TBV-LV5 series 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.

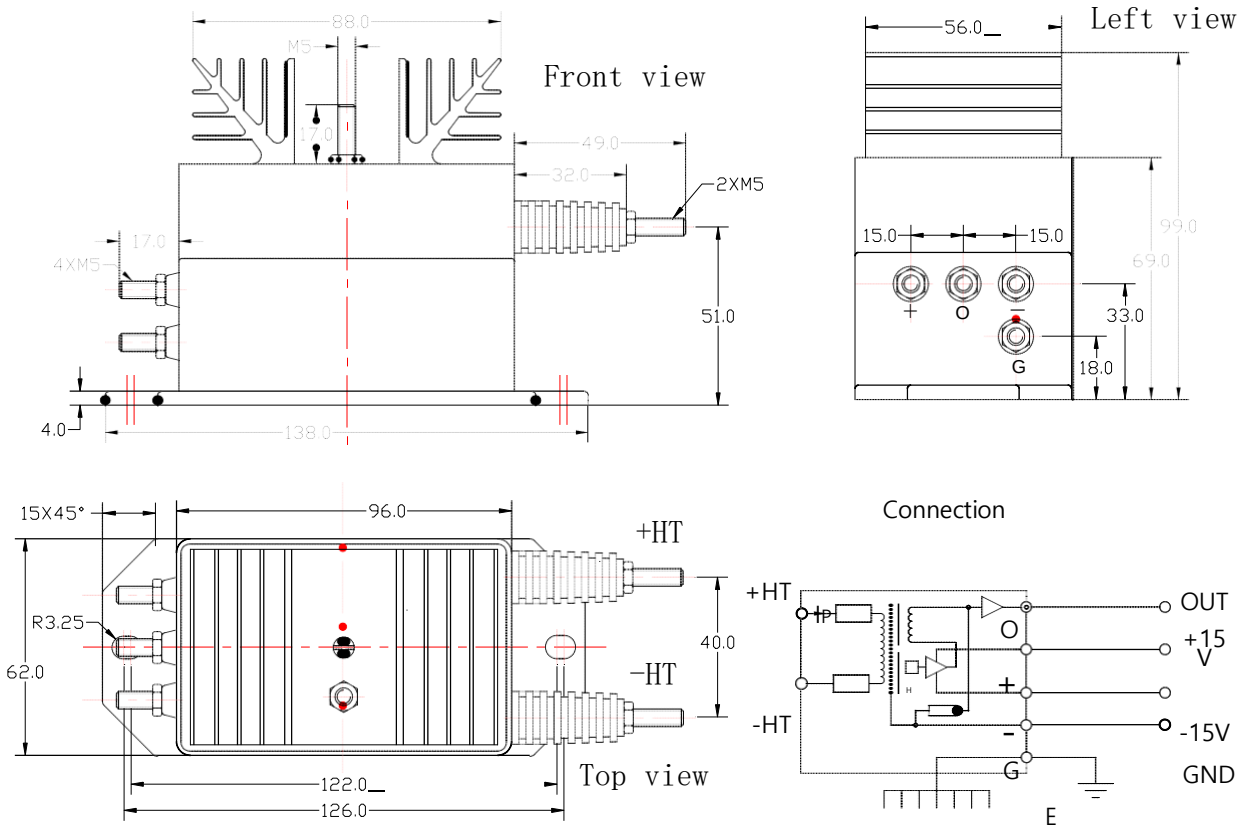
Electrical data (Ta=25℃±5℃)

Parameter \ Type	TBV 200LV5	TBV 300LV5	TBV 500LV5	TBV 1000LV5	TBV 2000LV5	TBV 3000LV5	TBV 4000LV5	TBV 6000LV5	Unit
Rated input (Vpn)	±200	±300	±500	±1000	±2000	±3000	±4000	±6000	V
Measure range (Vp)	±400	±600	±1000	±2000	±4000	±6000	±6000	±9000	V
Total input consumption	0.5	0.75	1.25	2．5	5.0	7.5	10	12.0	W
Rated input (Ip)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.0	mA
Turns ratio (Np/Ns)	20000：1000							25000：1000	T
Secondary coil resister	@ +85℃ 55								Ω
Rated output (Vsn)	@Vp=±Vpn ±5.0±0.5%								V
Internal resister	@ ±15V V_{PN} 50±0.1%								Ω
(±10%) Supply voltage	±15±3%								V
Consumption current	20+IpX (Np/Ns)								mA
Offset voltage	@ Vp=0 ≤±30								mV
Offset drift	≤±0.6								mV/℃
Linearity	@ Vp =0-±Vpn ≤0.1								%FS
Response time	≤200								uS
Galvanic isolation	@ 50HZ, AC,1min Between primary and secondary + shield 12.0								KV

Applications

- Variable speed drives
- Welding machine
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Electrochemical

Mechanical dimension (for reference only)



Remarks :

1. All dimensions are in mm.
2. General tolerance ±1mm

Directions for use

1. Is is positive when the Ip is applied to the terminal +HT. Temperature of the primary conductor should not exceed 100℃.
2. 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)
3. Custom design in the different rated input voltage and the output current available.

Standards

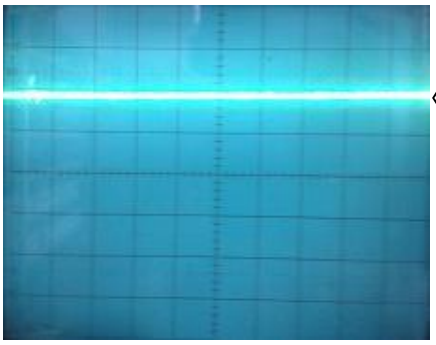
- UL94-V0
- EN60947-1:2004
- IEC60950-1:2001
- EN50178:1998
- SJ 20790-2000

General data

	Value	Unit	Symbol
Operating temperature	-40 to +85	ºC	TA
Storage temperature	-40 to +125	ºC	TS
Mass(approx)	850	g	M

Characteristics chart

Effects of impulse noise



(Output voltage)