DATA SHEET
Hall Effect Voltage Sensor

PN: CHV_AL15D25	IPN=100~1000V

Feature

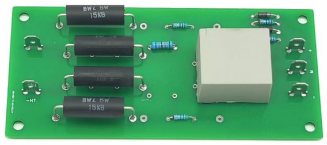
- Closed- loop (compensated) hall effect current mode voltage transducer
- The output from the voltage sensor can be expressed as a voltage by passing it through a resister.
- Input voltage can be expressed as a current by passing it through a input resister.
- It provides accurate electronic measurement of DC AC or pulse and pulsed voltage.
- Supply voltage: DC±12～±15

Advantages

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

Applications

- AC variable speed drives and servo motor dr
- 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)



RoHS

Electrical data：（Ta=25℃±5℃，Vc= +5VDC）

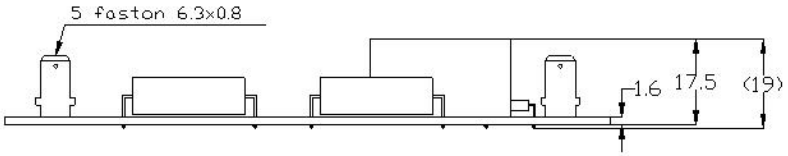
Parmeter \ Ref	CHV100 AL15D25	CHV200 AL15D25	CHV300 AL15D25	CHV400 AL15D25	CHV500 AL15D25	CHV800 AL15D25	CHV1000 AL15D25
Rated input voltage Vpn(V)	100	200	300	400	500	800	1000
Measuring range Vp(V)	0～+200	0～+400	0～+600	0～+800	0～+1000	0～+1600	0～+2000
Turns ratio Np/NS (T)	5000:1000						
Rated input Ipn (mA)	5.0						
Rated output current Isn(mA)	@Vp=±Vpn	±25±0.5%					
Measure resistor (Ω) with ±12V	@±Vpn max	100(min) 300(max)					
	@±2Vpn max	60(min) 150(max)					
Measure resistor (Ω) with ±15V	@±Vpn max	100(min) 360(max)					
	@±2Vpn max	60(min) 180(max)					

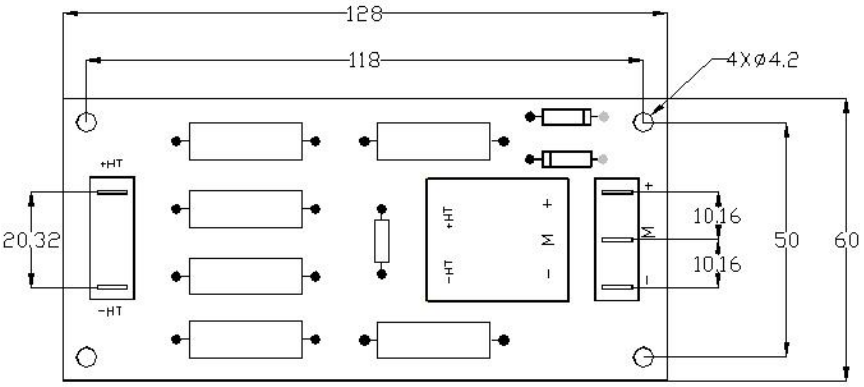
Supply voltage VC(V)	±12～±15±5%
Accuracy XG(%)	@IPN,T=25°C < ±0.5
Offset current IOE(mA)	@IP=0,T=25°C ≤ ±0.2
Offset drift (mA)	@ -40～+25°C ≤±0.6； @ 25°C～+85°C ≤±0.5
Linearity (%FS)	@Ip=0- ±Ipn ≤0.1
Response time tra(μs)	≤50
Current consumption IC(mA)	15+IpX(Np/Ns)
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC 2.5

General data：

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-40~ +125
Mass M(g)	75
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN60947-1:2004
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

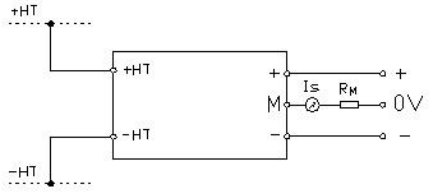




Secondary terminals

terminal + :supply voltage+12..15V
terminal M :measure
terminal - :supply voltage-12..15V

Connection

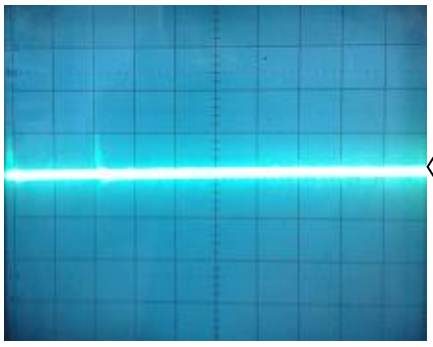


Remarks:

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

Characteristics chart:

Effects of Impulse Noise



⇦ **(Output voltage)**

Remarks:

- 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.