

Power Transducer Series *LT-UNIT*

AC CURRENT TRANSDUCER

MODEL LTCE

MODEL & SUFFIX CODE SELECTION

MODEL _____

INPUT _____

1 : 0 – 1A AC
2 : 0 – 2A AC
5 : 0 – 5A AC

OUTPUT _____

Current	Voltage
A : 4 – 20mA DC	1 : 0 – 10mV DC
D : 0 – 20mA DC	2 : 0 – 100mV DC
F : 0 – 10mA DC	3 : 0 – 1V DC
G : 0 – 1mA DC	4 : 0 – 10V DC
J : 0 – 5mA DC	5 : 0 – 5V DC
Z : Specify current	6 : 1 – 5V DC
	0 : Specify voltage

AUXILIARY POWER SUPPLY _____

AC Power	DC Power
K3: 100 – 120V AC	R : 24V DC
L3: 200 – 240V AC	V : 48V DC
	P : 110V DC**

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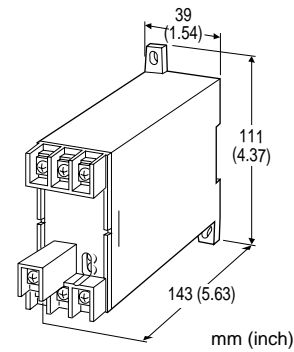
OPTIONS _____

/T : Terminal cover

LTCE-□□-□□

ORDERING INFORMATION

- Specify code number and variables.
- **Code number** (e.g. LTCE-5A-K3/T)
 - **Special output range** (For codes Z & 0)



Functions & Features

- Converting an alternating current from a current transformer into a standard process signal
- Minimum ripple
- True RMS sensing
- Isolation up to 2000V AC
- High-density mounting
- Conforms to IEC 688

Typical Applications

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

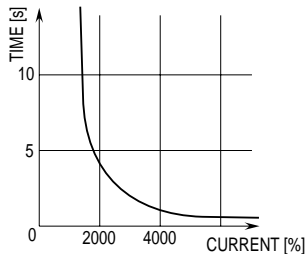
GENERAL SPECIFICATIONS

- 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 to power
- Input waveform:** up to 15% of 3rd harmonic content
- Overrange output:** 0 – 120% at 1 – 5V
- Front adjustments:** zero and span; ±5%

INPUT & OUTPUT

■INPUT: 0 – 1AAC, 0 – 2AAC or 0 – 5AAC
 Frequency: 50 or 60 Hz
 Input burden: 0.5VA
 Overload capacity: 4000% of rating for 1 sec., 2000% for 4 sec., 120% continuous
 Operational range: 0 – 120% of rating

■OVERLOAD CAPACITY



■OUTPUT

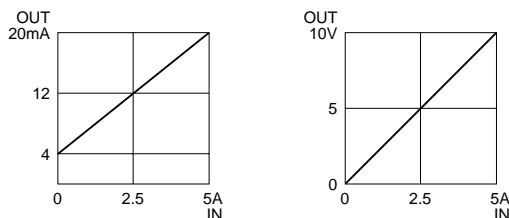
•DC Current: 0 – 20mA DC
 Minimum span: 1mA
 Zero suppression/elevation: max. 1.5 times span
 Load resistance: output drive 10V maximum

Output	Load Resistance
4 – 20mA	: 500 (Ω maximum)
0 – 20mA	: 500
0 – 10mA	: 1000
0 – 1mA	: 10k
0 – 5mA	: 2000

•DC Voltage: 0 – 12V DC
 Minimum span: 5mV
 Zero suppression/elevation: max. 1.5 times span
 Load resistance: output drive 1mA maximum at ≥0.5V

Output	Load Resistance
0 – 10mV	: 10k (Ω minimum)
0 – 100mV	: 100k
0 – 1V	: 1000
0 – 10V	: 10k
0 – 5V	: 5000
1 – 5V	: 5000

■OPERATION DIAGRAM (example)



INSTALLATION

Auxiliary power supply

AC: operational voltage range for K3: 85 – 132V or L3: 170 – 264V
 47 – 66 Hz, approx. 1.7VA
 DC: operational voltage range for R, V: rating ±10% or P: 85 – 150V; ripple 10% p-p max. approx. 1.7W (15mA at 110V)

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: 400 g (0.88 lbs)
 Terminal assignment: See General Spec. Sheet Figure B-1.

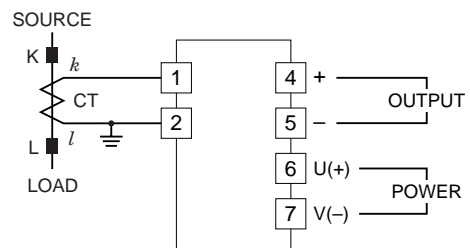
PERFORMANCE in percentage of span

Accuracy: ±0.5% (at 23°C ±10°C or 73.4°F ±18°F, 45 – 65 Hz)
 Response time: ≤1 second (0 – 100% ±1%)
 Ripple: 0.5% p-p max.
 Line voltage effect: ±0.1% over voltage range
 Insulation resistance: ≥100MΩ with 500V DC
 Dielectric strength: 2000V AC @1 minute (input to output to power to ground)
 Impulse withstand voltage: 1.2/50 μsec., ±5kV (input to output or ground)
 Magnetic field (ext. origin) effect: ±0.5% (400A/m)

STANDARDS & APPROVALS

CE conformity: Electromagnetic Compatibility Directive (89/336/EEC)
 EMI EN50081-2
 EMS EN50082-2 (EN61000-6-2)
 Low Voltage Directive (73/23/EEC)
 Installation category II
 Pollution degree 2
 Input to output or power – Reinforced insulation
 Max. operating voltage 550V
 Output to power – Reinforced insulation
 Max. operating voltage 300V
 IEC Standard: IEC 688

CONNECTION DIAGRAM



Specifications subject to change without notice.