

(PREVIEW)

Indian Standard

EXPLOSIVE ATMOSPHERES

PART 1 EQUIPMENT PROTECTION BY FLAMEPROOF ENCLOSURES “d”

1 Scope

This part of IEC 60079 contains specific requirements for the construction and testing of electrical equipment with the type of protection flameproof enclosure “d”, intended for use in explosive gas atmospheres,

This standard supplements and modifies the general requirements of IEC 60079-0. Where a requirement of this standard conflicts with a requirement of IEC 60079-0, the requirement of this standard will take precedence.

NOTE- Equipment protection by flameproof enclosures “d provides Equipment Protection Level (EPL) Gb. For further information, see Annex G.

2 Normative references

The following referenced documents are indispensable for the application of this document, For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60061 (all parts), *Lamp caps and holders together with gauges for the control of interchangeability and safety*

IEC 60079-0:2004, *Electrical apparatus for explosive gas atmospheres – Part 0: General requirements*

IEC 60079-1-1, *Electrical apparatus for explosive gas atmospheres – Part 1-1: Flameproof enclosures “d” – Method of test for ascertainment of maximum experimental safe gap*

IEC 60079-7, *Explosive atmospheres – Part 7: Equipment protection by increased safety ‘e’*

IEC 60079-11, *Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i”*

IEC 60079-14:2002, *Electrical apparatus for explosive gas atmospheres - Part 14,” Electrical installations in hazardous areas (other than mines)*

IEC 60086-1:2000, *Primary batteries – Part 1: General*

IEC 60112, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60127 (all parts), *Miniature fuses*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

IEC 60623:2001, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Vented nickel-cadmium prismatic rechargeable single cells*

IEC 60662:1980, *High-pressure sodium vapour lamps*

IEC 60695-11-10, *Fire hazard testing – Part 11-10: Test flames – 50 W horizontal and vertical flame test methods*

IEC 61951-1:2003, *Secondary cells and batteries containing alkaline or other electrolytes – Portable sealed rechargeable single cells – Part 1 : Nickel-cadmium*

IEC 61951-2:2003, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable sealed rechargeable single cells - Part 2: Nickel-metal hydride*

ISO 185 1988, *Gray cast iron'- Classification*

ISO 965-1:1998, *ISO general-purpose metric screw threads – Tolerances – Part 1: Principles and basic data*

ISO 965-3:1998, *ISO general-purpose metric screw threads – Tolerances – Part 3' Deviations for constructional threads*

ISO 2738:1999, *Sintered metal materials, excluding hard metals - Permeable sintered metal/ materials – Determination of density, oil content and open porosity*

ISO 3864: 1984, *Safety colours and safety signs*

ISO 4003:1977, *Permeable sintered metal materials - Determination of bubble test pore size*

ISO 4022:1987, *Permeable sintered metal materials – Determination of fluid permeability*

ANSI/ASME B1.20.1 -1983 (R2001), *Pipe threads, genera/ purpose (inch)*