

# Motorised Smoke & Heat Exhaust Dampers

## Presentation of the VANTONE-M range of reset motor dampers



VANTONE-M motorised electrical reset



GFA 007 with removable core

### Compliance

- Certified **NF**.
- Approved installation:
  - on the majority of vertical smoke exhaust ducts,
  - with or without mounting frames,
  - in wall-mounted and offset duct applications.
- Free air passage in compliance with the new IT 246.
- Reminder: a minimum annual control of dampers is imposed by French Standard NF-S 61.933.

### Advantages

- No smoke leakage, no heat transfer.
- Motorised reset:
  - reduces control time,
  - avoids any operating inconveniences caused by handling the damper and its grille.
- Upgradable: the motor can be installed on site without any reduction in the free air passage.
- The motor can be activated by the "Aldes Control" pack.
- VANTONE-M presents all of the advantages of VANTONE.

## APPLICATION

- Designed for all types of smoke exhaust installations, particularly where access to the dampers is difficult, or in case of big quantities.
- The motorised reset is ideal for carrying out periodic regulatory tests (French Standard NF-S 61.933) zone by zone. Permits considerable savings in time for inspection and testing and avoids operating inconveniences.

## DESCRIPTION

- Upgradable: the damper can be delivered with the motor mounted, or in the basic model pre-equipped to accommodate the motor after it leaves the factory. The addition of a motor does not reduce the free passage of the damper.
- Normally closed gate type damper, upgradable, fire resistant, 1 leaf.
- Made up of a metal frame composed of an airtight mechanism box and a casement air inlet in refractory materials.
- Access to the electrical equipment is made via the mechanism cover (2 screws). Electrical equipment wired up to an easy access unpluggable terminal block.
- 2h flame and fire resistance rating with grille GFA 007 with removable core locked by the 007 clip.

### Mechanism

- Basic model mechanism (without motor):
  - Tripping by self-reset electromagnetic lock (24 or 48 V DC, power emission or cut-off trip mode). Lock mounted on a plate pre-equipped to accommodate the future motor system.
  - Blocking system to maintain the door in the safety position.
- Accessory: post-motor system kit 24/48 V.
- Model mechanism motorised at the factory:
  - Tripping by self-reset electromagnetic lock (24 or 48 V DC, power emission or cut-off trip mode).
- Electrical characteristics of the B20S motor:
  - Power supply voltage between 24 and 48 VDC or VDA.
  - Maximum current consumed 700 mA.

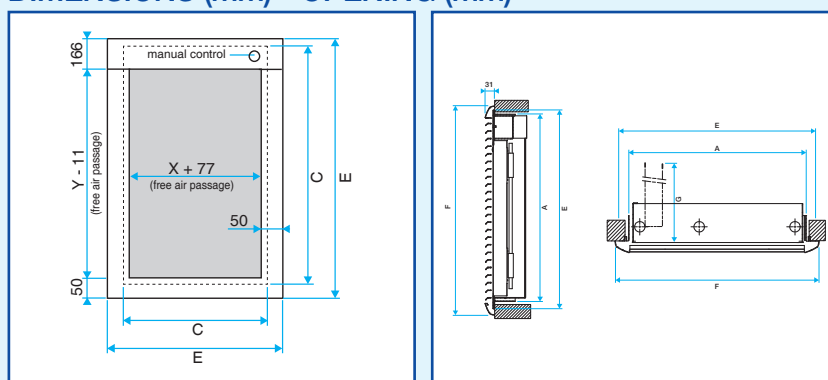
## INSTALLATION (see also page 63)

- Wall mounted on a fire damper duct. To be fixed or grouted depending on the types of ducts.
- The installation must respect the fire resistance Test Report.
- Mounting frames are required to ensure the damper is correctly fitted.

## RANGE

- VANTONE-M 2h fire resistance, 1 leaf for air supply.
- VANTONE-M 2h fire resistance, 1 leaf for air exhaust.
- GFA 007 with removable core fixed by screws, clips or hinges.
- VANTONE-M mounting frame.

## DIMENSIONS (mm) - OPENING (mm)



VANTONE-M DIMENSIONS		Width (mm)	Height (mm)
A	Except the frame of the mounting frame (part fitted into the duct)	X + 130	Y + 170
B	Mounting frame opening (with 10 mm of grouting)	X + 150	Y + 190
C	Except the VANTONE-M framework (part fitted into the duct)	X + 111	Y + 152
D	Opening without the mounting frame (with 10 mm of grouting)	X + 131	Y + 172
E	Vantone-M overall	X + 177	Y + 205
F	Vantone-M + new GFA 007 grille (overall dimension)	X + 200	Y + 240
	Vantone-M + GFA grille (overall dimension)	X + 214	Y + 260

## FREE AIRFLOW PASSAGE (dm<sup>2</sup>) - in accordance with IT 246

Y/X	250	300	350	400	450	500	550	600
300	9.5	10.9	12.3	13.8	15.2	16.7	-	-
350	11.1	12.8	14.5	16.2	17.9	19.6	21.3	-
400	12.7	14.7	16.6	18.6	20.5	22.4	24.4	26.3
450	14.4	16.6	18.7	20.9	23.1	25.3	27.5	29.7
500	16.0	18.4	20.9	23.3	25.8	28.2	30.7	33.1
550	17.6	20.3	23.0	25.7	28.4	31.1	33.8	36.5
600	19.3	22.2	25.2	28.1	31.0	34.0	36.9	39.9
650	20.9	24.1	27.3	30.5	33.7	36.9	40.1	43.3
700	-	26.0	29.4	32.9	36.3	39.8	43.2	46.6
750	-	27.9	31.6	35.3	38.9	42.6	46.3	50.0
800	-	-	33.7	37.6	41.6	45.5	49.5	-
850	-	-	35.8	40.0	44.2	48.4	-	-
900	-	-	-	42.4	46.9	-	-	-

## OPTIONS AND ACCESSORIES

- Reset motor.
- Other options and accessories same as VANTONE: please, see page 58.

# Motorised Smoke & Heat Exhaust Dampers

## VANTONE-M: 2h fire resistance, 1 leaf, motor compatible



- VANTONE-M 2h fire resistance for smoke exhaust.
- VANTONE-M 2h fire resistance for air supply.

### AVAILABLE OPTIONS <sup>R15</sup>

Description	Code
DCU contact	OPT41192
FCU contact	OPT41193
DCB contact	OPT41194
FCB contact	OPT41195
B20S Motor	OPT41196
B20s+FCU+DCU	OPT41199
Stop'air air exhaust	OPT45406
Stop'air air supply	OPT45407

### RANGE with a choice of options <sup>R15</sup>

Y	11044210 (upper mechanism) - 11044216 (bottom mechanism)							
	Width X							
	250	300	350	400	450	500	550	600
300	•	•	•	•	•	•		
350	•	•	•	•	•	•	•	
400	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•
500	•	•	•	•	•	•	•	•
550	•	•	•	•	•	•	•	•
600	•	•	•	•	•	•	•	•
650	•	•	•	•	•	•	•	•
700		•	•	•	•	•	•	•
750		•	•	•	•	•	•	•
800			•	•	•	•	•	
850			•	•	•	•		
900				•	•			

- The electromagnetic tripping device is included. When ordering, state whether the power "emission" or "cut-off" mode versions are required, in addition to a 24 or 48 V DC supply. - Standard NF-S 61.937 requires that the emission mode be used in multi-family housing ductwork ; standard NF-S 61.932 requires FCU and DCU (closed/opened) contacts on multi-family housing ductwork. - A grille must be fitted to ensure the fire protection rating is respected.

NOTE: the upper damper mechanism opens to the left, the lower mechanism to the right.



- Reversible: there is no high / low assembly direction.
- Depth 70 mm for correct fixing to the duct.
- Designed for an assembly on all types of material.
- Drilled to allow the passage of electrical cables.
- Pre-drilled to accommodate the damper's fixing screws.
- If a fire resistance rating > 1.5h, place the self-adhesive intumescent seal (code 11045394) on the mounting frame.

### Mounting frame for Vantone-M - 1 leaf <sup>R15</sup>

Y	11045397							
	Width X							
	250	300	350	400	450	500	550	600
300	•	•	•	•	•	•		
350	•	•	•	•	•	•	•	
400	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•
500	•	•	•	•	•	•	•	•
550	•	•	•	•	•	•	•	•
600	•	•	•	•	•	•	•	•
650	•	•	•	•	•	•	•	•
700		•	•	•	•	•	•	•
750		•	•	•	•	•	•	•
800			•	•	•	•	•	
850			•	•	•	•		
900				•	•			



### DID YOU KNOW?

- The GFA 007 was designed to combine air passage, aesthetic design and operating facility. Aldes invented the 007 clip to lock the vane core perfectly in place, removable for maintenance, but especially clever enough to reset the damper smoothly, without getting off the stepladder.
- To avoid any degradation to indoor hygiene during smoke extraction tests, Aldes proposes the use of a G3 filter adapted to the dimension, positioned between the damper and the vane core.

### New GFA 007 with removable core locked by the 007 clip <sup>R15</sup>

Y	11045334							
	Width X							
	250	300	350	400	450	500	550	600
300	•	•	•	•	•	•		
350	•	•	•	•	•	•	•	
400	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•
500	•	•	•	•	•	•	•	•
550	•	•	•	•	•	•	•	•
600	•	•	•	•	•	•	•	•
650	•	•	•	•	•	•	•	•
700		•	•	•	•	•	•	•
750		•	•	•	•	•	•	•
800			•	•	•	•	•	
850			•	•	•	•		
900				•	•			

- A high resistance paint may be requested depending on the RAL colour code required (except on the clips).

# Motorised Smoke & Heat Exhaust Dampers

## Installation of VANTONE on smoke exhaust ducts

### INSTALLATION PRINCIPLE

- VANTONE exhaust damper is either wall mounted, or mounted offset on a duct. The duct is of the smoke exhaust type and can be made from several types of materials:
  - concrete 110 mm wall,
  - sand-lime (Promatect L500 or Supalux M),
  - plaster tiles - 2h fire rating (BPB placo: Standard plaster board 7 + Stucal, LAFARGE: PF3-70 + Pregyfeu M0 BA15),
  - prégyfeu MO BD 25 - 2h fire protection rating (Lafarge),
  - staff 2h fire rating (GEOSTAFF: Staff, EXTHA: Isofiare),
  - vermiculite (Mica) 2h fire rating (cf Distribution: Tecriver).
- Mounting frame described in the Test Reports, recommended to ensure the installation geometry is correct, which itself is necessary for correct functioning of the damper.
- Depending on the type of material, the mounting frame and/or damper can be fixed or embedded. Respect the indications given in the Test Report.

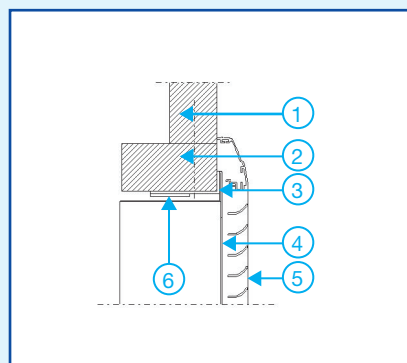
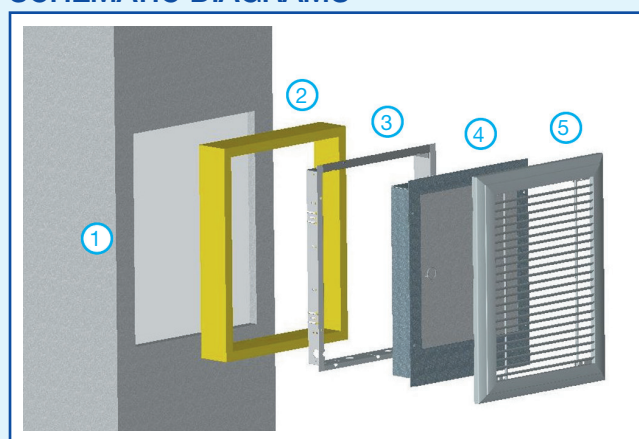
### INSTALLATION AND REGULATIONS

- Assembly of the damper on the duct must follow a fire resistance rating Test Report.
- VANTONE dampers have been tested in accordance to CTICM (Effectis) Test Reports, describing:
  - fixing of the VANTONE mounting frame, developed for a professional level installation,
  - precautions to be taken when fitting the VANTONE smoke exhaust damper, especially the fitting of a sleeve or not,
  - application of an intumescent seal on the mounting frame, if necessary.
- For more information, please consult us.

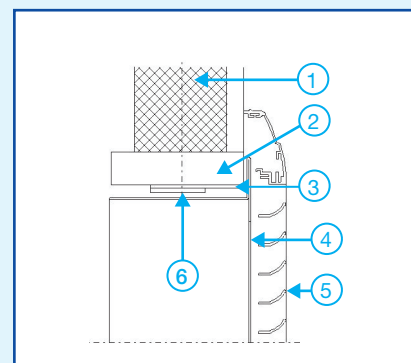
### KEY TO DIAGRAMS

- Duct having the benefit of a "vertical smoke exhaust duct" Test Report.
- Sleeve with a minimum depth of 110 mm. To be carried out by the duct supplier.
- VANTONE mounting frame to be fixed to the sleeve.
- VANTONE smoke exhaust damper to be screwed on to the mounting frame ③.
- GFA 007 grille to be fixed to the damper ④, by screws, clips or hinges.
- Self-adhesive intumescent seal to be applied to the mounting frame when the degree of fire resistance is higher than 1.5h or in cases where the partition wall is not M0 or M1 (incombustible or non-flammable).
- Grouting.

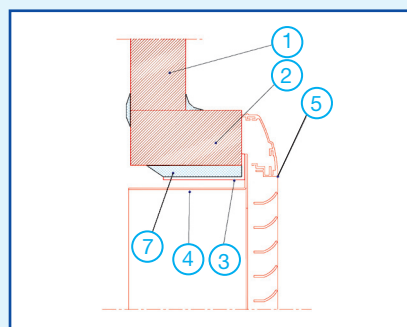
### SCHEMATIC DIAGRAMS



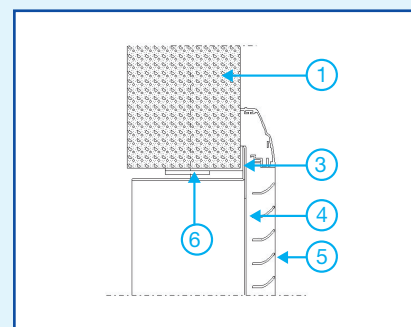
Silicate (PROMAT)



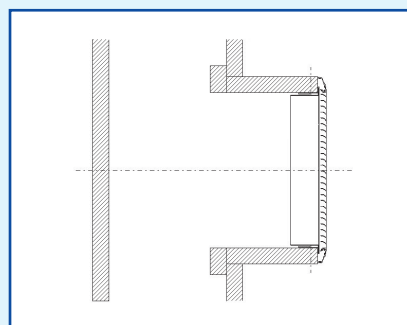
Plaster tiles + board



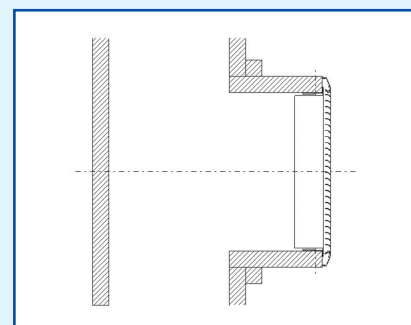
Staff



Concrete



Duct



Duct

### INTUMESCENT ROLLS R14

Description	Code
Self-adhesive intumescent seal: L x l x th. = 20 m x 40 mm x 2 mm	11045394