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 PTB 07.0008X issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2007-03-07** Page 1 of 3

Applicant: **Steute Schaltgeräte GmbH &Co. KG**
Brückenstraße 91
32584 Löhne
Germany

Electrical Apparatus: **solenoid switch Type EEx RC Si M30... (Magnetic Safety - Sensor)**
Optional accessory:

Type of Protection: **General requirements (G + D), Encapsulation, Protection by enclosures**

Marking: **Ex mb II T6**
Ex tD A21 IP 67 T 80 °C

Approved for issue on behalf of the IECEx Certification Body: Dr.-Ing. Ulrich Johannsmeyer

Position: Department Head "Intrinsic Safety and Safety of systems"

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.

Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany

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Manufacturer: **Steute Schaltgeräte GmbH &Co. KG**
Brückenstraße 91
32584 Löhne
Germany

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 manufacture'rs 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 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-18 : 2004 Edition: 2.0	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/PTB/ExTR07.0007/00

Quality Assessment Report:
DE/BVS/QAR06.0023/00

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Schedule

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

The solenoid switch consists of a metal housing into which a thermoplastic housing containing a p.c.b. with 4 reed contacts, is mounted and completely potted.

Electrical data

Switching voltage	max. 30 V
Breaking current	max. 0.125 A max. 0.02 A for LED-variant
Contact rating	max. 6 W/VA
Short-circuit current	max. 0.75 A (for 50 ms) max. 0.03 A for LED-variant
Contact variants	1 NC/1 NO (normally closed + normally open contact) 2 NC (2 normally closed contacts) 1 NC/1 NO-LED (with LED) 2 NC-LED

CONDITIONS OF CERTIFICATION: YES as shown below:

1. A fuse corresponding to the rated current of the solenoid switch (max. 3 x IB according to IEC 60127-2-1) or a motor protecting switch with short-circuit- or thermal instantaneous tripping (adjusted to breaking current) must be connected in series to each solenoid switch. For very low rated currents of the solenoid switch the fuse with the lowest current value according to the aforementioned IEC-standard will be sufficient. The fuse may be accommodated inside the associated power supply unit or has to be connected in series separately. The rated voltage of the fuse shall be the same as or higher than the rated voltage specified for the solenoid switch. The breaking capacity of the fuse link shall be the same as or higher than the maximum short-circuit current expected to occur at the place of installation (usually 1500 A).
2. The connecting cable shall be connected inside of an enclosure which complies with the requirements of an acknowledged type of protection according to IEC 60079-0:2004, clause 1 if the connection is carried out in the hazardous area.
3. The length of the connecting cable shall not exceed 15 m.
4. The permissible range of the ambient temperature is -20 °C up to +70 °C.