# SPLIT-CORE AC CURRENT TRANSDUCER/TRANSFORMER

## **AC INPUT / DC OUTPUT**

### DESCRIPTION

The SCT is a split core current transformer integrated with a current transducer to provide current measurement ranges up to 500Aac. Outputs of 0-1mAdc, 0-5Vdc, or loop powered 4-20mAdc are available.

The output is proportional to the average absolute value of the input and is calibrated to represent the RMS value of a sine wave.





Measuring Equipment 7N93

## **FEATURES**

- · Insensitive to polarity
- Split-core design for easy installation
- Accurate and reliable from 50-400Hz.

## **APPLICATIONS**

· Designed for applications requiring accurate current measurements.



#### STANDARD OUTPUTS MODEL SCT-**INPUT AC AMPS** 0-1mAdc\* 4-20mAdc\*\* 0-5Vdc\* 0-50 050A 050E2 050CX5 0-100 100A 100E2 100CX5 0-200 200A 200E2 200CX5 0-300 300A 300E2 300CX5 0-400 400A 400E2 400CX5 500E2 0-500 500A 500CX5

#### ORDERING INFORMATION

Example: 100 Amp AC Input with 4 - 20mA Loop-Powered Output. **SCT - 100E2** 

\*0-1mA & 0-5Vdc models are self-powered from measured line. \*\*4 - 20mA loop-powered models (15-40Vdc supply required)

## SPECIFICATIONS

#### **INPUT**

Current	See table	
Frequency Range	50 to 400Hz	
Burden	0.5VA max.	
Current overload	5 X rating for 10 sec./hr	
Dielectric Test(Input	/Output/Case) 1800Vac	
INCTRUMENT DOWER		

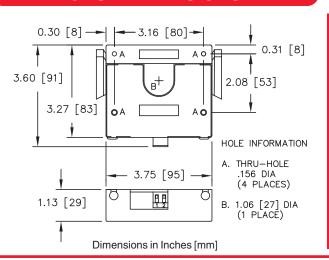
#### INSTRUMENT POWER

*Self-Powered	1mA & 5Vdc models
**Loop-Powered	15-40Vdc supply required

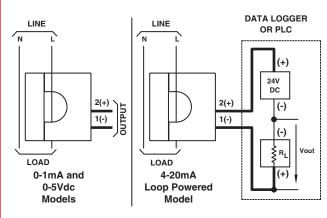
### **OUTPUT**

Output Ripple		< 0.5% F.S
Response(90%)	<	300 milliseconds
Output Loading (Ohms)	1mA	0-10K Ohms
	5Vdc	> 100K Ohms
	4-20mA	0-500 Ohms
ACCURACY (25° C, 601	tz)	<u>+</u> 0.5 % F.S
(All condition	ons)	<u>+</u> 0.7 % F.S
Temperature Range		20° to +60° C
Net Weight		101b

## CASE DIMENSIONS



## CONNECTION DIAGRAMS



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## INSTALLATION INSTRUCTIONS

- 1. Installation should be performed by qualified electricians only!
- 2. Make sure electrical service is disconnected before making any electrical connections.
- 3. Branch circuit protection is required to be provided in accordance with the National and Local codes of the inspection authority.
- 4. Route wires as required and secure to terminals per connection diagram on this sheet and on the unit.
- 5. Transducers are suitable for installation on 600Vac lines.
- 6. To prevent contact iwth live circuits, when installed on a bare bus bar, the transducer is required to be mounted in an enclosure that requires the use of a tool for access. When installed on an insulated cable this second enclosure is not required.

## **OPERATING INSTRUCTIONS**

- 1. This unit is intended for indoor use at altitudes up to 2000 meters.
- 2. Transient overvoltages according to Installation Category (overvoltage category)II, pollution Degree 2.
- 3. If cleaning of the exterior surface is necessary, de-energize all services of supply (both measuring and instrument power circuits) and brush with a soft brush or blow off with low pressure air. Use appropriate eye protection. Not suitable for hose-down cleaning.
- 4. Maximum relative humidity 80 percent for temperatures up to 31° C decreasing linearly to 50 percent relative humidity at 40° C.
- 5. Maximum operating temperature range is -20°C to 60°C.





UL approved for USA and Canada Equipment approved as Double Insulated

Direct current (dc)

## WARRANTY STATEMENT

Ohio Semitronics, warrants this unit to be free of defects in material and workmanship for a period of five years from date of shipment. This unit must not be used in any manner other than as specified in this document.