

KITCHEN LINE MODIS 2

Extract stainless steel hoods with lighting



MODIS 2 series kitchen hoods are part of a comprehensive product range – ATREA modular hoods.


The unique design solution based on the modular system offers the customer the possibility to choose delivery in as a disassembled kit without the connection outlet, disassembled with the connection outlet (DIY assembly the hood on site) or assembled. They can be fitted together using side panels to create a long set, or suspended back to back to create a central system above a cooking block. MODIS 2 series hoods provide efficient air extract and filtration over kitchen appliances such as deep fryers, grill plates, frying pans and other appliances without increased steam generation. The internal partitions and the front and sides of MODIS 2 hoods are made of stainless steel CSN 17240 (AISI 304). Extract air filtration is provided by 400 × 400mm cassette grease filters made of multi-layered expanded metal.

Hoods are supplied in standard dimensions according to the table; on request it is possible to deliver them in non-standard dimensions in the specified range.

Built-in fluorescent lighting (T5 with more economical operation) is a standard feature of the hood, with IP 54 protection rating and temperature resistance up to 60 °C. The terminal block for connecting the lighting is located on the top surface of the hood.

For the flow rate and pressure drop of the grease filters, see the sizing chart. The residual space between the grease filters is covered with cover plates. The extract outlets for the connection of the HVAC ducts are not supplied with the hood. They can be ordered separately, either with a circular or rectangular cross-section, normally located on the top – see sizing diagram..

LEGEND

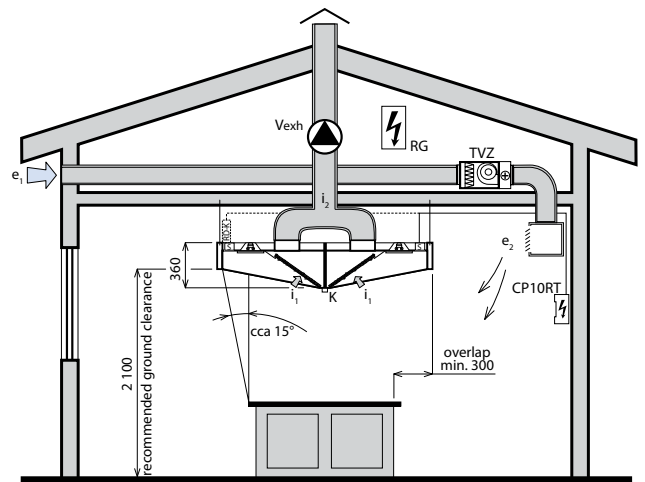
- e_1 ... fresh outdoor air supply
- e_2 ... fresh pre-heated air outlet to the kitchen
- i_1 ... extract air from the kitchen hood
- i_2 ... extract air discharged from the kitchen hood
- TVZ ... hot-air supply unit with filtration, heating and frost protection control
- K ... condensate tray (extendable)
-  ... fluorescent lighting (standard)
- S ... light connection terminal block
- (RD-K) ... (alternatively with a control module)
- RG ... automatic control system panel
- CP10RT ... control panel
- V_{ods} ... exhaust fan

The hoods are equipped with holes for their suspension. They can only be anchored to the ceiling structure using M6 threaded rods. Alternatively, the space above the hood can be covered with plasterboard.

RD5 controls for automatic operation

On request, MODIS 2 hoods can be equipped with a complete digital operation control system that ensures economical operation of the ventilation depending on the instantaneous heat production of the kitchen equipment, thus avoiding inefficient operation of the fans when no cooking occurs or when the heat load is reduced.

The basic principle of automatic control is the sensing of temperature in the areas above appliances and in the kitchen area. If the temperatures do not differ, fans operate only at minimum speeds to ensure basic air exchange rates in the kitchen, and the operation of gas appliances is allowed. When the temperature difference between the temperature sensor readings increases, the exhaust and supply fans automatically switch to higher power. When the temperature difference increases further, the speed of both fans is continuously increased up to the maximum power level. When the differential drops, the power is automatically reduced, possibly returning to the basic minimum air change rate.



Selection software

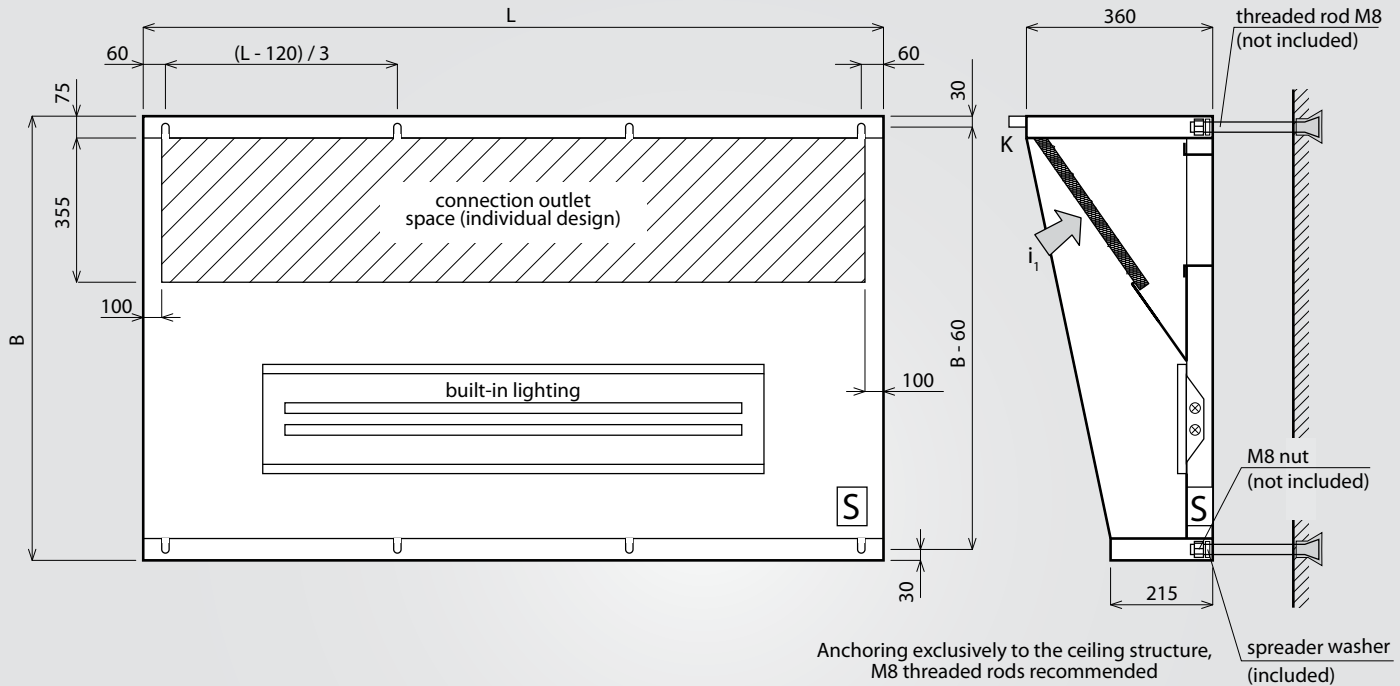
For the detailed selection of ventilated ceilings, kitchen hoods, accessories and control systems we recommend using our specialised selection software.

You will find it on our website www.atrea.com.

Atrea®

MODIS-N (WALL-MOUNTED)

MODIS-N (WALL-MOUNTED)



Anchoring exclusively to the ceiling structure, M8 threaded rods recommended

Notes:

- Hoods are normally supplied without fitted connection outlets.
- Optionally, an outlet can be ordered and fitted to the hood; as standard it is placed in the centre of the outlet space (unless otherwise specified in the order).
- For hoods from $L \geq 2\,500$ mm we recommend 2 outlets placed 1/4 of the length from the edges to provide uniform extraction.
- Hoods can also be freely suspended – the rear side is normally visible.
- The suspension points are determined by the length of the hood. Up to 2000 mm in length, 4 suspension points are provided (in the corners of the hood), above 2000 mm in length, 8 suspension points are provided according to the diagram.

Legend:

- S** Terminal block for lighting connection (normally on the right).
- K** condensate tray (normally on the left)
- ⊗ lighting tube

BASIC DIMENSIONS AND SIZING

Length L	Dimensions of the hood				Maximum number of filters	Maximum air flow rate (m ³ /h)	Maximum pressure drop	Lighting power	Number of hinges
	Width B								
1 000	800	1 000	1 200	1 400	2 pcs	1 280	75 Pa	1 pcs – 2x 14 W	4 pcs
1 100	800	1 000	1 200	1 400	2 pcs	1 280	75 Pa	1 pcs – 2x 14 W	4 pcs
1 200	800	1 000	1 200	1 400	2 pcs	1 280	75 Pa	1 pcs – 2x 14 W	4 pcs
1 300	800	1 000	1 200	1 400	2 pcs	1 280	75 Pa	1 pcs – 2x 14 W	4 pcs
1 400	800	1 000	1 200	1 400	3 pcs	1 920	75 Pa	1 pcs – 2x 14 W	4 pcs
1 500	800	1 000	1 200	1 400	3 pcs	1 920	75 Pa	1 pcs – 2x 28 W	4 pcs
1 600	800	1 000	1 200	1 400	3 pcs	1 920	75 Pa	1 pcs – 2x 28 W	4 pcs
1 700	800	1 000	1 200	1 400	3 pcs	1 920	75 Pa	1 pcs – 2x 28 W	4 pcs
1 800	800	1 000	1 200	1 400	4 pcs	2 560	75 Pa	1 pcs – 2x 28 W	4 pcs
1 900	800	1 000	1 200	1 400	4 pcs	2 560	75 Pa	1 pcs – 2x 28 W	4 pcs
2 000	800	1 000	1 200	1 400	4 pcs	2 560	75 Pa	1 pcs – 2x 28 W	4 pcs
2 100	800	1 000	1 200	1 400	4 pcs	2 560	75 Pa	1 pcs – 2x 49 W	8 pcs
2 200	800	1 000	1 200	1 400	5 pcs	3 200	75 Pa	1 pcs – 2x 49 W	8 pcs
2 300	800	1 000	1 200	1 400	5 pcs	3 200	75 Pa	1 pcs – 2x 49 W	8 pcs
2 400	800	1 000	1 200	1 400	5 pcs	3 200	75 Pa	1 pcs – 2x 49 W	8 pcs
2 500	800	1 000	1 200	1 400	5 pcs	3 200	75 Pa	1 pcs – 2x 49 W	8 pcs
2 600	800	1 000	1 200	1 400	6 pcs	3 840	75 Pa	1 pcs – 2x 49 W	8 pcs
2 700	800	1 000	1 200	1 400	6 pcs	3 840	75 Pa	1 pcs – 2x 49 W	8 pcs
2 800	800	1 000	1 200	1 400	6 pcs	3 840	75 Pa	1 pcs – 2x 49 W	8 pcs

NON-STANDARD DIMENSIONS

Hoods can be supplied in non-standard dimensions ranging from:

Length L = 1 000 to 5 000 mm (always in 50 mm increments).

Width B = 1 000 to 1 600 mm (always in 50 mm increments).

WEIGHT FOR DESIGNING THE HINGES LOAD CAPACITY

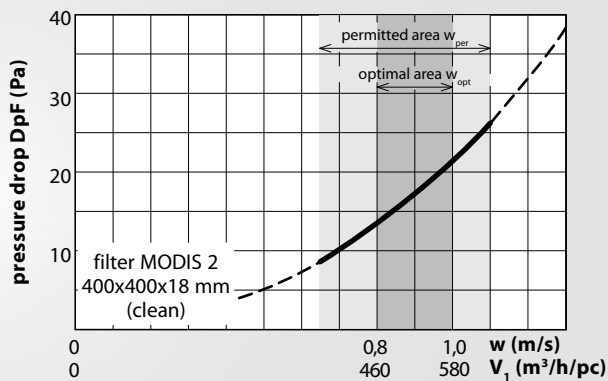
$$G_{\text{hood}} \approx L \times B \times (25 \text{ to } 32 \text{ kg} / \text{m}^2 \text{ of plan})$$

$$G_{\text{filter}} \approx 1,6 \text{ kg} / \text{pc}$$

GREASE FILTERS – SIZING

Hoods are equipped with grease filters type MODIS 2, size 400 x 400 mm as standard. The grease filters are made of multi-layered expanded metal, fitted in a stainless steel frame.

The number of filters is always determined according to the maximum air flow rate of the hood according to the chart so that the air flow rate through one filter is always in the optimum range. Finally, it must be checked that the calculated number of filters physically fits within the length of the hood.



AEROSOL SEPARATORS BY ATREA

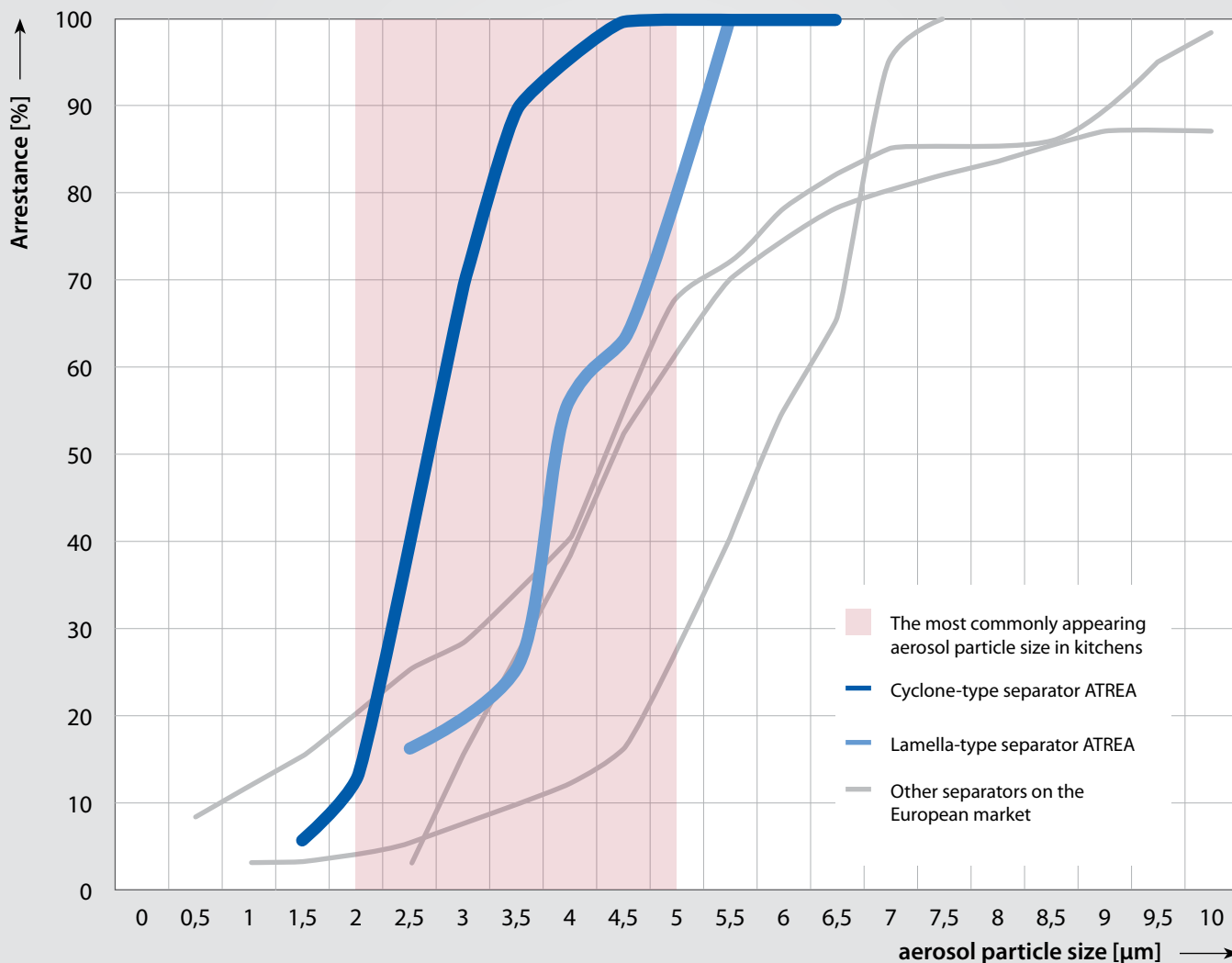
Our primary aims always include high quality, efficiency and maximum benefits for our customers. Our kitchen aerosol separators are no different as they are among top European products in their categories.

ATREA's range has two types of separators:

1. **The lamella-type separator** is featured regularly in our cooked hoods and ventilated ceilings. Although it was launched several years ago, it subsequently complied without any trouble with the strictest requirements of the kitchen ventilation standard (EN 16282).
2. **The cyclone-type separator** with truly cutting-edge parameters is a new product in our range. Its high efficiency and innovative design make sure even the smallest aerosol particles in the air are separated while its clogging with separated aerosols is reduced to a minimum.

Comparison of separator efficiency

The aerosol particle size in kitchens is assumed to be 0.5–10 µm, most commonly 2–5 µm.



IMPORTANT NOTICES

- Maximum exhaust air temperature is 60 °C
- Class B gas appliances must be ducted into the chimney; under no circumstances can they be ducted into the extractor hood
- **Ensure that the hood has a sufficient overhang over the outline of the appliances**
- We recommend that you always check the hood's transport and consider whether it should be delivered in one piece or disassembled
- The lighting control is not included with the hood
- The outlet or its preparation is not part of the hood. It must be designed together with the HVAC duct (the outlet installation can be bought separately).
- Hood outlets for connection to the air handling duct are not equipped with flanges

ORDERING INFORMATION

The following information must be specified when ordering:

- cooker hood MODIS 2
- hood dimensions L x B (mm)
- air flow rate $V_{\text{exh}} =$ m^3 / h
- grease filter 400 x 400 x pcs
- delivery disassembled without outlet / disassembled with outlet /
complete without outlet / complete with outlet
- outlet for air duct connection e.g. 2x $\varnothing 250$
- address of the assembly site

* hoods are normally delivered in parts. However, it is possible to order the assembly from the manufacturer; for details see the price list of MODIS 2 hoods.

OPTIONAL ACCESSORIES

- **RD5 control system** YES/NO (if yes, the type of both fans or AHU unit must be specified)
(RG5, CP10RT, room temperature sensor)
- **automatic operation** YES/NO (RD5 control system accessory)
(RD-K, 1–5 load sensors)

* For more detailed information about the RD5 control system see the separate RD5 control system datasheet for kitchen facilities.

