

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the Class B Recesses for Light Fittings, Ventilation Units and similar**with type designation(s)  
**CUS-25, CUS-35, CUR-25, CUR-35, CUT-25 and CUT-35**

Issued to

**DMA Shanghai Ltd.**  
**Shanghai, China**

is found to comply with

**DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations**  
**DNV GL rules for classification – Ships**  
**DNV GL offshore standards****Application :****Ventilation units approved for use in a B-0/B-15 ceiling.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2020-02-10**This Certificate is valid until **2025-02-09**.for **DNV GL**DNV GL local station: **Shanghai**Approval Engineer: **Grzegorz Wolski**

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**Mårten Schei-Nilsson**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



## Product description

"CUS-25", "CUS-35", "CUR-25", "CUR-35", "CUT-25" and "CUT-35"

are air conditioning cabin units installed in an approved B-15 ceiling. The air conditioning units are installed such that the casing of the cabin unit is placed above the ceiling (unexposed side) and the air outlet on the underside (exposed side) of the ceiling. The air conditioning cabin units are composed of 0.8 mm AL-Zinc plate insulated with 25 mm thick rock wool type "ABM-SR" with density of 100 kg/m<sup>3</sup> (manufactured by Shanghai ABM Rock Wool Co., Ltd.) and fastened to the ceiling with self-drilling screws.

For further details, see drawings listed under Type Approval documentation below.

## Application/Limitation

Air conditioning cabin units approved for use in class B-15 ceiling of type JCP-C2 B-15 manufactured by Jiangsu Hailu Technology Incorporated Corporation. Use of this fittings on any other ceiling is to be assessed on a case by case basis.

Maximum width of panels: 300 mm

| AC type | Maximum size (L x W x H)<br>[mm x mm x mm] | Maximum weight<br>[kg] |
|---------|--------------------------------------------|------------------------|
| CUS-25  | 450 x 450 x 135                            | 10.0                   |
| CUS-35  | 600 x 450 x 175                            | 12.0                   |
| CUR-25  | 550 x 450 x 135                            | 11.2                   |
| CUR-35  | 690 x 450 x 175                            | 15.2                   |
| CUT-25  | 450 x 450 x 135                            | 10.0                   |
| CUT-35  | 600 x 450 x 175                            | 12.0                   |

Minimum distance between the recesses should not be less than 600 mm.

The manufacturer of ceiling is responsible to document that the structural and thermal integrity is maintained after fitting the AC fixtures into the ceiling. The arrangement is subject for approval in each case.

Each product is to be supplied with its manual for installation and use.

## Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, September 2018.

Test Report No. FT19175 dated 05 August 2019 from FEFTC, Shanghai, China.

Test Report No. FT19176 dated 05 August 2019 from FEFTC, Shanghai, China.

Test Report No. FT19177 dated 05 August 2019 from FEFTC, Shanghai, China.

Drawing No. S010-CA-01 Rev.0 dated 18 December 2018 from manufacturer.

Drawing No. S010-CA-02 Rev.0 dated 18 December 2018 from manufacturer.

Drawing No. S010-CA-03 Rev.0 dated 18 December 2018 from manufacturer.

Drawing No. S010-CA-04 Rev.0 dated 18 December 2018 from manufacturer.

Drawing No. S010-CA-05 Rev.0 dated 18 December 2018 from manufacturer.

Drawing No. S010-CA-06 Rev.0 dated 18 December 2018 from manufacturer.



Job Id: **262.1-031242-1**  
Certificate No: **TAF00001AF**

### **Tests carried out**

Tested according to IMO 2010 FTP Code part 3.

### **Marking of product**

The product is to be marked with name of manufacturer, type designation and fire technical rating.

### **Periodical assessment**

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.