

RSVG *Chimney Fans*



EXHAUSTO

FOR A BETTER FLOW



RSVG - Product Information

Description

EXHAUSTO chimney fans RSVG are 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 BS 5440: 2000 Part 1 and BS 6644: 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 and thereby complies with the Clean Air Act. The RSVG can also be wall mounted.

EXHAUSTO chimney fans RSVG are used with 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 placing, dimensions or height of the chimney which is beneficial to new or existing installations.

The chimney fans offer capacities which will cover domestic appliances up to multi-boiler installations with a heat output up to 1 MW.

Construction

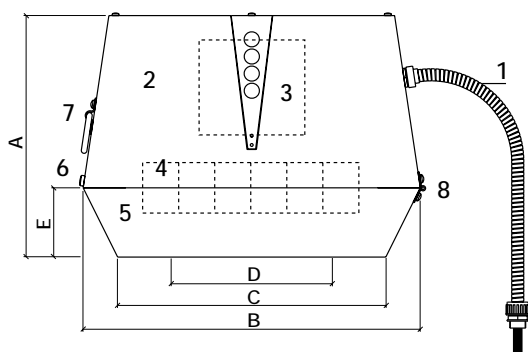
EXHAUSTO chimney fans RSVG are constructed of corrosion resistant cast aluminium and are supplied in grey, paint finish. The fans have a mesh safety guard of stainless steel covering the vertical discharge. The fans are supplied with a backward curved impeller, which gives high fan efficiency.

The fans are fitted with an entirely closed, asynchronous motor with ball bearings sealed for life.

The built-in pressure switch in the chimney fan is wired to the appropriate EXHAUSTO control unit which supervises the fail-safe function. In case of insufficient chimney draught, the heating appliance will be shut down.

EXHAUSTO chimney fans are supplied with a 30 days money-back guarantee.

RSVG - Specifications



- 1. Motor cable
- 2. Top section
- 3. Motor
- 4. Centrifugal impeller
- 5. Bottom section
- 6. Locking nuts
- 7. Handle
- 8. Hinges

Model	RPM	1x230V Amp/kW*	Weight kgs	A mm	BxB mm	CxC mm	D ø/mm	E mm
RSVG200-4-1	1400	0.4/0.08	15	280	390	310	200	80
RSVG250-4-1	1400	0.8/0.18	26	335	485	385	250	100
RSVG315-4-1	1400	1.8/0.37	35	380	580	465	315	115

*Effect

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

Sound levels to external surroundings.

Measured in accordance to ISO 3744

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

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 halfspheric sound distribution. Lp (20 meter) = Lp (10 meter) - 6 dB.

Lp = (5 meter) = Lp (10 meter) + 6dB

Lp = (20 meter) = Lp (10 meter) - 6dB

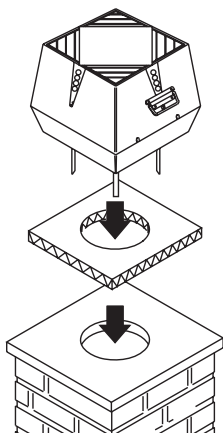
Sound levels to flue pipe.

Measured in accordance to ISO 5136

Model	Lw (dB)							Lw dB (A)	Lp dB (A)
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz		
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

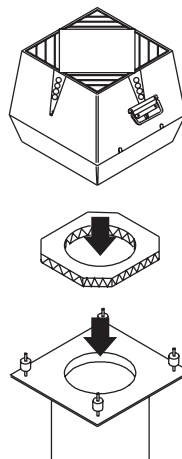
Lp = (5 meter) = Lp (10 meter) + 6dB

Lp = (20 meter) = Lp (10 meter) - 6dB



The fan is located on top of the chimney. The fans RSV200-315 are supplied with a pre-cut glass fibre mat corresponding to the chimney fan size.

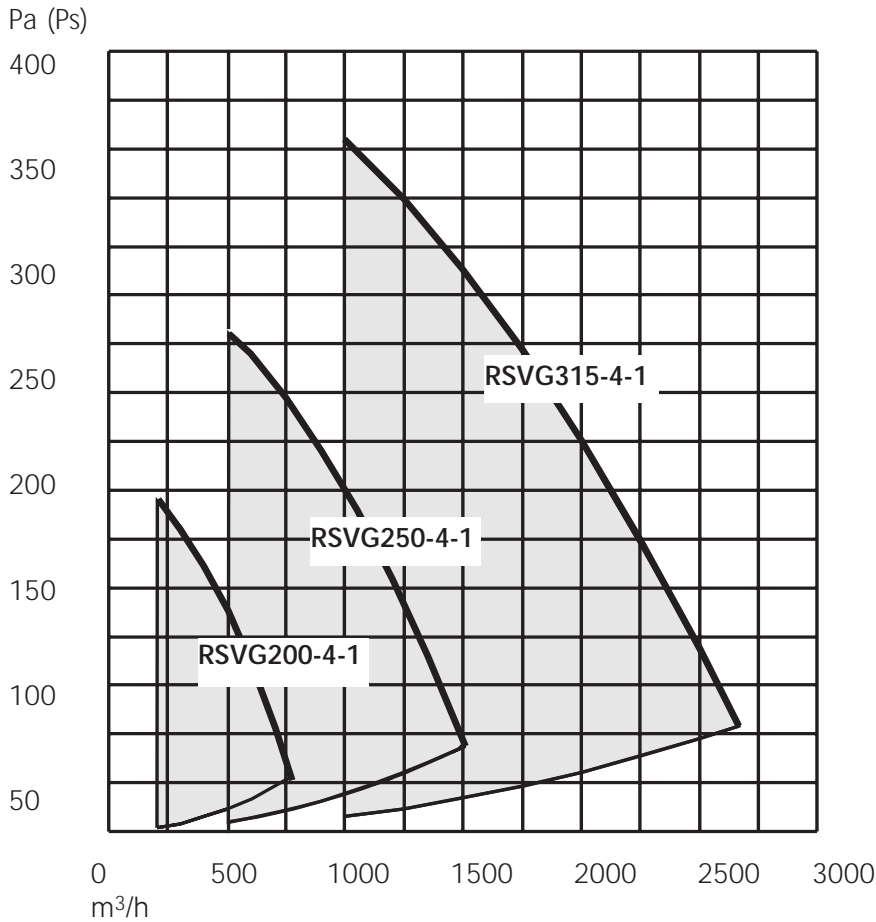
Locate the location brackets in the grooves on the underside of the fan base plate. The glass fibre mat is placed on top of the chimney with the aluminium foil facing upwards. Locate the fan on top of it.



If installed on a metal chimney the fan should be installed with flange type FRSV and if needed also with anti-vibration bolts instead of location brackets.

If the anti-vibration bolts are used, the corners of the glass fibre mat must also be cut off.

RSVG - Capacity charts



The capacity charts are measured at a flue gas temperature of 20°C. The fan capacity changes with temperature of the flue gases.

Correction of system pressure loss for flue gas temperature higher than 20°C is calculated:

$$P_{s, 20} = P_{s, t} \times \frac{273 + t (^{\circ}\text{C})}{293}$$

Example

System demand: 500m³/h and 90 Pa at 180°C
 Chimney fan selection: 500m³/h and 139 Pa at 20°C

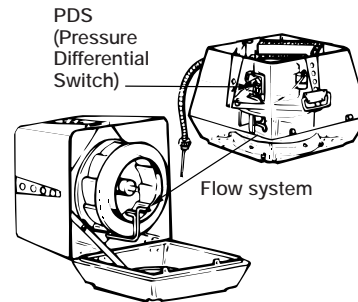
RSVG - Fan selection and fail-safe system

Chimney fan selection

Please use the EXHAUSTO fan selection charts or complete an appraisal form.

EXHAUSTO offers a free fan selection service. The correct chimney fan and control unit are calculated according to EN 13384.

For further technical information please see the leaflet for EXHAUSTO chimney fans RSV.



EXHAUSTO Chimney Fans are supplied with a 2 year warranty. EXHAUSTO is certified according to ISO 9001

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