

# ARDENT Clamp-On Current Transformer (CT) 1000A/1A

Designed for AC Current Measurement

## ARD-CM-CLCT-1 Operating Manual

### Application

ARDENT clamp-on CT 1000A /1A measures current without interrupting the conducting line. They are used for electrically isolated measurement of alternating current within a broad range without interrupting the current conducting cable and bus bars.

### Features

- Complies with IEC 61010-1
- Minimum transformation ratio error
- Compact, handy design
- Permanently connected safety cables



**ARDENT Clamp on CT 1000A/1A**

The ARDENT Clamp-on CT 1000A/1A can be used as an accessory for all ARDENT meters that measure AC current.

### Safety Features and Precautions



Application around and removal from a hazardous live conductor is permitted.

ARDENT clamp-on current transformers are built according to IEC 61010-1 safety standards, ensuring user and device safety during operation. Furthermore, an internal protection circuit prevents the generation of high voltage if the secondary circuit is interrupted. Before using, thoroughly read the instruction manual of the meter you will be using and adhere to all guidelines. Failure to follow instructions or improper handling may compromise the safety of both the user and the clamp.

### Measurement

ARDENT clamp-on CT's measure AC current without needing to break the circuit. The exposed contact surfaces of the core, visible when the trigger is pressed, must be kept clean at all times. Even small particles can negatively affect measurement accuracy. These CT's utilize long, contact-protected secondary cables with connection plugs, providing electrical isolation for non-intrusive AC current measurement. Ensure that you are calculating the proper transmission ratio Input/Output when taking the current measurements.



## Periodic Check-Up

The clamp-on CT does not require any specific maintenance. While cleaning, the probes must not be immersed into any liquid. No special maintenance is required for housing. The surface between the opening jaws should be cleaned with dry cloth before operating. Avoid use of cleansers, abrasives, or solvents.

## Specifications

Type	CT 1000A / 1A
Description/Application	The current transformers are used for electrically isolated measurement of alternating current within broad range.
Nominal Primary Current	1 - 1000A AC
Output Signal	1 mA - 1A AC
Transmission Ratio Input:Output	1000:1
Accuracy / Max. Error	Class 1 (2.5VA) (for current range from 1 A to 1000 A, 50 Hz)
Maximum Operating Voltage	CAT III 600 V as per IEC-61010
Frequency Range	40 Hz to 1 kHz
Jaw Opening / Conductor Diameter	1.7 / 1.7 in [43 / 43 mm]
Dimensions (W x H x D)	3.6 x 1.5 8.7 in [92 x 39 x 220 mm]
Weight	Approximately 23 oz [650 g]
Cable Length	5 ft [1.5 m]



**AutomationDirect**  
3505 Hutchinson Rd.  
Cumming, GA 30040  
automationdirect.com  
(800) 633-0405

Always check [www.automationdirect.com](http://www.automationdirect.com)  
for the latest information.

Item: ARD-CM-CLCT-1  
04/2025 : Rev A