



防爆合格证

证号: GYJ14.1320

由 德国PEPPERL+FUCHS有限公司

制造的产品:

(地址: Lilienthalstrasse 200, 68307 Mannheim, Germany)

名称 隔离式安全栅

型号规格 KF-D-Ex1.0/7

防爆标志 [Ex ia Ga] IIC

产品标准 /

图样编号 见附件

经图样及技术文件的审查和样品检验, 确认上述产品符合 GB 3836.1-2010、GB 3836.4-2010、GB 3836.20-2010 标准, 特颁发此证。

本证书有效期: 2014年8月5日至2019年8月4日

备注 1. 安全使用注意事项见本证书附件。
2. 本安电气参数见本证书附件。

站长

国家级仪器仪表防爆安全监督检验站

颁发日期 二〇一四年八月五日

本证书仅对与认可文件和样品一致的产品有效。

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EXPLOSION PROTECTION

CERTIFICATE OF CONFORMITY

Cert NO.GYJ14.1320

This is to certify that the product

Isolated Barrier

manufactured by PEPPERL+FUCHS GmbH

(Address:Lilienthalstrasse 200, 68307 Mannheim, Germany)

which model is KF-D-Ex1

Ex marking [Ex ia Ga] II C

product standard /

drawing number See attachment

has been inspected and certified by NEPSI, and that it conforms to GB 3836.1-2010,GB 3836.4-2010,GB 3836.20-2010

This Approval shall remain in force until 2019.08.04

Remarks 1. Conditions for safe use are specified in the attachment to this certificate.
2. Intrinsically safe electrical parameters are specified in the attachment to this certificate.

Director

National Supervision and Inspection Centre for
Explosion Protection and Safety of Instrumentation

Issued Date 2014.08.05

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

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国家级仪器仪表防爆安全监督检验站

National Supervision and Inspection Centre for
Explosion Protection and Safety of Instrumentation

(GYJ14.1320)

(Attachment I)

GYJ14.1320防爆合格证附件 I

德国PEPPERL+FUCHS有限公司生产的KFa-D_b-Ex1.c d 系列隔离式安全栅，经国家级仪器仪表防爆安全监督检验站（NEPSI）检验，符合下列标准要求：

GB3836.1 - 2010 爆炸性环境 第1部分：设备 通用要求

GB3836.4 - 2010 爆炸性环境 第4部分：由本质安全型“i”保护的的设备

GB3836.20 - 2010 爆炸性环境 第20部分：设备保护级别（EPL）为Ga级的设备
产品防爆标志为[Ex ia Ga] IIC，防爆合格证号为GYJ14.1320。

一、产品使用注意事项

1. 本证书认可产品的具体型号如下：

KFa - D_b - Ex1.c d

a 代码：包括U8、D2、A5和A6；

b 代码：包括U、WB；

c 代码：备选项为D；

d 代码：包括485代码。

2. 隔离式安全栅必须安装在安全场所，使用环境温度为-20℃~+60℃。

3. 隔离式安全栅的非本安端子电气参数：

接线端子代号	最高电压 Um
23-24	250V (KFU8)
	250V (KFA5)
	250V (KFA6)
	40V (KFD2)
PR1-PR2	40V (KFD2)
10-11-12, 16-17-18	250V
13-14	40V
19-20	40V
PR4	40V
RS485接口 (PR3-PR5)	40V

4. 隔离式安全栅本安端子（1-3或4-6）电气参数：

最高输出电压 Uo (V)	最大输出电流 Io (mA)	最大输出功率 Po (mW)	内部等效参数	
			Ci(μ F)	Li(mH)
10.1	13.5	34	0	0

气体组别	最大外部分布参数	
	Co (μF)	Lo (mH)
II C	2.87	195
II B	19.4	730
II A	93	1000

气体组别	最大外部集中参数	
	Co (μF)	Lo (mH)
II C	0.4	5
II B	1.5	10
II A	3.0	20

5. 产品的安装、使用和维护应同时遵守产品说明书、GB3836.13 - 1997“爆炸性气体环境用电气设备 第13部分：爆炸性气体环境用电气设备的检修”、GB3836.15 - 2000“爆炸性气体环境用电气设备 第15部分：危险场所电气安装（煤矿除外）”、GB3836.16 - 2006“爆炸性气体环境用电气设备 第16部分：电气装置的检查和维护（煤矿除外）”和GB50257 - 1996“电气装置安装工程爆炸和火灾危险环境 电气装置施工及验收规范”的有关规定。

二、制造厂责任

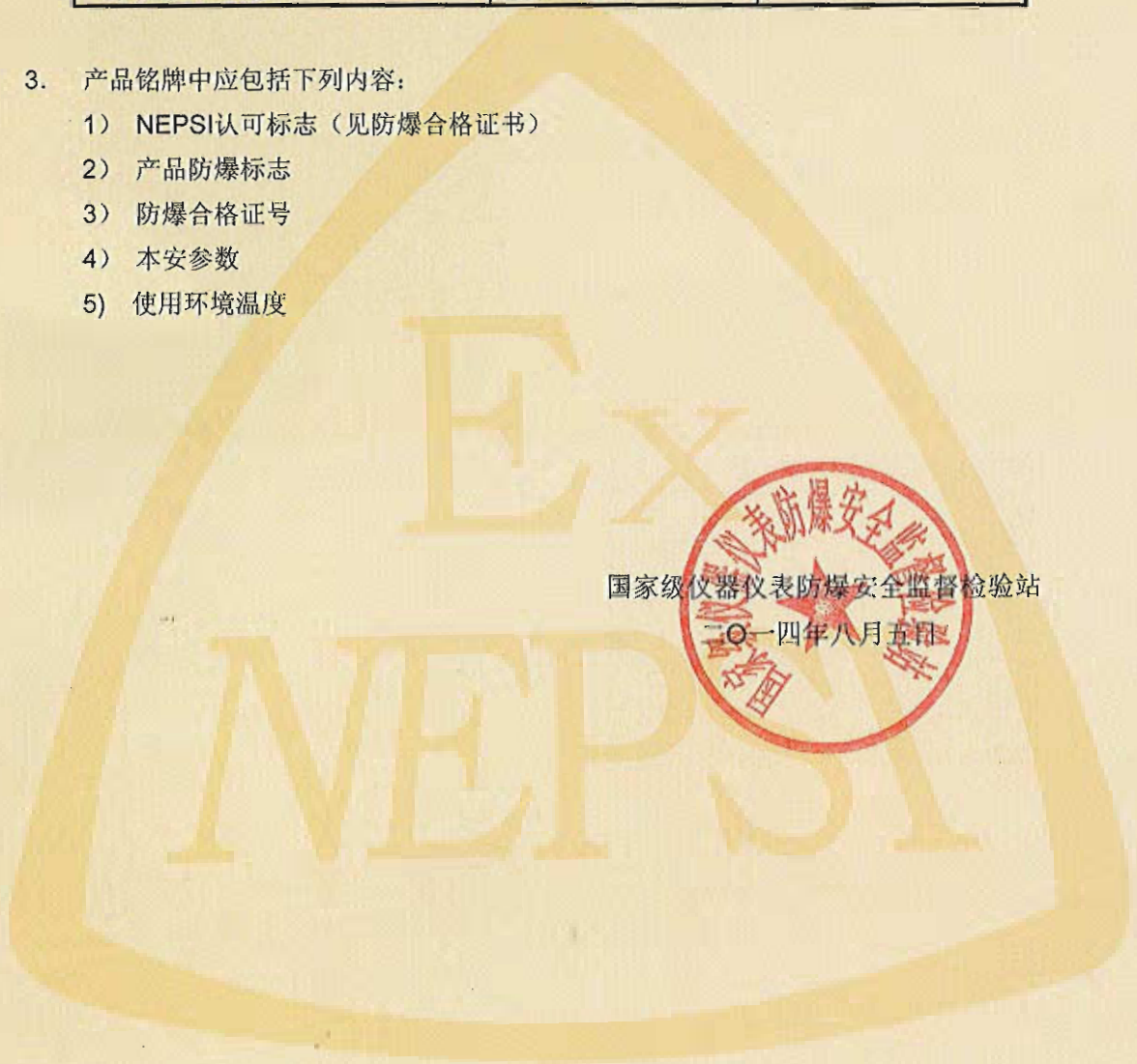
1. 产品制造厂必须将上述使用注意事项纳入上述系列隔离式安全栅使用说明书。
2. 制造厂必须严格按照NEPSI认可的文件资料生产：

图纸代号	版本号/签署日期	备注
16-538TV-00	2006.09.08	-
16-538TV-00C	2009.07.08	-
16-538TV-01C	2009.07.30	-
16-538TV-02	2006.09.05	-
16-538TV-03C	2009.07.30	-
16-538TV-04	2006.04.04	-
16-538TV-05C	2009.07.30	-
16-538TV-06	2006.05.09	-

16-538TV-07	2006.06.30	-
16-538TV-09C	2009.07.30	-
16-538TV-10C	2009.07.30	-
16-538TV-11C	2009.07.30	-

3. 产品铭牌中应包括下列内容:

- 1) NEPSI认可标志 (见防爆合格证书)
- 2) 产品防爆标志
- 3) 防爆合格证号
- 4) 本安参数
- 5) 使用环境温度



国家级仪器仪表防爆安全监督检验站

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

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(Attachment I)

Attachment I (Translation)

Isolated safety barrier type KF**a** -D**b** -EX1.**c d** manufactured by PEPPERL+Fuchs GmbH, have been approved by National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI) in accordance with the following standards:

GB 3836.1-2010	Explosive atmospheres	Part 1: Equipment	General requirements
GB 3836.4-2010	Explosive atmospheres	Part 4: Equipment protection by Intrinsic Safety "i"	
GB 3836.20-2010	Explosive atmospheres	Part 20: Equipment with equipment protection level (EPL) Ga	

Explosion marking: [Ex ia Ga] IIC

The certificate number is GYJ14.1320.

I . SPECIAL REQUIREMENTS

1. The types to this certificate are as follows:

KF**a** -D**b** -EX1.**c d**

a codes:U8 , D2,A5 and A6 ;

b codes:U,WB;

c codes:option D;

d codes:485 code.

2. Isolated safety barrier must be installed in non-hazardous area. The permissible maximum ambient temperature is $-20^{\circ}\text{C}\sim+60^{\circ}\text{C}$

3. The electrical parameters of non-Intrinsic Safety terminals are as below:

Terminals code	Max. voltage Um
23-24	250 V (KFU8)
	250 V (KFA5)
	250 V (KFA6)
	40 V (KFD2)
PR1-PR2	40V(KFD2)
10-11-12,16-17-18	250V

13-14	40V
19-20	40V
PR4	40V
RS485 interface(PR3-PR5)	40V

4. The electrical parameters of Intrinsic Safety terminals (1-3 or 4-6) are as below:

Max.output voltage Uo (V)	Max. output current Io (mA)	Max. output power Po (mW)	Internal parameter	
			Ci (μF)	Li (mH)
10.1	13.5	34	0	0

Gas groups	Maximum external parameters (without lumped parameters)	
	Co (μF)	Lo (mH)
	II C	2.87
II B	19.4	730
II A	93	1000

Gas groups	Maximum external parameters (with lumped parameters)	
	Co (μF)	Lo (mH)
	II C	0.4
II B	1.5	10
II A	3.0	20

5. During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB3836.13-1997 "Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres", GB3836.15-2000 "Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)", GB3836.16-2006 "Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)" and GB50257-1996 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".

II. MANUFACTURER'S RESPONSIBILITY

1. The instruction manual shall include all the clauses mentioned above.
2. The manufacturer shall exactly conform to the documents approved by NEPSI as following.

Drawing No.	Rev./Dated	Remark
16-538TV-00	2006.09.08	–
16-538TV-00C	2009.07.08	–
16-538TV-01C	2009.07.30	–
16-538TV-02	2006.09.05	–
16-538TV-03C	2009.07.30	–
16-538TV-04	2006.04.04	–
16-538TV-05C	2009.07.30	–
16-538TV-06	2006.05.09	–
16-538TV-07	2006.06.30	–
16-538TV-09C	2009.07.30	–
16-538TV-10C	2009.07.30	–
16-538TV-11C	2009.07.30	–

3. The nameplate shall include the following:

- 1) Identification of NEPSI
- 2) Ex Marking.
- 3) Certificate No.
- 4) Electrical parameters or specification.
- 5) Permissible ambient temperature.

**National Supervision and Inspection Centre
For Explosion Protection and Safety of Instrumentation
August 5, 2014**