P1349

Submitter Email: paddeneng@aol.com
Type of Project: Modify Existing Approved PAR
PAR Request Date: 01-Oct-2010
PAR Approval Date: 08-Dec-2010
PAR Expiration Date: 31-Dec-2011
Status: Modification to a Previously Approved PAR for the Revision of a Standard
Root PAR: P1349 **Approved on:** 04-Mar-2005
Root Project: 1349-2001

1.1 Project Number: P1349
1.2 Type of Document: Guide
1.3 Life Cycle: Full Use

2.1 Title: Guide for Application of Electric Motors in Class I, Division 2 and Class I, Zone 2 Hazardous (Classified) Locations

3.1 Working Group: Motors in Hazardous Locations Working Group (IAS/PCI/1349_WG)
Contact Information for Working Group Chair
Name: Lorraine Padden
Email Address: paddeneng@aol.com
Phone: 281-579-6550
Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Industry Applications Society/Petroleum & Chemical Industry (IAS/PCI)
Contact Information for Sponsor Chair
Name: William McBride
Email Address: wille.mcbridepe@ieee.org
Phone: 907 346-1381
Contact Information for Standards Representative
None

4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 12/2010
4.3 Projected Completion Date for Submittal to RevCom: 08/2011

5.1 Approximate number of people expected to be actively involved in the development of this project: 38

5.2 Scope: Three-phase and single-phase AC synchronous and induction electric motors in ratings 0.18 kW (1/4 hp) and larger are covered in this Guide. Primary emphasis is on the use of open or nonexplosionproof or nonflameproof enclosed motors in Class I, Division 2 and Class I, Zone 2 locations as covered in NFPA 70-2011. Surface temperature test methods and sine wave and non-sine wave applications are covered. Precautions against excessive surface temperatures and sparking are included. To mitigate hot surface temperatures and sparking, this document provides guidance for selecting, operating, and maintaining motors in Class I, Division 2 and Class I, Zone 2 locations.This Guide does not cover AC wound rotor motors and DC electric motors. Motors installed in locations other than Class I, Division 2 and Class I, Zone 2 as covered in NFPA 70-2011 are not covered in this Guide. This document is not a specification and is not intended to be used as a specification for purchasing motors. The voltage breaks in this document are 1000 V and less, and over 1000 V.

Old Scope: Three-phase and single-phase AC synchronous and induction electric motors in fractional ratings 0.18 kW (1/4 hp) and larger are covered in this Guide. Primary emphasis is on the use of open or nonexplosionproof or nonflameproof enclosed motors in Class I, Division 2 and Class I, Zone 2 locations as covered in NFPA 70-2005. Precautions against excessive surface temperatures and sparking of rotor bars and enclosure joints are also covered. This document also provides guidance for maintaining the life-cycle integrity of motors in Class I, Division 2 and Class I, Zone 2 locations as covered in NFPA 70-2005. This Guide does not cover AC wound rotor motors and DC electric motors. Motors installed in locations other than Class I, Division 2 and Class I, Zone 2 as covered in NFPA 70-2005 are not covered in this Guide. This document is not a specification and is not intended to be used as a specification for purchasing motors. The voltage breaks in this document are 1000 V and less, and over 1000 V.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: Existing codes and standards contain cautionary notes for open or nonexplosionproof or nonflameproof enclosed motors in Class I, Division 2 and Class I, Zone 2 locations as covered in NFPA 70-2011. This Guide documents industry experience and established practices and provides guidance for applying motors in these locations.

Old Purpose: Existing codes and standards contain cautionary notes for open or nonexplosionproof or nonflameproof enclosed motors in Class I, Division 2 and Class I, Zone 2 locations as covered in NFPA 70-2005. This Guide documents industry experience and established practices and provides guidance for applying motors in these locations.

5.5 Need for the Project: The existing Guide should be updated in general which will include up-to-date application practices, update reference standards, add Class I, Zone 2 to the Scope, expand the information on adjustable speed drive applications, include new motor data, and bring the entire document up to current standards. This information will mainly be used in the petrochemical industry by users, manufacturers, and designers for applying motors in hazardous locations.

5.6 Stakeholders for the Standard: petrochemical industry

Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: Yes
If yes please explain: NFPA excerpts are used in the Guide and copyright permissions will need to be updated for the revised Guide. Photos have copyright permission for the revised Guide.

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

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7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
Is it the intent to develop this document jointly with another organization?: No
7.3 International Activities
a. Adoption
Is there potential for this standard (in part or in whole) to be adopted by another national, regional or international organization?: No
b. Harmonization
Are you aware of another organization that may be interested in portions of this document in their standardization development efforts?: No

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8.1 Additional Explanatory Notes (Item Number and Explanation): The orginal PAR used NFPA 70-2005. The new PAR references the updated document NFPA 70-2011 which was published in September 2010.
The Scope term "life-cycle integrity" was replaced with more commonly used terminolgy and the sentence structure was improved.