



Translation

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

(2) Equipment or protective system Intended for use in potentially explosive atmospheres - **Directive 94/9/EC**



(3) EC-Type Examination Certificate Number

**TÜV 01 ATEX 1668**

(4) Equipment: Bus interface 4 x RTD in Ex I type 17-6583-.7././....

(5) Manufacturer: BARTEC Componenten und Systeme GmbH

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

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV Hannover/Sachsen-Anhalt e.V., TÜV CERT-Certification Body, notified body number N° 0032 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system 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 N° 01 PX 02410.

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

**EN 50 014: 1997**

**EN 50 020: 1994**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 and construction of the specified equipment or protective system according to Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and placing on the market of this equipment or protective system.

(12) The marking of the equipment or protective system must include the following:

 **II (1) G D [EEx Ia] IIC/IIB**

TÜV Hannover/Sachsen-Anhalt e.V.  
TÜV CERT-Zertifizierungsstelle  
Am TÜV 1  
D-30519 Hannover

Hannover, 2001-05-21

Head of the  
Certification Body



Translation

# 1. SUPPLEMENT

**to Certificate No.** TÜV 01 ATEX 1668

**Equipment:** Bus interface 4 x RTD in Ex i type 17-6583-\*7\*\*/\*\*\*\*

**Manufacturer:** BARTEC GmbH  
**Address:** Max-Eyth-Str. 16  
97980 Bad Mergentheim  
Germany

**Order number:** 8000556270

**Date of issue:** 2011-10-19

Amendments:

In the future the devices may also be manufactured and operated according to the test documents listed in the test report. The changes concern components and the standards used for assessment.

The electrical data and all other data apply unchanged for this supplement.

The equipment incl. of this supplement meets the requirements of these standards:

**EN 60079-0:2009**                      **EN 60079-11:2007**                      **EN 61241-11:2006**

In the future the marking must include the following:

 II (1) G [Ex ia Ga] IIC      resp.      II (1) G [Ex ia Ga] IIB      and  
II (1) D [Ex ia Da] IIIC      resp.      II (1) D [Ex ia Da] IIIB

(16) The test documents are listed in the test report No. 11 203 556270.

(17) Special conditions for safe use

No additional ones

1. Supplement to Certificate No. TÜV 01 ATEX 1668

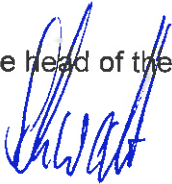
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(18) Essential Health and Safety Requirements

No additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

A handwritten signature in blue ink, appearing to read "Schwedt". The signature is stylized and cursive.

Schwedt

Hanover office, Am TÜV 1, 30519 Hanover, Tel.: +49 (0) 511 986-1455, Fax: +49 (0) 511 986-1590

(13)

## SCHEDULE

(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 01 ATEX 1668**

(15) Description of equipment

The Bus interface 4 x RTD in Ex I type 17-6583-.7./... is used for the galvanic separation of Intrinsically safe circuits that may be lead in hazardous areas that require category 1 to 3 equipment. The Bus interface has to be installed outside of the hazardous area.

The ambient temperature range is  $-25^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ .

### Electrical data

Supply circuit  
(connections X4.23 and X4.24)

$U = 20...30 \text{ V d.c.}$   
 $U_m = 253 \text{ V}$

PA  
(connections X4.21 and X4.22)

for the connection to the potential earthing system

Signal circuits  
(connections X1.1 to X1.12)

in type of protection "Intrinsic Safety" EEx ia IIC/IIB  
Maximum values per circuit:  $U_o = 7.2 \text{ V}$   
 $I_o = 6 \text{ mA}$   
 $P_o = 11 \text{ mW}$

	EEx ia IIC	EEx ia IIB
$L_o$	0.6 H	1 H
$C_o$	13.5 $\mu\text{F}$	240 $\mu\text{F}$

The above mentioned values of the outer reactances apply only, on condition that the simultaneous appearance does not need to be considered. In the case of simultaneous appearance capacitance and inductance in concentrated form the permissible maximum values have to be taken from the following table:

	EEx ia IIC	EEx ia IIB
$L_o$	25 mH	50 mH
$C_o$	1.1 $\mu\text{F}$	5.7 $\mu\text{F}$

Interface circuits  
(connections X9.1 to X9.60)

Operating value  $U = 5 \text{ V}$   
 $U_m = 253 \text{ V}$

The signal circuits are safely galvanically separated among each other up to 30 V and from all other circuits up a to a peak value of the nominal voltage of 375 V.

(16) Test documents are listed in the test report No.: 01 PX 02410.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

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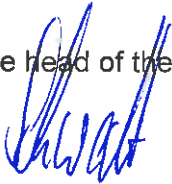
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