

# KOOLAIR



Fire dampers



**SF**

Mounting  
instructions

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## SF Series fire damper Assembly instructions



SCFR-3H  
SCFR-GD  
SCFR-PD  
SCFC-GD  
SCFC-PD

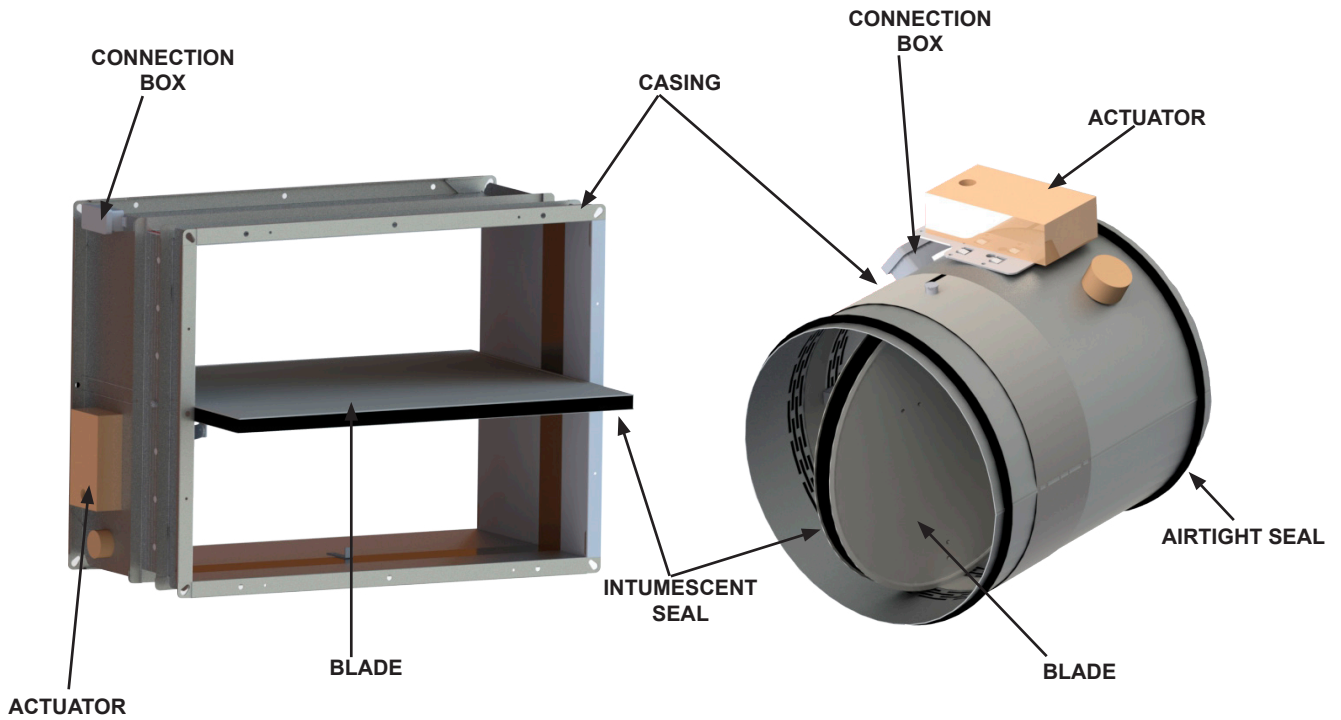


SCFR-GD  
SCFR-PD  
SCFC-GD  
SCFC-PD

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## SF Series fire damper Assembly instructions



### PRODUCT TYPE REGULATORY DESIGNATION

| Damper type       | Fusible link (TH70)<br>- Manual Activation<br>- Manual Reset | TH70 + Coil<br>(Power on/Power off)<br>- Activation<br>Manual/Coil<br>- Manual Reset | TH70 + Coil +<br>Motor<br>- Activation<br>Manual/Release<br>- Motor Reset | Motorised<br>- Activation<br>Motor<br>- Motor Reset |
|-------------------|--|--|---|---|
| Manual/Automatic  | X  |  |   |   |
| Remote Controlled |  | X  | X   | X   |

# SF Series fire damper Assembly instructions

## SPECIFIC CERTIFIED CHARACTERISTICS FOR EACH PRODUCT TYPE CE

| Certified characteristics of Fire dampers CE |  |            |            |            |                  |
|--|--|------------|------------|------------|------------------|
|  | SCFC-PD                                | SCFC-GD    | SCFR-PD    | SCFR-GD    | SCFR-3H          |
| <b>Operating mode</b>                        | Intrinsic energy                       |            |            |            |                  |
| <b>COMMAND MODE</b>                          |  |            |            |            |                  |
| <b><i>Command mode</i></b>                   |  |            |            |            |                  |
| Automatic (TH70)                             | CE<br>0370                             | CE<br>0370 | CE<br>0370 | CE<br>0370 | CE<br>0370       |
| Remote Controlled (TH70 + Release)           | CE<br>0370                             | CE<br>0370 | CE<br>0370 | CE<br>0370 | CE<br>0370       |
| Remote Controlled (TH70 + Release + Motor)   | CE<br>0370                             | CE<br>0370 | CE<br>0370 | CE<br>0370 | -                |
| Remote Controlled (Motor)                    | CE<br>0370                             | CE<br>0370 | CE<br>0370 | CE<br>0370 | CE<br>0370       |
| <b><i>Remote Control Mode</i></b>            |  |            |            |            |                  |
| Power on                                     | Yes                                    |            |            |            |                  |
| Power off                                    | Yes                                    |            |            |            |                  |
| <b><i>Uc voltage in VCC and VCA</i></b>      |  |            |            |            |                  |
| Automatic (TH70)                             | -                                      |            |            |            |                  |
| Remote Controlled (TH70 + Release)           | 24 V                                   | CE<br>0370 | 48 V       | CE<br>0370 | 230 V CE<br>0370 |
| Remote controlled (TH70 + Release + Motor)   | 24 V                                   | CE<br>0370 | 48 V       | CE<br>0370 | 230 V CE<br>0370 |
| Remote Controlled (Motor)                    | 24 V                                   | CE<br>0370 | 48 V       | CE<br>0370 | 230 V CE<br>0370 |
| <b><i>Power consump. in W</i></b>            |  |            |            |            |                  |
| Automatic (TH70)                             | -                                      |            |            |            |                  |
| Remote controlled (TH70 + Release)           | DC: Maximum 3,5 W - AC: Maximum 5,5 VA |            |            |            |                  |
| Remote controlled (TH70 + Release + Motor)   | DC: Maximum 3,5 W - AC: Maximum 5,5 VA |            |            |            |                  |
| Remote controlled (Motor)                    | From 2.5 W To 8.5 W CE<br>0370         |            |            |            |                  |
| <b>SUPPLEMENTARY FUNCTION</b>                |  |            |            |            |                  |
| Automatic (TH70)                             | Two-pole limit switch contacts PC/FC   |            |            |            |                  |
| Remote controlled (TH70 + Release)           |  |            |            |            |                  |
| Remote controlled (TH70 + Release + Motor)   |  |            |            |            |                  |
| <b>MODULARITY</b>                            |  |            |            |            |                  |
| <b><i>Modular Product</i></b>                | NOT APPLICABLE                         |            |            |            |                  |

# SF Series fire damper Assembly instructions

## SPECIFIC CERTIFIED CHARACTERISTICS FOR EACH PRODUCT TYPE CE

| Certified characteristics of Fire dampers CE+NF |                                      |         |         |         |
|---|--------------------------------------|---------|---------|---------|
|   | SCFC-PD                              | SCFC-GD | SCFR-PD | SCFR-GD |
| <b>Operating mode</b>                           | Intrinsic energy                     |         |         |         |
| <b>COMMAND MODE</b>                             |                                      |         |         |         |
| <b><i>Command mode</i></b>                      |                                      |         |         |         |
| Automatic (TH70)                                |                                      |         |         |         |
| Remote controlled (TH70 + Release)              |                                      |         |         |         |
| Remote Controlled (TH70 + Release + Motor)      |                                      |         |         |         |
| Remote Controlled (Motor)                       |                                      |         |         |         |
| <b><i>Remote Control Mode</i></b>               |                                      |         |         |         |
| Power on  | Yes                                  |         |         |         |
| Power off                                       | Yes                                  |         |         |         |
| <b><i>Uc voltage in VCC</i></b>                 |                                      |         |         |         |
| Remote controlled (TH70 + Release)              | 24 V                                 |         | 48 V    |         |
| Remote Controlled (Motor)                       | 24 V                                 |         | 48 V    |         |
| <b><i>Power consump. in W</i></b>               |                                      |         |         |         |
| Remote controlled (TH70 + Release)              | Maximum 3,5 W                        |         |         |         |
| Remote controlled (TH70 + Release+ Motor)       | Maximum 3,5 W                        |         |         |         |
| Remote Controlled (Motor)                       | Maximum 3,5 W  (BSIA)                |         |         |         |
| <b>SUPPLEMENTARY FUNCTION</b>                   |                                      |         |         |         |
| Automatic (TH70)                                | Two-pole limit switch contacts PC/FC |         |         |         |
| Remote controlled (TH70 + Release)              |                                      |         |         |         |
| Remote controlled (TH70 + Release+ Motor)       |                                      |         |         |         |
| <b>MODULARITY</b>                               |                                      |         |         |         |
| <b><i>Modular Product</i></b>                   | NOT APPLICABLE                       |         |         |         |

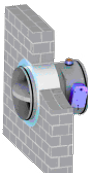

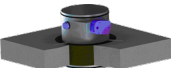



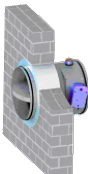

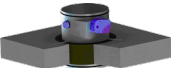

# SF Series fire damper Assembly instructions

## SPECIFIC CERTIFIED CHARACTERISTICS FOR EACH PRODUCT TYPE

| General characteristics of fire dampers   |   |
|---|---|
| <u>Characteristics CE</u>   | <p><b>Obligations:</b></p> <p>Switch to safety mode using fusible link<br/>Cold reset after switch to safety mode</p>   |
| <u>Characteristics NF</u>   |   |
| <p><b>Automatic dampers:</b><br/>-(TH70)</p>  | <p><b>Obligations:</b></p> <p>Thermal fuse according to ISO 10294-4<br/>Able to be reset after cold activation (local)</p> <p><b>Safety options:</b></p> <p>Stand-by position contact (start of run)<br/>Safety position contact (end of run)</p>           |
| <p><b>Remote Control Dampers:</b><br/>-(TH70+Release)<br/>-Motor-driven</p>           | <p><b>Obligations:</b></p> <p>Safety position contact (end of run)<br/>Able to be reset after cold activation (local or remote)<br/>Thermal fuse according to ISO 10294-4</p> <p><b>Safety options:</b></p> <p>Stand-by position contact (start of run)</p> |
| <b>ENDURANCE TESTING</b>  |   |
| <p><b>Automatic dampers:</b><br/>(TH70)</p>   | <p>After 300 testing cycles the characteristics remain within the set limit values</p>  |
| <p><b>Remote Control Dampers:</b><br/>-(TH70+Release)<br/>-(TH70+Release+Motor)</p>   |   |
| <p><b>Remote Control Dampers:</b><br/>-Motorised</p>                                  |   |
| <p>After 10,000 testing cycles the characteristics remain within set limit values</p> |   |
| <b>RANGE OF DIMENSIONAL VALIDITY</b>  |   |
| Free area   | See pages 5 and 6   |
| Dimensions  | See pages 5 and 6   |
| <b>FIRE RESISTANCE RATING</b>   |   |
| Degrees of fire resistance  | See pages 5 and 6   |
| Mounting methods  | See pages 5 and 6   |
| <b>MOUNTING</b>   |   |
| Mounting direction  | Horizontal blade axis   |
| Air flow direction  | Indifferent   |
| Direction of fire   | Indifferent   |

# SF Series fire damper Assembly instructions



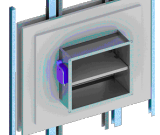


## FIRE RESISTANCE ACCORDING TO EN 13501 - 3

| SCFC-PD<br>CPR-2244-16  |   | Dimensions<br>(mm) | Construction<br>details                    | Installation<br>location | Mounting     | Classification                |
|---|---|--------------------|--|--------------------------|--------------|-------------------------------|
|    |    | Ø: 100 → 355       | d = 150 mm<br>$\rho = 1200 \text{ kg/m}^3$ | Brick Wall               | Mortar       | EI-120 (ve i↔o) S<br>(500 Pa) |
|     |    | Ø: 100 → 355       | d = 150 mm<br>$\rho = 2100 \text{ kg/m}^3$ | Floor slab               | Mortar       | EI-180 (ho i↔o) S<br>(500 Pa) |
|   |   | Ø: 100 → 355       | d ≥ 100 mm                                 | Stud wall                | Plasterboard | EI-120 (ve i↔o) S<br>(500 Pa) |
| SCFC-GD<br>CPR-2592-16  |   | Dimensions<br>(mm) | Construction<br>details                    | Installation<br>location | Mounting     | Classification                |
|  |  | Ø: 200 → 800       | d = 150 mm<br>$\rho = 1200 \text{ kg/m}^3$ | Brick Wall *             | Mortar       | EI-180 (ve i↔o) S<br>(500 Pa) |
|   |  | Ø: 200 → 630       | d = 150 mm<br>$\rho = 2100 \text{ kg/m}^3$ | Floor slab               | Mortar       | EI-180 (ho i↔o) S<br>(500 Pa) |

\* Test construction: Rigid vertical division based on ceramic blocks of 140 mm thick coated with 10 mm of mortar on the side not exposed to fire.

# SF Series fire damper Assembly instructions

## FIRE RESISTANCE ACCORDING TO EN 13501 - 3

| SCFR-PD<br>CPR-2245-16  |   | Dimensions<br>(mm)            | Construction<br>details                    | Installation<br>location | Mounting     | Classification                |
|---|---|-------------------------------|--|--------------------------|--------------|-------------------------------|
|    |    | L: 200 → 800<br>H: 100 → 600  | d = 150 mm<br>$\rho = 1200 \text{ kg/m}^3$ | Brick Wall               | Mortar       | EI-120 (ve i↔o) S<br>(500 Pa) |
|     |    | L: 200 → 800<br>H: 100 → 600  | d = 150 mm<br>$\rho = 2100 \text{ kg/m}^3$ | Floor slab               | Mortar       | EI-180 (ho i↔o) S<br>(500 Pa) |
|    |   | L: 200 → 800<br>H: 100 → 600  | d ≥ 100 mm                                 | Stud wall                | Plasterboard | EI-120 (ve i↔o) S<br>(500 Pa) |
| SCFR-GD<br>CPR-2591-16  |   | Dimensions<br>(mm)            | Construction<br>details                    | Installation<br>location | Mounting     | Classification                |
|  |  | L: 200 → 1500<br>H: 200 → 800 | d = 150 mm<br>$\rho = 1200 \text{ kg/m}^3$ | Brick Wall *             | Mortar       | EI-120 (ve i↔o) S<br>(500 Pa) |
|   |  | L: 850 → 1500<br>H: 200 → 800 | d = 150 mm<br>$\rho = 2400 \text{ kg/m}^3$ | Floor slab               | Mortar       | EI-120 (ho i↔o) S<br>(500 Pa) |
| SCFR-3H<br>CPR-3851-20  |   | Dimensions<br>(mm)            | Construction<br>details                    | Installation<br>location | Mounting     | Classification                |
|  |  | L: 200 → 1500<br>H: 200 → 800 | d = 150 mm<br>$\rho = 1300 \text{ kg/m}^3$ | Brick Wall               | Mortar       | EI-180 (ve i↔o) S<br>(500 Pa) |

\* Test construction: Rigid vertical division based on ceramic blocks of 140 mm thick coated with 10 mm of mortar on the side not exposed to fire.

### Details of support work composition, tests with Stud wall (Plasterboard):

- Fire resistance rating: EI 90.
- 2 sheets of laminated fireproof plasterboard ref. KNAUF fireproof DF thickness 12.5 mm.
- Rock wool panel ref. ProRox SL960 (ROCKWOOL).
- 2 sheets of laminated fireproof plasterboard ref. KNAUF fireproof DF thickness 12.5 mm.
- 48 mm U-shaped channels and uprights in 400 mm modules.

### Symbols

- L: Length
- H: Height
- Ø: Diameter
- d: Wall thickness
- $\rho$ : Density



# SF Series fire damper Assembly instructions

## PRODUCT CODE KEY

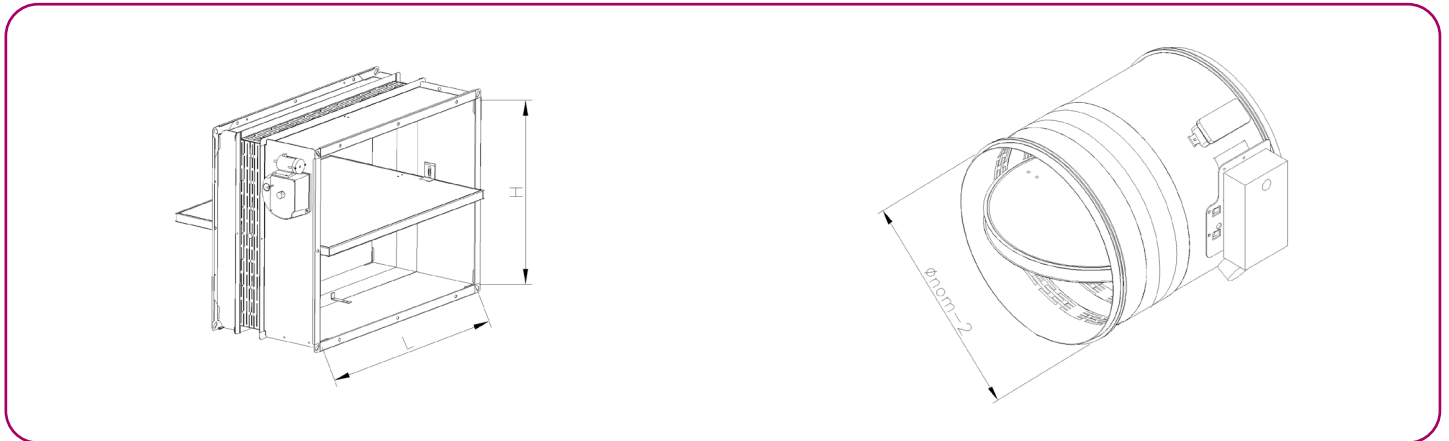
|       |  |
|-------|--|
| E     | = Integrity  |
| I     | = Isolation  |
| 120   | = Resistance time in minutes   |
| i ↔ o | = Mechanism position (indifferent to fire location)                          |
| ho    | = Application in Horizontal slab.<br>Assembly in horizontal enclosure (slab) |
| Ve    | = Application in vertical enclosure (wall / stud wall).                      |
| S     | = Airtightness   |
| Pa    | = Pressure in Pascals  |












## MARKING CODE KEY

|           |                        |
|-----------|------------------------|
| auto      | = automatic            |
| télé      | = remote controlled    |
| CC        | = Shared duct          |
| CU        | = Single duct          |
| Pa        | = Pressure in Pascals  |
| Dim.nom   | = Nominal dimensions   |
| S.L.      | = Free Area            |
| E.ALIM    | = Power input          |
| E.TELE    | = Remote control input |
| E         | = Power on             |
| R         | = /Power off           |
| Vca o Vac | = AC voltage           |
| Vcc o Vcc | = DC voltage           |

## SF Series fire damper Assembly instructions

### FREE AREA FORMULAS:



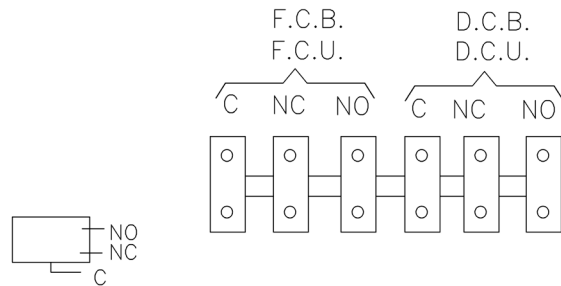
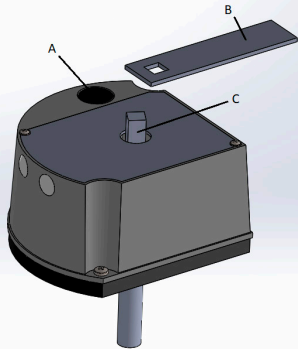
| MODEL           |   | Free area formula in dm <sup>2</sup>   |
|-----------------|---|--|
| SCFR-PD         |   | $((L \times H) - (L \times 25)) / 10000$   |
| SCFR-GD L≤700mm |   | $((L \times H) - (L \times 50) - 125) / 10000$   |
| SCFR-GD L>700mm |   | $((L \times H) - (L \times 50) - 170) / 10000$   |
| SCFR-3H         |    | $((L \times H) - (L \times 50)) / 10000$   |
| SCFC-PD         |   | $((\frac{\pi \times \varnothing_{nom}^2}{4}) - (\varnothing_{nom} \times 25)) / 10000$       |
| SCFC-GD         |   | $((\frac{\pi \times \varnothing_{nom}^2}{4}) - (50 \times \varnothing_{nom})) - 125 / 10000$ |

|                    |                               |
|--------------------|-------------------------------|
| L=                 | Damper length in mm           |
| H=                 | Damper height in mm           |
| Ø <sub>nom</sub> = | Nominal damper diameter in mm |

## SF Series fire damper Assembly instructions

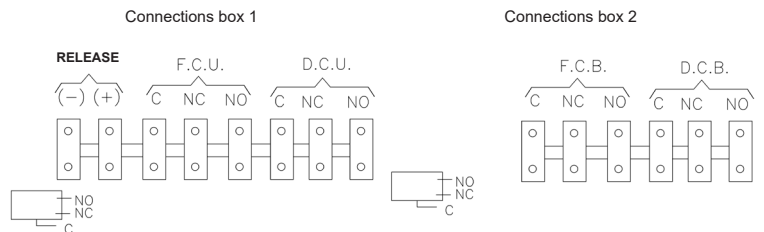
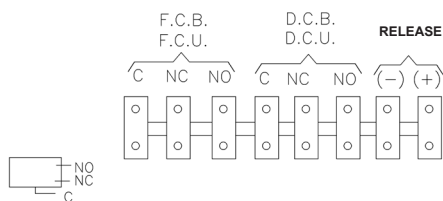
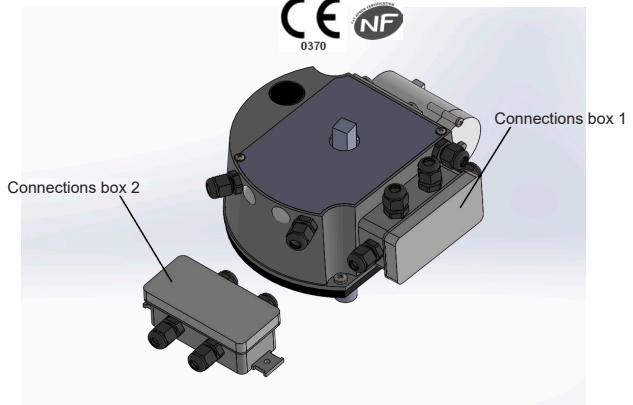
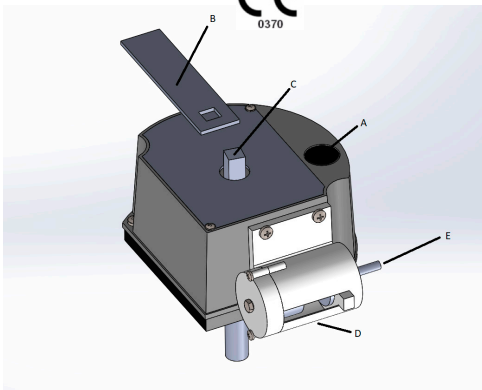
### ACTIVATION MECHANISMS AND ELECTRICAL CONNECTIONS

#### MANUAL ACTIVATION TH-70 (AUTOMATIC)



- The damper is activated by pressing button A or when the temperature exceeds 72°C.
- To reset the damper use key B to turn spindle C clockwise.

#### MANUAL ACTIVATION TH-70 + RELEASE (REMOTE CONTROLLED)

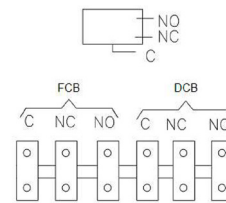
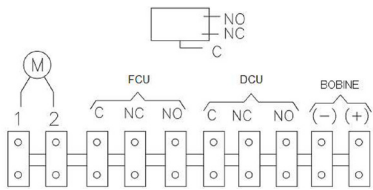
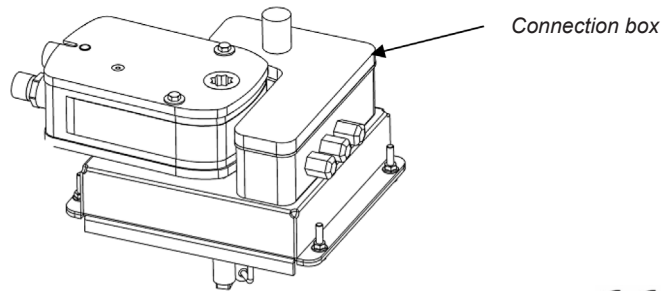


- To activate the damper, an electric signal must be sent by the shunt release or cut by the undervoltage release (D), in addition to the options for the TH-70.
- To reset the damper press down on shaft E until the coil is reset or use key B to turn spindle C.
- When the double start and end run limit switch accessories are requested, a second Famatel box will be installed.

# SF Series fire damper Assembly instructions

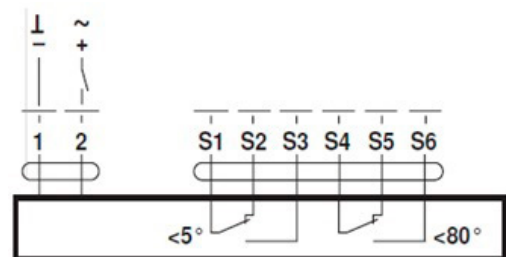
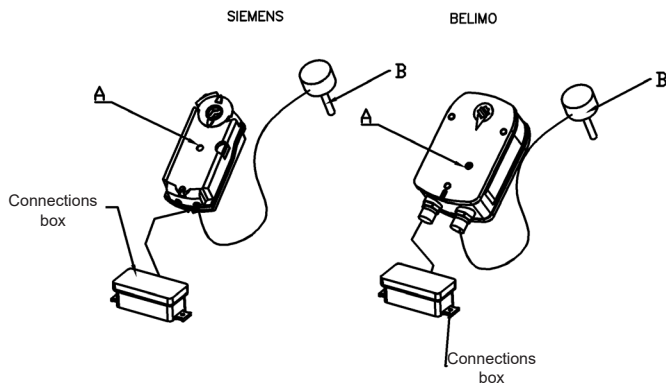
## ACTIVATION MECHANISMS AND ELECTRICAL CONNECTIONS

### MANUAL ACTIVATION TH-70 + RELEASE + MOTOR (REMOTE CONTROLLED)



- To activate the damper, an electric signal must be sent.
- To reset the damper, supply current to the motor until the fire damper reaches the open position.

### MOTORIZED (REMOTE CONTROLLED)

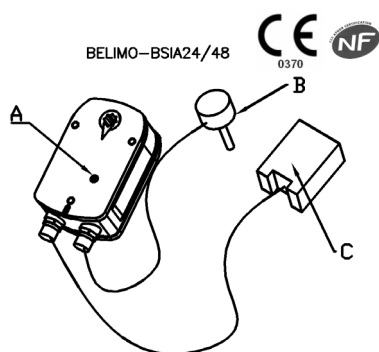


- The damper is activated by cutting the current to the motor or by temperature sensor (B) that acts at  $72^{\circ}\text{C}$ .
- To reset the damper, restore power to the motor or insert the key supplied with the motor in A and turn clockwise.

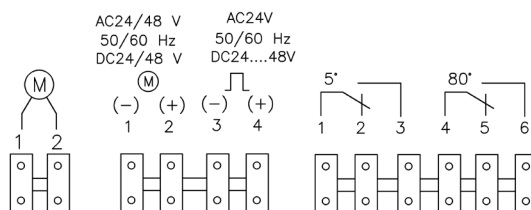
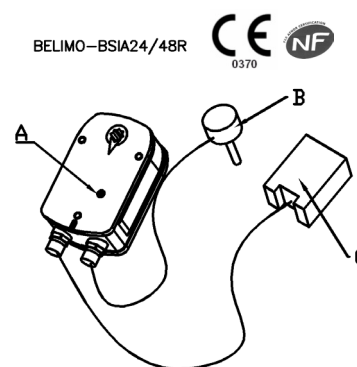
## SF Series fire damper Assembly instructions

### ACTIVATION MECHANISMS AND ELECTRICAL CONNECTIONS

**BELIMO BSIA 24/48 MOTORISED  
(REMOTE CONTROLLED)**



**BELIMO BSIA 24/48+R MOTORISED  
(REMOTE CONTROLLED)**



-The damper is activated by an electric signal sent for 0.7 seconds to terminals 3 and 4 on the BSIA box (C) or by temperature sensor (B) that acts at 72°C.  
-To reset the damper, cut off the supply to terminals 1 and 2 for more than 5 seconds before resupplying power or insert the key supplied with the motor in A and turn clockwise.

-The damper is activated by cutting the electric signal for 0.7 seconds to terminals 3 and 4 on the BSIA box (C) or by temperature sensor (B) that acts at 72°C.  
-To reset the damper, cut off the supply to terminals 1 and 2 for more than 5 seconds before resupplying power or insert the key supplied with the motor in A and turn clockwise.

### Sections and number of compatible electrical conductors

| Activation   | Certification | Min number | Max number | Min section          | Max section                 |
|--|---------------|------------|------------|----------------------|-----------------------------|
| Manual activation TH-70 (Automatic)                            |               | 0          | 12         | 0.50 mm <sup>2</sup> | 1.50 mm <sup>2</sup>        |
| Manual activation TH-70 + release (Remote controlled)          |               | 5          | 14         | 0.50 mm <sup>2</sup> | 1.50 mm <sup>2</sup>        |
| Manual activation TH-70 + release + Motor (Remote controlled)  |               | 7          | 16         | 0.50 mm <sup>2</sup> | 1.50 mm <sup>2</sup>        |
| Motorized (Remote controlled)                                  |               | 8          | 8          | 0.75 mm <sup>2</sup> | 1.50 mm <sup>2</sup>        |
| Belimo BSIA 24/48 motorized<br>Belimo BSIA 24/48 + R motorized |               | 10         | 10         | 0.75 mm <sup>2</sup> | 2.50 mm <sup>2</sup> (BSIA) |

## SF Series fire damper Assembly instructions

### INSTALLATION AND COMMISSIONING

Fire dampers are fire safety components in buildings and therefore special care must be taken with their installation. Installation of the dampers requires an opening in the wall that is 100 mm greater than the nominal dimensions of the damper.

No additional space is required for the device base as it sits outside the wall or partition. As such, when the fire damper blade is in the closed position, it will be exactly vertical in the firewall, as if it were an extension of this wall, as required by UNE-EN 1366-2. Likewise, it is necessary to respect the dimensions indicated on the drawings to allow entry of the activation box. It is important not to force the damper blade open or closed by hand; the mechanism, whether mechanical or electric, should be allowed to act to that effect.

The damper must be protected from being contaminated by sealant products and handled with caution. It must be cleaned of dust and dirt in order to avoid the risk of blade degradation.

The fusible link is a single-use element, make sure no thermal tests are performed.

#### Important:

**-Never apply a naked flame to the fusible link.**

**-When the activation mechanism includes an electromagnetic coil:**

- The electromagnetic coil (release) is very sensitive, it will be supplied with a protective bag that must not be removed until damper commissioning
- Once the protective bag has been removed, clean any dust or other particles from the coil and/or remove any debris that may be present. Check operation.

### Positioning in wall

#### SCFR-PD, SCFR-GD, SCFR-3H

|         | A  | B  | C   | D   |
|---------|----|----|-----|-----|
| SCFR-PD | 35 | 70 | 150 | 190 |
| SCFR-GD | 35 | 70 | 150 | 190 |
| SCFR-3H | 35 | 70 | 150 | 190 |

#### SCFC-PD, SCFC-GD

|         | E  |
|---------|----|
| SCFC-PD | 70 |
| SCFC-GD | 70 |

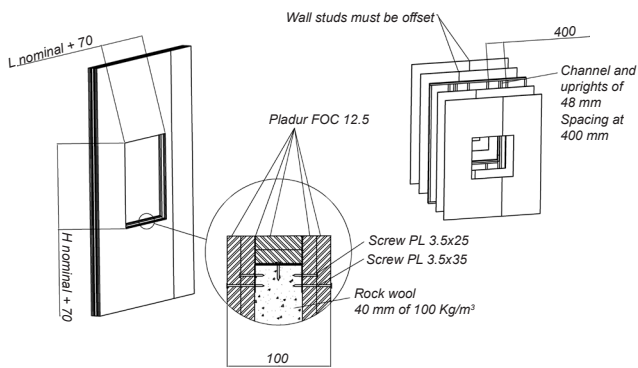
Test construction: Rigid vertical division based on ceramic blocks of 140 mm thick coated with 10 mm of mortar on the side not exposed to fire.

## SF Series fire damper Assembly instructions

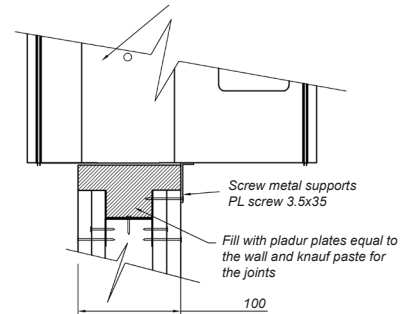
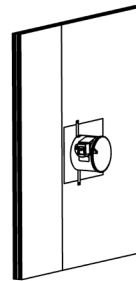
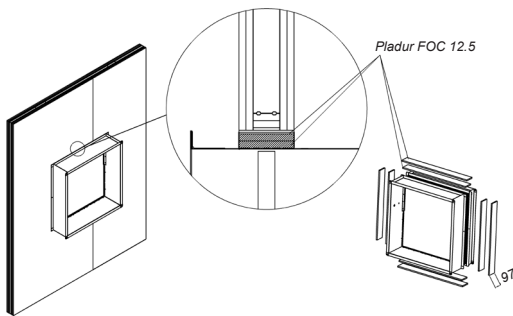
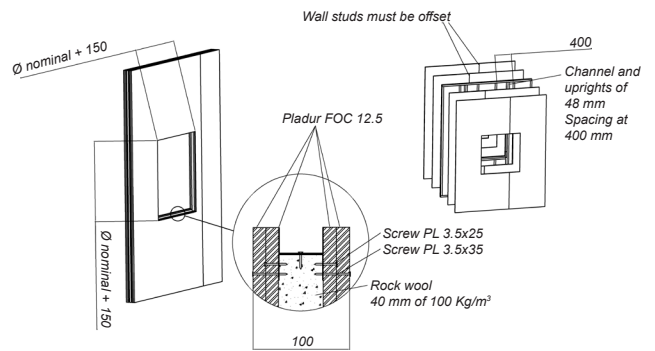
### INSTALLATION AND COMMISSIONING

#### Mounting in stud wall

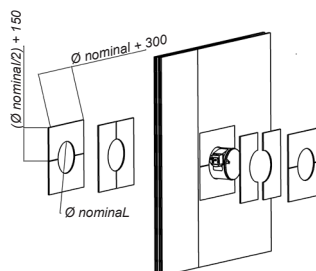
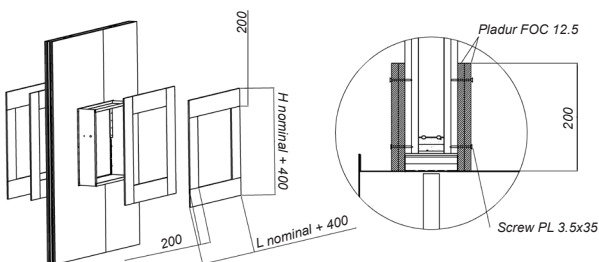
##### SCFR-PD



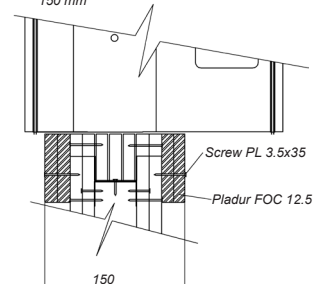
##### SCFC-PD



NOTE: The spacing between screws should not exceed 150 mm



NOTE: The spacing between screws should not exceed 150 mm

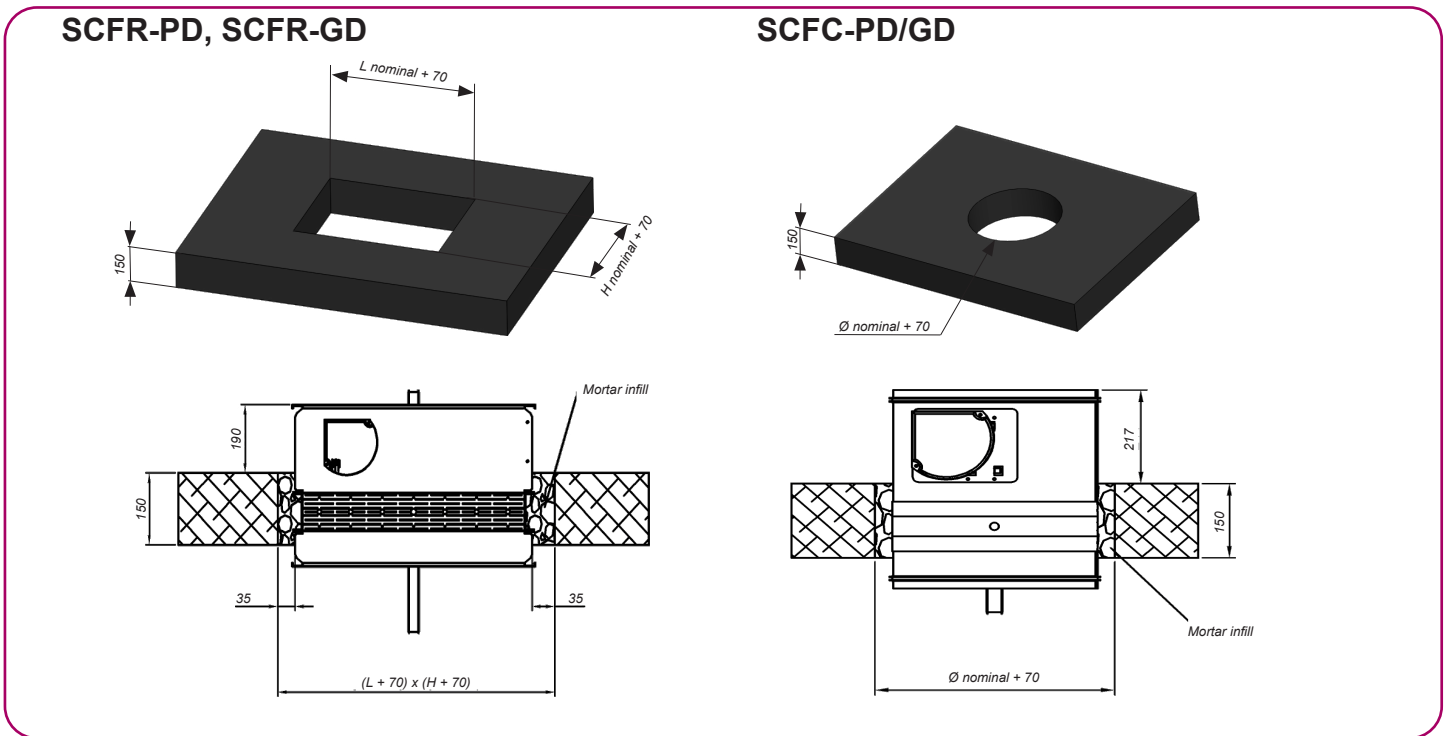


Test conditions:  
 - 15-8577-939 (SCFC-PD): KNAUF "fireproof DF" fireboard.  
 - 15-8577-1076 (SCFC-PD): KNAUF "fireproof DF" fireboard.

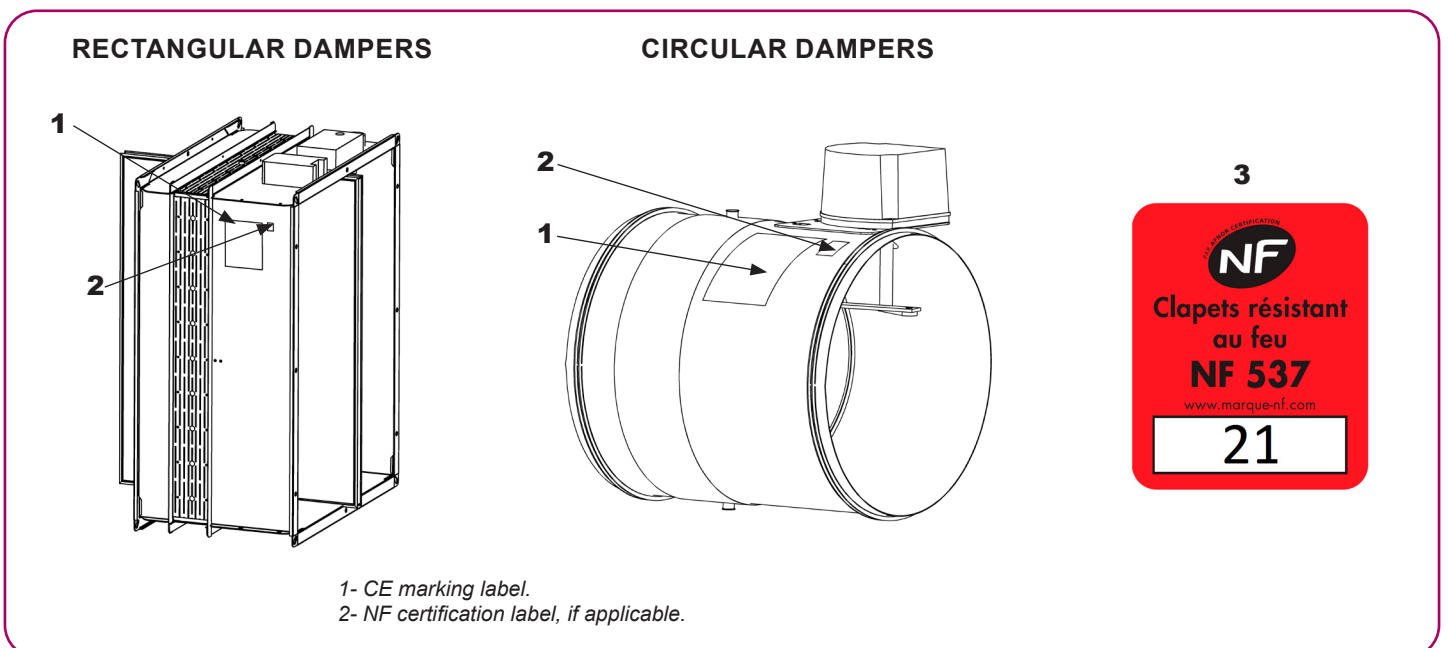
## SF Series fire damper Assembly instructions

### INSTALLATION AND COMMISSIONING

#### Mounting in slab



### DRAWINGS OF LABEL POSITIONS





## SF Series fire damper Assembly instructions

### SAFETY ACTUATOR DEVICES (SAD) AND ACCESSORIES

[As per standards ISO 10294-4: 2012, NF S 61937-1: 2003 and NF S 61937-5: 2012]

#### Fusible link (SAD)

Alloy type fusible link, which operates as a result of melting when the air flow temperature exceeds 72 °C (EN 10294). Standard version incorporates the fusible link into the internal trigger mechanism assembly.



FUSIBLE LINK (SAD)

#### Electromagnetic coil (shunt release or undervoltage release) (SAD)

There are two types: shunt release or undervoltage release.

Shunt releases, normally de-energised, operate when an electric impulse is received after power is applied.

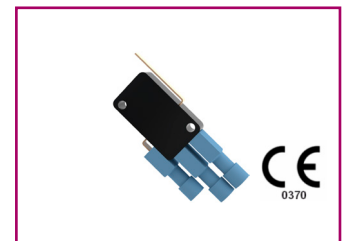
Undervoltage releases, normally energised, operate by removing or cutting power.

Available in:



ELECTRIC COIL (SAD)

| Voltage    | Shunt release | Under-voltage release |
|------------|---------------|-----------------------|
| 220 V.c.a. | CE<br>0370    | CE<br>0370            |
| 24 V.c.a.  | CE<br>0370    | CE<br>0370            |
| 24 V.c.c.  | CE NF<br>0370 | CE NF<br>0370         |
| 48 V.c.a.  | CE<br>0370    | CE<br>0370            |
| 48 V.c.c.  | CE NF<br>0370 | CE NF<br>0370         |



MICROSWITCHES (CE)

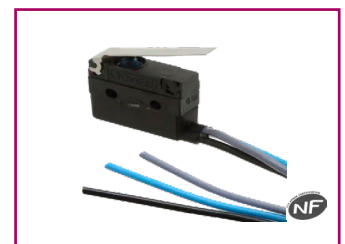
#### Start and end of run limit switch position contacts

Electrical devices that indicate the state of opening or closing of the damper by means of connection to control systems, central fire alarm systems, etc.

Degree of protection >= IP42

PC = Start of run LS position contact

FC = End of run LS position contact



MICROSWITCHES (NF)

#### Servomotor (with fusible link) (SAD)

Allows resetting and activation to be performed remotely. It incorporates the thermoelectric fusible link "T" (72 °C) (ISO 10294), as well as its own signalling contacts (start and end of run LS position contacts).

The servomotors are supplied for 24 V operation CE NF .

On request, they can be supplied to operate at 230 V CE .



SIEMENS  
SERVOMOTOR (SAD)



BELIMO SERVOMOTOR (SAD)



BELIMO SERVOMOTOR + BSIA (SAD)

# SF Series fire damper Assembly instructions

## INSTRUCTIONS FOR STORAGE, HANDLING, MAINTENANCE, INSPECTIONS AND WARRANTY

### - Storage and Handling

The damper should be stored in a location free from moisture and dust (NEVER outdoors).

The damper must remain closed until installation and commissioning (in accordance with its use).

The storage temperature should be between -5°C and +50°C. (Exceeding this temperature could damage the fusible link and cause the damper to fail).

Do not stack materials on top of the damper (and NEVER on the shutoff blade).

### - Recommended control and maintenance inspections.

The fire damper is a product that requires the approval of an accredited body and regular inspection and maintenance at defined intervals. A damper forms part of a system, therefore these actions must be integrated with building maintenance and control.

Regular inspections should therefore be carried out to meet regulatory requirements at least every six months. Certain automatic control systems in buildings allow this control to be performed more frequently (and may be required by national legislation)

### - Inspect, verify, check and confirm.

That the damper is in the normal (recommended) working position. In general, it will be sufficient to perform a visual inspection and to open and close the damper by means of its manual and/or electro-mechanical mechanisms. NEVER apply pressure to the blade; use the specific device.

Check that the damper fulfils its function within the control system (signalling and/or monitoring). Check the damper for cleanliness (it should be free of debris or objects that could prevent it from operating properly).

Check the state of:

- The blade.
- Intumescent seals.
- Blade spindles.

Checking the wiring of:

- Actuation mechanisms (if applicable).
- Switch terminals (if applicable).
- Coil terminals (if applicable).

**IMPORTANT: Never apply a naked flame to the thermal control elements (fusible links).**

### - Warranty instructions.

Koolair will not assume liability if the mounting, installation or electrical connections are not made according to this technical document. In such a case, the warranty may be affected.

# SF Series fire damper Assembly instructions

## TESTING AND CERTIFICATION

The SF Series fire damper complies with the requirements of Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (Construction Products Regulation or CPR) and Harmonised Standard EN-15650; “Ventilation for Buildings. Fire Dampers”.

All our dampers are tested by accredited bodies. Reports from these tests form the basis of the certifications of our fire dampers.

Test Standard: EN 1366-2 “Fire resistance tests for service installations Part 2: Fire Dampers”.

Classification according to EN 13501-3 “Fire classification of construction products and building elements. Part 3: Classification using data from fire resistance tests on products and elements used in building service installations: Fire resisting ducts and fire dampers”.



The CPR certificate guarantees the conformity of the functions

The Koolair Group undertakes to perform its tests with nationally and internationally accredited bodies or those that are affiliated to the International Laboratory Accreditation Cooperation (ILAC)

Certifying Body:

0370 - LGAI. Technological Center, S.A

Campus UAB – Ronda de la Font del Carmen s/n E-08193 Bellaterra (Barcelona)

Tel: +34 93 567 20 00

Fax: +34 93 567 20 01

[www.applus.com](http://www.applus.com)

## SF Series fire damper Assembly instructions

### TESTING AND CERTIFICATION

In addition to the aforementioned requirements, the SCFR-PD, SCFR-GD, SCFC-PD and SCFC-GD models also comply with the French regulations NF-S 61-937-1 and NF-S 61-937-5, obtaining the certification corresponding to the reference NF 537:



The NF mark guarantees:

- Compliance with the standard NF S 61-937 Parts 1 and 5: "Fire Safety Systems - Actuated Safety Devices"
- Compliance with the order of March 22, 2004 modified on March 14, 2011 for fire resistance rating.
- The values of the characteristics that are included in this instruction.

Certifying Body: AFNOR Certification.

11, Rue Francis de Pressensé 93571 La Plaine Saint Denis Cedex

Tel: +33(0)1 41 62 80 00

Fax: +33(0)1 49 17 90 00

Web: <http://www.afnor.org> y <http://www.marque-nf.com>

E-mail: [certification@afnor.org](mailto:certification@afnor.org)

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