

Approval Standard

Electrical Equipment
for Use in
Hazardous (Classified)
Locations –
General Requirements

Class Number 3600
December 2011



Approval Standard for Electrical Equipment for Use in Hazardous (Classified) Locations - General Requirements

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Foreword

The FM Approvals certification mark is intended to verify that the products and services described will meet FM Approvals' stated conditions of performance, safety and quality useful to the ends of property conservation. The purpose of Approval Standards is to present the criteria for FM Approval of various types of products and services, as guidance for FM Approvals personnel, manufacturers, users and authorities having jurisdiction.

Products submitted for certification by FM Approvals shall demonstrate that they meet the intent of the Approval Standard, and that quality control in manufacturing shall ensure a consistently uniform and reliable product. Approval Standards strive to be performance-oriented. They are intended to facilitate technological development.

For examining equipment, materials and services, Approval Standards:

- a) must be useful to the ends of property conservation by preventing, limiting or not causing damage under the conditions stated by the Approval listing; and
- b) must be readily identifiable.

Continuance of Approval and listing depends on compliance with the Approval Agreement, satisfactory performance in the field, on successful re-examinations of equipment, materials, and services as appropriate, and on surveillance audits of the manufacturing facility.

FM Approvals LLC reserves the right in its sole judgment to change or revise its standards, criteria, methods, or procedures.

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1 INTRODUCTION

1.1 Purpose

This standard identifies the basis for Approval of electrical equipment for use in hazardous (classified) locations.

1.2 Scope

This standard is used in conjunction with the following other standards and standards listed in Paragraph 2.3:

Note: In the event of a conflict between the requirements of this general standard and one of the following specific standards, the requirements of the specific standard shall take precedence.

1.2.1 The following standards are applicable to electrical equipment for Class I, II, or III, Division 1 or 2 hazardous (classified) locations.

Table 1 - Standards for “Divisions”

<i>Standard No.</i>	<i>Standard Title</i>
3610	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1 Hazardous (Classified) Locations
3611	Electrical Equipment for Use in Class I, Division 2; Class II, Division 2; and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
3613	Electric Flashlights and Lanterns for Use in Class I, II, and III, Division 2, Hazardous (Classified) Locations
3615	Explosionproof Electrical Equipment
3616	Dust-Ignitionproof Electrical Equipment
3620 (ANSI/NFPA 496)	Purged and Pressurized Electrical Equipment
6310/6320	Combustible Gas Detectors

1.2.2 The following standards are applicable to electrical equipment for Class I, Zone 0, 1, or 2 hazardous (classified) locations.

Table 2 – Standards for “Zones”

<i>Standard No.</i>	<i>Standard Title</i>
ANSI/ISA 60079-0	Explosive atmospheres – Part 0: Equipment – General Requirements
ANSI/ISA 60079-1	Explosive Atmospheres – Part 1: Equipment protection by flameproof enclosures “d”
ANSI/ISA 60079-2	Explosive Atmospheres – Part 2: Equipment protection by pressurized enclosures “p”
ANSI/ISA 60079-5	Electrical Apparatus for Use in Class I, Zone 1 Hazardous (Classified) Locations. Type of Protection Powder Filling “q”.
ANSI/ISA 60079-6	Electrical Apparatus for Use in Class I, Zone 1 Hazardous (Classified) Locations. Type of Protection Oil Immersion “o”.