



VT 9112

VOLTAGE TRANSDUCER

Instruction Manual

IM-5

SEPTEMBER 2003

USA: 6428 Ridglea Drive, Watauga, Texas 76148

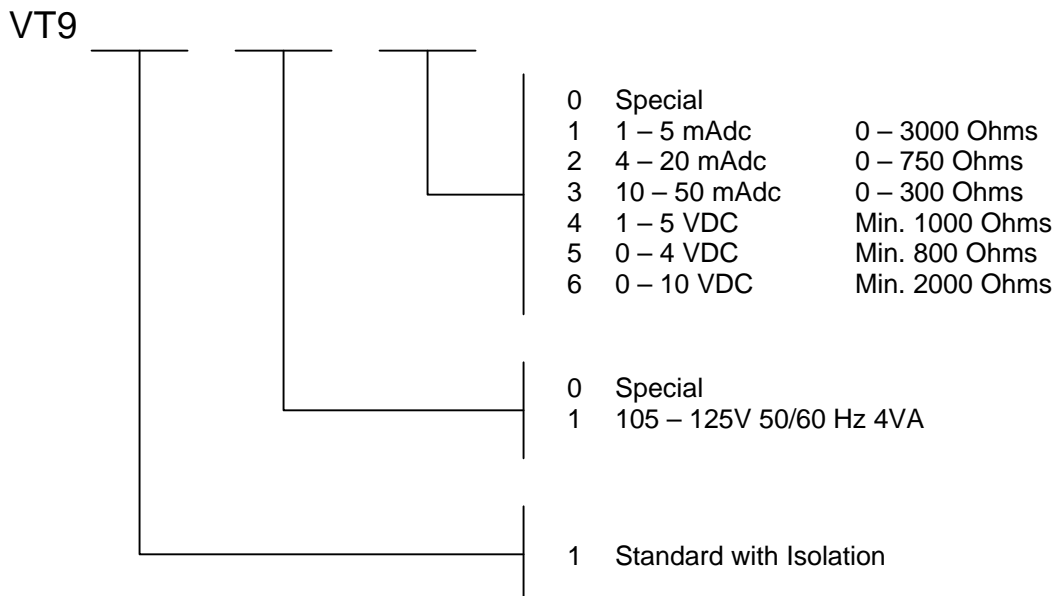
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SPECIFICATIONS

Input	Standard 0 – 130 VAC 50/60 Hz @ 0.1 VA Special Calibration <ul style="list-style-type: none"> - 0% output for 0 – 50 V input - 100% output for 50 to 130 V input - > 0, 150 V max
Output	Standard: 4 – 20 mA Optional: 1 – 5 mADC 10 – 50 mADC 1 – 5 VDC 0 – 4 VDC 0 – 10 VDC
Adjustments	Zero and Span for above damping 0.25 Sec. to 2 Minutes
Burden	0.1 VA
Supply	105 – 125 V 50/60 Hz @ 4 VA
Weight	2 lbs (0.9 Kg)
Temperature Range	Recommended: 32° to 140°F (0° to 60°C) Permissible: -40° to 150°F (-40° to 65°C)
Overload	230V Continuous
Linearity	± 0.5%

CATALOG INFORMATION



Function

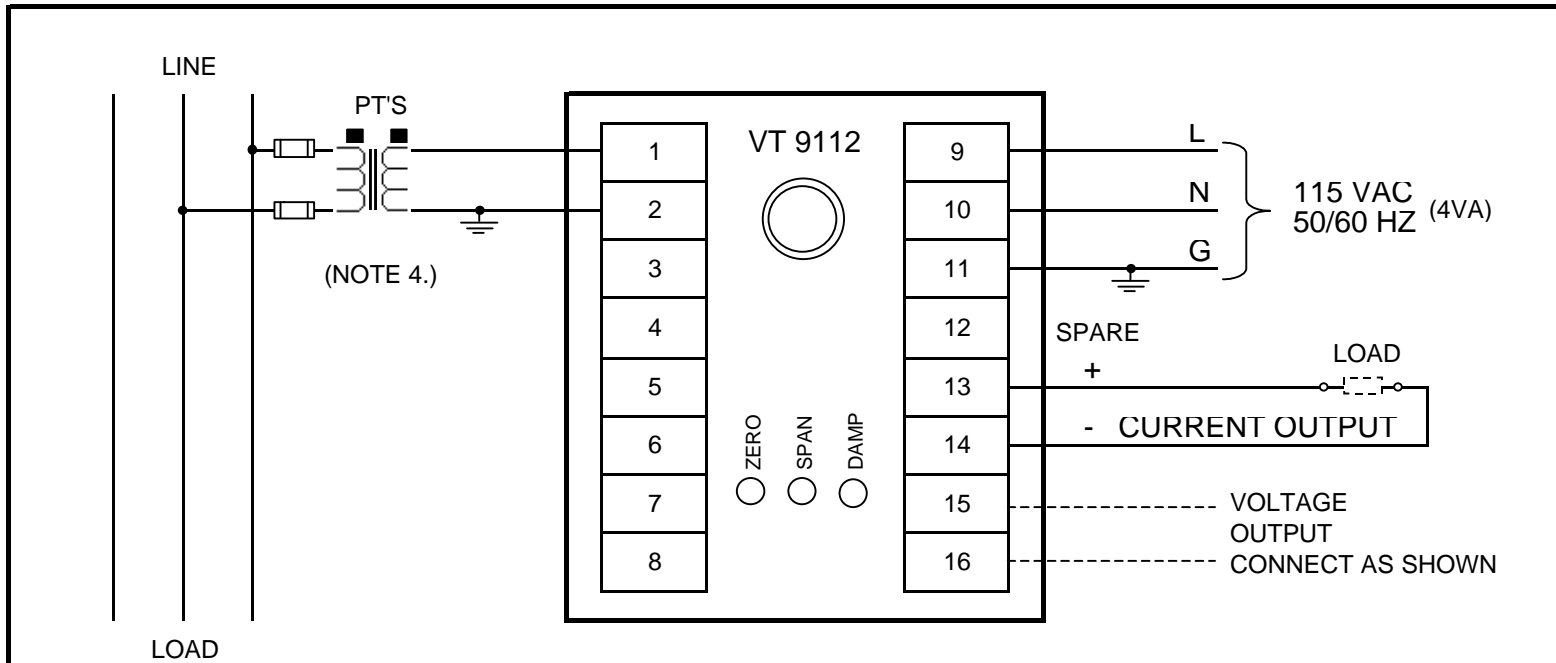
The VT-9000 type Voltage Transducer accepts a 0 – 130 VAC signal from a potential transformer and converts it to a 4 – 20 mA instrument signal for transmission to a receiver instrument. Adjustable damping is provided to remove signal function fluctuations.

Calibration

The VT-9000 is factory calibrated for 0 – 130 VAC input for 4 – 20 mA output, however, it can be factory or field calibrated for anywhere from 0 – 50 VAC input equals 4 – 20 mA output to 50 – 150 VAC input equals 4 – 20 mA output. Use an accurate AC voltmeter variable transformer 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 1-9503112Z-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.

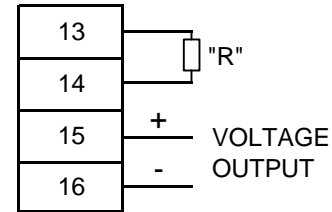


Notes:

1. PT's: 120v. Secondary Burden 0.1va
2. All wiring and PT's by customer.
3. Either current or voltage output is available. The output may be zero based or with an offset zero.
4. PT grounding optional.


	RANGE	MAX. LOAD	OUTPUT RANGE RESISTORS TO BE USED ON CIRCUIT BOARD	DELETE
Current Output Table	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

	RANGE	MIN. LOAD	"R" TERMINAL 13 & 14	OUTPUT RANGE RESISTOR
Voltage Output Table	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%	



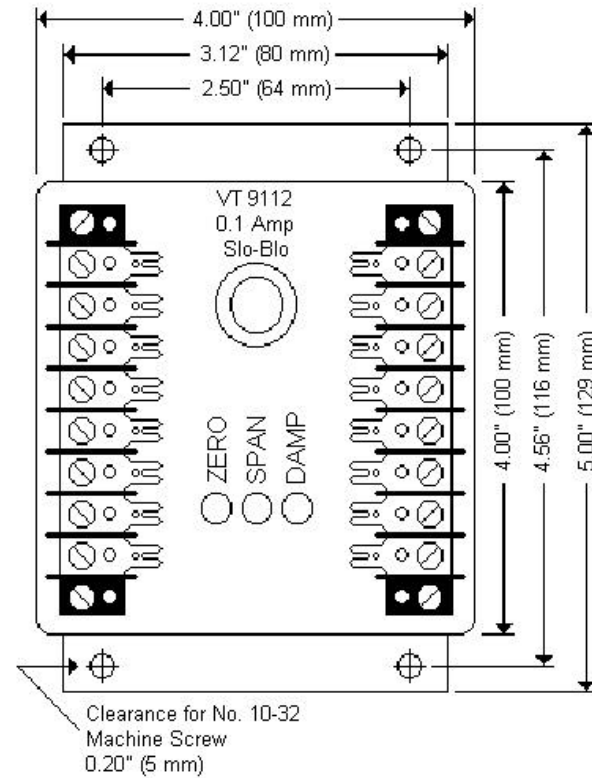
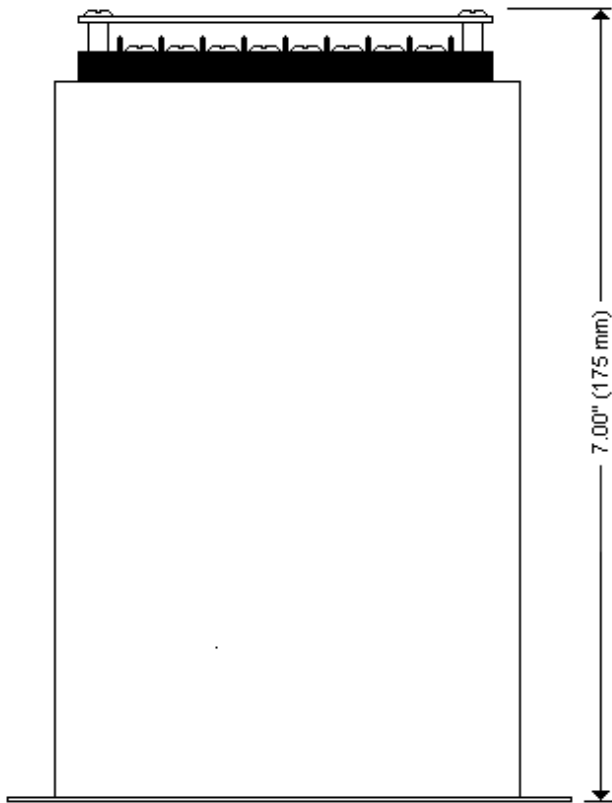
NO.	DESCRIPTION	DATE
REVISIONS		
SCALE	NTS	DATE
DRAWN	WWC	09/21/03
CHECKED	WWC	09/21/03
APPROVED	WWC	09/21/03

TITLE
**VT 9112 VOLTAGE TRANSDUCER
 WIRING DIAGRAM**




Westec Instruments

FILE	DRAWING NUMBER	REV
PLOT 1 = 1	1-9503112Z-DU-A	
JOB NO.	SHEET 1 OF 1	0



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

TITLE
**VT 9112 VOLTAGE TRANSDUCER
DIMENSIONS**



Westec Instruments

FILE	DRAWING NUMBER	REV
PLOT 1 = 1	1-9503113Z-DU-1	
JOB NO.	SHEET 1 OF 1	0