



**PAVUS, a.s.**  
Notified Body No. 1391  
Prosecká 412/74, 190 00 Praha 9 - Prosek  
Decision No. ÚNMZ/SPR/106/4000/18-7 from 20<sup>th</sup> November 2018

## CERTIFICATE OF CONSTANCY OF PERFORMANCE

**No. 1391-CPR-2019/0023**

In compliance with the 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 FDMS and FDMS-VAV**

**Technical parameters of the product:**  
are stated in the Annex No. 1 of this Certificate of constancy of performance

#### **Intended use of the product in buildings:**

Fire dampers are used in conjunction with partitions to maintain fire compartments and protect means of escape in case of fire in heating, ventilation and air conditioning (HVAC) systems in buildings. All fire dampers close automatically in response to raised temperatures indicating fire.

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

**MANDÍK, a.s.**  
**Dobříšská 550, 267 24 Hostomice, Česká republika, IČ 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:

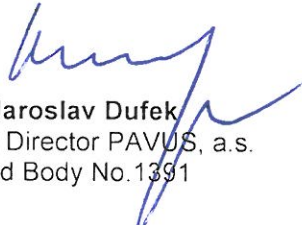
**EN 15650:2010**

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 14<sup>th</sup> June 2017. This Certificate replaces and cancels Certificate of Constancy of Performance No. 1391-CPR-2017/0092 of 14<sup>th</sup> June 2017 issued by NB 1391 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body

In Prague 14th February 2019



  
**Ing. Jaroslav Dufek**  
Managing Director PAVUS, a.s.  
Notified Body No. 1391

**Technical parameters of the product <sup>1)</sup>**

External dimension of the element: from min. diameter 100 mm to max. diameter 630 mm  
 Construction length: 120 mm – 150 mm  
 Starting devices and drives for FDMS: Bellimo or Gruner with thermoelectric starting device  
 Starting devices and drives for FDMS-VAV: Gruner with regulator VAV for regulation of air flow  
 Material versions:  
 - galvanized sheet metal  
 - stainless sheet metal

Leak tightness of the damper according to EN 1751:  
 - leakage through blade - min. class 2  
 - case leakage - min. class C


The classification according to 13501-3:2005+A1:2009:

**EI 45 (ve i↔o) S**  
**EI 60 (ve ho i↔o) S**  
**EI 90 (ve i↔o) S**

**Assessed characteristics of the product**

Essential characteristics	Requirements of EN 15650	Findings <sup>1)</sup>	Conformity Assessment
Nominal activation conditions/sensitivity:	4.2.1.2		
- sensing element load bearing capacity	4.2.1.2.2	Comply with EN 15650, 5.2.5	conforms
- sensing element response temperature	4.2.1.2.3	Comply with EN 15650, 5.2.5	conforms
Response delay (response time):	4.2.1.3	< 2 min	conforms
- closure time			
Operational reliability:	4.3.1, a)	50 cycles performed prior to test	conforms
- cycling			
<b>Fire resistance</b>			
- integrity	4.1.1, a)	E 120, E 90, E 60, E 45	conforms
- insulation	4.1.1, b)	EI 90, EI 60, EI 45	conforms
- smoke leakage	4.1.1, c)	EI 90 S, EI 60 S, EI 45 S	conforms
- mechanical stability (under E)	4.1.1, a)	-	NPD
- maintenance of the cross section (under E)	4.1.1, a)	-	NPD
Durability of response delay:	4.2.1.2.2	Sensing element of release mechanism responds to temperature and load according to EN 15650, cl. 5.2.5	conforms
- sensing element response to temperature and load bearing capacity	4.2.1.2.3		
Durability of operational reliability:	4.3.3.2	Cycling test performed (10 000+10 000 cycles) according to EN 15650, Annex C.3.3	conforms
- open and closing cycle tests			

<sup>1)</sup> Detailed technical parameters, fire classification and conditions of final classification according to EN 13501-3:2005+A1:2009 are stated in the Certification Report No. P-1391-CPR-2019/0023 of 14th February 2019.


<b>1391</b>
MANDÍK a.s., Dobříšská 550, 267 24 Hostomice, Czech Republic 19
1391 – CPR - 2019/0023
<b>EN 15650:2010</b>
<b>Fire damper</b>
type/model: fire damper FDMS
Classification: EI 45 (ve i↔o) S EI 60 (ve ho i↔o) S EI 90 (ve i↔o)



  
**Ing. Jaroslav Dufek**  
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