SA/SNZ TS IEC 60079.42:2022
IEC TS 60079-42:2019

Technical Specification

Explosive atmospheres

Part 42: Electrical safety devices for the control of potential ignition sources for Ex-Equipment

SA/SNZ TS IEC 60079.42:2022

This Joint Australian/New Zealand Technical Specification was prepared by Joint Technical Committee EL-014, Equipment for Explosive Atmospheres. It was approved on behalf of the Council of Standards Australia on 04 February 2022 and by the New Zealand Standards Executive on 02 February 2022.

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Preface

This Technical Specification was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres.

The objective of this document is to provide guidance for equipment manufacturers where electrical safety devices are used to reduce the likelihood of potential ignition sources becoming effective in Ex Equipment located in Explosive Atmospheres. Electrical safety devices perform a safety function to control potential ignition sources from both, electrical and non-electrical Ex Equipment in explosive atmospheres.

This document may also be applied to a combination of elements performing a safety function, for example sensor, logic system or final element. This document can also be used for assessing the safety device independently, without being designed for a specific Ex Equipment.

This document does not apply to —

(a) mechanical control equipment such as pressure relief valves, mechanical governors, and other mechanical safety devices;

(b) the use

(c) control equipment to prevent the occurrence of explosive atmospheres, e.g. inerting systems and ventilation systems; or

(d) mitigation of an explosion.

This document is intended for manufacturers and suppliers; the end user may elect to apply other standards such as IEC 61508 series or AS IEC 61511 series for safety devices and controls. Manufacturer's validation frequencies are considered as a guideline.

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