



Translation

EC-Type Examination Certificate

- (1)
- (2) **- Directive 94/9/EC -**
Equipment and protective systems intended for use
in potentially explosive atmospheres
- (3) **BVS 03 ATEX E 298**
- (4) **Equipment: Plugs type HSK-V-Ex**
- (5) **Manufacturer: HUMMEL Elektrotechnik GmbH**
- (6) **Address: D - 79183 Waldkirch**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.
- (8) The certification body of Deutsche Montan Technologie GmbH, notified body no. 0158 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 equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
The examination and test results are recorded in the test and assessment report BVS PP 03.2219 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- | | |
|---------------------|---------------------------|
| EN 50014:1997+A1-A2 | General requirements |
| EN 50019:2000 | Increased safety |
| EN 50281-1-1:1998 | Dust explosion protection |
- (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 the schedule to this certificate.
- (11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate
- (12) The marking of the equipment shall include the following:



II 2G EEx e II
II 2D IP 68

Deutsche Montan Technologie GmbH

Bochum, dated 24. September 2003

Signed: Dr. Jockers

Certification body

Signed: Dr. Eickhoff

Special services unit

(13) Appendix to

(14) **EC-Type Examination Certificate**

BVS 03 ATEX E 298

(15) 15.1 Subject and type
Plugs type HSK-V-Ex

15.2 Description

The plugs are designed for the installation at electrical apparatus type of protection "increased safety" (EEx e II). The plugs serves as blanking elements to close unused cable entries type HSK-K-Ex, HSK-M-Ex, HSK-M-EDV-Ex, HSK-Inox-Ex und HSK-Inox-EMV-Ex .The plugs are also intended for the use in combustibile dust atmospheres.

15.3 Parameters

Permitted temperature range

-20 °C up to +95 °C

The ambient temperature range of electrical apparatus is normally limited to $-20\text{ °C} \leq T_a \leq +40\text{ °C}$. The ambient temperature range can be exceeded for the use of these plugs as long as the permitted temperature range of -20 °C to +95 °C is taken into account.

(16) Test and assessment report
BVS PP 03.2219 EG as of 24.09.2003

(17) Special conditions for safe use
Not relevant

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 24. September 2003
BVS-Ld/Kw A 20030306

Deutsche Montan Technologie GmbH



Certification body



Special services unit



Translation

1st Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

**to the EC-Type Examination Certificate
BVS 03 ATEX E 298**

Equipment: Plugs
type HSK-V-Ex

Manufacturer: HUMMEL Elektrotechnik GmbH

Address: 79211 Denzlingen, Germany

Description

Now the plugs can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report. Now they are also intended for the use in combustible dust atmospheres of category 1D.

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

EN 50014:1997+A1-A2 General requirements
EN 50019:2000 Increased safety
EN 50281-1-1:1998 +A1 Dust explosion protection

Marking

The marking of the equipment shall include the following:

 **II 2G EEx e II**
II 1D IP 68

Test and assessment report

BVS PP 03.2219 EG as of 16.09.2005

EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 16. September 2005

Signed: Migenda

Certification body


Signed: Dr. Eickhoff

Special services unit

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 16. September 2005
BVS-Ld/Mi A 20050471

EXAM BBG Prüf- und Zertifizier GmbH



Certification body



Special services unit



Translation

3rd Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

to the EC-Type Examination Certificate

BVS 03 ATEX E 298

Equipment: Mushroom-type plugs type HSK-V-Ex *** and HSK-V-Ex *** long
Manufacturer: HUMMEL AG
Address: 79211 Denzlingen, Germany

Description


The reason for issuing this supplement is the adjustment of the mushroom-type plugs relating to their use for cable entries and conduits type HSK-K-MZ-Ex and type HSK-M-MZ-Ex. For these types, the mushroom plugs may now be manufactured in a longer version.

In future, the mushroom-type plugs may be manufactured according to the documents listed in the test report if the marking is modified accordingly.

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

EN 60079-0:2006 General requirements
EN 60079-7:2007 Increased safety
EN 61241-0:2006 General requirements
EN 61241-1:2004 Protection by enclosures

The marking of the equipment shall include the following:

 **II 2G 1D Ex e II tD A20 IP68***

* IP68 Marking on the packaging or in the accompanying manual

Special conditions for safe use

None

Test and assessment report

BVS PP 03.2219 EG as of 05.08.2008

DEKRA EXAM GmbH

Bochum, dated 05. August 2008

Signed: Dr. Jockers

Signed: Dr. Eickhoff

Certification body

Special services unit

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 27.08.2008
BVS-Ld/Ar E 1239/08

DEKRA EXAM GmbH

A handwritten signature in blue ink, appearing to read 'Johannes', written over a horizontal line.

Certification body

A handwritten signature in blue ink, appearing to read 'Lindloff', written over a horizontal line.

Special services unit