

## Declaration of performance

DoP No. 711/ENG/02-2023

|                                                                 |                                                                                                                                                                 |                                                                 |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Identification mark                                             | <b>FDC25/40 – Cylindrical fire damper</b>                                                                                                                       |                                                                 |
| Purpose of the product                                          | It is used in combination with fire protection elements to ensure fire protection zones in HVAC installations                                                   |                                                                 |
| Manufacturer                                                    | KLIMAOPREMA d.d.<br>Gradna 78A, 10430 Samobor, Croatia                                                                                                          |                                                                 |
| System for evaluating and verifying the constancy of properties | System 1                                                                                                                                                        |                                                                 |
| Harmonised norm                                                 | EN 15650:2010                                                                                                                                                   |                                                                 |
| Notified body                                                   | EFECTIS, France – Notified body 1812 – Certificate of constancy of performance 1812 CPR - 1161                                                                  |                                                                 |
| Declared properties                                             | <b>Characteristic</b>                                                                                                                                           | <b>Property/Result</b>                                          |
|                                                                 | <b>Nominal activation conditions/sensitivity according to ISO 10294-4:</b><br>- sensing element load bearing capacity<br>- sensing element response temperature | Passed                                                          |
|                                                                 | <b>Response delay (closing time):</b><br>- response delay (closing time) according to EN 1366-2                                                                 | Passed                                                          |
|                                                                 | <b>Operational reliability:</b><br>- cycles (opening, closing) according to EN 1366-2:                                                                          | Passed                                                          |
|                                                                 | <b>Resistance to fire:</b><br>- integrity E, insulation I<br>- smoke leakage S<br>- mechanical stability (under E)<br>- cross-section integrity (under E)       | EI 90 S<br>(ve - ho, i ↔ o)<br><br>EI 120 S<br>(ve - ho, i ↔ o) |
|                                                                 | <b>Durability of response delay:</b><br>- the sensing element responds to temperature and load capacity                                                         | Passed                                                          |
|                                                                 | <b>Durability of operational reliability:</b><br>- opening and closing cycles                                                                                   | 10 000 cycles                                                   |
|                                                                 | <b>Corrosion protection:</b><br>- according to EN 60068-2-52                                                                                                    | NPD                                                             |
|                                                                 | <b>Casing airtightness:</b><br>- according to EN 1751                                                                                                           | Class ≥ C                                                       |
|                                                                 | <b>Damper blade airtightness:</b><br>- according to EN 1751                                                                                                     | Class ≥ 3                                                       |

This Declaration of performance is available at: [www.klimaoprema.com](http://www.klimaoprema.com).

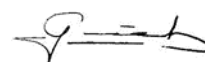
The previously determined property of the product is in accordance with the published properties. This Declaration of performance is issued in accordance with Regulation (EU) No. 305/2011 laying down harmonized conditions for the placing of construction products on the market, Delegated Regulation (EU) No. 574/2014, Delegated Regulation (EU) No. 568/2014, under the sole responsibility of the previously determined manufacturer.

Signed for the manufacturer on his behalf:

Sergio Galošić, CEO

Samobor, 10.02.2023.

**2 klimaoprema d.d.**  
Za projektiranje, proizvodnju, postavljanje,  
popravlak i održavanje opreme za klimatizaciju  
10430 SAMOBOR, GRADNA 78/A



To achieve the declared properties, this product must be used in accordance with the manufacturer's specifications and technical instructions!

| Range                                  | Supporting construction         | Wall thickness | Supporting construction details                                                                                             | Type of installation                             | Classification                                                        | Tested underpressure | Details | Construction type                                                                     | Sealing type                                                                          |
|----------------------------------------|---------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------|----------------------|---------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| d100-d800 mm                           | Rigid wall                      | ≥ 100 mm       | Aerated concrete (≥ 550kg/m³)<br>Reinforced concrete (≥ 2200kg/m³)                                                          | Gypsum plaster / Mortar                          | EI 120 (ve i↔o)S                                                      | 500Pa                | ▼       |    |    |
|                                        |                                 |                |                                                                                                                             | Mineral wool and cover boards                    | EI 90 (ve i↔o)S                                                       | 500Pa                | ▼       |    |    |
|                                        |                                 |                |                                                                                                                             | Fire Batt/ Weichschott                           |                                                                       | 300Pa                | ▼       |    |    |
|                                        | Flexible wall                   | ≥ 70 mm        | Gypsum blocks (≥ 995kg/m³)                                                                                                  | Gypsum plaster / Mortar and cover boards         | EI 120 (ve i↔o)S                                                      | 500Pa                | ▼       |    |    |
|                                        |                                 |                |                                                                                                                             | Gypsum plaster / Mortar and cover boards         | A: EI 120 (ve i↔o)S<br>B: EI 60 (ve i↔o)S                             | 500Pa                | ▼       |    |    |
|                                        |                                 | ≥ 100 mm       | A: Plasterboard type F (EN520), mineral wool up to 100 kg/m³<br>B: Plasterboard type A (EN520), mineral wool up to 60 kg/m³ | Mineral wool and cover boards                    | A: EI 90 (ve i↔o)S<br>B: EI 60 (ve i↔o)S                              | 500Pa                | ▼       |    |    |
|                                        |                                 |                |                                                                                                                             | Fire Batt/ Weichschott                           | A: EI 90 (ve i↔o)S<br>B: EI 60 (ve i↔o)S                              | 300Pa                | ▼       |   |   |
|                                        |                                 |                |                                                                                                                             | Cross laminated timber (480 kg/m³)               | EI 90 (ve i↔o)S                                                       | 300Pa                | ▼       |  |  |
|                                        |                                 |                |                                                                                                                             | Mineral wool (≥ 23 kg/m³)                        | Eurobond Firemaster Extra<br>FDC25:EI 60 (i↔o)S<br>FDC40:EI 60 (i↔o)S | 300Pa                | ▼       |  |  |
|                                        | Flexible wall + Sliding ceiling | ≥ 100 mm       | Gypsum blocks (≥ 450 kg/m³)                                                                                                 | Gypsum plaster / Mortar + Mineral wool (70 m³/h) | FDC25:EI 120 (ve i↔o)S<br>FDC40:EI 120 (ve i↔o)S                      | 300Pa                | ▼       |  |  |
|                                        | Floor/ceiling                   | ≥ 100 mm       | Aerated concrete (≥ 550kg/m³)<br>Reinforced concrete (≥ 2200kg/m³)                                                          | Gypsum plaster / Mortar                          | EI 120 (ho i↔o)S                                                      | 500Pa                | ▼       |  |  |
|                                        |                                 |                |                                                                                                                             | Fire Batt/ Weichschott                           | EI 90 (ho i↔o)S                                                       | 300Pa                | ▼       |  |  |
|                                        |                                 |                |                                                                                                                             | Fire Batt/ Weichschott                           | EI 90 (ho i↔o)S                                                       | 300Pa                | ▼       |  |  |
| APP INSTALLATION FRAME<br>d100-d315 mm | Rigid wall                      | ≥ 100 mm       | Aerated concrete (≥ 550kg/m³)<br>Reinforced concrete (≥ 2200kg/m³)                                                          | APPLIQUE (installation frame)                    | EI 90 (ve i↔o)S                                                       | 500Pa                | ▼       |  |  |
|                                        | Flexible wall                   | ≥ 70 mm        | Gypsum blocks (≥ 995kg/m³)                                                                                                  | APPLIQUE (installation frame)                    | EI 90 (ve i↔o)S                                                       | 500Pa                | ▼       |  |  |
|                                        |                                 | ≥ 100 mm       | Plasterboard type F (EN520)                                                                                                 | APPLIQUE (installation frame)                    | EI 90 (ve i↔o)S                                                       | 500Pa                | ▼       |  |  |
|                                        |                                 | ≥ 100 mm       | Plasterboard type F (EN520)                                                                                                 | APPLIQUE (installation frame)                    | EI 90 (ve i↔o)S                                                       | 500Pa                | ▼       |  |  |

## INSTALLATION

Check for more information about certificate installations in the declaration of performance:

-  Aerated concrete (≥ 550 kg/m³) or reinforced concrete (≥ 2200 kg/m³) wall, more than 100 mm thick
-  Gypsum blocks (≥ 995 kg/m³) wall, more than 70 mm thick
-  Plasterboard wall, type F (EN520), Plasterboard wall, type A (EN520), more than 100 mm thick
-  Shaft wall, steel frame construction
-  Aerated concrete (≥ 550 kg/m³) or reinforced concrete (≥ 2200 kg/m³) ceiling / floor, more than 100 mm thick

## FIRE DAMPER - FDC

-  Gypsum plaster, mortar sealing or mortar and cover boards. Mortar EN 998-2 Classes M 2.5 to M 20 or equivalent mortars that meet the requirements of the above standards, gypsum mortar or concrete.
-  Sealing with mineral wool and cover boards
-  Sealing with mineral wool and fireproof coating - FireBatt / Weichschott
-  Applique kit installation
-  MF1/MF2 kit installation
-  Remote from wall installation

|                                                                                 |               |          |                                                                           |                               |                                                    |       |   |                                                                                       |                                                                                       |
|---------------------------------------------------------------------------------|---------------|----------|---------------------------------------------------------------------------|-------------------------------|----------------------------------------------------|-------|---|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| MF1/ MF2 INSTALLATION FRAME<br>FDC25 MF1 d100-d315 mm<br>FDC40 MF2 d355-d800 mm | Rigid wall    | ≥ 100 mm | Aerated concrete<br>( ≥ 550kg/m³)<br>Reinforced concrete<br>(≥ 2200kg/m³) | MF1/MF2 (installation frame)  | FDC25:EI 60 (ve i↔o)S<br>FDC40:EI 90 (ve i↔o)S     | 500Pa | ▼ |    |    |
|                                                                                 | Flexible wall | ≥ 70 mm  | Gypsum blocks<br>(≥ 995kg/m³)                                             | MF1/MF2 (installation frame)  | FDC25:EI 60 (ve i↔o)S<br>FDC40:EI 90 (ve i↔o)S     | 500Pa | ▼ |    |    |
|                                                                                 |               | ≥ 100 mm | Plasterboard<br>A:type A (EN520)<br>B:type F (EN520)                      | MF1/ MF2 (installation frame) | A:FDC25:EI 60 (ve i↔o)S<br>B:FDC40:EI 90 (ve i↔o)S | 500Pa | ▼ |    |    |
|                                                                                 | Floor/ceiling | ≥ 100 mm | Aerated concrete<br>( ≥ 550kg/m³)<br>Reinforced concrete<br>(≥ 2200kg/m³) | MF1/MF2 (installation frame)  | FDC25:EI120 (ho i↔o)S<br>FDC40:EI 90 (ho i↔o)S     | 300Pa | ▼ |    |    |
| MF2 INSTALLATION FRAME<br>FDC25 MF2 d100-d315 mm<br>FDC40 MF2 d355-d800 mm      | Flexible wall | ≥ 90 mm  | Shaft wall<br>(steel frame)                                               | MF2 (installation frame)      | FDC25:EI 90 (ve i↔o)S<br>FDC40:EI 90 (ve i↔o)S     | 500Pa | ▼ |    |    |
| ISOVER<br>FDC25 d100-d315 mm<br>FDC40 d355-d630 mm                              | Flexible wall | ≥ 100 mm | Plasterboard<br>type F (EN520)                                            | REMOTE FROM WALL<br>(Isover)  | EI 60 (ve i↔o)S                                    | 300Pa | ▼ |  |  |
|                                                                                 | Rigid wall    |          | Aerated concrete<br>( ≥ 550kg/m³)<br>Reinforced concrete<br>(≥ 2200kg/m³) |                               |                                                    |       |   |                                                                                       |                                                                                       |



## INSTALLATION

Check for more information about certificate installations in the declaration of performance:

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Aerated concrete ( ≥ 550 kg/m³) or reinforced concrete (≥ 2200 kg/m³) wall, more than 100 mm thick
- 

Gypsum blocks (≥ 995 kg/m³) wall, more than 70 mm thick
- 

Plasterboard wall, type F (EN520), Plasterboard wall, type A (EN520), more than 100 mm thick
- 

Shaft wall, steel frame construction
- 

Aerated concrete ( ≥ 550 kg/m³) or reinforced concrete (≥ 2200 kg/m³) ceiling / floor, more than 100 mm thick

FIRE DAMPER - FDC

- 

Gypsum plaster, mortar sealing or mortar and cover boards
- 

Sealing with mineral wool and cover boards
- 

Sealing with mineral wool and fireproof coating - FireBatt / Weichschott
- 

Applique kit installation
- 

MF1/MF2 kit installation
- 

Remote from wall installation