Certificate number: 65254/A0 MED File number: ACI 7000/044/005

Item number: MED/3.2

This certificate is not valid when presented without the full attached schedule composed of 7 sections WWW.Veristar.com

Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

Marine & Offshore

# 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:

LINGJACK ENGINEERING WORKS PTE LTD

Singapore - SINGAPORE

for the type of product

# PORTABLE FIRE EXTINGUISHERS

COMBAT/LINGJACK POWDER FIRE EXTINGUISHER TYPES C-6ACE, C-9ACE AND C-12ACE

#### **Requirements:**

SOLAS 74 convention as amended, Regulations II-2/4, II-2/10, II-2/18, II-2/19, II-2/20, X/3 IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 7 IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 7 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), MSC.339(91) and MSC.457(101), 4 IMO Res. MSC.391(95) - (IGF Code)- as amended, 11 IMO Res. A.951(23), IMO MSC/Circ.1239 incl. Corr.1 and IMO MSC/Circ.1275 EN 3-7:2004 incl. /A.1:2007, EN 3-8:2006 incl. /AC:2007, EN 3-9:2006 incl. /AC:2007 and EN 3-10:2009

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: 01 Jun 2026

For Bureau Veritas Marine & Offshore Notified Body 2690, At BV SINGAPORE, on 01 Jun 2021, Shivananda Upadhya



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, 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**

# **<u>1. PRODUCT DESCRIPTION:</u>**

#### COMBAT/LINGJACK POWDER FIRE EXTINGUISHER TYPES C-6ACE, C-9ACE AND C-12ACE

Туре	C-6ACE	C-9ACE	C-12ACE
Capacity	6 kg	9 kg	12 kg
	ABC 40 dry chemical	ABC 40 dry chemical	ABC 40 dry chemical powder
Medium	powder from Orchidee	powder from Orchidee	from Orchidee Europe BVBA
	Europe BVBA	Europe BVBA	
Temperature Range of Use	-20 to +60 °C	-20 to +60 °C	-20 to +60 °C
Discharge Time	17 s	19 s	24 s
Propelling Gas	CO2 ; 110 g	CO2 ; 150 g	CO2 ; 225 g
Total Weight	10.5 kg	14.5 kg	18.0 kg
Pressure at maximum	10.3 bar	14.6 bar	19.7 bar
operating temperature			
Test Pressure (cylinder)	27 bar	27 bar	30 bar
Diameter	181 mm	181 mm	181 mm
Overall Height	515 mm	542 mm	645 mm
Hose Length	402 mm	490 mm	575 mm
Fire Class	27A/233B	43A/233B	55A/233B

#### Other materials and/or components:

Cylinder	Steel
Operating Valve	Copper Zinc Alloy
Discharge tube	Aluminium
Siphon Tube	Aluminium
Hose	Black braided PVC
Nozzle	UPVC Plastic
Hook Bracket	Stainless steel

#### **2. DOCUMENTS AND DRAWINGS:**

# 2.1 - Design Drawings

Туре	C-6ACE	C-9ACE	C-12ACE
ASSEMBLY DRAWING	20801504 Issue A dated	20801608 Issue A dated	20801649 Issue A dated
	10/02/2009	10/02/2009	10/02/2009
VALVE ASSEMBLY	03000700 Issue A dated	03000700 Issue A dated	03000700 Issue A dated
	07/04/2007	07/04/2007	07/04/2007
CYLINDER	03098400 Issue A dated	03098600 Issue A dated	03098300 Issue A dated
	10/02/2009	10/02/2009	10/02/2009
CO2 CARTRIDGE	03002400 revision 2 dated	03002300 revision 2 dated	03001900 revision 0 dated
	18/07/2017	04/08/2015	18/01/2017
SIPHON TUBE	03032401 Issue A dated	03032501 Issue A dated	03039205 Issue A dated
	10/02/2009	10/02/2009	10/02/2009
DISCHARGE TUBE	03032902 Issue A dated	03039204 Issue A dated	03039206 Issue A dated
	10/02/2009	10/02/2009	10/02/2009
HOSE + NOZZLE	03002503 Issue A dated	03002601 Issue A dated	03160400 Issue A dated
	10/02/2009	10/02/2009	03160400
HOOK BRACKET	03021702 Issue A dated	03021702 Issue A dated	03021702 Issue A dated
	10/02/2009	10/02/2009	10/02/2009

<u>2.2 - Installation, operation and maintenance instructions:</u> As per Manufacturer's document n°LJS-IOM-102 Rev G dated 06/04/2021.

2.3 - Safety data sheet for the extinguishing media:

MSDS ABC40 03024700 dated 12/08/2019.

# 3. TEST REPORTS:

#### 3.1 - C-6ACE:

Test report n°256373 dated 28/05/2010 as per EN 3-7:2004 incl. /A.1:2007 and EN 3-8:2006 incl. /AC:2007 from BRE Global Ltd, UK.

TPED certificate n°0036-059-13 revision 0 dated 24/05/2013 from TÜV SÜD Industrie Service GmbH.

#### 3.2 - C-9ACE:

Test report n°259385 dated 28/05/2010 as per EN 3-7:2004 incl. /A.1:2007 and EN 3-8:2006 incl. /AC:2007 from BRE Global Ltd, UK.

TPED certificate n°0036-059-13 revision 0 dated 24/05/2013 from TÜV SÜD Industrie Service GmbH.

3.3 - C-12ACE:

Test report n°259386 dated 28/05/2010 as per EN 3-7:2004 incl. /A.1:2007 and EN 3-8:2006 incl. /AC:2007 from BRE Global Ltd, UK.

TPED certificate n°0036-060-13 revision 0 dated 24/05/2013 from TÜV SÜD Industrie Service GmbH.

# 4. APPLICATION / LIMITATION:

4.1 - Manufacturer's instruction for maintenance and recharging the extinguishers should be kept on board.

4.2 - The extinguishers are to be installed according to manufacturer's instructions.

4.3 - Due to the type of extinguishers covered by this certificate (i.e. extinguisher with cartridge), the standard EN 3-9:2006 incl. AC:2007 quoted in the requirements in front page is not applicable.

#### **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 module E Product Quality Assurance or module 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 IMO Resolution A.951 (23), paragraph 8 and the provisions of the Directive:

- 1 Model designation
- 2 Manufacturer's name and address
- 3 Type of fire for which the extinguisher is suitable, i.e.
  - 27A/233B (C-6ACE), 43A/233B (C-9ACE) and 55A/233B (C12ACE)

4 - Type and quantity of extinguishing medium, i.e. ABC dry Chemical powder; 6kg (C-6ACE), 9kg (C-9ACE) and 12 kg (C12ACE)

5 - Propelling gas: CO2

6 - Instruction for use and recharge (it is recommended that operating instructions be given in pictorial form, in addition to explanatory text in language understood by the likely user)

7 - Year of manufacture

8 - Temperature range over which the extinguisher will operate satisfactorily

9 - Test pressure, i.e.: 27 bar for C-6ACE & C-9ACE and 30 bar for C12ACE.

10 - 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 LINGJACK ENGINEERING WORKS PTE LTD'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 EC Type Examination Certificate N°0832-MED-1013 issed on 06/11/2009 by BRE Global Ltd.

\*\*\* END OF CERTIFICATE \*\*\*