

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00008UR

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

that the Penetrations through "B" class divisions: pipe, duct, trunk, etc penetrations

with type designation(s)
CU-500, CUV-500, CU-500E cabin units

issued to

RUNCOO ENVIRONMENTAL SYSTEM CO.,LTD.
Taixing, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2023/1667**,
item No. **MED/3.27b. SOLAS 74 as amended, Regulation II-2/9 and IMO 2010 FTP Code.**

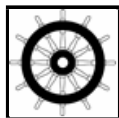
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2029-07-30**.

Issued at **Hamburg** on **2024-07-31**

DNV local unit:
Jiangyin NB & CMC

Approval Engineer:
Meike Grabau



Notified Body
No.: **0098**

for **DNV SE**

Mydlak-Röder, Christine
Head of Notified Body

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

“CU-500, CUV-500, CU-500E cabin units”

Ventilation units installed into cut-outs in a class B-15 ceiling.

The cabin units are composed of a box made of 0.8 mm thick galvanized steel plate, baffle plate, control mechanisms, inlet ducts, outlet ducts and diffusers. The internal body and selected internal parts are insulated with one layer of 25 mm thick RW120K rock wool (120 kg/m³ nominal density, manufactured by Wincell Insulation). A fireproof cloth is wrapped on the surface of the rock wool.

The CUV-500 and CU-500E types are fitted with heating elements. The CUV-500 type is fitted with an air volume pressure induction unit in addition.

The cabin units are mounted to the steel deck by four angle bars (L30 mm x 30 mm x 3 mm) and fixed to the ceiling by M6 x 40 bolts and rivets.

For further details, see documents in the “Type Examination documentation” below.

Application/Limitation

Approved for use as a cabin unit in a class B-15 ceiling.

Approved for installation in the tested ceiling panel JCP-C2A from Jiangsu Hailu Technology or ceiling panel of similar or better construction and materials. The ceiling panel JCP-C2A is constructed of 0.5 mm steel, 24 mm insulation (with density 120 kg/m³) and 0.5 mm steel. Ceiling panel has to be approved according to the Marine Equipment Directive and bear the MED Mark of Conformity.

Table 1: Approved cabin units as a duct penetration in B-15 ceiling panels

Cabin unit type	Maximum size (L x W x H) [mm]	Installation position	Size of outlet duct cutout [mm]	Outlet duct insulation
CU-500	600 x 450 x 200	Topside	Ø260	Fully insulated ¹⁾
CUV-500	600 x 450 x 240	Topside	Ø260	Fully insulated ¹⁾
CU-500E	690 x 450 x 200	Topside	Ø260	Fully insulated ¹⁾

¹⁾ one layer of 25 mm thick RW120K rock wool (120 kg/m³ nominal density, manufactured by Wincell Insulation) is laid between the bottom of the cabin unit boxes around the cabin unit outlet duct and the topside of the ceiling.

The structural integrity and thermal integrity shall be maintained after fitting the cabin unit into the ceiling panel. The arrangement is subject for approval in each case by attending surveyor/authority as per IMO 2010 FTP Code, part 3, appendix 1, 1.14.

The insulation material used has to be approved according to the Marine Equipment Directive and bear the MED Mark of Conformity.

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

Type Examination documentation

Test report no. FT23074 dated 29 March 2023 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Test report no. FT23165 dated 11 July 2023 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing no. CUV-350/500.01-00 to -03, Rev. B1 from manufacturer.

Drawing no. CU-350/500.01-00 to -03, Rev. B1 from manufacturer.

Drawing no. CU-350E/500E.01-00 to -04, Rev. B1 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code, part 3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating and MED Mark of Conformity (see first page).