



**EC TYPE EXAMINATION (MODULE B)**  
**CERTIFICATE No. MED508123WS/001**

*This is to certify that RINA Services S.p.A. (Notified Body No. 0474) did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Fire Protection requirements of Marine Equipment Directive (MED) 2014/90/EU, including the requirements and testing standards of Regulation (EU) 2023/1667.*

*MED Item N°*

**MED/3.7**

*Description*

**Self-contained compressed-air-operated breathing apparatus**

*Type*

**RHZK6; RHZK6.8**

*Applicant*

**SHANGHAI FANGZHAN FIRE TECHNOLOGY CO., LTD.**

BUILDING.41,NO.1-42, LANE 83  
NORTH HONGXIANG ROAD, WANXIANG TOWN  
PUDONG NEW AREA, SHANGHAI, CHINA

*Testing standards*

**ISO 23269-2:2011 (fire fighting - maritime use only)**

*Reference standards*

**SOLAS 74 Reg.II-2/10, SOLAS 74 Reg.II-2/15, SOLAS 74 Reg.II-2/19, IMO Res.MSC.4(48)-(IBC Code) 11, IMO Res.MSC.5(48)-(IGC Code) 11, IMO Res.MSC.36(63)-(1994 HSC Code) 7, IMO Res.MSC.97(73)-(2000 HSC Code) 7, IMO Res.MSC.98(73)-(FSS Code) 3, IMO MSC.1/Circ.1499, IMO MSC.1/Circ.1555.**

*Issued in SHANGHAI on*  
**January 18, 2024**

*This Certificate is valid until*  
**January 17, 2029**

*This Certificate consists of this sheet plus an attachment*



**Hai Wen Zhang**

**RINA Services S.p.A.**



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*Manufacturer*

SHANGHAI FANGZHAN FIRE TECHNOLOGY CO., LTD.

*Place of Manufacturer*

BUILDING.41  
NO.1-42  
LANE 83  
NORTH HONGXIANG ROAD  
WANXIANG TOWN  
PUDONG NEW AREA  
SHANGHAI  
CHINA

*Name & place of Authorised Representative*

ANTONIO TRANI (SSI SRL)  
Via Ponte dei Francesi 43 - 80146 Napoli, Vat 10227171211, ITALY  
ITALY

**Product Description**

Self-contained compressed-air-operated breathing apparatus designed in two different version with the following main characteristics:

| Module  | Max Working Pressure | Volume | Air Deposit | Using Time | Weight (Kg) | Packing Size (mm) | Working Temperature Range |
|---------|----------------------|--------|-------------|------------|-------------|-------------------|---------------------------|
| RHZK6   | 30 Mpa               | 6 L    | 1800 L      | ≥60 min    | ≤ 18        | 750 x 300 x 500   | -30 °C to 60 °C           |
| RHZK6.8 | 30 Mpa               | 6.8 L  | 2040 L      | ≥60 min    | ≤ 18        | 750 x 300 x 500   | -30 °C to 60 °C           |

**Main Components**

| Components                                 | Model   | Manufacturer  |
|--|---|---|
| Pressure Cylinder                          | 6 L   | Nanjing Banqiao Fire Equipment Co.,Ltd<br>Jiangsu Huiyuan Fire-Fighting Science and Technology Co.Ltd<br>Jiangsu Jiuwei High Pressure Vessel Manufacturer Co.,Ltd |
|  | 6.8 L   | Zhejiang Kaibo Pressure Vessel Co., Ltd<br>Shenyang Zhongfu Kejin Pressure Vessels Co.,Ltd  |
| Air Cylinder Valve                         | KHF-30  | Zhejiang Yuan Fire Equipment Co., Ltd<br>Taizhou Xiangqing Safety Protection Equipment Co., Ltd   |
| Pressure Reducer                           | FZJ-1 or FZJ-3<br>(With Secondary Decompression Function) | Shanghai Fangzhan Fire Technology Co.,Ltd   |
| Air Supply Valve Assembly                  | FZG-1   | Shanghai Fangzhan Fire Technology Co.,Ltd   |
| Full-face Mask                             | FZM-1   | Shanghai Fangzhan Fire Technology Co.,Ltd   |
| Pressure Gauge and Rest Air Warning System | FZK06C<br>(Electrical)<br>or FZBJQ-1<br>(Mechanical)      | Shanghai Fangzhan Fire Technology Co., Ltd  |
| Back Frame and Harness                     | FZB-1<br>FZB-3 (Without or With Waist Rotation Function)  | Shanghai Fangzhan Fire Technology Co.,Ltd   |
| Fireproof Lifeline                         | FZNHS   | Shanghai Fangzhan Fire Technology Co.,Ltd   |
| SCBA Box                                   | --  | Shanghai Fangzhan Fire Technology Co.,Ltd   |

RINA Services S.p.A.  
Via Corsica, 12 - 16128 Genova  
Tel +39 010 53851  
Fax +39 010 5351000





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Breathing Resistance at low temperatures: The exhalation resistance shall not exceed 1 kPa.

Breathing Resistance at high temperature: The exhalation resistance shall not exceed 1 kPa.

Breathing Resistance (Inhalation resistance, Exhalation resistance) has been tested according to EN 13274-3, method 2 (settings E and H shall be used).

**Field of Application**

Self-contained compressed-air-operated breathing apparatus for shipboard use for fire-fighters, Type 1 mask shall not be used.

**Reference Documents**

The Main Technical Parameters, issued by Shanghai Fangzhan Fire Technology Co.,Ltd and filed by RINA with No.: SHFP-25375;

SCBA User Instruction, issued by Shanghai Fangzhan Fire Technology Co.,Ltd and filed by RINA with No.: SHFP-25376;

Marking, issued by Shanghai Fangzhan Fire Technology Co.,Ltd and filed by RINA with No.: SHFP-25379;

SCBA Material List, issued by Shanghai Fangzhan Fire Technology Co.,Ltd and filed by RINA with No.: SHFP-25380;

Technical Drawing of SCBA, issued by Shanghai Fangzhan Fire Technology Co.,Ltd and approved by RINA with No.: SHFP-25393 & 25394.

**Test Carried Out**

- Test Report (RHZK6, Ref No.:2018104) issued by China Classification Society Wuhan Rules and Research Institute Testing Center of Marine Life-Saving Appliances and filed by RINA with No.: SHFP-12696;
- Test Report (RHZK6.8, Ref No.:2018105) issued by China Classification Society Wuhan Rules and Research Institute Testing Center of Marine Life-Saving Appliances and filed by RINA with No.: SHFP-12697;
- Test Report (RHZK6, Ref No.: 2015141) issued by China Classification Society Wuhan Rules and Research Institute Testing Center of Marine Life-Saving Appliances and filed by RINA with No.: SHFP-12822;
- Test Report (RHZK6.8, Ref No.: 2015142) issued by China Classification Society Wuhan Rules and Research Institute Testing Center of Marine Life-Saving Appliances and filed by RINA with No.: SHFP-12824;
- Test Report (RHZK6, Ref No.: 2023115) issued by China Classification Society Wuhan Rules and Research Institute Testing Center of Marine Life-Saving Appliances and filed by RINA with No.: SHFP-25377;
- Test Report (RHZK6.8, Ref No.: 2023116) issued by China Classification Society Wuhan Rules and Research Institute Testing Center of Marine Life-Saving Appliances and filed by RINA with No.: SHFP-25378.



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**Remarks**

Both types of SCBA have been designed in compliance with MSC.338(91) and MSC.339(91). And each type of SCBA can be provided with long-distance communication call device (Type FZJ30C, made by Shanghai Fangzhan Fire Technology Co., Ltd), if requested by purchaser.

The SCBA can be equipped with different EC approved type Gas Cylinder of same capacity and Fireproof Lifeline in compliance with Directive 2014/90/EU as amended.

The breathing air shall comply with the requirements of EN 132. Each SCBA shall be marked according to ISO 23269-2:2011(E), Par.9. The markings shall be as required by the specified standards and shall also include the EC 'Mark of Conformity' according to the Directive. The compressed air cylinder markings shall include the charging pressure, capacity and the stamp of the authorized inspection body.

Additional information shall be supplied by the manufacturer after delivery. 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 and storage shall be adhered to. Use and maintenance only by trained and qualified persons.

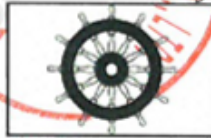
**Note**

- Renewal of Previous EC Type Examination (Module B) Certificate No.: MED130118WS/001 with below optimization.
- Add the new Model Back Plate (Model: FZB-3), which have two functions (with or without waist rotation function).
- And,
- Add the new Model Pressure Reducer Assembly (Model: FZJ-3), which have secondary decompression function.



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*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 control phase module (D, E or F) of Annex II of the Directive is fully complied with a written inspection agreement with a Notified Body*



**XXXX/YYYY**

**"WHEELMARK FORMAT"**

XXXX      *Notified Body number undertaking surveillance module*  
YYYY      *The year in which the mark is affixed*

***General conditions for the approval***

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reappraised prior to it being placed on board vessels to which the amended regulations or standards apply.



**Hai Wen Zhang**

**RINA Services S.p.A.**