

Application Note: AN-134

March 2016

Accu-CT Compliance to UL 2808 (XOBA)

Background

Until recently, almost all current transformers (CTs) used with electric submeters were certified by Underwriters Laboratories (UL) as Recognized components under the XODW standard, using a subset of the requirements from IEEE C57.13 and CSA 60044-1. The key phrase is "UL Recognized". In theory, the UL Recognized status meant they were not approved for field installation. But there was no other good option, so that was the status quo for over two decades. This was accepted by UL when approving submeters and generally accepted by the building inspector or Authority Having Jurisdiction (AHJ).

UL would grant UL Listing to a submeter for field installation with certain approved UL Recognized CTs. Occasionally, inspectors would request a copy of the conditions of acceptability for the current transformers and discover that Recognized CTs were not approved for field installation, and so would not approve the job.

UL 2808 CT safety standard

The UL 2808 CT safety standard was released by UL in 2012 under category code XOBA. The 2017 Edition of the National Electrical Code (NEC), which is scheduled for publication on Aug. 1, 2016, requires that field installed CTs used to measure current on the service entrance or branch circuit conductors within panelboards, switchboards, industrial control equipment, and energy-monitoring/management equipment, must be XOBA complaint.

This year, the National Fire Protection Association (NFPA) Technical Committee responsible for maintaining the national electric code approved an amendment requiring UL Listed (not UL Recognized) CTs for any installation in circuit breaker panels. This new version of the NEC will be finalized and released late 2016. As the new code is adopted by states and other authorities, only UL Listed CTs will be permitted in circuit breaker panels or related electrical enclosures.

All Accu-CTs now UL Listed to XOBA

The ACT family of high-accuracy split-core current transformers are now all certified by UL to meet the XOBA standard. The newest ACT model, the ACT-1250 Series, has been compliant since its release, and the older UL Recognized ACT-0750 Series, has recently been upgraded and approved as a UL 2808 Listed CT.

We are pleased to announce that now both the ACT-1250 and the new ACTL-0750 are XOBA compliant well before the compliance is mandatory and enforceable. The new ACTL-0750 version is outwardly form, fit and function identical except for the change to 18 AWG lead wires, as required by UL 2808. In addition, there is added internal insulation, and the blue plastic enclosure has a higher temperature rating.

See Also

CT Installation Safety

Current Transformers (CTs) Explained

CT Selection

CT Wire Extension

Measuring Multiple Circuits with One CT

Fitting Multiple Conductors Through a CT

Measuring Parallel Conductors

Paralleling Current Transformers

CT Common Terminals

Current Crest Factor

Current Transformer Crosstalk