

ICS 29.260.20

K 35



**NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC
OF CHINA**

中华人民共和国国家标准

GB 3836.9-2006/IEC 60079-18: 2004

Replace GB 3836.9-1990

**Electrical apparatus for explosive gas
atmospheres—Part 9: Encapsulation “m”**

爆炸性气体环境用电气设备

第 9 部分：浇封型 “m”

(IEC 60079-18: 2004, IDT)

Issued on December 01, 2006

Implemented on June 01, 2007

**Issued by General Administration of Quality Supervision, Inspection
and Quarantine of the People's Republic of China**

**Standardization Administration of the People's Republic of
China**

Contents

Foreword.....	1
1 Scope	4
2 Normative references	4
3 Terms and definitions	6
4 General	8
5 Requirements for compounds	9
6 Temperatures	10
7 Constructional requirements	11
8 Type tests	28
9 Routine verifications and tests	33
10 Marking	34
Annex A (Informative) Basic requirements for compounds for “m” apparatus.....	35
Annex B (Normative) Allocation of test samples	36
Annex C (Normative) Test procedure during thermal cycling test	37

Foreword

All the technical contents in this part are mandatory.

GB3836 *Electrical Equipment Used in the Explosive Gas Environment* is divided into several parts:

- Part 1: General requirements;
- Part 2: Flame-proof type “d”
- Part 3: Increased-safety type “e”
- Part 4: Intrinsically safe type “i”;

This part is part 9 of GB3836, equivalent to IEC 60079-18:2004 (version 2)

For IEC60079-18:2004, this part made the following editorial changes:

- It deleted the foreword of IEC 60079-18:2004;
- It added the foreword of the National Standard.

This part replaced GB 3836.9—1990 *Electrical Equipments Used in Explosive Gas Environment-Part 9: Encapsulated Electrical Equipment “m”*

This part mainly has the following changes in comparison with GB 3836.9 -1990:

—A normative annex (Annex B: sample distribution) and an informative annex (Annex A: basic requirements on compounds for “m” equipment) are added on the basis of IEC60079-18:2004 (Version 2); Annex C (normative annex) in this section replaces Annex A.

—In normative reference documents, GB 9364 (in its entirety), GB/T1408.1—1999, GB /T16935.1 —1997, GB 9816 —1998, GB/T 17571 —1998, ANSI/UL 248-1 and other contents are added;

—In aspect of “Terms and Definitions”, terms such as “Free Surface”, “Normal Operation”, “Void”, “Free Space”, “Switching Contact” are added and terms such as

Electrical apparatus for explosive gas atmospheres—Part 9: Encapsulation “m”

1 Scope

This part gives the specific requirements for the construction, testing and marking of electrical apparatus, parts of electrical apparatus and Ex components with the type of protection encapsulation “m”.

This part only applies for encapsulated electrical apparatus, encapsulated parts of electrical apparatus and encapsulated Ex components (hereinafter always referred to as “m” apparatus) where the rated voltage does not exceed 10 kV with a relative tolerance of 10 %.

This part supplements the general requirements in GB 3836.1.

2 Normative references

The articles contained in the following documents have become this part of GB 3836 when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this part.

GB/T 1408.1-2006 Electrical strength of insulating materials - Test methods - Part 1: Tests at power frequencies (IEC 60243-1: 1998, IDT)

GB 3836.1-2000 Electrical apparatus for explosive gas atmospheres--Part 1: General requirements (eqv IEC 60079-0: 1998)

GB 3836.3-2000 Electrical apparatus for explosive gas atmospheres--Part 3: Increased safety (eqv IEC 60079-7:1990)

GB 3836.4-2000 Electrical apparatus for explosive gas atmospheres--Part 4: Intrinsic safety (eqv IEC 60079-11:1999)

完整版本请在线下单/Order Checks Online for Full Version

联系我们/or Contact :

TEL: 400-678-1309

QQ: 19315219 | Skype: Lancarver

Email : info@lancarver.com

<http://www.lancarver.com>

线下付款方式 :

I. 对公账户 :

单位名称 : 北京文心雕语翻译有限公司

开户行 : 中国工商银行北京清河镇支行

账 号 : 0200 1486 0900 0006 131

II. 支付宝账户 : info@lancarver.com

III. Paypal: info@lancarver.com

注: 付款成功后, 请预留电邮, 完整版本将在一个工作日内通过电子 PDF 或 Word 形式发送至您的预留邮箱, 如需索取发票, 下单成功后的三个工作日内安排开具并寄出, 预祝合作愉快!

NOTE All documents on the store are in electronic Adobe Acrobat PDF format, there is not sell or ship documents in hard copy. Mail the order and payment information to info@lancarver.com, you will shortly receive an e-mail confirming your order.

