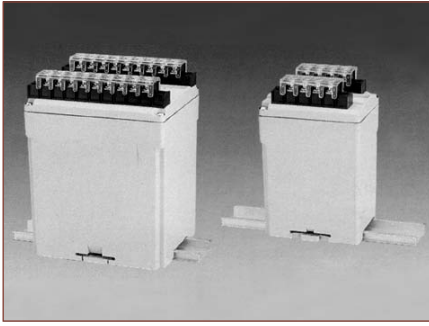


# AC VOLTAGE TRANSDUCERS

## RV Series



### FEATURES

- High accuracy  $\pm 0.2\%$  R.O.
- Precision measurement even for distorted waves
- High immunity to external noise
- Wide selection of input and output range
- Quick and easy mounting

RV-1	system Single phase, average sensing
RV-3	system Three phase, average sensing
RV-1T	system Single phase, True rms sensing
RV-3T	system Three phase, True rms sensing

These voltage transducers are available as average sensing devices calibrated in rms or as true rms units, either with a DC output proportional to the input. This output signal enables several receivers to be operated simultaneously—such as indicators, recorders, alarm units etc. the input voltage can be connected via a P.T. or directly.

### Ordering Informations

	RV-1	—	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RV-1T	—	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RV-3	—	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RV-3T	—	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**MODEL** \_\_\_\_\_

RV-1: 1  $\phi$ , average      RV-3: 3  $\phi$ , average  
 RV-1T: 1  $\phi$ , true rms      RV-3T: 3  $\phi$ , true rms

**INPUT** \_\_\_\_\_

1: AC 0 ~ 150V      3: AC 0 ~ 600V  
 2: AC 0 ~ 300V      Y: Option(0 ~ 600V max.)

**OUTPUT** \_\_\_\_\_

1: DC 4 ~ 20mA      A: DC 0 ~ 10V  
 2: DC 0 ~ 20mA      B: DC 0 ~ 5V  
 3: DC 0 ~ 10mA      C: DC 1 ~ 5V  
 4: DC 0 ~ 5mA      D: DC 0 ~ 1V  
 5: DC 0 ~ 1mA  
 Y: Option (0 ~ 20mA, 0~10V max.)

**AUX. POWER** \_\_\_\_\_

1: AC 115/230V      C: DC 110V  
 A: DC 24V      Y: Option  
 B: DC 48V

### Input

AC Input	0 ~ 150V, 0 ~ 300V, 0 ~ 600V
Frequency	45Hz ~ 65Hz
Burden	$\leq 0.1VA$ (RA-1, RA-1T) $\leq 0.3VA$ (RA-3)
Response sensitivity	$\leq 0.5\%$ of measuring range end value
Overload capacity	1.25 X rated continuous 2 X rated 10 sec. 4 X rated 5 sec. or 600V rms continuous

### Output

Output variables	DC voltage or DC current
Ripple	<0.5% p-p max.
Response time	<0.4 sec. or less
Zero adjustment	$\pm 5\%$ minimum
Span adjustment	$\pm 10\%$ minimum

### DC current: 0 ~ 20mA DC (max.)

Output	Load resistance	$R = \frac{10V}{\text{Output Current}}$ (R: Load resistance)
4 ~ 20mA	$\leq 500\Omega$	
0 ~ 20mA	$\leq 500\Omega$	
0 ~ 10mA	$\leq 1000\Omega$	
0 ~ 5mA	$\leq 2000\Omega$	
0 ~ 1mA	$\leq 10\Omega$	

### DC voltage: 0 ~ 10V DC

Output	Load resistance	$R = \frac{\text{Output Voltage}}{20mA}$ Load capacity 20mA
0 ~ 10V	$\geq 500\Omega$	
0 ~ 5V	$\geq 250\Omega$	
1 ~ 5V	$\geq 250\Omega$	
0 ~ 1V	$\geq 50\Omega$	

### Code Number

Model-Input / Output / Power	
Example	RV-1-111
Input	AC 0 ~ 150V
Output	DC 4 ~ 20mA
Power	AC 115/230V

### Specifications

Accuracy	$\pm 0.2\%$ R.O.( $\pm 0.1\%$ R.O.Option)
Temp. coefficient	$\leq 100\text{ppm}/^\circ\text{C}$ $\leq 60\text{ppm}/^\circ\text{C}$ , $25^\circ\text{C} \pm 10^\circ\text{C}$
Temp. range	$-20^\circ\text{C}$ to $60^\circ\text{C}$ , Operating 0 ~ $50^\circ\text{C}$
Humidity range	Up to 95% RH
Isolation	Input / output / power / case
Dielectric test	DIN-IEC 688 2K Vrms/1min, Between terminal to terminal 2.8K Vrms/1min, Between terminal to case
Surge test	DIN/IEC 255-4,ANSI C37 90a/1974 5KV (1.2 X 50us)
Insulation resistance	100M $\Omega$ or more, DC 500V
Housing material	ABS Resin (94V-0)
Mounting	Rail 35mm
Aux. power	AC 115/230V $\pm 15\%$ ,50/60Hz, 3VA DC 24V, 48V, 110V $\pm 20\%$ (option)