

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx BVS 13.0017** Page 1 of 4 Certificate history:

Issue 1 (2013-12-04) Issue No: 2 Status: Current Issue 0 (2013-03-05)

2019-06-12 Date of Issue:

Applicant: Cooper Crouse-Hinds GmbH

Neuer Weg-Nord 49 69412 Eberbach Germany

Equipment: LED exit luminaire type EXIT *

Optional accessory:

Type of Protection: Intrinsic Safety "i", Protection by encapsulation "m", Protection by enclosure "t", Increased Safety "e"

Marking: Ex eb ib mb IIC T*1) Gb Ex tb IIIC T80°C Db

1) The temperature class depends on type and ambient temperature.

See also parameters.

Approved for issue on behalf of the IECEx Jörg Koch

Certification Body:

Position: **Head of Certification Body**

Signature:

(for printed version)

(for printed version)

- This certificate and schedule may only be reproduced in full.

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Certificate issued by:

DEKRA Testing and Certification GmbH Certification Body Dinnendahlstrasse 9 44809 Bochum Germany





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Date of issue: 2019-06-12 Issue No: 2

Manufacturer: Cooper Crouse-Hinds GmbH

Neuer Weg-Nord 49 69412 Eberbach **Germany**

Manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"

Edition:4.1

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/BVS/ExTR13.0036/02

Quality Assessment Report:

DE/BVS/QAR11.0009/09



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Subject and Type

Exit luminaire type EXIT *

Details on luminaire variant

None Standard variant

N Emergency light with internal battery pack

24V Power supply with input voltage range 12 up to 24 VDC

V-CG-S Luminaire with V-CG-S module for connection to a central battery system

Description

The 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 lower is sealed by a gasket.

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 power supply unit.

N:

Additionally to the standard luminaire, 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 in the lower housing part.

24V:

Within the 24V variant the power supply with a large input voltage range is replaced by a power supply with a DC voltage range of 12 V to 24 V. The 24 V power supply is also accommodated in the separately potted enclosure and is assembled in the lower housing part. V-CG-S:

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

Parameters

See Annex

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Update of the used standards
- Removal of the variant with CG-S module
- Optional change of the material for the enclosure base
- Update of the type labels
- Optional use of the separately certified terminal block type 2410-4

Annex:

BVS_13_0017_Cooper_issue_2_Annex.pdf



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Parameters

Туре	Voltage [V]	AC / DC	Frequency [Hz]	Ambient temperature	Temperature class / surface temperature
	110 - 277	AC	50 / 60	-20 °C ≤ T _a ≤ 40 °C	T6 / T80 °C
EXIT	110 - 277	AC	30 / 00	-20 °C ≤ T _a ≤ 50 °C	T5 / T80 °C
EAH	110 - 250	DC		-20 °C ≤ T _a ≤ 40 °C	T6 / T80 °C
	110 - 230	DC		-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
	110 - 250	DC		-20 °C ≤ T _a ≤ 40 °C	T5 / T80 °C
				-20 °C ≤ T _a ≤ 50 °C	T4 / T80 °C
EXIT 24 V	12 - 24	DC		-20 °C ≤ T _a ≤ 40 °C	T6 / T80 °C
-15 % / +20 %	12 - 24 DC			-20 °C ≤ T _a ≤ 50 °C	T5 / T80 °C
EXIT V-CG-S	220 - 254	AC	50 / 60	-20 °C ≤ T _a ≤ 50 °C	T4 / T80 °C
EVII A-CG-2	195 - 250	DC	20 C s	-20 C \(\text{1a} \(\text{S0} \) C	

Listing of all components used referring to older standards

Subject and type	Certificate	Standards
Terminal type 2410-4	IECEx BVS 13.0088U ¹	IEC 60079-0:2011, Ed. 6.0
		IEC 60079-7:2015, Ed. 5.0
Terminal type MSDB	IECEx PTB 08.0048U ²	IEC 60079-0:2011, Ed. 6.0
		IEC 60079-7:2006, Ed. 4.0

¹ No applicable technical differences

² Technical differences evaluated and found satisfactory