

## Translation

# (1) Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (3) No. of Type Examination Certificate: **BVS 10 ATEX E 149**
- (4) Equipment: **Light fitting type nLL \* 10 \*/\* \*/\***
- (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, 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 10.2272 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- |                         |                                |
|-------------------------|--------------------------------|
| <b>EN 60079-0:2009</b>  | <b>General requirements</b>    |
| <b>EN 60079-1:2007</b>  | <b>Flameproof Enclosure</b>    |
| <b>EN 60079-7:2007</b>  | <b>Increased Safety</b>        |
| <b>EN 60079-15:2010</b> | <b>Type of Protection 'n'</b>  |
| <b>EN 61241-0:2006</b>  | <b>General requirements</b>    |
| <b>EN 61241-1:2004</b>  | <b>Protection by Enclosure</b> |
- (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 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 3G Ex nA de IIC T4 Gc**  
**II 3D Ex tD A22 IP66 T80°C**

DEKRA EXAM GmbH  
Bochum, dated 15<sup>th</sup> December 2010

Signed: Simanski

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Certification body

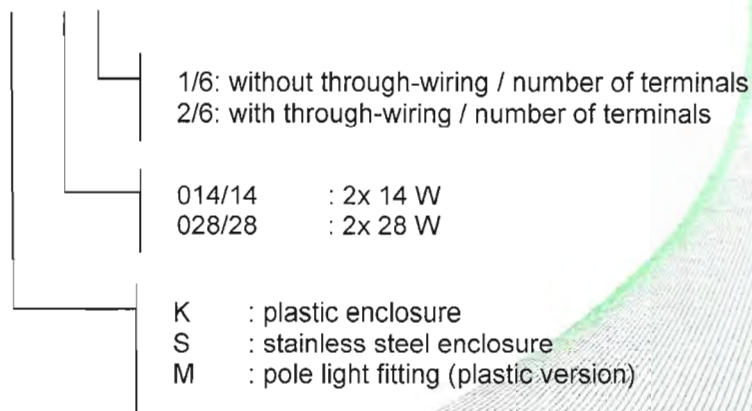
Signed: Dr. Eickhoff

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Special services unit



- (13) Appendix to
- (14) **Type Examination Certificate**  
**BVS 10 ATEX E 149 X**
- (15) 15.1 Subject and type

Light fitting type nLL\* 10\*/\*\* \*/\*



### 15.2 Description

The light fitting type nLL\* 10 \*/\*\* \*/\* is an explosion-protected electrical apparatus that accommodates single or twin fluorescent lamps with a G5 socket that serve to provide lighting in potentially explosive atmospheres of zones 2 and 22.

The electronic ballast (German abbreviation EVG) Luxtronic made by Hadler is used as ballast for the lamp type nLL\* 10 \*/\*\* \*/\*.

The lamps may be replaced inside the potentially explosive atmosphere if the light fitting is equipped with a separately certified light switch that meets the requirements of the type of protection Flameproof Enclosure. Either this switch disconnects the lamp at all poles when opening the light fitting or the voltage of the light fitting is set to zero before opening. The variant without a light switch contains a relevant warning on the outside of the enclosure.

Suitable lamps to be used are fluorescent tubes (HE fluorescent lamps) of type T5.

The light fitting enclosure consists of either glass-mat reinforced polyester or of stainless steel; the light-permitting diffuser is made of polycarbonate. The surrounding groove of the protective cover contains a self-adhesive gasket.

### 15.3 Parameters

Light fitting type	Ballast unit	Through-wiring		Rated voltage	Frequency	Ambient temperature
		with	without			
Standard light fitting nLL * 10*/** */*						
nLL* 10 014/14	EVG Luxtronic 3P 235 18 0	---	X	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0 Hz	-25°C - +50°C
nLL* 10 028/28	EVG Luxtronic 3P 235 18 0	---	X	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0 Hz	-25°C - +50°C
nLL* 10 014/14	EVG Luxtronic 3P 235 18 0	X	---	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0 Hz	-25°C - +45°C
nLL* 10 028/28	EVG Luxtronic 3P 235 18 0	X	---	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0 Hz	-25°C - +45°C



(16) Test and assessment report

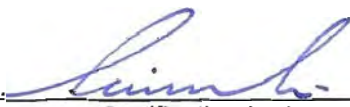
BVS PP 10.2272 EG as of 15.12.2010

(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, 10.10.2011  
BVS-Yil/Ar E 1467/11



Certification body



Special services unit

## Translation

# (1) 1. Supplement to the 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 10 ATEX E 149**
- (4) Equipment: **Light fitting type nLL \* 10 \*/\* \*/\***
- (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 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 10.2272 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 60079-15:2010 | Type of protection 'n'  |
| EN 61241-0:2006  | General requirements    |
| EN 61241-1:2004  | 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 3G Ex nA de IIC T4 Gc**  
**II 3D tD A22 IP66 T80°C**

DEKRA EXAM GmbH  
Bochum, dated 31.08.2011

signed: Dr. Eickhoff

Certification body

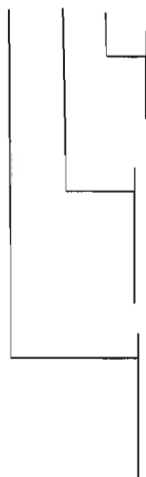
signed: Dr. Wittler

Special services unit



- (13) Appendix to
- (14) **1. Supplement to the EC-Type Examination Certificate**  
**BVS 10 ATEX E 149**
- (15) 15.1 Subject and type

Light fitting type nLL\* 10\*/\* \*/\*



1/6: without through-wiring / number of terminals  
2/6: with through-wiring / number of terminals

14/14 : 2x 14 W  
28/28 : 2x 28 W  
35/35 : 2x 35 W

K : plastic enclosure  
S : stainless steel enclosure  
M : pole light fitting (plastic version)

#### 15.2 Description

The reason of the supplement is the amplification of the electrical parameters.

#### 15.3 Parameters

light fitting type	ballast unit	through-wiring		rated voltage	frequency	ambient temperature
		with	without			
standard light fitting nLL * 10*/**/*						
nLL * 10 14/14	EVG Luxtronic 3P 235 18 0	---	X	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +50 °C
nLL * 10 28/28	EVG Luxtronic 3P 235 18 0	---	X	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +50 °C
nLL * 10 35/35	EVG Luxtronic 3P 235 18 0	---	X	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +45 °C
nLL * 10 14/14	EVG Luxtronic 3P 235 18 0	X	---	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +45 °C
nLL * 10 28/28	EVG Luxtronic 3P 235 18 0	X	---	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +45 °C
nLL * 10 35/35	EVG Luxtronic 3P 235 18 0	X	---	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +40 °C

- (16) Test and assessment report

BVS PP 10.2272 EG as of 31.08.2011


(17) Special conditions for safe use

None

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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, 31.08.2011  
BVS-Yil/Her A 20110510



Certification body



Special services unit



## Translation

# (1) 2. Supplement to the Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (3) No. of Type Examination Certificate: **BVS 10 ATEX E 149**
- (4) Equipment: **Light fitting type nLL \* 10 \*/\* \*/\***
- (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 certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 3 equipment 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 10.2272 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 60079-15:2010 | Equipment protection by type of protection 'n' |
| 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 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 3G Ex nA de IIC T4 Gc**  
**II 3D Ex tc IIIC T80°C Dc IP66**

DEKRA EXAM GmbH  
Bochum, dated 19. September 2012

Signed: Simanski

Certification body

Signed: Eickhoff

Special services unit



1) Version	K = Plastic enclosure M = Pole mounted with plastic enclosure S = Stainless steel enclosure
2) Lamp ratings	014/14 = 2 x 14 W 028/28 = 2 x 28 W 035/35 = 2 x 35 W
3) Quantity of the terminal rails	1 = without through-wiring 2 = with through-wiring
4) Quantity of terminal	6 = 6 Terminals

The light fitting type nLL \* 10 \*/\* is an explosion-protected electrical apparatus that accommodates single or twin fluorescent lamps with a G5 socket that serve to provide lighting in potentially explosive atmospheres of zones 2 and 22.

The lamps may be replaced inside the potentially explosive atmosphere if the light fitting is equipped with a separately certified light switch that meets the requirements of the type of protection Flameproof Enclosure. Either this switch disconnects the lamp at all poles when opening the light fitting or the voltage of the light fitting is set to zero before opening. The variant without a light switch contains a relevant warning on the outside of the enclosure.

The light fitting enclosure consists of either glass-mat reinforced polyester or of stainless steel; the light-permitting diffuser is made of polycarbonate. The surrounding groove of the protective cover contains a self-adhesive gasket.

The reason of the supplement is the updating to the standard EN 60079-31:2009.



### 15.3 Parameters

light fitting type	ballast unit	through-wiring		rated voltage	frequency	ambient temperature
		with	without			
standard light fitting nLL * 10*/**/*						
nLL* 10 14/14	EVG Luxtronic 3P 235 18 0	---	X	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +50 °C
nLL* 10 28/28	EVG Luxtronic 3P 235 18 0	---	X	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +50 °C
nLL * 10 35/35	EVG Luxtronic 3P 235 18 0	---	X	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +45 °C
nLL* 10 14/14	EVG Luxtronic 3P 235 18 0	X	---	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +45 °C
nLL* 10 28/28	EVG Luxtronic 3P 235 18 0	X	---	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +45 °C
nLL * 10 35/35	EVG Luxtronic 3P 235 18 0	X	---	220 V..240 V AC 220 V..240 V DC	50 / 60 Hz 0Hz	-25 °C - +40 °C

(16) Test and assessment report

BVS PP 10.2272 EG as of 19.09.2012

(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, 19. September 2012  
BVS-Yil/Dj A 20120553



Certification body



Special services unit