



**PAVUS**<sup>®</sup>  
FIRE TESTING INSTITUTE

**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-2024/0010**

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 FDMA-PM**

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, ID 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 15<sup>th</sup> January 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

**This Certificate replaces and cancels Certificate of Constancy of Performance No. 1391-CPR-2022/0048 of 1<sup>st</sup> June 2022 issued by NB 1391.**

Prague 15th January 2024



**Ing. Jan Tripes**  
executive director – NB 1391

**Technical parameters of the assessed product \*)**

Nominal dimensions: Min: DN 180 mm, max: DN 1000 mm

Damper blade thickness: 40 mm

Construction length: 375 mm

Materials used: Galvanised / stainless / painted sheet metal

Actuators and thermal sensitive 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 Gruner 340TA/360TA, with thermoelectric sensor (trigger temperature 72/95°C)
- Servo actuator Schischek ExMax-15-BF, with thermoelectric sensor (trigger temperature 72°C)

Aerodynamic characteristics in accordance with EN 1751:2014:

- Leakage through damper body: **Class C**
- Leakage through damper blade: **Class 2**

Test underpressure: **300 Pa**Fire resistance classification in accordance with EN 13501-3+A1:2009<sup>\*)</sup>:**EI 90 (ve ho i↔o) S / EI 120 (ve ho i↔o) S****Assessed product performance**

| Essential characteristics   | Requirement clauses in EN 15650   | Findings  |
|---|-----------------------------------|---|
| Nominal activation conditions/sensitivity:<br>– Sensing element load bearing capacity<br>– Sensing element response temperature | 4.2.1.2<br>4.2.1.2.3<br>4.2.1.2.2 | Conforms EN 15650, 4.2.1.2<br>Conforms EN 15650, 5.2.5<br>ISO 10294-4:2001, 4.2   |
| Response delay (response time):<br>– Closure time   | 4.2.1.3                           | Conforms EN 15650, 5.2.4<br>Closure time < 2 min,   |
| Operational reliability – cycling   | 4.3.1 a)                          | Conforms EN 15650, 4.3.1 a)<br>50 cycles before fire test finished  |
| Fire resistance:  |                                   |   |
| – Integrity   | 4.1.1, a)                         | E   |
| – Insulation  | 4.1.1, b)                         | EI  |
| – Smoke leakage   | 4.1.1, c)                         | EI S  |
| – Mechanical stability (Under E)  | 4.1.1, a)                         | –   |
| – Maintenance of the cross section (Under E)  | 4.1.1, a)                         | –   |
| Durability of response delay:<br>– sensing element response to temperature and load bearing capacity                            | 4.2.1.2.2<br>4.2.1.2.3            | Conforms EN 15650, 4.2.1.2  |
| Durability of operational reliability:<br>– open and closing cycle tests  | 4.3.3.2<br>Annex C                | Conforms EN 15650, 4.3.3.2,<br>Mechanical actuator M – NPD<br>Actuator MODULAR – C.3.1 – C <sub>300</sub> (100+100+100 cycles)<br>Belimo/Schischek/Gruner – C.3.2 – C <sub>10.000</sub> (10.000+200+200 cycles) |
| <b>Other characteristics</b>  |                                   |   |
| Protection against corrosion  | 4.2.2<br>Annex B                  | Conforms EN 15650, 4.2.2<br>Damper after test fully operational   |

\*) 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-2024/0010 of 15th January 2024.

Fire damper FDMA-PM also conforms to requirements of ÖNORM H 6025.



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