

# 5/20/50/100A REVENUE GRADE TOROIDAL SOLID CORE CURRENT TRANSFORMERS



DENT's Revenue Grade toroidal current transformers are designed for applications where an AC current signal must be transformed into a millivolt signal appropriate for micro-processor based circuits.

This series of CTs is designed specifically for integration into products which require exceptionally accurate signal transformation with low phase shift while exposed to harsh environmental operating conditions.

## KEY SPECIFICATIONS

|                             |                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------|
| Window Size                 | 0.5" (12.8mm)                                                                                           |
| Current Range*              | 5A Model: 0.05 - 10A AC<br>20A Model: 0.2—40A AC<br>50A Model: 0.5 - 100A AC<br>100A Model: 1.0—200A AC |
| Output                      | 333.3 mV at rated current                                                                               |
| Ratio Error                 | +/-0.2% at rated current (typical)                                                                      |
| Phase Error                 | <0.2°                                                                                                   |
| Accuracy Class <sup>1</sup> | IEC 61869-2 Class 0.2<br>IEEE C57.13 Class 0.3                                                          |

\* Depending on meter compatibility. See ELITEpro™ and PowerScout™ specifications for details.

## ELECTRICAL

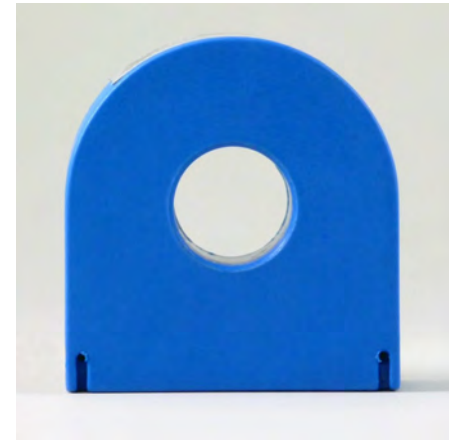
|                 |                                                       |
|-----------------|-------------------------------------------------------|
| Output          | 333.3 mV at rated current                             |
| Wire Polarity   | White = Hi, positive (+)<br>Black = Low, negative (-) |
| Frequency Range | 50 to 400 Hz                                          |

## MECHANICAL

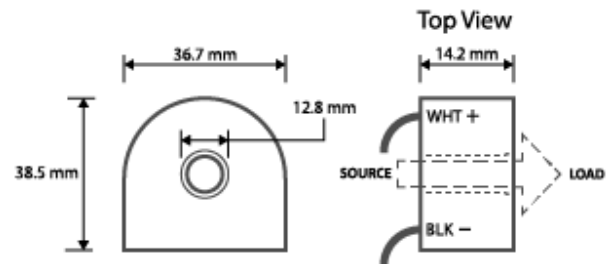
|                       |                                              |
|-----------------------|----------------------------------------------|
| Case Material         | PBT resin, UL 94V-0, epoxy encapsulated      |
| Leads [if equipped]   | 2.4 M (8'), twisted pair, 24 AWG, 600V rated |
| Operating Temperature | -25°C to 85°C (-13°F to 185°F)               |

## SAFETY

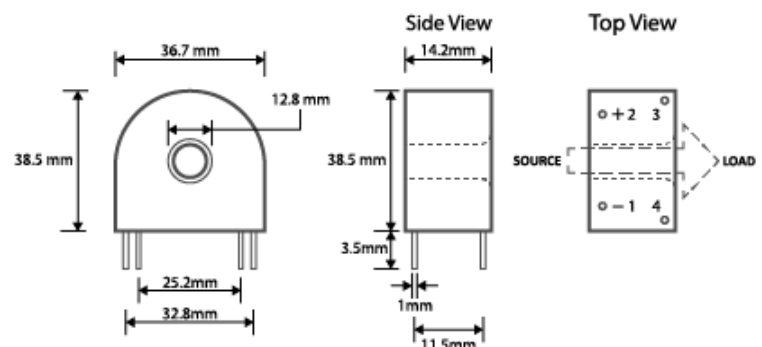
|                     |                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------|
| Working Voltage     | 600 VAC, Category III                                                                             |
| Dielectric Strength | 5400 VAC                                                                                          |
| Certification       | Conforms to:<br>UL STD 61010-1<br>EN 60044-1<br>Certified to:<br>CAN/CSA STD C22.2<br>No. 61010-1 |



## Outline Drawing with Lead Wires



## Outline Drawing with PCB/Pin Mounting



## PART NUMBERS<sup>2</sup>

|                   |                               |
|-------------------|-------------------------------|
| CT-RGT12-0005-U/P | 5A Revenue Grade Solid Core   |
| CT-RGT12-0020-U/P | 20A Revenue Grade Solid Core  |
| CT-RGT12-0050-U/P | 50A Revenue Grade Solid Core  |
| CT-RGT12-0100-U/P | 100A Revenue Grade Solid Core |

<sup>1</sup> When CT phase shift is set as follows: 5A = 0.0°, 20A = 0.0°, 50A = 0.0°, 100A = 0.0°

<sup>2</sup> U = Unterminated (with ferrules), P = Pins