



TBV-ASR12series current mode voltage sensor is a device based on the principle of the hall effect, with a galvanic isolation between primary and secondary circuit, it provides accurate electronic measurement of DC、AC or pulsed voltage.

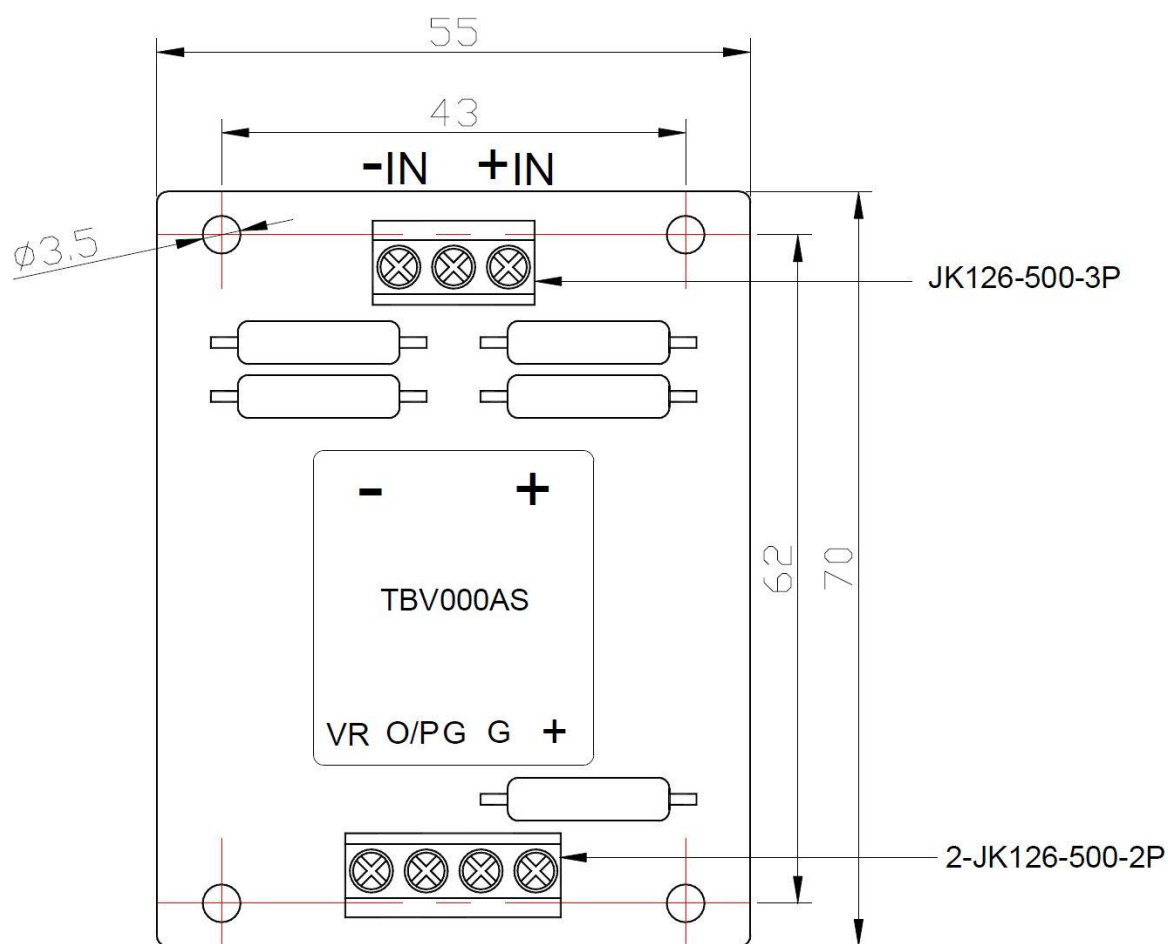
## Electrical data (Ta=25°C±5°C)

| Type<br>Parameter       | TBV50<br>ASR12              | TBV100<br>ASR12 | TBV200<br>ASR12 | TBV300<br>ASR12 | TBV400<br>ASR12 | TBV500<br>ASR12 | Unit  |
|-------------------------|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| Rated input ( Vpn )     | ±50                         | ±100            | ±200            | ±300            | ±400            | ±500            | V     |
| Measure range<br>( Vp ) | ±100                        | ±200            | ±400            | ±600            | ±800            | ±1000           | V     |
| Turns ratio (Np/Ns)     | 3333:1000                   |                 |                 |                 |                 |                 | T     |
| Rated input ( Ipn )     | ±3.0                        |                 |                 |                 |                 |                 | mA    |
| Rated output            | @Vp=±Vpn ±2±0.5%            |                 |                 |                 |                 |                 | V     |
| Supply voltage          | 12±5%                       |                 |                 |                 |                 |                 | V     |
| Consumption current     | 20+I <sub>p</sub> X (Np/Ns) |                 |                 |                 |                 |                 | mA    |
| Reference voltage       | 5±0.5%                      |                 |                 |                 |                 |                 | V     |
| Zero voltage            | 5±0.5%                      |                 |                 |                 |                 |                 | V     |
| Offset voltage drift    | ≤±0.3                       |                 |                 |                 |                 |                 | mV/°C |
| Linearity               | @Vp=0-±Vpn ≤0.2             |                 |                 |                 |                 |                 | %FS   |
| Response time           | ≤40                         |                 |                 |                 |                 |                 | μS    |
| Bandwidth<br>h          | 20 ~ 10000                  |                 |                 |                 |                 |                 | HZ    |
| 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 current is measured through a transmitter, the voltage will be measured at the output end. (Note: The false wiring may result in the damage of the transmitter).
2. Customs can adjust Output amplitude of the transmitter by needs.
3. Custom design in the different rated input current and the output voltage 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      |