# FIRE DAMPER FDR-3G, FDS-3G, FDS-EI90S & FDS-EI120S

This fire damper has guaranteed tightness





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### Systemair Production a.s.

90043 Kalinkovo 371, Slovakia 1396-CPR-0162 FDR-3G

EN 15650: 2010 Circular fire dampers

#### Nominal activation conditions/sensitivity: Pass

- sensing element load bearing capacity
- sensing element response temperature

Response delay (response time): Pass

- closure time

# Operational reliability:

- motorized cycle 10.200 cycles - manual cycle 50 cycles - modulated 20.200 cycles

#### Fire resistance:

- maintenance of the cross section (under E)

resistivity depending - integrity E

on installation method

and situation

- insulation I
- smoke leakage S
- mechanical stability (under E)
- cross section (under E)

### Durability of response delay:

- sensing element response temperature and load bearing capacity

### Durability of operational reliability:

- open and closing cycle

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# Systemair Production a.s.

90043 Kalinkovo 371, Slovakia 1396-CPR-0169 FDS-EI90S, FDS-EI120S 1396-CPR-0163 FDS-3G

# EN 15650: 2010 Rectangular fire dampers

#### Nominal activation conditions/sensitivity: **Pass**

- sensing element load bearing capacity
- sensing element response temperature

#### Response delay (response time): Pass

- closure time

Pass

Pass

**Pass** 

# Operational reliability:

- motorized cycle 10.200 cvcles - manual cycle 50 cycles - modulated 20.200 cycles

#### Fire resistance:

- maintenance of the cross section (under E)
- integrity E

FDS- EI90(ve ho  $i \leftrightarrow o$ )S

EI120(ve ho  $i \leftrightarrow o$ )S

**3G** depending on installation

method and situation

- insulation I
- smoke leakage S
- mechanical stability (under E)
- cross section (under E)

# Durability of response delay:

Pass

Pass

- sensing element response temperature and load bearing capacity

Durability of operational reliability:

Pass

- open and closing cycle

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A fire damper is used in ventilation ducts and serves to separate fire compartments in case of fire for avoiding the spread of fire between adjacent fire compartments. The type of fire damper, class of the fire resistance and production date are given on the label affixed to the fire damper.

## EVERY FIRE DAMPER MUST BE INSTALLED IN ACCORDANCE WITH THE USER MANUAL!

# The User Manual Is Available on the Webpage design.systemair.com and Includes:

- · Permitted installation methods with detailed descriptions
- · Fire resistance classes depending upon the installation method
- · Types and parameters of activating mechanisms
- · Electrical connections of activating mechanisms
- · Operating Conditions
- · Operation Manual
- · Fire Damper Functionality Check

# **OPERATING JOURNAL**

| Placement,<br>Building Object |  |
|-------------------------------|--|
| Room No.                      |  |
| Position No.                  |  |
| Damper<br>Type                |  |
| Activation<br>Type            |  |
| Nominal Size                  |  |
| Serial No.                    |  |

# Recommended Course of Action and Inspection Log as per EN 15 650:

- 1. Damper identification
- 2. Date of inspection
- 3. Checking of the electric connection of the activation mechanism (where applicable)
- 4. Checking of the damper for cleanliness and possible need for cleaning (where needed)
- 5. Checking of the blade and sealing condition, possible correction and logging (where needed)
- 6. Checking of the proper fire damper closure details can be found in the User Manual
- Checking of the damper functionality

   opening and closing using the control system,
   physical examination of the damper's behavior,
   possible correction and logging (where needed)
- Checking of the end switches' functionality in the open and closed position, possible correction and logging (where needed)
- 9. Check whether the damper is fulfilling its role as part of the regulation system (where needed)
- 10. Check whether the damper remains in its standard operating position
- 11. The damper is usually part of a system. In that case the whole system needs to be checked as described in its operation and requirements published by the builder of the system

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|-----------------|-------------|---|------------------|-------------|-------------|------------------|-------------------|------------------------------------|-------------------|-------------------|----------|
| Activation of t | he Dampe    | ·ſ  |                  |             |             |                  |                   |                                    |                   |                   |          |
| Mark the Appli  | ed Installa | tion Metl   | nod with         | a Cross:    |             |                  |                   |                                    |                   |                   |          |
|                 |             |   |                  |             |             |                  |                   |                                    |                   |                   |          |
| ① ② Dry         | 3<br>Soft   | 4<br>Kit  | <b>5.1</b><br>On | (5.2)<br>On | (5.3)<br>On | <b>5.4</b><br>On | <b>6.1</b><br>Out | <b>6.2</b><br>Out                  | <b>6.3</b><br>Out | <b>6.4</b><br>Out | 7<br>Mul |
| eriodic Damp    | er Inspect  | ions – at   | Least On         | ce Every    | 12 Mont     | hs               |                   |                                    |                   |                   |          |
| ate             |             | Description of the Discovered Defects and the Date of the Following Inspection after the Elimination of Deficiencies. |                  |             |             |                  |                   | Inspection Technician<br>Signature |                   |                   |          |
|                 |             |   |                  |             |             |                  |                   |                                    |                   |                   |          |
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|                 |             |   |                  |             |             |                  |                   |                                    |                   |                   |          |

# WARRANTY CONDITIONS

For warranty conditions contact Your local Systemair representative.

Before you can install the fire damper, it's functionality must be tested as per chapter "Fire Damper Functionality Check".

# DO NOT INSTALL NON-FUNCTIONING FIRE DAMPERS!

Changes of fire damper functionality, caused by transport or installation, aren't reclaimable after installation (deformations, damages, mechanical damage of the sealing material, foreign objects which can constrain the blade movement, wrong handling of the activation mechanism etc.).

Before you can connect the fire damper into the ductwork, the fire damper functionality must be checked again (according to chapter "Fire Damper Functionality Check").