



OVERVIEW

PRODUCT HIGHLIGHTS: The RC-FLEX3000A is a 36" flexible AC current probe comprised of a flexible sensor, an electronic module, and Radian Research's RC-CTA1, voltage to current converter. The flexible sensor permits measurements on conductors where standard clamp-on probes may not be used. The RC-FLEX3000A presents virtually no load to the circuit under test, has a low phase shift, excellent frequency response, and can not be damaged by current overloads. The RC-CTA1 must be used to insure the proper input to Radian Research RD reference standards. Radian Research has terminated the RC-CTA1 with a seven-pin Redel connector to allow for direct connection to RD reference standards. The RC-FLEX3000A with RC-CTA1 provides for true RMS measurement capabilities when used in conjunction with a Radian Research RD reference standard with RMS measurement capability. The RC-CTA1's contribution to the overall accuracy specification of the RC-FLEX3000A is negligible.

SPECIFICATIONS

MODEL RC-FLEX3000A	
Electrical	
Measurement Range	5A to 3000A
Accuracy	1.0% of Reading
Output Signal	1.0mV/A
Crest Factor (mid-range)	3.0
Phase Shift @ 50/60Hz	0.7°
Frequency Range	10Hz to 20kHz
Residual Noise	200mA
Working Voltage	1000VAC, Cat. III
Output Termination	6.5 ft. Lead with 0.75" Spaced 4mm Banana Jacks
Battery & Battery Life	9V Alkaline, ~150 hrs. of continuous use
Good Battery Indication	Green LED
Electric Overload Indication	Red LED
Safety Standards	IEC 1010, CE mark & UL listed (143005)
Mechanical	
Operating Temperature	14°F to 13°F (-10°C to 55°C)
Relative Humidity	10% to 90% @ 50°C
Sensor Length	36" (11.45" diameter)
Minimum Bend Radius	0.75" (19.1mm)
MODEL RC-CTA1	
Electrical	
Input Measurement Range	10mVrms to 3.0Vrms
Accuracy	<0.05%
Transconductance Ratio	1mV:1A
Phase Shift @ 45 to 65Hz	<0.01°
Frequency Range	45Hz to 5Khz
Output Termination	7 Pin Redel Connector
Mechanical	
Operating/Storage Temperature	-4°F to +158°F (-20°C to +70°C)
Relative Humidity	0% to 90% @ 50°C
Input Termination	4mm Banana Sockets @ 0.75" Spacing
Output Termination	7 Pin Redel Connector
Dimensions	2.26" x 1.61" x 0.75" (57.4mm x 40.9mm x 19.1mm)
Body Material	ABS

The RC-FLEX3000A is a 3000-36-1-1 AmpFlex™ current probe manufactured by AEMC® Instruments.

Radian Research, Inc.
3852 Fortune Drive
Lafayette, IN 47905 USA

Web Site: www.radianresearch.com
Phone: (765) 449-5500
Fax: (765) 448-4614

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