

(1) EC Type Examination Certificate



(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 94/9/EC**

(3) EC Type Examination Certificate Number:

TPS 03 ATEX 1 006



(4) Equipment: Converter Typ D46X.xxUx; for Group II, Category 1

(5) Manufacturer: Braun Gmb Industrie Elektronik

(6) Address: Esslinger Str. 26; 71334 Waiblingen; Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) TÜV Product Service, TÜV SÜD Group, notified body No. 0123 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive.
The examination and test results are recorded in the confidential report 70017991.2

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

DIN EN 50014: 1997

DIN EN 50020: 1994

(10) If the sign “X” is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

 **II (1)G [Ex ia] IIC**

Office of certification of explosion protection

Munich, 2003-06-27

J. Blum



Page 1 / 2

EC Type Examination Certificate without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by TÜV Product Service, TÜV SÜD Group. In case of dispute, the German text shall prevail.

The document is internally administrated under the following number: Ex5 03 06 20194 005 X



Schedule

- (13)
- (14) **EC Type Examination Certificate TPS 03 ATEX 1 006**
- (15) Description of equipment:

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. Also it is used to accommodate, to convert and to transduction the signals supplied from a measuring head resp. a preamplifier to the following not inherently safe circuits. For the connection to the transformer certified electrical equipment may be used up to zone 0.

The permissible cartridge temperature of the converter is $0^{\circ}\text{C} \leq T_{\text{amb}} \leq +50^{\circ}\text{C}$.

Numbers and/or letters those indicates the different implementations of the converters has to compose instead of. The different is e.g. the kind of the analysis of the received signals.

Electrical data:

Supply current circuit:

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

Intrinsic safe circuit:

Voltage, $U_o = 8,7\text{V DC}$

Current $I_o = 62\text{mA DC}$

Power $P_o = 130\text{mW}$

Maximally connectable capacitor, $C_o = 300\text{nF}$

Maximally connectable inductance, $L_o = 2\text{mH}$

- (16) Test report: 70017991.2
- (17) Special conditions for safe use: none
- (18) Essential health and safety requirements:

met by standards

Office of certification of explosion protection

Munich, 2003-06-27

J. Blum

Page 2 / 2

EC Type Examination Certificate without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by TÜV Product Service, TÜV SÜD Group. In case of dispute, the German text shall prevail.

The document is internally administrated under the following number: Ex5 03 06 20194 005 X