

## High-density Signal Conditioners 10-RACK

### PT TRANSMITTER

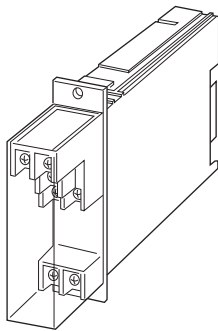
(RMS sensing)

#### Functions & Features

- Converting an alternating voltage from a potential (voltage) transformer into two standard process signals
- Minimum ripple
- Optional second channel output available at the front terminals and at the Standard Rack connector

#### Typical Applications

- Centralized monitoring and control of power line and power supply voltage measured at switch boards
- Monitoring abnormal voltage drops for detecting overload



### MODEL: 10PE-[1][2][3]-R[4]

#### ORDERING INFORMATION

- Code number: 10PE-[1][2][3]-R[4]
- Specify a code from below for each of [1] through [4].  
(e.g. 10PE-1A6-R/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### [1] INPUT

Voltage

- 1: 0 - 110 V AC
- 5: 0 - 150 V AC

#### [2] OUTPUT 1

Current

- A: 4 - 20 mA DC (Load resistance 600 Ω max.)
- B: 2 - 10 mA DC (Load resistance 1200 Ω max.)
- C: 1 - 5 mA DC (Load resistance 2400 Ω max.)
- D: 0 - 20 mA DC (Load resistance 600 Ω max.)
- E: 0 - 16 mA DC (Load resistance 750 Ω max.)

- F: 0 - 10 mA DC (Load resistance 1200 Ω max.)
  - G: 0 - 1 mA DC (Load resistance 12 kΩ max.)
- 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 100 Ω min.)
  - 4: 0 - 10 V DC (Load resistance 1000 Ω min.)
  - 5: 0 - 5 V DC (Load resistance 500 Ω min.)
  - 6: 1 - 5 V DC (Load resistance 500 Ω min.)

#### [3] OUTPUT 2

0: None

Voltage

- 6: 1 - 5 V DC (Load resistance 5000 Ω min.)

#### POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

#### [4] OPTIONS

blank: none

/Q: With options (specify the specification)

#### SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to our web site.)

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

#### GENERAL SPECIFICATIONS

**Construction:** Rack-mounted; terminal access via screw terminals at the front and via card-edge connector at the rear; terminal cover provided

#### Connection

**Input:** M3.5 screw terminals (torque 0.8 N·m)

**Output:** Card-edge connector and M3.5 screw terminals (torque 0.8 N·m)

**Power input:** Supplied from card-edge connector

**Screw terminal:** Nickel-plated steel

**Housing material:** Flame-resistant resin (black)

**Isolation:** Input to output 1 to output 2 to power

**Input waveform:** Up to 15 % of 3rd harmonic content

**Overrange output:** Approx. 0 to 120 % at 1 - 5V

**Zero adjustment:** -5 to +5 % (front)

**Span adjustment:** 95 to 105 % (front)

#### INPUT SPECIFICATIONS

**Frequency:** 50 or 60 Hz

**Input burden:** 0.5 VA max.

**Overload capacity:** 200 % of rating for 1 minute, 120 % continuous

**Operational range:** 0 - 120 % of rating

## INSTALLATION

**Current consumption:** Approx. 35 mA with voltage output 1

Approx. 55 mA with current output 1

**Operating temperature:** -5 to +55°C (23 to 131°F)

**Operating humidity:** 30 to 90 %RH (non-condensing)

**Mounting:** Standard Rack 10BXx

**Weight:** 200 g (0.44 lb)

## PERFORMANCE in percentage of span

**Accuracy:** ±0.4 %

**Temp. coefficient:** ±0.02 %/°C (±0.01 %/°F)

**Response time:** ≤ 0.5 sec. (0 - 90 %)

**Ripple:** 0.5 %p-p max. (100/120 Hz)

**Line voltage effect:** ±0.1 % over voltage range

**Insulation resistance:** ≥ 100 MΩ with 500 V DC

**Dielectric strength:** 2000 V AC @ 1 minute

(input to output 1 or output 2 or power)

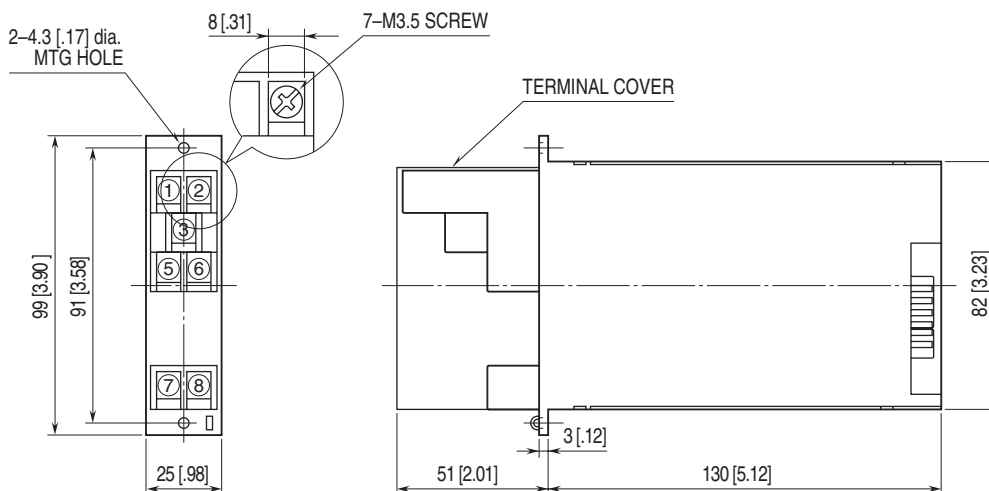
500 V AC @ 1 minute

(output 1 to output 2 to power)

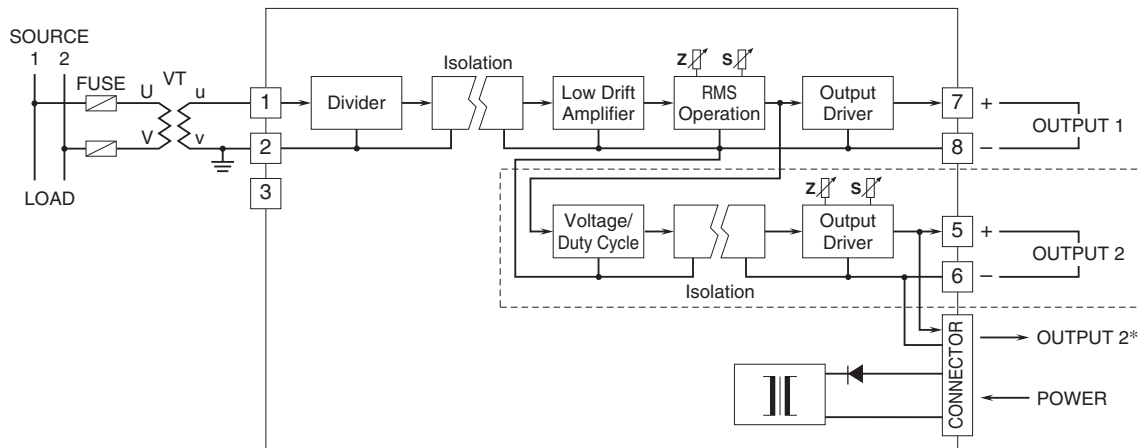
1500 V AC @ 1 minute

(input or output or power to ground)

## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



\*1 output type has the output 1 connected to the card-edge connector in parallel.  
 Remark 1) The section enclosed by broken line is only for 2nd output channel.



Specifications are subject to change without notice.