


Translation

(1) EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (3) No. of EC-Type Examination Certificate: **BVS 10 ATEX E 100 X**
- (4) Equipment: **Luminaire type USL07ALF-Ex**
- (5) Manufacturer: **F.H. Papenmeier GmbH & Co. KG**
- (6) Address: **58239 Schwerte, Germany**
- (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 12.2038 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- | | |
|-------------------------|-------------------------------------|
| EN 60079-0:2009 | General requirements |
| EN 60079-1:2007 | Flameproof enclosure 'd' |
| EN 60079-7:2007 | Increased safety 'e' |
| EN 60079-31:2009 | Protection by enclosures '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 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 T¹⁾ Gb**
II 2D Ex tb IIIC T²⁾ Db IP67

The values for ¹⁾ and ²⁾ are to be found in Parameters.

DEKRA EXAM GmbH
Bochum, dated 20th March 2012

Signed: Simanski

Certification body

Signed: Dr. Eickhoff

Special services unit

(13) Appendix to

(14) **EC-Type Examination Certificate**
BVS 10 ATEX E 100 X

(15) 15.1 Subject and type

Luminaire type USL07ALF-Ex

15.2 Description

The sight glass luminaire of type USL07ALF-Ex is designed for the types of protection Flameproof Enclosure (luminaire enclosure) and Increased Safety (terminal compartment). The luminaire is suitable for use in Gas-Ex atmospheres of zones 1 and 2 and in Dust-Ex at atmospheres of zones 21 and 22. The illumination of zone 0 and 20 is also permitted due to the metallic sight glass casing. The minimum length of the sight glass is 40 cm.

Ex-luminaires with sight glass serve the process observation inside reactors, vessels, machines etc. where limited space does not allow the use of standard Ex-luminaires.

Optionally, the luminaire can also be equipped with an electronic timer card; this timer uses a Reed contact to switch off the luminaire after a given period of time.

15.3 Parameters

U _{In,mains} [VAC]	U _{Out,trans} [VDC]	P _{bulb} [W]	Bulb type	Temperature class / Surface temperature	
				T _{a,max} +40 °C	T _{a,max} +60 °C
24	10	39	OSRAM type SIG 64009	T6 / T80 °C	T4 / T130 °C
	12	20	OSRAM type SIG 64002		
120	10	39	OSRAM type SIG 64009		
	12	20	OSRAM type SIG 64002		
230	10	39	OSRAM type SIG 64009		
	12	20	OSRAM type SIG 64002		
240	10	39	OSRAM type SIG 64009		
	12	20	OSRAM type SIG 64002		

(16) Test and assessment report

BVS PP 12.2038 EG as of 20.03.2012

(17) Special conditions for safe use

The joint widths of the flameproof joint of this apparatus are in parts longer, and its gaps are in parts shorter than required by Table 2 of EN 60079-1: 2007. Information on the dimensions shall be obtained from the manufacturer.

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 12.04.2012
BVS-Kir/Ar E 0547/12

Certification body

Special services unit