



**PAVUS, a.s.**  
Notified Body No. 1391  
Prosecká 412/74, 190 00 Praha 9 - Prosek  
Decision No. 27/2013-CPR of 13<sup>th</sup> December 2013

## **CERTIFICATE OF CONSTANCY OF PERFORMANCE**

**No. 1391-CPR-0163/2014**

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:

### **Smoke control damper VX-6**

**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:**  
Multi compartment smoke control dampers that are to be used in smoke and heat control systems at 600°C or under fire conditions.

**produced by or for:**  
**CIAT Sp. z o.o.**  
**ul. Langiewicza 62, PL 95-050 Konstancynów Łódzki, Poland**

**and produced in the manufacturing plant:**  
**CIAT Sp. z o.o.**  
**ul. Langiewicza 62, PL 95-050 Konstancynów Łódzki, Poland**

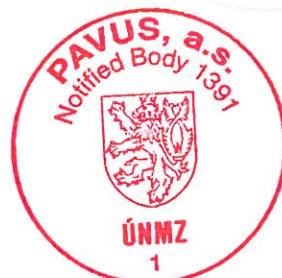
This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

**EN 12101- 8:2011**

**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 29<sup>th</sup> September 2014 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construction product, and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the product certification body.

In Prague 29<sup>th</sup> September 2014



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

### Technical parametres of the product

Trade name	Multi compartment smoke control damper
Classification according to EN 13501-4:2007+A1:2009 *) (test according to EN 1366-10:2011)	Smoke control damper VX-6 Variant with standard blade without reinforcement: <b>EI 120 (v<sub>ew</sub>-i↔o) S1500C<sub>10000</sub> AAmulti</b> <b>EI 90 (v<sub>ew</sub>-h<sub>ow</sub>-i↔o) S1500C<sub>10000</sub> AAmulti</b> , valid also for: <b>EI 60 (v<sub>ew</sub>-h<sub>ow</sub>-i↔o) S1500C<sub>10000</sub> AAmulti</b>
	Smoke control damper VX-6 + WM Subtype with reinforcement of blade: <b>EI 120 (v<sub>ew</sub>-h<sub>ow</sub>-i↔o) S1500C<sub>10000</sub> AAmulti</b> , valid also for: <b>EI 90 (v<sub>ew</sub>-h<sub>ow</sub>-i↔o) S1500C<sub>10000</sub> AAmulti</b> <b>EI 60 (v<sub>ew</sub>-h<sub>ow</sub>-i↔o) S1500C<sub>10000</sub> AAmulti</b>
Form and dimensions	Rectangular damper with dimensions: Min: 200 x 200 mm Max: 1 500 x 800 mm or 1 200 x 1 000 mm Min. length of the body: 290 mm
Actuators	1. Drive SDG-15-230, SDG-15-24 2. Mechanism GRYFIT H with electromagnet impuls 230VAC / 24VDC and with drive FDG-8-230 or FDG-8-24

### End use application

Max. underpressure	-1 500 Pa
Max. overpressure	+500 Pa
Application	<ul style="list-style-type: none"> <li>in systems with automatic activation</li> <li>connection on single or multi smoke control duct</li> <li>in combined systems (SHEVS and HVAC)</li> </ul>
Supporting construction	<ul style="list-style-type: none"> <li>concrete walls thickness min. 110 mm,</li> <li>walls from full bricks thickness min. 110 mm,</li> <li>walls from aerated concrete thickness min. 110 mm,</li> <li>flexible wall made from gypsum boards thickness 150 mm,</li> <li>concrete ceilings thickness min. 150 mm</li> </ul>
Additional information	Consequently actuators shall have no thermal devices to cause uncontrolled operation and no automatic return mechanisms that can, for instance, operate on loss of power (according to EN 12101-8:2011, cl. 4.2.1.1).

### Assessing product performances

Essential characteristics	Requirement clauses in EN 12101-8	Findings	Conformity Assessment
Nominal activation conditions/sensitivity	4.2.1.3	Closure/opening during the test in right time during right period.	Conforms
Response delay(response time)	4.2.1.4	< 60 s	Conforms
Operational reliability	4.4.2.2	C 10 000	Conforms **)
Fire resistance			
- integrity (E)	4.1.1 a), 4.4.1	E 120, E 90 < 360 m <sup>3</sup> /(h.m <sup>2</sup> )	Conforms
- insulation (EI)	4.1.1 b), 4.4.1	EI 120, EI 90	Conforms
- smoke leakage (EIS)	4.1.1 c), 4.4.1	EIS 120, EIS 90 < 200 m <sup>3</sup> /(h.m <sup>2</sup> )	Conforms ***)
- mechanical stability (under E)	4.1.1 d)	120/90 min	Conforms
- maintenance of cross-section (under E)	4.1.1 e)	120/90 min	Conforms
- high operational temperature	4.1.1 f), 4.4.1	No performance determined	NPD
Durability			
- of response delay	4.4.2.1	< 60 s	Conforms
- of operational reliability	4.4.2.2	C 10 000, < 120 s	Conforms **)

\*) Conditions of classification are stated in Classification report No. PK4-02-14-003-E-0, issued by PAVUS, a.s. of 22.9.2014 and in Fire classification No. LBO-606-K/14E, issued by Zespół Laboratoriów Badawczych Gryfitlab, Goleniów, Poland of 16.9.2014.

\*\*) On the request of producer was cycling test performed without load, therefore damper can change own position only before initiation of exhaust.

\*\*\*) Damper blade and casing ambient leakage according to EN 1751 producer does not declare.



*[Signature]*  
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