

Voltage Sensor CV100-AW/SP1

The CV100-AW/SP1 uses imported high-performance Hall elements and employs magnetic compensation to perform galvanic isolation measurement of DC, AC, or pulsed voltage. The output voltage is proportional to the measured voltage, offering excellent accuracy, linearity, and stability.

Parameters

Electrical Specifications

- Rated Measurement Current: 100Arms
- Measurement Range: up to 20mArms
- Rated Output Current: 50mArms
- Supply Voltage: $\pm 12 \sim \pm 24\text{VDC}$ ($\pm 5\%$)
- Secondary Coil Resistance: $60\ \Omega$ (Internal voltage drop: $3\text{V}@1000\text{V}$ primary voltage)
- Current Consumption: $15\text{mA}(\text{no-load}) + \text{output current}$
- Dielectric Strength: $9\text{kVrms}/50\text{Hz}/1\text{min}$
- Load Resistance:

Supply Voltage	Output Current	$R_{M\text{Min}}$	$R_{M\text{Max}}$
$\pm 12\text{V}$	$\pm 10\text{mA}$	$0\ \Omega$	$120\ \Omega$
	$\pm 20\text{mA}$	$0\ \Omega$	$30\ \Omega$
$\pm 24\text{V}$	$\pm 10\text{mA}$	$0\ \Omega$	$200\ \Omega$
	$\pm 20\text{mA}$	$0\ \Omega$	$80\ \Omega$

Accuracy & Dynamic Performance

- Accuracy: $\pm 0.7\%$
- Non-Linearity: $\pm 0.1\%$
- Zero Offset: $\leq \pm 0.3\text{mA}$
- Offset Current: $\leq \pm 0.3\text{mA}$
- Response Time: $\leq 20\mu\text{s}$

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: FASTON quick-connect tabs*3
- Mounting: Bottom mounting holes $\phi 6.5 \text{ mm} \times 2$, hole spacing 122 mm
- Weight: $\leq 500\text{g}$

Outline & Interface

