

THE CERTIFICATE OF COMPLIANCE VALIDATES AS FOLLOW:

In compliance with the Efectis Certification Rules: **DAP 21 REV. D - CERTIFICATION RULES FOR APPLICATION OUTSIDE THE EUROPEAN ECONOMIC AREA**, it was established that the fire protective construction product(s):

Name of the manufacturer:	KLIMAOPREMA	Name of the brand:	FDC : Fire Damper
Factory address/region:	GRADNA 78A 10430 SAMOBOR CROATIA	Model/N°:	FDC25 - FDC40

is submitted by the manufacturer to a factory production control, and that EFECTIS France has performed the initial type-testing for the relevant characteristics of this product, the initial inspection of the factory and of the factory production control and performs the continuous surveillance, assessment and approval of factory production control.

This certificate attests that all provisions concerning the evaluation of the performance are applied, and that the product(s) fulfill(s) all the prescribed requirements set out above.

	TEST REPORT	INSPECTION REPORT	CERTIFICATE OF COMPLIANCE
Number:	EFR 16-H - 001188 (EFR 16-004035)	EFR 17-003410	EFR-1801-0075_18-0
Date of issue:	December 2016 (October 2017)	December 2017	July 12 th 2018
Date of 1st issue:	-	-	July 12 th 2018
Expiry date:	Valid as long as the product, the test standard and the production process are not modified	Valid up to the issuance of the surveillance inspection report (no later than the expiry date of the Certificate)	January 12 th 2020

1. DESCRIPTION OF THE PRODUCT

Circular fire damper with movable blade:

Dimensions:

- FDC 25: diameter from 100 mm to 315 mm
- FDC 40: diameter from 315 mm to 800 mm

Fire damper body in galvanized steel or stainless steel :

- Thickness 8/10 mm or 10/10 mm

Blade:

- calcium silicate thickness 25 mm for model FDC 25 and 40 mm for model FDC 40
- Blade axis: horizontal or vertical

Leak tightness:

- at ambient temperature: Seal in EPDM
- at elevated temperature: Intumescent seal

Range FDC 25 equipped with: Control motor type BLF-T (Belimo) or BFL-T or MICRO or EVO or ExMax-5.10-BF (Schischek) or GNA326.1E/T12 (Siemens)

Range FDC 40 equipped with: Control motor type BFN -T or BF- T (Belimo) or MICRO or EVO or ExMax-5.10-BF (Schischek) or GNA326.1E/T12 (Siemens)



2. TEST STANDARD

EN 1363-1:	Fire resistance tests. General requirements
EN 1366-2 :	Fire resistance tests for service installations. Fire dampers
EN 15650:	Ventilation for buildings. Fire dampers

3. TEST DESCRIPTION

The temperature rise inside the furnace above the ambient temperature has been controlled according to the **standard thermal program** represented by the following function:

$$T = 345 \log_{10} (8t + 1) + 20$$

where :

t	=	Time (min)
T	=	Furnace temperature at time t (°C).

4. SPECIFICATION OF TEST SPECIMEN

Test performed on the largest size

- Fire damper mounted in construction walls made of plaster bricks
- Pressure differential: 500 Pa

5. TEST RESULT

Fire damper mounted in a wall made of plaster bricks : thickness 70 or 100 mm and density 995 kg/m³

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Other declared performances

Nominal activation conditions	Conforme
Sensing element load bearing capacity	Conforme
Sensing element response temperature : Front from the air flow Profil from the air flow	72°C and 95°C
Response delay closure time	Conforme
Closure time	Conforme
Operational reliability	Conforme
Durability of response delay	Conforme
Durability of operational reliability	50 cycles - Conforme
Nominal activation conditions	Conforme

6. NAME AND ADDRESS/REGION OF TEST FACILITIES

EFFECTIS France Voie romaine - 57270 MAIZIERES-LES-METZ - France

7. PRODUCT APPLICATION GUIDE LINE (END USE)

Flush mounted fire dampers

Signed by delegation of the Technical Certification Director,

The above certificate is valid only when the product is installed in accordance with the 'product application guideline' (End use). To verify the validity of the product, logon to our website www.efectis.com and type in the COMPLIANCE CERTIFICATE NUMBER.

Yannick LE TALLEC
Certification Director

