UL 2263A

Outline of Investigation for Electric Vehicle Cable for Use in High Power, DC Systems

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Summary of Topics

This First Issue of UL 2263A, the Outline of Investigation for Electric Vehicle Cable for Use in High Power, DC Systems, dated December 20, 2024 provides the construction and performance requirements for 1500V dc-rated Electric Vehicle Cable.

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INTRODUCTION

1 Scope

1.1 General

1.1.1 This standard specifies the requirements for electric vehicle cables rated 1500V DC intended for permanent connection to Electric Vehicle Supply Equipment (EVSE) for use in accordance with NFPA 70, National Electrical Code (NEC).

1.2 Products included

1.2.1 This standard covers sunlight and oil resistant electric vehicle cables rated 1500V DC, and 60 °C, 75 °C, 90 °C, or 105 °C. These cables may contain data, signal, communications and/or optical fiber cables.

2 Reference Publications

2.1 Any undated reference to a code or standard appearing in the requirements of this Outline shall be interpreted as referring to the latest edition of that code or standard.

2.2 The following publications are referenced in this Standard:

ASTM B3, *Standard Specification for Soft or Annealed Copper Wire*

ASTM B33, *Standard Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes*

NFPA 70, *National Electrical Code*

UL 224, *Extruded Insulating Tubing*

UL 62, *Flexible Cords and Cables*

UL 2556, *Wire and Cable Test Methods*

3 Definitions and Units of Measurement

3.1 Definitions

The following definitions apply in this standard:

3.1.1 **Bunch stranding** – a group of wires twisted together without a predetermined pattern.

3.1.2 **Data, communication, and signal cables** – a complete manufactured assembly of one or more insulated conductors which may also include optical fiber member(s), strength member(s), insulating and protecting material having a continuous overall covering providing electrical, mechanical and environmental protection to the assembly used for transmitting data or signals.

3.1.3 **Direction of lay** – the longitudinal direction, designated as left-hand (counterclockwise) or right-hand (clockwise), in which the wires of a member or units of a conductor run over the top of the member or conductor as they recede from an observer looking along the axis of the member or conductor.

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