Power Transducer Series L-UNIT

CT TRANSDUCER

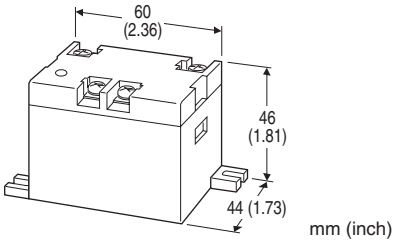
(super-miniature size; self-powered, approximate RMS sensing)

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: LDCK–[1][2][3]

ORDERING INFORMATION

• Code number: LDCK–[1][2][3]
Specify a code from below for each of [1] through [3].
(e.g. LDCK-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

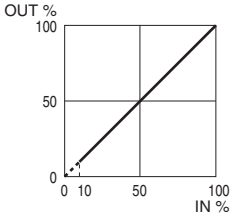
Construction: Stand-alone; terminal access at the front
Connection: M4 screw terminals (torque 1.2 N·m)
Screw terminal: Nickel-plated brass (standard) or stainless steel
Housing material: Flame-resistant resin (black)
Isolation: Input to output
Input waveform: Up to 5 % of 3rd harmonic content
Overrange 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.

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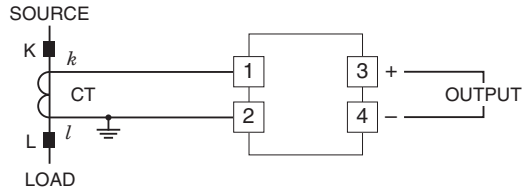
INSTALLATION

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

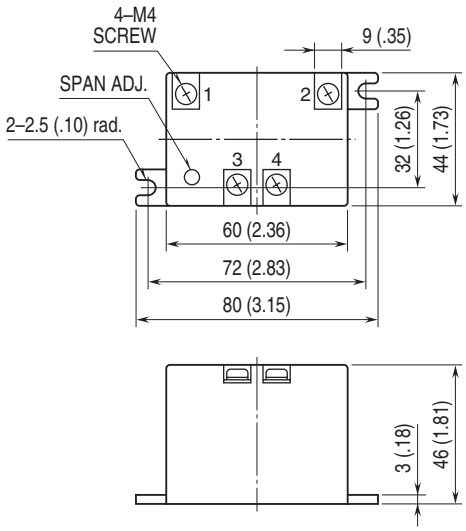
Accuracy: ±0.5 % (at 23°C ±10°C or 73.4°F ±18°F, 45 – 65 Hz)
Response time: ≤ 2 sec. (0 – 100 % ±1 %)
Ripple: 1 %p-p max.
Insulation resistance: ≥ 100 MΩ with 500 V DC
Dielectric strength: 2000 V AC @1 minute (input to output to ground)
Impulse withstand voltage: 1.2 / 50 µsec., ±5 kV (input to output or ground)

CONNECTION DIAGRAM

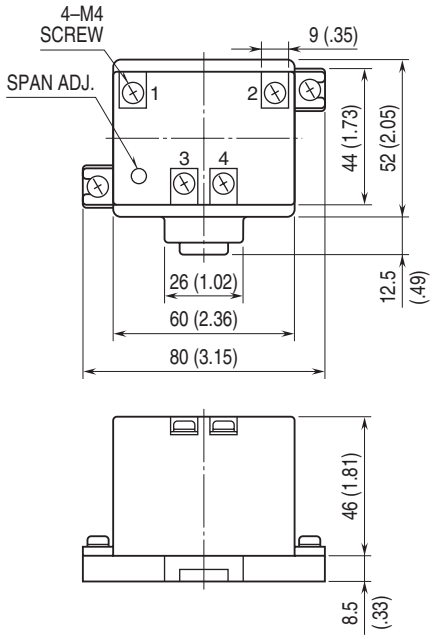


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]

■ **SURFACE MOUNTING**



■ **DIN RAIL MOUNTING**



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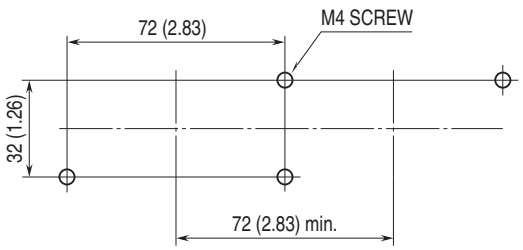
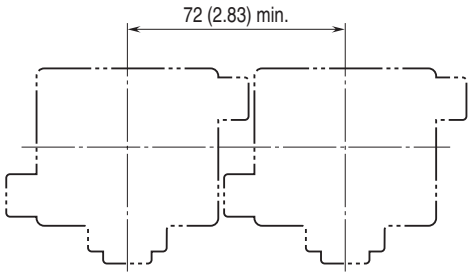
MOUNTING REQUIREMENTS unit: mm [inch]

■ SURFACE MOUNTING



■ DIN RAIL MOUNTING



⚠ Specifications are subject to change without notice.

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