

## 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 135**
- (4) Equipment : **Ex-Luminaire type USL06-Ex  
Ex-Luminaire type USL46-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 09.2036 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 T\* Gb**  
**II 2D Ex tb IIIC T \* °C Db**

„e“ for enclosures with terminal box

The values for \* are specified in the type chart, paragraph 15.3) Parameters

DEKRA EXAM GmbH  
Bochum, dated 2014-04-24

Signed: Dr. Eickhoff

Certification body

Signed: Leiendecker

Special services unit

- (13) Appendix to
- (14) **1. Supplement to the EC-Type Examination Certificate  
BVS 08 ATEX E 135**
- (15) 15.1 Subject and type

Ex-Luminaire type USL06-Ex  
Ex-Luminaire type USL46-Ex

### 15.2 Description

The enclosure of ex-luminaire type USL 06-Ex and type USL 46-Ex is available in a version with and without terminal box (TB) in the type of in increased safety 'e'.

The ex-luminaire is in the type of protection flameproof enclosure 'd' or in the type of protection flameproof enclosure 'd' with increased safety 'e' or in the type of protection by enclosure 't'. The transparent component has been mounted into the lid. The lamp is equipped with LED or halogen lights for nominal voltages of 12 V up to 240 V. Additionally, some variants of the lamp are equipped with a built-in transformer.

The transformer type EI 60 / 20 VA (Trafo-BV: 1.8711.018.97) can now be equipped with the PTC resistor type B59840C0130A070 or B59850C0130A070 instead of the PTC resistor type B59841-C135-A70 or B59851-C135-A70.

This supplement is issued to ensure the compliance of the equipment with the updated versions of the applicable standards and the change of the PTC types in the transformer.

### 15.3 Parameters

#### 15.3.1 Temperature classification type USL 06-Ex

Type USL 06-Ex	Nominal voltage	Ambient temperature range			
		$-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$		$-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$	
		Without TB	With TB	Without TB	With TB
12V / 20W	12V AC/DC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
24V / 20W	24V AC/DC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
120V/12V / 20W	120V AC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
230V/12V / 20W	230V AC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
240V/12V / 20W	240V AC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
12V / 35W	12V AC/DC	T4 / T130°C	T4 / T130°C	T3 / T195°C	----
12V / 50W	12V AC/DC	T3 / T195°C	T3 / T195°C	----	----
24V / 50W	24V AC/DC	T3 / T195°C	T3 / T195°C	----	----
230V / 50W	230V AC/DC	T3 / T195°C	T4 / T130°C	----	----

(TB= terminal box)

#### 15.3.2 Temperature classification type USL 46-Ex

Type USL 46-Ex	Nominal voltage	Ambient temperature range			
		$-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$		$-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$	
		Without TB	With TB	Without TB	With TB
12V LED	12V DC	----	120°C / T120°C	----	----
24V LED	24V DC	----	120°C / T120°C	----	----

(TB= terminal box)



(16) Test and assessment report  
 BVS PP 09.2036 EG as of 2014-04-24

(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, 2014-04-24  
 BVS-Ew/Ru/Ar A 20130211

---

Certification body

---

Special services unit

# DEKRA

Ex

Translation

## EC TYPE-EXAMINATION CERTIFICATE

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

- (3) **BVS 08 ATEX E 135**
- (4) Equipment: **Ex-Luminaire Type USL 06-Ex and Type USL 46-Ex**
- (5) Manufacturer: **F.H. Papenmeier GmbH & Co. KG**
- (6) Address **D-58239 Schwerte**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this examination certificate.
- (8) The certification body of DEKRA EXAM GmbH, notified body No. 0158 according to Article 9 of the Council Directive 94/9/EC 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 set out in Annex II to the Directive.  
The examination and test results are recorded in confidential test and assessment report No. BVS PP 09.2036 EC.
- (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 Enclosures
- (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.

This EC Type-Examination Certificate relates only to the compliance of the design and construction of the specified equipment in accordance with Directive 94/9/EC.  
Further requirements of the Directive apply to the manufacture and placing on the market of this equipment, and are not covered by this Certificate.

The marking of the equipment shall include the following:

**Ex II 2G Ex de IIC \***  
**II 2D Ex tD A21 IP 67 T\*\*\*°C**

The values for "\*\*\*" are specified in the type chart, paragraph 15.3 Parameters

**DEKRA EXAM GmbH**  
Bochum, dated 18 March 2009

(Signature illegible)  
Head of Certification Body

(Signature illegible)  
Head of Special Services Unit

# DEKRA

Schedule to

## EC TYPE-EXAMINATION CERTIFICATE

BVS 08 ATEX E 135

### 15.1 Item and Type

Explosion-protected Luminaire, Types USL 06-Ex, USL 46-Ex

### 15.2 Description

The enclosure of luminaire Type USL 06-Ex and Type USL 46-Ex is available in a version with and without terminal box (TB) and comprises an enclosure body and a screw-type cover. The translucent part of the luminaire is glued into the screw-type cover. An O-ring gasket is inserted in the end face of the enclosure body as a sealing element.

The luminaire is intended for use in mixed gas-air or dust-air environments.

### 15.3 Electrical, Mechanical and Thermal Parameters:

#### 15.3.1 Temperature classification Type USL 06-Ex

Type USL 06-Ex	Nominal Voltage	Ambient Temperature Range			
		$-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$		$-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$	
		Without TB	With TB	Without TB	With TB
12V / 20W	12V AC/DC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
24V / 20W	24V AC/DC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
120V/12V / 20W	120V AC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
230V/12V / 20W	230V AC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
240V/12V / 20 W	240V AC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C
12V / 35W	12V AC/DC	T4 / T130°C	T4 / T130°C	T3 / T195°C	---
12V / 50W	12V AC/DC	T3 / T195°C	T3 / T195°C		
24V / 50W	24V AC/DC	T3 / T195°C	T3 / T195°C		
230V / 50W	230V AC/DC	T3 / T195°C	T4 / T130°C		

#### 15.3.1 Temperature classification Type USL 46-Ex

Type USL 46-Ex	Nominal Voltage	Ambient Temperature Range			
		$-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$		$-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$	
		Without TB	With TB	Without TB	With TB
12V LED	12V DC	---	120°C / T120°C		
24V LED	24V DC	---	120°C / T120°C		