Limited-power wire and cable using copper-clad aluminum conductors

UL is pleased to offer a new service for wire and cable manufacturers who source components for use in limited-power applications (0.5mA/15W maximum or 30V/15W maximum)

Wire and Cable Incorporating Copper-Clad Aluminum (CCA) Conductors - Category OWLC2
This new category is designed for cable manufacturers to certify wires using CCA conductors for use in limited-power applications. This provides an additional certification option for wire and cable manufacturers who are looking for a cost-effective, limited evaluation program for products used in very specific applications.

Wires covered under this category are rated a maximum 80C. Any thermoplastic or thermoset insulation and/or jacket may be used. Any construction, including single and multi-conductor, jacketed, integrally insulated and jacketed or insulated conductors may be certified. The copper-clad aluminum (CCA) conductor used in these limited-power cables may be evaluated in the finished product or certified as a Recognized Component copper-clad aluminum conductor material. The wires are evaluated in accordance with the Outline of Investigation SU 2880 for limited-power wire and cable using copper-clad aluminum conductors.

Copper-Clad Aluminum Conductor Material - Category DVVU2
The Outline of Investigation for limited-power wire and cable using copper-clad aluminum conductors includes the requirements for the conductor material. If a Recognized Component copper-clad aluminum conductor material is sourced, several tests may be eliminated from the evaluation of the finished limited-power cable. Using a certified CCA conductor places the responsibility of maintaining a compliant conductor with the manufacturer of the conductor.

Conductor material evaluated under this program meets the tensile strength, elongation, resistivity and copper thickness requirements of ASTM B 566, the standard specification for copper-clad aluminum wire in sizes 36 AWG – 1/0. Two grades are available:
- Class 10A for those annealed conductors with a nominal 10% copper by volume
- Class 15A for those annealed conductors with a nominal 15% copper by volume

Program benefits
- Clear differentiation in the highly competitive market
- Limited test program geared to the limited-power applications
- Gain global market acceptance through well-proven global programs
- Opportunity for product promotion through the new, optional features of UL’s IQ™ Family of Databases
- Address the growing concern of safety and compliance in the consumer electronics industry
- Enhance product traceability and support customers’ global manufacturing and procurement footprint
- Reduce redundant testing, accelerate time-to-market and protect company reputation
- Ensure compliance and reduce liability and risk to all stakeholders in the supply chain
- Build customer trust and brand equity in a sustainable way
- Protect products through our valuable Anti-Counterfeiting Program

Please reach out to your UL representative via UL.com/contactwc for additional information about these service offerings.