



***CT 9112***

**CURRENT TRANSDUCER**

**Instruction Manual**

**IM-6**

**SEPTEMBER 2003**

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## Function

The CT-9000 type Current Transducer accepts a 0 – 5A A.C. signal from a current transformer and converts it to a 4 – 20 mA instrument signal for transmission to a receiver instrument. Adjustable damping is provided to remove signal function fluctuations.

## Calibration

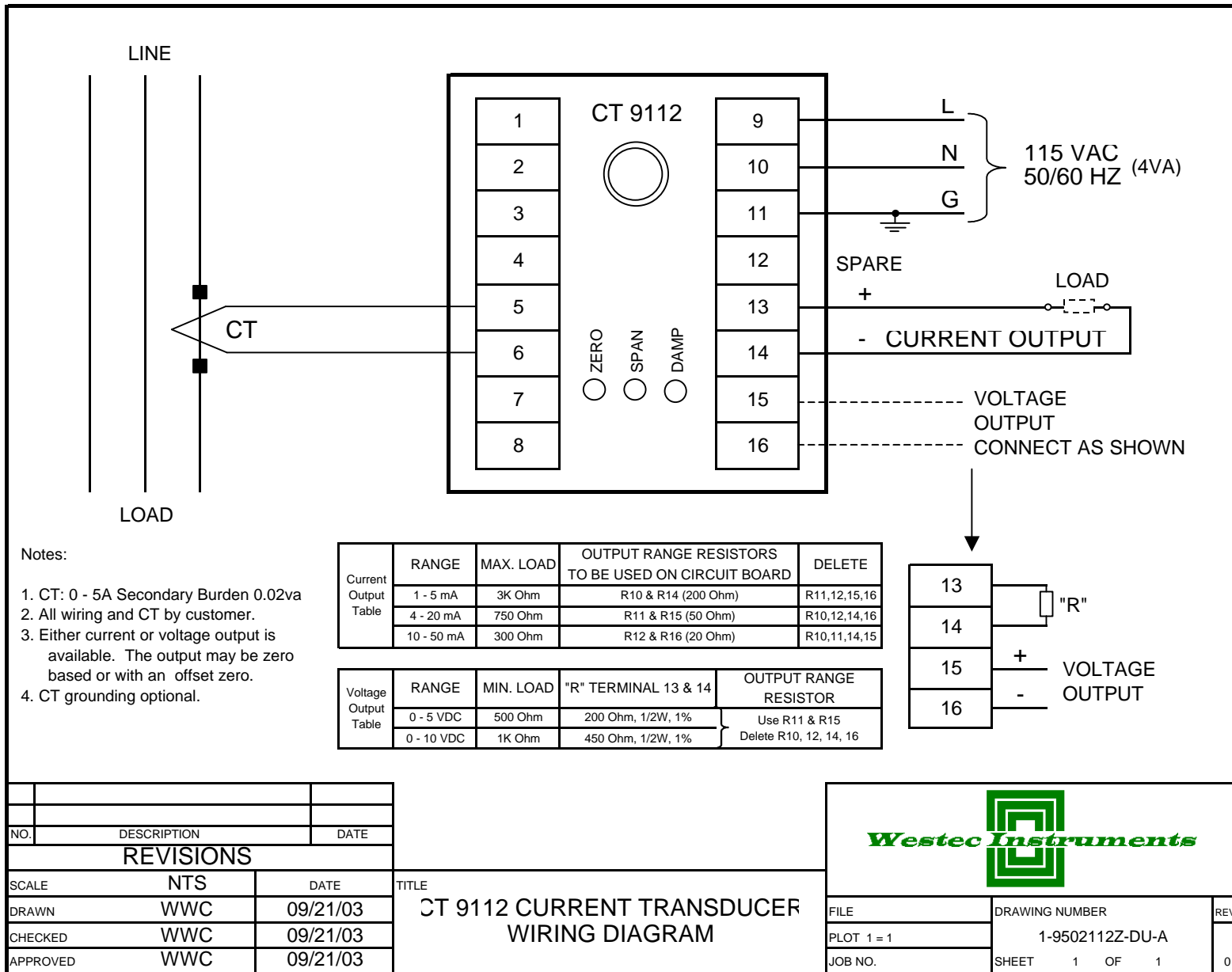
The CT-9000 is factory calibrated for 0 – 5A input for 4 – 20 mA output, however, it can be factory or field calibrated for anywhere from 0 – 2A input equals 4 – 20 mA output to 2 – 6A input equals 4 – 20 mA output. Use an accurate AC ammeter, variable transformer and 400 to 500 watt resistive load as calibration setup. Set minimum and maximum on AC meter and adjust zero and span respectively. Damping should be fully counterclockwise.

The output may also be 1 – 5 or 10 – 50 mA by selection of range resistors per notes on drawing 1-9502112Z-DU-A.

A voltage output is also available. The internal range resistors should be for 4 – 20 mA current output with a fixed resistor R between terminal block points 13 & 14. The value of R is calculated by taking desired maximum output voltage, dividing it by 20 mA then subtracting 50 ohms. If an exact value cannot be obtained, the next lowest standard value will suffice as the span adjustment has enough latitude to compensate. Adjust zero and span for proper input – output relationship.

## Warning

**DO NOT DISCONNECT TRANSFORMER LEAD FROM CT-9112 UNLESS SHORTING BAR IS ON TRANSFORMER OR MOTOR IS OFF AND LOCKED OUT. SHORT INPUT LEADS TOGETHER IF CT-9112 IS REMOVED FOR SERVICE.**

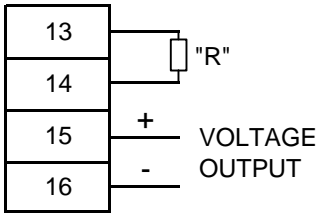


Notes:

1. CT: 0 - 5A Secondary Burden 0.02va
2. All wiring and CT by customer.
3. Either current or voltage output is available. The output may be zero based or with an offset zero.
4. CT grounding optional.


Current Output Table	RANGE	MAX. LOAD	OUTPUT RANGE RESISTORS TO BE USED ON CIRCUIT BOARD	DELETE
	1 - 5 mA	3K Ohm	R10 & R14 (200 Ohm)	R11,12,15,16
	4 - 20 mA	750 Ohm	R11 & R15 (50 Ohm)	R10,12,14,16
	10 - 50 mA	300 Ohm	R12 & R16 (20 Ohm)	R10,11,14,15

Voltage Output Table	RANGE	MIN. LOAD	"R" TERMINAL 13 & 14	OUTPUT RANGE RESISTOR
	0 - 5 VDC	500 Ohm	200 Ohm, 1/2W, 1%	Use R11 & R15 Delete R10, 12, 14, 16
	0 - 10 VDC	1K Ohm	450 Ohm, 1/2W, 1%	



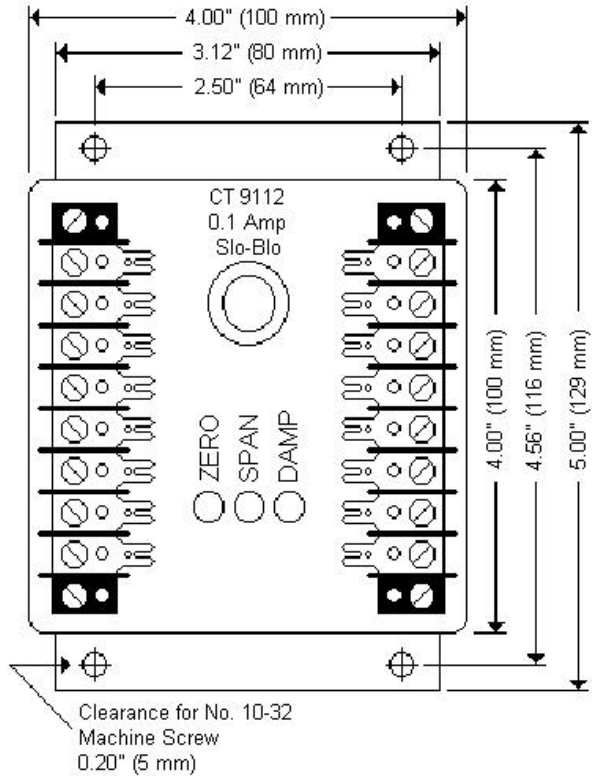
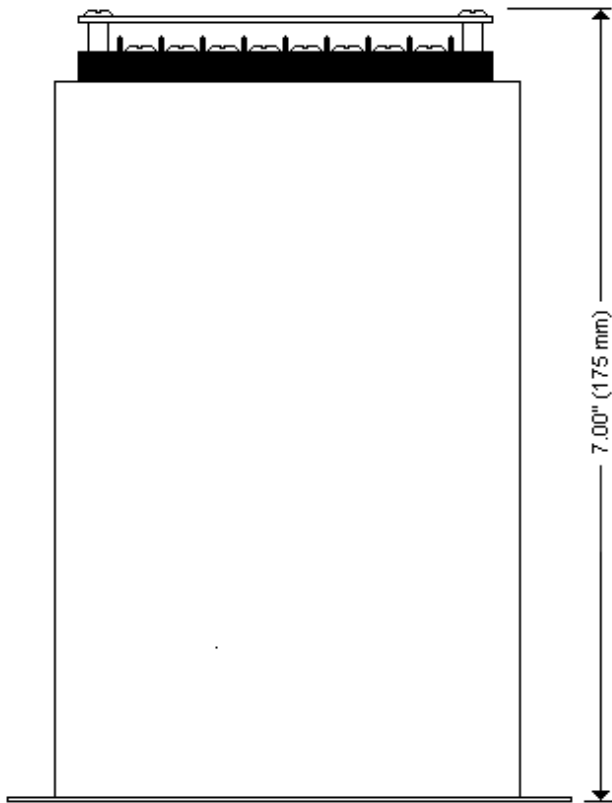
NO.	DESCRIPTION	DATE
<b>REVISIONS</b>		
SCALE	NTS	DATE
DRAWN	WWC	09/21/03
CHECKED	WWC	09/21/03
APPROVED	WWC	09/21/03

TITLE  
**CT 9112 CURRENT TRANSDUCER  
WIRING DIAGRAM**




**Westec Instruments**

FILE	DRAWING NUMBER	REV
PLOT 1 = 1	1-9502112Z-DU-A	
JOB NO.	SHEET 1 OF 1	0



NO.	DESCRIPTION	DATE
<b>REVISIONS</b>		
SCALE	NTS	DATE
DRAWN	WWC	09/21/03
CHECKED	WWC	09/21/03
APPROVED	WWC	09/21/03

TITLE	<b>CT 9112 CURRENT TRANSDUCER DIMENSIONS</b>
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FILE	DRAWING NUMBER	REV
PLOT 1 = 1	1-9502113Z-DU-1	
JOB NO.	SHEET 1 OF 1	0