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National Standard of the People's Republic of China

中华人民共和国国家标准

GB 3836.2—2010

Replace GB 3836.2—2000

**Explosive Atmospheres—
Part 2: Equipment Protection by Flameproof
Enclosures “d”**

爆炸性环境 第2部分：由隔爆外壳“d”保护的设各

(IEC 60079-1:2007, MOD)

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Foreword

All technical contents of this part are compulsory.

GB 3836 “Explosive Atmospheres” is divided into several parts:

- Part 1: Equipment—General Requirements;
- Part 2: Equipment Protection by Flameproof Enclosures “d”;
- Part 3: Equipment Protection by Increased Safety “e”;
- Part 4: Equipment Protection by Intrinsic Safety “i”;
- Part 5: Pressurized Enclosures “p”;
- Part 6: Oil-immersion “o”;
- Part 7: Power Filling “q”;
- Part 8: Type of Protection “n”;
- Part 9: Encapsulation “m”;
- Part 11: Method of Test for Ascertainment of Maximum Experimental Safe Gap;
- Part 12: Classification of Gases or Vapours with Air according to Their Maximum Experimental Safe Gaps and Minimum Igniting Current
- Part 13: Repair and Overhaul for Apparatus Used in Explosive Gas Atmospheres;
- Part 14: Classification of Hazardous Areas;
- Part 15: Electrical Installations in Hazardous Areas (other than Mines);
- Part 16: Inspection and Maintenance of Electrical Installation (other than Mines);
- Part 17: Construction and Use of Rooms or Buildings Protected by Pressurization;
- Part 18: Intrinsically Safe System;
- Part 19: Fieldbus Intrinsically Safe Concept (FISCO);
- Part 20: Equipment with Equipment Protection Level (EPL) Ga.

This part is part 2 of GB 3836 series and corresponding to IEC 60079-1:2007 “Explosive Atmospheres—Part 1: Equipment Protection by Flameproof Enclosures “d” (English edition).

This part is modified in relation to IEC 60079-1:2007.

Main difference between this part and IEC 60079-1:2007 is as follows:

Add Appendix F (Normative) “Supplementary Provisions for Electrical Equipment of Group I” and consider the relevant requirements of IEC 60079-1 Ed.7.0 CD, 15.1.2.

This part replaces GB 3836.2–2000 “Electrical Apparatus for Explosive Gas Atmospheres—Part 2: Flameproof enclosure “d”.

Explosive Atmospheres—

Part 2: Equipment Protection by Flameproof Enclosures “d”

1 Scope

This part of GB 3836 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 part supplements and modifies the general requirements of GB 3836.1–2010. Where a requirement of this part conflicts with a requirement of GB 3836.1–2010, the requirement of this part will take precedence.

Note: Equipment protection by flameproof enclosures “d” provides Equipment Protection Level (EPL) Gb. For further information, see Appendix H.

2 Normative References

The following standards contain provisions which, by reference in this part of GB 3836, constitute provisions of this part. For dated reference, subsequent amendments to (excluding correction to), or revisions of, any of these publications do not apply. However, all parties coming to an agreement according to this part are encouraged to study whether the latest edition of these documents is applicable. For undated references, the latest edition of the normative document is applicable to this part.

GB/T 197–2003 “General Purpose Metric Screw Threads—Tolerances” (ISO 965-1:1998, MOD)

GB 755–2008 “Rotating Electrical Machines—Rating and Performance” (IEC 60034-1:2004, IDT)

GB/T 2516–2003 “General Purpose Metric Screw Threads—Limit Deviations” (ISO 965-3:1998, MOD)

GB 2893–2001 “Safety Colours” (neq ISO 3864:1984)

GB 2894–2008 “Safety Signs and Guideline for the Use”

GB/T 2900.35–2008 “Electrotechnical Terminology—Electrical Apparatus for Explosive Atmospheres” (IEC 60050 (426):2008, IDT)

GB 3101–1993 “General Principles Concerning Quantities, Units and Symbols” (eqv ISO 31-0:1992)

GB 3836.1–2010 “Explosive Atmospheres—Part 1: Equipment-General Requirements” (IEC 60079-0:2007, MOD)

GB 3836.3–2010 “Explosive Atmospheres—Part 3: Equipment Protection by Increased Safety e” (IEC 60079-7:2006, IDT)

GB 3836.4–2010 “Explosive Atmospheres—Part 4: Equipment Protection by Intrinsic Safety i” (IEC 60079-11:2006, MOD)



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