



DATA SHEET

Hall Effect Voltage Sensor

PN: CHV_AC15D25

IPN=200~1000V

Feature

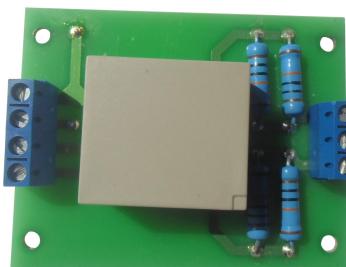
- Closed-loop (compensate) voltage transducer
- Capable measurement of DC and AC voltage with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC $\pm 12 \sim 15$ V

Advantages

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

Applications

- The application of induction cooker
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Inverter applications



RoHS



Electrical data: (Ta=25°C, Vc= ±15VDC)

Parameter	Ref	CHV200 AC15D25	CHV400 AC15D25	CHV600 AC15D25	CHV800 AC15D25	CHV1000 AC15D25
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 rms IS(mA)		$\pm 25 * VP / VPN$				
Inside resistance RM (Ω)		$[(VC - 3.0V) / (IS * 0.001)] - RS$				
Supply voltage VC(V)		$(\pm 12 \sim \pm 15) \pm 5\%$				
Accuracy XG(%)		$@IPN, T=25^\circ C < \pm 0.5$				
Offset current IOE(mA)		$@IP=0, T=25^\circ C < \pm 0.15$				
Temperature variation of IOE IOT(mA/°C)		$@IP=0, -40 \sim +85^\circ C < \pm 0.5$				
Linearity error er(%FS)		< 0.2				
Response time tra(μs)		$@90\% \text{ of IPN } < 40.0$				
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; IEC60950-1:2001
Standards	EN50178:1998 SJ20790-2000

Dimensions(mm):

<p>4-D3.5</p> <p>55</p> <p>43</p> <p>70</p> <p>62</p> <p>M NC+ -</p>	<p>Connection</p> <p>IS RM 0V Out +15V -15V</p>
	<p>General tolerance</p> <p>General tolerance:<±0.5mm size of Primary pin : DG301-5.0-03P ; Secondary pin:DG301-5.0-04P</p>

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.

