



TBV-A25 series current mode voltage sensor is a closed loop device based on the principle of the hall effect and null balance method. The output from the voltage sensor can be expressed as a voltage by passing it through a resistor. Input voltage can be expressed as a current by passing it through an input resistor. It provides accurate electronic measurement of DC AC or pulse and pulsed voltage.

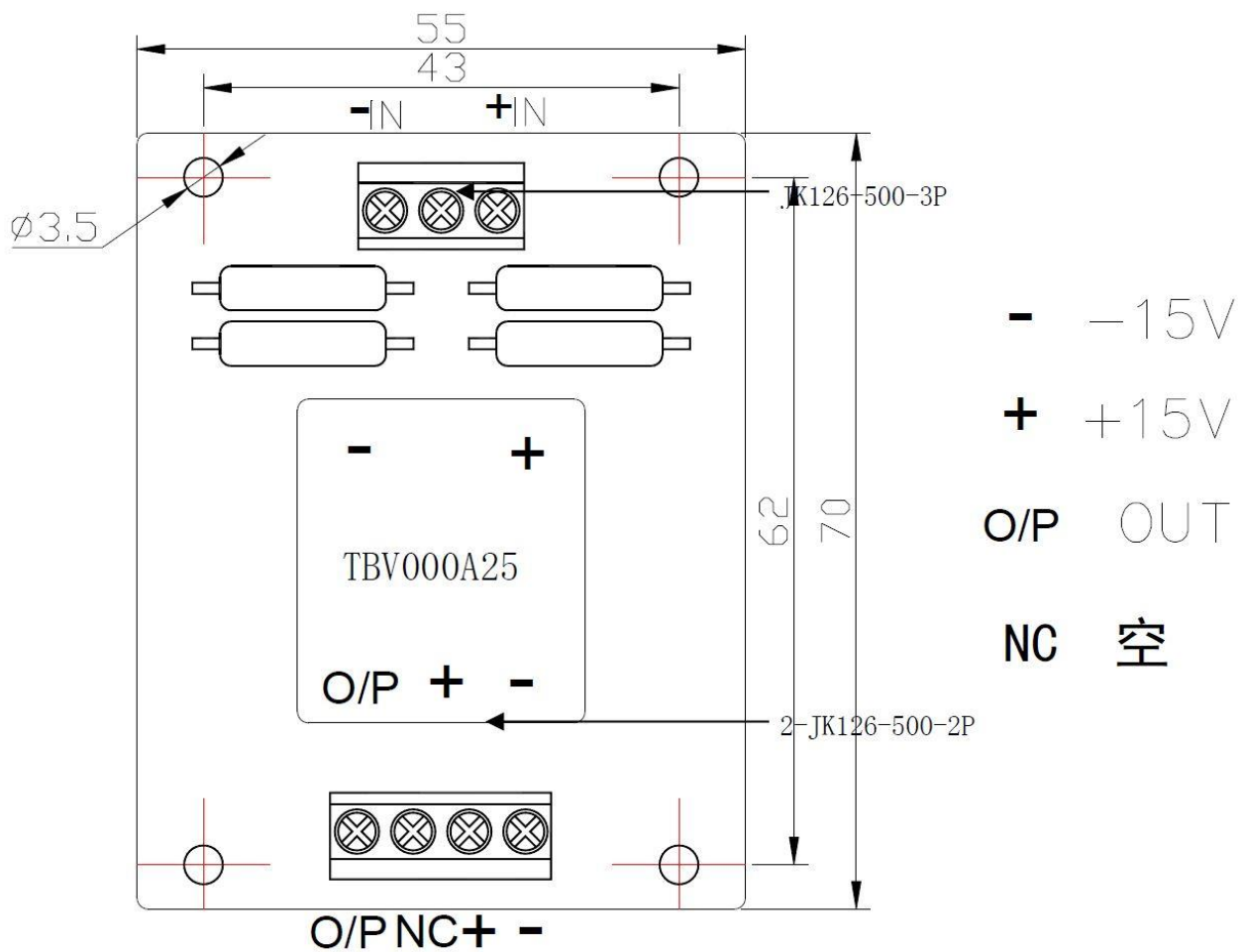
Electrical data (Ta=25°C±5°C)

Type Parameter	TBV- 50A25	TBV- 100A25	TBV- 200A25	TBV- 300A25	TBV- 400A25	TBV- 500A25	TBV- 800A25	TBV- 1000A25	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 (Isn)	@Vp=±Vpn ±25±0.5%								mA
Supply voltage	±15±5%								V
Consumption current	20+IpnX (Np/Ns)								mA
Offset current	@Vp=0 ≤±0.2								mA
Offset drift	≤±0.5 (Typ), ≤±0.75 (Max),								mA
Linearity	@Ipn=0-±Ipn ≤0.1								%FS
Response time	≤50								μS
Bandwidth(-3dB)	@-3dB DC-200								KHZ
Galvanic isolation	@ 50HZ, AC,1min 2.5								KV

Applications

- AC variable speed drives
- Static converters for DC motor drives
- Variable speed drives
- Power supplies for welding applications
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)

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 is measured through a sensor, the current 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 current available.

Standards

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

General data

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

Characteristics chart

Effects of impulse noise

