



EXPLOSION PROTECTION

CERTIFICATE OF CONFORMITY

Cert NO.GYJ18.1097X

This is to certify that the product

Magnetic-inductive Flowmeter

manufactured by **Endress + Hauser Flowtec AG**
(Address:CH-4153, Reinach BL1, Switzerland)

which model is **Proline Promag E 200, Proline Promag H 200**
Proline Promag P 200, Proline Promag W 200

Ex marking **See attachment to this certification**

product standard /

drawing number **340865-0000ZAB, 340771-0000ZBC, 340866-0000ZAB**
FEK0503-0000BBE, FEK0503-0000FBC, 319313-0000ZOB

has been inspected and certified by NEPSI, and that it conforms
to **GB 3836.1-2010,GB 3836.2-2010,GB 3836.4-2010,GB 3836.20-2010,**
GB 3836.8-2014,GB 12476.1-2013,GB 12476.4-2010,GB 12476.5-2013

This Approval shall remain in force until **2023.03.22**

Remarks

- 1.Conditions for safe use are specified in the attachment to this certificate.
- 2.Symbol "X" placed after the certification number denotes specific conditions of use, which are specified in the attachment to this certificate.
- 3.Safe parameters specified in the attachment to this certificate.
- 4.This certificate is also applicable for the product with the same type manufactured by Endress+Hauser Flowtec (China) Co., Ltd. (address: Su Hong Zhong Lu No.465, Suzhou-SIP, China)

Director



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

Issued Date **2018.03.23**

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

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

(GYJ18.1097X)

(Attachment I)

Attachment I to GYJ18.1097X (translation)

1. Description

Magnetic-inductive Flowmeter typed Proline Promag E 200, Proline Promag H 200, Proline Promag P 200 and Proline Promag W 200, manufactured by Endress+Hauser Flowtec AG, has been certified by National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI). This type of product accords with following standards:

GB3836.1-2010 Explosive atmospheres-Part 1: Equipment-General requirements

GB3836.2-2010 Explosive atmospheres-Part 2: Equipment protection by flameproof enclosure "d"

GB3836.4-2010 Explosive atmospheres-Part 4: Equipment protection by intrinsic safety "i"

GB3836.8-2014 Explosive atmospheres-Part 8: Equipment protection by type of protection "n"

GB3836.20-2010 Explosive atmospheres-Part 20: Equipment with equipment protection level (EPL) Ga

GB12476.1-2013 Electrical apparatus for use in the presence of combustible dust- Part 1: General requirements

GB12476.4-2010 Electrical apparatus for use in the presence of combustible dust- Part 4: Protection by intrinsic safety "iD"

GB12476.5-2013 Electrical apparatus for use in the presence of combustible dust- Part 5: Protection by enclosures "tD"

The Ex marking is Ex ia II C T1~T6 Gb, Ex d [ia] II C T1~T6 Gb, Ex d [ia Ga] II C T1~T6 Gb, Ex nA II C T1~T6 Gc, Ex nA [ia Ga] II C T1~T6 Gc, Ex ic II C T1~T6 Gc, Ex ic [ia Ga] II C T1~T6 Gc, Ex iaD 21 T*, Ex tD [iaD 20] A21 IP6X T*, Ex tD [iaD 21] A21 IP6X T*, its certificate number is GYJ18.1097X.

The order code of the approved product is detailed as below:

Proline Promag 200:

5a2b cc-dd e f □ □ □ □ □ □ □ + # * * #

O5a2b cc-dd e f □ □ □ □ □ □ □ + # * * #

Proline Promag 200 transmitter:

5X2b XX-dd e f □ □ + # * * #

O5X2b XX-dd e f □ □ + # * * #

a indicates sensor, including E, H, P or W;

b indicates generation, including B (Promag E/H/P/W 200);

cc indicates nominal diameter, including 02, 04, 08, 15, 22, 25, 26, 40, 50, 65, 80, 1H, 1Z, 1F or 2H;

dd indicates NEPSI approval code, including NF (Ex ia II C T1~T6 Gb)

NJ (Ex d [ia] II C T1~T6 Gb、 Ex d [ia Ga] II C T1~T6 Gb ¹⁾)

NH (Ex ic II C T1~T6 Gc、 Ex ic [ia Ga] II C T1~T6 Gc ¹⁾)

NK (Ex nA II C T1~T6 Gc、 Ex nA [ia Ga] II C T1~T6 Gc ¹⁾)



N6 (Ex ia II C T1~T6 Gb、Ex iaD 21 T*)

N7 (Ex d [ia] II C T1~T6 Gb、Ex tD [iaD 21] A21 IP6X T*

Ex d [ia Ga] II C T1~T6 Gb、Ex tD [iaD 20] A21 IP6X T* ¹⁾)**e** indicates output type, including A, B, C, D, E, G or X for sensor only;**f** indicates display, operation, including L, M prepared for FHX50

Any other single number or letter.

□ indicates enclosure, cable gland, tube material, process connection, calibration and customer version;

** indicates option;

indicates additional options, not relevant for safety.

Note: ¹⁾ Approval code for Flowmeters with display code **f** = L or M only.

For the details, see the instruction manual.

2. Special Conditions for Safe Use

The suffix "X" placed after the certificate number indicates that this product is subject to special conditions for safe use, that is:

For information on the dimensions of the flameproof joints contact the manufacturer (flameproof product only, approval code **dd** = NJ or N7).

3. Conditions for Safe Use

3.1 The external earth connection facility of the enclosure should be connected reliably (symbol **dd** = NJ, NK or N7).

3.2 When symbol **dd** = NJ, NK or N7, any maintenance shall be performed only when the warning "Do not open when energized" is observed.

3.3 When symbol **dd** = NJ or N7, suitable certified cable glands or blanking plugs for unused holes approved by ExTL according to GB3836.1-2010 and GB3836.2-2010 with Ex marking "Ex d II C Gb" shall be used and correctly installed (for the terminal compartment).

3.4 Ambient temperature range: -40°C ~ +60°C, and -60°C for product with approval code **dd** = NK.

3.5 Process temperature range: -40°C ~ +150°C, and it depends on the sensor liner material used.

3.6 The relationship between max. ambient temperature, max. medium temperature and temperature class is shown as following:

Temp. Class (T*)	T _{med}					
	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (200°C)	T1 (200°C)
Ta(max)						
40°C ¹⁾³⁾	80°C	95°C	130°C	150°C	150°C	150°C
55°C ¹⁾	-	95°C	130°C	150°C	150°C	150°C
60°C ¹⁾²⁾	-	95°C	130°C	150°C	150°C	150°C

Note: ¹⁾ for versions with approval code NF, N6, NH and provided with option OVP or TRM, the maximum ambient temperature decreases by 2K.

²⁾ only for I/O code A, B, E and G with pulse/frequency output limited to P_i = 0.85W.

³⁾ Ta(max) = 35°C for product with symbol **e** = D.

(GYJ18.1097X)**(Attachment I)**

3.7 When the symbol **dd** = NF, N6 or NH, this product should be used in explosive gas atmospheres/combustible dust atmospheres together with approved associated apparatus, follow the instruction manual of this product and associated apparatus when connecting the wiring. Connect the wiring terminals correctly.

3.7.1 Safe parameters

dde code	terminals	U _i	I _i	P _i	C _i	L _i
NFA N6A	1, 2	30V	300mA	1W	5nF	0mH
	3, 4	-	-	-	-	-
	5, 6	-	-	-	-	-
NFB N6B	1, 2	30V	300mA	1W	5nF	0mH
	3, 4	30V	300mA	1W	6nF	0mH
	5, 6	-	-	-	-	-
NFC N6C	1, 2	30V	300mA	1W	30nF	0mH
	3, 4	30V	300mA	1W	30nF	0mH
	5, 6	-	-	-	-	-
NFD N6D	1, 2	30V	300mA	1W	5nF	0mH
	3, 4	30V	300mA	1W	6nF	0mH
	5, 6	30V	300mA	1W	5nF	0mH
NFE NFG N6E N6G	1, 2	17.5V ¹⁾	550mA ¹⁾	5.5W ¹⁾	5nF ¹⁾	10μH ¹⁾
		30V	300mA	1.2W	5nF	10μH
	3, 4	30V	300mA	1W	6nF	0mH
	5, 6	-	-	-	-	-

Note: ¹⁾ the safe parameters meet all requirements for a FISCO Field Device

dde code	terminals	U _i	I _i	P _i	C _i	L _i
NHA	1, 2	35V	-	1W	5nF	0mH
	3, 4	-	-	-	-	-
	5, 6	-	-	-	-	-
NHB	1, 2	35V	-	1W	5nF	0mH
	3, 4	35V	-	1W	6nF	0mH
	5, 6	-	-	-	-	-
NHC	1, 2	30V	-	1W	30nF	0mH
	3, 4	30V	-	1W	30nF	0mH
	5, 6	-	-	-	-	-
NHD	1, 2	35V	-	1W	5nF	0mH
	3, 4	35V	-	1W	6nF	0mH
	5, 6	35V	-	1W	5nF	0mH
NHE NHG	1, 2	17.5V ¹⁾	- ¹⁾	- ¹⁾	5nF ¹⁾	10μH ¹⁾
		32V	300mA	-	5nF	10μH
	3, 4	35V	300mA	1W	6nF	0mH
	5, 6	-	-	-	-	-

Note: ¹⁾ the safe parameters meet all requirements for a FISCO Field Device

3.7.2 Connecting cable between this product and associated apparatus should be insulated screen cable; connect the cable screen functionally to earth ground.

3.8 When the symbol **dd** = NJ, N7 or NK, the electrical data is as follows:

dd e code	terminals	U_{nom}	U_{max}	P_{max}
NJA	1, 2	35Vdc	250Vac	-
N7A	3, 4	-	-	-
NKA	5, 6	-	-	-
NJB	1, 2	35Vdc	250Vac	-
N7B	3, 4	35Vdc	250Vac	1W ¹⁾
NKB	5, 6	-	-	-
NJC	1, 2	30Vdc	250Vac	-
N7C	3, 4	30Vdc	250Vac	-
NKC	5, 6	-	-	-
NJD	1, 2	35Vdc	250Vac	-
N7D	3, 4	35Vdc	250Vac	-
NKD	5, 6	35Vdc	250Vac	-
NJE	1, 2	32Vdc	250Vac	0.88W
NJG				
N7E	3, 4	35Vdc	250Vac	1W ¹⁾
N7G				
NKE	5, 6	-	-	-
NKG				

Note: ¹⁾ this circuit is functionally limited by an internal resistance of 760.5Ω ; herewith P_{max} may be determined.

3.9 When symbol **f** = L or M, the electrical data is as follows:

3.9.1 prepared for connection of FHX50 or any other suitable display in type of protection intrinsic safety

$$U_o = 7.3V \quad I_o = 157mA \quad P_o = 362mW \quad C_o = 388nF \quad L_o = 149 \mu H \quad C_c \leq 125nF \quad L_c \leq 149 \mu H$$

3.9.2 if used as interface in type of protection intrinsic safety

$$U_o = 7.3V \quad I_o = 327mA \quad P_o = 800mW; \quad U_i = 7.3V \quad C_i = 0nF \quad L_i = 0mH$$

3.9.3 if used as non-intrinsically safe interface

$$U_N = 6.5V$$

3.10 This product can be connected to an separated certified interface, with following maximum values:

$$U_o = 7.3V \quad I_o = 100mA \quad P_o = 160mW \quad C_i = 0nF \quad L_i = 0mH$$

3.11 Clean the surface of this product termly when using in combustibile dust atmosphere.

3.12 The user shall not change the configuration in order to maintain/ensure the explosion protection performance of this product. Any change may impair safety.

3.13 For installation, use and maintenance of this product, the end user should observe the instruction manual and the following standards:

GB50257-2014 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".

GB3836.13-2013 "Explosive atmospheres- Part 13:Equipment repair, overhaul and reclamation".

GB3836.15-2000 "Electrical apparatus for explosive gas atmospheres- Part 15:Electrical installations in hazardous area (other than mines)".

GB3836.16-2006 "Electrical apparatus for explosive gas atmospheres- Part 16:Inspection and maintenance of electrical installation (other than mines)".

GB3836.18-2010 "Explosive atmospheres-Part 18: Intrinsically safe system".

GB15577-2007 "Safety regulations for dust explosion prevention and protection". (Only if installed in dust hazardous areas)

GB12476.2-2010 "Electrical apparatus for use in the presence of combustible dust- Part 2: Selection and installation". (Only if installed in dust hazardous areas)

4. Manufacturer's Responsibility

4.1 Conditions for safe use, as specified above, should be included in the documentation the user is provided with.

4.2 Manufacturing should be done according to the documentation approved by NEPSI.

4.3 Nameplate should at least include these contents listed below:

- 1) NEPSI logo 
- 2) Ex marking
- 3) certificate number
- 4) ambient temperature range
- 5) medium temperature range
- 6) Safety parameters

In case the nameplate does not provide enough space, information can be given in the manual, provided the nameplate shows a link to the appropriate documentation.

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

2018.03.23





防爆合格证

证号: GYJ18.1097X

由 恩德斯+豪斯公司

(地址: CH-4153, Reinach BL1, Switzerland)

制造的产品:

名称 电磁流量计

型号规格 Proline Promag E 200、Proline Promag H 200
Proline Promag P 200、Proline Promag W 200

防爆标志 详见防爆合格证附件

产品标准 /

图样编号 340865-0000ZAB, 340771-0000ZBC, 340866-0000ZAB
FEK0503-0000BBE, FEK0503-0000FBC, 319313-0000ZOB

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 3836.2-2010、GB 3836.4-2010、
GB 3836.20-2010、GB 3836.8-2014、GB 12476.1-2013、标准,
特颁发此证。 GB 12476.4-2010、GB 12476.5-2013

本证书有效期: 2018年3月23日至2023年3月22日

备注 1. 安全使用注意事项见本证书附件。

2. 证书编号后缀“X”表明产品具有安全使用特殊条件, 内容见本证书附件。

3. 电气安全参数见本证书附件。

4. 本证书同时适用于恩德斯豪斯流量仪表技术(中国)有限公司(地址: 苏州工业园区苏虹中路465号)生产的同型号产品。

站长

国家级仪器仪表防爆安全监督检验站

颁发日期二〇一八年三月二十三日

本证书仅对与认可文件和样品一致的产品有效。

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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

(GYJ18.1097X)

(Attachment I)

GYJ18.1097X防爆合格证附件 I

由恩德斯+豪斯公司生产的Proline Promag E 200, Proline Promag H 200, Proline Promag P 200和Proline Promag W 200型电磁流量计, 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:

- GB3836.1-2010 爆炸性环境 第1部分: 设备 通用要求
- GB3836.2-2010 爆炸性环境 第2部分: 由隔爆外壳“d”保护的设备
- GB3836.4-2010 爆炸性环境 第4部分: 由本质安全型“i”保护的设备
- GB3836.8-2014 爆炸性环境 第8部分: 由“n”型保护的设备
- 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
- GB12476.1-2013 可燃性粉尘环境用电气设备 第1部分: 通用要求
- GB12476.4-2010 可燃性粉尘环境用电气设备 第4部分: 本质安全型“iD”
- GB12476.5-2013 可燃性粉尘环境用电气设备 第5部分: 外壳保护型“tD”

产品防爆标志Ex ia II C T1~T6 Gb Ex d [ia] II C T1~T6 Gb Ex d [ia Ga] II C T1~T6 Gb
Ex nA II C T1~T6 Gc Ex nA [ia Ga] II C T1~T6 Gc Ex ic II C T1~T6 Gc Ex ic [ia Ga] II C T1~T6 Gc
Ex iaD 21 T* Ex tD [iaD 20] A21 IP6X T* Ex tD [iaD 21] A21 IP6X T*, 防爆合格证号
GYJ18.1097X。

本证书认可产品的订购号如下:

Proline Promag 200:

5a2b cc-dd e f □□□□□□+##*#

O5a2b cc-dd e f □□□□□□+##*#

Proline Promag 200 transmitter:

5X2b XX-dd e f □□+##*#

O5X2b XX-dd e f □□+##*#

其中: a表示传感器类型, 可为E、H、P或W;

b表示产品代系识别码, 可为B (Promag E/H/P/W 200);

cc表示测量口径, 可为02、04、08、15、22、25、26、40、50、65、80、1H、1Z、1F或2H;

dd表示NEPSI认证代码, 可为NF (Ex ia II C T1~T6 Gb)

NJ (Ex d[ia] II C T1~T6 Gb, Ex d[ia Ga] II C T1~T6 Gb¹⁾)

NH (Ex ic II C T1~T6 Gc, Ex ic[ia Ga] II C T1~T6 Gc¹⁾)

NK (Ex nA II C T1~T6 Gc, Ex nA[ia Ga] II C T1~T6 Gc¹⁾)

N6 (Ex ia II C T1~T6 Gb Ex iaD 21 T*)

N7 (Ex d[ia] II C T1~T6 Gb Ex tD [iaD 21] A21 IP6X T*

Ex d[ia Ga] II C T1~T6 Gb Ex tD [iaD 20] A21 IP6X T*¹⁾)

e表示输出型式，可为A、B、C、D、E、G或X；

f表示显示/操作，代码可为L、M（连接FHX50）或任意一个其它数字/字母；

□代码表示外壳、电缆引入装置、管材、过程连接、校准和客户信息。

**表示备选信息

#表示附加信息，与安全性能无关

注：¹⁾ 仅适用于**f** = L或M的产品。

详见产品使用说明书。

一、产品安全使用特殊条件

产品防爆合格证号后缀“X”表示产品有安全使用特殊要求，具体内容如下：

涉及产品隔爆接合面的维修须联系产品制造商（隔爆产品，**dd** = NJ或N7）。

二、产品使用注意事项

- 1、产品外壳设有接地端子，用户在安装使用时应可靠接地（**dd** = NJ、NK或N7）。
- 2、产品在现场维护使用时应遵循“严禁带电开盖”的原则（**dd** = NJ、NK或N7）。
- 3、产品接线腔的电缆引入口须配用经防爆检验认可、符合GB3836.1-2010和GB3836.2-2010标准且防爆等级为Ex d II C Gb的电缆引入装置或封堵件（**dd** = NJ或N7）。
- 4、产品使用环境温度：-40℃~+60℃；代码**dd** = NK时，最低使用环境温度-60℃。
- 5、产品介质温度范围：-40℃~+150℃（与传感器内衬材料有关）。
- 6、产品最高使用环境温度、最高介质温度和温度组别的关系如下：

温度组别 (T*)	T _{med}					
	T6 (85℃)	T5 (100℃)	T4 (135℃)	T3 (200℃)	T2 (200℃)	T1 (200℃)
Ta(max)						
40℃ ¹⁾³⁾	80℃	95℃	130℃	150℃	150℃	150℃
55℃ ¹⁾	-	95℃	130℃	150℃	150℃	150℃
60℃ ¹⁾²⁾	-	95℃	130℃	150℃	150℃	150℃

注：¹⁾ 产品认证代码为NF、N6或NH且配备OVP或TRM时，最高环境温度减2K；

²⁾ 仅适用于I/O代码为A、B、E或G带脉冲/频率输出，Pi = 0.85W；

³⁾ 产品代码**e** = D时，T_{a(max)} = 35℃。

7、当**dd** = NF、N6或NH时，产品必须与已通过防爆认证的关联设备配套共同组成本安防爆系统方可使用于爆炸性气体环境或可燃性粉尘环境。其系统接线必须同时遵守本产品和所配关联设备的使用说明书要求，接线端子不得接错。

7.1 产品本安参数如下：

代码 dde	端子	U_i	I_i	P_i	C_i	L_i
NFA N6A	1, 2	30V	300mA	1W	5nF	0mH
	3, 4	-	-	-	-	-
	5, 6	-	-	-	-	-
NFB N6B	1, 2	30V	300mA	1W	5nF	0mH
	3, 4	30V	300mA	1W	6nF	0mH
	5, 6	-	-	-	-	-
NFC N6C	1, 2	30V	300mA	1W	30nF	0mH
	3, 4	30V	300mA	1W	30nF	0mH
	5, 6	-	-	-	-	-
NFD N6D	1, 2	30V	300mA	1W	5nF	0mH
	3, 4	30V	300mA	1W	6nF	0mH
	5, 6	30V	300mA	1W	5nF	0mH
NFE NFG N6E N6G	1, 2	17.5V ¹⁾	550mA ¹⁾	5.5W ¹⁾	5nF ¹⁾	10 μ H ¹⁾
		30V	300mA	1.2W	5nF	10 μ H
	3, 4	30V	300mA	1W	6nF	0mH
	5, 6	-	-	-	-	-

注：¹⁾ 表示此组安全参数满足FISCO总线设备的要求。

代码 dde	端子	U_i	I_i	P_i	C_i	L_i
NHA	1, 2	35V	-	1W	5nF	0mH
	3, 4	-	-	-	-	-
	5, 6	-	-	-	-	-
NHB	1, 2	35V	-	1W	5nF	0mH
	3, 4	35V	-	1W	6nF	0mH
	5, 6	-	-	-	-	-
NHC	1, 2	30V	-	1W	30nF	0mH
	3, 4	30V	-	1W	30nF	0mH
	5, 6	-	-	-	-	-
NHD	1, 2	35V	-	1W	5nF	0mH
	3, 4	35V	-	1W	6nF	0mH
	5, 6	35V	-	1W	5nF	0mH
NHE NHG	1, 2	17.5V ¹⁾	- ¹⁾	- ¹⁾	5nF ¹⁾	10 μ H ¹⁾
		32V	300mA	-	5nF	10 μ H
	3, 4	35V	300mA	1W	6nF	0mH
	5, 6	-	-	-	-	-

注：¹⁾ 表示此组安全参数满足FISCO总线设备的要求。

7.2 产品与关联设备的连接电缆应为带绝缘护套的屏蔽电缆，其屏蔽层应接地。

8、当 $dd = NJ、N7$ 或 NK 时，产品电气参数如下：

代码 dde	端子	U_{nom}	U_{max}	P_{max}
NJA	1, 2	35Vdc	250Vac	-
N7A	3, 4	-	-	-
NKA	5, 6	-	-	-
NJB	1, 2	35Vdc	250Vac	-
N7B	3, 4	35Vdc	250Vac	1W ¹⁾
NKB	5, 6	-	-	-
NJC	1, 2	30Vdc	250Vac	-
N7C	3, 4	30Vdc	250Vac	-
NKC	5, 6	-	-	-
NJD	1, 2	35Vdc	250Vac	-
N7D	3, 4	35Vdc	250Vac	-
NKD	5, 6	35Vdc	250Vac	-
NJE	1, 2	32Vdc	250Vac	0.88W
NJG				
N7E	3, 4	35Vdc	250Vac	1W ¹⁾
N7G				
NKE	5, 6	-	-	-
NKG				

注：¹⁾ 此电路由内阻 760.5Ω 保护；由此可确定 P_{max} 。

9、产品型号规格中 $f = L$ 或 M 时，电气参数如下：

9.1 连接FHX50或其它经认证的本安显示仪表

$$U_o = 7.3V \quad I_o = 157mA \quad P_o = 362mW \quad C_o = 388nF \quad L_o = 149\mu H$$
$$C_c \leq 125nF \quad L_c \leq 149\mu H$$

9.2 当本安接口使用

$$U_o = 7.3V \quad I_o = 327mA \quad P_o = 800mW; \quad U_i = 7.3V \quad C_i = 0nF \quad L_i = 0mH$$

9.3 当非本安接口使用

$$U_N = 6.5V$$

10、产品可外接经防爆认证的接口设备，本安输出参数如下：

$$U_o = 7.3V \quad I_o = 100mA \quad P_o = 160mW \quad C_i = 0nF \quad L_i = 0mH$$

11、产品在粉尘环境使用维护时，应定期采取清洁措施，以防止表面积聚粉尘。

12、用户不得自行随意更换该产品的电气零部件，应会同产品制造商共同解决运行中出现的故障，以免影响防爆性能和损坏现象的发生。

13、产品的安装、使用和维护应同时遵守产品使用说明书、GB3836.13-2013“爆炸性环境 第13部分：设备的修理、检修、修复和改造”、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修（煤矿除外）”、GB3836.18-2010“爆炸性环境 第18部分：本质安全系统”、GB50257-2014“电气设备安装工程爆炸和火灾危险环境电气装置施工及验收规范”、GB15577-2007“粉尘防爆安全规程”及GB12476.2-2010“可燃性粉尘环境用电气设备 第2部分：选型和安装”的有关规定。

三、制造厂责任

- 1、产品制造厂必须将上述使用注意事项纳入产品使用说明书；
- 2、制造厂必须严格按照NEPSI认可的文件资料生产；
- 3、产品铭牌中应至少包括下列内容：
 - a) NEPSI认可标志（见防爆合格证书）
 - b) 产品防爆标志
 - c) 防爆合格证号
 - d) 使用环境温度
 - e) 介质温度范围
 - f) 产品电气参数

国家级仪器仪表防爆安全监督检验站
二〇一八年三月二十三日