



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 048**

(4) **Equipment:** LED exit luminaire type Ex-Lite

(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 11.2002 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\*<sup>1)</sup> Gb  
II 2D Ex tb IIIC T80°C Db  
IP66**

<sup>1)</sup> The temperature class depends on type and ambient temperature. See also 15.3) Parameters.

**DEKRA EXAM GmbH**

Bochum, dated 03<sup>rd</sup> January 2011

Signed: Dr. Eickhoff

Signed: Dr. Wittler

Certification body

Special services unit

(13) Appendix to

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

**BVS 09 ATEX E 048**

(15) 15.1 Subject and type

LED exit luminaire type EX-Lite \*<sup>1)</sup>

- <sup>1)</sup> 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 metal enclosure and a glass window which is inserted into the lid and 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 Ex-Lite CG-S module the luminaire can be connected to the CEAG central battery system and controlled. The Ex-Lite 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

#### Electrical parameters

Type	Voltage [V]	AC / DC	Frequency [Hz]	Ambient temperature	Temperature class / surface
EX-Lite	110 - 254	AC	50 / 60	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
	110 - 277			$-20\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-20\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
	99 - 275	DC	---	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
EX-Lite 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
	99 - 275	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
EX-Lite CG-S	230 - 277	AC	50 / 60	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
	176 - 275	DC	---	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
EX-Lite 24 V	12 - 24	DC	---	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C

(16) Test and assessment report

BVS PP 11.2002 EG as of 03.01.2011

(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, 03.02.2011  
BVS-Ld/Ar E 0049/11

**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 048**

(4) Equipment: **Exit luminaire type Ex-Lite \***

(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 11.2002 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
EN 60079-7:2007	Increased Safety
EN 60079-11:2007	Intrinsic Safety
EN 60079-18:2009	Encapsulation
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\*<sup>1)</sup> Gb or**  
 **II 2G Ex d e ib mb IIC T4 Gb**  
**II 2D Ex tb IIIC T80°C Db**  
**IP66**

<sup>1)</sup> Temperature class depends on the type of luminary and the ambient temperature range. See also 15.3 parameters

DEKRA EXAM GmbH  
Bochum, dated 29.06.2012

Signed: Simanski

Certification body

Signed: Dr. Wittler

Special services unit

- (13) Appendix to
- (14) **1. Supplement to the EC-Type Examination Certificate  
BVS 09 ATEX E 048**
- (15) 15.1 Subject and type

LED exit luminaire type EX-Lite \*<sup>1)</sup>

- 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       |
| NLT  | = emergency luminaire with internal battery pack and heating element     |

## 15.2 Description

### Description of change

The certificate will be expanded by the variant "Ex-Lite NLT"  
Adjustment of the electrical parameters

### 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 metal enclosure and a glass window which is inserted into the lid and 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.

#### NLT:

Variant "N", with an additionally certificated heating element

### 15.3 Parameters

#### Electrical parameter

Type	Voltage [V]	AC / DC	Frequency [Hz]	Ambient temperature	Temperature class / surface temperature
Ex-Lite	110 – 254	AC	50 / 60	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
	110 – 277			$-20\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-20\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
	110 – 250	DC	---	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
Ex-Lite 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
Ex-Lite CG-S	220 – 254	AC	50 / 60	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
	195 – 250	DC	---	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
Ex-Lite 24 V	12 – 24	DC	---	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq +50\text{ °C}$	T5 / T80 °C
Ex-Lite NLT	110 – 240	AC	50 / 60	$-40\text{ °C} \leq T_a \leq +40\text{ °C}$	T4 / T80 °C

(16) Test and Assessment Report

BVS PP 11.2002 EG as of 29.06.2012

(17) Special conditions for safe use

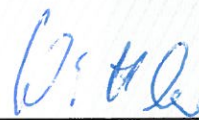
Not applicable

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.

DEKRA EXAM GmbH  
44809 Bochum, 29.06.2012  
BVS Sit/Sch A 20120107



Certification body



Special services unit


## Translation

# (1) 2<sup>nd</sup> 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 048**
- (4) Equipment: **Exit luminaire type Ex-Lite \***
- (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 11.2002 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:

**EN 60079-0:2012 General requirements**  
**EN 60079-1:2007 Flameproof enclosure "d"**  
**EN 60079-7:2007 Increased safety "e"**  
**EN 60079-11:2012 Intrinsic safety "i"**  
**EN 60079-18:2009 Encapsulation "m"**  
**EN 60079-31:2009 Protection by enclosure "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 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\*<sup>1)</sup> Gb**      or  
**II 2G Ex d e ib mb IIC T4 Gb**  
**II 2D Ex tb IIIC T80°C Db**

<sup>1)</sup>The temperature class depends on type and ambient temperature. See also 4) Parameters.

DEKRA EXAM GmbH  
Bochum, dated 2015-04-30

Signed: Simanski

Signed: Dr. Eickhoff

Certification body

Special services unit

- (13) Appendix to
- (14) **2<sup>nd</sup> Supplement to the EC-Type Examination Certificate  
BVS 09 ATEX E 048**
- (15) 15.1 Subject and type

Exit luminaire type Ex-Lite \*

<sup>1)</sup> Details on luminaire variant

none	= standard variant
LT	= standard variant for low ambient temperatures
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
NLT	= emergency luminaire with internal battery pack and heating element
V-CG-S	= successor of the CG-S module with new electronic components

### 15.2 Description

Addition of the types Ex-lite V-CG-S and Ex-lite LT to the type key  
Update of the standard

#### 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 metal enclosure and a glass window which is inserted into the lid and 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.

LT:

Standard variant for low ambient temperatures

CG-S:

In conjunction with the CG-S module the luminaire can be connected to the CEAG central battery system and controlled. The 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 well 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 from below onto the LED unit as well 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 24 V PSU is also accommodated in the separately potted enclosure.

NLT:

Variant "N", with an additionally certificated heating element

V-CG-S:

Successor of the CG-S variant. The CG-S module is equipped with new electronic components and is called V-CG-S.



### 15.3 Parameters

#### Electrical parameter

Type	Voltage [V]	AC / DC	Frequency [Hz]	Ambient temperature	Temperature class / surface temperature
Ex-Lite	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
Ex-Lite LT	110 - 254	AC	50 / 60	$-40\text{ °C} \leq T_a \leq 40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq 50\text{ °C}$	T5 / T80 °C
	110 - 250	DC	---	$-40\text{ °C} \leq T_a \leq 40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq 50\text{ °C}$	T5 / T80 °C
Ex-Lite 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
Ex-Lite CG-S	220 - 254	AC	50 / 60	$-40\text{ °C} \leq T_a \leq 40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq 50\text{ °C}$	T5 / T80 °C
	195 - 250	DC	---	$-40\text{ °C} \leq T_a \leq 40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq 50\text{ °C}$	T5 / T80 °C
Ex-Lite 24 V	12 - 24	DC	---	$-40\text{ °C} \leq T_a \leq 40\text{ °C}$	T6 / T80 °C
				$-40\text{ °C} \leq T_a \leq 50\text{ °C}$	T5 / T80 °C
Ex-Lite NLT	110 - 240	AC	50 / 60	$-40\text{ °C} \leq T_a \leq 40\text{ °C}$	T4 / T80 °C
Ex-Lite V-CG-S	220 - 254	AC	50 / 60	$-40\text{ °C} \leq T_a \leq 50\text{ °C}$	T4 / T80 °C
	195 - 250	DC	---		

(16) Test and Assessment Report

BVS PP 11.2002 EG as of 2015-04-30

(17) 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.

DEKRA EXAM GmbH  
44809 Bochum, 2015-04-30  
BVS-Sit/Ma A20120354



Certification body



Special services unit