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Examination Standard for Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous (Classified) Locations

Class Number 3610

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Foreword

This standard is intended to verify that the products and services described will meet stated conditions of performance, safety and quality useful to the ends of property conservation. The purpose of this standard is to present the criteria for examination of various types of products and services.

Examination in accordance with this standard shall demonstrate compliance and verify that quality control in manufacturing shall ensure a consistent and reliable product.

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1 INTRODUCTION

1.1 Purpose

- 1.1.1** This standard states testing and certification requirements for intrinsically safe apparatus and associated apparatus.
- 1.1.2** Testing and certification criteria may include, but are not limited to, performance requirements, marking requirements, examination of manufacturing facility(ies), audit of quality assurance procedures, and a surveillance program.

1.2 Scope

- 1.2.1** This standard provides requirements for the construction and testing of electrical apparatus, or parts of such apparatus, whose circuits are incapable of causing ignition in:
- Classes I, II & III, Division 1 hazardous (classified) locations as defined in Article 500 of the National Electrical Code®, ANSI/NFPA-70 (NEC®).
- 1.2.2** This standard is intended to be used in conjunction with FM Approvals Standard 3600, *Electrical Equipment for Use in Hazardous (Classified) Locations – General Requirements*, which includes the general requirements that apply to all types of classified location protection methods.

1.3 Basis for Requirements

See FM Approvals Standard 3600.

1.4 Basis for Certification

See FM Approvals Standard 3600.

1.5 Basis for Continued Certification

See FM Approvals Standard 3600.

1.6 Effective Date

The effective date of this certification standard mandates that all products tested for certification after the effective date shall satisfy the requirements of this standard.

The effective date of this standard is eighteen (18) months after the publication date of the standard for compliance with all requirements.

1.7 System of Units

Units of measurement used in this Standard are United States (U.S.) customary units. These are followed by their arithmetic equivalents in International System (SI) units, enclosed in parentheses. The first value stated shall be regarded as the requirement. The converted equivalent value may be approximate. Conversion of U.S. customary units is in accordance with ANSI/IEEE/ASTM SI 10.