

Current Transformers—333mV Submetering Solutions for Accurate Measurement & Verification For use with VerifEye™ Series 4000 and 7000 Meter Lines Only



Description

Leviton 333mV Current Transformers (CTs) support the Series 4000 and Series 7000 meter lines of 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 and NEMA standards. Solid core CTs are standard for high-quality, long-term accuracy and reliability. 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 (0.2% 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 - continued

Leviton split core CTs are designed to close and lock to ensure a secure, fast and precise installation with no need for timeconsuming tie wraps and no worries about improper seating or core 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", 16", 18" and 24". Rogowski Coil CTs are for use with VerifEye Series 4000 and 7000 Industrial ModBus and BACnet Meters.

Note: Leviton recommends solid core transformers (CTs) for revenue- grade accuracy. Split core CTs are also available for applications where power cannot be interrupted during installation.

Applications

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

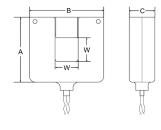
- Load profiling and benchmarking
- AMR/BAS/BMS/EMS integration
- Power quality analysis
- Usage aggregation
- Tenant cost allocation
- Measurement and verification
- Net metering
- Energy conservation and cost reduction
- Green building initiatives and government mandates

Leviton Manufacturing Co., Inc. Lighting & Controls

Dimensional Diagrams

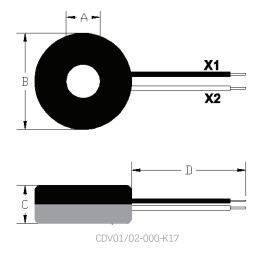
Split Core-for use with Series 4000 & 7000 Industrial ModBus & BACnet Meters

| Basic No. | CT Size | Α | В | С | Window | |
|-----------|------------|--------------------|--------------------|-------------------|---------------------------|--|
| CTV5X | 50A:333mV | 1.64" (41.7mm) | 1.16" (29.4mm) | 1.04" (25.4mm) | 0.40" (10.2mm) | |
| CTV01 | 100A:333mV | 3.24" (82.4mm) | 2.87" (72.9mm) | 1.11" (28.2mm) | 1.0" (25.4mm) | |
| CTV02 | 200A:333mV | 3.24" (82.4mm) | 2.87" (72.9mm) | 1.11" (28.2mm) | 1.0" (25.4mm) | |
| CTV04 | 400A:333mV | 3.22" (81.7mm) | 3.31" (84mm) | 1.14" (28.9mm) | 1.25" (31.7mm) | |
| CTV08 | 800A:333mV | 7.89" (200.4mm) | 6.08" (154.4mm) | 1.50" (38.1mm) | 3.0X3.5" (76.2x88.9mm) | |



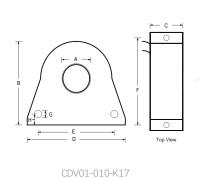
Solid Core

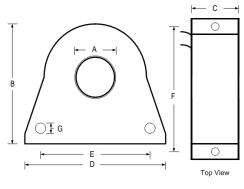
| Cat. No. | CT Size | Α | В | С | D |
|---------------|------------|-------------------|----------|-------------------|-----------------|
| CDV01-000-K17 | 100A:333mV | 0.72" (18.3mm) | 2.06" | 0.82" (20.8mm) | 48" (1219mm) |
| CDV02-000-K17 | 200A:333mV | | (52.3mm) | | |



Solid Core

| Cat. No. | CT Size | Α | В | С | D | E | F | G | H |
|---------------|------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|
| CDV01-010-K17 | 100A:333mV | 0.60" (15.0mm) | 1.78" (45.0mm) | 0.91" (23.0mm) | 2.28" (58.0mm) | 1.58" (40.0mm) | 1.89" (48.0mm) | 0.16 (4.0mm) | 0.37" (9.5mm) |
| CDV02-010-K17 | 200A:333mV | 0.78" (20.0mm) | 2.28" (58.0mm) | 0.87" (22.0mm) | 2.68" (68.0mm) | 1.97" (50.0mm) | 2.28" (58.0mm) | 0.20" (5.5mm) | - |





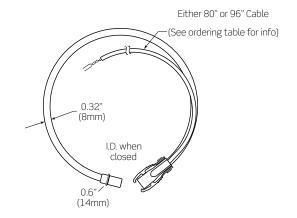
CDV02-010-K17



Dimensional Diagrams - continued Rogowski Coil*

| Basic No. | Length | Inside Diameter With Closed Connector |
|-----------|-------------|---------------------------------------|
| CRV50 | 12" (305mm) | 3.85" (98mm) |
| CRV50 | 16" (406mm) | 4.5" (115mm) |
| CRV50 | 18" (458mm) | 5.75" (147mm) |
| CRV50 | 24" (610mm) | 7.65" (195mm) |

^{*} Rogowski Coils are designed for use with specific meters. See the Ordering Information chart for meter compatibility.



Ordering Information

NOTE: Meters sold separately

| Amp | Opening Dimensions | Lead Length | Cat. No. | Accuracy | Description | | | |
|---|-----------------------|-------------------|---------------|----------|------------------|--|--|--|
| Solid Core CTs For Use With All 333mV Meters* | | | | | | | | |
| 100A | 0.75" | | CDV01-000-K17 | | Solid Core | | | |
| 200A | 0.75" | 144" | CDV02-000-K17 | 0.2% | | | | |
| 100A | 0.60" | 144 | CDV01-010-K17 | | | | | |
| 200A | 0.78" | | CDV02-010-K17 | | | | | |
| Split Core CTs For U | Jse With All 333mV I | Meters | | | | | | |
| 50A | 0.4" | 96" | CTV5X-WA4 | | Split Core | | | |
| 100A | 1.0" | | CTV01-KD0 | 0.5% | | | | |
| 200A | 1.0" | 144" | CTV02-KD0 | | | | | |
| 400A | 1.25" | ±44 | CTV04-KD1 | 1.0% | | | | |
| 800A | 3.0x3.5" | | CTV08-KG1 | | | | | |
| Rogowski Coil CTs F | For Use With Series 4 | 000 Meter Line On | ly** | | | | | |
| 50-5000A | 12" | | CRV50-K62 | 1.0% | Rogowski Coil CT | | | |
| 50-5000A | 18" | 96" | CRV50-K93 | | | | | |
| 50-5000A | 24" | | CRV50-KC2 | | | | | |
| Rogowski Coil CTs For Use With Series 7000 Meter Line Only*** | | | | | | | | |
| 5-4000A | 16" | 80" | CRV50-LR2 | 0.2% | Rogowski Coil CT | | | |
| 5-4000A | 24" | 00 | CRV50-LR4 | U.Z% | MOBOWSKI COIL CT | | | |

^{*333}mV solid core CT leads can be extended to 200'

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

Mini Meters

Series 1000 Meters Series 2000 Meters Series 3500 Meters

Series 4000 Industrial ModBus & BACnet Meters

Series 7000 Meters Series 8000 Meters

Multiple Meter Units (MMUs) Building Manager Online (BMO)

Leviton Manufacturing Co., Inc. Lighting & Controls

10385 SW Avery Street, Tualatin, OR 97062 tel 800-736-6682 tech line (6:00AM-4:00PM PT Mon-Fri) 800-959-6004 ©2022 Leviton Manufacturing Co., Inc. All rights reserved. Subject to change without notice.

^{**}Series 4000 Meter Line Rogowski CT leads can be extended up to 20'
***Series 7000 Meter Line Rogowski CT leads can be extended up to 100'

Product Data CDV0x, CTVxxx, CRV50



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10385 SW Avery Street, Tualatin, OR 97062 tel 800-736-6682 tech line (6:00AM-4:00PM PT Mon-Fri) 800-959-6004

Leviton Manufacturing Co., Inc. Global Headquarters

201 North Service Road, Melville, NY 11747-3138 tel 800-323-8920 tech line (8:00AM-10:00PM ET Mon-Fri, 9:00AM-7:00PM ET Sat, 9:00AM-5:00PM ET Sun) 800-824-3005