DATA SHEET
Hall Effect Voltage Sensor

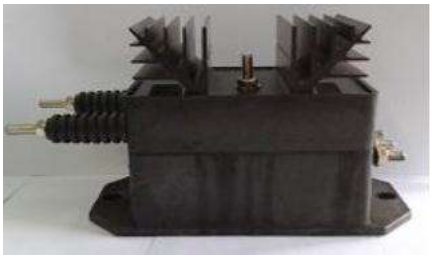
PN: CHV_LV15D5 | **IPN=300~10000V**

Feature

- It is a current mode voltage sensor, based on the principle of the hall effect,with a galvnic isolation between primary and secondary circuit
- It provides accurate electronic measurement of DC, AC or pulsed voltage.
- Supply voltage: ±12~±18 V

Advantages

- High accuracy
- Easy installation
- Low temperature drift
- High immunity to external interference
- Very good linearity
- Can be customized



Applications

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

Electrical data：（Ta=25℃±5℃）

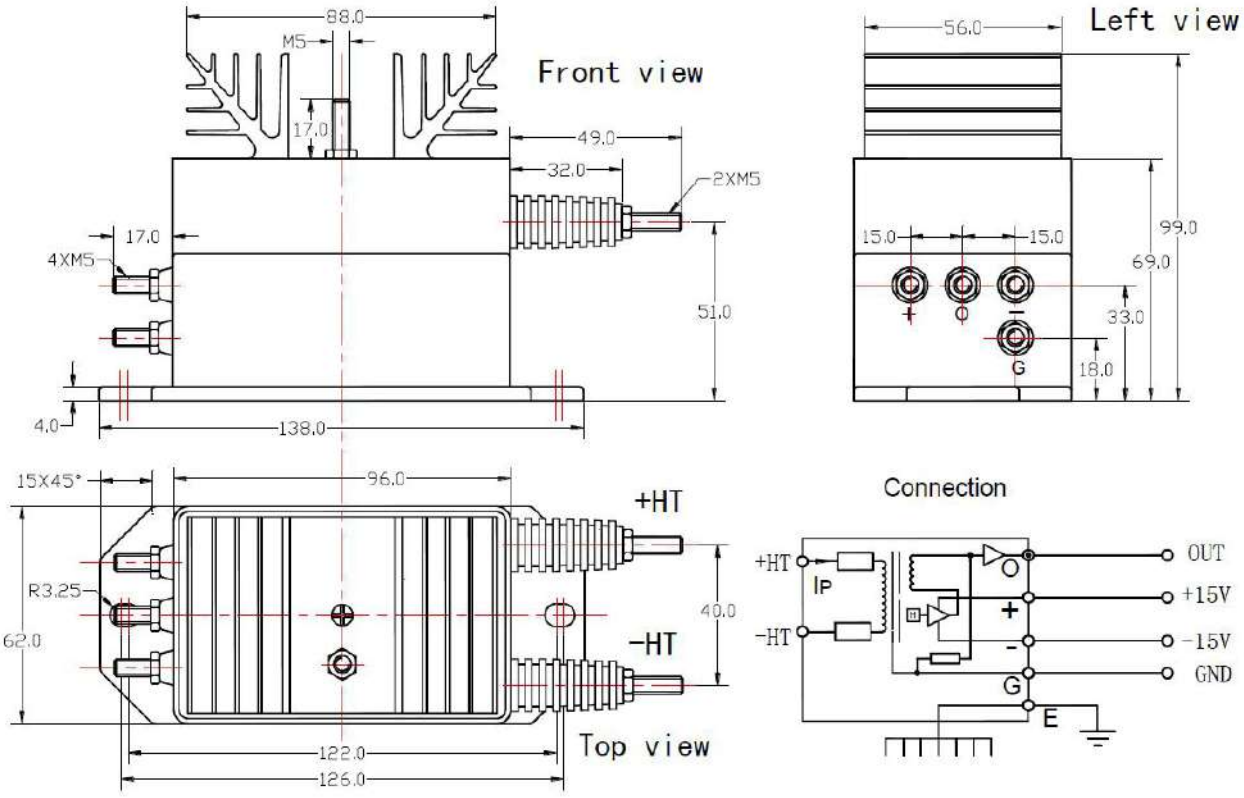
Parmeter \ Type	CHV300 LV15D5	CHV500 LV15D5	CHV1000 LV15D5	CHV2000 LV15D5	CHV3000 LV 15D5	CHV4000 LV15D5	CHV6000 LV15D5	CHV10000 LV15D5
Rated input Vpn(V)	300	500	1000	2000	3000	4000	6000	10000
Measure range Vp(V)	600	1000	2000	4000	6000	6000	9000	12000
Total input consumption (W)	0.75	1.25	2.5	5.0	7.5	10	12.0	12.5
Rated input Ip(mA)	2.5	2.5	2.5	2.5	2.5	2.5	2.0	1.25
Turns ratio Np/NS (T)	20000:1000						25000: 1000	40000: 1000
Secondary coil resiste (Ω)	@+85°C	55						
Rated output Isn(V)	@Vp=±Vpn	±5.0 ±0.5%						
Internal resister(Ω)	@±15V Vpn	50 ±0.1%						
Supply voltage (V)	±12~18V (±3%)							
Consumption current (mA)	20+IpX(Np/NS)							
Offset voltage (mV)	@Vp=0	≤±30						

Offset drift (mV/°C)	@-40 ~ +85°C	≤ ±0.6
Linearity (%FS)	@Vp=0-±Vpn	≤0.1
Response time (μS)		≤200
Galvanic isolation (KV)	@50Hz, AC, 1min Between primary and secondary + shield	12.0

General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-40~ +125
Mass M(g)	850
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000
	UL94-V0
	EN60947-1:2004

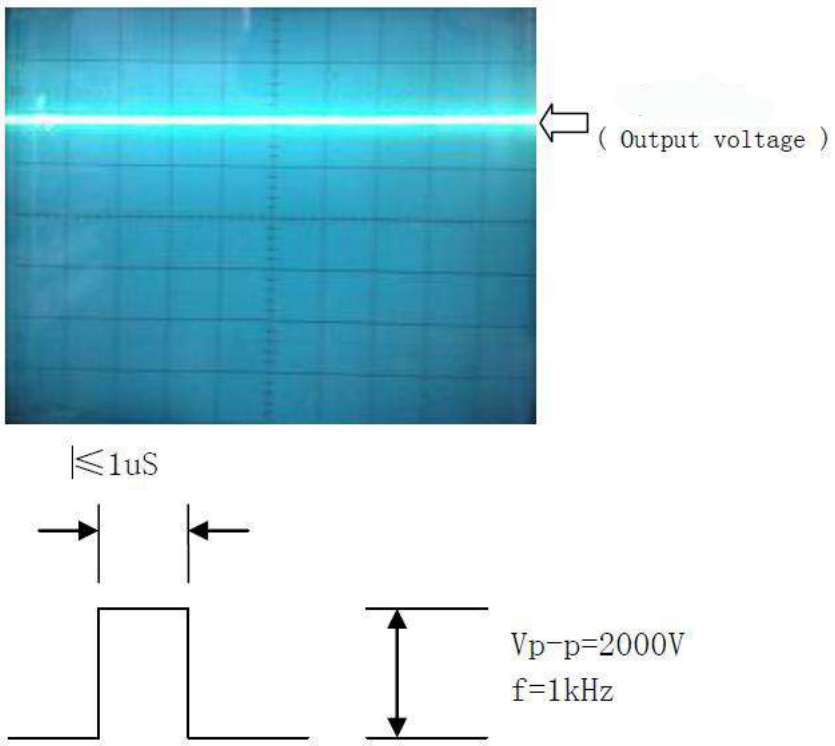
Dimensions(mm):



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

Characteristics chart:

Effects of impulse noise



Remarks:

- It is positive when the Ip is applied to the terminal +HT. Temperature of the primary conductor should not exceed 100°C.
- When the current goes through the primary pin of a sensor, the voltage will be measured at the output end.
- Custom design is available for the different rated input current and the output voltage.

WARNING : Incorrect wiring may cause damage to the sensor.