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 05.0006X issue No.:1

Status: **Current**

Certificate history:
Issue No. 1 (2014-5-14)
Issue No. 0 (2005-4-22)

Date of Issue: **2014-05-14**

Applicant: **Nass Magnet GmbH**
Eckenerstraße 4-6
30179 Hannover
Germany

Electrical Apparatus: **Solenoid operator, Type 0513, 1213, 0514 and 1214**
Optional accessory:

Type of Protection: **encapsulation 'mb' and protection by enclusure 'tb'**

Marking:

	Ex mb IIC T5,T4	and	Ex mb tb IIIC T95°C, T130°C
or	Ex mb IIC T5,T4 Gb	and	Ex mb tb IIIC T95°C, T130°C Db

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

Position: Head of Department "Explosion Protection in Sensor Technology and Instrumentation"

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:

Nass Magnet GmbH
Eckenerstraße 4-6
30179 Hannover
Germany

Additional Manufacturing location(s):

Precision Controls Kft
Henger utca 2
8200 Veszprem
Hungary

Nass Magnet GmbH
Eckenerstraße 4-6
30179 Hannover
Germany

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 : 2007-10 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-18 : 2009 Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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

IECEx ATR:
DE/PTB/05-009
DE/PTB/ExTR14.0032/00
DE/PTB/QAR08.0002

File Reference:
B002001

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Schedule

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

The valve magnets are intended for installation and operation in explosion hazardous areas. The coil assembly is plastic-sheathed, the terminal housing consists of glass-fibre-reinforced polyimide and is filled with casting compound. The breaking overvoltage is limited by a diode resp. a varistor connected in parallel to the coil. To protect the diodes against voltage peaks from the mains a varistor is connected in parallel to the supply terminal. The strain relief of the connecting cable is carried out by a cable tie which is completely potted.
Electrical data see Annex.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. A fuse corresponding to the rated current (max. 3 x I-rated according to DIN 41571 or IEC 127) resp. a motor protecting switch with short circuit- and thermal instantaneous tripping (adjusted to rated current) must be connected in series to each magnet as short circuit protection. This fuse may be located inside the associated supply unit or must be connected in series separately. The rated voltage of the fuse shall be higher than or equal to the indicated rated voltage of the magnet. The breaking capacity of the fuse link shall be equal to or higher than the prospective maximum short-circuit current (usually 1500 A)
2. The maximum permissible ripple for all magnets of DC-design is 20 %
3. The magnets of double coil design may only be operated with the associated valve. A larger valve body with improved thermal conductivity may be mounted any time.

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

applied standards changed
marking changed depending on normative requirements

Annex: Annexe to Certificate N1.pdf