

(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 03 ATEX 2169 X

(4) Equipment: Explosion protected isolating relay-card-module, type 17-9955-0***/*

(5) Manufacturer: BARTEC GmbH

(6) Address: Max-Eyth-Straße 16, 97980 Bad Mergentheim, Germany

(7) This equipment 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 equipment 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 04-23289.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014:1997 + A1 + A2 **EN 50020:2002**

(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 EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

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

II (1) G [Ex ia] IIC or [Ex ia] IIB

Zertifizierungsstelle Explosionsschutz

Braunschweig, March 25, 2004

By order:

Dr.-Ing. H. Wehinger

Direktor und Professor

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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.

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SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 03 ATEX 2169 X**(15) Description of equipment

The explosion protected isolating relay-card-module, type 17-9955-0***/* is used for the electrical isolation of intrinsically safe circuits from non-intrinsically safe circuits.

The maximum permissible ambient temperature is 70 °C.

Electrical dataCoil circuit:

Type of current: direct current
Excitation voltage: 6 ... 110 V DC (depending on coil)
Excitation power: up to 1 W

Contact circuit(s):

type of current:	alternating current	
voltage max.:	250 V	250 V
current max.:	5 A	3 A
power max.:	100 VA	-
cos φ		≥ 0.7

type of current:	direct current					
voltage:	24 V	110 V	220 V	24 V	110 V	220 V
current max.:	6 A	0.5 A	0.3 A	1.5 A	0.22 A	0.14 A
power max.:	144 W	55 W	66 W	20 W	20 W	20 W
L/R				≤ 40 ms	≤ 40 ms	≤ 40 ms

The coil circuit and the contact circuit(s) are safely electrically isolated from each other up to a peak value of the nominal voltage of 375 V.

(16) Test report PTB Ex 04-23289(17) Special conditions for safe use

- The isolating relay-card-module shall be mounted into an enclosure which meets the degree of protection IP 20 according to EN 60529:2000 as a minimum.
- For „Electrical data“ reference is made to the operating instructions.

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3. Certified circuits of type of protection Intrinsic Safety EEx ia IIC or EEx ia IIB may be connected alternatively to the coil circuit or the contact circuits respectively. The effective internal inductances and capacitances shall be neglected. Several intrinsically safe circuits may be connected to the contact circuits only if Intrinsic Safety is maintained with the connection of these circuits considering the rules for the interconnection of intrinsically safe circuits. Existing effective inductances shall be considered with the evaluation.
4. The total sum of the peak values of the nominal voltages of coil circuit and contact circuit(s) must not exceed 375 V.

(18) Essential health and safety requirements

met by compliance with the standards mentioned above

Zertifizierungsstelle Explosionsschutz

By order:


Dr.-Ing. H. Wefing
Direktor und Professor

Braunschweig, March 25, 2004

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Wir	We	Nous
BARTEC GmbH, Max-Eyth-Strasse 16, 97980 Bad Mergentheim		
erklären, dass das Produkt	declare, that the product	attestons, que le produit
Trennrelais	Isolator relais	Relais de séparation

Typ-Nr.: 07 – 7311 – 937* / **00

auf das sich diese Erklärung bezieht, den Bestimmungen der folgenden Richtlinien entspricht	to which this declaration relates in accordance with the provision of the following directives	se référant à cette attestation correspond aux dispositions des directives suivantes
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94/9/EG,
2004/108/EG

94/9/EC,
2004/108/EC

94/9/CE,
2004/108/CE

und mit folgenden Normen oder normativen Dokumenten übereinstimmt

and is in conformity with the following standards or other normative documents

et est conforme aux normes ou documents normatifs ci-dessous

EN 60 079-0: 2006;

EN 60 079-1: 2004;

EN 60 079-7: 2007;

EN 50 020 : 2002;

EN 55 022 : 2006;

EN 55 024 : 2003

EG-Baumusterprüf-bescheinigung	EC-Type Examination Certificate	Attestation d'examen CE de type
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PTB 97 ATEX 1068 U

PTB 03 ATEX 2169 X

Kennzeichnung

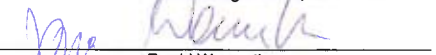
Marking

Marquage

0044

Ⓔ II 2(1)G Ex de [ia] IIC

Bad Mergentheim, den 13.05.2008


Ewald Warmuth
Managing Director
Bad Mergentheim