



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 UL 25.0016X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 1 [Issue 0 \(2025-03-31\)](#)
Date of Issue: 2026-07-30
Applicant: **Federal Signal Corporation**
2645 Federal Signal Drive
University Park, IL 60484
United States of America
Equipment: **Visual LED - Global Series Modular Visual LED, GLED****; Visual Strobe - Global Series Modular Visual Strobe, GSTR****; Audible Device - Global Series Modular Audible Device, GSND***, GSPA***, GSPK***. See Annex for additional information.**
Optional accessory:
Type of Protection: **Dust ignition Protection by Enclosure "tb", Flameproof "db", Increased Safety "eb", Optical Radiation "op is"**
Marking: **Global Series Modular Visual LED:**
Ex db op is IIC T6 Gb or EX db eb op is IIC T6 Gb (Tamb = -55°C to +58°C); Ex op is tb IIIC 85°C Db IP66 (Tamb = -55°C to +58°C); Ex db op is IIC T5 Gb or Ex db eb op is IIC T5 Gb (Tamb = -55°C to +70°C); Ex op is tb IIIC 100°C Db IP66 (Tamb = -55°C to +70°C)
Global Series Modular Visual Strobe:
Ex db IIC T3 Gb; Ex tb IIIC T200°C Db IP66 (Tamb = -55°C to +70°C) or Ex db eb IIC T3 Gb; Ex tb IIIC T200°C Db IP66 (Tamb = -55°C to +70°C)
Global Series Modular Audible Device:
Ex db IIB T5 Gb or Ex db eb IIB T5 Gb; Ex tb IIIC T100°C Db IP66 (Tamb = -55°C to +49°C); Ex db IIC T4 Gb or Ex db eb IIC T4 Gb; Ex tb IIIC T135°C Db IP66 (Tamb = -55°C to +70°C)

Approved for issue on behalf of the IECEx
Certification Body:

Katy A. Holdredge

Position:

Senior Staff Engineer

Signature:
(for printed version)

Date:
(for printed version)

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Certificate issued by:

UL Solutions (US)
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America





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Manufacturer: **Federal Signal Corporation**
2645 Federal Signal Drive
University Park, IL 60484
United States of America

Manufacturing locations: **Federal Signal Corporation**
2645 Federal Signal Drive
University Park, IL 60484
United States of America

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 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-28:2015](#) Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

[IEC 60079-31:2022](#) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

[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 Reports:

[US/UL/ExTR25.0019/00](#)

[US/UL/ExTR25.0019/01](#)

Quality Assessment Report:

[US/UL/QAR06.0012/14](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Global Series Modular Visual LED, Global Series Modular Visual Strobe, Global Series Modular Audible Device

Please see Annex for detailed Equipment information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Global Series Modular Visual LED

- The Modular Visual LED has external non-metallic surfaces which may provide a potential electrostatic charging hazard. See the manufacturer's instructions for further information.
- The Modular Visual LED has metallic components in the non-metallic walls of the enclosure which can store electrical charge and therefore may provide a potential electrostatic charging hazard. The metallic brass inserts have a capacitance of 14 pF. The metallic guard has a capacitance of 18 pF. See the manufacturer's instructions for further information.
- When multiple Ex e terminal housings are installed, they must be fully supported by the base

Global Series Modular Visual Strobe

- The Modular Visual Strobe has external non-metallic surfaces which may provide a potential electrostatic charging hazard. See the manufacturer's instructions for further information.
- The Modular Visual Strobe has metallic components in the non-metallic walls of the enclosure which can store electrical charge and therefore may provide a potential electrostatic charging hazard. The metallic brass inserts have a capacitance of 14 pF. The metallic guard has a capacitance of 18 pF. See the manufacturer's instructions for further information.
- When multiple Ex e terminal housings are installed, they must be fully supported by the base fixings provided.

Global Series Modular Audible Device

- The Modular Audible Device enclosure incorporates a sinter and the volume is greater than 100cm³, therefore the use of the Modular Audible Device in carbon disulphide gas atmospheres is not permitted.
- The Modular Audible Device has external non-metallic surfaces which may provide a potential electrostatic charging hazard. See the manufacturer's instructions for further information.
- The Modular Audible Device has metallic components in the non-metallic walls of the enclosure which can store electrical charge and therefore may provide a potential electrostatic charging hazard. The metallic brass inserts have a capacitance of 14 pF. See the manufacturer's instructions for further information.
- When multiple Ex eb terminal housings are installed, they must be fully supported by the base fixings provided.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1: Updating to the latest editions of the standards and additional ambient temperature ranges.

Annex:

[Annex to IECEx UL 25.0016X Issue 1.pdf](#)



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TYPE DESIGNATION

Global Series Modular Visual LED

The Global Series Modular Visual LED is rated for 24 Vdc, 300 mA or 110-240 Vac at 120-70 mA and is afforded ingress protection rating IP66. The optical irradiance is less than 5mW/mm² at the surface of the glass dome.

The Global Series Modular Visual LED comprises a non-metallic flameproof LED array enclosure, which may be used with optional increased safety terminal enclosures.

The flameproof LED enclosure is in two parts that are screwed together to form a threaded flameproof joint. Entry into the internal electronics is via this threaded joint, which is additionally retained by a hexagon socket screw. The bottom half of the enclosure has two entry holes to provide electrical connections. The top half of the enclosure has an integral glass dome, covered by a metallic guard. An optional non-metallic clear or coloured lens may be fitted which is not covered by this certificate.

When the optional increased safety terminal enclosures are used, a line bushing to IECEx EPS 11.0004X is fitted to provide conductor egress from the flameproof enclosure for the connection inside the increased safety enclosure. Component certified terminals to IECEx PTB 05.0003U or IECEx PTB 08.0048U are used.

Cable entry holes are provided as specified in the certification drawings for the accommodation of cable entry devices, with or without the interposition of a thread adaptor. Unused entries are to be fitted with certified stopping plugs.

The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component).

When used in a potentially explosive dust atmosphere, the cable entry devices shall maintain the ingress protection of the enclosure.

Nomenclature:

I	II	III	IV	V	VI	VII
G	LED	DC	T	A	H	R

I – Model

II – Type

(LED) – LED

III – Voltage

(DC) – 24VDC

(AC) – 120-240VAC

IV – Configuration

(D) - Ex d Surface Mount

(T) – Ex d U-Bracket

(E) – Ex de Surface Mount

V – Color

(A) – Amber

(B) - Blue



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(C) - Clear
(G) - Green
(M) - Magenta
(R) - Red
(Y) - Yellow

VI - Lens
(Blank) - Low-Profile
(H) - High-Profile

VII - Enclosure Color
(Blank) - Black
(R) - Red

Global Series Modular Visual Strobe

The Global Series Modular Visual Strobe is rated for 24Vdc, 1.5A or 110Vac, 450 mA or 240Vac, 340 mA and is afforded ingress protection rating IP66. The maximum flash frequency is 60 FPM.

The Global Series Modular Visual Strobe comprises a non-metallic flameproof Strobe enclosure, which may be used with optional increased safety terminal enclosures.

The flameproof Strobe enclosure is in two parts that are screwed together to form a threaded flameproof joint. Entry to the internal electronics is via this threaded joint, which is additionally retained by a hexagon socket set screw. The bottom half of the enclosure has two entry holes to provide electrical connections. The top half of the enclosure has an integral glass dome, covered by a metallic guard. An optional non-metallic clear or coloured lens may be fitted which is not covered by this certificate.

When the optional increased safety terminal enclosures are used, a line bushing to IECEx EPS 11.0004X is fitted to provide conductor egress from the flameproof enclosure for connection inside the increased safety enclosure. Component certified terminals to IECEx PTB 05.0003U or IECEx PTB 08.0048U are used.

Cable entry holes are provided as specified in the certification drawings for the accommodation of cable entry devices, with or without the interposition of a thread adaptor. Unused entries are to be fitted with certified stopping plugs. The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component). When used in a potentially explosive dust atmosphere, the cable entry devices shall maintain the ingress protection of the enclosure.

Nomenclature:

I	II	III	IV	V	VI	VII
G	STR	024	T	A	15J	R

I - Model

II - Type

(STR) - Strobe

III - Voltage

(024) - 24VDC

(120) - 120VAC

(230) - 220-240VAC



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IV – Configuration

- (D) - Ex d Surface Mount
- (T) – Ex d U-Bracket
- (E) – Ex de Surface Mount

V – Color

- (A) – Amber
- (B) - Blue
- (C) - Clear
- (G) – Green
- (M) - Magenta
- (R) - Red
- (Y) – Yellow

VI – Joule

- (21J) – Blank
- (15J) – 15 Joule

VII – Enclosure Color

- (Blank) – Black
- (R) – Red

Global Series Modular Audible Device

The Global Series Modular Audible Device comes in three forms: an Audible Sounder, an Audible Amplified Speaker and an Audible Loudspeaker. The devices have an ingress protection rating of IP66 and have an electrical rating as per the table below:

	Voltage (DC) Max Current	Voltage (AC) Max Current	Voltage (AC) Max Current
Audible Sounder	24Vdc 460mA	110Vac 140mA	240Vac 80mA
Audible Amplified Speaker	24Vdc 370mA	110Vac 60mA	240Vac 40mA
Audible Loudspeaker	-	70Vac 160 mA	100Vac 110mA

The Global Series Modular Audible Device comprises a non-metallic flameproof Audio Device enclosure, which may be used with optional increased safety terminal enclosures.

The flameproof Audible Device enclosure is in two parts that are screwed together to form a threaded flameproof joint. Entry to the internal electronics is via this threaded joint, which is additionally retained by a hexagon socket set screw. The bottom half of the enclosure has two entry holes to provide electrical connections. The top half of the enclosure is an audible cap with an integral sinter at the base to allow for the emergence of sound from the respective electrical Audible Device inside the flameproof enclosure.

When the optional increased safety terminal enclosures are used, a line bushing to IECEx EPS 11.0004X is fitted to provide conductor egress from the flameproof enclosure for connection inside the increased safety enclosure. Component certified terminals to IECEx PTB 05.0003U or IECEx PTB 08.0048U are used.

Cable entry holes are provided as specified in the certification drawings for the accommodation of cable entry devices, with or without the interposition of a thread adaptor. Unused entries are to be fitted with certified stopping plugs. The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component).



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When used in a potentially explosive dust atmosphere, the cable entry devices shall maintain the ingress protection of the enclosure.

Nomenclature:

I	II	III	IV	V	VI
G	SND	MV	D		R

I – Model

II – Type

(SND) – Sounder

III – Voltage

(MV) – Multi-voltage

(024) – 24VDC

(120) – 120VAC

(230) – 220-240VAC

IV – Configuration

(D) - Ex d Surface Mount

(T) – Ex d U-Bracket

(E) – Ex de Surface Mount

V – Rated Power

(Blank) – 15W

VI – Enclosure Color

(Blank) – Black

(R) – Red

I	II	III	IV	V	VI	VII
G	SPA	MV	D	25V		R

I – Model

II – Type

(SPA) – Amplified Speaker

III – Voltage

(MV) – Multi-voltage

(024) – 24VDC

(120) – 120VAC

(230) – 220-240VAC

IV – Configuration

(D) - Ex d Surface Mount

(T) – Ex d U-Bracket

(E) – Ex de Surface Mount

V – Color

(25V) – 25Vrms

(Blank) – 0.8/2.8Vrms

VI – Rated Power

(Blank) – 15W

VII – Enclosure Color

(Blank) – Black

(R) – Red



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I	II	III	IV	V	VI
G	SPK	070	D		

I – Model

II – Type

(SPK) – Loudspeaker

III – Voltage

(070) – Loudspeaker 70 Vrms

(100) – Loudspeaker 100 Vrms

IV – Configuration

(D) - Ex d Surface Mount

(T) – Ex d U-Bracket

(E) – Ex de Surface Mount

V – Rated Power

(Blank) – 15W

VI – Enclosure Color

(Blank) – Black

(R) – Red

PARAMETERS RELATING TO THE SAFETY

Global Series Modular Visual LED

-55°C to +58°C at T6

-55°C to +70°C at T5

Global Series Modular Visual Strobe

-55°C to +70°C at T3

-55°C to +66°C at T4 (21J Models)

-55°C to +40°C at T5 (15J Models)

Global Series Modular Audible Device

-55°C to +49°C for T5

-55°C to +70°C for T4

Global Series Modular Visual LED

24Vdc 300mA, 110-240Vac, 120-7mA

Global Series Modular Visual Strobe

24Vdc. 1.5A or 110Vac, 450 mA or 240Vac, 340mA

Global Series Modular Audible Device

Audible Sounder - 24Vdc 460mA; 110Vac 140mA; 240Vac 80mA

Audible Amplified Speaker - 24Vdc 370mA; 110Vac 60mA; 240Vac 40mA

Audible Loudspeaker – 70Vac 160mA; 100Vac 110mA

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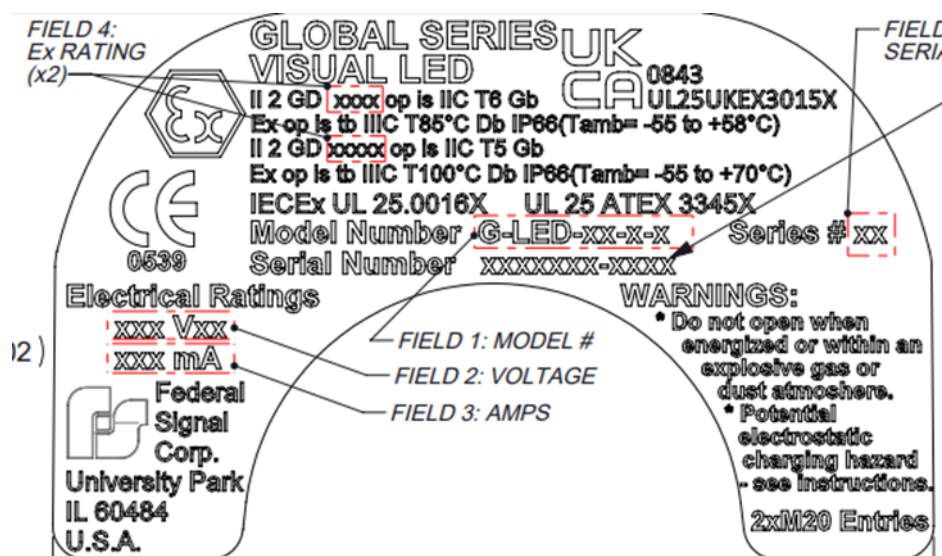
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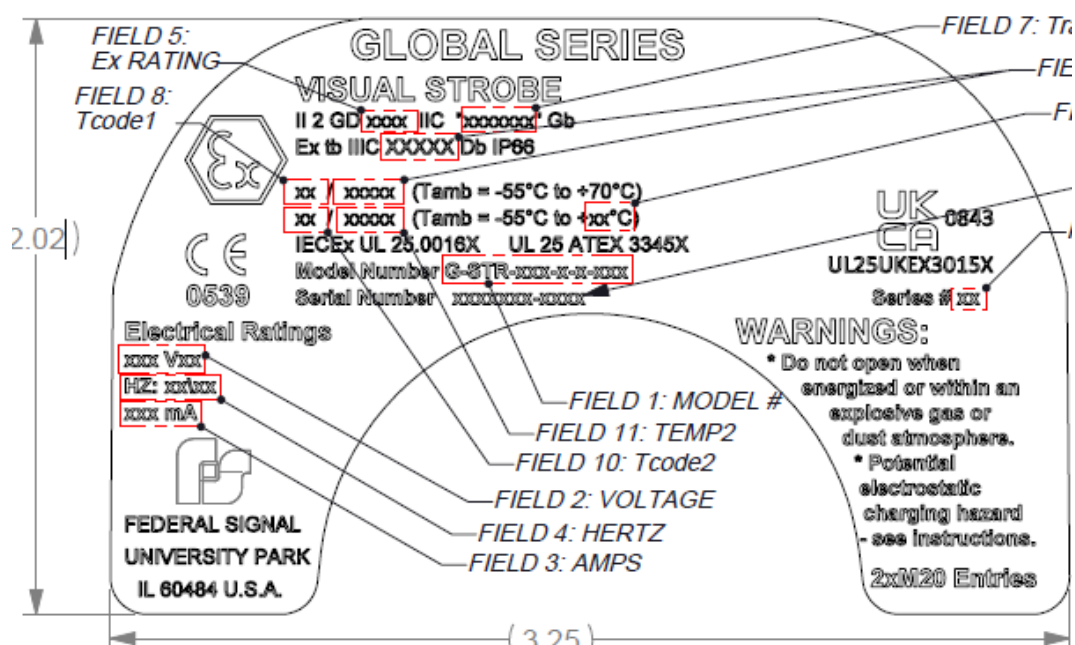
MARKING

Marking has to be readable and indelible; it has to include the following indications:

Global Series Modular Visual LED



Global Series Modular Visual Strobe



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Global Series Modular Audible Device

**FIELD 2: (x2)
Ex RATING**

GLOBAL SERIES UK
AUD. SOUNDER CA 0843

II 2 GD [xxxxx] IIB T5 Gb
Ex tb IIIC T100°C Db IP66 (Tamb = -55°C to +49°C)
II 2 GD [xxxxx] IIC T4 Gb
Ex tb IIIC T135°C Db IP66 (Tamb = -55°C to +70°C)
IECEx UL 25.0016X UL 25 ATEX 3345X
Model Number G-SND-xxx-x
Serial Number xxxxxxxx-xxxx

**FIELD 3:
SERIES #**

Series # xx

Electrical Ratings
24VDC/110VAC/240VAC
480/140/80mA

**Federal
Signal
Corp.**
University Park
IL 60484
U.S.A.

WARNINGS:
• Do not open when energized or within an explosive gas or dust atmosphere.
• Potential electrostatic charging hazard - see instructions.

2xM20 Entries

FIELD 1: MODEL #

**FIELD 2: (x2)
Ex RATING**

GLOBAL SERIES UK
AUD. AMP. SPKR. CA 0843

II 2 GD [xxxxx] IIB T5 Gb
Ex tb IIIC T100°C Db IP66 (Tamb = -55°C to +49°C)
II 2 GD [xxxxx] IIC T4 Gb
Ex tb IIIC T135°C Db IP66 (Tamb = -55°C to +70°C)
IECEx UL 25.0016X UL 25 ATEX 3345X
Model Number G-SPA-xxx-x
Serial Number xxxxxxxx-xxxx

**FIELD 3:
SERIES #**

Series # xx

Electrical Ratings
24VDC/110VAC/240VAC
370/60/40mA

**Federal
Signal
Corp.**
University Park
IL 60484
U.S.A.

WARNINGS:
• Do not open when energized within an explosive gas or dust atmosphere.
• Potential electrostatic charging hazard - see instructions.

2xM20 Entries

FIELD 1: MODEL #

ROUTINE EXAMINATIONS AND TESTS

Each piece of equipment defined above has to have successfully passed; before delivery:

1. Each and every flameproof enclosure shall be subject to a routine overpressure test at a pressure of at least 16.3 bar (1.5 x 10.86 bar) without damage, permanent deformation or leakage other than through the flamepaths.
2. When the Global Modular Visual LED, Global Series Modular Visual Strobe, and/or Global Series Modular Audible Device are used with the Global Series increased safety enclosures it shall be subject to a routine dielectric strength test.



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LIST OF CERTIFIED EQUIPMENT AND/OR COMPONENTS

The following additional previous editions of Standards noted under the "Standards" section of this Certificate were applied to integral Components as itemized below. There are no significant safety related changes between these previous editions and the editions noted under the "Standards" section.

Product	Certificate Number	Standards
Quintex GmbH, LB* * * * **/...	IECEx EPS 11.0004X Issue 6	IEC 60079-31:2013