 20 V



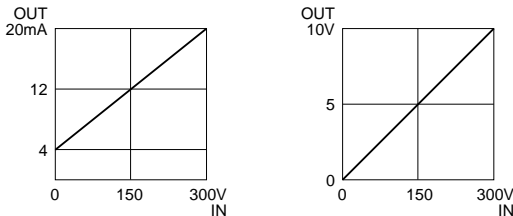
Frequency: 50 or 60 Hz
Operational range: 0 – 120 % of rating
Overload capacity: 200 % of rating for 10 sec., 120 % continuous
Input burden: 0.5 VA (1 VA with Input greater than 300 V at 100 %)

EMI EN 61000-6-4: 2007
EMS EN 61000-6-2: 2005
Low Voltage Directive (2006/95/EC)
EN 61010-1: 2001
Measurement Category II (input, output)
Installation Category II (power)
Pollution Degree 2
Input to output or power: Reinforced insulation (550 V)
Output to power: Reinforced insulation (300 V)
IEC Standard: IEC 60688

OUTPUT SPECIFICATIONS

■ **DC Current:** 0 – 20 mA DC
Minimum span: 1 mA
Offset: Max. 1.5 times span
Load resistance: Output drive 10 V max.
■ **DC Voltage:** 0 – 12 V DC
Minimum span: 5 mV
Offset: Max. 1.5 times span
Load resistance: Output drive 1 mA max.; at ≥ 0.5 V

■ OPERATION DIAGRAM (example)



INSTALLATION

Power Consumption
•AC: Approx. 2 VA
•DC: Approx. 1.7 W (15 mA at 110 V)
Operating temperature: -10 to +55°C (14 to 131°F)
Operating humidity: 30 to 85 %RH (non-condensing)
Mounting: Surface or DIN rail
Weight: 400 g (0.88 lb)

PERFORMANCE in percentage of span

Accuracy: ± 0.5 % (at 23°C ± 10 °C or 73.4°F ± 18 °F, 45 – 65 Hz)
Magnetic field (ext. origin) effect: ± 0.5 % (400 A/m)
Response time: ≤ 1 sec. (0 – 100 % ± 1 %)
Ripple: 0.5 %p-p max.
Line voltage effect: ± 0.25 % over voltage range
Insulation resistance: ≥ 100 M Ω with 500 V DC
Dielectric strength: 2000 V AC @1 minute (input to output to power to ground)
Impulse withstand voltage: 1.2 / 50 μ sec., ± 5 kV (input to output or ground)

STANDARDS & APPROVALS

CE conformity:
EMC Directive (2004/108/EC)

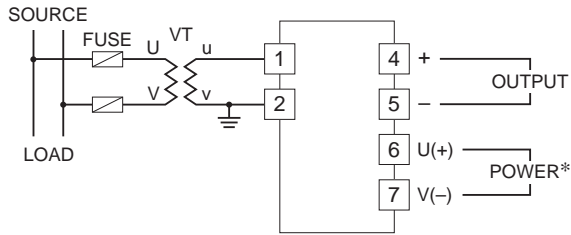


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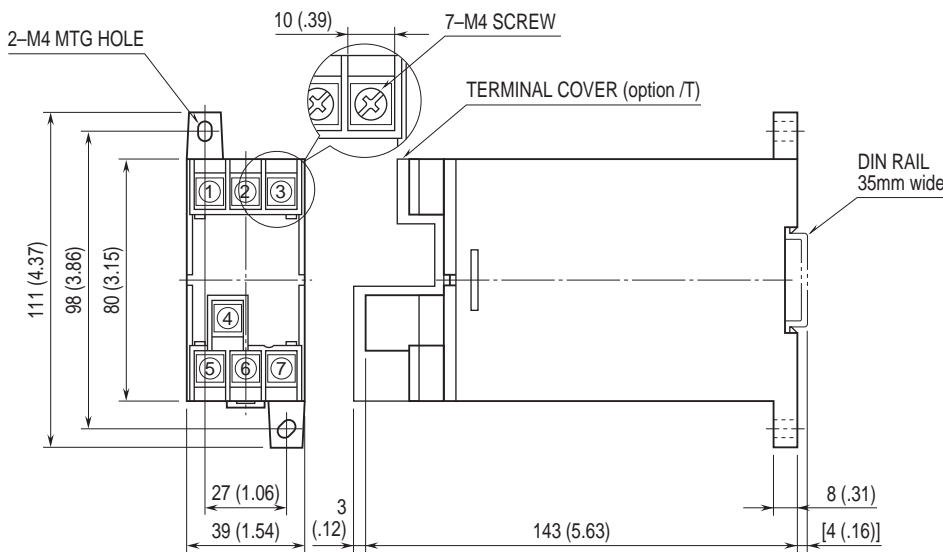
E-mail : info@xintop.com
Website : www.xintop.com

CONNECTION DIAGRAM



*The transducer can be powered from the input voltage when the voltage is sufficiently stable and meets within the range of auxiliary power supply of the unit specified in the data sheet/instruction manual.

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



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



Specifications are subject to change without notice.