

# GLE/AC-CTA-100-C AC Current Transformer

## Main Features

- Rugged construction
- Easy installation
- Wide temperature range
- 400 Hz AC current measurement

## Description

GLE/AC-CTA-100-C is a family of rugged AC Current Transducers, based on a toroidal transformer in a potted assembly, directly installable on the current carrying cable to provide a simple method to monitor any AC electrical load.

These transducers are designed for harsh environments applications, typical of onboard flight testing, are optimized for 400 Hz sinusoidal AC current measurement and incorporate a precision low drift resistor to produce a voltage output

signal proportional to the input current.

These units are available with different wires length and with four standard output sensitivities, others are available on request.



## Main Characteristics

<b>Transformer current ratio</b>	750 ± 2 for 1 primary turn.
<b>Output sensitivity</b>	see the table below.
<b>Frequency / Waveform</b>	400 Hz / Sinusoidal.
<b>Power rating</b>	maximum recommended power on the incorporated output resistor: 1 Watt.
<b>Input/output phase</b>	t1 – t2 voltage is positive when measured current flows as per the marked arrow direction, see mechanical drawing below. <i>In the case the transducer has been mistakenly installed overturned, the correct measurement phase can be restored by swapping the connection of the t1 and t2 leads.</i>
<b>Enclosure</b>	mechanical construction: potted assembly with epoxy resin, white colour.
<b>Electrical connection</b>	flying leads: 2 per AWG22, Silver Plated Copper Conductor, PTFE insulated, white colour, 1 or 3 meters long.
<b>Size</b>	see mechanical drawing below.
<b>Weight</b>	less than 50 grams, including 1 meter flying leads .
<b>Altitude</b>	from any earth surface level to 25.000 m AMSL (82.000 ft).
<b>Temperature Range</b>	-50 ÷ 100°C, operating.

## How to order

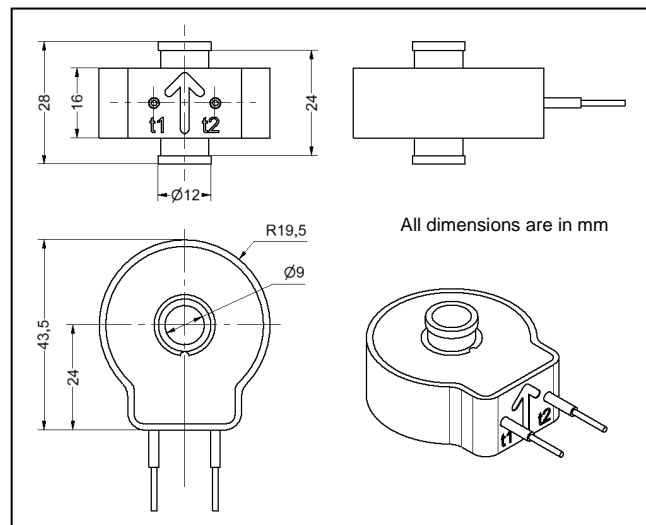
Part Number	Nominal Output Sensitivity <sup>1)</sup> mV / A / primary turn @ 400 Hz (± 0.35%)	Incorporated output Resistor (3 Watt, 0.1%, 20 ppm/ °C )	Maximum input current @ recommended max 1 Watt on the incorporated resistor
gle/AC-CTA-100-C-20-L <sup>2)</sup>	16.66	12.5 Ohm	212 A
gle/AC-CTA-100-C-30-L <sup>2)</sup>	33.33	25 Ohm	150 A
gle/AC-CTA-100-C-40-L <sup>2)</sup>	66.66	50 Ohm	106 A
gle/AC-CTA-100-C-50-L <sup>2)</sup>	133.32	100 Ohm	75 A

<sup>1)</sup> Optionally, the transducer sensitivity can be measured at factory and stated on a calibration sheet.

<sup>2)</sup> "L" in the P/N is the flying leads length: 1 = approx 1 meter, 3 = approx 3 meters (others lengths are available on request).

## Mechanical drawing

Note: On installation, the current carrying conductor should be sleeved with heat shrink to prevent free movement within the transducer. Heat shrink should be then fixed over both bushes to clamp the transducer in place.



Due to continuous developments, specifications are subject to change without prior notice.  
This product is not intended for applications whose its failure to perform can be expected to cause damages to properties and/or persons and/or injury to human life.