

(1) **EC-TYPE-EXAMINATION CERTIFICATE**  
(Translation)

(2) Equipment and Protective Systems intended for Use  
in Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

**PTB 99 ATEX 1157**



(4) Equipment: Luminaire USL06-Ex/USL46-Ex

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

(6) Address: Talweg 2, 58239 Schwerte, Deutschland (Germany)

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with 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, given in Annex II to the Directive.


The examination and test results are recorded in the confidential report **PTB Ex 99-19119**.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 50014:1997      EN 50018:1994      EN 50019:1994**

(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 and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

 **II 2 G   EEx d (e) IIC T3 or T4 or 120° C**

Zertifizierungsstelle Explosionsschutz  
By order

Braunschweig, 08. March 2000

Dr.-Ing. U. Klausmeyer  
Regierungsdirektor

# Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

## SCHEDULE

(13)

(14)

### EC-TYPE-EXAMINATION CERTIFICATE PTB 99 ATEX 1157

(15) Description of the Equipment

The Ex rated luminaires USL06-Ex and USL46-Ex comprise a pressure tight encapsulated housing in which the light sources are set. The pressure tight space comprises an aluminium housing with a screwed cover. The light transmitting part is set into the cover.

The luminaire can, as an option, be fitted with terminal box (AK) ignition protection rated at "increased safety". Furthermore, the luminaires may be fitted with an Opal Glass disc.

The luminaires type USL06-Ex can, as an option, be fitted with a timer card (PCB) which will switch off the lamp automatically by means of a reed switch after a preset time. The luminaire model USL46-Ex is provided with a module made up of light emitting diodes which will, depending on selection, light up in red or yellow to provide the functions of rear light, brake light or flasher.

Type USL06-Ex	Nominal Voltage	Ambient Temperature sphere			
		-20° C to + 40° C		-20° C to + 60° C	
		without AK	with AK	without AK	with AK
(12 V) 20 W AC/DC	12 V ± 10% AC/DC	T4	T4	T4	T4
(24 V) 20 W AC/DC	24 V ± 10% AC/DC	T4	T4	T4	T4
(120 V/ 12 V) 20 W AC	120 V ± 10% AC	T4	T4	T4	T4
(230 V/12 V) 20 W AC	230 V ± 10% AC	T4	T4	T4	T4
(240 V/12 V) 20 W AC	240 V ± 10% AC	T4	T4	T4	T4
(12 V) 35 W AC/DC	12 V ± 10% AC	T4	T4	T3	-
(12 V) 50 W AC/DC	12 V ± 10% AC/DC	T3	T3	-	-
(24 V) 50 W AC/DC	24 V ± 10% AC/DC	T3	T3	-	-
(230 V) 50 W AC/DC	230 V ± 10% AC/DC	T3	T4	-	-

Type	Nominal Voltage	max. Ambient Temperature			
		-20° C to + 40° C		-20° C to + 60° C	
		without AK	with AK	without AK	with AK
USL46-Ex	24 V ± 10% DC	-	120° C	-	-

note: AK means "terminal box"

# Physikalisch-Technische Bundesanstalt

## Braunschweig und Berlin

(16) Test Report PTB Ex 99-19119

(17) Special conditions for safe use

none;

additional notes for safe installation:

When wiring up luminaire model USL06-Ex fitted with terminal box, a cable with a temperature rating of at least 95° C must be used.

(18) Essential health and safety requirements

These are met when conforming to above standards.

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Braunschweig, 08. March 2000

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