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 circut)	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.

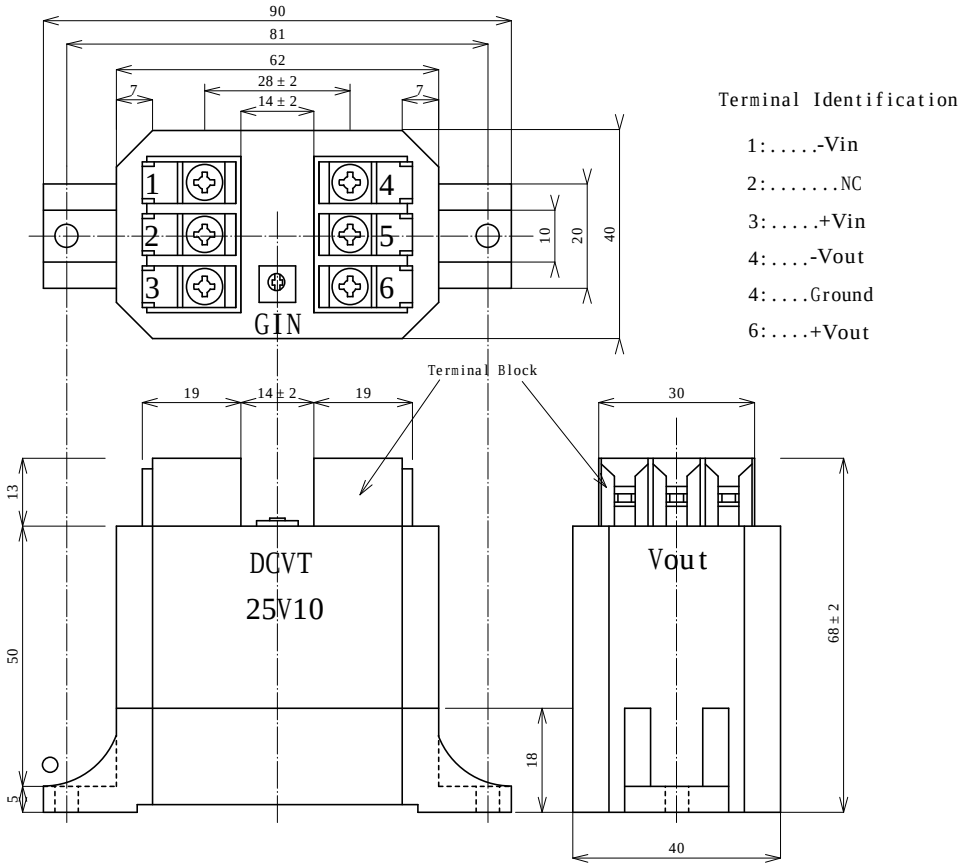
Advantages

- 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)



Terminal Identification

1:.....-Vin

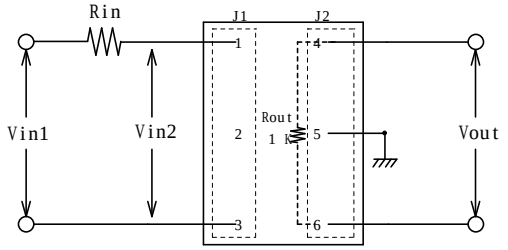
2:.....NC

3:.....+Vin

4:....-Vout

4:....Ground

6:....+Vout



Vin1:Sensed Voltage

Vin2:Normal Input Voltage

Vout:Output Voltage

Rin:External Input Resistance to be added