

Kameleon Mk 5

Natural Smoke Ventilator



Data Sheet

Kameleon Mk 5 is a thermally broken natural ventilator, available in a wide range of sizes, flap options and control options. It is particularly suited for installation into glazing systems in an unobtrusive way, and can provide both day to day and smoke ventilation.

Kameleon has been tested in accordance with EN 12101-2 (2003), and is CE-marked as a smoke and heat exhaust ventilator.

CONSTRUCTION

All principal components of the base and flap have been manufactured from EN AW-6063 T6 aluminium alloy. The frames of both the base and flap are thermally broken and it has continuous inner and outer seals. The ventilator is suitable for several types of flaps, such as:

- Sandwich panels (double skin aluminium with infill material)
- Glass
- Polycarbonate.

FLAPS

There is a choice to be made between a narrower or wider flap profile width (either 70 or 99 mm). It can either open from the top with a hinge at the bottom or open from the bottom with the hinge at the top. Panels include polycarbonate, glass, aluminium (insulated and uninsulated). In general any type of panel can be incorporated into the Kameleon flap. The only restrictions are panel thickness and flap weight (max. 100 kg).

With the narrow section frame widths, overall thicknesses of the infill or glazing panels between 20 and 28 mm are permitted. For the wider section frame widths, glass and panels from 8 to 58 mm can be used.

Flange thicknesses can vary between 26 and 32 mm or without the flange.

CONTROLS

Control options:

- Controls are positioned behind the slim profiles of the ventilator
- 24V DC electric and pneumatic. These options are suitable both for day to day ventilation and smoke ventilation.
- 230V AC electric. This option is suitable only for day to day ventilation.

DIMENSIONS

Flap sizes (measure from outer flap frames):
 400mm – 2500 mm wide
 500mm – 2500 mm high
 max. area 4 m²

Flange sizes (measured from outer frames):
 460mm – 2560 mm wide
 560mm – 2560 mm high

The opening angle is between 12° and 70°.

The maximum permitted dimensions depend on the type of panel, the ventilator geometry and whether the hinges are on the top or bottom. In addition, local building regulations may limit the ventilator sizes.

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FINISHES

- Mill finish
- Polyester powder coated in a standard 60 micron single layer thickness (max. 90 micron) in any RAL colour (under Qualicoat standards)
- Anodized in a standard 20 micron layer thickness (under Qualanod standards).

INSTALLATION

In principle Kameleon Mk 5 is designed to be installed into glazing systems or other types of wall systems, and is only to be installed in the vertical.

PERFORMANCE

Kameleon Mk 5 has been tested and meets with the requirements of EN 12101-2 (2003) and has the following attributes:

- Coefficient Cv: values up to 0.65
- Reliability: Re 1000
- Snow load: SL 0
- Low ambient internal temperature: T(-15)
- Wind suction load: WL 2000
- Resistance to heat: B 300
- Performance of the materials of the ventilator (to EN 13501-1): E.

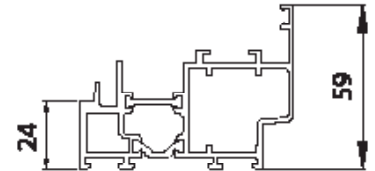
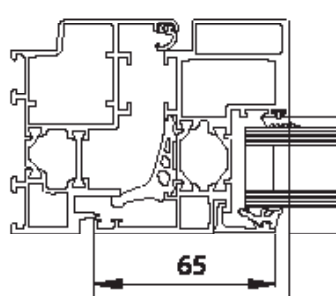
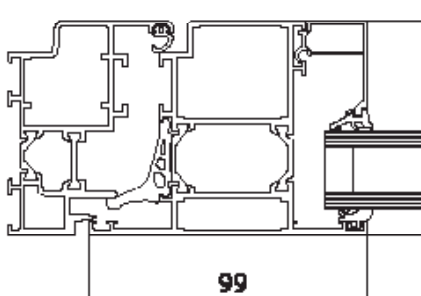
In accordance with EN 12207 (1999) the Kameleon Mk 5 has air permeability of Class 4.

In accordance with EN 12208 (1999) the Kameleon Mk 5 has watertightness of Class 9 A.

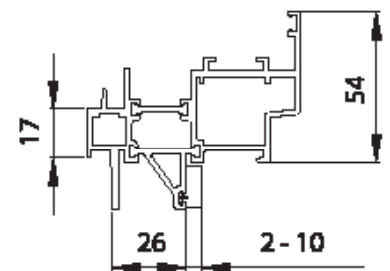
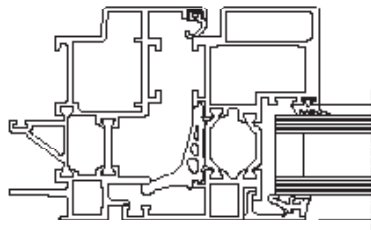
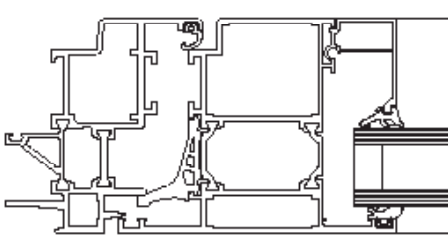
Kameleon Mk 5 can be designed to provide an overall ventilator U-value of up to 1.5 W/m²/K.

These values vary depending on the chosen configuration.

LARGE FLAP VERSION WITH ADAPTOR



SMALL FLAP VERSION WITH ADAPTOR



FEATURES AND BENEFITS:

1. Glazing held in by EPDM rubber seals
2. Insulation with continuous plastic based thermal break with 25% glass fibre constituent
3. Continuous thermal breaks in frames, flaps and infill material
4. EPDM seals in the middle of the unit for thermal treatment, continuous inner and outer seals
5. Variable connection to surrounding glazing of 26 to 32 mm
6. U-value of the combination of all profiles comparable with that of insulated glazing
7. Variable adjustment for thicknesses of glass, sandwich panel, polycarbonate between 8 and 58 mm
8. Profiles designed for incorporation of angle pieces
9. Hinges with high-grade steel pivots and nylon bushes for silent movement of the flap
10. Frame width limited to 24 mm or 17 mm so as to enhance the visual design.