

Voltage Sensor CV100-1000/SP7

The CV100-1000/SP7 voltage sensor adopts high-performance imported Hall elements and utilizes the magnetic compensation principle to achieve electrically isolated measurement of DC, AC, or pulsed voltages. The output current is proportional to the measured voltage, ensuring excellent accuracy, linearity, and long-term stability.

Parameters

Electrical Specifications

- Rated Voltage Input: $\pm 1000\text{V}$
- Measurement Range: : $0 \sim \pm 1500\text{V}$
- Rated Output: $\pm 50\text{mA}_{\text{rms}}$
- Supply Voltage: $\pm 12 \sim \pm 24\text{VDC}$ ($\pm 5\%$)
- Secondary Side Resistance: 60Ω (Internal voltage drop: 3V per 1000V of input voltage)
- Current Consumption: 15mA (no-load) + output current
- Dielectric Strength: $6\text{kV}_{\text{rms}}/50\text{Hz}/1\text{min}$

Accuracy & Dynamic Performance

- Accuracy: $\pm 0.7\%$
- Non-Linearity: $\leq \pm 0.1\%$
- Temperature Drift: $\leq \pm 0.2\text{mA}$
- Offset Current: $\leq \pm 0.2\text{mA}$
- Response Time: $\leq 100\mu\text{s}$

General Data

- Operating Temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Storage Temperature: $-45^{\circ}\text{C} \sim +90^{\circ}\text{C}$
- Flame-retardant, self-extinguishing insulating plastic housing
- Connection Type: $6.3 \times 0.8\text{mm}$ terminals*4
- Weight: $\leq 600\text{g}$

Outline & Interface

