

(PREVIEW)

## *Indian Standard*

### **EXPLOSIVE ATMOSPHERES**

#### **PART 5 EQUIPMENT PROTECTION BY POWDER FILLING “q”**

##### **1 Scope**

This part of IEC 60079 contains specific requirements for the construction, testing and marking of electrical equipment, parts of electrical equipment and Ex components in the type of protection powder filling "q", intended for use in explosive gas atmospheres.

NOTE 1 Electrical equipment and Ex components protected by powder filling "q" may contain electronic circuits, transformers, protection fuses, relays, intrinsically safe electrical apparatus, associated electrical apparatus switches, etc.

NOTE 2 Type of protection powder filling "q" provides equipment protection level (EPL) Gb. For further information, see Annex A. .

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.

This standard applies to electrical equipment, parts of electrical equipment and Ex components with:

- a rated supply current less than or equal to 16 A;
- a rated supply voltage less than or equal to 1 000 V;
- a rated power consumption less than or equal to 1 000 W.

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

IEC 60079-1, *Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure “d”*

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

ISO 3310-1 , *Test sieves - Technical requirements and testing - Part 1: Test sieves of metal wire cloth .*

ISO 3310-2, *Test sieves - Technical requirements and testing - Part 2: Test sieves of perforated plates*

ISO 2591-1, *Test sieving - Methods using test sieves of woven wire cloth and perforated metal plate*