Space-saving Two-wire Signal Conditioners *B-UNIT*

PT TRANSMITTER

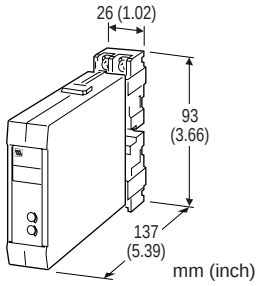
MODEL **BPT**

MODEL & SUFFIX CODE SELECTION

BPT–❑

MODEL
INPUT
1 : 0 – 110V AC
5 : 0 – 150V AC
OUTPUT
4 – 20mA DC
SUPPLY VOLTAGE
12 – 60V DC

ISOLATION



Functions & Features

• Converting an alternating voltage from a potential (voltage) transformer into an isolated 4 – 20mA DC signal • Minimal ripple • True RMS sensing • Monitor terminals • 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

ORDERING INFORMATION

Specify code number. (e.g. BPT-1)

GENERAL SPECIFICATIONS

Construction: plug-in
Connection: M3.5 screw terminals
(nickel-plated steel; torque ≤0.8 N·m)
Housing material: flame-resistant resin (black)
Isolation: input to output
Input waveform: up to 15% of 3rd harmonic content
Front adjustments: zero and span; ±5%

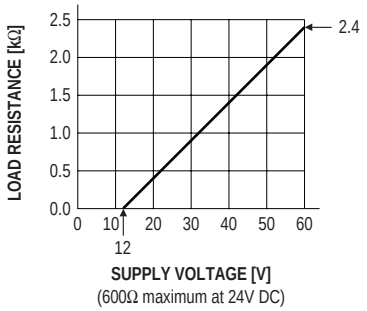
INPUT & OUTPUT

■**INPUT**: 0 – 110V AC or 0 – 150V AC
Frequency: 50 or 60 Hz
Input burden: 0.5VA maximum
Overload capacity: 200% of rating for 1 min., 120% continuous
Operational range: 0 – 120% of rating

■**OUTPUT**: 4 – 20mA DC
Load resistance vs. supply voltage:

$$\text{Load Resistance } (\Omega) = \frac{\text{Supply Voltage (V)} - 12\text{ (V)}}{0.02\text{ (A)}}$$

(including leadwire resistance)



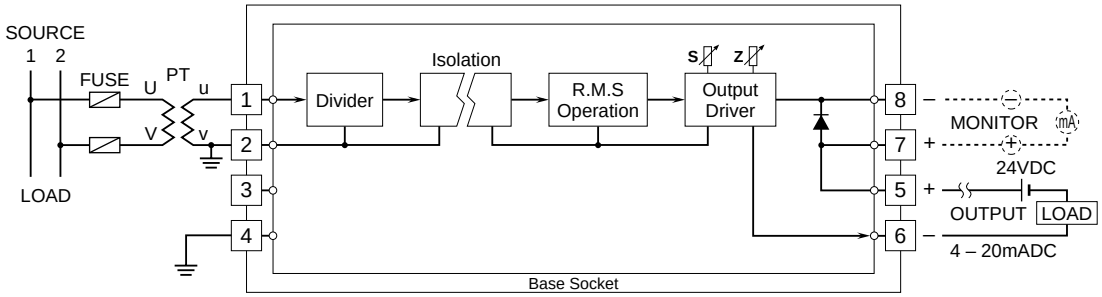
INSTALLATION

Supply voltage: 12 – 60V DC
Operating temperature: -5 to +55°C (23 to 131°F)
Operating humidity: 30 to 90% RH (non-condensing)
Mounting: surface or DIN rail; Standard Rack Mounting Frame BX-16H available
Dimensions: W26×H93×D137 mm (1.02"×3.66"×5.39")
See General Spec. Sheet Figure A.
Weight: 160 g (0.35 lbs)
Terminal assignment: See General Spec. Sheet Figure B-1.

PERFORMANCE in percentage of span

Accuracy: ±0.3%
Temp. coefficient: ±0.03%/°C (±0.02%/°F)
Response time: ≤0.5 seconds (0 – 90%)
Ripple: 0.5% p-p max. (100/120 Hz)
Insulation resistance: ≥100MΩ with 500V DC
Dielectric strength: 2000V AC @1 minute
(input to output)
1500V AC @1 minute
(input or output to ground)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications subject to change without notice.