

CERTIFICATE OF CONSTANCY OF PERFORMANCE

Issued by DBI Certification, notified body No. 2531.

In compliance with *Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011* (the Construction Products Regulation or CPR), this certificate applies to the construction product

55000-217 Series 65 conventional ionisation smoke detector for use in fire detection and alarm systems

The product fulfils the essential characteristic:

	See Annex 1
Intended use:	Applications related to automatic fire alarm systems
Placed on the market under the name	e or trade mark of:
	Apollo Fire Detectors Ltd.
	36 Brookside Road
	Havant, Hampshire P09 1JR
	United Kingdom
and produced in the manufacturing p	lant:
	Apollo Fire Detectors Ltd.
	36 Brookside Road
	Havant, Hampshire P09 1JR
	United Kingdom
This certificate attests that all provision	ons concerning the assessment and verification of constancy of performance described
in Annex ZA of the standards	
EN 54-7:2018 :	Fire detection and fire alarm systems - part 7: Smoke detectors - Point smoke
	detectors that operate using scattered light, transmitted light or ionization

under system 1 for the performance set out in this certificate are applied and that the performance of the construction product is assessed to remain constant.

The attached annexes form part of this certificate.

Date of issue: 2022-02-10

This certificate will remain valid as long as neither the harmonized standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly unless suspended or withdrawn by the notified product certification body.

(This certificate supersedes the previous version of this certificate issued 2019-10-28)

This certificate was first issued 2019-10-28.

Steen Nilsson Responsible for evaluation

Allan Laursen Responsible for certification decision



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DBI Certification A/S Jernholmen 12, 2650 Hvidovre Tlf.: 36 34 90 90

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Annex 1

EXTENT

Type:

55000-217 Series 65 conventional ionization smoke detector for use in fire detection and alarm systems

Bases:

45681-200 Series 60 mounting base 45681-201 Series 60 diode mounting base 45681-245 Series 65 relay mounting base 45681-246 Series 65 auxiliary mounting base 45681-247 Series 65 EOL 12 Volt mounting base 45681-248 Series 65 EOL 24 Volt mounting base

Performance

Performance	-	-	
Essential characteristics	Clauses in EN 54-7:2018	Regulatory classes	Performance
Operational reliability:			
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
			500 lx.
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	None	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

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		complies with the requirements of EN 54-7:201
Nominal activation conditions/sensitivity:		
Repeatability	4.3.1	Ratio of response values
		$m_{max}:m_{min} < 1.6$
		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} ≤ 1.6
		Lower response value,
		m _{max} :m _{min} ≥ 0.05 dB m ⁻¹
Reproducibility	4.3.3	Ratio of response values
		m _{max} : <u>m</u> ≤ 1.33
		Ratio of the response values
		<u>m</u> : m _{min} <u>≤</u> 1.5
		Lower response value, m _{min}
		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 detecto
		did not emit a fault nor alarn
		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} ≤ 1.6
Tolerance to supply voltage:	45	Detic of more services
Variation in supply parameters	4.5	Threshold Ratio of response values
		IIImax.IIImin < 1.0
		Lower response value, m _{min}
Performance parameters under fire conditions:		0.05 dB m ⁻¹
Fire sensitivity	4.6	Evaluated as meeting the
The sensitivity	4.0	requirements of TF2 toTF5
Durability of nominal activation conditions/Sens	itivity:	
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
Dry heat (operational)	4.7.1.2	The specimen did not emit
		neither an alarm nor a fault
		signal and Ratio of response
		values $m_{max}:m_{min} \le 1.6$
	4704	
Humidity resistance Damp heat, steady-state (operational)	4.7.2.1	The specimen did not emit
	4.7.2.1	The specimen did not emit neither an alarm nor a fault
	4.7.2.1	The specimen did not emit neither an alarm nor a fault signal and ratio of response
Damp heat, steady-state (operational)		The specimen did not emit neither an alarm nor a fault signal and ratio of response values m _{max} :m _{min} ≤ 1.6
	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 No fault signal, attributable t
Damp heat, steady-state (operational)		The specimen did not emit neither an alarm nor a fault signal and ratio of response values m _{max} :m _{min} ≤ 1.6 No fault signal, attributable t the endurance conditioning
Damp heat, steady-state (operational)		The specimen did not emit neither an alarm nor a fault signal and ratio of response values m _{max} :m _{min} ≤ 1.6 No fault signal, attributable t the endurance conditioning was given on reconnection o
Damp heat, steady-state (operational)		The specimen did not emit neither an alarm nor a fault signal and ratio of response values m _{max} :m _{min} ≤ 1.6 No fault signal, attributable t the endurance conditioning was given on reconnection o the specimen and Ratio of
		The specimen did not emit neither an alarm nor a fault signal and ratio of response values m _{max} :m _{min} ≤ 1.6 No fault signal, attributable t the endurance conditioning was given on reconnection o

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Sulphur dioxide (SO ₂) 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} <
Vibration resistance		1.6
Shock (operational)	4.7.4.1	No fault signal given from the
Shock (operational)	4.7.4.1	specimen during the
		conditioning period or the
		additional 2 min. and Ratio of
		response values m _{max} :m _{min} <u><</u>
		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} <
	4.7.5	1.6
Electrical stability EMC immunity (operational)	4.7.5	No alarm or fault signal given
a) Electrostatic discharge (operational)		during the conditioning and
a) Electrostatic discharge (operational)		Ratio of response values
b) Radiated electromagnetic fields (operational)		$m_{max}:m_{min} \leq 1.6$
b) hadiated electromagnetic fields (operational)		
c) Conducted disturbances(operational)		
d) Fast transient bursts (operational)		
e) Slow high energy voltage surge (operational)		



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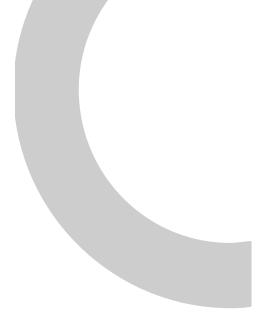
Annex 2

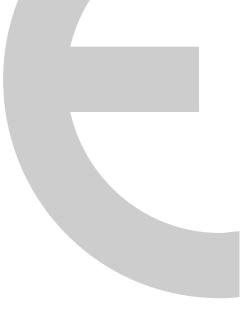
TEST DOCUMENTATION

Accredited Laboratory	Report no.	Date
VdS	BMA 00014	2000-02-11
BRE	AB-P118559	2022-01-22

TECHNICAL BASIS

File Number	Title
55000-217	Build Standard
45681-200	Build Standard
45681-201	Build Standard
45681-245	Build Standard
45681-246	Build Standard
45681-247	Build Standard
45681-248	Build Standard







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