

## 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.

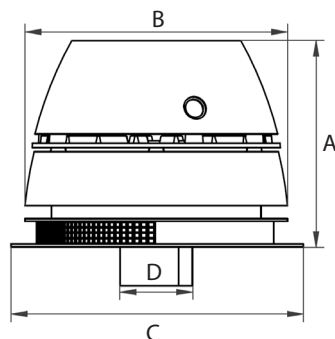
The fan can be mounted on top of the chimney or be mounted on the wall. The fan can withstand temperatures up to 200 °C at the flue exit or chimney top.

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

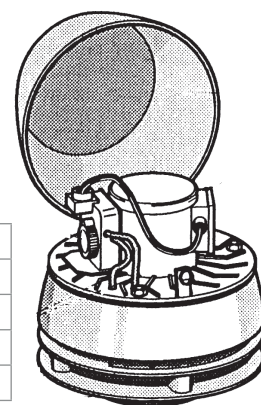
- Minimum concentric chimney length between fireplace and fan is 5 m.
- Maximum guaranteed concentric chimney length between fireplace and fan is 60 m and 15 pcs 90° elbows.
- Minimum chimney dimension 80 mm inside diameter, 125 mm outside diameter.

The fan must be connected to an exodraft control type EFC21 for the failsafe system to work.

### Technical data



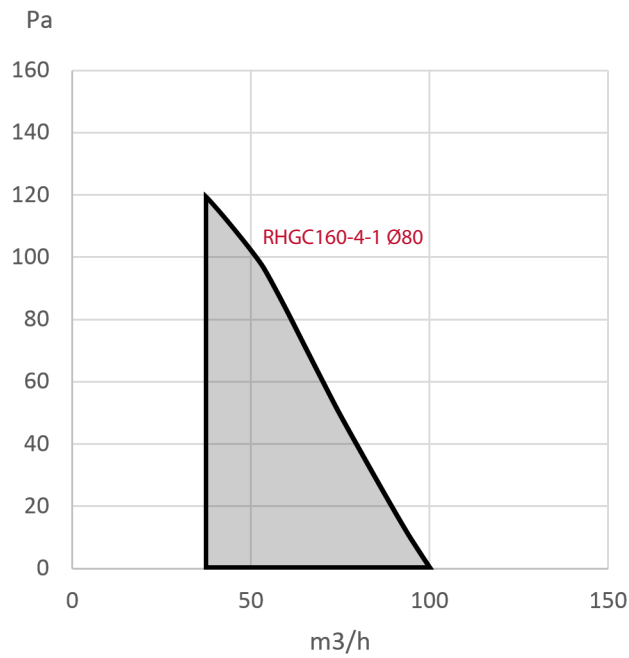
<b>Amp</b>	0.4
<b>Max. flue gas temp</b>	200 °C
<b>Ambient temp</b>	-20 °C to max +40 °C
<b>Mounting position</b>	Wall or roof
<b>Fan control</b>	EFC21



Model	Motor specifications				Weight kg	Dimensions			
	RPM	V	Amp	kW*		A mm	B ø/mm	C ø/mm	D ø/mm
RHGC160-4-1 80/125	1400	1x230	0.4	0.09	10	227.5	290	323	80

\*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

### Capacity diagrams



Type	Test flue diameters
RHGC160-4-1	ø 80 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:

$$Ps_{20} = Ps_t \times \left( \frac{273 + t \text{ (°C)}}{293} \right)$$

t = temperature measured in °C

#### Example

System need: 200 m<sup>3</sup>/h and 25 Pa at 180 °C  
 Selection of fan: 200 m<sup>3</sup>/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		
RHGC160-4-1	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