



Translation

(1) EC-Type Examination Certificate

(2) **- Directive 94/9/EC -**
**Equipment and protective systems intended for use
in potentially explosive atmospheres**

(3) **BVS 08 ATEX E 137**

(4) **Equipment:** Lamp type ESL25-Ex; ESL25-Ex/1

(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 98.2049 EG.

(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 61241-0:2006 General requirements
EN 61241-1:2004 Protection by Enclosures

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.

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

The marking of the equipment shall include the following:

 **II 2G Ex d IIC ***
II 2D Ex tD A21 IP67 *

The values represented by the asterisks are given in the type table under item 15.3 Parameters.

DEKRA EXAM GmbH

Bochum, dated 29th July 2009

Signed: Simanski

Certification body

Signed: Dr. Eickhoff

Special services unit

Appendix to

(14) **EC-Type Examination Certificate**

BVS 08 ATEX E 137

15.1 Subject and type

Lamp type ESL25-Ex; ESL25-Ex/1

15.2 Description

The Ex-lamp consists of an enclosure manufactured in compliance with both types of protection, Flameproof Enclosure 'd' and Protection by Enclosures 'tD'; the lamp has a screw-top lid and is intended for the use in potentially explosive atmospheres where hazardous mixtures of air and gas or of dust and gas are present. The transparent component has been mounted into the lid.

The lamp is equipped with halogen lights for nominal voltages of 12 V up to 230 V. Additionally, some variants of the lamp are equipped with a built-in transformer.

The requirements regarding the cable entries and the cable itself are described in item 15.3) Parameters.

15.3 Parameters

15.3.1 Temperature classification type ESL 25-Ex

Type ESL 25-Ex	Nominal voltage	Ambient temperature range		Cable entry and cable 110°C
		$-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$	$-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$	
12 V / 5 W	12 V AC/DC	T6 / T80°C	----	No
120 V / 12 V / 5 W	120 V AC	T6 / T80°C	----	No
230 V / 12 V / 5 W	230 V AC	T6 / T80°C	.	No
12 V / 10 W	12 V AC/DC		T4 / T130°C	Yes
120 V / 12 V / 10 W	120 V AC		T4 / T130°C	Yes
230 V / 12 V / 10 W	230 V AC	----	T4 / T130°C	Yes
12 V / 20 W	12 V AC/DC	T4 / T130°C		Yes
24 V / 20 W	24 V AC/DC	T4 / T130°C		Yes

15.3.2 Temperature classification type ESL 25-Ex/1

Type ESL 25-Ex/1	Nominal voltage	Ambient temperature range		Cable entry and cable 110°C
		$-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$	$-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$	
12 V / 5 W	12 V AC/DC	T6 / T80°C	----	No
12 V / 10 W	12 V AC/DC		T4 / T130°C	Yes
12 V / 20 W	12 V AC/DC	T4 / T130°C		Yes
24 V / 20 W	24 V AC/DC	T4 / T130°C		Yes

Test and assessment report

BVS PP 98.2049 EG as of 29.07.2009

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.

44809 Bochum, 21.08.2009
BVS-Kr/Ld/Ar A 20070225

DEKRA EXAM GmbH



body

Special services unit