

# EXPLOSION PROTECTION

## CERTIFICATE OF CONFORMITY

Cert NO.GYJ19.1082X

This is to certify that the product

**Temperature Transmitter**

manufactured by **Endress + Hauser Wetzer GmbH + Co. KG**

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

which model is **TMT71/72, TMT82**

Ex marking **Ex nAIIc T4~T6 Gc**

product standard /

drawing number **10000010119 10000002902 10000009254 10000004708  
10000010855**

has been inspected and certified by NEPSI, and that it conforms  
to **GB 3836.1-2010,GB 3836.8-2014**

This Approval shall remain in force until **2024.03.28**

- 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 Wetzer (Suzhou) Co., Ltd. (address: No.31 JiangTianLiLu,Suzhou Industrial Park)
  - 5.[VariationI]: Modify the drawing number. Signed on 2020.05.13.
  - 6.[VariationII]: Update the thermal parameters. Signed on 2021.03.01.

Director

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

Issued Date **2019.03.29**

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

(GYJ19.1082X)

(Attachment III)

## Attachment III to GYJ19.1082X

### 1. Description

Temperature transmitter typed TMT71/72 and TMT82, 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). The product accords with following standards:

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

GB 3836.8-2014 Explosive atmospheres-Part 8: Equipment protection by type of protection "n"

The Ex marking is Ex nA II C T4~T6 Gc, its certificate number is GYJ19.1082X.

### 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 This product shall be installed in the enclosure with IP degree at least IP54 according to GB/T 4208-2017, and meets the requirement of GB3836.1-2010 item 7.4.2 or 8.1.2 and 26.4.2.

2.2 Product must guarantee that the rated voltage  $U_n$  is not exceeded by more than 40% in the event of temporary faults.

### 3. Conditions for Safe Use

3.1 The external earth connection facility of the whole product shall be connected reliably.

3.2 This product should only be used in zone 2.

3.3 The relationship between ambient temperature range and the temperature class is shown as follows:

TMT71/72 (head type)

Temperature class	T6	T5	T4
Ambient temperature	-40°C~+55°C	-40°C~+70°C	-40°C~+85°C

TMT71/72 (DIN rail type)

Temperature class	T6	T5	T4
Ambient temperature	-50°C~+43°C	-50°C~+58°C	-50°C~+85°C

TMT82 (head type)

Temperature class	T6	T5	T4
Ambient temperature	-50°C~+58°C	-50°C~+75°C	-50°C~+85°C

TMT82 (DIN rail type)

Temperature class	T6	T5	T4
Ambient temperature	-40°C~+41°C	-40°C~+56°C	-40°C~+85°C

3.4 Electrical data:

U≤36 Vdc, I<sub>N</sub> = 23 mA. (TMT71/72)

U≤42 Vdc, I<sub>N</sub> = 23 mA. (TMT82)

3.5 Any maintenance shall be performed only when the warning "Do not open when energized" is observed.

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

3.7 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 Nameplate should include these contents listed below:

- 1) NEPSI logo 
- 2) Ex marking
- 3) certificate number
- 4) ambient temperature
- 5) electrical data

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

2021.03.01

Note: This attachment is the amendment to the attachment II issued on 2020.05.13.



# 防爆合格证

证号: GYJ19.1082X

由 恩德斯+豪斯公司

制造的产品:

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

名称 温度变送器

型号规格 TMT71/72, TMT82

防爆标志 Ex nA II C T4~T6 Gc

产品标准 /

图样编号 10000010119 10000002902 10000009254 1000000470  
8 10000010855

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 3836.8-2014 标准, 特颁发此证。

本证书有效期: 2019年3月29日至2024年3月28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。
  5. [更改 I]: 图样编号变更。2020年5月13日签发。
  6. [更改 II]: 产品温度参数更新。2021年3月1日签发。

站长

国家级仪器仪表防爆安全监督检验站

颁发日期二〇一九年三月二十九日

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

(GYJ19.1082X)

(Attachment III)

## GYJ19.1082X防爆合格证附件III

由恩德斯+豪斯公司生产的TMT71/72、TMT82型温度变送器，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 3836.8-2014 爆炸性环境 第8部分：由“n”型保护的设

产品防爆标志Ex nA II C T4~T6 Gc，防爆合格证号GYJ19.1082X。

### 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：

- 1、产品须安装于符合GB/T 4208-2017规定的IP54以上、且符合GB3836.1-2010标准第7.4.2条或第8.1.2条和第26.4.2条要求的外壳内，方可使用于相应的爆炸性危险场所。
- 2、应采取措​​施以防额定电压因瞬态干扰而超过40%以上。

### 二、产品使用注意事项

- 1、完整的温度变送器外壳设有接地端子，用户在安装使用时应可靠接地。
- 2、本产品仅能使用于2区爆炸性气体危险场所。
- 3、产品使用环境温度和温度组别的关系：

TMT71/72（模块式）

温度组别	T6	T5	T4
环境温度	-40℃~+55℃	-40℃~+70℃	-40℃~+85℃

TMT71/72（导轨式）

温度组别	T6	T5	T4
环境温度	-50℃~+43℃	-50℃~+58℃	-50℃~+85℃

TMT82（模块式）

温度组别	T6	T5	T4
环境温度	-50℃~+58℃	-50℃~+75℃	-50℃~+85℃

## TMT82 (导轨式)

温度组别	T6	T5	T4
环境温度	-40℃~+41℃	-40℃~+56℃	-40℃~+85℃

## 4、产品电气参数:

TMT71/72:  $U \leq 36 \text{ Vdc}$ 、 $I_n = 23 \text{ mA}$ TMT82:  $U \leq 42 \text{ Vdc}$ 、 $I_n = 23 \text{ mA}$ 

## 5、产品在现场使用维护时必须遵守“断电源后开盖”的原则。

6、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。

7、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) 安全电气参数

国家级仪器仪表防爆安全监督检验站

二〇二一年三月一日

注：本附件是对2020年5月13日签发的附件II的更新。