

Current Transformers

Submetering Solutions for Accurate Measurement & Verification



DEFINITION

Leviton Current Transformers (CTs) support our full line of VeriEye™ 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 Rogowski 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 revenue-grade 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”. Rogowski Coil CTs are for use with VeriEye Series 4000 and 4100 Industrial ModBus Meter Kits only

APPLICATIONS

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

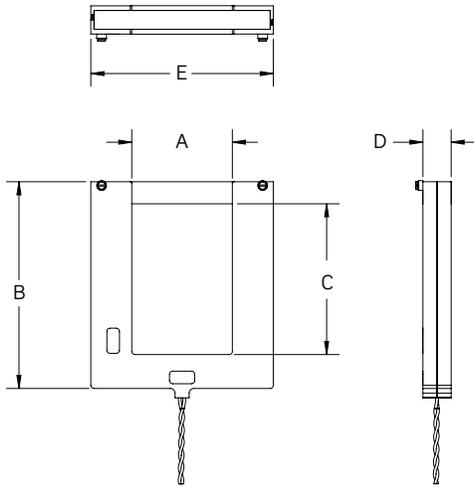
- Load profiling and benchmarking
- AMR/BAS/BMS/EMS integration
- Power quality analysis
- Usage aggregation
- Tenant cost allocation
- Measurement and verification
- Net metering
- Energy conservation and cost reduction
- Green building initiatives and government mandates

PRODUCT DATA



DIMENSIONAL DIAGRAMS

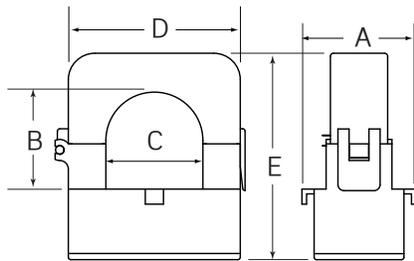
SPLIT CORE—FOR USE WITH SERIES 1000, 2000, 3500, 8000, MINI METERS AND MULTIPLE METER UNITS (MMUs) ONLY



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

CT Size	A	B	C	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)

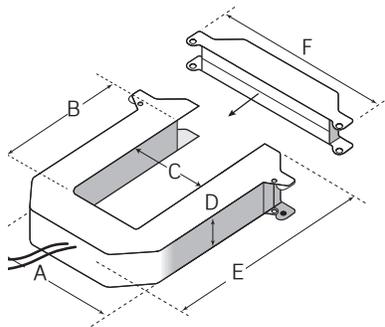
SPLIT CORE—FOR USE WITH EMH+ AND SERIES 4000 & 4100 INDUSTRIAL MODBUS METER KITS ONLY



100 & 200A

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

CT Size	A	B	C	D	E	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)

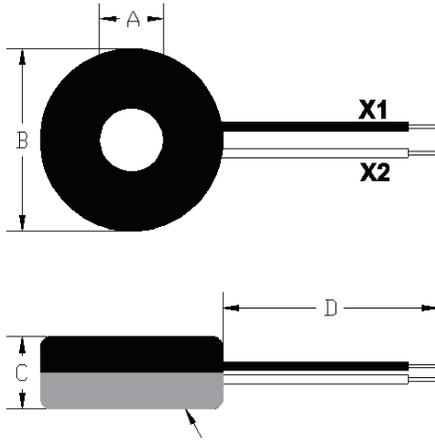


400 & 800A

PRODUCT DATA

DIMENSIONAL DIAGRAMS

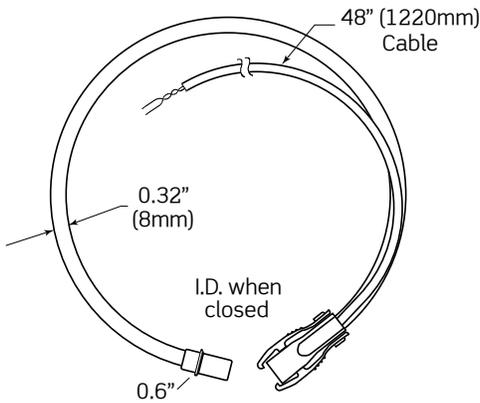
SOLID CORE—FOR USE WITH SERIES 1000, 2000, 3500 AND 8000 METERS, MINI METERS AND MMUs ONLY



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

CT Size	A	B	C	D
100:0.1A & 200:0.1A 0.72"	0.72" (18.3mm)	2.06" (52.3mm)	0.82" (20.8mm)	48.00" (1219mm)
400:0.1A 1.5"	1.50" (38.1mm)	3.60" (76.2mm)	1.38" (34.9mm)	48.00" (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)

*Rogowski Coils are for use with the following Series 4000 & 4100 Meter Models only: 4KUMR-00R, 41OUB-00R, 41OUM-00R, 4DUBM-00R, 4DUMR-00R

ORDERING INFORMATION

NOTE: Meters sold separately

Current Transformers

AMP	CAT. NO.	DESCRIPTION
FOR USE WITH SERIES 1000, 2000, 3500, 8000 METERS, AND MINI METERS AND MMUs ONLY		
SOLID CORE CTs		
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	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	CDA01-212	CT Kit, 0.72", Red, Black
100:0.1A	CDA01-312	CT Kit, 0.72", 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

AMP	CAT. NO.	DESCRIPTION
FOR USE WITH SERIES 4000 & 4100 INDUSTRIAL MODBUS METERS		
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 WITH SERIES 4000 & 4100 INDUSTRIAL MODBUS METERS ONLY		
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 WITH EMH+ INTEGRATED 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"
800:0.333V	CTV08-K40	Split Core, 6" x 5.2"

Note

- All 0.1A CTs can be extended to 500'. All .333V CTs can be extended to 300'
- All Rogowski CTs can be extended up to 20'

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

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