



(1) **EG-Baumusterprüfbescheinigung**

(2) **- Richtlinie 94/9/EG -**
Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung
in explosionsgefährdeten Bereichen

(3) **BVS 08 ATEX E 135**

(4) **Gerät: Ex-Leuchte Typ USL06-Ex und Typ USL46-Ex**

(5) **Hersteller: F.H. Papenmeier GmbH & Co. KG**

(6) **Anschrift: 58239 Schwerte**

(7) Die Bauart dieses Gerätes sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Baumusterprüfbescheinigung festgelegt.

(8) Die Zertifizierungsstelle der DEKRA EXAM GmbH, benannte Stelle Nr. 0158 gemäß Artikel 9 der Richtlinie 94/9/EG des Europäischen Parlaments und des Rates vom 23. März 1994, bescheinigt, dass das Gerät die grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von Geräten und Schutzsystemen zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen gemäß Anhang II der Richtlinie erfüllt.
Die Ergebnisse der Prüfung sind in dem Prüfprotokoll BVS PP 09.2036 EG niedergelegt.

(9) Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit

EN 60079-0:2006 Allgemeine Anforderungen
EN 60079-1:2007 Druckfeste Kapselung
EN 60079-7:2007 Erhöhte Sicherheit
EN 61241-0:2006 Allgemeine Anforderungen
EN 61241-1:2004 Schutz durch Gehäuse

(10) Falls das Zeichen „X“ hinter der Bescheinigungsnummer steht, wird in der Anlage zu dieser Bescheinigung auf besondere Bedingungen für die sichere Anwendung des Gerätes hingewiesen.

(11) Diese EG-Baumusterprüfbescheinigung bezieht sich nur auf die Konzeption und die Baumusterprüfung des beschriebenen Gerätes in Übereinstimmung mit der Richtlinie 94/9/EG. Für Herstellung und Inverkehrbringen des Gerätes sind weitere Anforderungen der Richtlinie zu erfüllen, die nicht durch diese Bescheinigung abgedeckt sind.

(12) Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:

II 2G Ex de IIC *



II 2D Ex tD A21 IP67 T*°C**

die Werte für „*“ sind der Typtabelle unter Punkt 15.3 Kenngrößen zu entnehmen

DEKRA EXAM GmbH

Bochum, den 18. März 2009

Zertifizierungsstelle

Fachbereich

Seite 1 von 3 zu BVS 08 ATEX E 135

Dieses Zertifikat darf nur vollständig und unverändert weiterverbreitet werden.

(13) Anlage zur

(14) **EG-Baumusterprüfbescheinigung**

BVS 08 ATEX E 135

(15) 15.1 Gegenstand und Typ

Ex-Leuchte Typ USL06-Ex, USL46-Ex

15.2 Beschreibung

Das Gehäuse der Ex-Leuchte Typ USL 06-Ex bzw. Typ USL 46-Ex besteht in einer Version ohne und mit Anschlusskasten aus einem Gehäusekörper und einem Schraubdeckel. Der lichtdurchlässige Teil der Leuchte ist in den Schraubdeckel eingeklebt. Als Abdichtung ist in die Stirnfläche des Gehäusekörpers eine O-Ring Dichtung eingelassen.

Die Leuchte ist für den Einsatz in Gas- oder Staub-Luftgemischen bestimmt.

15.3 Kenngrößen

15.3.1 Temperaturzuordnung Typ USL 06-Ex

Typ USL 06-Ex	Nennspannung	Umgebungstemperaturbereich			
		$-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$		$-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$	
		Ohne AK	Mit AK	Ohne AK	Mit AK
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	----	----

15.3.2 Temperaturzuordnung Typ USL 46-Ex

Typ USL 46-Ex	Nennspannung	Umgebungstemperaturbereich			
		$-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$		$-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$	
		Ohne AK	Mit AK	Ohne AK	Mit AK
12V LED	12V DC	----	120°C / T120°C	----	----
24V LED	24V DC	----	120°C / T120°C	----	----

(16) Prüfprotokoll

BVS PP 09.2036 EG, Stand 18.03.2009

(17) Besondere Bedingungen für die sichere Anwendung

Entfällt


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** „e“ for enclosures with terminal box
II 2D Ex tb IIIC T * °C Db
The values for * are specified in the type chart, paragraph 15.3) Parameters

DEKRA EXAM GmbH
Bochum, dated 2014-04-24

Signed: Dr. Eickhoff

Signed: Leiendecker

Certification body

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°C ≤ Ta ≤ +40°C		-20°C ≤ Ta ≤ +60°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°C ≤ Ta ≤ +40°C		-20°C ≤ Ta ≤ +60°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

Translation

EU-Type Examination Certificate Supplement 2

Change to Directive 2014/34/EU

Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU

EU-Type Examination Certificate Number: **BVS 08 ATEX E 135**

Product: **Ex-Luminaires type USL46-Ex,USL06-Ex and USL06LED-Ex**

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

Address: **Talweg 2, 58239 Schwerte, Germany**

This supplementary certificate extends EC-Type Examination Certificate No. BVS 20 ATEX E 016 to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential Report No. BVS PP 09.2036


The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018	General requirements
EN 60079-1:2014	Flameproof enclosure "d"
EN IEC 60079-7:2015 + A1:2018	Increased Safety "e"
EN 60079-31:2014	Protection by Enclosure "t"

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

 **II 2G Ex db eb IIC T* Gb** „eb“ for enclosures with terminal box
II 2D Ex tb IIIC T*°C Db
The values for * are specified in the type chart, paragraph 15.3) Parameters

DEKRA Testing and Certification GmbH
Bochum, 2021-04-23

Signed: Jörg-Timm Kilisch

Managing Director

13 **Appendix**

14 **EU-Type Examination Certificate**

BVS 20 ATEX E 016
Supplement 2

15 **Product description**

15.1 **Subject and type**

Ex-Luminaires type Typ USL46-Ex, USL06-Ex and USL06LED-Ex

Type USL46-Ex:

Vehicle light

Halogen lamp

Supply voltages:

12 V/DC

24 V/DC

Version without terminal box in increased safety

USL06-Ex:

Mounting on flange plate

Halogen lamp

Supply voltages:

12 V/AC/DC

24 V/AC/DC

120 V/AC

230 V/AC

240 V/AC

Version with and without terminal box in increased safety

USL06LED-Ex:

Mounting on flange plate / vehicle light

LED lamp

Supply voltages:

12 V/DC

24 V/DC

24 V/AC/DC

120 - 230 V/AC/DC

Version with terminal box in increased safety

15.2 **Description**

With this supplement the certificate is changed to Directive 2014/34/EU.
(Annotation: In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.)

Reasons for this supplement:

- Change to the new directive RL 2014/34/EU
- Update to the latest standard
- New LED type (USL06-LED)
- Minor design changes

Listing of all components used referring to older standards

Subject and type	Certificate	Standards
Mini terminal type 07-9702-0*2*/****	PTB 99 ATEX 3117 U	EN 60079-0:2012 IEC 60079-7:2015

15.3 Parameters

Temperature classification type USL06-Ex

Type USL06-Ex	Nennspannung	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
12 V / 20 W	12 V AC/DC	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C
24 V / 20 W	24 V AC/DC	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C
120 V/12 V / 20 W	120 V AC	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C
230 V/12 V / 20 W	230 V AC	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C
240 V/12 V / 20 W	240 V AC	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C	T4 / T130 °C
12 V / 35 W	12 V AC/DC	T4 / T130 °C	T4 / T130 °C	T3 / T195 °C	----
12 V / 50 W	12 V AC/DC	T3 / T195 °C	T3 / T195 °C	----	----
24 V / 50 W	24 V AC/DC	T3 / T195 °C	T3 / T195 °C	----	----
230 V / 50 W	230 V AC/DC	T3 / T195 °C	T4 / T130 °C	----	----

(TB= terminal box)

Temperature classification type USL46-Ex

Type USL46-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
12 V	12 V DC	----	120 °C / T120 °C	----	----
24 V	24 V DC	----	120 °C / T120 °C	----	----

(TB= terminal box)

Temperature classification type USL06LED-Ex

Type USL06LED-Ex	Nominal voltage	Ambient temperature range	
		$-20^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$	
		Without TB	With TB
12 V 9 W 12V DC	12 V DC	----	T6 / T80 °C
24 V / 14W 24V AC/DC	24 V AC/DC	----	T6 / T80 °C
24 V / 9 W 24V DC	24V DC	----	T6 / T80 °C
230 V / 7 W	120-230 V AC/DC	----	T6 / T80 °C

(TB= terminal box)

16 **Report Number**

BVS PP 09.2036 EU, as of 2021-04-23

17 **Special Conditions for Use**

None

18 **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 **Drawings and Documents**

Drawings and documents are listed in the confidential report.

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 Testing and Certification GmbH
Bochum, 2021-04-23
BVS-WI0/MGR A20200419



Managing Director