



PAVUS[®]
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 10th August 2022

CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1391-CPR-2023/0161

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 FDMR

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 5th 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.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-2021/0145 of 25th October 2021 issued by NB 1391.

Prague, 5th December 2023



Ing. Jan Tripes
executive director – NB 1391

Technical parameters of the assessed product *)

| | |
|---|--|
| Cross section shape: | Circular |
| Basic dimensions: | DN100 - 200 mm, blade thickness 20 mm DN225 - 315 mm, blade thickness 25 mm DN350 - 630 mm, blade thickness 30 mm DN710 - 800 mm, blade thickness 40 mm |
| Construction length: | 300 or 500 mm |
| Damper body material: | Galvanised/stainless/painted steel |
| Actuators: | Mandik M (size M1 – M5); thermal fuse, trigger temp. 72/104/147°C MODULAR (size N1 – N5); thermal fuse, trigger temp. 72/104/147°C Bellimo BF (BFL/BF/BFN); thermoelectric sensor, trigger temp. 72/95/120/140°C Gruner (340TA/360TA); thermoelectric sensor, trigger temp. 72/95°C Schishek ExMax-15-BF; thermoelectric sensor trigger temp. 72°C |
| Aerodynamic characteristics (EN 1751): | Damper body - class C Damper blade - class 3 |
| Test under pressure: | 300 / 500 Pa |
| Fire resistance classification in accordance with EN 13501-3+A1:2009: | |

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: - sensing element load bearing capacity - sensing element response temperature | 4.2.1.2 4.2.1.2.2 4.2.1.2.3 | 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 | < 2 min, conforms EN 15650, 5.2.4 |
| 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) | E |
| - Insulation | 4.1.1, b) | EI |
| - 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 | Conforms EN 15650 MODULAR: C.3.1 (C ₃₀₀) Belimo BF/Gruner/Schishek: C.3.2 (C _{10.000}) |

Other characteristics

| Other characteristics | Requirement clauses in EN 15650 | Findings |
|------------------------------|---------------------------------|--|
| Protection against corrosion | 4.2.2 | Conforms EN 15650, 4.2.2, annex B Damper fully operational after test |

*) Detailed technical parameters and conditions of the final classification according to EN 13501:2005+A1:2009 are stated in the Assessment Report of Performance of the Construction product No. P-1391-CPR-2023/0161 of 5th December 2023.



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