



Jednostka Notyfikowana Nr 2434

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CENTRUM TECHNIKI OKRĘTOWEJ S.A.
OŚRODEK CERTYFIKACJI WYROBÓW



AC 170

CERTIFICATE OF CONSTANCY OF PERFORMANCE

2434-CPR-0198

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR) as amended, this certificate applies to the construction product:

1. Fire damper type FDA-BU basic version

with fire resistance class acc. to EN 13501-3:2005+A1:2009:

**EI 120 (ve i↔o) S, EI 90 (ve ho i↔o) S, EI 60 (ve ho i↔o) S, EI 45 (ve ho i↔o) S,
EI 30 (ve ho i↔o) S, EI 20 (ve ho i↔o) S, EI 15 (ve ho i↔o) S**

2. Fire damper type FDA-BU-KW basic version with a mushroom valve and fire damper type FDA-BU-KN basic version with a centre valve

with fire resistance class acc. to EN 13501-3:2005+A1:2009:

**EI 120 (ve ho i↔o) S, EI 90 (ve ho i↔o) S, EI 60 (ve ho i↔o) S, EI 45 (ve ho i↔o) S,
EI 30 (ve ho i↔o) S, EI 20 (ve ho i↔o) S, EI 15 (ve ho i↔o) S**

3. Fire damper type FDA-BU-E budget version

with fire resistance class acc. to EN 13501-3:2005+A1:2009:

EI 60 (ve i↔o) S, EI 45 (ve i↔o) S, EI 30 (ve i↔o) S, EI 20 (ve i↔o) S, EI 15 (ve i↔o) S

placed on the market under the name or trade mark of:

ALNOR SYSTEMY WENTYLACJI Sp. z o.o.

ul. Zwierzyniecka 8B, 00-719 Warszawa

and produced in the manufacturing plant:

ALNOR SYSTEMY WENTYLACJI Sp. z o.o.

ul. Aleja Krakowska 10, 05-552 Wola Mrokwowska

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

EN 15650:2010

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 **13.05.2021** and revised on 30.06.2022, and will remain valid as long as neither the harmonised standard, the construction product, the assessment and verification of constancy of performance methods nor the manufacturing conditions in the plant are modified significantly unless suspended or withdrawn by the notified product certification body.


Zuzanna Andrzejewska

Head of Product Certification Division of CTO S.A.

Gdańsk, 30.06.2022

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Certificate of constancy of performance No. 2434-CPR-0198, issued on 30.06.2022
Performance of fire damper type FDA-BU, FDA-BU-KW, FDA-BU-KN and FDA-BU-E

Essential characteristics	Requirements of EN 15650:2010 Standard	Level, class and/or description	Assessment
Nominal activation conditions/sensitivity	4.2.1.2	-	fulfills
Sensing element response temperature	4.2.1.2.2	-	fulfills
Sensing element load bearing capacity	4.2.1.2.3	-	fulfills
Response delay (response time)			
Closure time	4.2.1.3	≤ 2 min	fulfills
Operational reliability			
Cycling	4.3.1a	50 cycles	fulfills
Fire resistance			
- integrity	4.1.1a	Type FDA-BU: EI 120 (ve), EI 90 (ve, ho), EI 60 (ve, ho), EI 45 (ve, ho), EI 30 (ve, ho), EI 20 (ve, ho), EI 15 (ve, ho) Type FDA-BU-KW and FDA-BU-KN: EI 120 (ve, ho), EI 90 (ve, ho), EI 60 (ve, ho), EI 45 (ve, ho), EI 30 (ve, ho), EI 20 (ve, ho), EI 15 (ve, ho) Type FDA-BU-E: EI 60 (ve), EI 45 (ve), EI 30 (ve), EI 20 (ve), EI 15 (ve)	fulfills
- insulation	4.1.1.b	Type FDA-BU: EI 120 (ve), EI 90 (ve, ho), EI 60 (ve, ho), EI 45 (ve, ho), EI 30 (ve, ho), EI 20 (ve, ho), EI 15 (ve, ho) Type FDA-BU-KW and FDA-BU-KN: EI 120 (ve, ho), EI 90 (ve, ho), EI 60 (ve, ho), EI 45 (ve, ho), EI 30 (ve, ho), EI 20 (ve, ho), EI 15 (ve, ho) Type FDA-BU-E: EI 60 (ve), EI 45 (ve), EI 30 (ve), EI 20 (ve), EI 15 (ve)	fulfills
- smoke leakage	4.1.1c	S	fulfills
- mechanical stability (under E)	4.1.1a	-	fulfills
- maintenance of the cross section (under E)	4.1.1a	-	fulfills
Durability of response delay			
Sensing element response to temperature and load bearing capacity	4.2.1.2.2 4.2.1.2.3	-	fulfills
Durability of operational reliability			
Open and closing cycle tests	4.3.3.2	NPD	-

Intended use:

For use in fire ventilation systems, for protection of ventilation ducts in fire safety partitions. Works against spreading of fire and smoke by ventilation installations through maintaining of integrity and/or insulation and/or smoke leakage criteria.

Technical parameters of fire dampers:

Shape, dimensions: round, outer diameter: 97,5÷197,4 mm, inner diameter: 95,7÷195,6 mm, length: 70 mm

Housing material: galvanised steel sheet

Damper blade: two-part, made of the following board: Promatect-H, thickness: 10 mm of Promat or Nevpanel Magnesium Oxide Boards, thickness 9 mm of Nevra Yapi

Release mechanism:

- spring trigger and closing mechanism (trigger system with a fuse-link of the following type: "FDA-BU" 72°C by JPCI Controls; closing system – torsion spring of D type)

Valve type KW/KN (optional): round with the outer diameter of 248 mm consisting of frame, crossbar, frame cover and either a mushroom (KW) or centre (KN) valve.

Assembly of damper type: FDA-BU, FDA-BU-KW and FDA-BU-KN:

- in rigid walls of low density ($650 \pm 200 \text{ kg/m}^3$) or higher, thickness: 130 mm or bigger and with fire resistance class of EI 120 or higher,
- in flexible walls, thickness: 130 mm or bigger, with the structure as used in the test and fire resistance class of EI120 or higher (thicker, with higher density, more board layers)
- in ceilings with density of $2200 \pm 200 \text{ kg/m}^3$ or higher, thickness: 150 mm or bigger and with fire resistance class equal to or higher than the construction partition used in the test
- in partitions, built of cellular concrete blocks, hollow bricks (unless their openings are filled/closed prior to the final sealing of the installation duct) and prefabricated boards with fire resistance equal to or higher than the fire resistance required for cut-off flap installation.
- inside a steel pipe with wall thickness of 0.5 mm, located in vertical or horizontal building partitions.

The minimum distance between the dampers installed in separate ducts: 200 mm

The minimum distance between the damper installed in the construction partition and the nearby wall or ceiling: 75 mm.

Assembly of damper type FDA-BU-E:

- in rigid walls of low density ($650 \pm 200 \text{ kg/m}^3$) or higher, thickness: 100 mm or bigger and with fire resistance class of EI 60 or higher,
- in flexible walls, thickness: 100 mm or bigger, with structure as used in the test and fire resistance class of EI60 or higher (thicker, with higher density, more board layers),
- in partitions, built of cellular concrete blocks, hollow bricks (unless their openings are filled/closed prior to the final sealing of the installation duct) and prefabricated boards with fire resistance equal to or higher than the fire resistance required for cut-off flap installation.
- inside a steel pipe with wall thickness of 0.5 mm, located in vertical or horizontal building partitions.

The minimum distance between the dampers installed in separate ducts: 200 mm

The minimum distance between the damper installed in the construction partition and the nearby wall or ceiling: 75 mm.

The detailed technical parameters and final classification conditions according to EN 13501-3:2005+A1:2009 are listed in the Fire Resistance Classification No. RS-21/T-540 dated 16.12.2021.

