

GLE/AC-CTA-100-D AC Current Transformer

Main Features

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

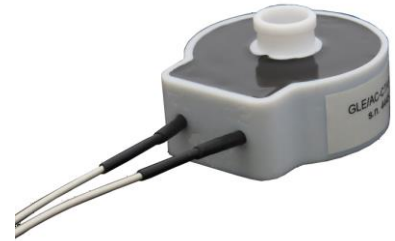
Description

GLE/AC-CTA-100-D 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

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

How to order

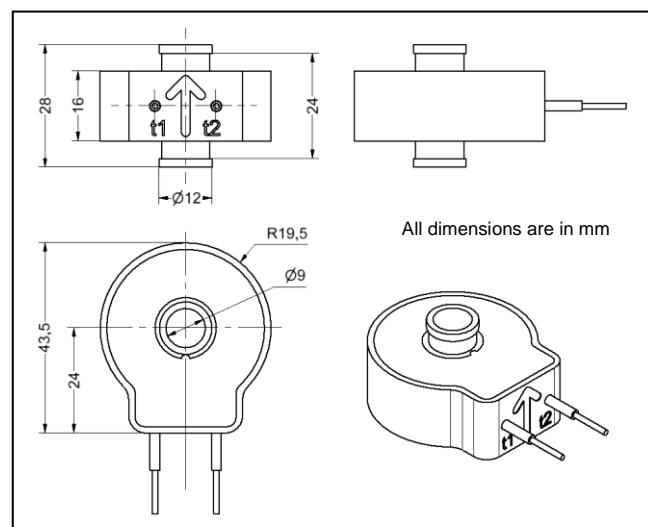
Part Number	Nominal Output Sensitivity ¹⁾ mV / A / primary turn @ 400 Hz (± 0.35%)	Incorporated output Resistor (3 Watt, 0.1%, 20 ppm/ °C)	Maximum input current @ recommended max 1 Watt on the incorporated resistor
gle/AC-CTA-100-D-20-L ²⁾	16.66	12.5 Ohm	212 A
gle/AC-CTA-100-D-30-L ²⁾	33.33	25 Ohm	150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

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

²⁾ "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.



All dimensions are in mm

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.

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