EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007XS

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

This is to certify:

That the Self-contained compressed-air-operated breathing apparatus

with type designation(s)
RHZK 6/30 and RHZK 6.8/30

Issued to
Dongtai Martian Ship Equipment Co., Ltd. Shanghai branch
Shanghai, **China**

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2022/1157,**
item No. MED/3.7. SOLAS 74 as amended, Regulation II-2/10 & X/3, 2000 HSC Code 7, FSS Code 3, IBC Code 11, IGC Code 11 and IMO MSC.1/Circ.1499, IMO MSC.1/Circ.1555.

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

This Certificate is valid until **2027-11-22**.

Issued at **Hamburg** on **2022-11-23**

DNV local station:
Shanghai

Approval Engineer:
Michael Oberländer

Notified Body
No.: **0098**

for **DNV SE**

Christine Mydlak-Roeder
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

RHZK6/30 and RHZKF6.8/30 are positive pressure self-contained compressed-air-operated breathing apparatus (SCBA) for shipboard fire-fighters (maritime use only).

Principle components (for details see Product Feature File):

a) Full face mask “KEMZ-II” (class 3 according EN 136) manufactured by Nantong Kaen Safety Equipment Co.Ltd
b) Air supply valve
c) Cylinder valve and pressure reducer,
d) Pressure gauge and rest air warning system acc. to IMO Res. MSC.339(91), in conjunction with IMO SC.1/Circ.1499,
e) Back-frame and harness,
f) Compressed air cylinder manufactured by “Jiangsu Jiuwei High Pressure Special Gas Cylinder Co.,Ltd” RHZK6/30, steel (Volume 6L), or compressed air cylinder, manufactured by “Zhejiang KaiboPressure vessel Co., Ltd”: RHZK6.8/30, carbon fibre composite (Volume 6.8 L).

Application/Limitation

Approved for use as self-contained compressed air breathing apparatus of fire-fighter’s outfit.
The SCBA is in compliance with IMO FSS Code Ch.3 Para 2.1.2.1 and 2.1.2.2 as amended by IMO Res. MSC.339(91).
All air cylinders for breathing apparatus shall be interchangeable.
The apparatus is not for use in accidents with cargoes.
Air cylinders and their valves shall comply with appropriate national regulations.
The volume of air contained in the cylinder shall be at least 1200 l.
Maximum working pressure: 300 bar.
The compressed air shall comply with EN 12021.
Each SCBA shall be used together with an approved lifeline (complying with the requirements of MED/3.44 and ISO 23269-2 Para 4.28.) as part of the fire-fighters outfit according to FSS Code Ch.3.2.1.3.
Each product is to be supplied with its manual for use and maintenance.
A set of manufacturer’s instructions shall accompany every unit and should be kept onboard. Manufacturer’s instructions for application / limitations, checks prior to use, donning and fitting, use, cleaning and disinfection, maintenance, transport and storage shall be adhered to.

Type Examination documentation

Test Report Nos.2022009 and 2022010 both dated 2022-07-15 issued by Wuhan Testing Center of Marine Life-saving Appliances, China

Technical drawing: General drawing RHZK6/30-00-00 Rev.A and RHZK6.8/30-00-00 Rev.A
Product Feature File no.20220510
RHZK6/30 Drawing List no.20220518 Rev.A
RHZK6.8.8/30 Drawing List no.20220520 Rev.A
RHZK6/30 & RHZK6.8/30 User Manual no.20220530

Tests carried out

Tested according to ISO 23269-2:2011.

Marking of product

The product is to be indelibly marked in accordance with ISO 23269-2:2011 Para.9 and with name and address of manufacturer, type designation and the MED Mark of Conformity (see first page).
The compressed air cylinder markings shall include the charging pressure, capacity and the stamp of the authorised inspection body.