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

Address (6) D-58239 Schwerte

- 77 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:

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

Nominal Voltage	Ambient Temperature Range				
•	$-20^{\circ}\text{C} \leq \text{T}_{\text{a}} \leq +40^{\circ}\text{C}$		-20 °C $\leq T_a \leq +60$ °C		
	Without TB	With TB	Without TB	With TB	
12V AC/DC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C	
24V AC/DC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C	
120V AC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C	
230V AC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C	
240V AC	T4 / T130°C	T4 / T130°C	T4 / T130°C	T4 / T130°C	
12V AC/DC	T4 / T130°C	T4 / T130°C	T3 / T195°C	alor way day ya	
12V AC/DC	T3 / T195°C	T3 / T195°C			
24V AC/DC	T3 / T195°C	T3 / T195°C			
230V AC/DC	T3 / T195°C	T4 / T130°C			
	Voltage 12V AC/DC 24V AC/DC 120V AC 230V AC 240V AC 12V AC/DC 12V AC/DC 24V AC/DC	Voltage -20°C ≤ T Without TB 12V AC/DC T4 / T130°C 24V AC/DC T4 / T130°C 120V AC T4 / T130°C 230V AC T4 / T130°C 240V AC T4 / T130°C 12V AC/DC T4 / T130°C 12V AC/DC T3 / T195°C 24V AC/DC T3 / T195°C	Voltage $-20^{\circ}\text{C} \le T_a \le +40^{\circ}\text{C}$ Without TB With TB 12V AC/DC T4 / T130°C T4 / T130°C 24V AC/DC T4 / T130°C T4 / T130°C 120V AC T4 / T130°C T4 / T130°C 230V AC T4 / T130°C T4 / T130°C 240V AC T4 / T130°C T4 / T130°C 12V AC/DC T4 / T130°C T4 / T130°C 12V AC/DC T3 / T195°C T3 / T195°C 24V AC/DC T3 / T195°C T3 / T195°C	Voltage -20°C ≤ Ta ≤ +40°C -20°C ≤ Ta Without TB 12V AC/DC T4 / T130°C T4 / T130°C 24V AC/DC T4 / T130°C T4 / T130°C 120V AC T4 / T130°C T4 / T130°C 230V AC T4 / T130°C T4 / T130°C 240V AC T4 / T130°C T4 / T130°C 12V AC/DC T4 / T130°C T3 / T195°C 12V AC/DC T3 / T195°C T3 / T195°C T3 / T195°C	

15.3.1 Temperature classification Type USL 46-Ex

Type USL 46-Ex	Nominal Voltage	Ambient Temperature Range				
	-	-20 °C $\leq T_a \leq +40$ °C		-20 °C $\leq T_a \leq +60$ °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			

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Test report

BVS PP 09.2036 EC, issued 18/03/2009

Special conditions for safe use

None