

# KITCHEN LINE GRANDE

Kitchen exhaust hoods,  
completely made of stainless steel



**GRANDE series hoods** provide efficient exhaust with waste air filtration above kitchen appliances in kitchens of all sizes and configurations, available with custom-made automatic operation control systems.

The hoods are supplied in standard dimensions according to the tables or, for an extra charge, in atypical dimensions within the specified range, with a uniform height of 435 mm. GRANDE series hoods are made of stainless sheet steel CSN 17240 (AISI 304). The filtration of exhaust air is provided by high-efficiency, 400 × 400mm cassette grease separators. As standard the hoods are equipped with extendable grease collectors, more economical LED lighting, a connection terminal block and an optional remote light switch.


The extraction outlets are circular or rectangular, located at the top. The hoods are suspended from M8 suspension rods anchored to the ceiling with expansion bolts at the spacing shown in the diagram.

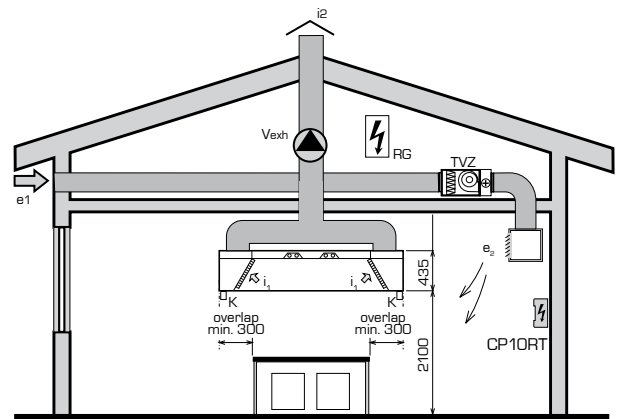
## RD5 controls for automatic operation

On request, GRANDE hoods can be equipped with a complete digital operation control system, which ensures economical operation of the ventilation depending on the immediate heat production of the kitchen equipment, thus avoiding uneconomical operation of the fans when no cooking takes place 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.

## LEGEND

- $e_1$  ... fresh outdoor air supply
- $e_2$  ... fresh pre-heated air outlet to the kitchen
- $i_1$  ... exhaust air from the cooker hood
- $i_2$  ... exhaust air discharge from the cooker hood
- TVZ ... hot air supply unit with filtration, heating and frost protection control
- K ... condensate tray (extendable)
-  ... lighting
- CP10RT ... control panel (optional)
- $V_{exh}$  ... exhaust fan
- RG ... control system cabinet (optional)



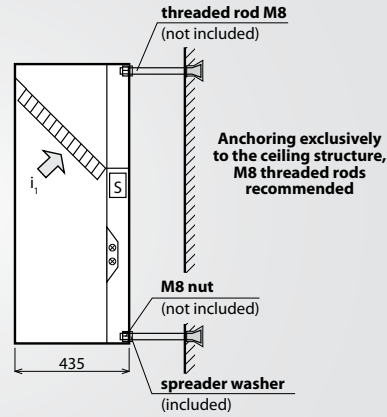
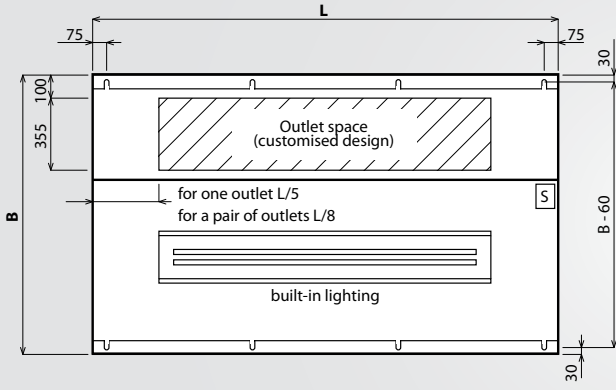
## Selection software

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](http://www.atrea.com).

**Atrea**®

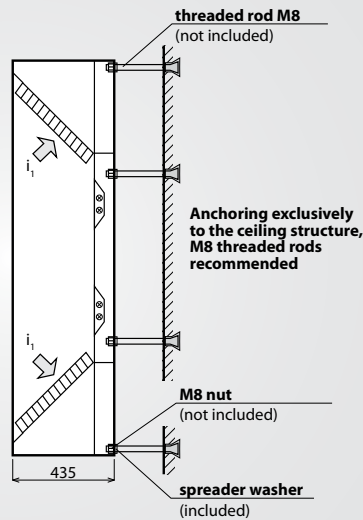
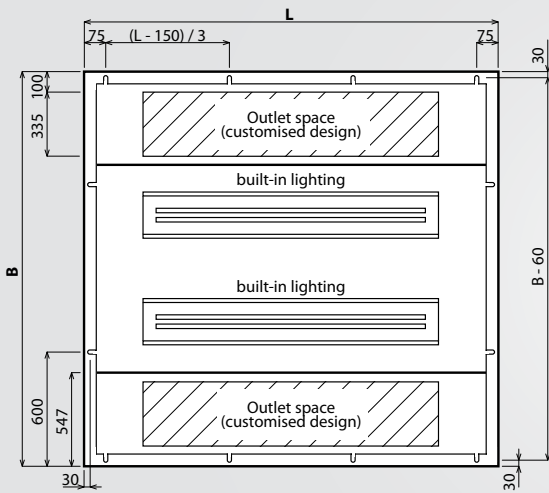
## GRANDE-1R (1-ROW)



## BASIC DIMENSIONS AND SIZING

| Length L | Dimensions of the hood |       |       |       | Maximum number of separators | Maximum air flow rate (m <sup>3</sup> /h) | Maximum pressure drop (Pa) | Lighting / LED power input | Number of hinges |
|----------|------------------------|-------|-------|-------|------------------------------|---|----------------------------|----------------------------|------------------|
|          | Width B                |       |       |       |                              |   |                            |                            |                  |
| 1 000    | 1 000                  | 1 200 | 1 400 | 1 500 | 2 pcs                        | 1 160                                     | 49                         | 2× 14 W / 22 W             | 4 pcs            |
| 1 250    | 1 000                  | 1 200 | 1 400 | 1 500 | 2 pcs                        | 1 160                                     | 49                         | 2× 14 W / 22 W             | 4 pcs            |
| 1 500    | 1 000                  | 1 200 | 1 400 | 1 500 | 3 pcs                        | 1 740                                     | 64                         | 2× 28 W / 44 W             | 4 pcs            |
| 1 750    | 1 000                  | 1 200 | 1 400 | 1 500 | 3 pcs                        | 1 740                                     | 64                         | 2× 28 W / 44 W             | 4 pcs            |
| 2 000    | 1 000                  | 1 200 | 1 400 | 1 500 | 4 pcs                        | 2 320                                     | 78                         | 2× 49 W / 65 W             | 8 pcs            |
| 2 250    | 1 000                  | 1 200 | 1 400 | 1 500 | 5 pcs                        | 2 900                                     | 93                         | 2× 49 W / 65 W             | 8 pcs            |
| 2 500    | 1 000                  | 1 200 | 1 400 | 1 500 | 5 pcs                        | 2 900                                     | 93                         | 2× 49 W / 65 W             | 8 pcs            |
| 2 750    | 1 000                  | 1 200 | 1 400 | 1 500 | 6 pcs                        | 3 480                                     | 107                        | 2× 49 W / 65 W             | 8 pcs            |
| 3 000    | 1 000                  | 1 200 | 1 400 | 1 500 | 7 pcs                        | 3 850                                     | 122                        | 2× 49 W / 65 W             | 8 pcs            |

## GRANDE-2R (2-ROW)

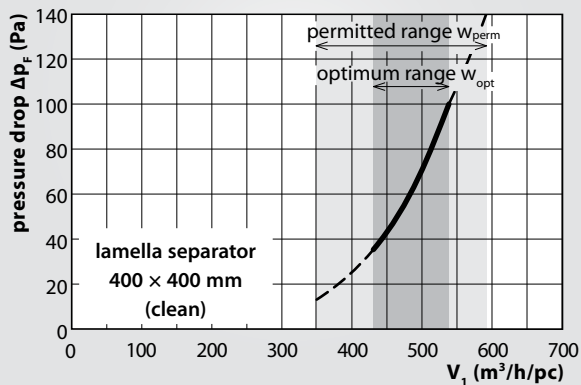


## BASIC DIMENSIONS AND SIZING

| Length L | Dimensions of the hood |       |       |       |       |       | Maximum number of separators | Maximum air flow rate (m <sup>3</sup> /h) | Maximum pressure drop (Pa) | Lighting / LED power input |                  | Number of hinges |
|----------|------------------------|-------|-------|-------|-------|-------|------------------------------|---|----------------------------|----------------------------|------------------|------------------|
|          | Width B                |       |       |       |       |       |                              |   |                            | B=1 500 to 1 950           | B=2 000 to 2 500 |                  |
| 1 000    | 1 600                  | 1 800 | 2 000 | 2 200 | 2 400 | 2 500 | 4 pcs                        | 2 320                                     | 78                         | 22 W                       | 2× 22 W          | 8 pcs            |
| 1 250    | 1 600                  | 1 800 | 2 000 | 2 200 | 2 400 | 2 500 | 4 pcs                        | 2 320                                     | 78                         | 22 W                       | 2× 22 W          | 8 pcs            |
| 1 500    | 1 600                  | 1 800 | 2 000 | 2 200 | 2 400 | 2 500 | 6 pcs                        | 3 480                                     | 107                        | 44 W                       | 2× 44 W          | 8 pcs            |
| 1 750    | 1 600                  | 1 800 | 2 000 | 2 200 | 2 400 | 2 500 | 6 pcs                        | 3 480                                     | 107                        | 44 W                       | 2× 44 W          | 8 pcs            |
| 2 000    | 1 600                  | 1 800 | 2 000 | 2 200 | 2 400 | 2 500 | 8 pcs                        | 4 640                                     | 136                        | 65 W                       | 2× 65 W          | 12 pcs           |
| 2 250    | 1 600                  | 1 800 | 2 000 | 2 200 | 2 400 | 2 500 | 10 pcs                       | 5 800                                     | 165                        | 65 W                       | 2× 65 W          | 12 pcs           |
| 2 500    | 1 600                  | 1 800 | 2 000 | 2 200 | 2 400 | 2 500 | 10 pcs                       | 5 800                                     | 165                        | 65 W                       | 2× 65 W          | 12 pcs           |
| 2 750    | 1 600                  | 1 800 | 2 000 | 2 200 | 2 400 | 2 500 | 12 pcs                       | 6 960                                     | 194                        | 65 W                       | 2× 65 W          | 12 pcs           |
| 3 000    | 1 600                  | 1 800 | 2 000 | 2 200 | 2 400 | 2 500 | 14 pcs                       | 7 700                                     | 223                        | 65 W                       | 2× 65 W          | 12 pcs           |

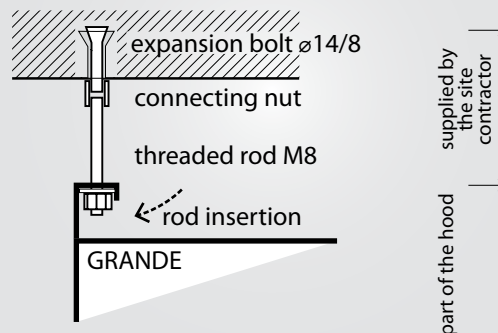
### LAMELLA SEPARATORS

The hoods are fitted with 400 × 400 mm lamella separators as standard. The number of separators is always determined according to the maximum considered 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 can be physically accommodated within the length of the hood.



### ANCHORING TO THE CEILING

GRANDE hoods are equipped with special brackets for suspension on M10 threaded rods anchored to the ceiling with  $\varnothing 14 / 8$  mm expansion bolts (not included). The brackets with cut-outs allow for easy lateral insertion of the suspension rods and with nuts and easy height setting of the hood. For the number and type of hinges see the diagrams.



### WEIGHT FOR DESIGNING THE LOAD CAPACITY OF THE SUSPENSION BRACKETS

$$G_{hood} = \sim L \times B \times (25 \text{ to } 35 \text{ kg} / m^2 \text{ of floor plan})$$

$$G_{separator} = \sim 1,6 \text{ kg} / pc$$

### IMPORTANT NOTES

- GRANDE hoods always delivered as a complete unit
- The maximum exhaust air temperature is 60 °C
- Class B gas appliances must be ducted into the chimney and must never be ducted into the hood
- Ensure that the hood overhang over the outline of the appliances is sufficient

### ORDERING INFORMATION

GRANDE kitchen hood – L × B (mm) –  $V_{exh}$  ( $m^3/h$ ) –  $\times D_{exh}$  (mm), number of separators, automatic control YES / NO – RD-K, CP Touch, CP10RT, RG5 switchboard – type, the power consumption and type of the exhaust (alt. supply) fan



## DIGITAL CONTROL SYSTEM RD5

### System assembly

The automatic control system consists of the following components:

- RG5 switchboard
- microprocessor module RD-K
- control panel CP10RT or CP Touch

The RG5 switchboard is supplied in a wall-mounted version, with IP 54 protection rating, and is to be installed in the HVAC room, corridors, warehouses, etc., always outside the kitchen area near the fans.

The CP10RT control panel is equipped with continuous control of ventilation power and temperature and an operation LED indicator.

For touch control, the CP Touch panel must be fitted, but must not be fitted in the kitchen area.

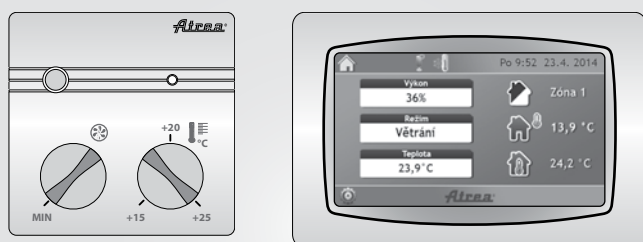
The CP10RT panels are supplied in a plastic wall mounted box with IP 43 protection rating. They are installed in the kitchen area.

### Advantages of automatic control

Automatic control is distinct for its highly economical operation and a short rate of return, remarkably aiding to ensure perfect hygienic conditions in kitchens.

\* The RD5 control system must only be used with a heat recovery system.

## CP SERIES CONTROL PANELS

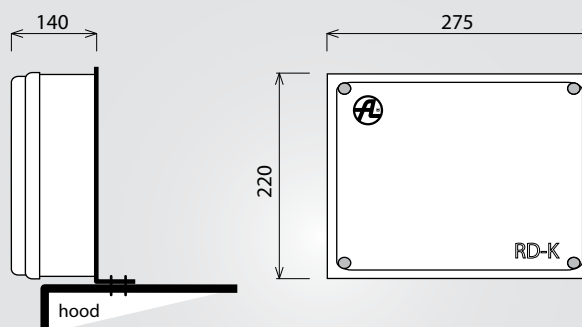


**CP10 RT location:** In the kitchen area at a height of approx. 1.300 to 1.500 mm.

**CP Touch location:** E.g. in the office area to allow setting of automatic modes.

**Protection rating:** IP 43

## MICROPROCESSOR MODULE RD-K



**Location:** As standard it is fitted on the front or top edge of the hood.

## WEB SERVER

### Web server (standard with DUPLEX units)

The web server integrated in the RD5 digital control system provides for remote control or monitoring of DUPLEX units via the Internet. The intuitive web interface provides access for all user and service parameters. This means not only convenience in the form of remote control for the user, but also significantly simplified servicing.

