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 13.0053U	issue No.:2	Certificate history: Issue No. 2 (2017-1-2) Issue No. 1 (2015-3-30) Issue No. 0 (2013-5-24)
Status:	**Current**		
Date of Issue:	**2017-01-02**	Page 1 of 5	

Applicant: **Friemann & Wolf Batterietechnik GmbH**
Industriestraße 22
63654 Büdingen
Germany

Equipment: **Cell type Saft M52 EX SV**
Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i"**

Marking: Small Ex Component marking

Approved for issue on behalf of the IECEx Certification Body: G. Schumann

Position: Deputy Head of Certification Body

Signature:
(for printed version)

Date: 2017-01-02

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.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA EXAM GmbH

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Manufacturer: **Friemann & Wolf Batterietechnik GmbH**
Industriestraße 22
63654 Büdingen
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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*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/ExTR13.0055/02

Quality Assessment Report:

DE/BVS/QAR13.0006/02

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Schedule

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

General product information:

The cell type Saft M52 EX SV is a Lithium-Manganese Dioxide (Li-MnO_2) cell and consists of a spirally wound electrode construction and has a thin separator.
The cell code for this cell type Saft M52 EX SV includes the charge number and the specification of the version.
This component should not be brought without any additional safety elements in a potentially explosive atmosphere. See installation instructions.
There are six different variants of the cell type Saft M 52 EX SV.
The different part numbers and configurations are not relevant for intrinsic safety.

Cell designation:	Part Number:	Tab configuration:
Saft M52 EX SVKP/S	414 2177 103	Positive and negative endcaps
Saft M52 EX SV/T	414 4170 203	+/- tabs in C-configuration
Saft M52 EX SV/T/Z	414 4170 703	+/- tabs in Z-configuration
Saft M52 EX SVK/+T	414 2170 403	+ tab and negative endcap
Saft M52 EX SVK/T	414 2170 203	+/- tabs in C-configuration and negative endcap
Saft M52 EX SVK/T/Z	414 2170 703	+/- tabs in Z-configuration and negative endcap

SPECIFIC CONDITIONS OF USE: NO

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EQUIPMENT(continued):

Technical Parameters

1. Electrical data

Nominal voltage	U_0 = 3.0 V
Rated capacity	5.6 Ah at 60 mA

2. Permissible ambient temperature range -40 °C to +72 ° C

The product under consideration is tested according to the European Directive 2014/34/EU (ATEX), too.
Number of the ATEX Certificate: BVS 13 ATEX E 035 U;
Number of the associated Test and Assessment Report: BVS PP 13.2073 EG.

Schedule of limitations

1. This component should not be brought in a potentially explosive atmosphere without any additional safety elements .
2. The combination of the cell and the safety elements must be tested and certified.
3. For the temperature class T4 this cell is intended for use in a temperature range at the mounting location from -40 °C to +72 °C.
4. Read Operating Instructions Saft M52 EX SV Cell before use.
5. This Certificate only covers the tests for tightness against leakage of electrolyte and temperature behavior according to clause 10.5 of IEC 60079-11 and the distance between positive and negative pole according to clause 6.3.1 of IEC 60079-11.
6. All further requirements shall be separately tested and certified for use in intrinsically safe apparatus. This includes the division into the Groups IIA, IIB or IIC as well as into the protection levels ia, ib or ic.

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

The construction of the cell type Saft M52 EX SV was slightly modified.