

# **Current Transformers**

## **Submetering Solutions** for Accurate Measurement & Verification



#### **DEFINITION**

Leviton Current Transformers (CTs) support our full line of VerifEye™ revenue-grade meters and help meet all measurement and verification-based opportunities — including smart metering and LEED rating achievement. Designed as part of a simple and effective process for accurately capturing measurements of power consumption, CTs are easy to specify and install for new construction and retrofits.

The better the equipment, the better the measurement. Leviton meters utilize highly accurate current transformers for revenue-grade performance certified to ANSI standards. Competing products use current sensors that do not provide the same level of performance. CTs come as solid core standard for high-quality, long-term accuracy and reliability. Solid core CTs deliver +/-0.3% accuracy. Split core and Rogowki Coil CTs deliver +/-1.0% accuracy. For added safety, all Leviton current transformers come with built-in voltage suppression devices that prevent hazardous voltages from developing on CT secondaries should they become disconnected from a meter with load current present. Leviton CTs are UL and cUL listed devices.

#### **SOLID CORE**

Leviton solid core CTs are cost effective and less susceptible to damage during installation. Solid core CTs slip over power lines to measure the electrical current flowing through the line. The CT "secondary" wires connect to the meter, facilitating power and energy calculations. They are compact and cost effective. Solid core CTs are accurate (0.3% maximum error). For installation, power must be de-energized and the circuit opened in order to slip the CT over the power line.

#### SPLIT CORE

Split core CTs can be disassembled, or 'split' into halves, eliminating the need to turn power off and open the circuit during installation. This time-saving installation is ideal for critical loads that cannot be disconnected. Split core CTs close securely for fast, precise installation with no need for time-consuming tie wraps and no worries about improper seating or core half separation.

- Indoor type for measurement category class IV, accessory equipment for energy meters
- Designed to meet the requirements of UL916 plus CSA C22.2 no. 61010-1
- Suitable for installation on 600V un-insulated bus duct

### ROGOWSKI COIL

Rogowski Coil CTs are flexible rope style CTs with high amperage ranges from 20-5000A. The coil opens at the connector junction for fast and easy installation into an existing cable or bus bar. The Rogowski Coil's flexible core is ideal for tight enclosures and odd-sized conductors with three length options: 12", 18", and 24". Rogoski Coil CTs are for use with VerifEye Series 4000 Industrial ModBus Meter Kits only.

#### **APPLICATIONS**

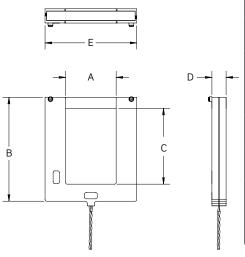
Use Current Transformers in commercial, institutional, industrial and government applications to

- Load profiling and benchmarking
- AMR/BAS/BMS/EMS integration
- Power quality analysis
- Usage aggregation
- Tenant cost allocation
- Measurement and verification
- Net Metering
- Energy conservation and cost reduction
- Green building initiatives and Government mandates



#### **DIMENSIONAL DIAGRAMS**

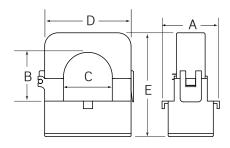
SPLIT CORE - SERIES 1000, 2000, AND 3300/3500 METERS, AND SERIES 2000 **MULTIPLE METER UNITS (MMUs)** 



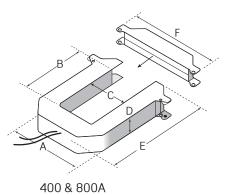
## SPLIT CORE - FOR USE WITH SERIES 1000, 2000, AND 3300/3500 METERS, AND SERIES 2000 MULTIPLE METER UNITS (MMUs) ONLY

CT Size	A	В	С	D	Е
100:0.1A	0.75"	2.53"	0.75"	0.95"	2.58"
	(19.05mm)	(64.16mm)	(19.05mm)	(24.13mm)	(65.53mm)
200:0.1A	1.00"	2.86"	1.00"	0.75"	2.75"
	(25.4mm)	(72.64mm)	(25.4mm)	(19.05mm)	(69.85mm)
400:0.1A	1.50"	3.31"	1.50"	1.07"	3.74"
	(38.1mm)	(84.07mm)	(38.1mm)	(27.18mm)	(95mm)
800:0.1A	3.00"	5.38"	3.50"	1.25"	5.39"
	(76.2mm)	(136.65mm)	(88.9mm)	(31.75mm)	(136.91mm)
1200:0.1A	4.00"	8.23"	6.00"	1.12"	7.25"
	(101.6mm)	(209.04mm)	(152.4mm)	(28.45mm)	(184.15mm)
1600:0.1A	4.00"	8.23"	6.00"	1.12"	7.25"
	(101.6mm)	(209.04mm)	(152.4mm)	(28.45mm)	(184.15mm)
3000:0.1A	5.00"	9.86"	7.00"	1.44"	8.44"
	(127mm)	(250.44mm)	(177.8mm)	(36.58mm)	(214.38mm)
5000:0.1A	5.00"	9.86"	7.00"	1.44"	8.44"
	(127mm)	(250.44mm)	(177.8mm)	(36.58mm)	214.38mm)

## SPLIT CORE - FOR USE WITH EMH+ AND **SERIES 4000 INDUSTRIAL MODBUS METER KITS**



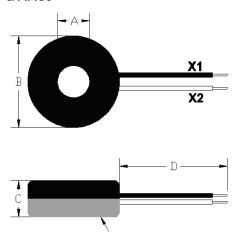
100 & 200A



## SPLIT CORE - FOR USE WITH EMH+ AND SERIES 4000 INDUSTRIAL **MODBUS METER KITS**

CT Size	Α	В	С	D	Е	F
100:0.333V	1.5" (38.10mm)	0.8" (20.32mm)	0.7" (17.78mm)	1.6" (40.64mm)	2.1" (53.34mm)	-
200:0.333V	1.5" (38.10mm)	1.25" (31.75mm)	1.25" (31.75mm)	2.25" (57.15mm)	2.8" (71.12mm)	-
400:0.333V & 800:0.333V	4.9" (124.46mm)	2.29" (58.16mm)	2.25" (63.5mm)	1.2" (30.48mm)	5.2" (132.08mm)	6.0" (152.40mm)

## **DIMENSIONAL DIAGRAMS SOLID CORE - FOR USE WITH MINI METERS** & MMUs

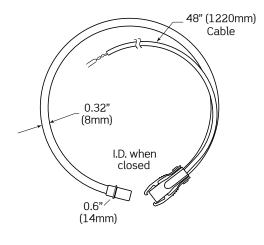


## SOLID CORE - FOR USE WITH MINI METERS & MMUs

CT Size	Α	В	С	D
100:0.1A &	0.67"	1.65"	0.71"	48.00"
200:0.1A 0.67"	(17mm)	(42mm)	(18mm)	(1219mm)
100:0.1A &	0.72"	2.06"	0.82"	48.00"
200:0.1A 0.72"	(18.3mm)	(52.3mm)	(20.8mm)	(1219mm)

**NOTE**: Lead lengths may be extended up to 500'. Consult factory for details.

## **ROGOWSKI COIL -FOR USE WITH SERIES 4000** INDUSTRIAL MODBUS METER KITS ONLY



## **ROGOWSKI COIL - FOR USE WITH SERIES 4000** INDUSTRIAL MODBUS METER KITS ONLY

LENGTH	INSIDE DIAMETER WITH CLOSED CONNECTOR		
12" (305mm)	3.85" (98mm)		
18" (458mm)	5.75" (147mm)		
24" (610mm)	7.65" (195mm)		
36" (915mm)	11.50 (293mm)		

20-5000A

CRV50-KC2

Rogowski Coil, 24"



#### ORDERING INFORMATION

NOTE: Meters sold separately.

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AMP	CAT. NO.	DESCRIPTION		
SINGLES				
SOLID CORE -	FOR USE WITH	MINI METERS AND MMUs		
100:0.1A	CDE01-K11	Solid Core, 0.67", Black		
100:0.1A	CDE01-L11	Solid Core, 0.67", Blue		
100:0.1A	CDE01-R11	Solid Core, 0.67", Red		
100:0.1A	CDA01-K12	Solid Core, 0.72", Black		
100:0.1A	CDA01-L12	Solid Core, 0.72", Blue		
100:0.1A	CDA01-R12	Solid Core, 0.72", Red		
200:0.1A	CDE02-K11	Solid Core, 0.67", Black		
200:0.1A	CDE02-L11	Solid Core, 0.67", Blue		
200:0.1A	CDE02-R11	Solid Core, 0.67", Red		
200:0.1A	CDA02-K12	Solid Core, 0.72", Black		
200:0.1A	CDA02-L12	Solid Core, 0.72", Blue		
200.0.1A	CDA02-R12	Solid Core, 0.72", Red		
400:0.1A	CDF04-K24	Solid Core, 1.5", Black		
		2000, AND 3300/3500 METERS,		
	2000 (MMUs) C			
100:0.1A	CTD01-K16	Split Core, .75" x .75"		
200:0.1A	CTD02-K16	Split Core, 1" x 1"		
400:0.1A	CTD04-K23	Split Core, 1.5", x 1.5"		
800:0.1A	CTC08-K46	Split Core, 3" x 3.5"		
1200:0.1A	CTC12-K46	Split Core, 4" x 6"		
1600:0.1A	CTC16-K96	Split Core, 4" x 6"		
3000:0.1A	CTC30-57B	Split Core, 5" x 7"		
5000:0.1A	CTC50-57B	Split Core, 5" x 7"		
	FOR USE WITH MODBUS METE	EMH+ & SERIES 4000 R KITS ONLY		
100:0.333V	CTV01-K21	Split Core, 1.6" x 2.1"		
200:0.333V	CTV02-K21	Split Core, 2.2" x 2.8"		
400:0.333V	CTV04-K40	Split Core, 6" x 5.2"		
800:0.333V	CTV08-K40	Split Core, 6" x 5.2"		
ROGOWSKI COIL- FOR USE WITH SERIES 4000 INDUSTRIAL MODBUS METER KITS ONLY				
20-5000A	CRV50-K62	Rogowski Coil, 12"		
20-5000A	CRV50-K93	Rogowski Coil, 18"		
		110 110 11		

AMP	CAT. NO.	DESCRIPTION			
KITS - FOR US	KITS - FOR USE WITH MINI-METERS & MMUs				
100:0.1A	CDE01-211	CT Kit, 0.67", Red, Black			
100:0.1A	CDE01-311	CT Kit, 0.67", Blue, Red, Black			
100:0.1A	CDA01-212	CT Kit, 0.72", Red, Black			
100:0.1A	CDA01-312	CT Kit, 0.72", Blue, Red, Black			
200:0.1A	CDE02-211	CT Kit, 0.67", Red, Black			
200:0.1A	CDE02-311	CT Kit, .067", Blue, Red, Black			
200:0.1A	CDA02-212	CT Kit, 0.72", Red, Black			
200:0.1A	CDA02-312	CT Kit, 0.72", Blue, Red, Black			

Leviton recommends solid core transformers (CTs) for revenue-grade accuracy. Our 100A and 200A color coded CTs assist with correct installation by indicating phase monitored. Split core CTs are also available upon request for applications where power cannot be interrupted during installation. Our 100-5,000A split core and 20-5000A Rogowski Coil CTs offer +/-1.0% accuracy.

### The following products are also part of the Leviton line of VerifEye integrated metering solutions:

Series 1000 Meters Series 2000 Meters

Series 33000 and 3500 Meters

Series 4000 Industrial ModBus Meter Kits

Series 8000 Meters

EMH+ Integrated Meter & Hub

Mini Meters

Multiple Meter Units (MMUs)

**Energy Monitoring Software and Hardware**