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Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations

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Commitment for Amendments

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Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations

21 August 2015
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Preface

In this second printing, the following changes were made.

- In 15.5, Gasket test, the references at the end of the first paragraph and at the end of the last paragraph were corrected from 13.2 to 15.6.
- In Annex C, Suggested warnings with French equivalent, the column of French text (previously missing) was added.

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1 Purpose

The purpose of this standard is to provide minimum requirements for the design, construction, and marking of electrical equipment or parts of such equipment for use in Class I and Class II, Division 2 and Class III, Divisions 1 and 2 hazardous (classified) locations.

This equipment, in normal operation, is not capable of causing ignition of the surrounding atmosphere under the conditions prescribed in this standard, although the equipment may contain electronic components used in an incendive circuit and may also have field wiring that is an incendive circuit.

In addition, it is the intent of this document to establish uniformity in test methods for determining the suitability of the equipment and associated circuits and components as they relate to potential ignition of a specific flammable gas or vapour-in-air mixture, combustible dust, easily ignitable fibers, or flyings.

2 Scope

2.1 Applicable to Class I and II, Division 2 and Class III, Divisions 1 and 2 locations

This standard applies only to equipment, circuits, and components for use in Class I and II, Division 2 and Class III, Divisions 1 and 2 hazardous (classified) locations as defined in the National Electrical Code® (NEC®) ANSI/NFPA 70 or in the Canadian Electrical Code (CEC) CSA C22.1.

NOTE 1 Some equipment designed for use in unclassified locations is permitted by the NEC® or CEC for installation in Division 2 locations. The judgment of acceptability for the installation would be determined by the authority having jurisdiction. Such equipment would not have the hazardous location marking or documentation described in this standard. It is anticipated that such equipment would comply with the other requirements in this standard and that the determination of compliance is elementary (e.g., a nonarcing instrument inside a Type 4 or Type 12 enclosure used in a Class II, Division 2 location).

NOTE 2 Throughout this standard, reference to CAN/CSA C22.2 No. 60079-0 and ANSI/ISA 60079-0 are made as CSA/ISA 60079-0. Similarly reference to CAN/CSA C22.2 No. 60079-1 and ANSI/ISA 60079-1 are made as CSA/ISA 60079-1. Similarly reference to CAN/CSA C22.2 No. 60079-11 and ANSI/ISA 60079-11 are made as CSA/ISA 60079-11. Similarly reference to CAN/CSA C22.2 No. 60079-15 and ANSI/ISA 60079-15 are made as CSA/ISA 60079-15.

NOTE 3 The US and Canadian adoptions of IEC 60079-0, IEC 60079-1, IEC 60079-11 and IEC 60079-15 may be adopted at different revision levels and may have different National Deviations.

2.2 Applicable to associated nonincendive field wiring apparatus

This standard also applies to associated nonincendive field wiring apparatus located in a non-hazardous (unclassified) location specifically designed to directly connect to nonincendive field wiring in Class I and II, Division 2 and Class III, Divisions 1 and 2 hazardous (classified) locations.

NOTE The 2015 CEC does not address nonincendive field wiring circuits in Class II or Class III hazardous locations.