EXPLOSION PROTECTION
CERTIFICATE OF CONFORMITY

Cert No. GYJ071234X

This is to certify that the product

Transmitter

manufactured by Micro Motion, Inc.
(Address: Boulder, Co. 80301, USA)

which model is 3350A Series; 3700A Series

Ex marking Ex de[ib] ⅡB/ⅡCT4

product standard --

drawing number --

has been inspected and certified by NEPSI, and that it conforms to GB3836.1～4 - 2000

This Approval shall remain in force until 2012.06.24

Remarks
1. This certificate also cover the Transmitter with the same type that manufactured by Emerson Process Management Co., Ltd. (Address: No.1277, Xin Jin Qiao Rd., Pudong).
2. When the sign "X" is placed after the certificate number, it indicates that the sensor is subject to special conditions for safe use specified in the attachment to this certificate.
3. Type detail, Intrinsiclly safe parameters and Special requirements for safe use specified in the attachment to this certificate.

Director

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

Issued Date 2007.06.25

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

103 Cao Bao Road
Shanghai 200233, China
http://www.nepsi.org.cn
Email: info@nepsi.org.cn
Tel:0086 21 64368180
Fax:0086 21 64844580

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

(GYJ071234X) **(Attachment Ⅰ)**

Attachment Ⅰ

(Translation)

Transmitters, type 3350A series and 3370A series, manufactured by Micro Motion, Inc. or by Emerson Process Management Co., Ltd., have been approved by National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation (NEPSI) in accordance with the following standards:

GB3836.1-2000 Electrical apparatus for explosive gas atmospheres
Part 1: General requirements

GB3836.2-2000 Electrical apparatus for explosive gas atmospheres
Part 2: Flameproof enclosure "d"

GB3836.3-2000 Electrical apparatus for explosive gas atmospheres
Part 3: Increased safety "e"

GB3836.4-2000 Electrical apparatus for explosive gas atmospheres
Part 4: Intrinsic safety "i"

The transmitters are approved with explosion marking of Ex de[ib] ⅡB/ⅡCT4, the certificate number is GYJ071234X.

The permissible range of ambient temperature is -30℃ to +60℃.

The types to this certificate are as below:

3350A [1][2][3][4][5]P[6][7]; 3700A [1][2][3][4][5]P[6][7]

[1] code: Numeral 1 or 2 for power supply

[2] code: Letter for future options

[3] code: Numeral for additional hardware

[4] code: Numeral 3, 4, 5 or 6 for sensor interface

[5] code: Letter A, B, C or D for conduit connections

[6] code: Letter for language

[7] code: Letters for application software

Ⅰ. SPECIAL CONDITIONS FOR SAFE USE

1.1 The cable entry holes and the conduit entry holes have to be connected by means of suitable entry or blanking plug, shall be certified in type of Increased safety Ex eⅡ accordance with GB3836.1-2000 and GB3836.3-2000, unused apertures shall be closed with suitable blanking plug, the instruction manual of entry or blanking plug shall be act.

1.2 The use of the transmitter at an ambient temperature under -20℃ is only admissible, if the cables and the entries are suitable for that temperature.

1.3 The keypad in the front cover of the enclosure was tested corresponding to the low risk of mechanical danger (4J), so the apparatus shall be protected against a high risk of mechanical danger.

Ⅱ. SPECIAL REQUIREMENTS

2.1 The maximum voltage (Um) for the non-intrinsically safe circuits:

Terminals number	Maximum voltage (Um)
J18：10 - 9	250Va.c./d.c
J18：1～8 and 11～20	29Va.c./d.c

2.2 Intrinsically safe parameters at terminals for the intrinsically safe circuits:

2.2.1 Transmitter for type 3350A□□□3□P□□ or 3700A□□□3□P□□:

Circuits type	Gas groups	Max.output voltage Uo	Max.output current Io	Max.output power Po	Max.external parameters	
					Co(μF)	Lo(μH)
Drive circuit (J19: 11-12)	ⅡB	11.4V	1.14A	1.2W	11.7	109
	ⅡC				1.7	27.4
Pick-Off circuits (J19: 18-17/20-19)	ⅡB	15.6V	0.01A	0.04W	3.03	1.4×10^6
	ⅡC				0.5	3.55×10^5
Temperature circuit (J19:15 -16-13)	ⅡB	15.6V	0.01A	0.04W	3.03	1.4×10^6
	ⅡC				0.5	3.55×10^5

2.2.2 Transmitter for type 3350A□□□4□P□□ or 3700A□□□4□P□□:

Circuits type	Gas groups	Max.output voltage Uo	Max.output current Io	Max.output power Po	Max.external parameters	
					Co(μF)	Lo(μH)
Drive circuit (J19: 11-12)	ⅡB	11.4V	1.14A	1.2W	11.7	109
	ⅡC				1.7	27.4
Pick-Off circuits (J19: 18-17/20-19)	ⅡB	21.13V	0.0845A	0.045W	1.24	1.9×10^6
	ⅡC				0.18	4.9×10^5
Temperature circuit (J19:15 -16-13)	ⅡB	21.13V	0.017A	0.09W	1.24	4.92×10^5
	ⅡC				0.18	1.22×10^5

2.2.3 Transmitter for type 3350A□ □ □5 □ P □ □, 3700A□ □ □5 □ P □ □,3350A□ □ □6□ P □ □ or 3700A□ □ □6□ P □ □ (terminals J19 - 13/14和J19 - 15/16):

Gas groups	Max.output voltage Uo	Max.output current Io	Max.output power Po	Max.external parameters	
				Co(μF)	Lo(μH)
ⅡC	17.22V	0.484A	2.05W	0.333	151.7
ⅡB				2.04	607

2.3 The transmitter shall be connected reliably to the earthing during installation and operation.

2.4 Do not open the cover while the circuit energized.

2.5 Users are forbidden to change the configuration to ensure the explosion protection performance of the equipment. Any faults shall be settled with experts from the manufacturer.

2.6 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".

Ⅲ. MANUFACTURER'S RESPONSIBILITY

3.1 The instruction manual shall include all the clauses mentioned above.

3.2 The manufacturer shall exactly conform to the documents approved by NEPSI.

3.3 The nameplate shall include the following:

3.3.1 Intrinsically safe parameters or specification.

3.3.2 The permissible range of ambient temperature

3.3.3 Identification of NEPSI.

3.3.4 Certificate No.

3.3.5 Ex Marking

National Supervision and Inspection Centre
For Explosion Protection and Safety of Instrumentation
June 25, 2007

防 爆 合 格 证

证 号：GYJ071234X

由 美国高准公司
(地址：Boulder, Co. 80301, USA)　　制造的产品：

名　　称　变送器

型号规格　3350A 系列；3700A 系列

防爆标志　Ex de[ib] ⅡB/ⅡCT4

产品标准　—

图样编号　—

经图样及技术文件的审查和样品检验，确认上述产品符合　GB3836.1～4－2000　标准，特颁发此证。有效期自颁发日期起伍　年内有效。

备注
1. 本证书同时适用于由艾默生过程控制有限公司(地址：浦东新金桥路 1277 号)组装生产的相同型号变送器。
2. 防爆合格证号后缀“X”表示使用时有特殊要求，见本合格证附件。
3. 认可产品型号、本安参数和产品使用注意事项见本合格证附件。

站 长

国家级仪器仪表防爆安全监督检验站

颁发日期　二00七　年六　月二十五 日

本证书仅对与认可文件和样品一致的产品有效。

地址：上海市漕宝路103号　网址：www.nepsi.org.cn　电话：0086 21 64368180
邮编：200233　Email:info@nepsi.org.cn　传真：0086 21 64844580

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

(GYJ071234X) (Attachment Ⅰ)

GYJ071234X防爆合格证附件Ⅰ

由美国高准公司或艾默生过程控制有限公司生产的3350A系列和3700A系列变送器，符合GB3836.1－2000“爆炸性气体环境用电气设备 第1部分：通用要求”、 GB3836.2－2000“爆炸性气体环境用电气设备 第2部分：隔爆型“d””、GB3836.3－2000“爆炸性气体环境用电气设备 第3部分：增安型“e””和GB3836.4-2000“爆炸性气体环境用电气设备 第4部分：本质安全型“i””防爆标准规定的要求，产品防爆标志为Ex de[ib]ⅡB/ⅡCT4，防爆合格证号为GYJ071234X。

产品最大使用环境温度范围介于-30℃～+60℃之间。

本证书认可产品的具体型号如下：

3350A[1][2][3][4][5]P[6][7]；3700A[1][2][3][4][5]P[6][7]

[1]代码：代表电源类型，包括1或2；

[2]代码：预置备选项代码；

[3]代码：代表附加硬件数字；

[4]代码：代表传感器界面，包括3、4、5或6；

[5]代码：代表导管连接方式，包括A、B、C或D；

[6]代码：代表语言种类；

[7]代码：代表应用软件字符；

一、产品使用特殊要求

1．电缆引入口和导管引入口必须配置引入装置或封堵件，该类部件必须是防爆检验机构依据GB3836.1–2000和GB3836.3–2000要求认可的Ex元件，其防爆标志为Ex eⅡ；冗余口用封堵件堵封，且引入装置或封堵件的安装使用必须遵守其说明书。

2. 当产品应用的环境温度低于-20℃时，电缆、引入装置和封堵件的允许使用环境温度必须符合相应的环境要求。

3. 变送器外壳前端盖上的键盘依据GB3836.1－2000要求承受的冲击能量为4J低机械冲击能量，使用时应当采取避免高机械冲击能量的防护措施。

二、产品使用注意事项

1. 变送器非本安端的电气参数：

端子代号	最高电压 Um
J18：10－9	250Va.c./d.c
J18：1～8 和11～20	29Va.c./d.c

2. 该产品本安端的本安参数：

2.1 当产品型号为3350A□□□3□P□□时和3700A□□□3□P□□时：

回路类型	组别	最高输出电压Uo(V)	最大输出电流Io(A)	最大输出功率Po(W)	最大外部参数	
					Co(μF)	Lo(μH)
驱动线圈回路 (J19: 11-12)	ⅡB	11.4	1.14	1.2	11.7	109
	ⅡC				1.7	27.4
检测线圈回路 (J19: 18-17/20-19)	ⅡB	15.6	0.01	0.04	3.03	1.4×10^6
	ⅡC				0.5	3.55×10^5
温度传感器回路 (J19:15 -16-13)	ⅡB	15.6	0.01	0.04	3.03	1.4×10^6
	ⅡC				0.5	3.55×10^5

2.2 当产品型号为3350A□□□4□P□□时和3700A□□□4□P□□时：

回路类型	组别	最高输出电压Uo(V)	最大输出电流Io(A)	最大输出功率Po(W)	最大外部参数	
					Co(μF)	Lo(μH)
驱动线圈回路 (J19: 11-12)	ⅡB	11.4	1.14	1.2	11.7	109
	ⅡC				1.7	27.4
检测线圈回路 (J19: 18-17/20-19)	ⅡB	21.13	0.0845	0.045	1.24	1.9×10^6
	ⅡC				0.18	4.9×10^5
温度传感器回路 (J19: 15 -16-13)	ⅡB	21.13	0.017	0.09	1.24	4.92×10^5
	ⅡC				0.18	1.22×10^5

2.3 当产品型号为3350A□□□5□P□□、3700A□□□5□P□□、3350A□□□6□P□□和3700A□□□6□P□□时，端子J19－13/14和J19－15/16的本安参数为：

组别	最高输出电压 Uo (V)	最大输出电流 Io (A)	最大输出功率 Po (W)	最大外部允许参数	
				Co(μF)	Lo(μH)
ⅡC	17.22	0.484	2.05	0.333	151.7
ⅡB				2.04	607

3. 变送器在安装使用时应可靠接地。

4. 必须切断电源后开盖。

5. 用户不得自行更换该产品的零部件，应会同产品制造商共同解决运行中出现的故障，以杜绝损坏现象的发生。

6. 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。

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该产品使用说明书；

2. 制造厂必须严格按照NEPSI认可的文件资料生产；

3. 产品铭牌中必须包括下列内容：

3.1 产品的本安参数或说明；

3.2 使用环境温度；

3.3 NEPSI认可标志 ；

3.4 防爆合格证号；

3.5 防爆标志。

国家级仪器仪表防爆安全监督检验站

二〇〇七年六月二十五日