
Conforming U.S. and International Safety Standards

Status of the U.S. Adoption of IEC 61730

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Benefits of Harmonization

- Consistency
 - Construction/Design Requirements
 - Test methods
 - Pass/Fail Requirements
- Less need for multiple designs
- Leverages global knowledge
- Allows for local differences



Background

UL 1703

- First Published in 1986
- Developed between UL, US-DOE, NASA-JPL
- Intended to provide guidance for safely adapting space-based power technology into a Earth-based consumer power products
- Established basic construction and material requirements,
- Coordinate installation with U.S. NEC



Background

IEC 61730-1 and -2

- First Published in October, 2004
- Established basic construction, material, and test requirements
- Based on a combination of IEC 61215/61646 and UL 1703
- Second editions are currently under draft by TC82, Working Group 2



Harmonization Process

- Initial Proposal for adoption in the US
 - First proposed in 2005/2006 with National Differences
 - Determination by the UL 1703 STP to move many of the national differences to a second edition of the IEC version
 - Proposed again in 2010
 - An International Harmonization Committee was formed, led by John Wohlgemuth
- Current IEC 2nd edition draft status:
 - Multiple iterations were developed and presented to the Working Group, led by Tim Zgonena and a core team of international contributors
 - Draft was presented in May as a proposed 2nd edition
 - 88 pages of comments were received
 - The draft will be rewritten to address those comments
 - A task group was developed to facilitate the process



Next Steps

- IHC committee maintains the responsibility of determining when the harmonization will occur
- Currently, the IHC is recommending that the second editions of 61730-1 and -2 are used as the basis for the harmonization



Bottom Line

Publish the second edition of the IEC documents!



IEC 2nd Edition Efforts

Task Group met Wednesday and determined:

- 61730-1 Revision Goal - Continue 61730-1 revisions, based on the comments received, to:
 - Incorporate insulation coordination concepts (IEC 60664);
 - Move all test methods to 61730-2;
 - Clarify definitions for module safety (not performance related) requirements for polymer applications (for example, define - contact with live parts);
 - Include material level tests or alternative module level tests
- Established sub-task groups to address:
 - Controversial comments for discussion in Oslo in October
 - Clarify insulation coordination (IEC 60664-1)
 - Communicate and clarify polymeric committee involvement



Thank You!

