1. Record Nr. UNISA996574879403316 1349-2021: IEEE Guide for the Application of Electric Machines in Zone **Titolo** 2 and Class I, Division 2 Hazardous (Classified) Locations / / Institute of **Electrical and Electronics Engineers** New York, NY, USA:,: IEEE,, 2021 Pubbl/distr/stampa **ISBN** 1-5044-7722-7 Descrizione fisica 1 online resource (211 pages) Disciplina 621.313 Soggetti Electric machines Electric motors, Direct current Electric current converters Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Three-phase and single-phase ac synchronous and induction electric Sommario/riassunto machines in ratings 0.18 kW (1/4 hp) and larger are covered in this guide. Primary emphasis is on the use of open or nonexplosion proof or nonflameproof enclosed machines in Zone 2 and Class I. Division 2 locations as covered in the NEC(R) (NFPA 70-2020) and CE Code(R) (CSA C22.1-2021) as applicable. Surface temperature test methods and sine wave and non-sine wave applications are covered. Precautions against excessive surface temperatures and sparking are included. To help mitigate hot surface temperatures and sparking, this document provides guidance for selecting, operating, and maintaining machines in Zone 2 and Class I, Division 2 locations. This guide does not cover ac wound rotor machines and dc electric machines. Machines installed in locations other than Zone 2 and Class I, Division 2 as covered in NFPA 70-2020 or CSA C22.1-2021 are not covered in this guide. This document is not a specification and is not intended to be used as a

specification for purchasing electric machines. The voltage breaks in

this document are 1000 V and less, and over 1000 V.