



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEx EPS 14.0042X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 Issue 1 (2017-09-01)
Issue 0 (2014-07-02)
Date of Issue: 2025-02-05
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] IIIC T80°C, T95°C, T130°C Db
Ex tb op is ia/ib [ia Da] IIIC T80°C, T95°C, T130°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Ulrich Feike

Position:

Head of Certification

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

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





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

Manufacturing
locations:

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 equipment 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 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-28:2015](#) Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

[IEC 60079-7:2015](#) Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

This Certificate **does not** indicate compliance with 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/EXTR14.0043/02](#)

Quality Assessment Report:

[DE/TUN/QAR06.0017/14](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Miniature / Control and Display Unit type 07-61**-* / * is used to provide a flameproof enclosure of industrial-standard switching, control and display units. It consists of a flameproof housing, optionally with spindles, shafts and/or inspection windows.

The Potentiometer type 07-662*-* / * is used to provide a flameproof enclosure of industrial-standard regulating resistors. It consists of a flameproof housing with actuating spindle.

Connection is made by means of a terminal box in type of protection Increased Safety or by means of an integrated connecting cable (open-ended line).

Max. ambient temperature range: -40 °C to +40 °C resp. up to max. +80 °C at reduced power dissipation

See annex for further details.

SPECIFIC CONDITIONS OF USE: YES as shown below:

For use in environment below -20°C to -40°C, only special model with mechanical protection of glass window shall be used.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Addendum for extended temperature range related to low power dissipation

Annex:

[IECEX EPS 14.0042 issue 2 - Annex.pdf](#)



Annex to Certificate
IECEX EPS 14.0042 Issue No.: 2



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 mm²

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



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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.				

1) The nominal value of the enclosed volume is smaller than 25 cm³ (∅ 30 mm), 100 cm³ (∅ 45 mm) and 100 cm³ (∅ 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.

2) The nominal value of the enclosed volume is 200 cm³ (∅ 60 mm and L = 135 mm), 1000 cm³ (∅ 90 mm and L = 250 mm) and 2750 cm³ (∅ 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.