



TECHNICAL BULLETIN

UL 1449 TVSS requirements effective February 9, 2007

Background:

- National Electrical Code Article 285.5 requires that Transient Voltage Surge Suppressors be UL Listed.
- Underwriters Laboratories has issued revised product safety listing requirements for UL 1449 Edition 2, Transient Voltage Surge Suppressors (AKA UL 1449 edition 2.5).
- All UL Listed products manufactured after February 9, 2007 are required to meet these new requirements.

What the changes are:

The changes test to ensure that a Transient Voltage Surge Suppressor (TVSS) will not create a fire or shock hazard when exposed to a prolonged AC overvoltage condition. This is done by applying the highest possible system voltage in the worst possible places within the surge suppressor at various intermediate level current levels ranging from 100 to 1000 Amperes. These tests are destructive safety tests, and will place any quality brand of TVSS into conduction, generating sufficient heat to require the action of current interrupt devices within the TVSS to prevent a fire or shock hazard.

What the changes are not:

These tests do not relate to the ability of the TVSS to perform its intended function. UL's basic purpose is product safety testing, not product performance testing. In fact, some manufacturers have chosen to over rely on current fusing techniques in order to meet these requirements, resulting in a greatly reduced maximum surge capacity. Even for units with replaceable fuses, a truck roll may be required and the site equipment will be left unprotected until the TVSS is repaired.

The AC Data Solution:

ACData Solutions does not believe a product needs to fail more often in order to improve safety. Engineers at ACData Solutions Ryan Labs™ have developed a new tri-mode technology integrating a new patent pending anti-arcing system with existing thermal and current fusing mechanisms.

Tri-mode technology ensures:

- ACData Solutions products far exceed the new UL safety requirements.
- ACData Solutions products will continue to exceed maximum surge current capabilities without degradation, failure, or required maintenance.

Your Bottom Line:

- **If you are not yet an ACData Solutions Customer:**
 - The new UL requirements are intended to reduce certain hazardous field failures you may have experienced in the past.
 - You may, however, experience an increased field failure rate due to reduced surge handling capability.
- **For current ACData Solutions customers ... nothing will change.**
 - In our vast field experience, we have never had a product fail in the manner UL is trying to prevent. ACData Solutions applauds UL's efforts to "raise the bar" of product safety to this level for all manufacturers.
 - There is no "post UL" degradation of ACData Solutions product performance or tested surge capacity. ACData Solutions products are tested at Ryan Labs to ensure they meet their full rated surge capability.

For more information on the new UL 2007 requirements, please contact an ACData Account Manager at (800)890-2569 or visit our website at www.acdata.com.