

Voltage Transducer DCVT-25V10

V_{PN} = 25 V

For the electronic measurement of voltages : DC with a galvanic isolation between the primary circuit and the secondary circuit.

Preliminary



Electrical data

| | | | |
|------------------------|--|---|----|
| V_{PN} | Primary nominal r.m.s. voltage | 25 | V |
| V_P | Primary voltage, measuring range | + 1.6 .. + 35 | V |
| V_{out} | Output voltage @ V _{PN} | 10 | V |
| R_{IN} | Input Load resistance ¹⁾ | R _{IN} =62(V _{IN(max)} -26.6) Ω | |
| K_N | Conversion ratio | 25 : 10 | |
| V_d | R.m.s. voltage for AC isolation test, 50 Hz, 1 mn (between primary and measuring circuit) | 5.4 | kV |

Accuracy - Dynamic performance data

| | | | |
|--------------------------|--|-------|-----|
| X_G | Overall accuracy @ V _{PN} T _A = 25°C | ± 1.5 | % |
| | Output ripple voltage @ V _{PN} | ± 50 | mV |
| TCV_{OUT} | Thermal drift of V _{OUT} | ± 0.1 | %/K |
| t_r | Response time @ 90 % of V _{PN} | 150 | μs |

General data

| | | | |
|----------------------|-------------------------------|--------------|----|
| T_A | Ambient operating temperature | - 10 .. + 80 | °C |
| T_s | Ambient storage temperature | - 15 .. + 80 | °C |
| m | Mass | 210 | g |

Notes : ¹⁾ R_{IN} is not needed when V_P is less than 26.6V.
Power rating of R_{IN} should be more than 0.02 x V_{IN(max)} W

Features

- RCC voltage transducer
- Compact panel Mount type

Remarks

- When sensing voltages, the range of the sensed voltage can be adjusted by adding an external input resistor on the input side.

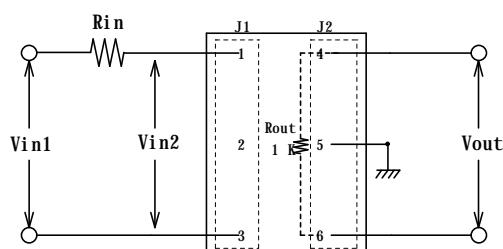
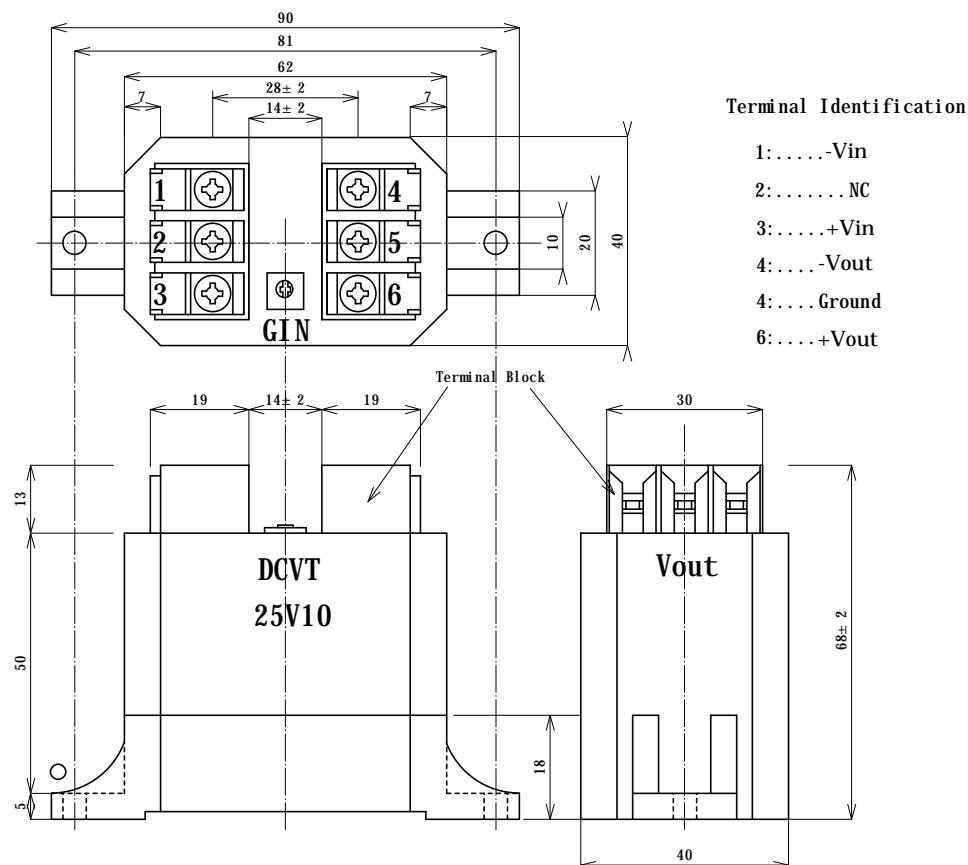
Advantages

- No external power supply is required
- Good overall accuracy
- Excellent linearity
- Low temperature drift
- Fast response time

Applications

- DC variable inverter
- Railway overhead line voltage measurement
- Uninterruptible Power Supplies (UPS)
- Battery supplied application

Dimensions DCVT-25V10 (Unit: mm)



Vin1: Sensed Voltage

Vin2: Normal Input Voltage

Vout: Output Voltage

Rin: External Input Resistance to be added