

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 Non-portable and transportable extinguishers

with type designation(s)

KCO-10-MED, KCO-20-MED, KFG-135-MED, KFG-150-MED, KFG-45-MED, KFM-135-MED, KFM-45-MED, KPG-25-MED, KPG-50-MED, KPM-25-MED, KPM-50-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/3.52. SOLAS 74 as amended, Regulation II-2/4, II-2/10 & X/3 and 2000 HSC Code 7

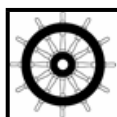
Further details of the equipment and conditions for certification are given overleaf.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

Non-portable and transportable extinguishers with designation as per table below:

Type	Fire rating	Lower operating temp. [°C]	Upper operating temp. [°C]	Extinguishing medium	Charge size	Pressurisation	Assembly drawing No.
KCO-10-MED	70B	-20	60	CO2	10 kg	Stored pressure	72KW-KFE-17-010A
KCO-20-MED	89B	-20	60	CO2	20kg	Stored pressure	72WM-KFE-17-020A
KFG-135-MED	IV B	5	60	6 % AFFF	135 l	External cartridge	72WM-KFE-35-135A
KFG-150-MED	IV B	5	60	6 % AFFF	150 l	External cartridge	72WM-KFE-35-150A
KFG-45-MED	III B	5	60	6 % AFFF	45 l	External cartridge	72WM-KFE-35-045A
KFM-135-MED	IV B	5	60	6 % AFFF	135 l	Stored pressure	72WM-KFE-15-135A
KFM-45-MED	III B	5	60	6 % AFFF	45 l	Stored pressure	72WM-KFE-15-045A
KPG-25-MED	I B	-20	60	ABC powder	25 kg	External cartridge	72WM-KFE-30-025A
KPG-50-MED	II B	-20	60	ABC powder	50 kg	External cartridge	72WM-KFE-30-050A
KPM-25-MED	I B	-20	60	ABC powder	25 kg	Stored pressure	72WM-KFE-10-025A
KPM-50-MED	II B	-20	60	ABC powder	50 kg	Stored pressure	72WM-KFE-10-050A

Application/Limitation

The extinguishers of types KFG-135-MED, KFG-150-MED, KFG-45-MED, KFM-45-MED, KFM-135-MED are not be used on live electrical equipment.

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

Type Examination documentation

Type	Manual	Test report		
		EN 1866-1:2007	EN 1866-2:2014	EN 1866-3:2013
KCO-10-MED	IM-SPT-KCO	285/7292084 Model MCO-10 Issue 2	N/A	2244/8487315-10 Model MCO-10 Issue 2
KCO-20-MED	IM-SPT-KCO	285/7292084 Model MCO-20 Issue 2	N/A	2244/8487315-12 Model MCO-20 Issue 2
KFG-135-MED	IM-COT-KFE	2244/7663017 3 of 10 Model MFG-135 and 285-7292084 Model MFG-135 Issue 2	2244/8487315-8 Model MFG-135 Issue 2	N/A
KFG-150-MED	IM-COT-KFE	2244/7663017 5 of 10 Model MFG-150 and 285-7292084 Model MFG-150 Issue 2	2244/8487315-9 Model MFG-150 Issue 2	N/A
KFG-45-MED	IM-COT-KFE	2244/7663017 1 of 10 Model MFG-45 and 285/7292084 Model MFG-45 Issue 2	2244/8487315-7 Model MFG-45 Issue 2	N/A
KFM-135-MED	IM-SPT-KFE	2244/7663017 4 of 10 Model MFM-135 and 285-7292084-MFM-135 issue 2	2244/8487315-4 Model MFM-135 Issue 2	N/A
KFM-45-MED	IM-SPT-KFE	2244/7663017 2 of 10 Model MFM-45 and 285-7292084-MFM-45 issue 2	2244/8487315-3 Model MFM-45 Issue 2	N/A
KPG-25-MED	IM-COT-KFE	285/7292084 Model MPG-25 Issue 3	2244/8487315-5 Model MPG-25	N/A
KPG-50-MED	IM-COT-KFE	285/7292084 Model MPG-50 Issue 2	2244/8487315-6 Model MPG-50 Issue 2	N/A
KPM-25-MED	IM-SPT-KFE	285/7292084 Model MPM-25 Issue 2	2244/8487315-1 Model MPM-25	N/A
KPM-50-MED	IM-SPT-KFE	285/7292084 Model MPM-50 Issue 2	2244/8487315-2 Model MPM-50 Issue 2	N/A

Tests carried out

Tested according to EN 1866-1:2007, EN 1866-2:2014 and EN 1866-3:2013 as applicable.

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 1866-1:2007 Ch. 6.9.