



Application

RAK-RC filtering units have been developed for **general ventilation/filtration**. They can be used in any places where it is not possible to apply local exhausts, or they are not sufficient in efficiency. Additionally, the appliances can be used in not large rooms as well in large buildings, under the condition that several filtering units are used, which are suitable to the pollution emission source. Each device features four-step filtration system: pre-filter, filtering pad, compact filter and carbon filter, absorbing the part of gaseous contamination.

At the moment the filters reach the limit pollution degree, replace them for new – they cannot be submit to regeneration.

Structure

RAK-RC filtering unit consists of following elements:

- housing of steel sheet,
- radial fan (one or two),
- pre-filter – wire mesh of 0,8x0,25 mm holes,
- filtering pad – class G-3,
- compact filter – class F-9,
- spunbond filter impregnated with active carbon,
- control unit,
- hour-meter – to measure the work time,
- pressure control (pressostat)
- castor assembly for the mobile version, or a set of brackets for the wall mounted version,
- suction hood.

Operational Use

RAK-RC type filtering unit is adapted to install castor wheels (mobile version) or wall brackets (stationary version).

There are two sizes in the RAK-RC series – of nominal volume flow 1000 m³/h and 2000 m³/h.

The polluted air is drawn in, at the top of the device, whereas the cleaned air flows out at the bottom of the filtering unit, as a full recirculation into the process room.

The inlet is guarded by a suction hood and additionally protected with a circumferential grill.

The device is switched on through a control unit. Each appliance is equipped with a hour-meter to measure the work time and a pressure control (pressostat), indicating the replacement requirement of the compact filter.

Periodical maintenance of the filters consists in:

- periodical cleaning the wire-mesh pre-filter,
- periodical replacement of the filtering pad and the carbon spunbond,
- periodical replacement of the compact filter.



Technical Data

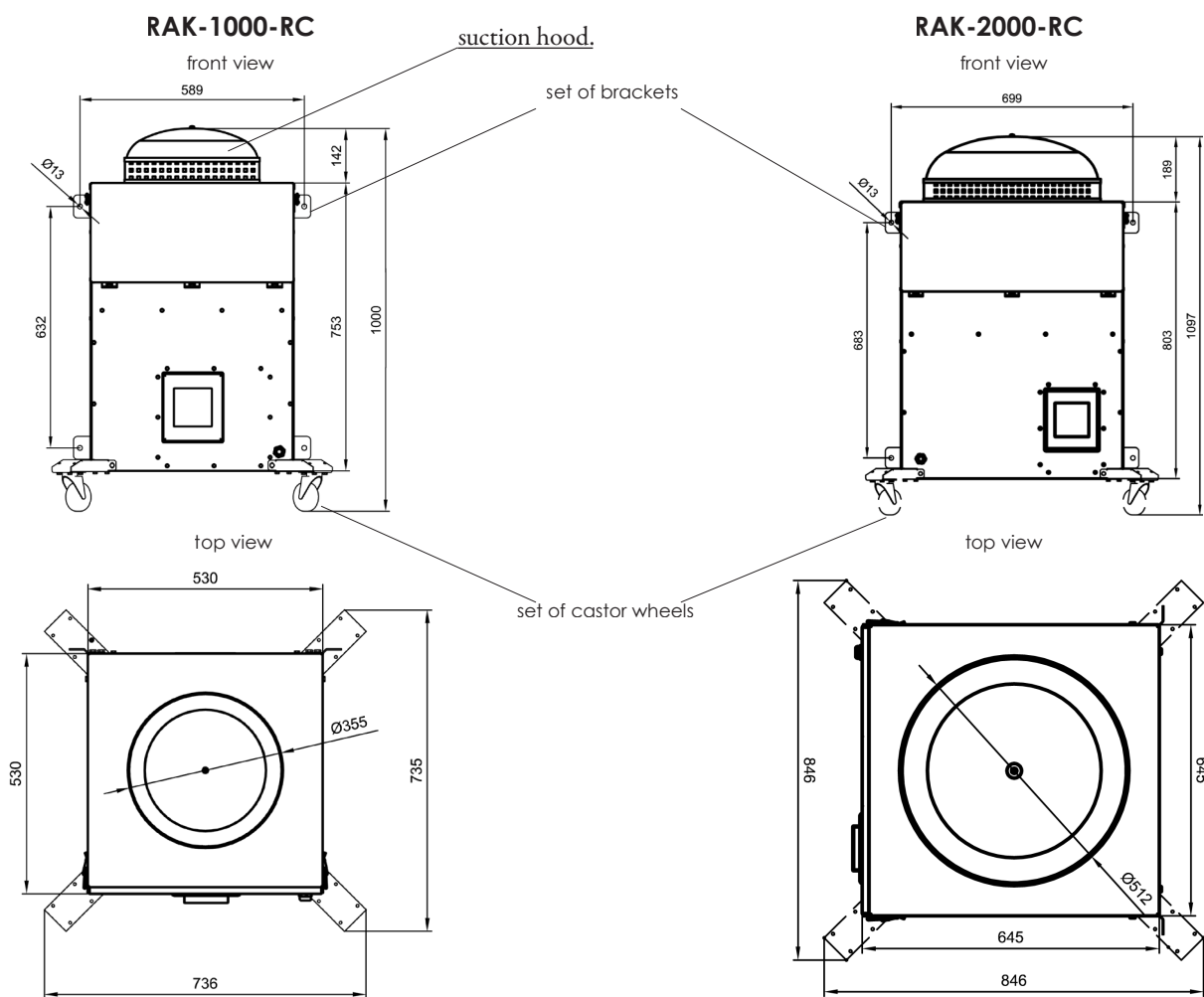
Type	Part. No	Maximum volume flow [m ³ /h] ¹	Supply voltage [V]	Motor rate [W]	Acoustic pressure level [dB(A)] from distance ²		Weight [kg]
					1 m	5 m	
RAK-1000-RC	800O48	1260	230	160	59	40	65
RAK-2000-RC	800O49	2320	230	2x160	62	63	85

- Caution: 1. Volume flow has been measured at the clean filters.
2. Acoustic pressure level values are given in the of free field conditions.




Additional equipment

Type	Part.No	Remarks
	Zestaw kołowy 828K00	<ul style="list-style-type: none"> Consists of 4 castor wheels along with the brackets (for RAK-1000-RC and RAK-2000-RC)
	Zestaw wieszaków 828W00	<ul style="list-style-type: none"> Consists of 4 pieces of wall brackets (for RAK-1000-RC and RAK-2000-RC)




Replaceable filters

Filtering pad

Type	Part.No	Weight [kg]	Dimensions [mm]	Class	Filtration efficiency [%]	Remarks
	FWR-1000	838W78	0,18	490x490	G3	88
	FWR-2000	838W79	0,20	600x600		


In each device is placed one filtration pad.

Compact filter

Type	Part.No	Weight [kg]	Dimensions [mm]	Class	Filtration efficiency [%]	Remarks
	FKR-1000	838F47	2,5	490x490	F9	95,6
	FKR-2000	838F48	4	600x600		

1 pc. in RAK-1000-RC
1 pc. in RAK-2000-RCX

Włóknina impregnowana węglem aktywnym

Type	Part.No	Weight [kg]	Dimensions [mm]	Remarks
	FCR-1000	838W96	0,30	450x450
	FCR-2000	838W97	0,32	570x700

In each device is placed one sheet of spunbond.
Dimensions of spunbond in FCR-2000 is given in the developed view.