

TECHNICAL DETAILS

AC Current Transducer (D5PTC1)

Introduction :

It is a precision grade Transducer used for measurement of AC Current in a 3 Phase Network. It has 3 Nos. of independent Current Transducers in a single enclosure. 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.

Advantages :

- Reduces Wiring cost
- Compact compared to 3 separate Transducers
- Economical

Operation :

The input AC Current is scaled down through a interposing CT to provide galvanic isolation. The scaled down AC Current 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 Current. 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 Current Range (Three Current Inputs)	0 – 1 A AC Or 0 – 5 A AC
No.of Outputs	Three Nos.
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.
Isolation	2 KV AC, 50 Hz between Individual Inputs, Outputs and Power Supply
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 the Transducer. 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.

The Outputs are marked from right to left (Output 3 to Output 1) for Input Currents of R, Y and B Phase respectively.

TECHNICAL DETAILS

AC Voltage Transducer (D5PTV1)

Introduction :

It is a precision grade Transducer used for measurement of AC Voltage in a 3 Phase Network. It has 3 Nos. of independent Voltage Transducers in a single enclosure. 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.

Advantages :

- Reduces Wiring cost
- Compact compared to 3 separate Transducers
- Economical

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 (Three Voltage Inputs)	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
No.of Outputs	Three Nos.
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.
Isolation	2 KV AC, 50 Hz between Individual Inputs, Outputs and Power Supply
Conformity	General Conformity to IEC 688.1, BIS 12784-Part I-1989

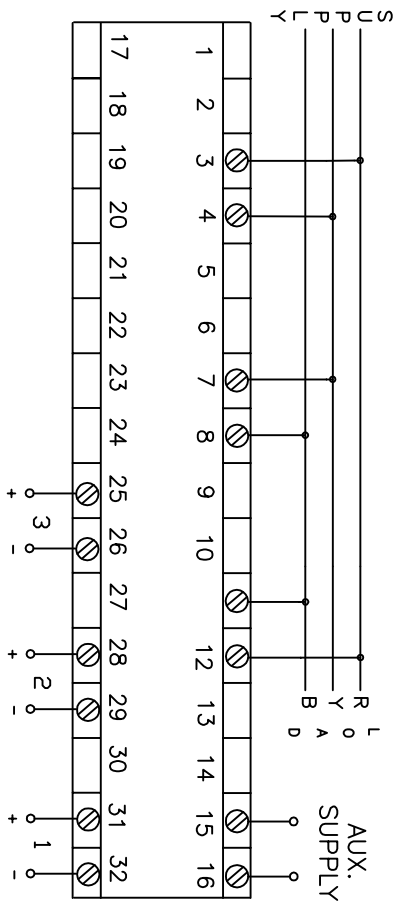
Operating Instructions :

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 the Transducer. 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.

The Outputs are marked from right to left (Output 3 to Output 1) for Input Voltages of RY, YB and BR (Phase – Phase) respectively.

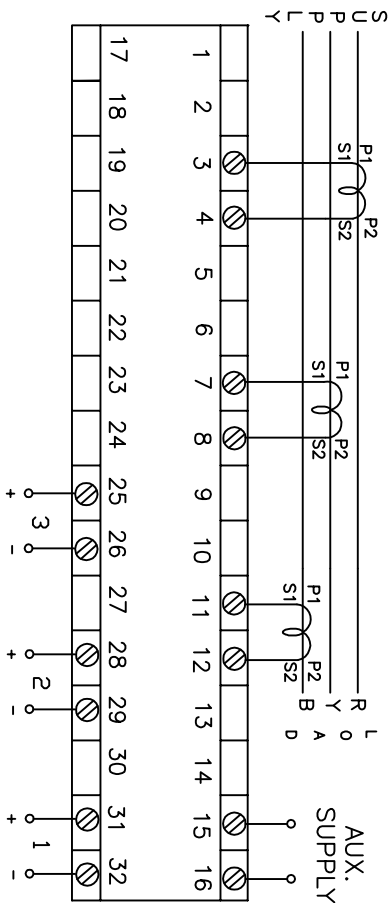
Wiring and Dimensional Drawing

D5PTV1



DC OUTPUTS

D5PTC1



DC OUTPUTS

