



(1) EC-Type Examination Certificate (Translation)

(2) Equipment or Protective Systems Intended for use in
Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-Type Examination Certificate Number:

PTB 96 ATEX 2144

(4) Equipment: Luminaire with fluorescent lamps Type eLL. 92 0...

(5) Manufacturer: CEAG Sicherheitstechnik GmbH

(6) Address: Senator-Schwartz-Ring 26, D-59494 Soest

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with 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, given in Annex II to the Directive.

The examination and test results are recorded in a confidential report No. 96/2/0522.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

DIN EN 50014:1994-03

DIN EN 50018:1995-03

DIN EN 50019:1996-03

DIN EN 50020:1996-04

DIN EN 50028:1988-07

(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.

(11) This EC-Type Examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this apply to the manufacture and supply of this equipment.

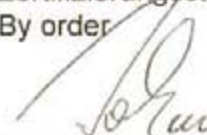
(12) The marking of the equipment shall include the following:

Ex II 2 G Ex eds IIC T4 resp. Ex edms ib IIC T4

Zertifizierungsstelle Explosionsschutz

Braunschweig, 18.12.1996

By order


Dr.-Ing. U. Johannsmeyer
Oberregierungsrat



(13) **S c h e d u l e**

(14) **EC-Type Examination Certificate No. PTB 96 ATEX 2144**

(15) Description of equipment

The luminaire with fluorescent lamps of the type eLL.92 0... is an explosion protected electrical apparatus with lamp sockets for the use of fluorescent lamps with a G 13-lamp cap. It is used for the illumination of explosion hazardous operating- and storage areas.

If the luminaire is equipped with emergency supply unit and emergency battery it is used to ensure illumination in case of mains failure.

The luminaire's housing is made of glass-fibre reinforced polyester and a translucent part of polycarbonate.

(16) Report No. PTB Ex 96/2/0522 consisting of 9 pages

(17) Special Conditions for safe use

not applicable

(18) Essential Health and Safety Requirements

The luminaire with fluorescent lamps meets the requirements according to DIN EN 50 014, DIN EN 50 018, DIN EN 50 020, DIN EN 50 028 and DIN EN 50 019 except for section 5.2.

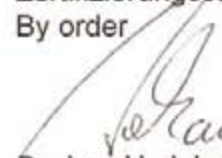
The variation relating to the construction of the lamp cap is permitted, because it was proved by experiment in combination with the lamp socket, that the chosen measures for ignition protection provide a safety at least equal to the safety level of the harmonized European Standard for the type of protection "Increased Safety".

The evaluation is based on the draft CLC/SC31-4 (Sec) 157.

Zertifizierungsstelle Explosionsschutz

Braunschweig, 18.12.1996

By order


Dr.-Ing. U. Johannsmeyer
Oberregierungsrat



1st SUPPLEMENT

according to Directive 94/9/EC Annex III letter 6

to EC-type-examination Certificate PTB 96 ATEX 2144

Equipment: Luminaire with fluorescent lamps of type eLL.92.0...

Manufacturer: CEAG Sicherheitstechnik GmbH

Address: Senator-Schwartz-Ring 26, D-59494 Soest

Description of supplements and modifications

The module of type Ex 2LCG may be incorporated in all lamps of type eLLK92 036/36 and eLLK92 058/58.

The monitoring module serves to control luminaires in emergency light operation.

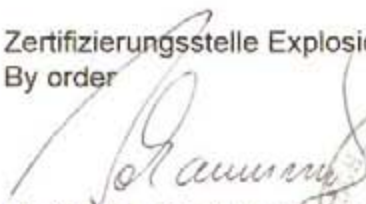
Electrical data

Rated voltage 220 V...254 V + 10 %, - 10 % AC
47 Hz...63 Hz
220 V + 25 %, - 20 % DC

Report: PTB Ex 97-27507

Zertifizierungsstelle Explosionsschutz

By order


Dr.-Ing. U. Johannsmeyer
Regierungsdirektor



Braunschweig, 09.01.1998

sheet 1/1

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

2. SUPPLEMENT

according to Directive 94/9/EC Annex III letter 6

to EC-type-examination Certificate PTB 96 ATEX 2144

(Translation)

Equipment: Luminaire with fluorescent lamps of type eLL.92 0...

Marking:  II 2 G EEx ed IIC T4 resp. EEx ed ib IIC T4 resp. EEx edm IIC T4 resp. EEX edm ib IIC T4

Manufacturer: CEAG Sicherheitstechnik GmbH

Address: Senator-Schwartz-Ring 26, D-59494 Soest

Description of supplements and modifications

The following modified components may in future be optionally used in all luminaires of type eLL.92...:

Sealing stud, protecting trough, electronic ballast, mains and emergency light unit, and mains and watchdog unit.

A switch in compliance with PTB 98 ATEX 1033 U or PTB No. 92.C.1022 U is additionally installed in all emergency luminaires.

Test report: PTB Ex 99-28533

Zertifizierungsstelle Explosionsschutz

By order:


Dr.-Ing. U. Johannsmeyer
Regierungsdirektor



Braunschweig, March 22, 1999


3. SUPPLEMENT

according to Directive 94/9/EC Annex III letter 6

to EC-type-examination Certificate PTB 96 ATEX 2144

(Translation)

Equipment: Luminaire with fluorescent lamps of types eLL.92 ... NI

Marking:  II 2 G EEx ed IIC T4 resp. EEx ed ib IIC T4 resp. EEx edm IIC T4 resp. EEx edm ib IIC T4

Manufacturer: CEAG Sicherheitstechnik GmbH

Address: Senator-Schwartz-Ring 26, D-59494 Soest

Description of supplements and modifications

All luminaires of types eLLK 92 018/18 NI, eLLM 92 018/18 NI, eLLK 92 036 NI, eLLK 92 036/36 NI, eLLM 92 036 NI and eLLM 92 036/36 N (with the cells manufactured by SAFT type VTF 037) may be used up to an ambient temperature of +55 °C.

Furthermore the batteries KR-7000F manufactured by Sanyo may be used alternatively for the luminaires listed.

Test report: PTB Ex 99-29378

Zertifizierungsstelle Explosionsschutz

By order:


Dr.-Ing. Johannsmeyer
Regierungsdirektor



Braunschweig, November 18, 1999


4th SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 96 ATEX 2144

(Translation)

Equipment: Light fixture with fluorescent lamp, type eLL.92 0...

Marking:  II 2 G EEx ed IIC T4 or EEx ed ib IIC T4 or EEx edm IIC T4 or
EEx edm ib IIC T4 or

 II 2 D T80 °C IP 66

Manufacturer: CEAG Sicherheitstechnik GmbH

Address: Senator-Schwartz-Ring 26
D-59494 Soest

Description of supplements and modifications

The light fixture may in future be manufactured in accordance with the documents listed in the test report.

The modifications concern:

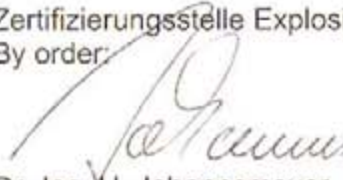
1. the use of additional certified components
2. the use of an additional housing material, and
3. the use of specific types of luminaires in atmospheres involving combustible dust.

All other specifications remain unchanged.

Test report: PTB Ex 00-20181

Zertifizierungsstelle Explosionsschutz

By order:


Dr.-Ing. U. Johannsmeyer
Regierungsdirektor



Braunschweig, August 10, 2000

Sheet 1/1



5. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 96 ATEX 2144

(Translation)

Equipment: Luminaire with fluorescent lamps, type eLL.92...-

Marking:  II 2 G EEx ed IIC T4 or EEx ed ib IIC T4 or EEx edm IIC T4 or
EEx edm ib IIC T4 and  II 2 D T80°C IP 66

Manufacturer: CEAG Sicherheitstechnik GmbH

Address: Neuer Weg Nord 49, 69412 Eberbach, Germany

Description of supplements and modifications

The luminaire with fluorescent lamps, type eLL. 92..., may be manufactured with the following modifications and supplements:

1. All luminaires of the type eLLK92.58/58 may be manufactured alternatively with two electronic ballasts.
2. Reduction glands according to Point 2 of Description to Supplement 5 may be used in all luminaires of the series eLL.92... with metal entries.
3. All luminaires of the type eLL.92...CG may be manufactured with the mains and monitoring unit Ex2LCG or EVG 97218/Ex2LCG in accordance with PTB 98 ATEX 1114 U.
4. All luminaires of the series eLL.92... with a new enclosure material are suited for use in areas with combustible dust.
5. All luminaires of the series eLL.92... may be manufactured alternatively with a built-in pushbutton.
6. All luminaires of the series ELL.92... may be manufactured alternatively without a lamp switch.
7. All luminaires of the series eLL.92... may be manufactured alternatively with a moulded plastic venting stub. These luminaires may only be used in II 2 G areas.
8. All luminaires of the series eLL.92 3.. with Fa6 holder may be fitted with fluorescent lamps with a diameter of 26 mm according to EN 60061-1, irrespective of the manufacturer.

5. SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 96 ATEX 2144

9. Protective bowls of luminaires of the series eLL.92... may be treated in accordance with Point 9 of Description to Supplement 5. Luminaires that have been treated in this way must not be installed and operated in II 2 D areas.
10. Luminaires of the series eLL.92... with 2x18 W or 2x36 W fluorescent lamps may be manufactured alternatively with a cover that is laid into the protective bowl.
11. The eLL.92.../..ZB version of the luminaire series eLL.92... may be operated in accordance with Point 11 of the Description to Supplement 5.
12. The eLL.92... NIB version of the luminaire series eLL.92... for emergency lighting may also be manufactured in accordance with Point 12 of the Description to Supplement 5.
13. The luminaire of the type eLL.92 3... may also be manufactured with single-pin fluorescent lamps with a diameter of 38 mm. The marking of the luminaire then reads PTB 96 ATEX 2144 X.

Test report: PTB Ex 03-23085

Zertifizierungsstelle Explosionsschutz
By order:

Braunschweig, October 20, 2003

Dr.-Ing. U. Gerlach





6. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 96 ATEX 2144

(Translation)

Equipment: Luminaire with fluorescent lamps, type eLL.92... / eLL.92 ... CG-S

Marking:  II 2 G EEx ed m ib IIC T4  II 2 D T80°C IP6X (IP66)

Manufacturer: Cooper Crouse-Hinds GmbH

Address: Neuer Weg Nord 49, 69412 Eberbach, Germany

Description of supplements and modifications

1. The luminaire, type eLL.92... may also be manufactured with a further module for connection to the CEAG-center battery system under the type designation eLL 92 ... CG-S .

Range of the input voltage for the luminaire with CG-S module:	220 V...254 V \pm 10%, 50/60 Hz 195 V up to 250 V DC
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2. The luminaire, type eLL.92 218 / 136 / 236 / 158 / 258 may also be manufactured with a further type of electronic ballast.

Range of the input voltage for the types mentioned, except for type 258:	110 V...254 V \pm 10%, 50/60 Hz 99 V up to 276 V DC
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Type 258	220 V...254 V \pm 10%, 50/60 Hz 176 V up to 276 V DC
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All other specifications apply without changes.

Test report: PTB Ex 05-24368

Zertifizierungsstelle Explosionsschutz

By order:


Dr.-Ing. U. Johannsmeyer
Direktor und Professor



Braunschweig, June 9, 2005

Sheet 1/1