

Power Transducer Series *LT-UNIT*

**AC CURRENT TRANSDUCER
(self-powered)**

MODEL **LTCNE**

MODEL & SUFFIX CODE SELECTION

MODEL _____ **LTCNE-□□□**

INPUT _____

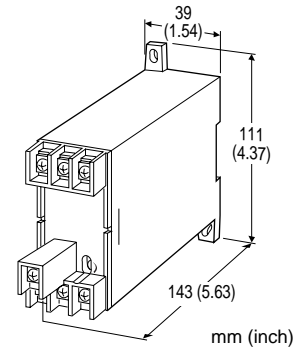
1 : 0 – 1A AC (used within 0.1 – 1A)
 2 : 0 – 2A AC (used within 0.2 – 2A)
 5 : 0 – 5A AC (used within 0.5 – 5A)

OUTPUT _____

Current	Voltage
G : 0 – 1mA DC	3 : 0 – 1V DC
	4 : 0 – 10V DC
	5 : 0 – 5V DC

OPTIONS _____

/T : Terminal cover



Functions & Features

- Converting an alternating current from a current transformer into a standard process signal
- Minimum ripple
- True RMS sensing
- No auxiliary power source required
- Isolation up to 2000V 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

ORDERING INFORMATION

Specify code number and variables.
 • **Code number** (e.g. LTCNE-1G/T)

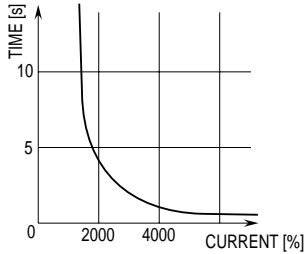
GENERAL SPECIFICATIONS

- Construction:** stand-alone; terminal access at the front
- Connection:** M4 screw terminals
 (chrome-plated steel; torque ≤ 1.2 N·m)
- 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 – 5V
- Span adjustment:** $\pm 5\%$ (front)

INPUT & OUTPUT

INPUT: 0 – 1AAC, 0 – 2AAC or 0 – 5AAC
Frequency: 50 or 60 Hz
Input burden: 2VA
Overload capacity: 4000% of rating for 1 sec., 2000% for 4 sec., 120% continuous
Operational range: 10 – 120% of rating

■OVERLOAD CAPACITY



■OUTPUT

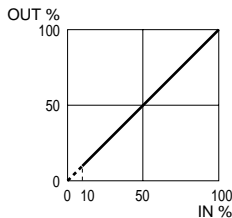
DC Current: 0 – 1mA DC
Load resistance: 5000Ω maximum

•DC Voltage

Load resistance

Output	Load Resistance
0 – 1V	: 2000 (Ω minimum)
0 – 10V	: 20k
0 – 5V	: 10k

■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
Dimensions: W39×H111×D143 mm (1.54"×4.37"×5.63")
 *D147 mm (5.79") with terminal cover
 See General Spec. Sheet Figure A-1.
Weight: 300 g (0.66 lbs)
Terminal assignment: See General Spec. Sheet Figure B-1.

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% (400A/m)
Response time: ≤2 seconds (0 – 100% ±1%)
Ripple: 0.5% p-p max.
Insulation resistance: ≥100MΩ with 500V DC
Dielectric strength: 2000V AC @1 minute (input to output to ground)
Impulse withstand voltage: 1.2/50 μsec., ±5kV (input to output or ground)
Referenced Standard: IEC 60688

CONNECTION DIAGRAM

