



CERTIFICATE NUMBER
18-HS1726695-PDA

DATE
22 Mar 2018

ABS TECHNICAL OFFICE
Houston ESD - Electrical

CERTIFICATE OF Design Assessment

This is to certify that a representative of this Bureau did, at the request of

APPLETON GROUP

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Lighting Fixtures, LED, Hazardous Area**

Model: **MLG Series**

This Product Design Assessment (PDA) Certificate 18-HS1726695-PDA, dated 22/Mar/2018 remains valid until 21/Mar/2023 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.

AMERICAN BUREAU OF SHIPPING

Tim Kimble
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

APPLETON GROUP

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Tier: 2 - PDA Issued

Product: Lighting Fixtures, LED, Hazardous Area

Model: MLG Series

Intended Service:

Marine and Offshore Installations - Hazardous Locations.

Description:

Mercmaster™ Generation 3 LED Luminaires, Enclosed and Gasketed.

Construction: Copper-free aluminum mounting hood and body, silicone gaskets, stainless steel hardware and catch assembly, polycarbonate or glass globe or prismatic glass refractors, globe/refractor Guard (optional).

Rating:

Hazardous Area: Class I, Div. 2, Group A, B, C, D; Class I, Zone 2, Group IIC;

Enclosure: NEMA type 4X, IP66/IP67;

Ambient Temperature Range: -40°C to +65°C (-40°F to +149°F);

Input Voltage: 120-277Vac, 347-480Vac, 50/60Hz or 170-300Vdc;

Nominal Output: seven light outputs from 3,500 to 17,500 lumens

See attached document for further details

Service Restriction:

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.

Comments:

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

Notes/Drawing/Documentation:

Brochure, Mercmaster™ LED Generation 3 Series Luminaires, Enclosed and Gasketed Fixtures;

Certificate No. 70112879 (065182_0_000), CSA Certificate of Compliance, Date issued: 2017-11-30;

Report 70112879, CSA Descriptive Report & Test Results

Terms of Validity:

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STANDARDS

ABS Rules:

2018 Steel Vessel Rules 1-1-4/7.7, 1-1-Appendix 3, 1-1-Appendix 4, 4-8-3/1.3, 4-8-3/1.7, 4-8-3/1.9, 4-8-3/1.11.1, 4-8-3/1.17.1, 4-8-3/13.3.2, 4-8-3/13.3.3;

2018 MODU Rules 1-1-4/9.7, 1-1-Appendix 2, 1-1-Appendix 3, 4-3-1/9, 4-3-1/11, 4-3-1/15, 4-3-1/17, 4-3-3/9.1.2, 4-

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3-3/9.1.3

National:

UL Standards:

UL 844:2015 - Luminaires for Use in Hazardous Locations, Thirteenth Edition;

UL 1598:2012 - Luminaires, Third Edition;

UL 1598A:2014 - Luminaires for Installation on Marine Vessels, First Edition;

UL 8750:2015 - LED Equipment for Use in Lighting Products, Second Edition

CSA Standards:

CSA C22.2 No. 250.0-08 - Luminaires;

CSA C22.2 No. 250.13-14 -Light emitting diode (LED) equipment for lighting applications;

CSA C22.2 No. 137-M1981:2014 - Electric Luminaires for Use in Hazardous Locations

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA