

Instruction Manual

AC Voltage Transducer (D2PTV1, D3PTV1)

Introduction :

It is a precision grade transducer used for measurement of AC Voltage. The transducer is fully solid state. Use of latest circuit techniques and quality components ensure reliable operation over long period. The Transducer is suitable for Panel Wall Mounting Or 35 mm DIN Rail mounting.

Operation :

The input ac voltage is scaled down through a interposing PT to provide galvanic isolation. The scaled down AC Voltage signal is fed to a precision AC/DC rectifier stage. Its output is processed to provide DC Voltage or DC Current proportional to input AC Voltage. The output signal is calibrated for RMS value. The Auxiliary Power Supply provides necessary power to operate the electronic circuits.

Specifications :

Auxiliary Power Supply	110, 240 V AC \pm 15%, 50 Hz Or 24,48,110,220 V DC \pm 10%
Input Voltage Range	0 – 75 V AC, 0 – 125 V AC, 0 – 150 V AC 0 – 250 V AC, 0 – 300 V AC, 0 – 500 V AC 50 – 75 V AC, 85 – 135 V AC, 50 – 150 V AC 175 – 275 V AC, 150 – 300 V AC, 300 – 500 V AC Or As specified
PT Ratio	As specified
No.of Outputs	One Or Two
Output Range	4-20 mA DC, 0-1,0-5,0-10,0-20 mA DC 0 – (\pm) 5, 0 – (\pm)10, 0 – (\pm)20 mA DC 0-5, 0-10 V DC
Output Load Resistance	Max 10 V / Iout For Current Output 10 K Ohm (Min) For Voltage Output
Accuracy	\pm 0.5% of Span.
Conformity	General Conformity to IEC 688.1, BIS 12784-Part I-1989

Operating Instructions :

The Transducer is to be mounted either on Panel Wall or on a 35 mm DIN Rail as ordered. The electrical connections are to be done as per the wiring diagram provided on the specification sticker located on side of the enclosure. For Auxiliary Power Supply ensure that proper rated supply voltage is connected. Also ensure proper polarity incase of DC Power Supply. While wiring DC output signal, ensure proper polarities.