

Plug-in Signal Conditioners K-UNIT

PT TRANSMITTER

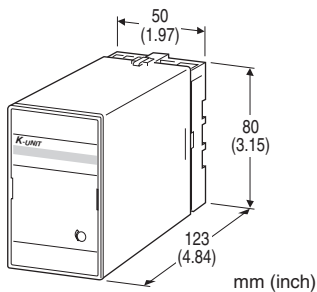
(self-powered, RMS sensing)

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:KPNE-[1][2][3]

ORDERING INFORMATION

- Code number: KPNE-[1][2][3]
- Specify a code from below for each of [1] through [3]. (e.g. KPNE-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 M-System's web site.)

- /C01: Silicone coating
- /C02: Polyurethane coating
- /C03: Rubber coating

TERMINAL SCREW MATERIAL

- /S01: Stainless steel

GENERAL SPECIFICATIONS

Construction: Plug-in

Connection: M3.5 screw terminals

Screw terminal: Chromated 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

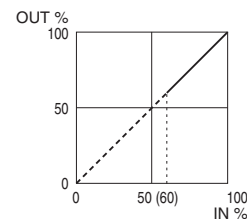
Input burden: 2 VA

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: ≤ 2 sec. (0 - 100 % $\pm 1\%$)

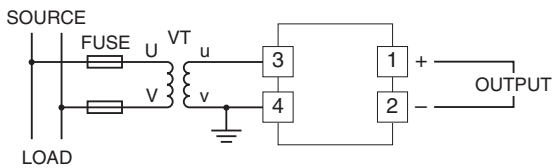
Ripple: 1 %p-p max.

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

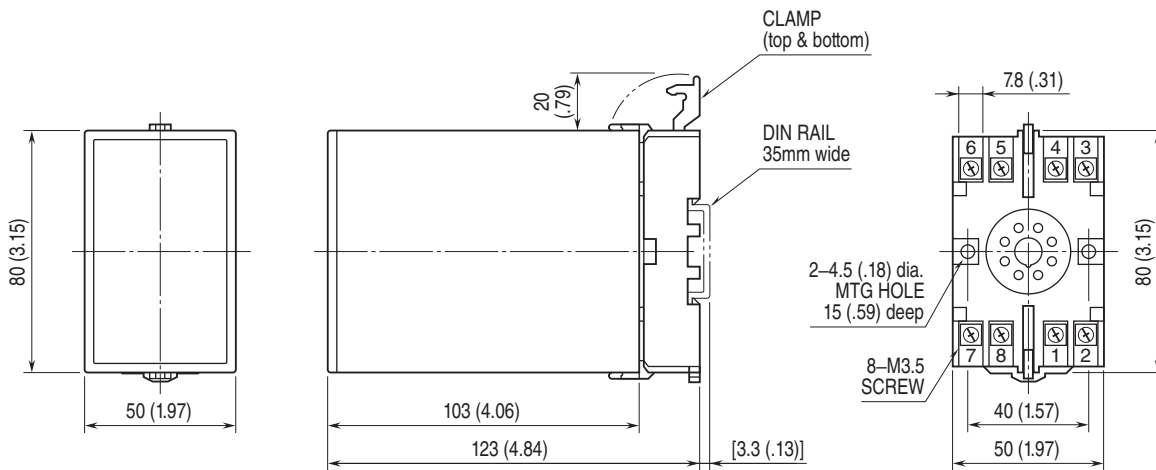
Dielectric strength: 2000 V AC @1 minute
(input to output to ground)

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.



Specifications are subject to change without notice.