IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx TUN 11.0032X	Issue No: 1	Certificate history:
			Issue No. 1 (2016-12-20)
Status:	**Current**	Page 1 of 4	Issue No. 0 (2011-10-27)
Date of Issue:	**2016-12-20**		
Applicant:	**BARTEC GmbH** Max-Eyth-Str. 16 97980 Bad Mergentheim **Germany**		
Equipment:	**Profibus Interface 8 Transmitter in type 17-6583-34**/******		
Optional accessory:			
Type of Protection:	**Intrinsic Safety**		
Marking:	[Ex ia Ga] IIC/IIB [Ex ia Da] IIIC/IIIB		

Approved for issue on behalf of the IECEx Certification Body: Christian Roder

Position: Deputy Head of the IECEx Certification Body

Signature:
(for printed version)

Date: 2016 - 12 - 20

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1
30519 Hannover
Germany

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

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

DE/TUN/ExTR11.0032/01

Quality Assessment Report:

DE/TUN/QAR06.0017/08

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Profibus Interface 8 Transmitter in type 17-6583-34**/**** serves to safely electrically isolate the intrinsically safe signal circuit from the non-intrinsically safe supply circuit, the non-intrinsically safe Interface circuits as well as the non intrinsically-safe output circuit.

Type code:

Profibus Interface 8 Transmitter in type 17-6583-34**/****

For further data see attachment.

CONDITIONS OF CERTIFICATION: YES as shown below:

The device has to be erected in such a way, that a degree of protection of at least IP20 according to IEC 60529 is reached.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Proof of conformity of the Profibus Interface 8 Transmitter in type 17-6583-34**/**** to the current versions of the IEC standards IEC 60079-0:2011, Ed.6 and IEC 60079-11:2011, Ed.6.

No constructive changes or similar.

Annex:

_Attachment to IECEx TUN 11.0032 Issue 1.pdf

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The Profibus Interface 8 Transmitter in type 17-6583-34**/**** serves to safely electrically isolate the intrinsically safe signal circuit from the non-intrinsically safe supply circuit, the non-intrinsically safe Interface circuits as well as the non intrinsically-safe output circuit.

Type code:
Profibus Interface 8 Transmitter in type 17-6583-34**/****

Type no.	17	-	6	5	8	3	-	3	4	*	*	/	*	*	*	*
Code no.	**A**		**B**	**C**	**D**	**E**		**F**	**G**	**H**	**I**		**J**	**K**	**L**	**M**

Code	**Code for:**	**Variation:**	**Description**
A	Product sector	17	Electronical device
B	Product group	6	Transmitter / Bus module
C	Operating place	5	Location outside the hazardous area, Associated equipment
D	Type of device	8	Euro board / board module
E	Design	3	Bus module / board device
F	Bus version	3	Profibus
G	Device version	4	8 Transmitter in
H - M	And letter for characteristics without influence to the explosion protection	-	-

Electrical Data:

Supply circuit
(Connection X4.23, X4.24 and X4.22 (PE))

only for the connection to a non-intrinsically safe circuit with following maximum values:

U_N = 24 VDC (max. 30 VDC), ca 7.6 W
U_m = 253 V

Interface circuit
(Connection X4.1, X4.2, X4.5, X4.6, X4.8 and X4.9)

only for the connection to a non-intrinsically safe circuit with following maximum values:

U_N < 5 VDC
U_m = 253 V

The shield of the bus line is connected to X4.3 and X4.4. The Connections X4.16 and X4.17 is either bridged or not occupied.

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Output circuit (Connection X4.19, X4.18 and X4.20)

only for the connection to a non-intrinsically safe circuit with following maximum values:

U_N = 230 VAC, I = 3 A, S = 100 VA
U_m = 253 V

Signal circuit (Connections X1.1 up to X1.16)

in type of protection intrinsic safety Ex ia IIC/IIB resp. Ex ia IIIC/IIIB with following maximum values per circuit:

U_o = 26 V
I_o = 84.3 mA
P_o = 549 mW
Characteristic line: linear

The effective internal capacitance and inductance are negligibly small.

The maximum permissible values for the external inductance L_o and the external capacitance C_o have to be taken from the following table:

Ex ia IIC	L_o	2.7 mH	L_o	1 mH	L_o	0.5 mH	L_o	0.2 mH
	C_o	43 nF	C_o	61 nF	C_o	78 nF	C_o	99 nF
Ex ia IIB / IIIB / IIIC	L_o	19 mH	L_o	1.0 mH	L_o	0.2 mH	L_o	0.1 mH
	C_o	340 nF	C_o	410 nF	C_o	640 nF	C_o	770 nF

Thermal Data:
Ambient temperature range: -25 °C ≤ T_a ≤ +75 °C

The intrinsically safe signal circuits are safely galvanically isolated from the non-intrinsically safe circuits up to a voltage of 375 V and the intrinsically signal safe circuits are connected with one another galvanically.

Specific Condition of Use

The device has to be erected in such a way, that a degree of protection of at least IP20 according to IEC 60529 is reached.