Chimney fan RSVG

RSVG

Description
An **exodraft** chimney fan RSVG is specially designed to work with heating appliances burning gas. The fans have a built-in fail-safe system consisting of a pressure differential switch and a flow measuring system. The fail-safe system complies with BS5440: 2000 Part 1 and BS6644: 1991.

The fans are normally installed on top of the chimney where the vertical discharge column prevents a plume of gas flowing down outside of the chimney. The RSVG can also be wall mounted.

exodraft chimney fans RSVG are used with gas heating appliances and provide a controllable negative pressure along the full length of the flue and chimney. The fans guarantee optimum chimney draught irrespective of the placement, dimensions or height of the chimney which is beneficial to new or existing installations.

The fan must be connected to an **exodraft** control type EFC21 or EFC25.

Construction
The **exodraft** chimney fans RSVG are constructed of corrosion resistant cast aluminium and are designed to work reliably in a hot and corrosive environment year after year.

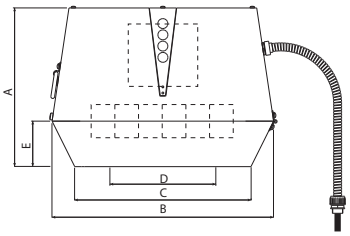
The fan has vertical discharge and is specially made to withstand continuous flue gas temperatures up to 200 °C.

RSVG fans are supplied with a backward curved impeller, which gives excellent fan efficiency. A mesh safety guard of stainless steel covers the vertical discharge. All fans are hinged, providing easy access for service and maintenance.

The fans are fitted with an entirely closed, asynchronous motor with ball bearings sealed for life. The motor is specifically constructed to provide reliable operation at a high temperature. It is made to international classifications IP54 (protection class) and F (insulation). The motor is located inside the motor housing and thus seperated from the flue gases. The electrical connection is provided by a heat resistant silicone cable withstanding 200 °C

The built-in pressure switch in the chimney fan is wired to the appropriate **exodraft** control unit which supervises the fail-safe function. Only when the draught exceeds the preset and safe level can the gas appliance be used. The fail-safe system will prevent any spillage of combustion products from the appliance when the fan and controller are commissioned correctly. In case of insufficient chimney draught, the heating appliance will be shut down.

Technical data RSVG



Model	Motorspecification				Weight	Dimensions (mm)				
	RPM	V	Amp	kW*	kg	A	B x B	C x C	D Ø	E
RSVG200-4-1	1400	1 x 230	0.4	0.07	18	280	390	310	200	80
RSVG250-4-1	1400	1 x 230	0.8	0.16	27	335	485	385	250	100
RSVG315-4-1	1400	1 x 230	1.8	0.37	37	380	580	465	315	115

*Effect at the motor shaft at ambient temperature: 20 °C
RPM is infinitely adjustable for all 1x230 V motors
The motor is overload protected
Motor protection class IP 54, Insulation class F

Sound levels RSVG

Sound levels to external surroundings. Measured in accordance with ISO 3744.

Model	Lw (dB) 125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Lp dB (A)
RSVG200-4-1	58	60	62	61	56	44	37	36
RSVG250-4-1	64	68	66	65	61	49	45	41
RSVG315-4-1	71	75	70	73	68	57	52	48

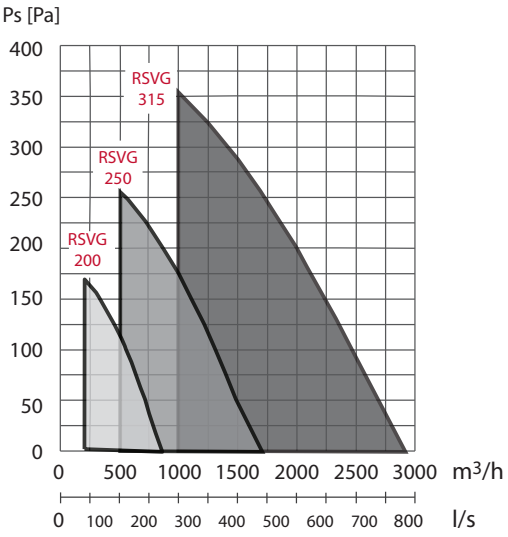
Sound levels to flue pipe. Measured in accordance with ISO 5136.

Model	Lw (dB) 125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Lw dB (A)	Lp dB (A)
RSVG200-4	65	62	62	58	48	41	30	63	55
RSVG250-4	72	69	65	63	56	48	41	68	61
RSVG315-4	74	73	70	71	63	53	47	74	69

Tolerance +/-3 dB
Lw = Sound effect level dB. (reference: 1 pW)
Lp = Sound Pressure level dB (A) at a distance of 10 m from the fan at half-spheric sound distribution.
Lp = (5 metres) = Lp (10 metres) + 6dB
Lp = (20 metres) = Lp (10 metres) - 6dB

Chimney fan selection RSVG

Please use the **exodraft** fan selection chart or complete an appraisal form.
exodraft offers a free fan selection service - the correct chimney fan and control unit are calculated according to EN 13384.



Type	Flue
RSVG200	ø 200 mm
RSVG250	ø 250 mm
RSVG315	ø 315 mm
at 1400 RPM	

The capacity chart is measured at a flue gas temperature of 20 °C. The fan capacity changes with temperature. Correction of system pressure loss for flue gas temperature higher than 20 °C is calculated:

$$Ps_{20} = Ps_t \times \frac{273 + t}{293}$$

Ps = static pressure
t = temperature measured in °C

Example:
System need: 500 m³/h and 90 Pa at 180 °C
Selection of fan: 500 m³/h and 139 Pa at 20 °C