

Current Sensor UP-200A

Zero Magnetic Field Detecting Method

Accuracy : $\pm 0.01\%$ or less
Linearity : $\pm 0.01\%$ or less
Offset current : $\pm 10\mu\text{A}$ or less
Hysteresis : 1ppm or less
Response speed : 1 μsec


Ultrahigh-accuracy
 $\pm 0.01\%$
 or less

H35mm × W35mm
Compact size

Significant Cost Reduction

UP-200A
SECI

Main features

- 1 High-accuracy sensor with a range of $\pm 0.01\%$ or less accuracy. Hysteresis : 1ppm or less.
- 2 The Smallest Sensor in 200A Class.
H 35mm × W 35mm × D 20mm Weight : 30g
- 3 Significant cost reduction with SECI's original method.
- 4 Series : 200A ($\pm 200\text{A}$)
- 5  Available for EV battery packs.
Operating temperature : -30°C to 80°C

Accuracy on each model

UPseries	MFUPseries	SUPseries
for both DC and AC	for both DC and AC	for both DC and AC
Accuracy : $\pm 0.01\%$	Accuracy : $\pm 0.005\%$	Accuracy : $\pm 0.1\%$
	Build to order	AC only Accuracy : $\pm 0.1\%$

Series lineup

External dimensions may differ from this brochure at the time of release. (February, 2012)

Detection current	Max rated output	External size (mm)	Available Wire Diameters
200A Class	$\pm 100\text{mA}$	UPseries H35_W35_D20 MFUPseries H50_W50_D30 SUPseries H35_W35_D20	15mm ϕ

Direct-current characteristics

Current(A)	Voltage(V)	Range of error(%)
0A	0.00000	0.0000
50A	1.25001	0.0002
100A	2.50003	0.0006
150A	3.75004	0.0008
200A	5.00004	0.0008

Frequency characteristic

Temperature Frequency	25°C per 1V (V)
100Hz	1.00040
1KHz	1.00056
10KHz	1.00094

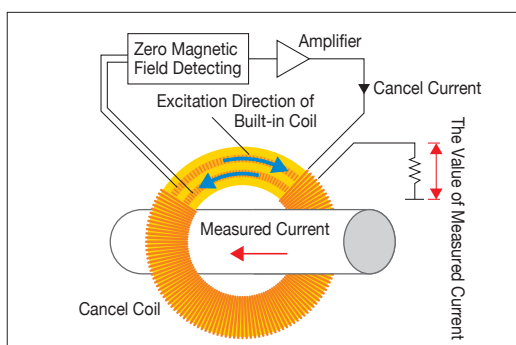
※ Input current : 40A

Specifications

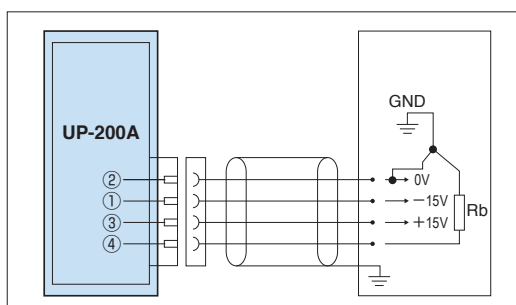
Measurement condition: Ultra precision resistance 50Ω within the range of error 0.001% is used as a load resistor

Temperature	Offset	Noise	Power-supply voltage	Voltage fluctuation	Consumption current
25°C	10μA	10μA	±15V	±5%	35mA

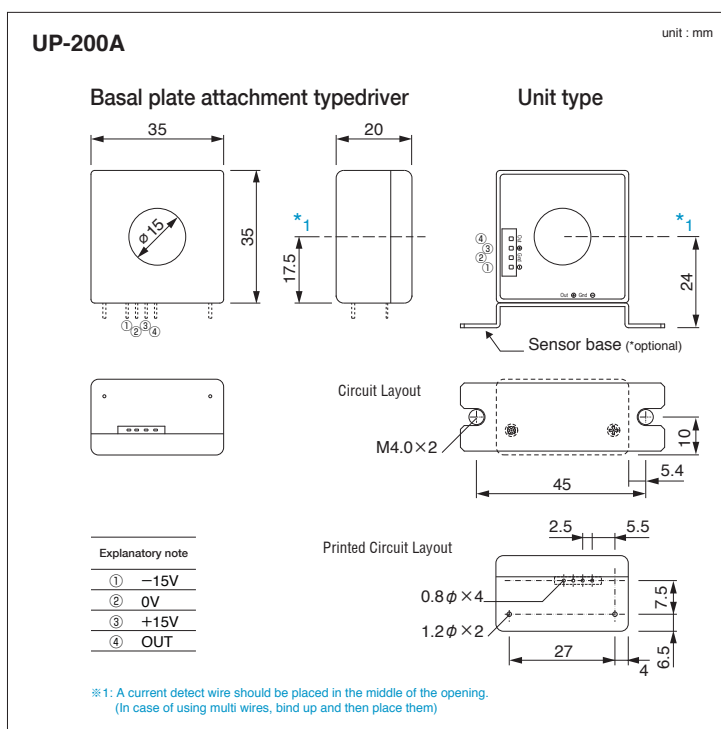
Structure



User interface



Dimensional drawing



SoftEnergy Controls Inc.

www.softenergy-controls.co.jp