

PAVUS, a.s.

Notified Body No. 1391 Prosecká 412/74, 190 00 Praha 9 - Prosek Decision No. 27/2013-CPR of 13. 12. 2013

CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1391-CPR-2015/0175

In compliance with Regulation 305/2011/EU of European Parliament and of the Council of 9 March 2011 (the Construction Product regulation or CPR), this certificates applies to the construction product:

Fire damper FDMA-R and FDMA-S

Technical parametres 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, under methods of use and installation conditions stated in Certification report and related documentation. All fire dampers close automatically in response to raised temperatures indicating fire.

produced by or for:

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 performances set out in this certificate are applied and that the construction product fulfils all the prescribed requirements for these performances

This certificate was first issued on 29th August 2012 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performances of the declared essential characteristics, do not change, and the construction product, and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the product certification body. This Certificate replaces and canceles Certificate of constancy of performance No. 1391-CPR-0010/2014 of 28th July 2014 issued by NB 1391.

In Prague 8th October 2015

Ing. Jaroslav Dufek/ Managing Director PAVUS, a.s.

Notified Body No.1391

Technical parametres of the product *)

External dimension of the element:

- circular (R) from min. diameter 180 mm to max. diameter 1 000 mm,

- square (S) (w x h) from min. (180 x 180) mm

to max. (1 500 x 800) mm - type with control out of axis of blade, or to max. (1 600 x 1 000) mm - type with control in axis of blade.

Construction length:

min. 375 mm, max. 500 mm

Starting devices and drives:

- fuse safety lock 72°C/95°C/104°C/147°C with closing spring

- pulse magnetic drive

Bellimo - spring drive with starting device 72°C/95°C
 Gruner - spring drive with starting device 72°C/95°C
 Schischek - spring drive with starting device 72°C/95°C

All used marks of drives fulfil 10 000 cycles according to EN 15650.

Material versions:

galvanized sheet metal,stainless sheet metal,painted sheet metal.

Leak tightness of the damper according to EN 1751:

- over blade min. class 2 (square) and class 3 (circular)

- over case min. class C

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

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

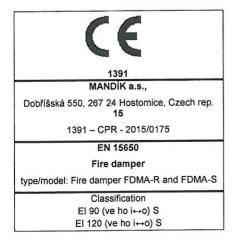
Assessed properties of the product

Essential characteristics	Requirement clauses in EN 15650	Requirement	Conformity Assessment
Nominal activation conditions/sensitivity:	4.2.1.2	EN 15650, 4.2.1.2	conforms
- sensing element load bearing capacity	4.2.1.2.2	EN 15650, 5.2.5	conforms
sensing element response temperature	4.2.1.2.3	EN 15650, 5.2.5	conforms
Response delay (response time): — closure time	4.2.1.3	EN 1366-2, 10.4.6	conforms
Operational reliability: - cycling	4.3.1, a)	The fire damper conforms to cycle test if 50 cycles are done prior to the fire test	conforms
Fire resistance		300 300 300	
- integrity	4.1.1, a)	E	conforms
- insulation	4.1.1, b)	El	conforms
- smoke leakage	4.1.1, c)	ES/EIS	conforms
mechanical stability (under E)	4.1.1, a)	-	conforms
 maintenance of the cross section (under E) 	4.1.1, a)		conforms
Durability of response delay: - sensing element response to temperature and load bearing capacity	4.2.1.2.2 4.2.1.2.3	EN 15650, 4.2.1.2	conforms
Durability of operational reliability: open and closing cycle tests	4.3.3.2	EN 15650, Annex C.3.2	conforms
Resistance against corrosion	4.2.2 Annex B	Increased resistance against corrosion - Salt spray exposure test (EN 60068-2-52)	conforms

^{*)} Detailed technical parametres and conditions of final classification according to EN 13501-3:2005+A1:2009 are stated in the Assessment Report of the construction product No. P-1391-CPR-2015/0175 of 8th October 2015.

The fire damper FDMA-R/S fulfils also all the prescribed requirements of the standard ÖNORM H 6025, see the Assessment Report of the construction product No. P-1391-CPR-2015/0175 of 8th October 2015.

Fire damper FDMA-R may be produced and placed on the market also with trade name PKTM 90-K or BSK-A-90-R, and FDMA-S also with trade name PKTM 90-C or BSK-A-90-E.





Ing. Jaroslav Dufek
Managing Director PAVUS, a.s.
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