

# 11044431

## OPTONE CLASSIC - 2H/2 flap

OPTONE "Classic" smoke control dampers are intended for commercial premises and can be used as air inlets or for smoke and heat exhaust.



OPTONE «classic» 2H/2 flap

### PRODUCT BENEFITS

- simplicity: Nominal dimensions = installation dimensions,
- reversible top/bottom mounting frame,
- single mounting frame for all OPTONE models.

### REGLEMENTATIONS AND COMPLIANCES

PV CE number : 1812-CPR-1055

### Principles of operation

In standby position, the damper is closed. It opens when instructed by the FACP and moves into failsafe position.

### Product description

OPTONE "Classic" 2-flap smoke control dampers are intended for commercial buildings (public-access, high-rise), and can be used as air inlets or for smoke and heat exhaust. They can be motorised. The OPTONE «Classic» 2 flap dampers are compatible with ALDES GFA steel grilles, GFA 007, GFE and GGH, as well as all grilles with geometrical transparency greater than 44%. The electromagnetic trip device is included and available in current make/break versions and 24/48V.

### Fields of application

New, Refurbishment, Non-residential buildings

### Installation

- "multi-compartment" dampers are suitable for "single-compartment" applications,
- maximum negative pressure: - 1,000 Pa,
- direction of fire: respect fire inside smoke exhaust duct (when damper is closed).
- use of mounting frame strongly recommended,
- use of CONCEPTOR DESENFUMAGE design software recommended to define the dimensions of the mounting frame installation space,
- if mounting frame already fixed to damper (no gaps), nominal LxH dimensions of damper = dimensions of opening,
- if mounting frame mortar sealed, add thickness of mortar to L and H,
- use detailed instructions for correct installation of flaps,
- damper can be inverted "upside down",
- damper flush-mounted against vertical smoke exhaust duct,
- attached with 4 self-tapping screws supplied, on front face in mounting frame holes.

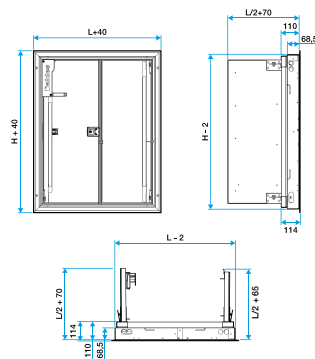
### Main characteristics

- CE marking compliant as per EN 12101-8: 1812-CPR-1055,
- fire resistance classification as per EN 1366-10 test:
  - EI 120 (ved-i o) S - 1 000 Pa - AA multi, in compliance with § 7.2.4 of EN 13501-4, certified on Promatect smoke exhaust duct L500, and on ducts compliant with EN 1366-9 of the same material and same density,
  - for H • 1000 mm: EI 60 (ved-i o) S - 1 000 Pa - AA multi, in compliance with § 7.2.4 of EN 13501-4, certified on Promatect smoke exhaust duct L500, and on ducts compliant with EN 1366-9 of the same material and same density.
- compliant with French standard NF-S-61937-10,
- leak rate < 200 m<sup>3</sup>/h per m<sup>2</sup> of leaf at 1,000 Pa,
- free air passage (dm<sup>2</sup>) with L and H in mm: 2 flap = ((L-76) x (H-57) - 14 147) / 10 000,
- mounting frame and grille can be installed in factory.

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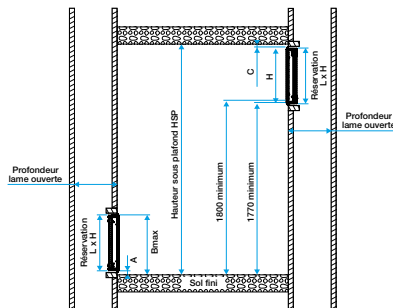
### Supplementary characteristics

- motorised damper possible,
- can be ordered in steps of 5 mm in L and H,
- electric control mechanism inside protective box,
- steel mounting frame 20/10 mm,
- choice of aesthetic aluminium frame,
- nominal dimensions of damper L x H = installation space (opening) for mounting frame,
- locking system mounted on flap for greater free surface,
- cable through holes included,
- locking system fitted with self-resetting electromagnetic trip device,
- scalable junction box,
- pressure loss for damper only (with grille):  
 - exhaust:  $\Delta P = 2.083 \times \sqrt{(S_{\text{free}} / (L \times H))} \cdot (Q / S_{\text{free}})^2$ ,  
 - supply:  $\Delta p = 2.00 \cdot \sqrt{(S_{\text{free}} / (L \times H))} \cdot (Q / S_{\text{free}})^2$ ,  
 - ( $\Delta p$  en Pa,  $S_{\text{free}}$  in m<sup>2</sup>, Q in m<sup>3</sup>.s<sup>-1</sup>, L and H in mm).
- available options:  
 - galvanised steel trim, choice of RAL colour,  
 - backdraft (required on air intakes if speed in ducts is above 7 m/s).



Encombrement OPTONE «Classic» 2V avec contre-cadre (mm)

### Installation visual 1



C = 22 mm pour OPTONE «GRILLE»  
 C = 32 mm pour OPTONE «CLASSIC» avec GFA 007  
 A = hauteur plinthe + C  
 Bmax = A + H < 1030

Schéma d'installation du volet OPTONE