By Appointment to
Her Majesty the Queen
Manufacturers of Fire Detection
& Alarm Products
Apollo Fire Detectors Ltd
Hampshire

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Construction Products Regulation
EU 305/2011

apollo
WORLD CLASS FIRE SOLUTIONS

APOLLO FIRE DETECTORS LTD
DECLARATION OF PERFORMANCE
No. CD0003/HEAT/V2

This document is a declaration of performance that the products identified below conform to the essential requirements that have been specified in the European Regulation 305/2011 covering construction products. This Regulation has been enacted into the UK law by the Statutory Instrument Construction Product Regulations 2013.

The products listed below are manufactured at the premises of Apollo Fire Detectors Ltd. 36 Brookside Road, Havant, Hampshire, PO9 1JR, England.

1. Unique identification code of the product-type:

   Heat Detectors
   58000-305, 55000-120, 55000-121, 55000-122, 55000-125, 55000-126, 55000-127, 55000-130, 55000-131, 55000-132, 55000-135, 55000-136, 55000-137, 55000-190, 55000-193, 55000-400, 55000-420, 55000-401, 55000-440, 55000-465, 55000-475, 58000-400, 58000-700, XPA-HT-11170-APO, XPA-HT-11171-APO,
   Orbis Class A1R conventional heat detectors starting from the following prefixes letters: ORB-HT, OAX-HT, OPX-HT, OEX-HT, OIX-HT, OMX-HT, OSX-HT, OLX-HT,
   Orbis Class A1S conventional heat detectors starting from the following prefixes letters: ORB-HT,
   Orbis Class A2S conventional heat detectors starting from the following prefixes letters: ORB-HT, OAX-HT, OPX-HT, OEX-HT, OIX-HT, OMX-HT, OSX-HT, OLX-HT,
   Orbis Class BR conventional heat detectors starting from the following prefixes letters: ORB-HT, OAX-HT, OPX-HT, OEX-HT, OIX-HT, OMX-HT, OSX-HT, OLX-HT,
   Orbis Class BS conventional heat detectors starting from the following prefixes letters: ORB-HT, OAX-HT, OPX-HT, OEX-HT, OIX-HT, OMX-HT, OSX-HT, OLX-HT,
   Orbis Class CR conventional heat detectors starting from the following prefixes letters: ORB-HT, OAX-HT, OPX-HT, OEX-HT, OIX-HT, OMX-HT, OSX-HT, OLX-HT,
   Orbis Class CS conventional heat detectors starting from the following prefixes letters: ORB-HT, OAX-HT, OPX-HT, OEX-HT, OIX-HT, OMX-HT, OSX-HT, OLX-HT,
   Orbis IS Class A1R conventional heat detectors starting from the following prefixes letters: ORB-HT,
   Orbis IS Class A1S conventional heat detectors starting from the following prefixes letters: ORB-HT,
   Orbis IS Class A2S conventional heat detectors starting from the following prefixes letters: ORB-HT,
   Orbis IS Class BR conventional heat detectors starting from the following prefixes letters: ORB-HT,
   Orbis IS Class BS conventional heat detectors starting from the following prefixes letters: ORB-HT,
   Orbis IS Class CR conventional heat detectors starting from the following prefixes letters: ORB-HT,
   Orbis IS Class CS conventional heat detectors starting from the following prefixes letters: ORB-HT

2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4) of the CPR:

   Each individual product is identified with a label or laser marking containing a production date code with build standard number

3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

   Fire detection and fire alarm systems

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):

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

5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):

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

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V:

   System 1

7. In case of the declaration of performance concerning a construction product covered by a harmonized standard:

   BRE Global Limited No.0832/Intertek No.0359/UL No.0843 performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

   Not applicable

9. Declared performance

Essential characteristics	Declared Performance	Harmonised technical specification
Nominal activation conditions/Sensitivity, Response delay (response time) and Performance under fire conditions	1) Apollo Heat detectors conform to one or more of the following classes: A1, A2, B, C, D, E, F or G 2) Each detector is constructed such that at least part of its heat sensitive element(s), except elements with auxiliary functions, is ≥15mm from the mounting surface of the detector 3) Heat detectors are compliant with clause 5.2 Directional dependence test. The directional dependence test confirmed that the response time of the detector is not unduly dependent on the direction of airflow around the detector 4) Heat detectors are compliant with clause 5.3 Static response temperature test. The static response temperature test confirmed the ability of the detector to respond correctly to a slow rate of rise of air temperature. 5) Heat detectors are compliant with clause 5.4 Response times from typical application temperature test. Mentioned test confirmed the ability of the detector stabilized at its typical application temperature to respond correctly over a range of rates of rise of air temperature 6) Heat detectors are compliant with clause 5.5 Response times from 25°C test. Mentioned test confirmed that detectors in a class with a typical application temperature above 25°C do not exhibit an abnormally fast response to normal increases in temperature (not applicable to class A1 or A2 detectors) 7) Heat detectors are compliant with clause 5.6 Response times from high ambient temperature (dry heat operational) test. Mentioned test demonstrated the ability of the detectors	EN54-5:2000

	to function correctly at high ambient temperatures appropriate to the anticipated service temperatures 8) Heat detectors are compliant with clause 5.8 Reproducibility test. The reproducibility test confirmed that the response times of the detectors are within the required limits and, for resettable detectors, the established response time base data for comparison with the response times measured after the environmental tests 9) All suffix S heat detectors are compliant with clause 6.1 Test for suffix S detectors. Mentioned test confirmed that suffix S detectors do not respond below the minimum static response temperature applicable to the class of the detector [a] 10) All suffix R detectors are compliant with clause 6.2 Test for suffix R detectors. Mentioned test confirmed that suffix R detectors maintain the response requirements of their class for high rates of rise of temperature starting from an initial temperature below the typical application temperature applicable to the class marked on the detector [b]	
Operational reliability	1) Heat detectors are compliant with clause 4.4 Individual alarm indication requirements stating that class A1, A2, B, C or D detectors shall be provided with an integral red visual indicator, by which the individual detector, which released an alarm, can be identified, until the alarm condition is reset. 2) Connection of a remote indicator cannot prevent normal operation of the detectors 3) Detector head removal gives fault signal as per clause 4.6 requirement 4) It is not possible to change heat detector manufacturer's settings except by special means as per clause 4.7 5) Adjustments can only be made via the CIE, all modes of operation are approved and certified 6) Each heat detector is permanently marked with obligatory information as per clause 4.9 7) Each heat detector is supplied with reference to the appropriate data sheet(s) as per clause 4.10 8) For heat detectors which rely on software control the requirements of clause 4.11 are met	
Tolerance to supply voltage	1) Heat detectors are compliant with clause 5.7 Variation in supply parameters test. Mentioned test confirmed that, within the specified range(s) of the supply parameters, the response time of the detectors is not unduly dependent on these parameters	EN54-5:2000
Durability of operational reliability and response delay; temperature resistance	1) Heat detectors are compliant with clause 5.9 Cold (operational) test. Mentioned test demonstrated the ability of the detectors to function correctly at low ambient temperatures appropriate to the anticipated service temperature 2) Heat detectors are compliant with clause 5.10 Dry heat (endurance) test. Mentioned test demonstrated the ability of the detectors to withstand a high ambient temperature appropriate to its class (not applicable to class A1, A2 and B detectors).	
Durability of operational reliability; vibration resistance	1) Heat detectors are compliant with clause 5.14 Shock (operational) test. Mentioned test demonstrated the immunity of the detectors to mechanical shocks in the anticipated service environment 2) Heat detectors are compliant with clause 5.17 Vibration, sinusoidal (endurance) test. Mentioned test demonstrated the ability of the detectors to withstand the long-term effects of vibration at levels appropriate to the service environment	
Durability of operational reliability; humidity resistance	1) Heat detectors are compliant with clause 5.11 Damp heat, cyclic (operational) test. Mentioned test demonstrated the ability of the detectors to function correctly at high relative humidities (with condensation), which can occur for short periods in the anticipated service environment 2) Heat detectors are compliant with clause 5.12 Damp heat, steady state (endurance) test. Mentioned test demonstrated the ability of the detectors to withstand the long-term effects of humidity in the service environment (e.g. changes in the electrical properties of materials, chemical reactions involving moisture, galvanic corrosion etc.)	
Durability of operational reliability; corrosion resistance	1) Heat detectors are compliant with clause 5.13 SO_2 corrosion (endurance) test. Mentioned test demonstrated the ability of the detectors to withstand the corrosive effects of sulphur dioxide as an atmospheric pollutant	
Durability of operational reliability; electrical stability	1) Heat detectors are compliant with clause 5.18 Electromagnetic compatibility (EMC), immunity tests (operational). Heat detectors passed the following tests:	

	electrostatic discharge, radiated electromagnetic fields, conducted disturbances induced by electromagnetic fields, fast transient bursts, slow high energy voltage surges	

[a] Suffix S detectors only
[b] Suffix R detectors only

10. The performance of the product indentified in points 1 and 2 is in conformity with the declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Mr Clifton Gare-Mogg, Conformance Manager

.....
(name and function)

Havant, 01/07/2013

.....
(place and date of issue)

.....
(signature)

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