



Marine & Offshore

Certificate number: 43413/B0 MED

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This certificate is not valid when presented without the full attached schedule
composed of 7 sections
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Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2020/1170 of 16 July 2020

This certificate is issued to:

DESAUTEL

MEYZIEU - FRANCE

for the type of product

NON-PORTABLE AND TRANSPORTABLE EXTINGUISHERS

MOBILE WATER & FOAM EXTINGUISHERS (MED004)

Types E45A2, E45BF, SE45A2, SE135A2, E45A1EV, E45A1EVT and E45A2T

Trade name : DESAUTEL, AUCA, MIM, SURVITEC, KENBRI

Requirements:

SOLAS 74 convention as amended, Regulations II-2/4, II-2/10, X/3

IMO Res. MSC.98(73) -(FSS Code)- as amended by MSC.206(81), MSC.217(82), MSC.292(87), MSC.311(88), MSC.327(90) and MSC.339(91), 4

IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 7

IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 7

EN 1866-1:2007

EN 1866-2:2014 (other extinguishers)


This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate will expire on: 30 Oct 2025**For Bureau Veritas Marine & Offshore Notified Body 2690,**

At BV LYON, on 30 Oct 2020,

Yann Krempiewicz



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark ) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

EXTINGUISHERS with PULVERIZED WATER and ADDITIVE

	E45A2	E45BF
Water capacity	44.1 L	42.30 L
Additive capacity	2 % ; 0.9 L in premix	6 % ; 2.70 L in premix
Additives	Compact or BSX233 or EX1	
Fire Class	A and IVB	
Discharge Time	90s	
Propelling Gas	CO ₂ ; 0.45 kg	
Total Weight	about 90 kg	
Maximum allowable pressure PS at 60°C	16.4 bar	
Test Pressure (cylinder) PT	24 bar	
Diameter	350 mm	
Overall Height	about 1000 mm	
Hose Length	5 m	
Additives	Compact ou BSX233 ou EX1	
Temperature Range of Use	+5°C to +60°C	

	SE45A2	SE135A2
Water capacity	44,1 L	132,3 L
Additive capacity	2 % ; 0.9 L	2 % ; 2.7 L
Additives	Compact or BSX233 or EX1 in premix	Compact or BSX233 or EX1 n premix
Fire Class	A and IVB	
Discharge Time	85 s	189 s
Propelling Gas	CO ₂ ; 0.45 kg	
Total Weight	about 81 kg	about 231 kg
Maximum allowable pressure PS at 60°C	18 bar	
Test Pressure (cylinder) PT	26 bar	26 bar
Diameter	350 mm	450 mm
Overall Height	about 1000 mm	1200 mm
Hose Length	5 m	
Temperature Range of Use	+5°C to +60°C	+5°C to +60°C

	E45A2T	E45A1EV	E45A1EVT
Water capacity	34.1 L	44.55L	34.55 L
Additive capacity	2 % ; 0.9 L	1 % ; 0.45 L	1 % ; 0.45 L
Additives	Compact or BSX233 or EX1 in premix	Compact or BSX233 or EX1 in separate cartridge	Compact or BSX233 or EX1 in separate cartridge
Anti freeze	10 L MEG in premix	/	10 L MEG in premix
Additives	Compact or BSX233 or EX1		
Fire Class	A and IVB		
Discharge Time	90 s		
Propelling Gas	CO ₂ ; 0.45 kg		
Total Weight	about 90 kg		
Maximum allowable pressure PS at 60°C	16.4 bar		
Test Pressure (cylinder) PT	24 bar		
Diameter	350 mm		
Overall Height	about 1000 mm		
Hose Length	5 m		
Temperature Range of Use	-10°C / +60°C	5°C / +60°C	-10°C / +60°C

Other materials and/or components:

Cylinder	Steel
Operating Valve	Brass
Siphon Tube	Steel
Hose	Reinforced rubber
Nozzle	Polyamide

2. DOCUMENTS AND DRAWINGS:

2.1 - Design drawings:

	E45A2	E45BF
Fire extinguisher	UDA211 issue B	UDA211 issue B
Body	UDA00148 ind. D	
CO2 cylinder with valve	UDA210 issue B	
Hose and control valve	UDA00207 issue A	
Informative form	n° 6080110 version 04	

	SE45A2	SE135A2
Fire extinguisher	UDA00288 issue A	UDA00390 issue B
Body	UDA00295 issue B	UDA00860 issue A
CO2 cylinder with valve	UDA210 issue B	UDA212 issue A
Hose and control valve	UDA00296 issue A	UDA00297 issue A
Informative form	n° 6080127 version 01	n° 6080110 version 04

	E45A2T	E45A1EV	E45A1EVT
Fire extinguisher	UDA211 issue B	UDA00293 issue B	UDA00293 issue B
Body	UDA00148 issue D		
CO2 cylinder with valve	UDA210 issue B		
Hose and control valve	UDA00207 Issue A		
Informative form	n° 6080110 version 04		

2.2 - Manual(s) of maintenance:

E45A2, E45BF : n° 6050172 version 03

SE45A2 and SE135A2 : n° 6050128 version 02

E45A2T: n° 6050172 version 03

E45A1EV & E45A1EVT: n° 6050721 version 00

3. TEST REPORTS :

Technical assessment from Desautel S.A N/REF 2013/02/22/FD for equivalence of following additives with a concentration between 1% and 6% : SC1 (Orchidée); FORAFAC 1203 (Dupont); FILMFOAM 211 (Eau et Feu); EX1 (Auxquimia); Compact (Ruhl); BSX 233 (Uniteq).

3.1 - E45A2

- Test report n° EN 12033 dated 27/03/2020, as per EN 1866-1 (2007), Usine Desautel, France

- Test report n° EN 12187 dated 27/04/2020 as per EN 1866-2 (2014), Apragaz, Belgium.

3.2 - E45BF

- Test report n°120601dated 01/06/2012 as per EN 1866-1 (2007), Usine Desautel, France. Witnessed by Bureau Veritas.

- Test report n°120601addendum dated 04/09/2012 as per EN 1866-1 (2007), Usine Desautel, France. Witnessed by Bureau Veritas.

- Test report "Modele D350 - n° 20141030-45L 50KG" dated 02/02/2015, as per EN 1866-2 (2014) including corrections dated 08/04/2015 from Usine Desautel, France. Witnessed by Bureau Veritas.

3.4 - SE45A2

- Test report n°EN 11593 dated 27/08/2015, as per EN 1866-1 (2007), Apragaz, Belgium. For class A : Test report n° EH 0510 11 1070 from CNPP, France (91 on a fire test 27 A). Witnessed by Bureau Veritas.

- Test report n°EN 11593-1 dated 07/12/2015, as per EN 1866-2 (2014) Apragaz, Belgium. Witnessed by Bureau Veritas.

3.5 - SE135A2

- Test report n°EN 11488 dated 21/01/2016, as per EN 1866-1 (2007), Apragaz, Belgium. Witnessed by Bureau Veritas.
- Test report n°EN 11488-1 dated 21/01/2016, as per EN 1866-2 (2014), Apragaz, Belgium. Witnessed by Bureau Veritas.

3.6 - E45A2T

- Test report n°EN 12035 dated 27/03/2020 as per EN 1866-1 (2007), Apragaz, Belgium.
- Test report n°EN 12187 dated 27/04/2020 as per EN 1866-2 (2014), Apragaz, Belgium.

3.7 - E45A1EV

- Test report n°EN 12032 dated 27/03/2020 as per EN 1866-1 (2007), Apragaz, Belgium.
- Test report n°EN 12187 dated 27/04/2020 as per EN 1866-2 (2014), Apragaz, Belgium.

3.8 - E45A1EVT

- Test report n°EN 12034 dated 27/03/2020 as per EN 1866-1 (2007), Apragaz, Belgium.
- Test report n°EN 12187 dated 27/04/2020 as per EN 1866-2 (2014), Apragaz, Belgium.

4. APPLICATION / LIMITATION:

- 4.1 - Manufacturer's instruction for maintenance and recharging should be kept on board.
- 4.2 - The equipment is to be installed according to manufacturer's instructions.
- 4.3 - These non-portable extinguishers cannot be used on electrical source.

5. PRODUCTION SURVEY REQUIREMENTS:

This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or E "Product Quality Assurance" or F "Product Verification" of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

6. MARKING OF PRODUCT:

As per EN 1866-1 paragraph 6.9 and EN 1866-2 paragraph 7.4. :

- 1 - Model designation including "Fire extinguisher" or "Extinguisher" plus medium
- 2 - Type and nominal charge of extinguishing medium and, identification and percentage of additives i.e. : pulverized water with x% of Compact, BSX233 or EX1
- 3 - Fire ratings, i.e.: A and IV B
- 4 - Instructions with pictograms and pictograms representing the type of fires
- 5 - Restrictions and dangers of use particularly in relation to toxicity and electrical risk, and following warning : "WARNING - Do not use on live electrical equipment "
- 6 - Following instruction : "Refill after any operation ; check periodically and only use products and spare parts in conformity with the agreed model for refilling and maintenance".
- 7 - Identification of propellant gas and quantity
- 8 - Numbers(s) or reference(s) relating to the approval of the extinguisher (serial or batch number)
- 9 - Operating temperature range, i.e. : +5°C / +60°C
- 10 - Reference to the European Standard EN 1866-1:2007
- 11 - Name and address of the manufacturer and/or supplier
- 12 - Test Pressure
- 13 - Maximum allowable pressure PS
- 14 - Reference is made to MED 2014/90/EU chapter 2.

In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

7. OTHERS :

- 7.1 - It is DESAUTEL's responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
- 7.2 - This certificate supersedes the EC Examination Certificate N° 43413/A3 MED issued on 14/09/2018 by the Society.

*** END OF CERTIFICATE ***