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UK Declaration of Performance - DoP

Declaration in accordance to (UK) Construction Products Regulation No 305/2011

UK Dichiarazione di Prestazione - DoP

Dichiarazione in conformità al regolamento sui prodotti da costruzione (Regno Unito) n. 305/2011

N°: AT5910UK

1. Unique identification code of the product-type:

Codice di identificazione unico del prodotto-tipo:

Product type: Heat Detectors; Smoke Detector with scattered light, transmitted light or ionization

Model Number and Description: A1000 - ALTAIR Analogue Addressable Photoelectric Smoke Detector with Short Circuit Isolator
A2000 - ALTAIR Addressable Multi-criteria Detector with Short Circuit Isolator
A3500 - ALTAIR Analogue Addressable Class P Heat Detector with Short Circuit Isolator

2. Intended use/es:

Usi previsti:

Fire Safety

Point detectors for use in fire detection and fire alarm systems installed in and around buildings

Fire detection and fire alarm systems installed in and around buildings

Sicurezza Antincendio

Rivelatori puntiformi per l'uso in sistemi di rivelamento e allarme antincendio installati all'interno ed intorno agli edifici

Sistemi di rivelamento ed allarme antincendio installati all'interno ed intorno agli edifici

3. Manufacturer:

Fabbricante:

ARGUS SECURITY Srl
Via del Canneto 14
Valle delle Noghere - 34015 Muggia - Trieste - Italy
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4. Authorised representative:

Mandatario:

Halma UK DS LTS
Misbourne Court, Rectory Way, Amersham
Bucks HP7 0DE, UK

5. System/s of AVCP:

Sistemi di VVCP:

System 1

6. Designated standard(s):

Norme Armonizzate:

EN 54-5:2017 + A1:2018 (A2000 - A3500)
EN 54-7:2017 (A1000 - A2000)

EN 54-17:2005 (A1000 - A2000 - A3500)
CEA 4021:2003 (A2000)

7. UK Approved Body/ies

Organismi Notificati:

Bre Global Ltd, No. 0832

Product code:	**A1000**	CoP Reference:	**0832-UCKA-CPR-F0481**
	A2000	CoP Reference:	**0832-UCKA-CPR-F0482**
	A3500	CoP Reference:	**0832-UCKA-CPR-F0480**

8. Declared performance/s:

Prestazioni Dichiarate:

ESSENTIAL CHARACTERISTICS	CLAUSE APPLICABLE	PERFORMANCE	REGULATORY CLASSES	HARMONISED STANDARD
Operational reliability:				
Position of heat sensitive element	4.2.1	The heat sensitive element(s) or at least part of it, except elements with auxiliary functions (e.g.characteristic correctors), are a distance ≥15mm from the mounting surface of the point heat detector.		
Individual alarm indication	4.2.2	Category A1R The heat detector is provided with an integral red visual indicator and can remain identified until the alarm is reset. The visual indicator is visible from a distance of 6 m directly below the point heat detector,in an ambient light intensity up to 500 lx.		
Connection of ancillary devices	4.2.3	Open or short circuit failures of connection to ancillary device do not prevent the correct operation of the detector		
Monitoring of detachable point heat detectors	4.2.4	A fault condition is signaled when the detector is removed from the mounting base.		
Manufacturer's adjustments	4.2.5	It is not possible to change the manufacture´s settings expept by special means (e.g. a special code or tool, or by breaking or remove a seal).		
Onsite adjustments of response behavior	4.2.6	N/A		
Software controlled detectors (when provided)	4.2.7	The software documentation and the software design complies supplied by the manufacturer with the requirements of this standard.		
Nominal activation conditions/sensitivity:				EN 54-5:2017 + A1:2018
Directional dependence	4.3.1	The response time of the point dectetor do not unduly depend on the direction of airflow around the point heat detector.		
Static response temperature	4.3.2	The response temperatures of the point heat detectors lie between the minimum and maximum static response temperatures, according to the category of the point heat detector in Table 1 above.		
Response times from typical application temperature	4.3.3	The response times of the point heat detector lie between the lower and upper response time limits for the appropriate point heat detector category in Table 2 above.		

Response times from 25°	4.3.4	The response time at 3 K min^{-1} exceeds 7 min 13 s and the response time at 20 K min^{-1} exceeds 1 min 0 s.		
Response times from high ambient temperature	4.3.5	No alarm or fault signal was given at high ambient temperatures appropriate to the anticipated service temepratures. A1R 3 K min^{-1} , Lower limit, 1 min 20 s and upper limit 13 m 40 s. 20 K min^{-1} , Lower limit, 12 s and upper limit 2 m 20 s.		
Reproducibility	4.3.6	The response times of the point heat detectors lie between the lower ad upper response time limits specified in Table 2 above.		
Response delay (response time):				
Additional test for suffix S point heat detectors	4.4.1	N/A		
Additional test for suffix R point heat detectors	4.4.2	Suffix R, the point heat detector maintains the response requirements of its category, in table 2 above, for high rates of rise of temperature from an initial temperature below the typical application temperature applicable to the category marked on it.		
		Point heat detector category: A1R; Initial conditioning temperature °C: 5 ±2		
Tolerance to supply voltage:				
Variation in supply parameters	4.5	The point heat detector does not unduly depent on variation in the supply parameters and lie between the lower and upper response time limits specified in Table 2 above.		
Durability of nominal activation conditions/Sensitivity:				
temperature resistance				
Cold (operational)	4.6.1.1	No alarm or fault signal was given during the transition to the conditioning temperature or during the period at the condition temperature A1R: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6		EN 54-5:2017 + A1:2018
Dry heat (operational)	4.6.1.2	No fault signal was given on reconnection attributable to the endurance conditioning A1R: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6	A1R	
Humidity resistance				

Damp heat, cyclic (operational)	4.6.2.1	No alarm or fault signal was given during the conditioning. Lower temperature: (25±3) °C Upper temperature: (40±2) °C Relative humidity: At lower temperature :≥ 95 % At upper temperature : (93 ±3) % A1R: 20 K min-1 was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6	
Damp heat, steady-state (endurance)	4.6.2.2	No fault signal was given on reconnection attributable to the endurance conditioning. Conditioning Temperature: 40 ±2 °C Relative Humidity: 93 ±3 % Duration:21 days A1R: 20 K min-1 was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6 BS: 20 K min-1 was not less than 1 min and did	
Corrosion resistance			
Sulphur dioxide (SO_2) corrosion (endurance)	4.6.3	No fault signal was given on reconnection attributable to the endurance conditioning. Conditioning Temperature: 25 ±2 °C Relative Humidity: 93 ±3 % SO_2 concentration: 25 ±5 ppm (by volume) Duration :21 days A1R: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6	
Vibration resistance			
Shock (operational)	4.6.4.1	No alarm or fault signal was given during the conditioning period or an additional 2 min. For specimen with a mass ≤ 4,75 kg : Shock pulse type: Half sine Pulse duration : 6 ms Peak acceleration: 10X (100-20M) ms-2 (M is specimen mass in Kg) Number of directions: 6 Pulses per direction: 3 A1R: 20 K min-1 was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6	
Impact (operational)	4.6.4.2	No alarm or fault signal was given during the conditioning period or an additional 2 min. Conditioning: Impact energy: 1,9 ±0,1 J Hammer velocity: 1,5 ±0,13 ms^{-1} Number of impacts: 1 A1R: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6	EN 54-5:2017 + A1:2018

Vibration, sinusoidal (operational)	4.6.4.3	No fault signal was given during the conditioning Conditioning: Frequency range: 10 to 150 Hz Acceleration amplitude: 5 ms^{-2}(≈0,5 gn) Number of axes : 3 Sweep rate: 1 octave min^{-1} Number of sweep cycles: 1 per axis A1R: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6		
Vibration, sinusoidal (endurance)	4.6.4.4	No fault signal was given on reconnection attributable to the endurance conditioning. Conditioning: Frequency range: 10 to 150 Hz Acceleration amplitude: 10 ms-2(≈1,0 gn) Number of axes: 3 Sweep rate: 1 octave min-1 Number of sweep cycles: 20 per axis A1R: 20 K min-1 was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6		
Electrical stability EMC immunity (operational)	4.6.5	Compliance in EN 50130-4:2011 and No fault signal was given during the conditioning. A1R: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6		

ESSENTIAL CHARACTERISTICS	CLAUSE APPLICABLE	PERFORMANCE	REGULATORY CLASSES	HARMONISED STANDARD
Operational reliability:			None	EN 54-7:2018
Individual alarm indication	4.2.1	The visual indicator(s) are visible from a distance of 6 m in an ambient light intensity up to 500lx.		
Connection of ancillary devices	4.2.2	Open or short circuit failures of connection to ancillary device did not prevent the correct operation of the detector.		
Monitoring of detachable detectors	4.2.3	A fault condition is signaled when the detector is removed from the mounting base.		
Manufacturer´s adjustments	4.2.4	It is not possible to adjust the detector settings without the use of a special tool to access into the detector or use of a code to enabling entry into the panel programming software.		
On site adjustment of response behavior	4.2.5	The mode(s) of operation are adjustable from the Control and Indicating Equipment by use of a loop communication protocol. Access to enable mode changes is by software control of the protocol communication.		
Protection against the ingress of foreign bodies	4.2.6	The chamber is designed so that a sphere of diameter (1,3±0,05) mm cannot pass into the sensor chamber.		

Response to slowly developing fires	4.2.7	The provision of "drift compensation" (e.g. to compensate for sensor drift due to the build-up of dirt in the detector), does not lead to a significant reduction in the detectors sensitivity to slowly developing fires.		
Software controlled detectors (when provided)	4.2.8	The software documentation and the software design complies with the requirements of EN 54-7:2018.		
Nominal activation conditions/sensitivity:				
Repeatability	4.3.1	Ratio of response values $m_{max}:m_{min} \leq 1.6$ Lower response value, $m_{max}:m_{min} > 0.05$ dB m^{-1}		
Directional dependence	4.3.2	Ratio of response values $m_{max}:m_{min} \leq 1.6$ Lower response value, $m_{max}:m_{min} > 0.05$ dB m^{-1}		
Reproducibility	4.3.3	Ratio of response values $m_{max}:m \leq 1.33$ Ratio of the response values $m_{min} \leq 1.5$ Lower response value, $m_{min} \geq$ 0.05 dB m^{-1}		
Response delay (response time):				
Air movement	4.4.1	Ratio is > 0.0625 and < 1.60 and the point smoke detector did not emit a fault nor alarm signal during the test with aerosol-free air		
Dazzling	4.4.2	The specimen did not emit neither an alarm nor a fault signal and Ratio of response thresholds $m_{max}:m_{min} \leq 1.6$		
Tolerance to supply voltage:				
Variation in supply parameters	4.5	Ratio of response values $m_{max}:m_{min} \leq 1.6$ Lower response value, $m_{min} \geq$ 0.05 dB m^{-1}		
Performance parameters under fire conditions:				
Fire sensitivity	4.6	Evaluated as meeting the requirements of TF2 toTF5		
Durability of nominal activation conditions/Sensitivity:				
temperature resistance				
Cold (operational)	4.7.1.1	The specimen did not emit neither an alarm nor a fault signal and Ratio of response values $m_{max}:m_{min} < 1.6$		EN 54-7:2018
Dry heat (operational)	4.7.1.2	The specimen did not emit neither an alarm nor a fault signal and Ratio of response values $m_{max}:m_{min} < 1.6$		
Humidity resistance				
Damp heat, steady-state (operational)	4.7.2.1	The specimen did not emit neither an alarm nor a fault signal and Ratio of response values $m_{max}:m_{min} < 1.6$	Threshold	

Damp heat, steady-state (endurance)	4.7.2.2	No fault signal, attributable to the endurance conditioning was given on reconnection of the specimen and Ratio of response values m_{max}:m_{min} ≤ 1.6		
Corrosion resistance				
Sulphur dioxide (SO2) corrosion (endurance)	4.7.3	No fault signal, attributable to the endurance conditioning was given on reconnection of the specimen and Ratio of response values m_{max}:m_{min} ≤ 1.6		
Vibration resistance				
Shock (operational)	4.7.4.1	No fault signal given from the specimen during the conditioning period or the additional 2 min. and Ratio of response values m_{max}:m_{min} ≤ 1.6		
Impact (operational)	4.7.4.2	No fault signal given from the specimen during the conditioning period or the additional 2 min. and Ratio of response values m_{max}:m_{min} ≤ 1.6		
Vibration, sinusoidal (operational)	4.7.4.3	No fault signal given from the specimen during the conditioning and Ratio of response values m_{max}:m_{min} ≤ 1.6		
Vibration, sinusoidal (endurance)	4.7.4.4	No fault signal, attributable to the endurance conditioning was given on reconnection of the specimen and Ratio of response values m_{max}:m_{min}≤1.6		
Electrical stability EMC immunity (operational) a) Electrostatic discharge (operational) b) Radiated electromagnetic fields (operational) c) Conducted disturbances (operational) d) Fast transient bursts (operational) e) Slow high energy voltage surge (operational)	4.7.5	No alarm or fault signal given during the conditioning and Ratio of response values m_{max}:m_{min} ≤ 1.6		EN 54-7:2018

ESSENTIAL CHARACTERISTICS	CLAUSE APPLICABLE	PERFORMANCE	HARMONISED STANDARD
Performance parameters under fire conditions	5.2 (1)	PASS	EN 54-17:2005
Operational reliability	4	PASS	
Durability of operational reliability, temperature resistance	5.4, 5.5	PASS	
Durability of operational reliability, vibration resistance	5.9 to 5.12	PASS	
Durability of operational reliability, humidity resistance	5.6, 5.7	PASS	
Durability of operational reliability, corrosion resistance	5.8	PASS	
Durability of operational reliability, electrical stability	5.3, 5.13	PASS	

(1) This is assuming that the effect of the fire is to cause a short circuit in the transmission path that is protected by these devices

The performance of the products identified in point 1 in conformity with the declared performance in the point 8. This declaration is issued under the sole responsibility of the manufacturer identified in point 3.

La prestazione dei prodotti individuati al punto 1 è conforme alla prestazione dichiarata al punto 8. Tale dichiarazione è rilasciata sotto l'esclusiva responsabilità del fabbricante individuato al punto 3.

This document in available on website: www.argussecurity.it (section download for each product)

Questo documento è disponibile sul sito: www.argussecurity.it (nella sezione "download" di ogni prodotto)

Signed for and on behalf of the manufacturer by:

Firmato a nome e per conto del Fabbricante da:

Technical Director
Mauro Ceppa

Trieste, Italy 01/09/2022