IBExU Institut für Sicherheitstechnik GmbH
An-Institut der TU Bergakademie Freiberg

[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: **IBExU13ATEX1005 X**

[4] Equipment: **Limit switch module**
Type D

[5] Manufacturer: ROTECH Antriebselemente GmbH

[6] Address: Im Katzentach 16-18
76275 Ettlingen
GERMANY

[7] The design of 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 Directive 94/9/EC of the European Parliament and the Council of 23 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 test results are recorded in the test report IB-12-3-127 of 24 May 2013.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2009, EN 60079-1:2007 and EN 60079-31:2009.

[10] If the sign „X" is placed after the certificate number, it indicates that the equipment 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:

Ex II 2G Ex d IIC T6 Gb **Ex II 2D Ex tb IIIC T80°C Db**

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Authorised for certifications
-Explosion protection-

By order

(Dr. Wagner)

Zertifizierungsstelle Explosionsschutz IBExU Institut für Sicherheitstechnik GmbH Kenn-Nr. 0637

- Seal -
(ID no. 0637)

Freiberg, 24 May 2013

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.

Annex

[13] **Annex**

[14] **to the EC-TYPE EXAMINATION CERTIFICATE IBExU13ATEX1005 X**

[15] **Description of equipment**

The Limit switch module type D serves for the end position feedback with mechanical switches or inductive sensors as well as the practicability of the connection of separately certified explosion protected operating magnets of pneumatic valves.

The flameproof enclosure consists of the enclosure base with actuation shaft and mounting console as well as the cover. The electric connection is carried out via direct Ex d cable entries.

Technical data:

- Rated voltage:	max. 250 V
- Rated current:	max. 4 A
- Rated cross section:	max. 4 mm²
- Ambient temperature range:	-40 °C up to +60 °C
- Property class fastening screws:	at least 8.8

[16] **Test report**

The test results are recorded in the test report IB-12-3-127 of 24 May 2013. The test documents are listed in the annex to the test report.

Summary:

The Limit switch module type D fulfils the requirements of explosion protection for equipment of Group II, Category 2G, type of protection flameproof enclosure „d" and Category 2D, type of dust protection protection by enclosure „tb".

[17] **Special conditions for safe use**

- The Limit switch module type D can be used in an ambient temperature range from -40 °C up to +60 °C. Cable entries and connection cables must be suitable for use in this temperature range.
- The Limit switch module can contain internal sources of ignition according to EN 60079-14, Paragraph 10.4.2, corresponding to the used built-in components. The corresponding requirements have to be noticed at the selection of the cable entry as well as of the connecting cable.
- Unused openings for cable entries have to be closed durably with suitable screw plugs, which are confirmed for explosion protection according to EN 60079-1, 11.9.

[18] **Essential Health and Safety Requirements**

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

By order

Freiberg, 24 May 2013

(Dr. Wagner)