IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

EC-TYPE EXAMINATION CERTIFICATE [1]

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
- EC-Type Examination Certificate Number: IBExU14ATEX1030 U [3]

[4] Component: switch block

Type GHG41. R

[5] Manufacturer: Cooper Crouse-Hinds GmbH

[6] Address: Neuer Weg-Nord 49 69412 Eberbach **GERMANY**

- [7] The design of the component mentioned under [4] and any acceptable variations 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 Directive 94/9/EC of the European Parliament and the Council 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-13-3-007 of 26 May 2014.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012, EN 60079-1:2007 and EN 60079-7:2007.
- [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 the 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.
- The marking of the component mentioned under [4] shall include the following: [12]

⟨€x⟩ II 2G Ex de IIC/IIB Gb resp. ⟨€x⟩ I M2 Ex de I Mb

IBExU Institut für Sicherheitstechnik GmbH

Fuchsmühlenweg 7 - 09599 Freiberg, GERMANY

Authorised for certifications -Explosion protection-

By order

(Dr. Wagner)

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Institut für Sicherheits rechnik **GmbH**

- Seal -(ID no. 0637) Freiberg, 26 May 2014

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.

Annex

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[13] Annex

[14] to the EC-TYPE EXAMINATION CERTIFICATE IBEXU14ATEX1030 U

[15] Description of the component

switch block type GHG41. R for installation in control panel mounting as well as in socket type (rail mounting)

Type key

Stelle der Identnummer Code No. digit Schlüsselzeichen Code No.	1 2 3 4 5 G H G 4 1	1 1	!!	10 11 12 13 14 15 _ R
Drucktastersockel / switch block Sockelaufbau / rail mounting				
Drucktastersockel mechanisch betätigt/Dr mechanisch bet. + Widerstand / switch block mechanical operated/switch mechanical op. + resistor	block 11			
Potentiometer / potentiometer	16	,		
Diode / diode	19			
Sicherung / fuse	20			
Zählnummer / code nos 01 R0001 - 99 R999	9			

Kontaktvarianten haben keinen Einfluss auf den Explosionschutz / contact variants do not affect the explosion protecion

Thermal data:

- Ambient temperature range: IIB: -60 °C to +55 °C IIC: -45 °C to +55 °C

Operating temperature range: IIB: -60 °C to +80 °C

IIC: -45 °C to +80 °C

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Technical data for type of protection increased safety:

- Rated voltage:

500 V AC/DC

- Rated current:

16 A 2.5 mm²

Rated cross section:Bolt torque:

2.5 Nm

Further details are specified in the operation manual as well as in the documents of the manufacturer which are part of the test report.

[16] Test report

The test results are recorded in the test report IB-13-3-007 of 26 May 2014. The test and information documents are part of the test report and listed there.

Summary of the test results

The switch block type GHG41. R fulfils as component the requirements of explosion protection for Equipment Group II, Category 2G as well as Equipment Group I, Category M2 in type of protection flameproof enclosure "d" in combination with increased safety "e".

[17] Special conditions for safe use

The installation of the switch block in equipment of Category 2G and M2 must be tested and certified separately, At this, the thermal parameters have to be verified among others.

[18] Essential Health and Safety Requirements

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

By order

Freiberg, 26 May 2014

(Dr. Wagner)