DATA SHEET
Hall Effect Voltage Sensor

PN: CHV_AV5S20 | **IPN=200~1000V**

Feature

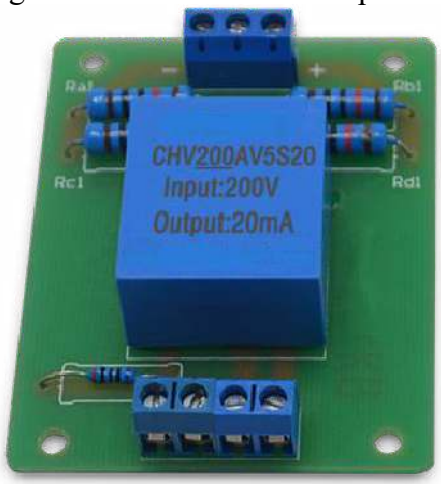
- Closed- loop (compensated) voltage transducer
- Supply voltage: DC+5 V
- Capable measurement of DC and AC voltage with galvanic isolation between primary circuit and secondary circuit.

Advantages

- High accuracy
- Easy installation
- Low temperature drift
- High immunity to external interference

Applications

- Voltage detection of power distribution cabinet
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)



ISO 14001

RoHS

CE

Electrical data: （Ta=25℃，Vc= +5VDC）

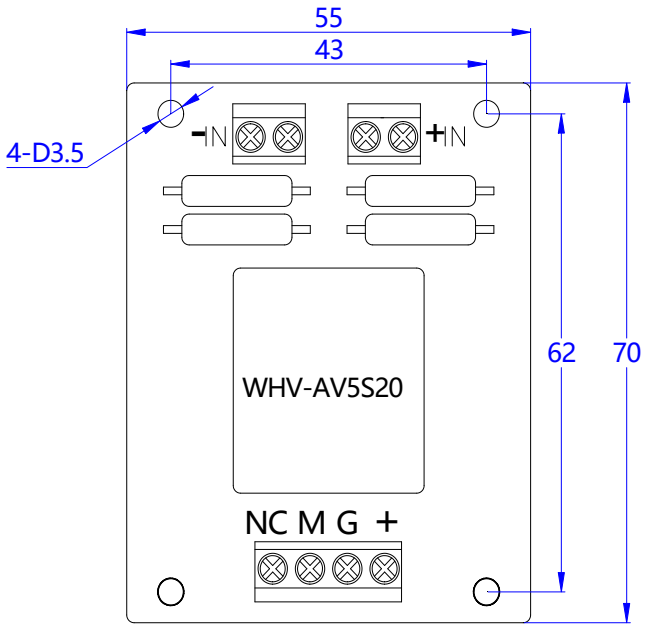
Parmeter \ Ref	CHV200 AV5S20	CHV400 AV5S20	CHV600 AV5S20	CHV800 AV5S20	CHV1000 AV5S20
Rated input voltage Vpn(V)	200	400	600	800	1000
Measuring range Vp(V)	0 ~ +280	0 ~ +360	0 ~ +840	0 ~ +1120	0 ~ +1400
Turns ratio Np/NS (T)	1000	1000	1000	1000	1000
Secondary coil resistance RS (Ω)	60	60	60	60	60
Output current IS(mA)	+20*VP/VPN				
Inside resistance RM (Ω)	【(VC-0.5)/IS*0.001】-RS				
Supply voltage VC(V)	+5.0 ±5%				
Accuracy XG(%)	@IPN,T=25°C < ±0.5				
Offset current IOE(mA)	@IP=0,T=25°C < +0.2				
Temperature variation of IOE IOT(mA/°C)	@IP=0,-40 ~ +85°C < ±0.5				
Linearity error εr(%FS)	< 0.2				
Response time tra(μs)	@90% of IPN <40.0				
Power consumption IC(mA)	15+Is				

Insulation voltage Vd(KV)	@50/60Hz, 1min,AC 2.5

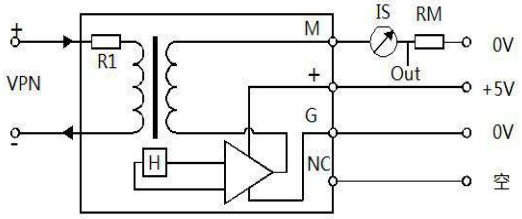
General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	50
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):



Connection



General tolerance

General tolerance:< ±0.5mm

Size of Primary pin:

DG301-5.0-02P;

Secondary pin:DG301-5.0-04P

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.