

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 Portable fire-extinguishing equipment for lifeboats and rescue boats

with type designation(s)

KEC-2e2-MED, KED-2-MED, KED-3-MED, KED-4c-MED, KED-4N-MED, KEF-6cs-MED, KEF-6s-MED, KEK-6cs-MED, KEK-6s-MED

Issued to

Asiatic Fire System Pte Ltd
SINGAPORE, Singapore

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773,**

item No. MED/3.38. SOLAS 74, Regulation III/4, III/34 & X/3, IMO Res. A.951(23), LSA Code and 2000 HSC Code 8

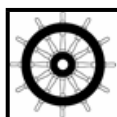
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-02-19**.

Issued at **Hamburg** on **2019-02-20**

DNV GL local station:

**Certification of Materials -
Singapore**



for **DNV GL SE**

Approval Engineer:

Andrii Pishchanskyi

Notified Body

No.: **0098**

Sven Dudszus

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 GL 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



Product description

Portable fire extinguishers for lifeboats and rescue boats with designation as per table below:

Type	Fire rating	Lower operating temp. [°C]	Upper operating temp. [°C]	Extinguishing medium	Charge size	Assembly drawing No.
KEC-2e2-MED	34B	-20	60	CO2	2kg	71WM-KFE-57-002A
KED-2-MED	13A, 55B	-30	60	ABC powder	2 kg	71WM-KFE-10-002A
KED-3-MED	13A, 89B	-30	60	ABC powder	3 kg	71WM-KFE-10-003H
KED-4c-MED	21A, 89B	-20	60	ABC powder	4 kg	71WM-KFE-10-004H
KED-4N-MED	21A, 113B	-30	60	ABC powder	4 kg	71WM-KFE-10-004A
KEF-6cs-MED	13A, 144B	5	60	6% AFFF	6 l	71WM-KFE-35-006A
KEF-6s-MED	13A, 144B	5	60	6% AFFF	6 l	71WM-KFE-15-006A
KEK-6cs-MED	8A, 75F	0	60	Wet chemical	6 l	71KW-KFE-36-006A
KEK-6s-MED	8A, 75F	0	60	Wet chemical	6 l	71KW-KFE-16-006A

Application/Limitation

Extinguishers of size less than 9 L foam, 5 kg CO2 or 5 kg powder may only be used when accepted by the Flag Administration.

The portable extinguisher shall be of a size in accordance with FSS Code, Ch. 4, except that smaller extinguishers may be used for lifeboats and rescue boats if their combined capacity equals or exceeds the requirements of that Code.

For water based extinguishers of types KEF-6cs-MED, KEF-6s-MED, KEK-6cs-MED, KEK-6s-MED a Dielectric Test according to EN 3-7 item 9 has been performed showing that this product is suitable for use on live electrical equipment up to 1,000 V at a distance of 1 m.

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

Job Id: **344.1-008347-1**
Certificate No: **MEDB0000497**

Type Examination documentation

Type	Manual	Test report		
		EN 3-7:2004+ A1:2007	EN 3-8:2006+ A1:2007	EN 3-9:2006+ A1:2007
KEC-2e2-MED	IM-SPT-KEC	2244/8150392 Model EEC-2e2	N/A	285/7146036-5
KED-2-MED	IM-SPT-KED	2244/7945292 Model EED-2	285/7146036-4	N/A
KED-3-MED	IM-SPT-KED	2244/8150392 Model EED-3	285/7146036-4	N/A
KED-4c-MED	IM-SPT-KED	2244/8150392a2 Model EED-4c Issue 2	285/7146036-4	N/A
KED-4N-MED	IM-SPT-KED	2244/8150392a2 Model EED-4N Issue 2	285/7146036-4	N/A
KEF-6cs-MED	IM-COT-KEF	2244/8150392 Model EEF-6cs	285/7146036-4	N/A
KEF-6s-MED	IM-SPT-KEF	2244/8150392 Model EEF-6s	285/7146036-4	N/A
KEK-6cs-MED	IM-COT-KEK	2244/8150392a2 Model EEK-6cs Issue 2	285/7146036-4	N/A
KEK-6s-MED	IM-SPT-KEK	2244/8150392a2 Model EEK-6s Issue 2	285/7146036-4	N/A

Tests carried out

Tested according to EN 3.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, the MED Mark of Conformity (see first page) and in accordance with EN 3-7, Ch. 16.