



# EXPLOSION PROTECTION

## CERTIFICATE OF CONFORMITY

Cert NO.GYJ20.1294X

This is to certify that the product

Temperature sensor

manufactured by Endress+Hauser Wetzer GmbH + Co.KG

(Address:Obere Wank 1, 87484 Nesselwang, Germany)

which model is T~~a6b~~-2c

Ex marking Ex dIIC T1 ~ T6 Gb

product standard /

drawing number S60100200~S60100204

has been inspected and certified by NEPSI, and that it conforms  
to GB 3836.1-2010,GB 3836.2-2010

This Approval shall remain in force until 2025.07.14

**Remarks**

- 1.Conditions for safe use are specified in the attachment(s) to this certificate.
- 2.Symbol "X" placed after the certification number denotes specific conditions of use, which are specified in the attachment(s) to this certificate.
- 3.Model designation is specified in the attachment(s) to this certificate.
- 4.This certificate is also applicable for the product with same type manufactured by Endress + Hauser Sicestherm S.r.L. (Address: Via Martin Luther King 7, 20060 Pessano con Bornago (MI), Italy) and Endress+Hauser Wetzer (Suzhou) Co., Ltd. (address: No.31 JiangTianLiLu,Suzhou Industrial Park)

Director

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

Issued Date 2020.07.15

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](mailto:info@nepsi.org.cn)

Tel: +86 21 64368180  
Fax: +86 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

(GYJ20.1294X)

(Attachment I )

## Attachment I to GYJ20.1294X (translation)

### 1. Description

Temperature sensor typed T~~a6b-2c~~, manufactured by Endress + Hauser Wetzler GmbH + Co. KG, has been certified by National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI). This product accords with following standards:

GB 3836.1-2010 Explosive atmospheres-Part 1: Equipment-General requirements

GB 3836.2-2010 Explosive atmospheres-Part 2: Equipment protection by flameproof enclosure"d"

The Ex marking is Ex d II C T1~T6 Gb, its certificate number is GYJ20.1294X.

Type approved in this certificate is T~~a6b-2c~~

~~a~~ indicates temperature sensor, its code is R, C;

~~b~~ indicates thermowell configuration, its code is 1, 2, 3, 5, 6;

~~c~~ indicates enclosure.

### 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:

2.1 For information on the dimensions of the flameproof joints contact the manufacturer.

2.2 Temperature sensors with diameters smaller than 6mm shall be mechanically protected by the thermowell.

### 3. Conditions for Safe Use

3.1 The external earth connection facility should be connected reliably.

3.2 Suitable certified cable gland and blanking plug approved by ExTL according to GB 3836.1-2010 and GB 3836.2-2010 with Ex marking "Ex d II C Gb" shall be used and correctly installed; after installing, degree of protection of enclosure should be at least IP66/67 according to GB/T 4208-2017. The cable glands and blanking plugs to be used shall suitable for the product working conditions.

3.3 The relationship between temperature class, ambient temperature range and process temperature range is shown as the table below:



Table 1: assemblies with electronics

| Temperature class | Ambient temperature range | Process temperature range |
|-------------------|---------------------------|---------------------------|
| T6                | -40°C ~+65°C              | -50°C ~+70°C              |
| T5                | -40°C ~+80°C              | -50°C ~+80°C              |
| T4                | -40°C ~+85°C              | -50°C ~+120°C             |

Table 2: assemblies without electronics

| Temperature class | Ambient temperature range | Process temperature range |
|-------------------|---------------------------|---------------------------|
| T6                | -50°C ~+70°C              | -50°C ~+70°C              |
| T5                | -50°C ~+80°C              | -50°C ~+80°C              |
| T4                | -50°C ~+120°C             | -50°C ~+120°C             |
| T3                | -50°C ~+120°C             | -50°C ~+185°C             |
| T2                | -50°C ~+120°C             | -50°C ~+285°C             |
| T1                | -50°C ~+120°C             | -50°C ~+435°C             |

3.4 Any maintenance shall be performed only when the warning of "Keep tight while the circuit is alive" is observed.

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

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

GB 50257-2014 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".

GB 3836.13-2013 "Explosive atmospheres- Part 13: Equipment repair, overhaul and reclamation".

GB/T 3836.15-2017 "Explosive atmospheres- Part 15: Electrical installations design, selection and erection".

GB/T 3836.16-2017 "Explosive atmospheres- Part 16: Electrical installations inspection and maintenance".

#### 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 Any modification affecting the explosion protection performance as shown in the documentation approved by NEPSI should not be done, except after NEPSI's reapproval.

4.4 Nameplate should at least show the following

4.4.1 NEPSI logo



4.4.2 Type of explosion protection

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(Attachment I )

4.4.3 Certificate number

4.4.4 Ambient temperature range

4.4.5 Process temperature range

4.4.6 Warning of "Keep tight while the circuit is alive"

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

2020.07.15



Ex  
NEPSI





# 防爆合格证

证号: GYJ20.1294X

由 Endress+Hauser Wetzer GmbH + Co. KG  
(地址: Obere Wank 1, 87484 Nesselwang, Germany)

制造的产品:

名称 隔爆热电阻/热电偶

型号规格 Ta6b-2c

防爆标志 Ex d IIC T1 ~ T6 Gb

产品标准 /

图样编号 S60100200~S60100204

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 标准,  
特颁发此证。

本证书有效期: 2020年7月15日至2025年7月14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. 型号规格说明见本证书附件。  
4. 本证书同时适用于Endress+Hauser Sigestherm S.r.L. (地址: Via Martin Luther King 7, 20060 Pessano con Bornago (MI), Italy) 和恩德斯豪斯温度仪表(苏州)有限公司(地址: 苏州工业园区江田里路31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

颁发日期二〇二〇年七月十五日

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  
邮编: 200233

网址: [www.nepsi.org.cn](http://www.nepsi.org.cn)  
Email: [info@nepsi.org.cn](mailto:info@nepsi.org.cn)

电话: +86 21 64368180  
传真: +86 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

(GYJ20.1294X)

(Attachment I)

## GYJ20.1294X防爆合格证附件 I

由 Endress+Hauser Wetzer GmbH + Co.KG 生产的Ta6b-2c型隔爆热电阻/热电偶，  
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：

GB 3836.1-2010 爆炸性环境 第1部分：设备 通用要求

GB 3836.2-2010 爆炸性环境 第2部分：由隔爆外壳“d”保护的设备  
产品防爆标志为Ex d IIC T1~T6 Gb，防爆合格证号为GYJ20.1294X。

本证书认可的产品型号规格为：Ta6b-2c

其中，a表示传感器类型，代码为R、C；

b表示套管配置，代码为1、2、3、5、6；

c表示外壳类型。

### 一、产品安全使用特定条件

防爆合格证号后缀“X”表示该产品安全使用特定条件，具体内容如下：

- 1、涉及隔爆接合面的维修须联系产品制造商。
- 2、温度传感器的直径小于6mm时必须由套管机械保护。

### 二、产品使用注意事项

- 1、产品外壳设有接地端子，用户在使用时应可靠接地。
- 2、产品的电缆引入口须配用经防爆检验认可、符合GB 3836.1-2010和GB 3836.2-2010标准要求、防爆等级Ex d IIC Gb的电缆引入装置或封堵件；装配后外壳防护等级不得低于GB/T 4208-2017规定的IP66/67。选用的电缆引入装置或封堵件应与产品的工作条件相适应。

- 3、产品的使用环境温度范围、介质温度范围和温度组别的关系如下：

表1：内装电子器件

| 温度组别 | 环境温度范围    | 介质温度范围     |
|------|-----------|------------|
| T6   | -40℃~+65℃ | -50℃~+70℃  |
| T5   | -40℃~+80℃ | -50℃~+80℃  |
| T4   | -40℃~+85℃ | -50℃~+120℃ |



表2: 不装电子器件

| 温度组别 | 环境温度范围     | 介质温度范围     |
|------|------------|------------|
| T6   | -50℃~+70℃  | -50℃~+70℃  |
| T5   | -50℃~+80℃  | -50℃~+80℃  |
| T4   | -50℃~+120℃ | -50℃~+120℃ |
| T3   | -50℃~+120℃ | -50℃~+185℃ |
| T2   | -50℃~+120℃ | -50℃~+285℃ |
| T1   | -50℃~+120℃ | -50℃~+435℃ |

4、产品在现场使用和维护时必须遵守“断电源后开盖”的原则。

5、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。

6、产品的安装、使用和维护应同时遵守产品使用说明书、GB 3836.13-2013“爆炸性环境 第13部分：设备的修理、检修、修复和改造”、GB/T 3836.15-2017“爆炸性环境 第15部分：电气装置的设计、选型和安装”、GB/T 3836.16-2017“爆炸性环境 第16部分：电气装置的检查与维护”及GB 50257-2014“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”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) “断电源后开盖”警告语

国家级仪器仪表防爆安全监督检验站

二〇二〇年七月十五日