



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 15.0015X issue No.: 0 Certificate history:

Status: **Current**

Date of Issue: **2015-05-20** Page 1 of 3

Applicant: **nass magnet GmbH**
Ecknerstraße 4-6
30179 Hannover
Germany

Electrical Apparatus: **solenoid, type 0519**
Optional accessory:


Type of Protection: **Increased Safety, Encapsulation, Dust Ignition Protection by Enclosure**

Marking: Ex e mb IIC T6, T4 Gb
Ex tb mb IIIC T80°C, T130°C Db

Approved for issue on behalf of the IECEx Certification Body: Dr. Ing. U. Gerlach

Position: Head of working group "Ignition Hazards of Modern Energy Supply Systems"

Signature:
(for printed version)



11.06.2015

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](http://www.iecex.com).

Certificate issued by:

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





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Manufacturer: **nass magnet GmbH**
Ecknerstraße 4-6
30179 Hannover
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 60079-18 : 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'
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR15.0019/00](#)

Quality Assessment Report:

[DE/PTB/QAR08.0002/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The solenoid of type 0519 is used for the control in installations and systems where the occurrence of explosive atmospheres consisting of gas/air or dust/air mixtures is to be assumed. It is comprised of a magnet coil, an armature system and mounting accessories.

For more details refer to attached file.

CONDITIONS OF CERTIFICATION: YES as shown below:

refer to attached file

Annex:

[COCA150015-00.pdf](#)



Applicant: nass magnet GmbH
Electrical Apparatus: solenoid, type 0519

Description of equipment

The solenoid of type 0519 is used for the control in installations and systems where the occurrence of explosive atmospheres consisting of gas/air or dust/air mixtures is to be assumed. It is comprised of a magnet coil, an armature system and mounting accessories.

Electrical data

Type of voltage Alternating voltage, 50 Hz to 60 Hz or direct voltage with max. 45% residual ripple
Voltage tolerance -10 % ... +10 %
Butt mounting yes, center-to-center distance \geq 55 mm

Type	0519 00 / xxxx xx						
Marking	Ex e mb IIC T4 Gb Ex tb mb IIIC T130°C Db IP65, IP67						
Temperature class	T4						
Ambient temperature	-40°C ... +60°C						
Medium temperature	-40°C ... +70°C						
Type number	Rated voltage		Rated current		Limit power		Fusing [mA]
	AC $U_{N,AC}$ [V]	DC $U_{N,DC}$ [V]	AC $I_{N,AC}$ [mA]	DC $I_{N,DC}$ [mA]	AC $P_{G,AC}$ [W]	DC $P_{G,DC}$ [W]	
0519 00/7148	12		898	990	7.54	8.93	1600
0519 00/7149	24		439	486	7.71	9.20	1000
0519 00/7153	36		291	322	7.77	9.29	600
0519 00/7150	48		189	209	6.93	8.31	400
0519 00/7151	110		90	100	7.58	9.10	200
	115	-	95	-	8.18	-	
	120	-	99	-	8.79	-	
0519 00/7152	125		79	87	7.51	9.0	150
0519 00/7137	220		47	53	7.90	9.51	100
	230	-	50	-	8.48	-	
	240	-	52	-	9.16	-	

Type	0519 60 / xxxx xx						
Marking	Ex e mb IIC T6 Gb Ex tb mb IIIC T80°C Db IP65, IP67						
Temperature class	T6						
Ambient temperature	-40°C ... +50°C						
Medium temperature	-40°C ... +70°C						
Type number	Rated voltage		Rated current		Limit power		Fusing [mA]
	AC $U_{N,AC}$ [V]	DC $U_{N,DC}$ [V]	AC $I_{N,AC}$ [mA]	DC $I_{N,DC}$ [mA]	AC $P_{G,AC}$ [W]	DC $P_{G,DC}$ [W]	
0519 60/7196	12		399	440	3.77	4.48	1000
0519 60/7156	24		179	198	3.57	4.28	500
0519 60/7154	36		108	119	3.30	3.97	250
0519 60/7197	48		90	100	3.68	4.43	200
0519 60/7198	110		40	44	3.74	4.51	100
	115	-	42	-	4.06	-	
	120	-	43	-	4.38	-	
0519 60/7155	125		31	35	3.41	4.11	75
0519 60/7195	220		20	22	3.74	4.52	50
	230	-	21	-	4.06	-	
	240	-	22	-	4.39	-	

Special conditions for safe use

1. An external fuse (according to DIN 41571 or IEC 60127-2-1) corresponding to the type shall be connected in series to each solenoid as short circuit protection. Alternatively, a motor protecting switch with short circuit- and thermal instantaneous tripping can be connected in series. This shall be adjusted to the respective rated current of the solenoid. The rated voltage of the fuse shall be higher than or equal to the specified 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). The fuse may be accommodated inside the associated supply unit or shall be connected in series separately.
2. Connecting cables and connecting lines shall be suitable for permanent application in a temperature range of – 40 °C up to + 105 °C.
3. When using silicone or silicone-containing cables for connection or cables which are not scratch-proof, these shall be protected against mechanical damage.
4. The armature tube should be subjected to a routine test with 1.5 fold the nominal operating pressure.