[1] # EC-TYPE EXAMINATION CERTIFICATE

according to Directive 94/9/EC, Annex III
(Translation of 18 November 2010)

[2] Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**

[3] EC-Type Examination Certificate Number: **IBExU05ATEX1057**

[4] Equipment: **Distribution boxes** type BS 63*/*/16****

[5] Manufacturer: BöSha GmbH & Co. KG

[6] Address: Heidberg 10
59602 Rüthen, Germany

[7] The design of the equipment as well as 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 this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of the 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-03-3-850 of 24 June 2005.

[9] Compliance with the essential health and safety requirements has been assured by compliance with EN 50014:1997+A1+A2, EN 50019:2000 and EN 50281-1-1:1998+A1.

[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 in [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 or protective system. If applicable, further requirements of this directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment mentioned in [4] shall include one of the following details:

Ex I M2	**EEx e I**
Ex II 2G	**EEx e II T6, T5 resp. T4**
Ex II 2D	**T 80 °C IP 6X**

The selection of the temperature class depends on the maximum power dissipation of the respective used components.

IBExU Institut für Sicherheitstechnik GmbH
Fuchsmühlenweg 7 - 09599 Freiberg, Germany
Phone: +49 3731 3805-0 - Fax: +49 3731 23650

Authorised for certifications
-Explosion protection-

By order

(Dr. Wagner)

- Seal -
(ID no. 0637)

Freiberg, 27 June 2005

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 the EC-TYPE EXAMINATION CERTIFICATE IBExU05ATEX1057**

[15] **Description of the equipment or protective system**
The enclosures in type of protection increased safety of equipment group II are manufactured of steel, stainless steel or aluminium. The enclosures of equipment group I are manufactured of steel or stainless steel. They serve, in combination with cable entries and terminals, for the connection of electrical conductors. Instruction and signal devices which do not endanger the type of protection increased safety can be installed in the enclosures. The internal fittings are certified with certificates according to Directive 94/9/EC.

Ambient temperature range	from – 20 °C to + 40 °C
IP-Degree of protection	≥ IP 65

Rated values

Maximum voltage:	to 1100 V AC

[16] **Test report**
The proof of the explosion protection is explained in detail in the test report IB-03-3-850 of 24 June 2005.

Summary of the test results:
The distribution boxes type BS 63*/*/16**** fulfil the requirements of the type of protection increased safety for an explosion protected apparatus for the groups I and II, categories M2 and 2G and the requirements of the dust explosion protection for category 2D.

Safety instructions:
- Each distribution box type BS 63*/*/16**** has to be subjected to routine verifications and tests according to EN 50014:1994, chapter 24, regarding their compliance with the measures of the explosion protection.
- The special conditions specified in the EC-Type Examination Certificates of the Ex-components have to be taken into account at the installation of these components into the distribution boxes.
- The degree of protection, at least IP 65, at the installation and operation is only reached by a proper use of cable entries tested and certified for explosion protection.
- The separation clearances according to EN 50019 have to be kept.
- Regarding the equipping, conductor cross-sections and the rated current the maximum temperatures have to be taken at the terminals for the specification of the temperature class and at the enclosure for the specification of the maximum surface temperature. The manufacturer is authorized to carry out these measurements and to document them responsibly.
- The specifications in EN 50281-1-2 have to be kept for the selection, installation and maintenance. In particular, the ignition temperature of the respective dust/air-mixture resp. the smoulder temperature of the respective dust must be higher than the maximum surface temperature of the distribution boxes considering the safety factor specified in EN 50281-1-2.
- In the mining industry enclosures made of steel or stainless steel shall exclusively be used.

[17] **Special conditions for safe use**
none

[18] **Essential health and safety requirements**
Confirmed by compliance with standards (see [9])

By order

Freiberg, 27 June 2005

Wagner

(Dr. Wagner)

[1] **1st Addition to**
EC-TYPE EXAMINATION CERTIFICATE IBExU05ATEX1057
(Translation of 18 November 2010)

[2] Equipment:
a) Designation according to IBExU05ATEX1057:
Distribution boxes type BS 63/*/16****

b) Changed designation: **Distribution boxes type BS 63**/*/161*****

[3] Manufacturer: BöSha GmbH + Co. KG

[4] Address: Industriegebiet Heidberg 10
59602 Rüthen
Germany

[5] **Addition/Alteration**
The additions/alterations of the equipment mentioned in [2] b) compared with the equipment already certified concern in detail:
a) The test and marking were carried out in accordance with the standard series EN 60079 ff.
b) The voltage range was increased to 10 000 V AC ± 10 %.
c) The maximum cross-section of the connecting cables was extended to 240 mm².
d) The lower ambient temperature range was extended to -40 °C.

[6] **Test Report**
The proof of the explosion protection of the equipment mentioned in [2] b) is documented in the test report IB-06-3-281 of 19 December 2006. The test documents are part of the test report.

[7] **Test result**
IBExU certifies that the equipment mentioned in [2] b) fulfils the essential health and safety requirements fixed in Annex II of Directive 94/9/EC by compliance with EN 60069-0:2004, EN 60079-7:2003 and EN 50281-1-1:1998+A1.
The equipment mentioned in [2] b) fulfils the requirements of the explosion protection for an electrical equipment in the type of protection increased safety "e", temperature class T4 to T6 for the equipment groups I and II, categories M2 and 2G and the requirements of dust explosion protection for category 2D.

The marking of the equipment mentioned in [2] b) must include one of the following details:

I M2	**Ex e I**
II 2G	**Ex e II T6, T5 resp. T4**
II 2D	**T 80 °C IP 6X**

-40 °C ≤ T_a ≤ +40 °C

The selection of the temperature class depends on the maximum power dissipation of the respective used components.

Safety instructions
The instructions and conditions mentioned in the EC-Type Examination Certificate IBExU05ATEX1057 keep their validity.

This addition is only valid in combination with the EC-Type Examination Certificate IBExU05ATEX1057 of 27 June 2005.

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

Authorized for certifications
- Explosion protection -

By order

(Dr. Wagner)

- Seal -
(Identification No. 0637)

Freiberg, 20 December 2006

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.