

PAVUS, a.s., Prosecká 412/74, 190 00 Praha 9 – Prosek, Czech Republic Notified Body 1391 Authorization No. ÚNMZ/SPR/012/4000/22-15 from 10<sup>th</sup> August 2022

## CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1391-CPR-2023/0166

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

## Fire damper FDMB

To be used in conjunction with partitions to maintain fire compartments in heating, ventilating and air conditioning installations.

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

MANDÍK, a.s.

Dobříšská 550, 267 24 Hostomice, Czech Republic, 26718405

and produced in the manufacturing plant:

MANDÍK, a.s.

Dobříšská 550, 267 24 Hostomice, Czech Republic

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

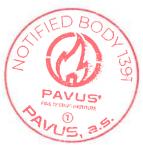
under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This Certificate was first issued on 8<sup>th</sup> December 2023 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

This Certificate replaces and cancels Certificate of Constancy of Performance No. 1391-CPR-2022/0008 of 1st December 2022 issued by NB 1391.

Prague 8th December 2023



Ing. Jan Tripes executive director – NB 1391 Annex No.1 of the Certificate of Constancy of Performance No. 1391-CPR-2023/0166 of 08.12.2023

## Technical parameters of the assessed product \*)

Min: 100 x 100 mm. Max: 1000 x 500 or 500 x 1000 mm or maximum area Nominal dimensions:

of 0,5 m<sup>2</sup>,

Damper blade thickness: 30 mm

Construction length: 375 mm or 500 mm

Galvanised / stainless / painted sheet metal Materials used:

Actuators and thermal sensing elements:

- Mechanical actuator Mandík size M1 - M5, with thermal fuse (trigger temperature 72/104/147°C)

Actuator MODULAR, size N1 - N5, with thermal fuse (trigger temperature 72/104/147°C)

- Servo actuator Belimo BFL/BFN/BF, with thermoelectric sensor (trigger temperature 72/95/120/140°C)
- Servo actuator Grunner 340TA, 360TA, with thermoelectric sensor (trigger temperature 72/95°C)
- Servo actuator Schischek, with thermoelectric sensor (trigger temperature 72°C)

Aerodynamic characteristics in accordance with EN 1751:

- Leakage through damper body: Class C - Leakage through damper blade: Class 3

Test underpressure: 300 Pa

Fire resistance classification in accordance with EN 13501-3+A1:2009\*):

El 60 (ve ho i $\leftrightarrow$ o) S, El 90 (ve ho i $\leftrightarrow$ o) S, El 120 (ve ho i $\leftrightarrow$ o) S

## Assessed product performance

Essential characteristics	Requirement clauses in EN 15650	Findings
Nominal activation conditions/sensitivity: - sensing element load bearing capacity - sensing element response temperature	4.2.1.2 4.2.1.2.3 4.2.1.2.2	Conforms EN 15650, 4.2.1.2 Conforms EN 15650, 5.2.5 ISO 10294-4:2001, 4.2
Response delay (response time): - closure time	4.2.1.3	Conforms EN 15650, 5.2.4 Response time < 2 min
Operational reliability: - cycling	4.3.1 a)	Conforms EN 15650, 4.3.1 a) 50 cycles before fire test finished
Fire resistance:		
Integrity	4.1.1, a)	Е
Insulation	4.1.1, b)	El
Smoke leakage	4.1.1, c)	EIS
Mechanical stability (Under E)	4.1.1, a)	
Maintenance of the cross section (Under E)	4.1.1, a) -	
Durability of response delay: - sensing element response to temperature and load bearing capacity	4.2.1.2.2 4.2.1.2.3	Conforms EN 15650, 4.2.1.2
Durability of operational reliability: - open and closing cycle tests	4.3.3.2	$\begin{array}{c} \text{Conforms EN 15650 4.3.3.2,} \\ \text{Actuator M} - \text{NPD} \\ \text{MODULAR} - \text{C.3.1} - \text{C}_{300} (100+100+100 \text{ cycles}) \\ \text{Belimo/Schischek} - \text{C.3.2} - \text{C}_{10.000} (10.000+200+200 \text{ cycles}) \\ \text{Grunner} - \text{C.3.3.} - \text{C}_{\text{MOD}} (10.000+10.000 \text{ cycles}) \end{array}$
Other characteristics		
Protection against corrosion	422	Conforms EN 15650, 4.2.2

Protection against corrosion 4.2.2 Damper fully operational after test

The fire damper FDMB also conforms to provisions of standard ÖNORM H 6025.

Ing. Jan Tripes executive director - NB 1391

<sup>\*)</sup> Detailed technical parameters and conditions of the final classification according to EN 13501-3+A1:2009 are stated in the Assessment Report of Performance of the Construction product No. P-1391-CPR-2023/0166 of 8th December 2023.