



EVPU®

NOTIFIED BODY No. 1293

CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1293 – CPR – 0908

In compliance with the *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

Optical smoke detector ELKRON FDO500

For specifications see Annex to this certificate

placed on the market under the name or trade mark of

URMET S.p.A.

Via Bologna, 188/C, 10154 Torino, Italy

and produced in the manufacturing plant

VAT No. IT05288880965

This certificate attests that all provisions concerning the assessment and verification of constancy of performance and the performances described in Annex ZA of the standard

EN 54-7: 2018,

EN 54-17:2005, EN 54-17:2005/AC:2007

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on May 20th, 2024 and will remain valid as long as neither the harmonised 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.



Nová Dubnica, May 20th, 2024

Michal Mišiak
Head of CB NB No. 1293

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Annex to Certificate No. 1293 - CPR – 0908 from May 20th, 2024

General information

Based on a microcontroller and equipped with a short circuit isolator, the digital optical smoke detector, ELKRON FDO500 offers maximum reliability and accuracy for smoke sensing based on Tyndall effect.

A special algorithm supervises for smoke density filtering false alarms, performs calculations and storage of drift compensation reference values, which is updated only per effect of panel command.

The three-colour LED, in operating mode, indicate the detector status while, in service mode, it can be used to show the detector's address by a special function activated from the control panel.

The detector head must be used in conjunction with SD500, SD500R and SD500RL standard bases.

The ELKRON FDO500 is only to be used with ELKRON FAP series control panels.

Technical specifications

Operating voltage range	20 V dc (-15%, +10%) modulated
Dimensions (Ø x H)	90 x 31 mm
Weight	70 g
Enclosure material	ABS V0

Essential characteristics	Harmonised technical specification		Performance
	EN 54-7:2018	EN 54-17: 2005 EN 54-17: 2005/AC:2007	
Operational reliability	cl. 4.2.1 to 4.2.4, 4.2.5=N/A, 4.2.6 to 4.2.8	cl. 4	Pass
Nominal activation conditions / Sensitivity	cl. 4.3.1 to 4.3.3	---	Pass
Response delay (response time)	cl. 4.4.1, 4.4.2	---	Pass
Tolerance to supply voltage	cl. 4.5	---	Pass
Performance parameters under fire conditions	cl. 4.6	cl. 5.2	Pass
Durability of Nominal activation condition / Sensitivity: Temperature resistance	cl. 4.7.1.1, 4.7.1.2	cl. 5.4, 5.5	Pass
Durability of Nominal activation condition / Sensitivity: Humidity resistance	cl. 4.7.2.1, 4.7.2.2	cl. 5.6, 5.7	Pass
Durability of Nominal activation condition / Sensitivity: Corrosion resistance	cl. 4.7.3	cl. 5.8	Pass
Durability of Nominal activation condition / Sensitivity: Vibration resistance	cl. 4.7.4.1 to 4.7.4.4	cl. 5.9 to 5.12	Pass
Durability of Nominal activation condition / Sensitivity: Electrical stability	cl. 4.7.5	cl. 5.3, 5.13	Pass

History of certification

No.	Certificate No.	Description	Date of issue
1	1293-CPD-0340	Original CPD certificate issued	September 12 th , 2012
2	1293-CPR-0908	CPR certificate issued Testing according to the new edition of standard	May 20 th , 2024

Nová Dubnica, May 20th, 2024



Michal Mišiak
Head of CB NB No. 1293