

FDL241-9

Declaration of performance No UKP210337

English – EN 2

Zug, 2022-03-07
Siemens Schweiz AG

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Head of Fire Safety

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This declaration of performance has been issued on the basis of the Construction Products Regulations 2013 and has no significance beyond this context. In particular, without limitation, this declaration does not contain any legal relevant declarations, such as in respect to quality, durability, usability, or warranty and liability commitments of any kind. These aspects are subject to agreement on a case-by-case basis at the time when the contract is concluded. The safety information in the applicable product documentation must be observed. You can obtain the latest version of the product documentation, as well as the declarations of performance and declarations of conformity, by contacting the Customer Support Center on +49 89 9221-8000 or by visiting <https://siemens.com/bt/download>.

Product type:

FDL241-9

Product description:

Linear optical smoke detector incl. short-circuit isolator

Product variants:

FDL241-9

Components:

DLR1191 DLR1192 DLR1193 FDLB291

Intended use/es:

Fire safety, fire detection and fire alarm installations in buildings.

Manufacturer:

Siemens Schweiz AG, Theilerstrasse 1a, CH-6300 Zug

System/s of AVCP:

System 1

Harmonised standard:

EN 54-12:2015 | EN 54-17:2005 + AC:2007

Notified body/ies:

0832, BRE Global Limited

Declared performance/s:

EN 54-12:2015		
Essential characteristics	Section	Performance
Operational reliability		
Individual alarm indicator	4.2.1	Red LED
Connection of auxiliary devices	4.2.2	Proper function
Manufacturer adjustments	4.2.3	Special agent required
Setting of response behavior on site	4.2.4	Special agent required
Protection against the ingress of foreign objects	4.2.5	Protected (>1.3 mm)
Monitoring of removable detectors and connections	4.2.6	Interference signal is activated

EN 54-12:2015		
Essential characteristics	Section	Performance
Requirements for software-controlled detectors (if applicable)	4.2.7	Proper documentation, design and storage
Rated conditions for the activation/sensitivity		
Manufacturing tolerance	4.3.1	$C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\text{rep}} \leq 1.33$, $C_{\text{rep}}/C_{\min} \leq 1.5$
Reproducibility	4.3.2	Proper function, $C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Tolerance for misalignment of the beam	4.3.3	Proper function, maximum angle $>0.4^\circ$
Rapid change in light attenuation	4.3.4	Proper function
Response in the event of slowly developing fires	4.3.5	Proper function
Dependence on the length of the optical measuring section	4.3.6	$C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Scattered light	4.3.7	Proper function, $C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Supply voltage tolerance		
Fluctuations in supply parameters	4.4	$C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Performance parameters in case of fire		
Fire sensitivity	4.5	$m_a < 0.7$ dB m^{-1}
Stability of rated conditions for the activation/sensitivity		
Dry heat (during operation)	4.6.1.1	Proper function, $C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Cold (during operation)	4.6.1.2	Proper function, $C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Humid heat, constant (during operation)	4.6.2.1	Proper function, $C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Humid heat, constant (endurance test)	4.6.2.2	$C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Oscillation (endurance test)	4.6.3.1	$C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Blow (during operation)	4.6.3.2	Proper function, $C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
EMC, interference immunity (during operation)	4.6.4	Proper function, $C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
Sulphur dioxide (SO ₂) corrosion (endurance test)	4.6.5	$C_{\min} \geq 0.4$ dB, $C_{\max}/C_{\min} \leq 1.6$
EN 54-17:2005 + AC:2007		
Essential characteristics	Section	Performance
Performance in the event of fire		
Manufacturing tolerance	5.2	Passed
Operational reliability		
Requirements	4	Passed
Stability of operational reliability, temperature resistance		
Dry heat (during operation)	5.4	Passed
Cold (during operation)	5.5	Passed
Stability of operational reliability, vibration resistance		
Impact (during operation)	5.9	Passed
Blow (during operation)	5.10	Passed
Oscillation, sinusoidal (during operation)	5.11	Passed
Oscillation, sinusoidal (endurance test)	5.12	Passed
Stability of operational reliability, air humidity resistance		
Humid heat, cyclical (during operation)	5.6	Passed
Humid heat, constant (endurance test)	5.7	Passed
Stability of operational reliability, corrosion resistance		
Sulphur dioxide (SO ₂) corrosion (endurance test)	5.8	Passed
Stability of operational reliability, electrical stability		
Fluctuations in supply voltage	5.3	Passed
Electromagnetic compatibility (EMC), interference immunity tests (during operation)	5.13	Passed

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with the Construction Products Regulations 2013, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Zug, 2022-03-07

Siemens Schweiz AG

Dr. Peter Nebiker
Head of Fire Safety

Irina Penzo Feliu de Cabrera
Quality Manager Fire Safety

For signatures, see front page