



Translation

EC-Type Examination Certificate

(1)

EC-Type Examination Certificate

(2)

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

(3)

BVS 09 ATEX E 029

(4) **Equipment:** LED exit luminaire type EXIT *

(5) **Manufacturer:** Cooper Crouse-Hinds GmbH

(6) **Address:** 69412 Eberbach, 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 10.2228 EG.


(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2009	General requirements
EN 60079-7:2007	Increased Safety 'e'
EN 60079-11:2007	Intrinsic Safety 'i'
EN 60079-18:2009	Encapsulation 'm'
EN 60079-31:2009	Protection by Enclosure

(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 e ib mb IIC T*¹⁾ Gb
 **II 2D Ex tb IIC T80°C Db**
IP66

¹⁾ The temperature class depends on type and ambient temperature. See also 15.3) Parameters.

DEKRA EXAM GmbH
Bochum, dated 30th September 2010

Signed: Simanski

Signed: Dr. Eickhoff

Certification body

Special services unit

(13) Appendix to

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

BVS 09 ATEX E 029

(15) 15.1 Subject and type

LED exit luminaire type EXIT *¹⁾

¹⁾ Details on luminaire variant

none = standard variant

CG-S = luminaire with CG-S module to be connected to a central battery system

N = emergency luminaire with internal battery pack

24V = power supply unit (PSU) with input voltage range from 12 to 24 V

15.2 Description

The LED exit luminaire or emergency luminaire is an explosion-protected electrical equipment intended for use in potentially explosive atmospheres. It consists of a plastic enclosure with cover onto which the emergency sign is fixed. The joint between enclosure top and enclosure bottom is sealed by a gasket.

Standard variant:

White LEDs are used as source of light; these are assembled on a specific circuit board, the so-called LED unit. Overall, ten strings of 3 LEDs each are supplied by a separate PSU.

CG-S:

In conjunction with the EXIT CG-S module the luminaire can be connected to the CEAG central battery system and controlled. The EXIT CG-S module is mechanically inserted into the same enclosure as the PSU and also potted. The module is assembled as an independent unit from below onto the LED unit as is the PSU module.

N:

The emergency luminaire is based on the same components and the same assembly of white LEDs as the standard variant. Additionally, the components for charging, for monitoring the charging and discharging processes, and the capacitance counter are placed at the LED unit.

In case of mains failure two battery blocks of five cells each are in place to provide power. The energy storage is assembled as an independent unit from below onto the LED unit as is the PSU module.

24V:

Instead of a PSU with a large input voltage range, a PSU with a DC voltage range of 12 V to 24 V is mounted onto the LED unit of the standard variant.

The 24V PSU is also accommodated in the separately potted enclosure.

15.3 Parameters

Elektrischen Kenngrößen

Type	Voltage [V]	AC / DC	Frequency [Hz]	Ambient temperature	Temperature class / surface
EXIT	110 - 277	AC	50 / 60	-20 °C ≤ T _a ≤ +40 °C	T6 / T80 °C
				-20 °C ≤ T _a ≤ +50 °C	T5 / T80 °C
	99 - 275	DC	---	-20 °C ≤ T _a ≤ +40 °C	T6 / T80 °C
				-20 °C ≤ T _a ≤ +50 °C	T5 / T80 °C
EXIT N	110 - 277	AC	50 / 60	-20 °C ≤ T _a ≤ +40 °C	T5 / T80 °C
				-20 °C ≤ T _a ≤ +50 °C	T4 / T80 °C
	99 - 275	DC	---	-20 °C ≤ T _a ≤ +40 °C	T5 / T80 °C
				-20 °C ≤ T _a ≤ +50 °C	T4 / T80 °C
EXIT CG-S	230 - 277	AC	50 / 60	-20 °C ≤ T _a ≤ +40 °C	T6 / T80 °C
				-20 °C ≤ T _a ≤ +50 °C	T5 / T80 °C
EXIT 24 V	12 - 24	DC	---	-20 °C ≤ T _a ≤ +40 °C	T6 / T80 °C
				-20 °C ≤ T _a ≤ +50 °C	T5 / T80 °C

(16) Test and assessment report

BVS PP 10.2228 EG as of 30.09.2010

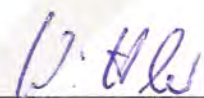
(17) Special conditions for safe use

Not applicable

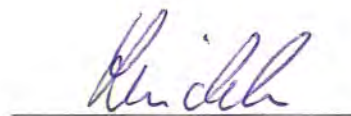
We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 29.11.2010
BVS-Ld/Ar E 1946/10

DEKRA EXAM GmbH



Certification body




Special services unit

Translation

(1) 1. Supplement to the EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use
in potentially explosive atmospheres - Directive 94/9/EC
Supplement accordant with Annex III number 6
- (3) No. of EC-Type Examination Certificate: **BVS 09 ATEX E 029**
- (4) Equipment: **Rettungszeichenleuchte type EXIT ***
- (5) Manufacturer: **Cooper Crouse-Hinds GmbH**
- (6) Address: **Neuer Weg Nord 49, 69412 Eberbach, Germany**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (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 10.2228 / N1 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- EN 60079-0:2009 General requirements**
EN 60079-7:2007 Increased Safety 'e'
EN 60079-11:2007 Intrinsic Safety 'i'
EN 60079-18:2009 Encapsulation 'm'
EN 60079-31:2009 Protection by Enclosure
- (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 supplement to the 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 e ib mb IIC T*1) Gb**
II 2D Ex tb IIIC T80°C Db
IP66

The temperature class depends on type and ambient temperature. See also 15.3) Parameters.

DEKRA EXAM GmbH
Bochum, dated 30. May 2012

Signed:

Signed:

Certification body

Special services unit

- (13) Appendix to
- (14) **1. Supplement to the EC-Type Examination Certificate
BVS 09 ATEX E 029**
- (15) 15.1 Subject and type

- 1) LED exit luminaire type EXIT *1)
 - Details on luminaire variant
 - none = standard variant
 - CG-S = luminaire with CG-S module to be connected to a central battery system
 - N = emergency luminaire with internal battery pack
 - 24V = power supply unit (PSU) with input voltage range from 12 to 24 V

15.2 Description

Description of change:

The connection of the modules among each other is realised by plug connection
 The enclosure material has changed
 Type of terminals
 Size of the marking-plates
 Rotation of the positioning of internal modules
 Adjustment of the electrical parameters

The exit luminaire can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report

Description of the equipment:

The LED exit luminaire or emergency luminaire is an explosion-protected electrical equipment intended for use in potentially explosive atmospheres. It consists of a plastic enclosure with cover onto which the emergency sign is fixed. The joint between enclosure top and enclosure bottom is sealed by a gasket.

Standard variant:

White LEDs are used as source of light; these are assembled on a specific circuit board, the so-called LED unit. Overall, ten strings of 3 LEDs each are supplied by a separate PSU.

CG-S:

In conjunction with the EXIT CG-S module the luminaire can be connected to the CEAG central battery system and controlled. The EXIT CG-S module is mechanically inserted into the same enclosure as the PSU and also potted. The module is assembled as an independent unit in the lower housing part as the PSU module.

N:

The emergency luminaire is based on the same components and the same assembly of white LEDs as the standard variant. Additionally, the components for charging, for monitoring the charging and discharging processes and the capacitance counter are placed at the LED unit. In case of mains failure two battery blocks of five cells each are in place to provide power. The energy storage is assembled as an independent unit lower housing part as the PSU module.

24V:

Instead of a PSU with a large input voltage range, a PSU with a DC voltage range of 12 V to 24 V is mounted onto the LED unit of the standard variant.
 The 24V PSU is also accommodated in the separately potted enclosure and is assembled in the lower housing part.

15.3 Parameters

Electrical parameters

Type	Voltage [V]	AC / DC	Frequency [Hz]	Ambient temperature	Temperature class / surface
EXIT	110 – 277	AC	50 / 60	$-20\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-20\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
	110 – 250	DC	---	$-20\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-20\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
EXIT N	110 – 277	AC	50 / 60	$-20\text{ °C} \leq T_a \leq +40\text{ °C}$	T5 / T80 °C
				$-20\text{ °C} \leq T_a \leq +50\text{ °C}$	T4 / T80 °C
	110 – 250	DC	---	$-20\text{ °C} \leq T_a \leq +40\text{ °C}$	T5 / T80 °C
				$-20\text{ °C} \leq T_a \leq +50\text{ °C}$	T4 / T80 °C
EXIT CG-S	220 – 254	AC	50 / 60	$-20\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-20\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
	195 – 250	DC	---	$-20\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-20\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
EXIT 24 V	12 – 24	DC	---	$-20\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-20\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C

(16) Test and assessment report

BVS PP 10.2228 EG as of 30.05.2012

(17) Special conditions for safe use

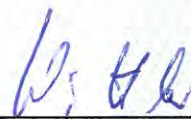
Not applicable

We confirm the correctness of the translation from the German original.
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DEKRA EXAM GmbH
44809 Bochum, 30, May 2012
BVS-Sit/Sp A 20110486



Certification body



Special services unit