

Rongtech Industry(ShangHai) Inc.,

RTV25-1000 Series Hall Effect Voltage Sensor

Rongtech®



RTV25-1000 series hall effect voltage sensor is the measuring principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It provides accurate electronic measurement of DC, AC or pulsed currents.

Electrical data (Ta=25°C±5°C)

Type Parameter	RTV25 -50	RTV25 -100	RTV25 -200	RTV25 -300	RTV25 -400	RTV25 -500	RTV25 -800	RTV25 -1000	Unit
Rated input (Vpn)	50	100	200	300	400	500	800	1000	V
Measure range (Vp)	100	200	400	600	800	1000	1600	2000	V
Turns ratio (Np/Ns)	5000:1000								T
Rated input (Ipn)	5.0								mA
Rated output	@Vp=±Vpn ±5±0.5%								V
Supply voltage	±15±5%								V
Consumption current	20+IpX (Np/Ns)								mA
Offset voltage	@Vp=0 ±25								mV
Offset drift	@ -40°C ~ +85°C ≤±0.5								mV/°C
Linearity	@Ip=0-±Ipn ≤0.1								%FS
Response time	≤50								uS
Bandwidth (-3dB)	0~10								KHZ
Galvanic isolation	@ 50HZ, AC, 1min 2.5								KV

Applications

1. AC variable speed drives and servo motor drives
2. Static converters for DC motor drives
3. Variable speed drives
4. Power supplies for welding applications
5. Battery supplied applications
6. Uninterruptible Power Supplies (UPS)
7. Switched Mode Power Supplies (SMPS)

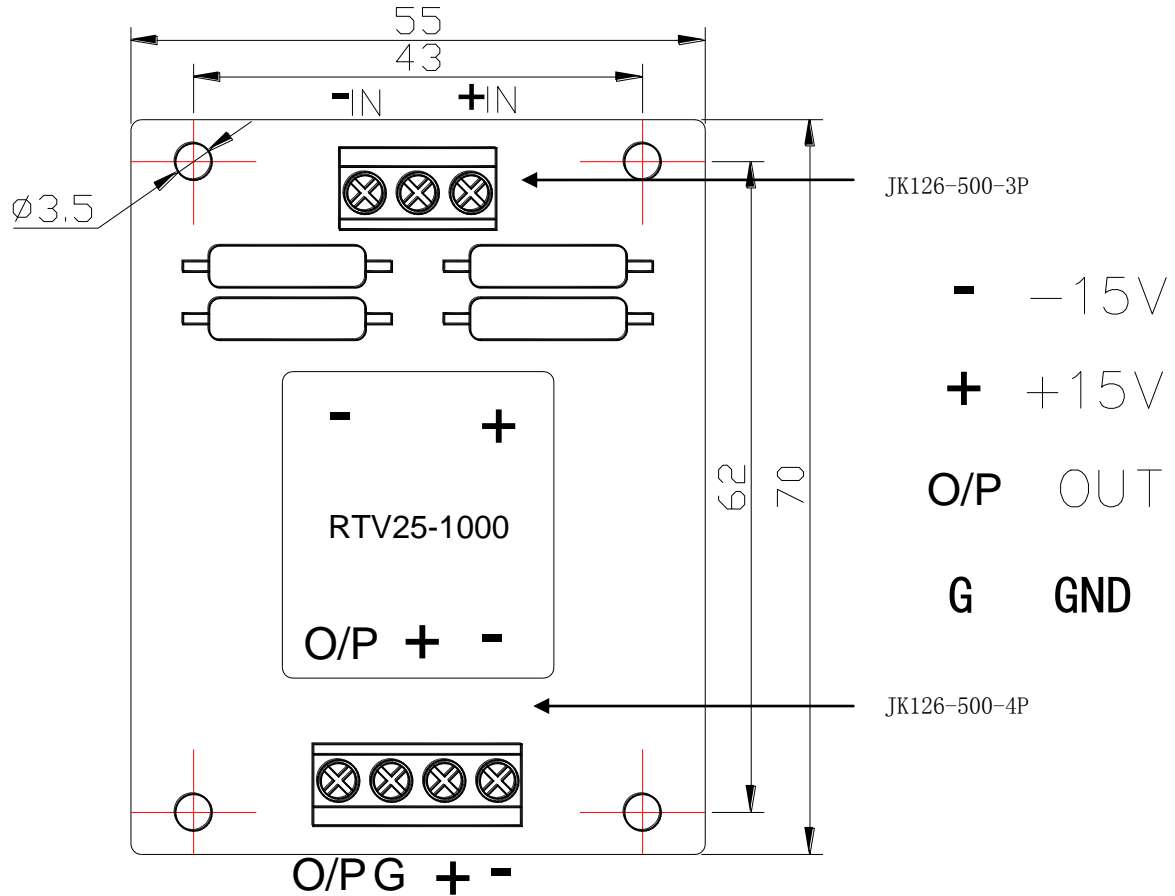
General data

	Value	Unit	Symbol
Operating temperature	-40 to +85	°C	TA
Storage temperature	-40 to +125	°C	TS
Mass (approx)	43	g	M

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Mechanical dimension(for reference only)



Remarks: 1. All dimensions are in mm. 2. General tolerance $\pm 1\text{mm}$.

Directions for use

1. When the voltage will be measured goes through a transmitter, the voltage will be measured at the output end.
(Note: The false wiring may result in the damage of the sensor).
2. Customs can adjust output amplitude of the sensor by needs.
3. Custom design in the different rated input voltage and the output voltage are available.

Standards

- UL94-V0. ;EN60947-1:2004 ;IEC60950-1:2001
- EN50178:1998 ;SJ 20790-2000

Characteristics chart

Effects of impulse noise

