

Translation

(1) EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) No. of EC-Type Examination Certificate: **BVS 10 ATEX E 019**

(4) Equipment: **Electro-magnet type FEB 106/10**

(5) Manufacturer: **Dr. Breit GmbH**

(6) Address: **42579 Heiligenhaus, Germany**

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.

(8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 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 to the Directive. The examination and test results are recorded in the test and assessment report BVS PP 10.2106 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2006 General requirements

EN 60079-1:2007 Flameproof Enclosure

(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 appendix to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

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

 **II 2G Ex d IIC T4/T5/T6**

DEKRA EXAM GmbH
Bochum, dated 30th March 2010

Signed: Simanski

Certification body

Signed: Schumann

Special services unit

- (13) Appendix to
- (14) **EC-Type Examination Certificate
BVS 10 ATEX E 019**
- (15) 15.1 Subject and type

Electro-magnet type FEB 106/10

15.2 Description

The enclosure, which is closed by two lids, accommodates the electro-magnet together with the overvoltage protection and the rectifier.

The magnet is connected by cable glands separately certified for this purpose.

If the ambient temperatures (T_a) are higher than +30°C or lower than -20°C, connecting cables and cable glands will be used that are suitable for these temperatures.

15.3 Parameters

Nominal voltage	max. DC / AC	250 V
Nominal current	max.	1.9 A
Power dissipation	max.	22 W

The total power dissipation and the temperature class depend on the ambient temperature selected:

Ambient temperature T_a	Total power dissipation P_v	Temperature class
-55°C up to +40°C	≤ 22 W	T5
-55°C up to +70°C	≤ 22 W	T4
-55°C up to +30°C	≤ 16 W	T6
-55°C up to +50°C	≤ 16 W	T5
-55°C up to +80°C	≤ 16 W	T4
-55°C up to +60°C	≤ 11 W	T6
-55°C up to +70°C	≤ 11 W	T5
-55°C up to +110°C	≤ 11 W	T4

- (16) Test and assessment report
BVS PP 10.2106 EG as of 30.03.2011
- (17) Special conditions for safe use
None

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH
44809 Bochum, 23.05.2011
BVS-HK/Ar E 0855/11



Certification body



Special services unit