**Instruction Manual**

# AC Current Transducer (D2PTC1, D3PTC1)

## Introduction :

It is a precision grade transducer used for measurement of AC Current. 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 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 :*

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|---|---|
| Auxiliary Power Supply | 110, 240 V AC ± 15%, 50 Hz Or<br>24,48,110,220 V DC ± 10% |
| Input Current Range | 0 – 1 A AC Or 0 – 5 A AC |
| No.of Outputs | One Or Two |
| Output Range | 4-20 mA DC,<br>0-1,0-5,0-10,0-20 mA DC<br>0 – (±) 5, 0 – (±)10, 0 – (±)20 mA DC<br>0-5, 0-10 V DC |
| Output Load Resistance | Max 10 V / Iout For Current Output<br>10 K Ohm ( Min ) For Voltage Output |
| Accuracy | ± 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.