

Chimney fan

RHGC

An Exodraft RHGC chimney fan provides reliable chimney draught for closed natural gas and LPG fireplaces connected to a concentric flue gas system with a maximum burner output <13 kW.

The fan has 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 fan can be mounted on top of the chimney or be mounted on the wall.

The fan can withstand temperatures up to 200 °C at the flue exit or chimney top.

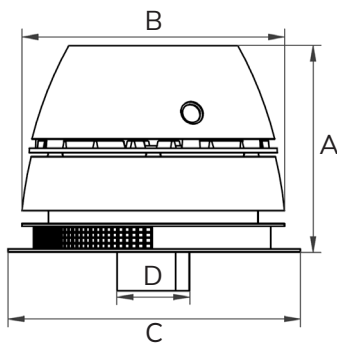
The RHGC160 fan guarantees optimum draught if you adhere to the following installations criteria:

- Minimum concentric chimney length between fireplace and fan is 5 m.
- Maximum guaranteed concentric chimney length between fireplace and fan is 60 m and 15 pcs 90° elbows.
- Minimum chimney dimension 80 mm inside diameter, 125 mm outside diameter.

The fan must be connected to an Exodraft control type EFC21 for the fail-safe system to work.



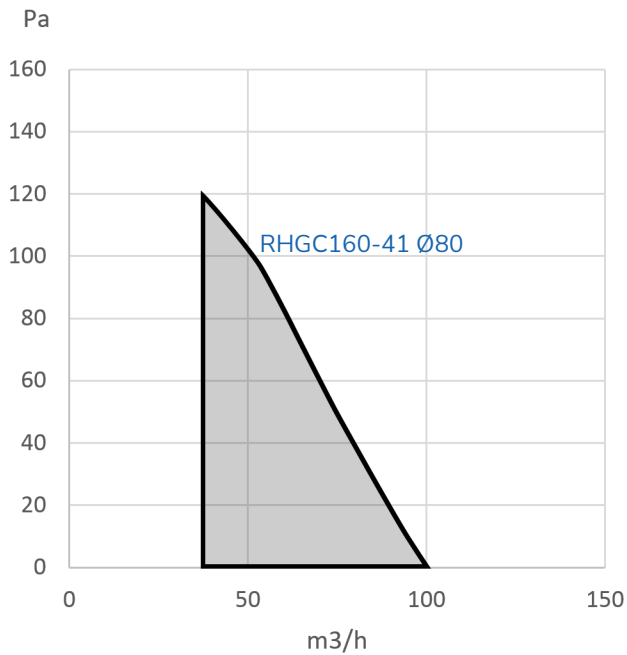
Technical data



Model	Motor specifications				Weight kg	Dimensions [mm]			
	rpm	V	Amp	kW*		A	B [Ø]	C [Ø]	D [Ø]
RHGC160-41 80/125	1400	1 x 230	0.40	0.09	10	227.5	290	323	80

*Effect at the motor shaft at ambient temperature: 20 °C
RPM is infinitely adjustable for all 1 x 230 V motors
The motor is overload protected
Motor protection class IP 54, Insulation class F

Capacity diagram



Type	Test flue diameters
RHGC160-41	Ø80 mm
at 1400 rpm	

The capacity diagram 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:

$$P_{S_{20}} = P_{S_t} \times \left(\frac{273 + t \text{ (°C)}}{293} \right)$$

t = temperature measured in °C

Example

System need: 200 m³/h and 25 Pa at 180 °C

Selection of fan: 200 m³/h and 39 Pa at 20 °C

Sound data

Sound levels to external surroundings (ISO 3744)

Model	Lw [dB]							Lw dB [A]	Lp dB [A]
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz		
RHGC160-41	72	73	63	56	62	63	51	71	43

Tolerance +/- 3 dB.

Lw = sound effect level dB (reference: 1 pW)

Lp = sound pressure level dB (A) at 10 m distance from the fan at half spheric sound distribution

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

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