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UL 1836

**Outline of Investigation for Electric Motors and Generators for Use in Class
I, Division 2, Class I, Zone 2, Class II, Division 2 and Zone 22 Hazardous
(Classified) Locations**

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Summary of Topics

This Fifth issue of the Outline of Investigation for Electric Motors and Generators for Use in Class I, Division 2, Class I, Zone 2, Class II, Division 2 and Zone 22 Hazardous (Classified) Locations, UL 1836, is being published to include revisions to Annex A.

Both the third and fifth issues are active and effective on their date of publication. The fifth issue includes harmonization with the UL 1004-1 series of standards. As such, there is no requirement to revise motors currently certified to issue three.

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Motor Bearing Sparking - Discharge Energy Calculation

INTRODUCTION

1 Scope

1.1 These requirements cover electric motors and generators for use in hazardous (classified) locations in accordance with the National Electrical Code, NFPA 70, as follows:

- Class I, Division 2;
- Class I, Zone 2;
- Class II, Division 2;
- Class III, Division 1 and 2; and
- Zone 22.

1.2 These requirements cover both horizontal and vertical machines that have fractional and integral horsepower ratings.

1.3 These requirements do not cover intrinsically safe motors.

2 General

2.1.1 When the term “motor” is employed in the following text, it is understood that the requirement also applies to a generator.

3 Components

3.1 Except as indicated in 3.2, a component of a product covered by this Outline of Investigation shall comply with the requirements for that component.

3.2 A component is not required to comply with a specific requirement that:

- a) Involves a feature or characteristic not required in the application of the component in the product covered by this Outline of Investigation; or
- b) Is superseded by a requirement in this Outline of Investigation.

3.3 A component shall be used in accordance with its rating established for the intended conditions of use.

3.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.