

Split Core Hall Effect AC Current Sensor CYHCS-K104V

This Hall Effect current sensor is based on open loop principle and designed with a high galvanic isolation between primary conductor and secondary circuit. It can be used for measurement of AC current, pulse currents etc. The output of the transducer reflects the rectified average value of the current in the carrying conductor.

Product Characteristics	Applications		
Excellent accuracy Very good linearity Using split cores and easy mounting Less power consumption Window structure Electrically isolating the output of the transducer from the current carrying conductor No insertion loss	Photovoltaic equipment Frequency conversion timing equipment Various power supply Uninterruptible power supplies (UPS) Electric welding machines Transformer substation Numerical controlled machine tools Electric powered locomotive Microcomputer monitoring		
 Current overload capability 	 Electric power network monitoring 		

Electrical Data

Primary Nominal Current I_r (A), rms	Measuring Range (A)	DC Output Voltage (V)	Window size (mm)	Part number
500	0~±500			CYHCS-K104V-500A-xn
1000	0~±1000	x=0: 0-4V ±1.0% x=3: 0-5V ±1.0% x=8: 0-10V ±1.0%		CYHCS-K104V-1000A-xn
1500	0~±1500			CYHCS-K104V-1500A-xn
2000	0~±2000		104 x 36	CYHCS-K104V-2000A-xn
3000	0~±3000			CYHCS-K104V-3000A-xn
4000	0~±4000			CYHCS-K104V-4000A-xn
5000	0~±5000			CYHCS-K104V-5000A-xn

(n=2, Vcc= +12VDC; n=3, Vcc =+15VDC; n=4, Vcc =+24VDC)

Supply Voltage V_{cc} +12V, +15V, +24VDC ± 5% Output Voltage at I I =25°C:

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Output Voltage at I_r , T_A =25°C: V_{out} =0-4V, 0-5V, 0-10VDC

Current Consumption $I_c < 25 \text{mA}$ Galvanic isolation, 50/60Hz, 1min: 3kV rms Output Impedance: $R_{\text{out}} < 150 \Omega$ Load resistance: 10k Ω

Accuracy and Dynamic performance data

Case Material: PBT

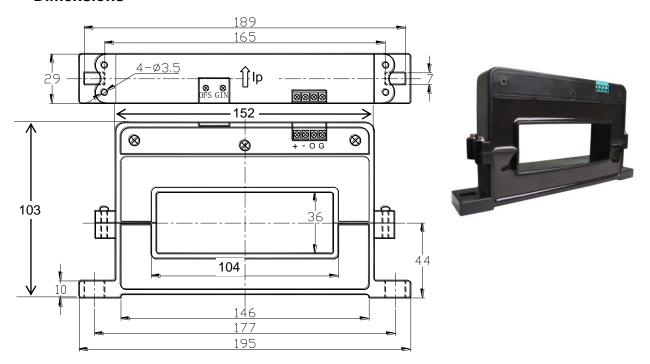
General Data

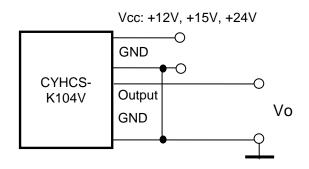
Ambient Operating Temperature, Ambient Storage Temperature,

$$T_A = -25^{\circ}\text{C} \sim +85^{\circ}\text{C}$$

 $T_S = -40^{\circ}\text{C} \sim +100^{\circ}\text{C}$

Dimensions





Pin Arrangement

1(+): Vcc

2(-): Ground (GND)

3(O): Output

4(G): Ground (GND)

GIN: gain adjustment OFS: offset adjustment

Notes:

- Connect the terminals of power source, output respectively and correctly, never make wrong connection.
- 2. Two potentiometers can be adjusted, only if necessary, by turning slowly to the required accuracy with a small screwdriver.
- 3. The best accuracy can be achieved when the window is fully filled with bus-bar (current carrying conductor).
- 4. The in-phase output can be obtained when the direction of current of current carrying conductor is the same as the direction of arrow marked on the transducer

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