

# **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 revenuegrade 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.

**Note:** Leviton recommends solid core transformers (CTs) for revenuegrade accuracy. The 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. The 100-5,000A split core and 50-5000A Rogowski Coil CTs offer +/-1.0% accuracy.

# 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. Leviton split core CTs are designed to close and lock to ensure a secure, fast and 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 uninsulated bus duct

# **ROGOWSKI COIL**

Rogowski Coil CTs are flexible rope style CTs with high amperage ranges from 50-5000A. 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 and 4100 Industrial ModBus Meter Kits only

# **APPLICATIONS**

Use current transformers in commercial, institutional, industrial and government applications to support:

- 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

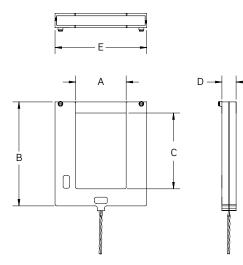
# Leviton Manufacturing Co., Inc. Energy Management, Controls and Automation

20497 SW Teton Avenue, Tualatin, OR 97062 **tech line** (6:00AM-4:00PM PT Mon-Fri) 800-959-6004 **fax** 503-404-5594 ©2017 Leviton Manufacturing Co., Inc. All rights reserved. Subject to change without notice.



### **DIMENSIONAL DIAGRAMS**

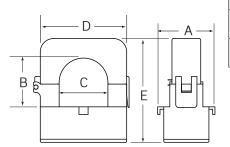
#### SPLIT CORE—FOR USE WITH SERIES 1000, 2000, 3500, 8000, MINI METERS AND MULTIPLE METER UNITS (MMUs) ONLY



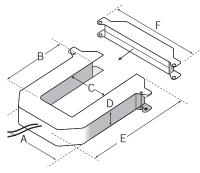
#### SPLIT CORE—FOR USE WITH SERIES 1000, 2000, 3500, 8000, MINI METERS AND MULTIPLE METER UNITS (MMUs) ONLY

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

#### SPLIT CORE—FOR USE WITH EMH+ AND SERIES 4000 & 4100 INDUSTRIAL MODBUS METER KITS ONLY



100 & 200A



SPLIT CORE—FOR USE WITH EMH+ AND SERIES 4000 & 4100 INDUSTRIAL MODBUS METER KITS ONLY

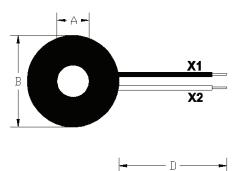
CT Size	А	В	С	D	Е	F
100:0.333V	1.5" (38.10mm)	0.8" (20.32mm)	0.7" (17.78mm)	1.6" (40.64mm)	2.1" (53.34mm)	-
200:0.333V	1.5" (38.10mm)	1.25" (31.75mm)	1.25" (31.75mm)	2.25" (57.15mm)	2.8" (71.12mm)	-
400:0.333V & 800:0.333V	4.9" (124.46mm)	2.29" (58.16mm)	2.25" (63.5mm)	1.2" (30.48mm)	5.2" (132.08mm)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

# **PRODUCT DATA**



#### **DIMENSIONAL DIAGRAMS**

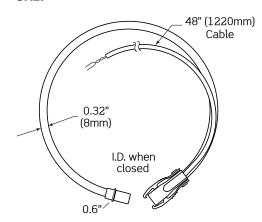
SOLID CORE—FOR USE WITH SERIES 1000, 2000, 3500 AND 8000 METERS, MINI METERS AND MMUS ONLY



# SOLID CORE—FOR USE WITH SERIES 1000, 2000, 3500 AND 8000 METERS, MINI METERS AND MMUS ONLY

CT Size	А	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)
400:0.1A 1.5"	1.50"	3.60"	1.38"	48.00"
	(38.1mm)	(76.2mm)	(34.9mm)	(1219mm)

#### ROGOWSKI COIL—FOR USE WITH SERIES 4000 & 4100 INDUSTRIAL MODBUS METER KITS ONLY\*



### ROGOWSKI COIL—FOR USE WITH SERIES 4000 & 4100 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)
*Pogowski Coils aro f	or use with the following Series 4000 & 4100 Meter

\*Rogowski Coils are for use with the following Series 4000 & 4100 Meter Models only: 4KUMR-00R, 410UB-00R, 410UM-00R, 4DUBM-00R, 4DUMR-00R

Leviton Manufacturing Co., Inc. Energy Management, Controls and Automation

20497 SW Teton Avenue, Tualatin, OR 97062 **tech line** (6:00AM-4:00PM PT Mon-Fri) 800-959-6004 **fax** 503-404-5594 ©2017 Leviton Manufacturing Co., Inc. All rights reserved. Subject to change without notice.

# **ORDERING INFORMATION**

NOTE: Meters sold separately

AMP	CAT. NO.	DESCRIPTION			
		0, 2000, 3500, 8000 METERS,			
SOLID CORE	TERS AND MM				
100:0.1A	CDE01-K11	Solid Core, 0.67", Black			
100:0.1A	CDE01-KII	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			
SPLIT CORE CTs					
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"			
CT Kits					
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			

SPLIT CORE	CTs	
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"
FOR USE WIT METERS ONI		0 & 4100 INDUSTRIAL MODBU
ROGOWSKI	COIL CTs	
50-5000A	CRV50-K62	Rogowski Coil CT 12"
50-5000A	CRV50-K93	Rogowski Coil CT 18"
50-5000A	CRV50-KC2	Rogowski Coil CT 24"
FOR USE WIT	TH EMH+ INTEG	GRATED METER AND HUB
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"
	CTV08-K40	Split Core, 6" x 5.2"

The following products are also part of the Leviton line of VerifEye integrated metering solutions: Series 1000 Meters Series 2000 Meters Series 3500 Meters Series 4000 & 4100 Industrial ModBus Meter Kits Series 8000 Meters EMH+ Integrated Meter & Hub Mini Meters Multiple Meter Units (MMUs) Building Manager Online (BMO) 3.0

# Leviton Manufacturing Co., Inc. Global Headquarters

201 North Service Road, Melville, NY 11747-3138 tel 800-323-8920 fax 800-832-9538 tech line (8:30AM-7:00PM ET Mon-Fri) 800-824-3005

# Leviton Manufacturing Co., Inc. Energy Management, Controls and Automation

20497 SW Teton Avenue, Tualatin, OR 97062 tel 800-736-6682 fax 503-404-5594 tech line (6:00AM-4:00PM PT Mon-Fri) 800-959-6004

#### Visit our Website at: www.leviton.com/verifeye

©2017 Leviton Manufacturing Co., Inc. All rights reserved. Subject to change without notice.



