



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

Certificate No.:	IECEx BVS 15.0058X	issue No.:0	Certificate history:
Status:	Current		
Date of Issue:	2015-06-29	Page 1 of 3	
Applicant:	Dr. Breit GmbH Carl-Zeiss-Str. 25 42579 Heiligenhaus Germany		
Electrical Apparatus: Optional accessory:	Solenoid type FEB 102/97		
Type of Protection:	Equipment protection by flameproof enclosures "d"		
Marking:	Ex db IIC T6 Gb alternate Ex db IIC T6		
Approved for issue on behalf of the IECEx Certification Body:	H.-Ch. Simanski		
Position:	Head of Certification Body		
Signature: (for printed version)			
Date:	<u>29.6.2015</u>		

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:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
DEKRA EXAM GmbH



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Manufacturer: **Dr. Breit GmbH**
Carl-Zeiss-Str. 25
42579 Heiligenhaus
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 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition: 7.0

*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/BVS/ExTR15.0050/00](#)

Quality Assessment Report:
[DE/BVS/QAR14.0002/01](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Subject and Type

Solenoid type FEB 102/97

Description

The solenoid type FEB 102/97 has a terminal compartment and an installation compartment which are each closed by a screw-top lid. Both compartments are interconnected by an opening and, together, form a compartment designed for the type of protection Flameproof Enclosure 'd'.

Parameters

Ambient temperature range -20 °C to +60 °C
Rated voltage DC 250 V
Rated current 1 A
Total power Dissipation ≤3.3 W

Ambient temperature range -20 °C to +50 °C
Rated voltage DC 250 V
Rated current 1 A
Total power dissipation ≤3.3 W and ≤ 8 W

CONDITIONS OF CERTIFICATION: YES as shown below:

The widths and gaps of the flameproof joints of this apparatus are not identical with the respective minimum or maximum values required by Table 2 of IEC 60079-1:2014. Information on the dimensions are to be obtained from the manufacturer.

If solenoids of > 3.3 W power are used or if the ambient temperature exceeds 50 °C, cables and cable glands have to be used of a permitted service temperature $T_a + 25$ K minimum. The cable glands and the connection cables also have to be suitable for lower ambient temperatures.