

STANDARD INFORMATION

Standard: UL 2849

Standard ID: Electrical Systems for eBikes [ANSI/CAN/UL 2849: Ed.1+R:17Jun2022]

Previous Standard ID: Electrical Systems for eBikes [ANSI/CAN/UL 2849:2020 Ed.1]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **June 17, 2024**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes: See 'Standard Information' for a summary of affected clauses.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



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CLAUSE AND COMMENT

More significant technical changes are highlighted.

Added reference to alternative battery standard CSA C22.2 No. 197.2 (6.3, 23.1)

Alignment of pedal cessation test with EN 15194 (41.3)

Clarification that strain relief test also applies to hazardous energy circuit (39.1.1)

Added references to alternate standards for positive temperature coefficient device (6.3, 19.7)

Alignment of dielectric strength test condition (30.2) with 4.11 definition of risk of electric shock

Added tolerance of speed for startup assistance mode test and cutoff at maximum speed test (40.4, 41.5.4)

Clarification of marking requirements (43.1)

Added motor windings Tmax value when measuring temperature with resistance method (Table 28.1)

Updated compliance criteria of impact test and mold stress test (33.5, 34.5)

Added references to additional standards for cables and connectors (6.3, 24.1, 24.2)

Added exceptions to enclosure requirements in accordance with UL 62368-1 / CSA C22.2 No. 62368-1 (13.2.1.2, 17.1)

Revised short circuit test to specify discharge protection/control circuit (32.7.1)

Revised enclosure requirements in accordance with UL 746C (13.2.1.3)

Revised flammability requirements to incorporate requirements of UL 62368-1 / CSA C22.2 No. 62368-1 (17.2)

Revised operator interface requirements to address communication devices (5.3.A, 5.10A, 21)

Revised shock and vibration test requirements to allow testing to CSA C22.2 No. 62133-2 / UL 62133-2 (6.3, 32.9.3, 38.2.3)

Clarification of functional safety requirements (5, 6, 12)

Updated references from CSA C22.2 No. 62133 / UL 62133 to CSA C22.2 No. 62133-1 / UL 62133-1 and CSA C22.2 No. 62133-2 / UL 62133-2 (6.3, 11.1, 11.3)

Added endurance test for the external terminal of a removable battery pack (11.4)