

AS/NZS IEC 60079.31:2023
IEC 60079-31:2022



Australian/New Zealand Standard™

Explosive atmospheres

Part 31: Equipment dust ignition protection by enclosure "t"



AS/NZS IEC 60079.31:2023

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres to supersede AS/NZS 60079.31:2014.

The objective of this document is to specify requirements for design, construction and testing of Ex Equipment and Ex Components, and is applicable to equipment protected by enclosure and surface temperature limitation for use in explosive dust atmospheres.

This document supplements and modifies the general requirements of AS/NZS IEC 60079-0. Where a requirement of this document conflicts with a requirement of AS/NZS IEC 60079-0, the requirement of this document takes precedence.

This document does not apply to dusts of explosives, which do not require atmospheric oxygen for combustion, or to pyrophoric substances.

This document does not apply to Ex Equipment or Ex Components intended for use in underground parts of mines as well as those parts of surface installations of such mines endangered by firedamp and/or combustible dust.

This document does not take account of any hazard due to an emission of flammable or toxic gas from the dust.

This document does not contain requirements for Ex Equipment used in areas where both combustible dust and explosive gas atmospheres can occur, whether simultaneously or separately. Requirements for explosive gas atmospheres can be found in other parts of the IEC 60079 series. Guidance on Ex Equipment to be used where combustible dust and explosive gas atmospheres occur simultaneously ("hybrid mixtures") can be found in AS/NZS 60079.14.

Where the Ex Equipment has to meet other environmental conditions, for example, protection against ingress of water and resistance to corrosion, additional measures which do not adversely affect the integrity of the enclosure can be necessary.

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EXPLOSIVE ATMOSPHERES –

Part 31: Equipment dust ignition protection by enclosure "t"

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