

EC-TYPE-EXAMINATION CERTIFICATE
(Translation)

- (1)
- (2) Equipment and Protective Systems intended for Use
in Potentially Explosive Atmospheres - **Directive 94/9/EC**
- (3) EC-type-examination Certificate Number:
PTB 01 ATEX 1031
- (4) Equipment: Ex-Luminaire USL07-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 01-10245**
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014:1997 + A + A2 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 T6 or 120° C



Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 26. July 2001

Dipl.-Phys. U. Völker

SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1031**

(15) Description of the Equipment

The Ex rated luminaire USL07-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".

The luminaires type USL07-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.

| Type USL07-Ex | Nominal Voltage | Ambient Temperature sphere | | | |
|-------------------|-----------------|----------------------------|-----------|-------------------|---------|
| | | -20° C to + 40° C | | -20° C to + 60° C | |
| | | without AK | with AK | without AK | with AK |
| (230 V/12 V) 20 W | 230 V AC | T6 | T6 | - | - |
| (230 V/12 V) 35 W | 230 V AC | T4 | T4 | - | - |
| (240 V/12 V) 35 W | 240 V AC | T4 | T4 | - | - |
| 12 V 50 W | 12 V AC/DC | T4 | T4 | T3 | - |
| 24 V 50 W | 24 V AC/DC | T4 | T4/120° C | T3 | - |
| (120 V/12 V) 50 W | 120 V AC | T3 | T3 | - | - |
| 230 V 50 W | 230 V AC/DC | T4 | T4 | T3 | - |
| (230 V/12 V) 50 W | 230 V AC | T4 | T4 | - | - |
| (240 V/12 V) 50 W | 240 V AC | T3 | T3 | - | - |
| 230 V 75 W | 230 V AC/DC | T3 | T3 | - | - |

note: AK means "terminal box"

16) Test Report **PTB Ex 01-10245**

(17) Special conditions for safe use

none;

additional notes for safe installation:

When wiring up luminaire model USL07-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.

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 26. July 2001

Dipl.-Phys. U. Völkel
Regierungsdirektor

1. Supplement
in accordance with guideline 94/9 EG Appendix III Fig.6
to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1031

Equipment: Luminaire USL07-Ex

Identification Code:  **II 2 G EEx d IIC T3 or T4 or T6 or 120° C**

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

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

Description of supplements and modifications

The Luminaire series USL07-Ex with or without terminal box is extended for use by an additional lamp (24 V/20 W halogen, manufacturer Osram, Order No. 64435U).

Test report: PTB Ex 02-11322

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 4. February 2002

Dr.-Ing. U. Klausmeyer
Regierungsdirektor



Translation

EC-Type Examination Certificate

-Directive 94/9/EC-

Equipment and protective systems intended for use
in potentially explosive atmospheres

DMT 01 ATEX E 144

- (4) **Equipment:** Ex-Luminaire Type USL07-Ex
- (5) **Manufacturer:** FH. 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 DMT-Gesellschaft für Forschung und Prüfung mbH, notified body no. 0158 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 test and assessment report BVS PP 01.2115 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:

EN 50281-1-1: 1998 Dust-Explosive-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 and construction of the specified equipment in accordance to Directive 94/9/EC. Further requirements of this Directive which are not covered by this Certificate apply to the manufacture and placing on the market of this equipment.
- (12) The marking of the equipment shall include the following:
Ⓔ II 2D IP67 T195° C or T130° C or T120° C or T80° C

Deutsche Montan Technologie GmbH

Essen, dated 21. November 2001

Signature

Signature

DMT certification body

Head of special services unit

(13)

Appendix to

(14)

EC-Type Examination Certificate

DMT 01 ATEX E 144

(15) 15.1 Subject and type

Ex-Luminaire Type USL07-Ex
15.2 Description

The Ex-Luminaire comprise a housing with a screwed cover, and is designed for use in inflammable dust hazardous areas. The light transmitting part is set into the cover.

The luminaire can, as an option, be fitted with terminal box (AK) and with an electronic timer card. The timer card will switch off the lamp automatically by means of a reed switch after a preset time.

The luminaire is tested for use in gas-air-mixed hazardous areas in EC-Type Examination Certificate PTB 01 ATEX 1031

15.3 Distinguishing features

Classification of temperature rates and electrical features

| Model Type USL07-Ex | Nominal Voltage | Ambient Temperature sphere | | | |
|------------------------|-----------------|----------------------------------|---------|----------------------------------|---------|
| | | -20° C ≤ T _a ≤ +40° C | | -20° C ≤ T _a ≤ +60° C | |
| | | without AK | with AK | without AK | with AK |
| (230 V/12 V) 20 W | 230 V AC | T80° C | T80° C | - | - |
| (230 V/12 V) 35 W | 230 V AC | T130° C | T130° C | - | - |
| (240 V/12 V) 35 W | 240 V AC | T130° C | T130° C | - | - |
| 12 V 50 W | 12 V AC/DC | T130° C | T130° C | T195° C | - |
| 24 V 50 W | 24 V AC/DC | T130° C | T120° C | T195° C | - |
| (120 V/12 V) 50 W | 120 V AC | T195° C | T195° C | - | - |
| 230 V 50 W | 230 V AC/DC | T130° C | T130° C | T195° C | - |
| (230 V/12 V) 50 W | 230 V AC | T130° C | T130° C | - | - |
| (240 V/12 V) 50 W | 240 V AC | T195° C | T195° C | - | - |
| 230 V 75 W | 230 V AC/DC | T195° C | T195° C | - | - |

note: AK means "terminal box"

(16) Test report

BVS PP 01.2115 EG , issue 21.11.2001

(17) Special conditions for safe use

none