



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 1724

- (4) Equipment: Bus interface HART type 17-6583-.H./....
(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 YEX 126497.

(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-30819 Hannover

Hannover, 2001-07-25


Head of the
Certification Body



(13)

SCHEDULE

(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 01 ATEX 1724**

(15) Description of equipment

The Bus interface HART type 17-6583-.H./... is intended for the galvanic separation and signal transmission between intrinsically safe transducer circuits, that may be lead into areas that require apparatus of category 1 to 3, and non intrinsically safe circuits of evaluation units. The bus interface has to be installed outside of the hazardous area. Furthermore, it has to be erected in such a way that at least a degree of protection of IP 20 according to IEC 60529 is obtained.

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

Electrical data

Supply circuit
(connections X4.21 to X4.24)

$U = 20...30 \text{ V DC}$; about 7,8 W
 $U_m = 253 \text{ V}$

Interface circuits
(connections X4.1 to X4.9)

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

Signal circuits

in type of protection "Intrinsic Safety" EEx ia IIC/IIB

Analogue-in In for measuring transducers resp. Analogue-out
(connections X1.1, X1.2; X1.4, X1.5; X1.7, X1.8; X1.10, X1.11; X1.13, X1.14; X1.16, X1.17; X1.19, X1.20; X1.22, X1.23)

maximum values per circuit: $U_o = 26,7 \text{ V}$
 $I_o = 89,9 \text{ mA}$
 $P_o = 600 \text{ mW}$

	EEx ia IIC	EEx ia IIB
L_o	5 mH	18 mH
C_o	93 nF	720 nF

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	2 mH	16 mH
C_o	35 nF	227 nF



Schedule EC-Type Examination Certificate N° TÜV 01 ATEX 1724

or

Analogue-in intended for an external standard signal of 4 to 20 mA (connections X1.2, X1.3; X1.5, X1.6; X1.8, X1.9; X1.11, X1.12; X1.14, X1.15; X1.17, X1.18; X1.20, X1.21; X1.23, X1.24)

only for the connection to certified intrinsically safe circuits with the following maximum values per circuit:

$$U_i = 50 \text{ V}$$
$$I_i = 87,7 \text{ mA}$$

The effective internal capacitance and inductance are negligibly small

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

(16) Test documents are listed in the test report No.: 01YEX126497.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

Translation

1. SUPPLEMENT

to Certificate No. TÜV 01 ATEX 1724

Equipment: Bus-Interface HART type 17-6583-*H**/****

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

Order number: 8000556271

Date of issue: 2011-10-19

Amendments:

In the future the device 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:

Ex 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 556271.

(17) Special conditions for safe use

None

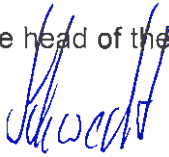
1. Supplement to Certificate No. TÜV 01 ATEX 1724

(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

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