



# 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](http://www.iecex.com)

Certificate No.:	IECEX TUN 11.0027X	Issue No: 1	<u>Certificate history:</u> Issue No. 1 (2016-03-09) Issue No. 0 (2011-09-30)
Status:	<b>Current</b>	Page 1 of 4	
Date of Issue:	<b>2016-03-09</b>		
Applicant:	<b>BARTEC GmbH</b> Max-Eyth-Straße 16 97980 Bad Mergentheim <b>Germany</b>		
Electrical Apparatus: <i>Optional accessory:</i>	<b>Isolating Switch Amplifier type 17-5521-4***/*</b>		
Type of Protection:	<b>Intrinsic Safety</b>		
Marking:	[Ex ia Ga] IIC/IIB [Ex ia Da] IIIC/IIIB		

*Approved for issue on behalf of the IECEx  
Certification Body:*

Andreas Meyer

*Position:*

Head of the IECEx Certification Body

*Signature:  
(for printed version)*

*Date:*

\_\_\_\_\_  
\_\_\_\_\_

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](http://www.iecex.com).

Certificate issued by:

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





# IECEx Certificate of Conformity

Certificate No: IECEx TUN 11.0027X

Issue No: 1

Date of Issue: 2016-03-09

Page 2 of 4

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** Explosive atmospheres - Part 0: General requirements  
Edition:6.0

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

*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/ExTR11.0027/00](#)      [DE/TUN/ExTR11.0027/01](#)

Quality Assessment Report:

[DE/TUN/QAR06.0017/07](#)



# IECEx Certificate of Conformity

Certificate No: IECEx TUN 11.0027X

Issue No: 1

Date of Issue: 2016-03-09

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The device is an associated apparatus which provides a safe galvanically separation of intrinsically safe and non-intrinsically safe circuits.

For technical 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.



# IECEX Certificate of Conformity

---

Certificate No: IECEx TUN 11.0027X

Issue No: 1

Date of Issue: 2016-03-09

Page 4 of 4

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

Proof of conformity of the Isolating Switch Amplifier type 17-5521-4\*\*\*/\*\* to the current versions of the IECEx standards IEC 60079-0:2011 and IEC 60079-11:2011.

**Annex:**

[Attachment to IECEx TUN 11.0027 Issue 1.pdf](#)

Technical data

The permissible temperature range is -40 °C to + 75 °C.

Supply circuit  
(connections Z1, Z2/Z3)

$U = 20 \dots 30 \text{ V d.c.}$   
 $P = 2.5 \text{ W}$   
 $U_m = 253 \text{ V}$

Signal circuits  
(connections Z5, Z7, Z9, Z11 and Z4, Z6, Z8, Z10)

In type of protection [Ex ia Ga] IIC / IIB  
resp. [Ex ia Da] IIIC / IIIB

$U_o = 11.55 \text{ V}$   
 $I_o = 30 \text{ mA}$   
 $P_o = 86.4 \text{ mW}$   
Characteristic line: linear

Maximum permissible external inductance  
for IIC resp. IIIC

$L_o = 34 \text{ mH}$

Maximum permissible external inductance  
for IIB resp. IIIB

$L_o = 130 \text{ mH}$

Maximum permissible external capacitance  
for IIC resp. IIIC

$C_o = 1.59 \mu\text{F}$

Maximum permissible external capacitance  
for IIB resp. IIIB

$C_o = 10.8 \mu\text{F}$

Output circuits  
(connections Z12, Z13, Z14, Z15, Z16 and Z3)

$U \leq 29 \text{ V d.c.}$   
 $I \leq 100 \text{ mA}$