

# VOLTAGE TRANSDUCERS

## DC or VARIABLE FREQUENCY VOLTAGE TRANSDUCER MODELS VT7, VT8

### DC TO 10K HERTZ FREQUENCY RANGE

#### FEATURES

- VT7 Output is proportional to the input amplitude and frequency (ac in/ac out, dc in/dc out).
- VT8 Provides dc output which is proportional to RMS value of AC and/or dc input signal.
- Better than 10 kilohertz bandwidth.
- Input/output isolation of 2500V.

\*Shunt Rated

| *INPUT<br>mV   | STANDARD OUTPUTS MODEL VT7- OR VT8- |        |        |       |
|----------------|-------------------------------------|--------|--------|-------|
|                | ***1mA                              | 4-20mA | ***10V | ***5V |
| 0-50*          | 015B                                | 015E   | 015D   | 015X5 |
| 0-100*         | 016B                                | 016E   | 016D   | 016X5 |
| 0-200*         | 017B                                | 017E   | 017D   | 017X5 |
| 0-250*         | 018B                                | 018E   | 018D   | 018X5 |
| INPUT<br>VOLTS | STANDARD OUTPUTS MODEL VT7- OR VT8- |        |        |       |
|                | ***1mA                              | 4-20mA | ***10V | ***5V |
| 0-10           | 001B                                | 001E   | 001D   | 001X5 |
| 0-25           | 002B                                | 002E   | 002D   | 002X5 |
| 0-50           | 003B                                | 003E   | 003D   | 003X5 |
| 0-100          | 004B                                | 004E   | 004D   | 004X5 |
| 0-150          | 005B                                | 005E   | 005D   | 005X5 |
| 0-250          | 006B                                | 006E   | 006D   | 006X5 |
| 0-300          | 007B                                | 007E   | 007D   | 007X5 |
| 0-400          | 008B                                | 008E   | 008D   | 008X5 |
| 0-500          | 009B                                | 009E   | 009D   | 009X5 |
| 0-600          | 010B                                | 010E   | 010D   | 010X5 |
| 0-700**        | 011B                                | 011E   | 011D   | 011X5 |
| 0-800**        | 012B                                | 012E   | 012D   | 012X5 |
| 0-900**        | 013B                                | 013E   | 013D   | 013X5 |
| 0-1000**       | 014B                                | 014E   | 014D   | 014X5 |

\*50, 100, 200 and 250mV models can be used for shunt isolation.

\*\*Highlighted models will be supplied with an externally mounted divider module.

\*\*\*NOTE: VT7 Models are Bi-Directional (Except "E" output)

All units have universal power supply 85-265Vac, 48-420Hz or 110-370Vdc

Optional DC Instrument Power Available  
-12, -15, -24, -37, -48 (150mA)

#### SPECIFICATIONS

##### INPUT

Voltage..... See Table  
 Frequency Range ..... dc-10kHz  
 Overload ... 0.05-600V ..... 2 X F.S. or 600Vac/850Vdc max.  
 700V-1000V(w/external multiplier box)... 1.25 X F.S.  
 Burden (Ω)..... > 100K  
 Dielectric Test..... (Direct Input/Output/Case) ..... 2500Vac  
 Inst. Power.... 85-265Vac, 48-420Hz, 5VA or 110-370Vdc, 5VA  
 Temperature Effects...(-10°C to +60°C) ..... ± 1.0% Rdg.  
 Field Adjustable Cal..... ± 10%

##### OUTPUT

##### ACCURACY

Includes effects of linearity, setpoint and repeatability.

VT7 Models..... ± 0.25% F.S. @ DC

VT8 Models ..... ± 0.25% F.S. @ 48-420Hz

##### Response Time

VT7 Models.....(to 90%)..... 50μs

VT8 Models.....(to 90%)..... 100ms

##### Output Loading (Ω)

1mA ..... 0-10K

10V, 5V ..... > 2K

4-20mA ..... 0-50K

#### APPLICATIONS

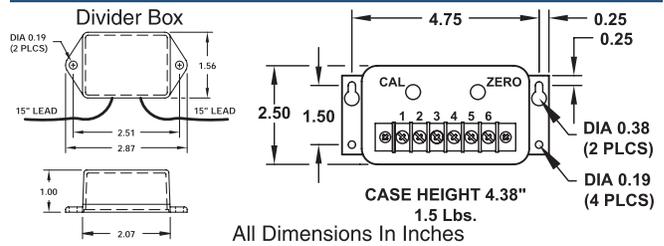
- Monitoring of substation or electric circuit performance.
- Isolation and amplification of shunt output.
- Accurate measurement of voltage that may contain dc and non-sinusoidal AC components.
- Monitoring of RMS voltage. (VT8)

#### ORDERING INFORMATION

Example: 150Vdc Input with  
4-20mA Output.  
VT7-005E

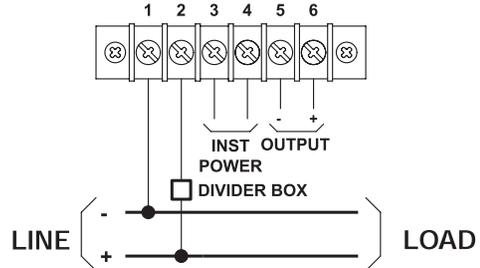


#### CASE DIMENSIONS



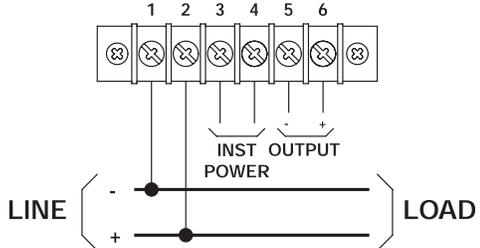
#### CONNECTION DIAGRAMS

##### 700V - 1000V Models

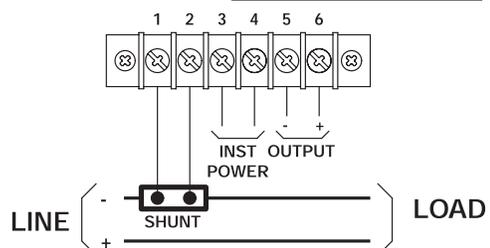


Note: All models above 600V input require a divider box in series with the input terminal #2. Do not connect the input voltage directly, damage to the transducer will result if not properly connected.

##### 10V - 600V Models



##### Shunt Isolator 50mV - 250mV Models



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