

EU - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

EU - Type Examination Certificate Number: **Baseefa15ATEX0153X – Issue 5**

In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

Product: **Global Series Modular Visual LED**

Manufacturer: **Federal Signal Corporation**

Address: **2645 Federal Signal Drive, University Park, Illinois, 60484, USA**

This re-issued certificate extends EC Type Examination Certificate No. **Baseefa15ATEX0153X** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

SGS Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See Certificate History**.

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

EN IEC 60079-0:2018 EN 60079-1:2014 EN IEC 60079-7:2015+A1:2018 EN 60079-28:2015 EN 60079-31:2014

except in respect of those requirements listed at item 18 of the Schedule.

If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

⊕ II 2 GD Ex db op is IIC T6 Gb or Ex db eb op is IIC T6 (T_{amb} = -55°C to +58°C)

Ex op is tb IIIC T85°C Db IP66 (T_{amb} = -55°C to +58°C)

⊕ II 2 GD Ex db op is IIC T5 Gb or Ex db eb op is IIC T5 Gb (T_{amb} = -55°C to +70°C)

Ex op is tb IIIC T100°C Db IP66 (T_{amb} = -55°C to +70°C)

SGS Fimko Oy Customer Reference No. **5121**

Project File No. **23/0454**

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Schedule

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Certificate Number Baseefa15ATEX0153X – Issue 5

15 Description of Product

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 5 mW/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 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 EPS11ATEX1342X is fitted to provide conductor egress from the flameproof enclosure for connection inside the increased safety enclosure. Component certified terminals to PTB03ATEX1189U or PTB08ATEX1075U 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.

16 Report Number

See certificate history.

17 Specific Conditions of Use

1. 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.
2. 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.
3. When multiple Ex e terminal housings are installed, they must be fully supported by the base fixings provided.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
850000297		A9	03/20/24	Schedule Assembly, Global Series, IEC Modular Visual LED
850000301*		A9	03/25/24	Schedule Assembly, Global Series, IEC Modular “e” box w/Options
850000571A*		A2	03/25/24	Schedule Sub Assembly, Global Series, Coupler flange, base module to E Box option.

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
850000300		A3	09/10/15	Schedule Sub-Assy, LED Visual Cap, Global Series, IEC Mod. Platform
850000302*		A4	09/23/16	SCHEDULE ASSEMBLY, GLOBAL SERIES, IEC MODULAR ARRAY CONFIGURATIONS
850000306		A6	08/30/23	SCHEDULE DWG, NAMEPLATE MODULAR VISUAL LED, GLOBAL SERIES
850000311		A0	11/24/15	Scheduled DWG, LED Light Head, IEC Modular Global Series

These drawings are common to Baseefa15ATEX0153X and IECEx BAS 15.0102X and are held with the latter.

*These drawings are common to Baseefa15ATEX0153X, Baseefa15ATEX0154X, Baseefa15ATEX0155X, IECEx BAS 15.0102X, IECEx BAS 15.0104X and are held with IECEx BAS 15.0103X.

20 Certificate History

Certificate No.	Date	Comments
Baseefa15ATEX0153X	9 th December 2015	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2012+A11:2013, EN 60079-1:2014, EN 60079-7:2007, EN 60079-28:2015 and EN 60079-31:2014 is documented in Test Report No GB/BAS/ExTR15.0130/00 and Project File 14/0842.
Baseefa15ATEX0153X/1	12 th October 2016	To allow the introduction of an optional part known as the 90°coupler to allow the terminal box to be mounted at a 90° orientation. The associated test and assessment is recorded in GB/BAS/ExTR16.0277/00 and Project File 16/0716.
Baseefa15ATEX0153X Issue 2	1 March 2017	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate permits a lower ambient temperature of -55°C. The associated test and assessment is recorded in GB/BAS/ExTR17.0045/00 and Project File 17/0122.
Baseefa15ATEX0153X Issue 3	31 st July 2018	The manufacturer has requested minor correction to schedule drawing revision numbers and enclosure wall thickness. The full assessment is recorded in GB/BAS/ExTR18.0180/00 project file number 18/0442.

Certificate No.	Date	Comments
Baseefa15ATEX0153X Issue 4	1 September 2023	To assess the equipment against EN IEC 60079-0:2018 and EN IEC 60079-7:2015+A1:2018. To include the correct version of drawing 850000302 on the certificate. To amend the nameplate to include UKEX certificate numbers. SGS Baseefa certification report GB/SGS/ExTR23.0026/00 refers.
Baseefa15ATEX0153X Issue 5	23 April 2024	To introduce an alternative non-metallic Ex e housing material. Introduce additional Special Condition of Use no.3. SGS UK certification report GB/SGS/ExTR24.0045/00 refers.
For drawings applicable to each issue, see original of that issue.		