

DATA SHEET

Hall Effect Voltage Sensor



PN: CHV_AVDA24S4

IPN=80~1000V

Feature

- Closed- loop (compensated) voltage transducer
- Capable measurement of DC and AC voltage with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC+24 V

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)



RoHS



Electrical data: (Ta=25°C, Vc= +24.0VDC)

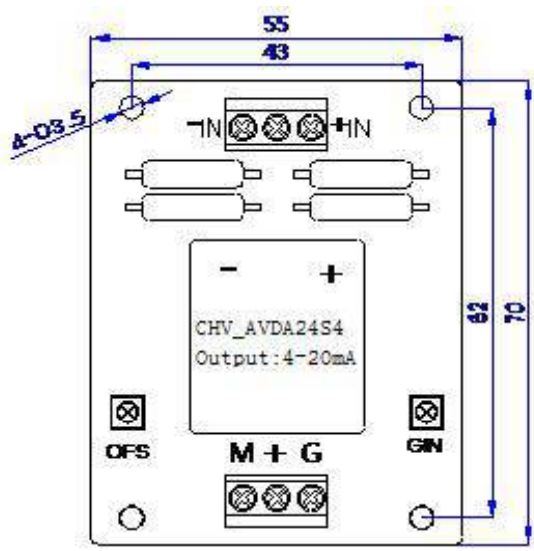
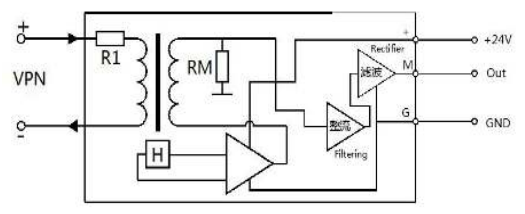
Parameter \ Ref	CHV80 AVDA24S4	CHV100 AVDA24S4	CHV300 AVDA24S4	CHV600 AVDA24S4	CHV1000 AVDA24S4
Rated input voltage V _{pn} (V)	80	100	300	600	1000
Measuring range V _p (V)	0 ~ +112	0 ~ +140	0 ~ +420	0 ~ +840	0 ~ +1400
Turns ratio N _p /N _s (T)	1000	1000	1000	1000	1000
Output current I _S (mA)	4.0+16*(V _P /V _{PN})				
Supply voltage V _C (V)	+24.0 ±5%				
Accuracy X _G (%)	@IPN,T=25°C		< ±0.7		
Offset current IOE(mA)	@IP=0,T=25°C		< +4.0		
Temperature variation of IOE IOT(mA/°C)	@IP=0,-40 ~ +85°C		< ±0.5		
Linearity error ε _r (%FS)			< 0.2		
Response time τ _{ra} (μs)	@90% of IPN		<40.0		
Power consumption I _C (mA)			15+I _s		

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

	<p style="text-align: center;">Connection</p>  <p style="text-align: center;">General tolerance</p> <p>General tolerance: <math>\pm 0.5\text{mm}</math> Size of Primary pin: DG301-5.0-03P; Secondary pin: DG301-5.0-03P</p>
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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.