

# (1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in  
Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

**TÜV 20 ATEX 8612 X**

Issue: 00

- (4) Equipment: **Fixed Gas Detector**  
**Model name: GTQ-BS Series**
- (5) Manufacturer: **Hanwei Electronics Group Corporation.**
- (6) Address: **No. 169, Xuesong Road, National Hi-Tech Zone, Zhengzhou, 450001  
Henan, P.R. China.**

- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26<sup>th</sup> February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report GC/Ex8612.00/20

- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

**EN IEC 60079-0:2018**

**EN 60079-1:2014**

**EN 60079-31:2014**

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

- (12) The marking of the equipment shall include the following:



**II 2 G**

**Ex db IIC T6/T5 Gb**

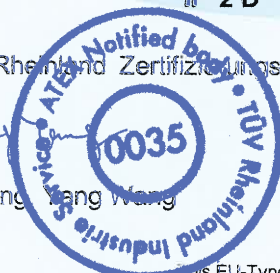
**II 2 D**

**Ex tb IIIC T80°C/T95°C Db**

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2024-06-13

  
Dipl.-Ing. Wang Wang



This EU-Type Examination Certificate without signature and stamp shall not be valid.  
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the  
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln  
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114



(13) Annex

(14) **EU Type Examination Certificate**  
**TÜV 20 ATEX 8612 X** Issue: 00

(15) Description of equipment

15.1 Equipment and type:

Fixed Gas Detector, GTQ-BS Series

Model name: GTQ-BS01, GTQ-BS02, GTQ-BS03 and GTQ-BS05

Note:

Model differences, see Clause 15.2 below.

15.2 Description / Details of Change

General Description:

The GTQ-BS series of fixed gas detector has four different models, namely GTQ-BS01, GTQ-BS02, GTQ-BS03 and GTQ-BS05. The fixed gas detector is designed for using in atmospheres Zone 1, Zone 2, Zone 21 and Zone 22.

The explosive protection types are "db" and "tb". The equipment consists of two parts: a sensor and an enclosure. The enclosure is composed of upper cover, O-ring, main enclosure, transparent window and plug etc. The enclosures have two important structures: main enclosure and upper cover. The equipment has two ¾ NPT threaded connections for wiring installation. All the models have the same main enclosure. The main enclosures for all models are made of ADC-12 Aluminum. The rated voltage is 18Vdc to 30Vdc, and the maximum power is 3W.

The differences between the series are listed as below:

- 1) The models GTQ-BS01 and GTQ-BS02 have the same upper cover, and the upper cover consists of PVC transparent parts and a metal enclosure. The models GTQ-BS03 and GTQ-BS05 have the same upper cover, and the cover consists of tempering glass transparent parts and a metal enclosure.
- 2) The models GTQ-BS01, GTQ-BS02 and GTQ-BS03 have the same type HM25 sensor module, while GTQ-BS05 have type HM40 sensor module.
- 3) The display mode of the models GTQ-BS01, GTQ-BS02 and GTQ-BS03 are different as LCD, LED digital tube and LED light respectively. The GTQ-BS03 and GTQ-BS05 have the same display mode.

This EU Type Examination Certificate without signature and official stamp shall not be valid.  
This certificate may be circulated without alteration. Extracts or alterations are subject to approval by:  
Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH

Technical Data

Elektrische Daten/ Electrical data

Rated voltage: (24±6)VDC

Rated power: 3.0W

Environmental data

Tamb: -40°C...+47°C(T6/T80°C)

-40°C...+60°C(T5/T95°C)

IP Rating: IP66/IP67

(16) Test-Report No. GC/Ex8612.00/20

(17) Special Conditions for safe use

1. End user shall comply with the manufacturer's User manual to minimize the risk from electrostatic discharge: Conductors and live parts are prohibited from contacting the non-metallic enclosure during normal operation of the equipment. Use insulators to contact non-metallic enclosures during maintenance.
2. Tamb: -40°C...+47°C(T6/T80°C), -40°C...+60°C(T5/T95°C).
3. End user shall use certified cable glands with suitable type of protection for installation purpose. Cable gland with minimum IP66/IP67 rating.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2024-06-13



This EU Type Examination Certificate without signature and official stamp shall not be valid.  
This certificate may be circulated without alteration. Extracts or alterations are subject to approval by:  
Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH