

Subject 6703

November 17, 2017

SUMMARY OF TOPICS

The following topic for the Standard for Connectors for Use in Photovoltaic Systems, UL 6703, is being recirculated:

1. Additional Requirements to Allow for AL Conductors of AA-8000 Grade or Higher.

COMMENTS DUE: December 18, 2017

For your convenience in review, proposed additions to the previously proposed standard dated 2017-09-22 are shown underlined and proposed deletions are shown ~~lined-out~~.

1. Additional Requirements to Allow for AL Conductors of AA-8000 Grade or Higher.

RATIONALE

Responses to comments have been posted within the UL 6703 Proposal Review Work Area dated 2017-09-22.

PROPOSAL

5 Current Carrying Parts (Contacts)

5.1 Connectors shall be rated either for the use of Aluminum (AL) with aluminum conductors, or Copper (CU) or dual rated for AL/CU conductors to be used use with copper conductors, or dual-rated for use with either aluminum or copper conductors. The current-carrying parts of a connector shall use material that complies with the Standard for Wire Connectors, UL 486A-486B at the points of electrical contact with the conductor coupling. The current-carrying parts at the points of electrical coupling (i.e., contacts) shall use material that ~~complies with the Standard for Wire Connectors, UL 486A-486B, based on the conductor rating of the connector.~~

~~5.2 Connectors rated for use with aluminum conductors shall have current-carrying parts made of aluminum, tin-plated copper, or brass-plated copper. AL-rated connectors shall only be used with AA-8000 conductors or similar.~~

5.2 Connectors rated for use with aluminum conductors shall only be used with AA-8000 series aluminum alloy conductors that comply with the Standard for Photovoltaic Wire, UL 4703.

~~5.3 CU-rated connectors shall have current-carrying parts made of copper or copper alloy. Current-carrying parts containing more than 15% zinc shall comply with 7.12.3 of the Standard for Wire Connectors, UL 486A-486B.~~

5.3 Connectors rated for use with copper conductors with current carrying parts that contain more than 15% zinc shall comply with 7.12.3 of the Standard for Wire Connectors, UL 486A-486B.

5.4 ~~AL/CU-rated Mated~~ connectors shall ~~have current-carrying parts made of tin-plated both be aluminum-rated, both be copper rated, or brass-plated at least one connector shall be dual-rated for use with aluminum or copper. When used to connect to an aluminum conductor, only type AA-8000 conductors or similar shall be used. conductors. Alternatively, mated connectors that are listed for use with each other shall be permitted, irrespective of their individual conductor rating.~~

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