



#### **Construction Products Regulation:** EU (No) 305/2011

This Declaration has been drawn-up in accordance with Commission Delegated Regulation (EU) No. 574/2014 which amends Annex III of Regulation (EU) No 305/2011.

# **DECLARATION OF PERFORMANCE**

## No. 2531-CPR-CSP11129

## 1. Unique identification code of the product-type:

#### Model number and Description:

55000-216 Series 65 Conventional Ionisation Smoke Detector (with Flashing LED)

#### **Approved Accessories:**

45681-200, 45681-201, 45681-245, 45681-246, 45681-247, 45681-248 Bases

### Harmonised Product Type(s):

Smoke Detectors - Point Detectors

#### 2. Intended use/es:

Fire detection and fire alarm systems installed in and around buildings

#### 3. Manufacturer:

Apollo Fire Detectors Ltd, 36 Brookside Road, Havant, Hampshire, PO9 1JR, United Kingdom

#### 4. Authorised representative:

Apollo Gesellschaft für Meldetechnologie mbH Am Anger 31 33332 Gütersloh Deutschland

## 5. System(s) of AVCP

System 1

6 Harmonised Standard(s)

EN 54-7:2018

Notified Body/ies:

DBI Certification A/S (Notified Body 2531)

# A HALMA COMPANY







Apollo Fire Detectors Ltd. Registered in England No. 1483208 Registered Office: 36 Brookside Road, Havant, Hampshire, PO9 1JR VAT Registration No. GB 339 0553 54

**Apollo Fire Detectors Limited** 

www.apollo-fire.co.uk

# 7. Declared performance

| Essential characteristics                        | Clauses in<br>EN 54-7:2018 | Regulatory classes | Performance   |
|--|----------------------------|--------------------|---|
| Operational reliability:                         |                            |                    |   |
| Individual alarm indication                      | 4.2.1                      |                    | The visual indicator(s) are<br>visible from a distance of 6 m in<br>an ambient light intensity up to<br>500 lx.   |
| Connection of ancillary devices                  | 4.2.2                      |                    | Open or short circuit failures of<br>connection to ancillary device<br>did not prevent the correct<br>operation of the detector   |
| Monitoring of detachable detectors               | 4.2.3                      |                    | A fault condition is signaled<br>when the detector is removed<br>from the mounting base.  |
| Manufacturer's adjustments                       | 4.2.4                      |                    | It is not possible to adjust the<br>detector settings without the<br>use of a special tool to access<br>into the detector or use of a<br>code to enabling entry into the<br>panel programming software.   |
| On site adjustment of response behavior          | 4.2.5                      | None               | The mode(s) of operation are<br>adjustable from the Control<br>and Indicating Equipment by<br>use of a loop communication<br>protocol. Access to enable<br>mode changes is by software<br>control of the protocol<br>communication.                             |
| Protection against the ingress of foreign bodies | 4.2.6                      |                    | The chamber is designed so<br>that a sphere of diameter<br>(1,3±0,05) mm cannot pass into<br>the sensor chamber.  |
| Response to slowly developing fires              | 4.2.7                      |                    | The provision of "drift<br>compensation" (e.g. to<br>compensate for sensor drift<br>due to the build-up of dirt in<br>the detector), does not lead to<br>a significant reduction in the<br>detectors sensitivity to slowly<br>developing fires.                 |
| Software controlled detectors (when provided)    | 4.2.8                      | _                  | The software documentation<br>and the software design<br>complies with the<br>requirements of EN 54-7:2018.   |
| Nominal activation conditions/sensitivity:       |                            |                    |   |
| Repeatability                                    | 4.3.1                      |                    | Ratio of response values<br>$m_{max}:m_{min} \le 1.6$<br>Lower response value,<br>$m_{max}:m_{min} \ge 0.05$ dB m <sup>-1</sup>   |
| Directional dependence                           | 4.3.2                      | Threshold          | $\begin{array}{l} \mbox{Ratio of response values} \\ m_{max}:m_{min} \leq 1.6 \\ \mbox{Lower response value,} \\ m_{max}:m_{min} \geq 0.05 \ dB \ m^{-1} \end{array}$   |
| Reproducibility                                  | 4.3.3                      |                    | $\begin{array}{l} \mbox{Ratio of response values} \\ m_{max}: \mbox{$\overline{m} \leq 1.33$} \\ \mbox{Ratio of the response values} \\ \mbox{$\overline{m}$: $m_{min} \leq 1.5$} \\ \mbox{Lower response value, $m_{min} \geq $$0.05 dB $m^{-1}$} \end{array}$ |



| Response delay (response time):                             |         |  |
|---|---------|--|
| Air movement  | 4.4.1   | Ratio is > 0.0625 and < 1.60<br>and the point smoke detector<br>did not emit a fault nor alarm<br>signal during the test with<br>aerosol-free air  |
| Dazzling  | 4.4.2   | The specimen did not emit<br>neither an alarm nor a fault<br>signal and Ratio of response<br>thresholds m <sub>max</sub> :m <sub>min</sub> ≤ 1.6   |
| Tolerance to supply voltage:                                |         |  |
| Variation in supply parameters                              | 4.5     | Ratio of response values<br>m <sub>max</sub> :m <sub>min</sub> < 1.6<br>Lower response value, m <sub>min</sub> ≥<br>0.05 dB m <sup>-1</sup>  |
| Performance parameters under fire conditions:               |         |  |
| Fire sensitivity  | 4.6     | Evaluated as meeting the<br>requirements of TF2 toTF5  |
| Durability of nominal activation<br>conditions/Sensitivity: |         |  |
| temperature resistance<br>Cold (operational)                | 4.7.1.1 | The specimen did not emit<br>neither an alarm nor a fault<br>signal and Ratio of response<br>values m <sub>max</sub> :m <sub>min</sub> ≤ 1.6   |
| Dry heat (operational)                                      | 4.7.1.2 | The specimen did not emit<br>neither an alarm nor a fault<br>signal and Ratio of response<br>values m <sub>max</sub> :m <sub>min</sub> ≤ 1.6   |
| Humidity resistance   |         |  |
| Damp heat, steady-state (operational)                       | 4.7.2.1 | The specimen did not emit<br>neither an alarm nor a fault<br>signal and ratio of response<br>values m <sub>max</sub> :m <sub>min</sub> ≤ 1.6   |
| Damp heat, steady-state (endurance)                         | 4.7.2.2 | No fault signal, attributable to<br>the endurance conditioning<br>was given on reconnection of<br>the specimen and Ratio of<br>response values m <sub>max</sub> :m <sub>min</sub> ≤<br>1.6 |
| Corrosion resistance  |         |  |
| Sulphur dioxide (SO <sub>2</sub> ) corrosion (endurance)    | 4.7.3   | No fault signal, attributable to<br>the endurance conditioning<br>was given on reconnection of<br>the specimen and Ratio of<br>response values m <sub>max</sub> :m <sub>min</sub> ≤<br>1.6 |
| Vibration resistance  |         |  |
| Shock (operational)   | 4.7.4.1 | No fault signal given from the<br>specimen during the<br>conditioning period or the<br>additional 2 min. and Ratio of<br>response values m <sub>max</sub> :m <sub>min</sub> ≤<br>1.6       |
| Impact (operational)  | 4.7.4.2 | No fault signal given from the<br>specimen during the<br>conditioning period or the<br>additional 2 min. and Ratio of<br>response values m <sub>max</sub> :m <sub>min</sub> ≤<br>1.6       |



| Vibration, sinusoidal (operational)  | 4.7.4.3 | No fault signal given from the<br>specimen during the<br>conditioning and Ratio of<br>response values m <sub>max</sub> :m <sub>min</sub> ≤<br>1.6  |
|--|---------|--|
| Vibration, sinusoidal (endurance)  | 4.7.4.4 | No fault signal, attributable to<br>the endurance conditioning<br>was given on reconnection of<br>the specimen and Ratio of<br>response values m <sub>max</sub> :m <sub>min</sub> ≤<br>1.6 |
| Electrical stability EMC immunity (operational)<br>a) Electrostatic discharge (operational)<br>b) Radiated electromagnetic fields (operational)<br>c) Conducted disturbances(operational)<br>d) Fast transient bursts (operational)<br>e) Slow high energy voltage surge (operational) | 4.7.5   | No alarm or fault signal given<br>during the conditioning and<br>Ratio of response values<br>m <sub>max</sub> :m <sub>min</sub> ≤ 1.6  |

# 8. Online Display Location

This document can be viewed online at www.apollo-fire.co.uk

The performance of the product identified above is in the conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No. 305/2011, under the sole responsibility of the manufacturer identified above

Signed for and on behalf of Apollo Fire Detectors Limited by:

K. West

Mr. Karl Westhead Technical Director Havant – 21.02.2022

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