



**EC TYPE EXAMINATION (MODULE B)**  
**CERTIFICATE No. MED088017WS**

***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) 2017/306.*

*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.**

**NO. 288 JIANZHONG ROAD, LAOGANG TOWN, PUDONG NEW AREA  
SHANGHAI  
CHINA**

*Testing standards*

**EN 136 (1998) including AC (2003); EN 137 (2006); ISO 23269-3(2011)**

*Reference standards*

**Reg. II-2/10 of SOLAS '74 as amended, 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.**

*Issued in* **SHANGHAI** *on*  
**March 23, 2018**

*This Certificate is valid until*  
**March 22, 2023**

*This Certificate consists of this sheet plus an attachment*



**Giuseppe Zagaria**

*RINA Services S.p.A.*







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*Manufacturer*

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

*Place of Manufacturer*

NO. 288 JIANZHONG ROAD  
LAOGANG TOWN  
PUDONG NEW AREA SHANGHAI  
CHINA

*Name & place of Authorised Representative*

ANTONIO TRANI (FTTM SRL)  
VIA DOMENICO CIMAROSA NO.37, NAPOLI, 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 or 6.8 L	Nanjing Banqiao Fire Equipment Co.,Ltd (6 L) or Zhejiang Kaibo Pressure Vessel Co., Ltd (6.8 L)
Air Cylinder Valve	KHF-30	Taizhou Xiangqing Safeguard Equipment Co., Ltd
Pressure Reducer	FZJ-1	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
Electrical Pressure Gauge and Rest Air Warning System, or Mechanical Pressure Gauge and Rest Air Warning System	FZK06C	Shanghai Fangzhan Fire Technology Co., Ltd
Back Frame and Harness	FZB-1	Shanghai Fangzhan Fire Technology Co.,Ltd
SCBA Box	--	Shanghai Fangzhan Fire Technology Co.,Ltd

Breathing Resistance at low temperatures:

The exhalation resistance of all types of apparatus shall not exceed 10 mbar.

Breathing Resistance at high temperature:

The exhalation resistance shall not exceed 10 mbar.

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







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**Field of Application**

Self-contained compressed-air-operated breathing apparatus for shipboard use for fire-fighters.

**Reference Documents**

Drawing of SCBA, issued by Shanghai Fangzhan Fire Technology Co.,Ltd and approved by RINA with No.: SHFP-8748 & SHFP-11128;

SCBA Material List, issued by Shanghai Fangzhan Fire Technology Co.,Ltd and approved by RINA with No.: SHFP-8749;

User Instruction and Maintenance Manual, issued by Shanghai Fangzhan Fire Technology Co.,Ltd and approved by RINA with No.: SHFP-8750;

Gas Cylinder Certificate (6L) (Ref No.:Z-IS-DDG-MUC-12-08-790008-013-052) and filed by RINA with No.: SHFP-8851;

Gas Cylinder Certificate (6.8L) (Ref No.: 03487/3/2012) and filed by RINA with No.: SHFP-8852;

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-8849;

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-8850;

Test Report (RHZK6.0/RHZK6.8, Ref No.: 2015144 ANNEX) issued by China Classification Society Wuhan Rules and Research Institute Testing Center of Marine Life-Saving Appliances according to ISO 23269-2:2011 & ISO 23269-3:2011 and filed by RINA with No.: SHFP-9613;

Self-contained Breathing Apparatus Factory Inspection Report, filed by RINA with No.: SHFP-11127.

**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.

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.

The breathing air shall comply with the requirements of EN 132. Each SCBA shall be marked according to EN 137:(2006), Par.8.

Additional information shall be supplied by the manufacturer according to EN 137:(2006), Par.9 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.

This product is designed in compliance with ISO 23269-2:2011 & ISO 23269-3:2011 also. This certificate supersedes the previous MED Module B Certificate No.: MED055817WS/001 issued on 10 May 2017 by the Society.







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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 no 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 reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.



**Giuseppe Zagaria**

