

# Ensuring CT Safety and Reliability

## New UL2808 becomes only applicable standard for field-installed split core CTs

Electrical contractors and other construction professionals should ensure the split core CTs they field install for submetering applications carry the most stringent UL standard--UL2808.

To ensure workplace safety, federal Occupational Safety and Health Administration (OSHA) provides standards requiring testing and certification of specific products by a Nationally Recognized Testing Laboratory (NRTL), such as Underwriters Laboratories (UL). One of the most important areas of workplace safety involves the electrical infrastructure.

### UL CERTIFICATIONS AND STANDARDS

UL testing and certification is critical for split core CTs being field-installed in submetering applications. Some CT coils carry a UL standard 61010-1 rating . However, this standard was originally intended primarily for laboratory and other experimental situations. UL has recognized the fundamentally different nature of commercial submetering applications, and developed a new standard, UL 2808. This standard is specifically for “open-type accessory current transformers intended for field installation within distribution and control equipment such as panelboards, switchboards, industrial control equipment, and energy monitoring/management equipment, to measure current consumption on a branch circuit” (emphasis added).

Table 1 provides a review of many commercially available split core CTs, and identifies whether these qualify for field installation based on the UL rating of the product.

Electrical contractors and other construction professionals should be sure the split core CTs they field install meet these requirements to ensure safe and compliant operation of the submetering system.

### UL Marks

**UL Listed certifies the complete product meets relevant UL standards, and is free from foreseeable risks of fire, electric shock and related hazards.**



**UL Recognized means a component part has been tested only for its capability to perform a limited function.**



TABLE 1. COMMERCIALY AVAILABLE SPLIT CORE CURRENT TRANSFORMERS WITH UL MARKS AND STANDARDS.

Company	Model #	UL or equiv. NRTL mark	UL standard	Qualified for field installation
Continental Control Systems		UL Listed	standard not identified	No
Cyber Switching	CS-400-CT050	UL Listed	UL2808	Yes
Cyber Switching	CS-400-CT300	UL Listed	UL2808	Yes
Cyber Switching	CS-400-CT600	UL Listed	UL2808	Yes
Dent	CT-SCS-0050	ETL	UL 61010-1	No
Dent	CT-SCS-0100	ETL	UL 61010-1	No
Dent	CT-SCM-0100	ETL	UL 61010-1	No
Dent	CT-SCM-0200	ETL	UL 61010-1	No
E-mon D-mon	CS25	standard not identified	standard not identified	No
E-mon D-mon	CS50	standard not identified	standard not identified	No
E-mon D-mon	CS100	standard not identified	standard not identified	No
E-mon D-mon	CS200	standard not identified	standard not identified	No
E-mon D-mon	CS400	standard not identified	standard not identified	No
Flex-Core	FC Series	standard not identified	IEC 60044-1	No
Leviton	CTDxx	UL Listed	CSA C22.2 no. 61010-1	No
Leviton	CTCxx	UL Listed	CSA C22.2 no. 61010-1	No
Leviton	CTVxx	UL Recognized	CSA C22.2 no. 61010-1	No
MagneLab	SCT-xxxx	UL Recognized	standard not identified	No
MagneLab	DCT-xxxx	UL Recognized	standard not identified	No
MagneLab	MCT-xxxx	UL Recognized	standard not identified	No
Sentran	4LS	UL Recognized	IEC 60044-1; IEEE C57.13-2008.	No
Sentran	4LSF	UL Listed	UL2808; CSA/CAN 61010-1	Yes
Sentran	FCL Series	UL Recognized	standard not identified	No
Sentran	615	UL Recognized	standard not identified	No
Schneider Electric PowerLogic Enercept	3020Bxxx	UL Listed	standard not identified	No
Schneider Electric PowerLogic Enercept	3020Exxxx	UL Listed	standard not identified	No

### About Cyber Switching

Headquartered in Silicon Valley, Cyber Switching began pioneering power distribution technologies in 1994. Fueled by an entrepreneurial leadership team and dedicated staff, the company continues to engineer innovative and technically advanced solutions for the rapidly evolving power and energy challenges faced by enterprises of all sizes.