



# 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 EPS 14.0042X

Issue No: 1

Certificate history:

Issue No. 1 (2017-09-01)

Issue No. 0 (2014-07-02)

Status: Current

Page 1 of 4

Date of Issue: 2017-09-01

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

Equipment: Miniature / Control and Display Unit, type 07-61\*\*-\*///\*\* and type 07-662\*-\*///\*\*

*Optional accessory:*

Type of Protection: d, e, i, t, op is

Marking:

Ex db eb op is ia/ib [ib] IIC T6...T4 Gb  
Ex db eb op is ia/ib [ia Ga] IIC T6...T4 Gb  
Ex tb op is ia/ib [ib] IIC T80°C, T95°C, T130°C Db  
Ex tb op is ia/ib [ia Da] IIC T80°C, T95°C, T130°C Db

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

Holger Schaffer

*Position:*

Certification Manager

*Signature:  
(for printed version)*

*Date:*

2017-09-01

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:

Bureau Veritas Consumer Products Services Germany GmbH  
Businesspark A96  
86842 Türkheim  
Germany





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Certificate No: IECEx EPS 14.0042X Issue No: 1  
Date of Issue: 2017-09-01 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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-28 : 2015 Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/EPS/ExTR14.0043/00 DE/EPS/ExTR14.0043/01

### Quality Assessment Report:

DE/TUN/QAR06.0017/05



# IECEX Certificate of Conformity

Certificate No: IECEx EPS 14.0042X

Issue No: 1

Date of Issue: 2017-09-01

Page 3 of 4

## Schedule

### EQUIPMENT:

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

SPECIFIC CONDITIONS OF USE: YES as shown below:

When operated at ambient temperatures below  $-20\text{ }^{\circ}\text{C}$ , different variants of viewing windows can be used if a protected installation is ensured by the construction in accordance with the requirements of IEC 60079-0, section 26.4.2.



# IECEX Certificate of Conformity

Certificate No: IECEx EPS 14.0042X

Issue No: 1

Date of Issue: 2017-09-01

Page 4 of 4

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

Rev. 1: Update of standards, Update of minimum ambient temperature, Update of enclosure sizes

**Annex:**

[IECEX EPS 14.0042 issue 1 - Annex.pdf](#)



Electrical data:

Rated insulating voltage:

Type 07-61\*2-\*\*\*\*/\*\*\*\*.....: up to 1100 V

Type 07-61\*1-\*\*\*\*/\*\*\*\* & 07-662\*-\*\*\*\*/\*\*\*\*: up to 690 V

Rated current .....: max. 21 A

Conductor size.....: max. 2,5 mm<sup>2</sup>

Dimensions in mm (Diameter, length)			Power dissipation in W for	
			T6	T5
07-6111	∅ 30	L ≥ 55 <sup>1)</sup>	2,5	3
07-6622	∅ 30	L ≥ 55 <sup>1)</sup>	2,5	-
07-6623	∅ 30	L ≥ 55 <sup>1)</sup>	-	3
07-6121	∅ 45	L ≥ 55 <sup>1)</sup>	2,5	3
07-6121	∅ 45	L ≥ 90 <sup>1)</sup>	5	6
07-6624	∅ 45	L ≥ 55 <sup>1)</sup>	5	-
07-6625	∅ 45	L ≥ 55 <sup>1)</sup>	-	6
07-6131	∅ 60	L ≥ 60 <sup>1)</sup>	5	6
07-6131	∅ 60	L ≥ 90 <sup>1)</sup>	7	8
07-6626	∅ 60	L ≥ 55 <sup>1)</sup>	7	-
07-6627	∅ 60	L ≥ 55 <sup>1)</sup>	-	8
07-6132	∅ 60	60 ≤ L < 90	5	6
07-6132	∅ 60	90 ≤ L < 135 <sup>2)</sup>	7	8
07-6142	∅ 90	40 ≤ L < 140		
07-6142	∅ 90	140 ≤ L ≤ 250	16	18
07-6152	∅ 120	75 ≤ L < 200		
07-6142	∅ 90	L > 250 <sup>2)</sup>	23	26
07-6152	∅ 120	200 ≤ L ≤ 370	30	34
07-6152	∅ 120	L > 370 <sup>2)</sup>	40	45
07-6163	∅ 140	L > 400	40	45
07-6173	∅ 160	L > 400	40	45



Annex to Certificate  
IECEx EPS 14.0042 Issue No.: 1



07-6183	∅ 180	L > 400	40	45
07-6193	∅ 200	L > 400	80	100
The power dissipation values refer to an ambient temperature of +40 °C.				

<sup>1)</sup> The nominal value of the enclosed volume is smaller than 25 cm<sup>3</sup> (∅ 30 mm ), 100 cm<sup>3</sup> (∅ 45 mm ) and 100 cm<sup>3</sup> (∅ 60 mm). The length may exceed the given value only if the internal electrical device compensates for the increase of volume. The gaseous part (remaining free space) of the enclosed volume is kept at 1/3 minimum.

<sup>2)</sup> The nominal value of the enclosed volume is 200 cm<sup>3</sup> (∅ 60 mm and L = 135 mm), 1000 cm<sup>3</sup> (∅ 90 mm and L = 250 mm) and 2750 cm<sup>3</sup> (∅ 120 mm and L = 370 mm). The length may exceed the given value only if the internal electrical device compensates for the increase of volume. The gaseous part (remaining free space) of the enclosed volume is kept at 1/3 minimum.

In case of reduced power dissipation, ambient temperatures beyond +40 °C are acceptable.

The rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values and complying with the appropriate standards, the manufacturer specifies the final limiting values depending on power supply specifications, operating mode, utilization category etc. Any additional technical features are specified in the test documents.

The composition of the Ex marking will be based on the types of protection of the components actually used.