



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEX DNV 23.0069X** Page 1 of 4 [Certificate history:](#)
Issue 0 (2023-12-20)

Status: **Current** Issue No: 1

Date of Issue: 2024-06-06

Applicant: **GLAMOX AS**
Birger Hatlebakks veg 15,
6415
Molde
Norway

Equipment: **LED Luminaires, MAX G2 Series**

Optional accessory:

Type of Protection: **Ex eb, Ex mb and Ex tb**

Marking: Ex eb mb IIC T4 Gb
Ex tb IIIC T81°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Ståle Sandstad

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

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2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

DNV Product Assurance AS
Veritasveien 1
1363 Høvik
Norway





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Certificate No.: **IECEX DNV 23.0069X**

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Date of issue: 2024-06-06

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Manufacturer: **GLAMOX AS**
Birger Hatlebakks veg 15,
6415
Molde
Norway

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 60079-18:2017](#) 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

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
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:

[NO/DNV/ExTR23.0083/01](#)

Quality Assessment Report:

[NO/NEM/QAR09.0002/11](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

MAX G2 Series, with and without emergency light option.

Its main protection is Ex eb and the luminaire include an Ex eb mb certified HFX/HFXE LED driver and an Ex-mb certified ARC BG5 LED stripe.

For those LED luminaires which are equipped with emergency light option, a battery box with a battery package with different charge capacity options are available, and a VSI LED status indicator which is mounted at the LED module is also included. The VSI LED status indicator is included in the same Ex certificate as the ARC BG5 LED stripes. For the specific variant MAXZ67-1200 ICE G2 4000 HF E3, the battery is mounted internally below the LED module.

For electrical connections, Ex eb certified Terminal blocks are used.

The enclosures are made with two plain entries into each short side of the enclosure. Suitable Ex eb and tb certified cable glands and blanking elements must be used with IP66/67 protection.

The luminaires can be connected in series with each other. The supply current to the luminaires is limited to 20A.

Type designations and ambient temperatures

See Annex for all variants of the luminaires, table below is showing Ta for three sub groups of variants:

MAX G2 Subgroup	Min/Max Ta (°C)
MAX ICE G2 luminaires with and without emergency light	-40/+55, -40/+45 or -40/+40
MAX HF/DALI G2 luminaires without emergency light	-40/+55
MAX HF/DALI G2 luminaires with emergency light	0/+50

IP Protection:

IP66/67 in accordance with both IEC 60079-0 and IEC 60529.

Battery packages for luminaires with emergency light option:

Battery Option:	Battery package part no:	Battery Data:	Luminaire variants
1)	PM220105801	NiCd 7.2V 4,0Ah	For all MAX HF/DALI G2 luminaires with emergency light option.
2)	PM220105803	NiCd 7.2V 5,0Ah	For all MAX ICE G2 variants with emergency light option.
3)	SP-22-004363	NiCd 7.2V 5,0Ah	Only for MAXZ67-1200 ICE G2 4000 HF E3

SPECIFIC CONDITIONS OF USE: YES as shown below:

WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – FOR CLEANING USE MOIST CLOTH ONLY! NO SOLVENT!



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue	Description
0	Original issue
1	<ul style="list-style-type: none">- New gasket option and adhesive material in enclosure.- Enclosures tested and approved for IP66/67 in accordance with both EN IEC 60079-0 and IEC 60529.- Luminaires now also complies with EN IEC 60079-31:2014 with level of protection "tb".- Battery option SP-22-004363 added.- Drive unit option HFX/HFXE, 550 mA have been removed which have results in a smaller number of variants available. The most powerful luminaire is now 67W instead of 100W.

Annex:

[Annex IECEx DNV 23.0069X_Issue 1.pdf](#)

Annex to certificate: IECEx DNV 23.0069X Issue 1

Type designations and ambient temperatures:

Variants of luminaires in the MAX G2 Series with different min/max ambient temperatures.

Model	Ta
MAXZ67-600 ICE G2 2000 HF	-40°C/+55°C
MAXZ67-1200 ICE G2 4000 HF	-40°C/+55°C
MAXZ67-600 G2 2500 HF	-40°C/+55°C
MAXZ67-1200 G2 5000 HF	-40°C/+55°C
MAXZ67-1500 G2 5500 HF	-40°C/+55°C
MAXZ67-600 G2 3500 HF	-40°C/+55°C
MAXZ67-1200 G2 7000 HF	-40°C/+55°C
MAXZ67-1500 G2 8500 HF	-40°C/+55°C
MAXZ67-600 G2 2500 HF	-40°C/+55°C
MAXZ67-1200 G2 5000 HF	-40°C/+55°C
MAXZ67-1500 G2 5500 HF	-40°C/+55°C
MAXZ67-600 G2 3500 HF	-40°C/+55°C
MAXZ67-1200 G2 7000 HF	-40°C/+55°C
MAXZ67-1500 G2 8500 HF	-40°C/+55°C
MAXZ67-600 G2 2500 DALI	-40°C/+55°C
MAXZ67-1200 G2 5000 DALI	-40°C/+55°C
MAXZ67-1500 G2 5500 DALI	-40°C/+55°C
MAXZ67-600 G2 3500 DALI	-40°C/+55°C
MAXZ67-1200 G2 7000 DALI	-40°C/+55°C
MAXZ67-1500 G2 8500 DALI	-40°C/+55°C
MAXZ67-600 G2 3500 DALI	-40°C/+55°C
MAXZ67-1200 G2 7000 DALI	-40°C/+55°C
MAXZ67-1500 G2 8500 DALI	-40°C/+55°C
MAXZ67-600 G2 2000 HF EB3	0°C/+50°C
MAXZ67-1200 G2 4000 HF EB3	0°C/+50°C
MAXZ67-600 G2 2500 HF EB3	0°C/+50°C
MAXZ67-1200 G2 5000 HF EB3	0°C/+50°C
MAXZ67-600 G2 3500 HF EB3	0°C/+50°C
MAXZ67-1200 G2 7000 HF EB3	0°C/+50°C
MAXZ67-600 G2 3500 DALI EB3	0°C/+50°C
MAXZ67-1200 G2 7000 DALI EB3	0°C/+50°C

Model	Ta
MAXZ67-600 G2 2500 HF EB3	0°C/+50°C
MAXZ67-1200 G2 5000 HF EB3	0°C/+50°C
MAXZ67-1500 G2 5500 HF EB3	0°C/+50°C
MAXZ67-600 G2 3500 HF EB3	0°C/+50°C
MAXZ67-1200 G2 7000 HF EB3	0°C/+50°C
MAXZ67-1500 G2 8500 HF EB3	0°C/+50°C
MAXZ67-600 G2 2500 DALI EB3	0°C/+50°C
MAXZ67-1200 G2 5000 DALI EB3	0°C/+50°C
MAXZ67-1500 G2 5500 DALI EB3	0°C/+50°C
MAXZ67-600 G2 3500 DALI EB3	0°C/+50°C
MAXZ67-1200 G2 7000 DALI EB3	0°C/+50°C
MAXZ67-1500 G2 8500 DALI EB3	0°C/+50°C
MAXZ67-600 ICE G2 2000 HF EB3	-40°C/+45°C
MAXZ67-1200 ICE G2 4000 HF E3	-40°C/+40°C
MAXZ67-1200 ICE G2 4000 HF EB3	-40°C/+45°C
MAXZ67-600 ICE G2 2500 HF EB3	-40°C/+45°C
MAXZ67-1200 ICE G2 5000 HF EB3	-40°C/+45°C
MAXZ67-1500 ICE G2 5500 HF EB3	-40°C/+45°C
MAXZ67-600 ICE G2 3500 HF EB3	-40°C/+45°C
MAXZ67-1200 ICE G2 7000 HF EB3	-40°C/+45°C
MAXZ67-1500 ICE G2 8500 HF EB3	-40°C/+45°C
MAXZ67-600 ICE G2 2500 HF EB3	-40°C/+45°C
MAXZ67-1200 ICE G2 5000 HF EB3	-40°C/+45°C
MAXZ67-600 ICE G2 3500 HF EB3	-40°C/+45°C
MAXZ67-1200 ICE G2 7000 HF EB3	-40°C/+45°C
MAXZ67-600 ICE G2 3500 DALI EB3	-40°C/+45°C
MAXZ67-1200 ICE G2 7000 DALI EB3	-40°C/+45°C
MAXZ67-600 ICE G2 2500 DALI EB3	-40°C/+45°C
MAXZ67-1200 ICE G2 5000 DALI EB3	-40°C/+45°C
MAXZ67-1500 ICE G2 5500 DALI EB3	-40°C/+45°C
MAXZ67-600 ICE G2 3500 DALI EB3	-40°C/+45°C
MAXZ67-1200 ICE G2 7000 DALI EB3	-40°C/+45°C
MAXZ67-1500 ICE G2 8500 DALI EB3	-40°C/+45°C

Note:

All emergency variants “EB3” (3 hours emergency light) can also be “EB1” (1,5 hour emergency light) just by changing connection points for the status LED.

The Z in MAXZ67 means the body is made of Aluzinc, another option is steel and then it is MAXS67. The LED module is ARC BG5 and comes in colours 830, 840, 850 and 860. In addition, the LED can be cover with a PC plate and film in different colours.

Standard emergency versions (HF-E) use 6 cell 4,0Ah battery with spare part no. PM220105801.
ICE emergency versions (HF-E) use c cell 5,0AH battery with spare part no. PM220105803.
ICE emergency version (MAXZ67-1200 ICE G2 4000 HF E3) with internal battery uses 6 cell 5,0Ah battery (stick) with spare part no. SP-22-004363.

Electrical Data

Four main options exist for the line voltage supply dependent of variant:

- 1) Input voltage: 220 – 254 VAC, 50/60Hz
- 2) Input voltage: 110 – 127 VAC, 50/60Hz
- 3) Input voltage: 110 – 127 VAC, 50/60Hz, or 110 – 127 VDC
- 4) Input voltage: 220 – 254 VAC, 50/60Hz, or 220 – 250 VDC

Rated Power: 18 – 67 W depending of variant

Rated battery data for variants with emergency light option:

Rated voltage: 7.2V

Rated capacity: 4 or 5 Ah

Routine Test

Dielectric strength test according to IEC 60079-7, clause 7.1

For the HFX/HFXE LED driver units, the LED stripes and VSI status LED indicators: Visual inspection of Ex m equipment according to IEC 60079-18, clause 9.1

Ex Components used

Ex component	Certificate	IECEX Standard
HFX LED Driver and HFXE Emergency LED Driver, BG2 Series	IECEX EXV 22.0018U/04	IEC 60079-0, Ed 7 IEC 60079-7, Ed 5.1 IEC 60079-18, Ed 4.1
ARC BG5 series LED Modules and VSI LED Status Indicator	IECEX EXV 19.0027U/03	IEC 60079-0, Ed 7 IEC 60079-18, Ed 4
Terminal block, 11220556	IECEX NEM 14.0002U/02	IEC 60079-0, Ed 7 IEC 60079-7, Ed 5.1
Battery box BAT7X G2 & BAT7X IC G2 with battery pack.	IECEX PRE 14.0015U/06	IEC 60079-0, Ed 7 IEC 60079-7, Ed 5.1 IEC 60079-18, Ed 4 IEC 60079-31, Ed 2