## CERTIFICATE OF CONFORMITY

Member of the FM Global Group

## 1. FIRE PROTECTION EQUIPMENT

2. Certificate No:
3. Equipment:
(Type Reference and Name)
4. Name of Listing Company:
5. Address of Listing Company:

FM23FPUS0185
Control Inert Inergen Clean Agent Fire Extinguishing Systems

Fire Eater A/S
Vølundsvej 17, 3400 Hillerød, Denmark
6. The examination and test results are recorded in confidential report number:

$$
3039375 \text { dated } 24^{\text {th }} \text { May } 2013
$$

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

## FM 5600:2023

8. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
9. Approval Guide Listing Category:

Clean Agent Fire Extinguishing Systems

## Certificate issued by:


J.E. Marquedant

14 September 2023

VP, Manager - Electrical Systems
To verify the availability of the Approved product, please refer to www.approvalguide.com

## THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) $7817624300 \quad$ F: +1 (1) 7817629375 E-mail: information@fmapprovals.com www.fmapprovals.com

# CERTIFICATE OF CONFORMITY 

US Certificate of Conformity No: FM23FPUS0185

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10. Description of Equipment:

| System Designation: | Control Inert Inergen Clean Agent Fire Extinguishing Systems |
| :---: | :---: |
| System Type: | Engineered |
| Agent Identification: | Inergen (Identified as IG-541 in NFPA 2001) |
| Available Agent Storage Pressures: | 200 bar, 300 bar |
| Minimum and Maximum Agent Storage Temperatures: | $60^{\circ} \mathrm{F}$ to $80^{\circ} \mathrm{F}\left(15^{\circ} \mathrm{C}\right.$ to $\left.27^{\circ} \mathrm{C}\right)$ for multiple hazard, unbalanced systems $32^{\circ} \mathrm{F}$ to $150^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.$ to $\left.65^{\circ} \mathrm{C}\right)$ for single hazard, unbalanced systems |
| Available Nozzle Types: | $360^{\circ}$ |
| Maximum Nozzle Area of Coverage: | 24 ft by $24 \mathrm{ft}(7.3 \mathrm{~m}$ by 7.3 m ), $17 \mathrm{ft}(5.2 \mathrm{~m})$ maximum distance to farthest corner |
| Minimum and Maximum Nozzle Installation Height per Row: | 0.3 ft to 15.4 ft ( 0.1 m to 4.7 m ) |
| Minimum and Maximum Height of Protected Area per Nozzle Row: | 1.0 ft to 15.4 ft ( 0.3 m to 4.7 m ) |
| Minimum Design Concentration for Hazard Class: | Class A - 37.45\% <br> Class B-41.55\% |
| Design, Installation, Operation, and Maintenance Manual: | Fire Eater Control Inert Ci Manual for UL Listed, FM Approved Extinguishing System, P/N Ci Manual 2019-03 FM-UL, Rev. 2019-02-27 |
| Flow Calculation Software: | Fire Eater Inergen Management Tool (IMT) flow calculation program Version 2.2.0, utilizing Flow Sim Engine dated 2014-08-27 <br> or <br> Fire Eater Inergen Management Tool (IMT) flow calculation program 3.x.y (where $x$ and $y$ can be any number), utilizing Flow Sim Engine dated 2018-08-02 |
| Limitations or Exceptions to the Approval: | Limitations as defined in the manual and software and listed above |

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US Certificate of Conformity No: FM23FPUS0185

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|  | Air Products |
| :--- | :--- |
| Turanka 94 |  |
|  | 62700 Brno |
| Czech Republic |  |
| Approved Filling Facilities: | Shanghai Leinuo Security Technology Co., Ltd |
|  | Building 1, No. 919, Xin Kang Road <br> Qing Pu District, Shanghai <br> China |
|  | PG Depot Decin (Air Products spol s.r.o.) <br> J.S. Baara 2063/21 <br>  <br> 405 02 Decin <br> Czech Republic |
|  |  |
|  |  |

## 11. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

## 12. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.
13. Certificate History

Details of the supplements to this certificate are described below:

| Date | Description |
| :--- | :--- |
| 24 May 2013 | Original Issue. |
| 14 September 2023 | Supplement 1: <br> Report Reference: PR465951 dated 14 September 2023. <br> Description of the Change(s): Converted certificate format, added PG Depot Decin (Air <br> Products spol s.r.o.) filling facility. |

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