

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

PTB 98 ATEX 1116 U

(4) Component: Built-in switch or pushbutton component type GHG 23. ...R....

(5) Manufacturer: CEAG Sicherheitstechnik GmbH

(6) Address: D-69412 Eberbach

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

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component 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 atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 00-18183.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014:1997

EN 50018:1994

EN 50019:1994

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This Component Certificate only serves as a basis for the issuing of certificates for equipment or protective systems.

(11) This EC-type-examination Certificate relates only to the design and construction of the specified component in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this component.

(12) The marking of the component shall include the following:

II 2 G EEx de IIC IM 2 EEx de

Zertifizierungsstelle Explosionsschutz

Braunschweig, March 31, 2000

By order:

Dr.-Ing. U. Klausmeier
Regierungsdirektor



sheet 1/3

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

Physikalisch-Technische Bundesanstalt

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(13) SCHEDULE

(14) EC-TYPE-EXAMINATION CERTIFICATE PTB 98 ATEX 1116 U

(15) Description of component

The built-in switch or pushbutton component of type GHG 23. ... R ... serves to switch control, load and motor circuits. The built-in switch or pushbutton component is assembled as a module in wafers with individual flameproof switching contacts.

The integrated terminals are used for connection

Electrical data

Rated insulation voltage	up to					690 V	
Rated voltage U_e	up to	60 V				230 V	500 V
Rated current I_e	max.	10 A	10 A	0,4 A	0,4 A	10 A	6 A
related to utilization category		DC-1	AC-11	DC-1	DC-11	AC-3	AC-11

In accordance with the relevant provisions, values other than the rated values stated above are permissible, provided the making and breaking capacities are complied with. These values have been specified by the manufacturer, dependent on the mode of operation, utilization category, etc.

Rated cross-section max. 2,5 mm² single-core
1,5 mm² finely stranded

Ambient temperature up to -55 °C to 45 °C

The built-in switch or pushbutton component is designed for a temperature stability of 80 °C and can be used in ranges of temperature class T6.

(16) Test report PTB Ex 00-18183

(17) Special conditions for safe use

none;

Instructions for manufacture and operation

The built-in switch or pushbutton component is to be installed in an enclosure which complies with the requirements of a recognized type of protection according to EN 50 014, section 1.2.

sheet 2/3

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SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 98 ATEX 1116 U

If the built-in switch or pushbutton component is installed in an enclosure of the type of protection increased safety "e" according to EN 50 019, the creepage distances and clearances according to section 4.3, section 4.4 and Table 1 must be complied with.

The built-in switch or pushbutton component may be used in both group I and II, as the requirements of the standard are identical in this case.

This EC-type-examination Certificate and all future supplements to it are also considered to be supplements to Component Certificate PTB No. Ex-88.B.1047 U.

(18) Essential health and safety requirements

The tests carried out and their positive results show that the built-in switch or pushbutton component meets the requirements of Directive 94/9/EC and of the standards stated on the cover sheet.

Zertifizierungsstelle Explosionsschutz

Braunschweig, March 31, 2000

By order:


Dr.-Ing. U. Klausmeyer
Regierungsdirektor



Physikalisch-Technische Bundesanstalt • Postfach 33 45 • 38023 Braunschweig

Cooper-Crouse Hinds GmbH
z. Hd. Frau Frankhauser

Neuer Weg Nord 49
69412 Eberbach

Ihr Zeichen:
Ihre Nachricht vom: 11.01.2008
Unser Zeichen: 3.5-2231-07/08-Ko
Unsere Nachricht vom:

Bearbeitet von: Ruth Koch
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Datum: 07.05.2008

Normengenerationsänderung nach EN 60079-0 ff
Change of the standard generation to EN 60079-0 ff
Einbauschalter bzw. -taster Typ GHG 23. ...R....
Built-in switch or pushbutton component type GHG 23. ...R....

PTB 98 ATEX 1116 U

Sehr geehrte Frau Frankhauser,
Dear Mrs. Frankhauser,

die Selbsterklärung zu o.g. Komponente auf Übereinstimmung mit den vorgenannten Normen hat die PTB zur Kenntnis genommen und den zugehörigen Prüfungsunterlagen beigefügt.
Es bestehen keine sicherheitstechnischen Bedenken, die o.g. Komponente mit folgenden Kennzeichnungen zu versehen:

 II 2G Ex de IIC

 I M2 Ex de I

Wir bitten Sie, diese Änderungen bei zukünftigen Ergänzungen mit aufzunehmen.

Your statement relating the above-named component concerning the conformity with the aforementioned standards was acknowledged by PTB and added to the related test documentation. There are no safety-related objections from PTB to mark the above mentioned component as follows:

⊕ II 2G Ex de IIC

⊕ I M2 Ex de I

We would like to ask you to include this change into the next supplement.

Mit freundlichen Grüßen / Best regards

Im Auftrag / By order



Dr.-Ing. Martin Thedens
Oberregierungsrat