

[1] **EC-TYPE EXAMINATION CERTIFICATE**
according to Directive 94/9/EC, Annex III
(Translation)



[2] Equipment and Protective Systems intended for use
in Potentially Explosive Atmospheres, Directive 94/9/EC

[3] EC-Type Examination Certificate Number: **IBExU14ATEX1039 X**

[4] Equipment: **D.C. Solenoid**
Type GTCE 050 AGD..., GTCE 100 AGD... and GTCE 140 AGD...

[5] Manufacturer: **Magnet-Schultz GmbH & Co. KG**

[6] Address: **Allgäuer Straße 30**
87700 Memmingen
Germany

[7] The equipment mentioned under [4] and any acceptable variations thereto are specified in the schedule to this EC-Type Examination Certificate.



[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY number 0637 in accordance with article 9 of the Council Directive 94/9/EC of 23rd March 1994, certifies that the equipment mentioned under [4] has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in the test report IB-12-3-189 of 10th April 2014.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012, EN 60079-7:2007, EN 60079-18:2009 and EN 60079-31:2009.

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment mentioned under [4] is subject to special conditions for safe use specified under [17] in the schedule to this EC-Type Examination Certificate.

[11] This EC-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment mentioned under [4] shall include the following:

 **II 2G Ex e mb IIC T5/T4 Gb**
 **II 2D Ex tb IIIC T95 °C/T130 °C Db**
-30 °C ≤ T_a ≤ +40 °C/+50 °C/+60 °C

Institut für Sicherheitstechnik GmbH
Fuchsmühlenweg 7 - 09599 Freiberg, Germany
☎ +49 (0) 3731 3805-0 - 📠 +49 (0) 3731 23650

Authorised for certifications
- Explosion protection -

By order

(Dr. Wagner)



- Seal-
(ID no. 0637)

Freiberg, 10th April 2014

Certificates without signature and seal are not valid.
Certificates may only be duplicated completely and unchanged.
In case of dispute, the German text shall prevail.

Schedule

[13] **Schedule**

[14] **to EC-TYPE EXAMINATION CERTIFICATE IBExU14ATEX1039 X**

[15] **Description of the equipment**

The D.C. Solenoids, mentioned under [4], are used for actuation of hydraulic, pneumatic and special valves for industrial operation. They are suitable for use in hazardous atmospheres of gas or dust in single mode or together with several fittings.

Technical data

Rated current:	0.05 up to 22.2 A
Rated voltage:	6 up to 230 V DC ($\pm 10\%$) or 60 up to 230 V AC ($\pm 10\%$)
Ambient temperature range:	-30 °C up to max. +60 °C
Degree of protection (EN 60529):	IP 65

Further information is specified in documentation.

[16] **Test report**

The proof of explosion protection is explained in detail in the test report IB-12-3-189 of 10th April 2014. The test documents are part of the test report and listed there.

Summary of the test results:

The D.C. Solenoids types GTCE 050 AGD..., GTCE 100 AGD... and GTCE 140 AGD..., mentioned under [4], fulfil the requirements of explosion protection for equipment of group II, category 2G in the type of protection encapsulation in combination with connection facilities, which correspond to the type of protection increased safety. They fulfil in addition the requirements on equipment of Group II, category 2D by Equipment dust ignition protection by enclosure.

[17] **Special conditions**

- A fuse corresponding to the device's rating current (max. $3 \times I_N$ resp. I_B acc. to IEC/EN 60127-2) or, resp. a motor protective switch with short circuit and thermal rapid release (corresponding rating current) have to be connected in series to each solenoid.
- The solenoids are suitable for extended temperature ranges, the used cables must meet them.

[18] **Essential health and safety requirements**

Confirmed by compliance with standards (see [9]).

By order

Freiberg, 10th April 2014



(Dr. Wagner)