



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 00 ATEX 1649

(4) Equipment: Bus-Interface 16 digital out Ex i type 17-6583-10J.... and type 17-6583-11J....

(5) Manufacturer: BARTEC Componenten und Systeme GmbH

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

(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° 00PX20700.

(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 (2) G D [EEx ib] IIC**

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

Hanover, 2000-11-24

Head of the
Certification Body



(13)

SCHEDULE

(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 00 ATEX 1649**

(15) Description of equipment

The Bus-Interface 16 digital out Ex i type 17-6583-.10./.... and type 17-6583-.11./.... is used for the safe electrical separation of intrinsically safe output circuits and non intrinsically safe supply, interface- and indicating circuits, which are located outside of the hazardous explosive area. The non intrinsically safe circuits are galvanically connected with intrinsically safe output circuits.

The permissible ambient temperature range is -25 °C to $+85\text{ °C}$.

Electrical data

Supply circuit 1
(connections X4.23 and X4.24)
PA (connections X4.21, X4.22 and X1.17 to X1.24)

$U = 24\text{ V d.c. (max. } 30\text{ V d.c.)}$, about 2,5 W
 $U_m = 253\text{ V}$

Supply circuit 2
(Connections X4.19 to X4.22)
PA (connections X4.21, X4.22 and X1.17 to X1.24)

$U = 24\text{ V d.c. (max. } 30\text{ V d.c.)}$, about 15 W
 $U_m = 253\text{ V}$

Signal circuits (output)
(connections X1.1 to X1.20)
type 17-6583-.10./....

in type of protection Intrinsic Safety EEx ib IIC
resp. EEx ib IIB

maximum values: $U_o = 21\text{ V}$
 $I_o = 111,6\text{ mA}$
 $P_o = 586\text{ mW}$

characteristic line: linear

	EEx ib	IIC	IIB
max. permissible outer inductance		3,2 mH	12 mH
max. permissible outer capacitance		188 nF	1,27 μ F

C_i negligibly small
 L_i negligibly small

type 17-6583-11 /....

maximum values: $U_o = 21 \text{ V}$
 $I_o = 139,2 \text{ mA}$
 $P_o = 731 \text{ mW}$
 characteristic line: linear

EEx ib	IIC	IIB
max. permissible outer inductance	1,8 mH	8 mH
max. permissible outer capacitance	188 nF	1,27 μ F

C_i negligibly small
 L_i negligibly small

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

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

indicating circuits
 (connections X3.1 to X3.16 and
 X5.1 to X5.16)

$U = 5 \text{ V d.c.}$

(16) Test documents are listed in the test report No.: 00PX20700.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

Translation

1. SUPPLEMENT

to Certificate No. TÜV 00 ATEX 1649

Equipment: Bus interface 16 digital out Ex I type 17-6583-*1**/****

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

Order number: 8000556269

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 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 (2) G [Ex ib Gb] IIC resp. II (2) G [Ex ib Gb] IIB and
II (2) D [Ex ib Db] IIIC resp. II (2) D [Ex ib Db] IIIB

(16) The test documents are listed in the test report No. 11 203 556269.

(17) Special conditions for safe use

None

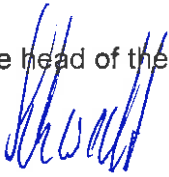
1. Supplement to Certificate No. TÜV 00 ATEX 1649

(18) Essential Health and Safety Requirements

No additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified 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 notified body

A handwritten signature in blue ink, appearing to read "Schwedt".

Schwedt

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