



# 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 TPS 09.0003	Issue No: 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Page 1 of 4	Issue No. 4 (2015-12-11)
Date of Issue:	<b>2015-12-11</b>		Issue No. 3 (2013-05-14)
Applicant:	<b>Braun GmbH Industrie Elektronik</b> Esslingerstrasse 26 71334 Waiblingen <b>Germany</b>		Issue No. 2 (2011-12-14)
Electrical Apparatus:	<b>Converter Type D46X.xxUx</b>		Issue No. 1 (2010-03-30)
<i>Optional accessory:</i>			Issue No. 0 (2009-11-12)
Type of Protection:	<b>Intrinsic safety „i“</b>		
Marking:	[Ex ia Ga] IIC		

Approved for issue on behalf of the IECEx  
Certification Body:

Dipl.-Ing. Ulrich Jacobs

Position:

Technical Certifier

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 SÜD Product Service GmbH**  
Ridlerstr. 65  
D-80339 Munich  
Germany



Product Service



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Manufacturer: **Braun GmbH Industrie Elektronik**  
Esslingerstrasse 26  
71334 Waiblingen  
**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 : 2004** Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

Edition:4.0

**IEC 60079-11 : 2006** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:5

*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/TPS/ExTR09.0005/00](#)

Quality Assessment Report:

[DE/TPS/QAR12.0006/03](#)



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## Schedule

### EQUIPMENT:

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

The converter D46X.xxUx is to assembly outside the explosive area. It is an appropriate electrical equipment to used as inherently safe current supply of a measuring head resp. a preamplifier.

#### Electrical Data:

Version	Classification	Range of voltage	Power consumption	Fuse [mA] slow	U m
1	D46X.xxU1	18V to 40V AC resp. DC	ca. 3VA	500	40V AC resp. DC
2	D46X.xxU2	85V to 250V AC	ca. 3VA	125	250V AC

Voltage:  $U_0 \leq 8,7V$  DC

Current:  $I_0 \leq 62mA$  DC

Power:  $P_0 \leq 130mW$

Maximally connectable Capacity:  $C_0 = 300nF$

Maximally connectable Inductance:  $L_0 = 2mH$

Temperature range:  $0^\circ C \leq T_{amb} \leq +50^\circ C$

### CONDITIONS OF CERTIFICATION: NO

None



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

Re-Assessment from Dec 11.2015