



## ***Confirmation of Product Type Approval***

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of . The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 02/MAR/2021 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

**Product Name: Alarm Sounding and Light Devices**

**Model Name(s): Global Series Modular - Audible & Visual, single & multi-signaling device**

**Presented to:**

FEDERAL SIGNAL CORPORATION  
2645 Federal Signal Drive  
United States

**Intended Service:**

Modular Audible & Visual Alarm/Warning Devices for Marine Safe and Hazardous Areas

**Description:**

G-SPK is a G-Series Loudspeaker available as a 15W device, and is designed to accept an audio input of either 70 Vrms or 100 Vrms. G-SPK can be configured by the user with five remotely selectable tap settings available at each of the high and low volume settings. G-SND is a G-Series Sounder that can be wired to perform two separate functions. A single tone can be selected via a rotary switch; once power is supplied, it will sound the selected tone. Alternatively, multiple tones can be selected remotely by choosing the appropriate combination of inputs. This allows a unique sound to match a specific alarm condition or to be used to escalate an alarm condition. G-SPA is a G-Series Amplified Speaker capable of amplifying audio-level signals from either 0.8 Vrms or 2.8 Vrms systems and reproducing it at a 15 Watt levels. G-LED is a G-Series LED Beacons features a long-life LED light source with the ability to set one of eight flash patterns that can be configured by the user. G-STR is a G-Series Strobe features a high-intensity xenon strobe tube operated at 21J. Modularity and Combinations - All G-Series devices can be combined together to form application-specific alerting modules. It can be in the form of a dual signal assembly that allows any two audible or visual G-series devices to be combined or it can be a combination of multiple signaling devices that can be connected together in the field, via the wiring terminal box, using a proprietary coupling system. Web Links to Product Brochures G-STR

[http://www.federsignal-indust.com/sites/default/files/downloads/G-STR\\_110315\\_%23430.p](http://www.federsignal-indust.com/sites/default/files/downloads/G-STR_110315_%23430.p)  
 G-LED  
<http://www.federsignal-indust.com/sites/default/files/downloads/G-LED%23431Rev110415.p>  
 G-SND  
[http://www.federsignal-indust.com/sites/default/files/downloads/G-SND\\_110315\\_%23433.p](http://www.federsignal-indust.com/sites/default/files/downloads/G-SND_110315_%23433.p)  
 G-SPK  
[http://www.federsignal-indust.com/sites/default/files/downloads/G-SPK\\_110315\\_%23435.p](http://www.federsignal-indust.com/sites/default/files/downloads/G-SPK_110315_%23435.p)  
 G-SPA  
[http://www.federsignal-indust.com/sites/default/files/downloads/G-SPA\\_110415\\_%23434.p](http://www.federsignal-indust.com/sites/default/files/downloads/G-SPA_110415_%23434.p)

**Ratings:**

G-STR: 24VDC, 120VAC and 220-240VAC 50/60Hz; 21J G-LED: 24VDC, 120VAC and 220-240VAC 50/60Hz G-SND: 24VDC, 120/230VAC 50/60Hz; 98 dB @ 10' and 108 dB @ 1M; 15 Watt G-SPK: 70 Vrms or 100 Vrms; 96 dB @ 10' and 106 dB @ 1M; 15 Watt G-SPA: 24VDC, 120/230VAC 50/60Hz; 96 dB @ 10' and 106 dB @ 1M All the above product enclosure rating: IP66, Zone 1

**Service Restrictions:**

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. ATEX certified equipment is not to be installed in hazardous areas on U.S vessels unless it can be prove to have been tested to the applicable IEC 60079 series standards by an independent laboratory accepted by the U.S coast Guard. USCG notice 01-12 (February 7, 2012).

**Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

**Notes / Documentation:**

Drawing No. Cert# Baseefa15ATEX0153X, Pages: 1 Drawing No. Cert# Baseefa15ATEX0154X, Pages: 1 Drawing No. Cert# Baseefa15ATEX0155X, Pages: 1 Drawing No. IECEx BAS 15 0102X, Pages: 1 Drawing No. IECEx BAS 15 0103X, Pages: 1 Drawing No. IECEx BAS 15 0104X, Pages: 1 Drawing No. IECEx QAR, Pages: 1 Drawing No. ISO Cert# 08514 2006 AQ HOU ANAB, Pages: 1 Drawing No. PDA Drawings LED, Pages: 4 Drawing No. PDA Drawings Strobe and Audibles, Pages: 10 Drawing No. Production Quality Assurance Notification, Production Quality Assurance Notification, Revision: -, Pages: 1

**Term of Validity:**

This Product Design Assessment (PDA) Certificate 16-HS1485645-PDA, dated 03/Mar/2016 remains valid until 02/Mar/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

**ABS Rules:**

Rules for Conditions of Classification, Part 1 - 2016 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following: 2016 Steel Vessels Rules 4-8-2/11.5, 4-8-2/11.7, 5C-7-5/13.5; 2016 Steel Vessels Under 90 Meters (295 feet) in Length 4-6-2/15, 4-6-2/17; 2016 Offshore Support Vessels (OSV Rules) 4-8-2/11.5, 4-8-2/11.7; Rules for Conditions of Classification, Part 1 - 2016 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following: 2016 Mobile Offshore Drilling Units 4-3-2/15, 4-3-2/17, 4-3-3/9

**National Standards:  
International Standards:**

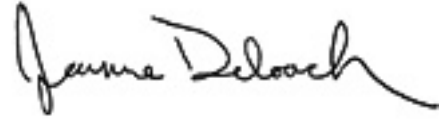
Baseefa15ATEX0153X EN 60079-0: 2012 + A11: 2013, EN 60079-1: 2014, EN 60079-7: 2007, EN 60079-31: 2014 Baseefa15ATEX0154X EN 60079-0: 2012 + A11: 2013, EN 60079-1: 2014, EN 60079-7: 2007, EN 60079-31: 2014 Baseefa15ATEX0155X EN 60079-0: 2012 + A11: 2013, EN 60079-1: 2014, EN 60079-7: 2007, EN 60079-31: 2014 IECEx BAS 15 0102X IEC 60079-0 : 2011, IEC 60079-1 : 2014-06, IEC 60079-28 : 2015, IEC 60079-31 : 2013, IEC 60079-7 : 2006-07 IECEx BAS 15 0103X IEC 60079-0 : 2011, IEC 60079-1 : 2014-06, IEC 60079-31 : 2013, IEC 60079-7 : 2006-07 IECEx BAS 15 0104X IEC 60079-0 : 2011, IEC 60079-1 : 2014-06, IEC 60079-31 : 2013, IEC 60079-7 : 2006-07

**Government Authority:**

46CFR 113.25 & 113.50 (USCG)

**EUMED:****Others:**

<b>Model Certificate</b>	<b>Model Certificate No</b>	<b>Issue Date</b>	<b>Expiry Date</b>
PDA	16-HS1485645-PDA	03/MAR/2016	02/MAR/2021



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.