

# SENTRY 200-3 & -4 Series

## High Current 4-20mA Transducers

The Sentry High Current 200 Series Transducers monitor up to 2000A of AC current and provide a loop-powered 4–20mA signal proportional to the monitored current.



**Variable  
Frequency  
Integration  
for VFDs**

### FEATURES

#### All Frequencies

Exclusive VFI™ (Variable Frequency Integration) technology is accurate both on sine wave and on distorted VFD waveforms.

#### Large Aperture

Accommodates large conductors or wire bundles.

#### Multi-Range

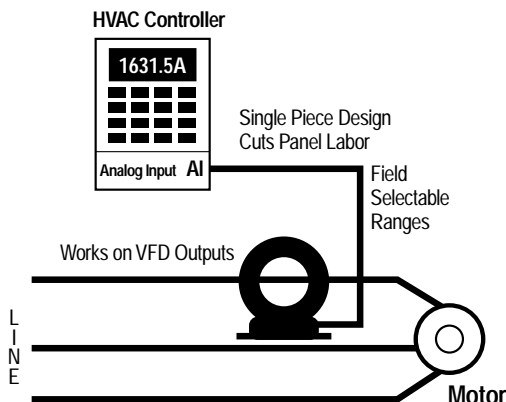
Fast, switch-selectable range setting.  
No zero or span field adjustments required.

#### Easy Installation

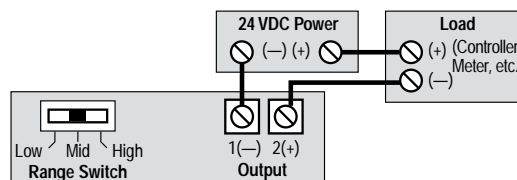
Single piece with integral mounting brackets makes a simple, solid installation.

### APPLICATIONS

- **Chillers:** Load measurement for energy savings
- **Large Pumps:** Detect dry run electronically
- **Heating Elements:** Monitoring heater load gives faster response than temperature sensors



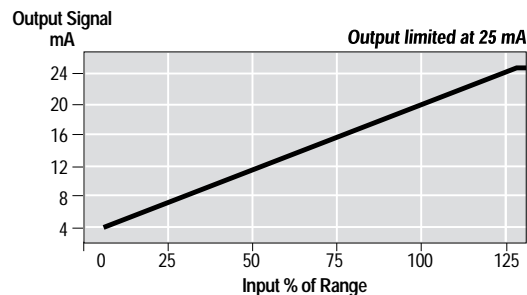
### CONNECTIONS



#### NOTES

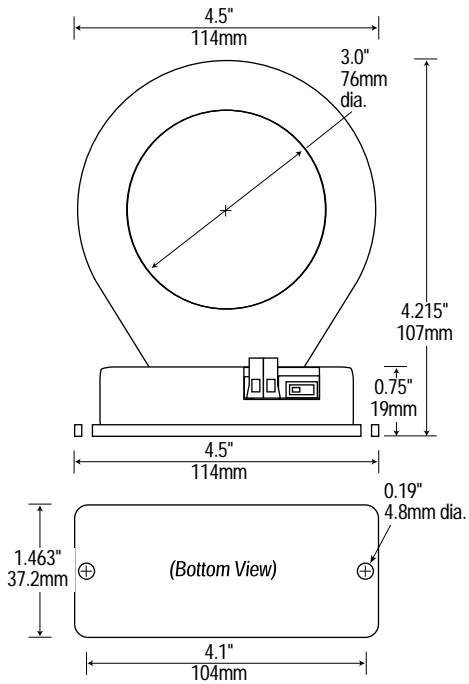
- Deadfront captive screw terminals.
- 12–22 AWG solid or stranded.
- Observe polarity.

### SIGNAL DIAGRAM



**Neilsen-Kuljian, Inc.**  
(800) 959-4014  
www.SentrySensors.com

### High Current 4-20mA Transducers



## SPECIFICATIONS

Output Signal . . . .	4–20mA, loop powered
Output Limit . . . . .	25mA
Accuracy . . . . .	1.0% FS
Response Time . . .	500 milliseconds to 90% of step change
Frequency . . . . .	50–60Hz, sinusoidal (standard versions) 10–400Hz (VFI versions)
Supply Voltage . . .	24 VDC nominal; 40 VDC maximum
Output Load . . . . .	600 ohms max @ 24 VDC $R_{max} = (V_{supply} - 12) / 0.020 \text{ A}$
Isolation Voltage . .	600 VAC
Polarity Protection	Diode protected against reversed polarity
Input Ranges . . . .	Field selectable from 0 to 2,000A
Sensing Aperture . .	3.0" (7.6 cm) ID
Case . . . . .	UL 94 flammability rated thermoplastic
Weight . . . . .	1.3 lb (0.6 kg)
Environmental . . . .	–4/122°F (–20/50°C), 0–95%RH, non-condensing
Approvals . . . . .	UL, ULC, CE (pending)

## ORDERING INFORMATION

**Example: Sentry 200-4-V**

Current transducer with 4–20mA output and 0–1000/1333/2000A range with “VFI” (Variable Frequency Integration) technology.

MODEL	RANGE
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## Standard Models

200-3	0-375, 0-500, 0-750A
200-4	0-1000, 0-1333, 0-2000A

## VFI Models

*(for monitoring the load side of VFDs)*

200-3-V	0-375, 0-500, 0-750A
200-4-V	0-1000, 0-1333, 0-2000A

## MAXIMUM AC CURRENT

MODEL	RANGE	MAX. CONTIN.	MAX. 6 SEC.	MAX. 1 SEC
200-3	0-375/500/750A	750A	1500A	3750A
200-3-V	0-375/500/750A	750A	1500A	3750A
200-4	0-1000/1333/2000A	2000A	4000A	10,000A
200-4-V	0-1000/1333/2000A	2000A	4000A	10,000A



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