

# Product Specification

## SPECIFICATION FOR 10VDC OUTPUT AC CURRENT SENSOR

**Model number**

DR20-30A-10VDC-60HZ (Fast Response)

<b>Absolute stress above which the unit may be damaged.</b>	<b>Min.</b>	<b>Max.</b>	<b>unit</b>
Ambient temperature	-40	80	°C
Measured current		400	A-rms max
Shock (any axis)		2500	g

<b>Range over which operation is guaranteed.</b>	<b>Min.</b>	<b>Max.</b>	<b>unit</b>
Ambient temperature	-5	70	°C
Frequency	59	61	Hz
Total harmonic distortion of sensed current (Note 2)		3.0	percent
Vibration (1Hz-10kHz)		200	g

<b>Operating parameters.</b>	<b>Min.</b>	<b>Typ.</b>	<b>Max.</b>	<b>unit</b>
Input current	0.0	30.0	36.0	A-rms
Output voltage	0	10.0	12.0	V dc
Output impedance (Note 1)		17.5		k
Load impedance, undamaged 0 to load (Note 1)	0		Infinity	
Sensor internal resistance		16.3		k
Thermal coefficient, low to room temp, potting B		-0.016		%/ °C
Thermal coefficient, room to high temp, potting B		0.036		%/ °C
Rise time constant		25		msec
Fall time constant		35		msec

<b>Physical</b>	<b>Min.</b>	<b>Typ.</b>	<b>Max.</b>	<b>unit</b>
Current wire hole size		0.8	0.8	inch
Depth		0.8		inch
Height		2.2		inch
Width		2.0		inch
Weight		115		grams
Polarized output wire leads		12		inch
Flammability, 94 V-O, self extinguishing				

**Note 1** Sensors are calibrated with 500 k  $\pm 2\%$  //300 pf. instrumentation capacity.

**Note 2** Sensor response nearly identical for all waveforms; sine, square, or triangle (except triacs).

**Note 3** The sensor output impedance is approx. 36k // 0.47uf.

**Note 4** Maximum output current obtained by dividing output volts by sensor internal resistance.

**Note 5** Sensors are powered by current being measured.

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Inductive AC voltage and current sensors