



**THOR SYSTEMS, INC.**  
**SURGE APPS SA-047: UL 1449 4<sup>TH</sup> EDITION UPDATE**  
*(Guidelines and application tools to promote improved Power Quality)*

3621 Saunders Avenue  
 Richmond, VA 23227-4354

**THOR SYSTEMS PRODUCTS**  
**UL 1449 4<sup>th</sup> Edition Surge Protection**

THOR SYSTEMS is pleased to announce that all of its Surge Protective Device (SPD) products fully meet the new American National Standards Institute/Underwriters Laboratories' Standard for Surge Protective Devices (ANSI/UL 1449 – 2015). The new 4<sup>th</sup> Edition standard issued August 20, 2014, which includes revisions through March 26, 2015, is now in effect except for the new sections added to the standard covering Photovoltaic/DC devices. These sections have an effective date of December 30, 2017.

**Ref. Standards:**  
 UL 1449 4<sup>th</sup> Ed.  
 UL 1283 5<sup>th</sup> Ed.  
 C62.41.1: 2002 IEEE  
 C62.41.2: 2002 IEEE  
 C62.45: 2002 IEEE  
 C62.62: 2010 IEEE  
 C62.72: 2007 IEEE  
 NEMA  
 NEC 2014  
 NFPA 70  
 FIPS 94  
 MIL-STD 220A

The main changes from the 3<sup>rd</sup> Edition standard to the new 4<sup>th</sup> Edition concern component assemblies and individual components as well as the new addition of Photovoltaic/DC devices – Supplement SA (sections covering the Scope, Definitions, Type 5 SPD Surge Testing, Type 4 Component Assembly Surge Testing, Metal Oxide Varistor Voltage, Nominal Varistor Voltage, Ratings and Markings) are all included in the changes.



The section of the 4<sup>th</sup> Edition standard falling under the December 30, 2017, effective date is Supplement SA – Photovoltaic (PV) SPDs.

**THOR SYSTEMS was informed of its new 4<sup>th</sup> Edition compliance effective April 15, 2015.**

All Surge Protective Device products covered under THOR SYSTEMS' UL E311522 file – which includes our Series TSr, TSn, and TSac/Compact (pictured at the left) – were deemed compliant with the new 4<sup>th</sup> Edition standard.

**THOR SYSTEMS has also submitted its Residential/Light Commercial SPD for updated testing under the new 4<sup>th</sup> Edition standard.** This product received the Authorization to Apply the UL Mark under the new standard on August 21, 2015.

THOR SYSTEMS, INC. offers a complete product line to meet our customers' needs and now our suppression devices are fully listed under the latest ANSI/UL 1449 4<sup>th</sup> Edition standard. Our products range from service entrances of large facilities to primary and secondary building distribution systems. These systems can include large computer rooms and data processing centers as well as manufacturing process controls, small business computer applications and individual residential surge protection



We would like to become an information resource for your surge protection applications. THOR SYSTEMS offers products and services that provide protection from the more *obvious external* to the more *frequent internal* transient voltage sources.

**Ref. Documents:**  
 SA-001 Why THOR SYSTEMS SPDs  
 SA-002 Bottom Feed SPDs  
 SA-004 Site Risk Assessment/Sizing SPD  
 SA-005 Modular vs. Non-modular  
 AG-09 Features/Benefits  
 SA-003 Case Study/Mfg.

Our consistent focus on improved product performance and increased value to the customer is conveyed by our products' transparent cover enclosures, showcasing the TILE Architecture, Innovative Design Configurations, and per Mode Status Indication.

Should you have any questions, please feel free to contact us (804.355.1100) or visit our Web site, [www.ThorSystems.us](http://www.ThorSystems.us).