



Translation


(1) 1. Supplement to the EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6
- (3) No. of EC-Type Examination Certificate: **BVS 08 ATEX E 132**
- (4) Equipment : **Ex-Camera type K06-Ex / K07ZP-Ex / K07ZN-Ex**
- (5) Manufacturer: **F.H. Papenmeier GmbH & Co. KG**
- (6) Address: **Talweg 2, 58239 Schwerte, Germany**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM 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 10.2081 EG.

- (9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2012 General requirements
EN 60079-1:2007 Flameproof enclosure "d"
EN 60079-7:2007 Increased safety "e"
EN 60079-31:2009 Protection by enclosure "t"

- (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 appendix to this certificate.
- (11) This supplement to the 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 Ex de IIC T6 Gb**
II 2D Ex tb IIIC T 80°C Db

DEKRA EXAM GmbH
 Bochum, dated 2014-01-07

Signed: Simanski

Signed: Dr. Eickhoff

 Certification body

 Special services unit



- (13) Appendix to
- (14) **1. Supplement to the EC-Type Examination Certificate
BVS 08 ATEX E 132**
- (15) 15.1 Subject and type

Ex-Camera type K06A-Ex,
Ex-Camera type K07ZP-Ex and
Ex-Camera type K07ZN-Ex

15.2 Description

All types of Ex-camera are manufactured for atmospheres endangered by gas in the type of protection flameproof enclosure „d“ for the camera housing and in type of protection increased safety „e“ for the terminal box and for atmospheres endangered by dust in the type of protection protection by enclosure „t“. All types of Ex-camera are designed for use in hazardous areas endangered by gas or by dust.

The connection to the related control unit has to be carried out outside the explosive atmosphere.

This supplement is issued to ensure the compliance of the equipment with the updated versions of the applicable standards.

15.3 Parameters

Electrical ratings

| | | | |
|--|----|---|----|
| Nominal voltage type K06A-Ex | 24 | V | DC |
| Nominal voltage type K07ZP-Ex and K07ZN-Ex | 24 | V | DC |

| | | |
|--|----------|---|
| Nominal power type K06A-Ex | up to 20 | W |
| Nominal power type K07ZP-Ex und K07ZN-Ex | up to 25 | W |

Thermal ratings

| Type | Ambient temperature | Temperature class | T _{surface} |
|----------|----------------------|-------------------|----------------------|
| K06A-Ex | -20 °C ≤ Ta ≤ +40 °C | T6 | T80 °C |
| K07ZP-Ex | -20 °C ≤ Ta ≤ +40 °C | T6 | T80 °C |
| K07ZN-Ex | -20 °C ≤ Ta ≤ +40 °C | T6 | T80 °C |

- (16) Test and assessment report

BVS PP 10.2081 EG as of 2014-01-07

- (17) Special conditions for safe use

None

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.

DEKRA EXAM GmbH
44809 Bochum, 2014-01-07
BVS-Ew/Sch A 20130291

Certification body

Special services unit



Translation

EC-Type Examination Certificate

(1)

(2)

**- Directive 94/9/EC -
Equipment and protective systems intended for use
in potentially explosive atmospheres**

(3)

BVS 08 ATEX E 132

(4)

Equipment: Ex-Camera type K06A-Ex, K07ZP-Ex and K07ZN-Ex

(5)

Manufacturer: F.H. Papenmeier GmbH & Co. KG

(6)

Address: 58239 Schwerte

(7)

The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.

(8)

The certification body of DEKRA EXAM 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 10.2081 EG.

(9)

The Essential Health and Safety Requirements are assured by compliance with:

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

(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 appendix 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 Ex de IIC T6
II 2D Ex tD A21 IP67 T80°C**

DEKRA EXAM GmbH

Bochum, dated 04. March 2010

Signed: Dr. Franz Eickhoff

Signed: Dr. Michael Wittler

Certification body

Special services unit

(13) Appendix to

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

BVS 08 ATEX E 132

(15) 15.1 Subject and type

Ex-Camera type K06A-Ex, K07ZP-Ex and K07ZN-Ex

15.2 Description

All types of Ex-camera are manufactured for atmospheres endangered by gas in the type of protection flameproof enclosure for the camera housing and in type of protection increased safety for the terminal box and for atmospheres endangered by dust in the type of protection protection by enclosure. All types of Ex-camera are designed for use in hazardous areas endangered by gas or by dust.

The connection to the related control unit has to be carried out outside the explosive atmosphere.

15.3 Parameters

15.3.1 Electrical ratings

| | | |
|--|------|----|
| Nominal voltage type K06A-Ex | 24 V | DC |
| Nominal voltage type K07ZP-Ex and K07ZN-Ex | 24 V | DC |

| | | |
|--|-------|------|
| Nominal power type K06A-Ex | up to | 20 W |
| Nominal power type K07-Ex, K07ZP-Ex und K07ZN-Ex | up to | 25 W |

15.3.2 Thermal ratings

| Type | Ambient temperature | Temperature class | T _{Surface} |
|----------|---|-------------------|----------------------|
| K06A-Ex | $-20\text{ °C} \leq T_a \leq +40\text{ °C}$ | T6 | T80 °C |
| K07ZP-Ex | $-20\text{ °C} \leq T_a \leq +40\text{ °C}$ | T6 | T80 °C |
| K07ZN-Ex | $-20\text{ °C} \leq T_a \leq +40\text{ °C}$ | T6 | T80 °C |

(16) Test and assessment report

BVS PP 10.2081 EG as of 04.03.2010

(17) Special conditions for safe use

None

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, 04. March 2010
BVS-Kr/Kw A 20080665

DEKRA EXAM GmbH

A handwritten signature in blue ink, appearing to read 'L. Müller', positioned above a horizontal line.

Certification body

A handwritten signature in blue ink, appearing to read 'W. H. B.', positioned above a horizontal line.

Special services unit