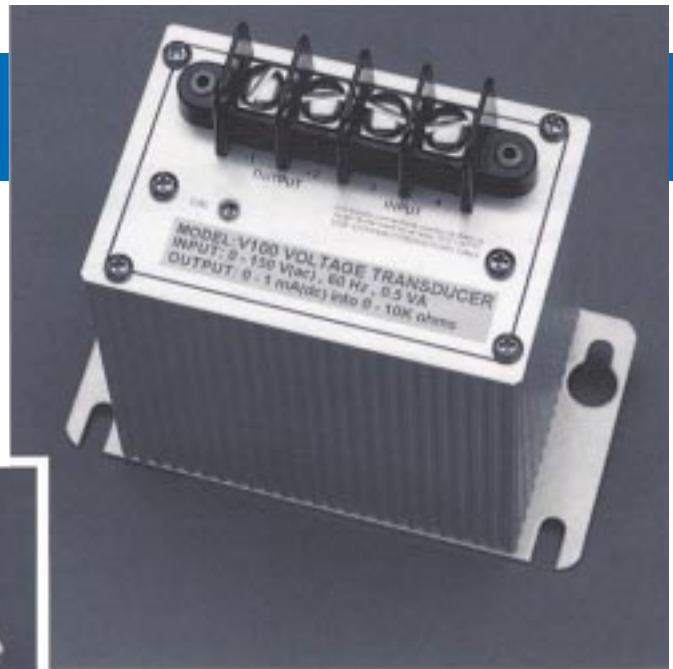


AC Voltage Transducers

Voltage: The most basic AC measurement. The magnitude of the waveform measured across a source or load. RMS is the most commonly used voltage value.



Standard Features

- True RMS or average-sensing models
- 0.25% of full scale accuracy
- 0.01%/°C temperature coefficient
- 0.2%/year long-term stability
- 2.5 kV or 5 kV transient immunity
- 5 kV impulse test
- 2 kV dielectric testing
- Current and voltage outputs
- ABS DIN rail mount or metal surface mount cases

Specifications

Accuracy (20°C to 25°C): 0.25% of rated full scale output from 10% to 110% of rated input range (some models work to zero)

Operating Temperature: -20°C to +70°C

Operating Humidity: 0 to 95% non-condensing

Temperature Coefficient: 0.01%/°C maximum

Long Term Drift: less than 0.2% of rated output per year

Output Ripple (Peak): 0.5% maximum

Power Factor Range: any

Dielectric Test Input/Output/Power/Case: 2000 Vrms for 1 minute

Response Time

To 90%: 200 ms maximum

To 99%: 400 ms maximum

Surge Withstand: ANSI C37.90a (IEEE 472); BEAMA 219; Special 5 kV (metal case only)

Calibration Range Full scale: ±10%; ±2% (if applicable)

Operating Frequency: 60 Hz (unless otherwise specified)

UL Approved Models: V100, V300, V104E, V304E, DV100, DV300, DV104E, DV304E

Option	Input Nom.	Input F.S.	Max. Input	Max. Input		Burden
			with Acc.	Cont.	10 s	
0	120 V	150 V	180 V	200 V	250 V	Maximum input burden is 4 VA at full scale regardless of option. Burden may be as low as 0.1 VA. Consult factory if critical.
1	69 V	90 V	110 V	120 V	150 V	
2	240 V	300 V	360 V	400 V	600 V	
3	480 V	600 V	650 V	700 V	900 V	
4 to 9			Per Option 0 or 2 as applicable			

Available Models– AC Voltage Transducers

V/DV Series

Average Sensing, Zero-Based Input

An economical and accurate means of voltage measurement on systems where the waveform is a pure sine wave. Can also be used for non-critical applications with distorted waveforms, where high accuracy is not required. Calibrated to the RMS (root mean square) value of the sine wave. Available in single or triple versions, self-powered or externally powered. 4-20 mA and 1-5 V output versions must have auxiliary power.

To Order, Specify:

A. ENCLOSURE	
Extruded Aluminum Metal, Surface Mount	V
ABS DIN, Rail Mount	DV
B. CONFIGURATION	
Single	1
Triple	3
C. INPUT	
0-150 V	0
0-90 V	1
0-300 V	2
0-600 V	3
Special	X
D. OUTPUT	
0-1 mA (0-10,000 Ohms)	0
0-3 mA (0-3,000 Ohms)	1
0-5 mA (0-2,000 Ohms)	2
0-10 mA (0-1,000 Ohms)	3
4-20 mA (0-750 Ohms) ^②	4
0-100 mV (2,000 Ohms min.)	5
0-1 V (2,000 Ohms min.)	6
0-5 V (2,000 Ohms min.)	7
0-10 V (2,000 Ohms min.)	8
1-5 V (2,000 Ohms min.) ^②	9
Special	X
E. SUFFIX (If Applicable)	
25 to 125% Calibration	A
50 Hz	C
400 Hz	D
120 VAC Aux Power	E
230 VAC Aux Power	F
Case Ground Terminal ^①	G
DC Aux Power (Please Specify)	K
Special	X

^① Metal case models only.

^② Auxiliary power supply required.

EXAMPLE: DV-3-2-4-E is the ordering code for an Average-Sensing Voltage Transducer in a DIN rail mount case, a triple version, with a 0-300 V input, a 4-20 mA output, and 120 VAC auxiliary power.

RV/DRV Series

True RMS Sensing, Zero-Based Input

Recommended where harmonics are present in the system. Uses new low voltage integrated circuit technology that computes the RMS value of the input waveform, regardless of shape, from the fundamental to the 50th harmonic. Self-powered or externally-powered. Readings down to virtually zero can be achieved with auxiliary-powered models. 4-20 mA version must have auxiliary power.

To Order, Specify:

A. ENCLOSURE	
Extruded Aluminum Metal, Surface Mount	RV
ABS DIN, Rail Mount	DRV
B. CONFIGURATION	
Single	1
C. INPUT	
0-150 V	0
Special	X
D. OUTPUT	
0-1 mA (0-10,000 Ohms)	0
4-20 mA (0-750 Ohms) Aux. Power Only	4
Special	X
E. SUFFIX (If Applicable)	
25 to 125% Calibration	A
50 Hz	C
400 Hz	D
120 VAC Aux Power	E
230 VAC Aux Power	F
Case Ground Terminal ^①	G
DC Aux Power (Please Specify)	K
Special	X

^① Metal case models only.

EXAMPLE: RV-1-0-4-F is the ordering code for an RMS-Sensing Voltage Transducer in a metal surface mount case, single-phase, with a 0-150 V input, a 4-20 mA output, and 230 VAC auxiliary power.

VX/DVX Series

Single-Phase, Average Sensing, Suppressed Zero-Based Input

Average sensing devices calibrated to the RMS value of the sine wave. Available in single-phase versions only. Self-powered or externally-powered. 4-20 mA and 1-5 V output versions must have auxiliary power.

To Order, Specify:

A. ENCLOSURE	
Extruded Aluminum Metal, Surface Mount	VX
ABS DIN, Rail Mount	DVX
B. CONFIGURATION	
Single	1
C. INPUT	
90-150 V	4
100-140 V	5
110-130 V	6
180-300 V	7
200-280 V	8
220-260 V	9
Special	X

D. OUTPUT

0-1 mA (0-10,000 Ohms)	0
0-3 mA (0-3,300 Ohms)	1
0-5 mA (0-2,000 Ohms)	2
0-10 mA (0-1,000 Ohms)	3
4-20 mA (0-750 Ohms) ^②	4
0-100 mV (2,000 Ohms min.)	5
0-1 V (2,000 Ohms min.)	6
0-5 V (2,000 Ohms min.)	7
0-10 V (2,000 Ohms min.)	8
1-5 V (2,000 Ohms min.) ^②	9

E. SUFFIX (If Applicable)

25 to 125% Calibration	A
50 Hz	C
400 Hz	D
120 VAC Aux Power	E
230 VAC Aux Power	F
Case Ground Terminal ^①	G
DC Aux Power (Please Specify)	K
Special	X

^① Metal case models only.^② Auxiliary power supply required.

EXAMPLE: DVX-1-4-2-A is the ordering code for a Single-Phase, Average Sensing Voltage Transducer in a DIN rail mount case, single-phase, with a 90-150 V input, a 0-5 mA output, and 25 to 125% calibration.

RVX/DRVX Series

Single-Phase, True RMS Sensing, Suppressed Zero-Based Input

RMS sensing, suppressed zero-based input devices. Available in single-phase versions only. Self-powered or externally-powered. 4-20 mA version must have auxiliary power.

To Order, Specify:**A. ENCLOSURE**

Extruded Aluminum Metal, Surface Mount	RVX
ABS DIN, Rail Mount	DRVX

B. CONFIGURATION

Single	1
--------	---

C. INPUT

90-150 V	4
100-140 V	5
110-130 V	6
180-300 V	7
200-280 V	8
220-260 V	9
Special	X

D. OUTPUT

0-1 mA (0-10,000 Ohms)	0
4-20 mA (0-750 Ohms) ^②	4
Special	X

E. SUFFIX (If Applicable)

25 to 125% Calibration	A
50 Hz	C
400 Hz	D
120 VAC Aux Power	E
230 VAC Aux Power	F
Case Ground Terminal ^①	G
DC Aux Power (Please Specify)	K
Special	X

^① Metal case models only.^② Auxiliary power supply required.

EXAMPLE: RVX-1-9-0-C is the ordering code for a Single-Phase, True RMS Sensing, Suppressed Zero-Based Input, Voltage Transducer in a metal surface mount case, single-phase, with a 220-260 V input, a 0-1 mA output, and 50 Hz.

TV/DTV Series

Single-Phase, Average Sensing, Two-Wire Loop Powered

Average sensing, zero-based input transducers that are calibrated to the RMS value of the sine wave. Single-phase versions only. Two-wire loop powered. 4-20 mA output only.

To Order, Specify:**A. ENCLOSURE**

Extruded Aluminum Metal, Surface Mount	TV
ABS DIN, Rail Mount	DTV

B. CONFIGURATION

Single	1
--------	---

C. INPUT

0-150 V	0
Special	X

D. OUTPUT

4-20 mA (Load limited by loop voltage, 18-30 VDC)	4
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E. SUFFIX (If Applicable)

50 Hz	C
400 Hz	D
Case Ground Terminal ^①	G
Special	X

^① Metal case models only.

EXAMPLE: TV-1-0-4-G is the ordering code for a Two-Wire Loop Powered Single-Phase, Average Sensing Transducer in a metal surface mount case, single-phase, with a 0-150 V input, a 4-20 mA output, and a case ground terminal.

See page 30 for connections.