KA-EU

GETEST VOLGENS VDI 6022

CAPILAIREVOELER

KA-EU MET ELEKTRISCHE OPENLOOPHULP

TYPE KA-EU

FOR THE EXTRACT AIR OF COMMERCIAL KITCHENS

Rectangular fire damper for use in extract air and exhaust air ducts of commercial kitchens. For the isolation of duct penetrations between fire compartments, available in 16 nominal sizes

- Nominal sizes from 250 × 225 to 1200 × 500 mm
- 100% free area ensures maximum safety
- No differential pressure, low sound power level
- Easy to clean
- Integration into the central BMS with TROXNETCOM

Optional equipment and accessories

- Electric blade opening actuator, 230 V
- Control module

Application

Application

- Fire dampers of Type KA-EU for shutting off extract air and exhaust air ducts of commercial kitchens, with general building inspectorate licence
- To prevent the propagation of fire and smoke through ductwork to adjacent designated fire compartments

Special characteristics

- General building inspectorate licence Z-41.3-692
- Tested for fire resistance properties to DIN 4104-6 and EN 1366-2
- 100% free area
- Low differential pressure and sound power level
- Integration into the central BMS with TROXNETCOM

Classification

- Fire resistance class K90to DIN 4102-6

Nominal sizes

- 250 × 225 to 1200 × 500 mm
- L: 595 – 880 mm (depending on the selected casing height)
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Description

Variants

- With thermal release mechanism
- With thermal release mechanism and control module
- With electric blade opening actuator and control module

Parts and characteristics

- Installation in horizontal or vertical ducts
- Installation in horizontal ducts with the damper blade at the top and airflow in any direction
- 100% free area, hence low differential pressure
- Secure closure by means of gas struts even when there are deposits
- Release temperature 72 °C

Attachments

- Capillary tube sensor

Construction features

- Rigid rectangular casing with installation subframe
- Connecting flanges with fixing holes on both sides, suitable for duct connection
- Scrapers on the damper blade to scrape off greasy deposits etc.
- Damper blade outside of the airflow
- Remote control with electric blade opening actuator

Materials and surfaces

Casing:

- Galvanised sheet steel
- Stainless steel 1.4301

Damper blade:

- Special insulation material faced with stainless steel

Other components:

- Damper blade shafts made of galvanised steel or stainless steel

Standards and guidelines

- EN 1366-2:1999 Fire resistance tests for service installations – Fire dampers
- DIN 4102-6, standard fire resistance test
- EN 1751 Ventilation for buildings – Air terminal devices
- VDI 2052 Ventilation equipment for kitchens

Maintenance

- The functional reliability of the fire damper must be tested at least every six months; this has to be arranged by the owner of the ventilation system; functional tests must be carried out in compliance with the basic maintenance principles stated in EN 13306 and DIN 31051. If two consecutive tests, one 6 months after the other, are successful, the next test can be conducted one year later.
- A functional test involves closing the damper blade and opening it again; with electric blade opening actuator this can be done via remote control
- Fire dampers must be included in the regular cleaning schedule of the ventilation system.
- For details on maintenance and inspection refer to the installation and operating manual
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TECHNISCHE INFORMATIE

Construction for manual operation

Functional description

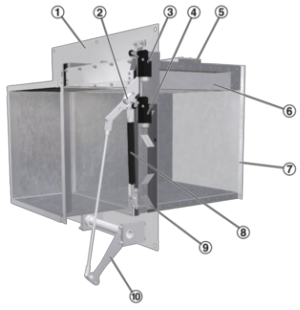
In the event of a fire, fire dampers shut automatically to prevent the propagation of fire and smoke through ductwork to adjacent designated fire compartments. When in the event of a fire the temperature rises to 72 °C, a capillary tube sensor interrupts the power supply to the electromagnet, and the damper blade is released. While power is being supplied to the electromagnets, the fire damper can be opened with the blade opening lever. The release mechanism is accessible and can be tested from the outside.

Construction with electric blade opening actuator

Functional description

In the event of a fire, fire dampers shut automatically to prevent the propagation of fire and smoke through ductwork to adjacent designated fire compartments. When in the event of a fire the temperature rises to 72 °C, a capillary tube sensor interrupts the power supply to the electromagnet, and the damper blade is released. While power is being supplied to the electromagnets, the fire damper can be opened with the blade opening lever. The release mechanism is accessible and can be tested from the outside.

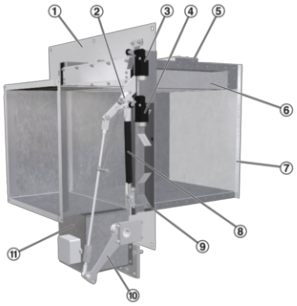
Schematische weergave KA-EU



① Montageplaat
② Veergrendel
③ Eindschakelaar DICHT-stand
④ Eindschakelaar OPEN-stand
⑤ Kleefmagneet
⑥ Klepblad met schraapstrippen
⑦ Behuizing

⑧ Gasdrukveer
⑨ Muuranker
⑩ Standhendel

Schematische weergave KA-EU met elektrische openloophulp



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⑩ Standhendel
⑪ Elektrische openloophulp

Nominal sizes	250 × 225 – 1200 × 500 mm
Volume flow rate range	Up to 6000 l/s or 21600 m³/h
Operating temperature	10 to 50 °C
Release temperature	72 °C

Quick selection

Duct dimensions B × H in mm	Volume flow rate V [l/s]						Volume flow rate V [m³/h]					
	Airflow velocity v_A [m/s]											
Duct dimensions B × H in mm	5	6	7	8	9	10	5	6	7	8	9	10
250 × 225	280	340	390	450	505	560	1008	1224	1404	1620	1818	2016
300 × 225	340	410	470	540	610	675	1224	1476	1692	1944	2196	2430
300 × 300	450	540	630	720	810	900	1620	1944	2268	2592	2916	3240
400 × 300	600	720	840	960	1080	1200	2160	2592	3024	3456	3888	4320
400 × 400	800	960	1120	1280	1440	1600	2880	3456	4032	4608	5184	5760
500 × 400	1000	1200	1400	1600	1800	2000	3600	4320	5040	5760	6480	7200
600 × 400	1200	1440	1680	1920	2160	2400	4320	5184	6048	6912	7776	8640
700 × 400	1400	1680	1960	2240	2520	2800	5040	6048	7056	8064	9072	10080
500 × 500	1250	1500	1750	2000	2250	2500	4500	5400	6300	7200	8100	9000
600 × 500	1500	1800	2100	2400	2700	3000	5400	6480	7560	8640	9720	10800
700 × 500	1750	2100	2450	2800	3150	3500	6300	7560	8820	10080	11340	12600
800 × 500	2000	2400	2800	3200	3600	4000	7200	8640	10080	11520	12960	14400
900 × 500	2250	2700	3150	3600	4050	4500	8100	9720	11340	12960	14580	16200
1000 × 500	2500	3000	3500	4000	4500	5000	9000	10800	12600	14400	16200	18000
1100 × 500	2750	3300	3850	4400	4950	5500	9900	11880	13860	15840	17820	19800
1200 × 500	3000	3600	4200	4800	5400	6000	10800	12960	15120	17280	19440	21600

Square or rectangular fire dampers for the isolation of extract air or exhaust air duct penetrations in commercial kitchens. With flanges for installation in horizontal or vertical ducts. Secure closure by means of gas struts even when there are deposits.

Tested for fire resistance properties to DIN 4102-6 and EN 1366-2, fire resistance class K90; casing made of sheet steel, stainless steel as an option. Low-leakage damper blade made of special insulation material faced with stainless steel. Scrapers on the damper blade to scrape off greasy deposits etc. Thermal release mechanism 72 °C. Two electric limit switches for capturing damper blade positions CLOSED and OPEN as well as for switching the fan off; electric blade opening actuator and control module as options. For mortar-based installation into solid walls and ceiling slabs, and into lightweight partition walls and fire walls with metal support structure and cladding on both sides.

Special characteristics

- General building inspectorate licence Z-41.3-692
- Tested for fire resistance properties to DIN 4104-6 and EN 1366-2
- 100% free area
- Low differential pressure and sound power level
- Integration into the central BMS with TROXNETCOM

Materials and surfaces

Casing:

- Galvanised sheet steel
- Stainless steel 1.4301

Damper blade:

- Special insulation material faced with stainless steel

Other components:

- Damper blade shafts made of galvanised steel or stainless steel

Technical data

- Nominal sizes: 250 × 225 – 1200 × 500 mm
- Volume flow rate range: up to 6000 l/s or 21600 m³/h
- Operating temperature: 10 to 50 °C
- Release temperature: 72 °C
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KA – EU – 2 / DE / 400×300×680 / Z01

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1 Serie

KA-EU Brandklep voor luchtafvoer in professionele keukens

2 Materiaal

Geen vermelding: verzinkt huis
2 Roestvaststaal 1.4301

3 Bestemmingsland

NL Nederland
Andere bestemmingslanden op aanvraag

4 Nominale grootte [mm]

B × H × L

5 Aanbouwdelen

Z00 Standaarduitvoering
Z02 midden onder / standaard
Z02LO links boven*
Z02LU links onder*
Z02RO rechts boven
Z02RU rechts onder
*alleen mogelijk bij B ≥ 700 mm