

## VOLTAGE TRANSDUCERS TRANSDUCERS

### KEY FEATURES

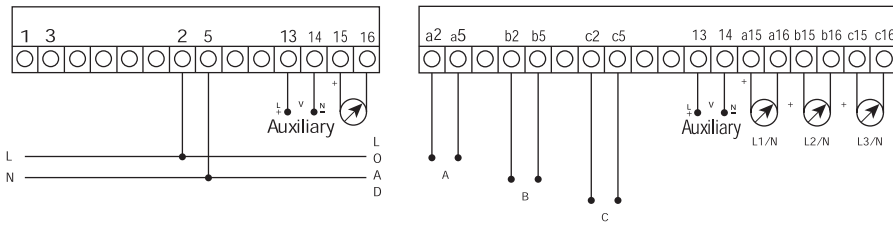
- Conversion to standard DC output signals
- Outputs suitable for indication, PLCs
- Multiple outputs in single housing
- Exceptional waveforms handling
- Zero and span adjustments
- Single and three-phase systems
- 3P4W, 3P3W, 1P2W system types

TE Connectivity's (TE) Crompton Instruments extensive range of transducers providing measurement, isolation, and conversion of electrical parameters into industry-standard DC output signals.

The range offers protection against high voltage and overload, and resistance to vibration in harsh electrical environments. The transducer range also offers multiple analog outputs in a single housing and individual measurement of most electrical parameters.

**Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.**

# Voltage Transducers



| SPECIFICATIONS  |  |   |
|---|--|---|
|   | Class 0.5 range  | Class 0.2 range   |
| <b>Performance</b>  | Designed to comply with BS 6253 part 1, EN 60688, IEC 688, AS 1384 and ANSI C37  | Designed to comply with BS 6253 part 1, EN 60688, IEC 688, AS 1384 and ANSI C37   |
| <b>Temperature range</b>                                    | Storage -20°C to +70°C operating 0°C to +60°C calibrated at 23°C   | Storage -55°C to +85°C operating (-20 to +70) -10°C to +60°C, calibrated at 23°C  |
| <b>Temperature coefficient</b>                              | 0.03%/per °C typical   | 0.01%/per °C typical  |
| <b>Humidity range</b>                                       | Up to 95% RH   | Up to 95% RH  |
| <b>Zero adjustment</b>                                      | ±2% minimum (except TAA & TVA)   | ±2% minimum   |
| <b>Span adjustment</b>                                      | ±10% minimum   | ±10% minimum  |
| <b>Accuracy class</b>                                       | 0.5 unless otherwise specified   | 0.2 unless otherwise specified  |
| <b>Accuracy range</b>                                       | 0 to 120% (except self powered)  | 0 to 120% (except self powered)   |
| <b>Stability</b>  | +0.25% per annum typical (reducing with time)  | +0.2% per annum typical (reducing with time)  |
| <b>Response time</b>  | <400 ms from 0 to 99% of rated output, 250ms to 90%  | <200ms from 0 to 99% of rated output, <400ms to 95% for 253-THZ   |
| <b>DC outputs (varies by model bipolar for some models)</b> | 0/1mA into 0-10kΩ<br>0/5mA into 0-2kΩ<br>0/10mA into 0-1kΩ<br>0/20mA into 0-500Ω<br>4/20mA into 0-500Ω<br>0/5V 1k ohm minimum load<br>0/10V 1k ohm minimum load  | 0/1mA into 0-15kΩ<br>0/5mA into 0-3kΩ<br>0/10mA into 0-1.5kΩ<br>0/20mA into 0-750Ω<br>4/20mA into 0-750Ω<br>0/5V 250 ohm minimum load<br>0/10V 500 ohm minimum load |
| <b>Current output protection</b>                            | Fully protected against open and short circuited output  | Fully protected against open and short circuited output   |
| <b>Voltage output protection</b>                            | Fully protected against open circuit output  | Fully protected against open circuit  |
| <b>Maximum output</b>                                       | 24V DC when open circuit   | 24V DC when open circuit  |
| <b>Output ripple</b>  | <0.5% of full rated output   | <0.5% of full rated output  |
| <b>Continuous overload capacity</b>                         | 2 x rated current continuous / 1.25 x rated voltage continuous   | 2 x rated current continuous / 1.5 x rated voltage continuous   |
| <b>Short duration overload capacity</b>                     | 20 x rated current for 1 second / 1.5 x rated voltage for 10 seconds   | 20 x rated current for 1 second / 2 x rated voltage for 1 second  |
| <b>Input burden</b>   | AC <2 VA   | AC <2 VA  |
| <b>Auxiliary burden</b>                                     | <2 VA AC <3.5 W DC auxiliary voltage variation   | <2 VA AC <3.5 W DC auxiliary voltage variation  |
| <b>Auxiliary permissible variation</b>                      | AC ±20%, DC ±15% including ripple, except wide range auxiliary<br>A2: 12-48V DC, +25%, -15% (10.2V absolute minimum to 60V absolute maximum)<br>A5: 100 to 250V AC ±15% 85V AC absolute minimum to 287V AC absolute maximum, 100V DC to 250V DC +25%, -15% (85V DC absolute minimum to 312V DC absolute maximum) | AC ±20%, DC ±20% including ripple   |
| <b>Safety</b>   | To IEC 1010 with terminal cover, basic insulation category   | To IEC 1010 with terminal cover, basic insulation category  |
| <b>Flammability</b>   | Flame retardant enclosure to UL90-V0 (terminal cover UL90-V2)  | Flame retardant enclosure to UL90-V0 (terminal cover UL90-V2)   |
| <b>Isolation</b>  | Input/output/supply/case (except TRR, TRP, TRT and TRV with no input/output isolation)   | Input/output/supply/case  |
| <b>Interference</b>   | In accordance with IEC 61326   | In accordance with IEC 61326  |
| <b>Input impedance: (DC I/P)</b>                            | DC 1000 ohms/volt as standard<br>10k ohms/volt available on request  | DC 1000 ohms/volt as standard<br>10k ohms/volt available on request   |

## FOR MORE INFORMATION: TE Technical Support Centers

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