

[1] **EC-TYPE EXAMINATION CERTIFICATE**

according to Directive 94/9/EC, Annex III

(Translation)



[2] Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres, Directive 94/9/EC

[3] EC-Type Examination Certificate Number: **IBExU15ATEX1013 U**

[4] Component: **Termination**  
Type TC-End-TTR / TTL / TTS

[5] Manufacturer: HTS Global Technologies AG

[6] Address: Am Unisys Park 6  
65843 Sulzbach  
GERMANY

[7] The design of this component mentioned under [4] and any acceptable variation thereto are specified in the schedule to this EC-Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY number 0637 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that the component mentioned under [4] has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components intended for use in potentially explosive atmospheres given in Annex II to the Directive.  
The test results are recorded in the test report IB-14-3-264 of 16 February 2015.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012, EN 60079-7:2007 und EN 60079-31:2009.

[10] The sign „U“ placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This certificate may only be used as a basis for certification of an equipment or protective system.

[11] This EC-Type Examination Certificate relates only to the design and construction of the specified component. If applicable, further requirements of this directive apply to the manufacture and supply of this component.

[12] The marking of the component mentioned under [4] shall include the following:

II 2G Ex e IIC Gb

II 2D Ex tb IIIC Db

IBExU Institut für Sicherheitstechnik GmbH  
Fuchsmühlenweg 7 - 09599 Freiberg, Germany  
☎ +49 (0) 3731 3805-0 - 📠 +49 (0) 3731 23650

Authorised for certifications  
-Explosion protection-

By order

(Dr. Wagner)



Freiberg, 16 February 2015

Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Schedule

[13] **Schedule**

[14] **to the EC-TYPE EXAMINATION CERTIFICATE IBExU15ATEX1013 U**

[15] **Description of component**

The Termination type TC-End-TTR / TTL / TTS is intended for use with explosion protected parallel heating tapes in potentially explosive atmospheres. It consists of a silicon tube, which is glued on the heating cable.

Technical data:

- |   |   |
|---|---|
| - Diameter:                                   | 7 mm, 7.5 mm and 9 mm                           |
| - Circumference of the heating tapes:         | 22-29 mm, 26-30 mm and 30-36 mm                 |
| - Permissible heating cable:                  | cable with outer jacket TPE-O and Fluor polymer |
| - Nominal voltage:                            | max. 300 V                                      |
| - Degree of protection according to EN 60529: | IP 65   |
| - Operating temperature range:                | -32 °C up to +210 °C                            |

[16] **Test report**

The test results are recorded in the test report IB-14-3-264 of 16 February 2015.  
The test and information documents are part of the test report and listed there.

Summary of the test results:

The Termination type TC-End-TTR / TTL / TTS fulfils as component the requirements of explosion protection for Equipment Group II, Categories 2G and 2D in the types of protection Increased safety and protection by enclosure.

[17] **Special conditions for safe use**

- The use of the Termination must be tested and certified separately within the context of the heating system. The service temperature must not exceed 210 °C. The extended service temperature range can be restricted corresponding to the used heating cables.
- The used heating cables must be tested and certified according to the Directive 94/9/EC. They may only be used at the permissible current density. The special conditions and safety instructions contained in the EC-Type Examination Certificate have to be noticed.
- At the installation it has to be checked the integrity of the silicon tube and the maintenance of the insulation distance.
- The Termination must to be protected from exposure to light.
- The Termination must be installed and operated protectedly in accordance with EN 60079-0 due to the low risk of mechanical danger.

[18] **Essential Health and Safety Requirements**

Confirmed by compliance with standards (see [9]).

By order

Freiberg, 16 February 2015



(Dr. Wagner)