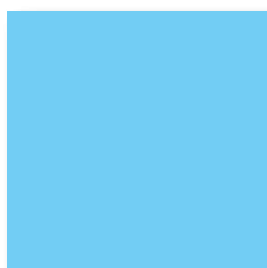




Technical data

Chimney fans, controllers and accessories
in systems for gas fireplaces, stoves
and single non-modulating gas boilers



Systems for gas fireplaces and gas stoves

The **exodraft** chimney fan systems for open gas fireplaces are the only ones on the market that feature an approved fail-safe function. This ensures that your family is not exposed to any unnecessary hazards from your open gas fire. Our systems can be used either on existing fireplaces or new installations.

In addition, the **exodraft** chimney fan system gives you the freedom to choose your gas fireplace on the basis of what you want, rather than what the building architecture or layout will allow. In some countries the system can be used together with a wall-mounted chimney fan.

An **exodraft** chimney fan system for a gas fireplace or stove consists of a chimney fan with a flow measuring system, a GASTEC approved fan controller and accessories.

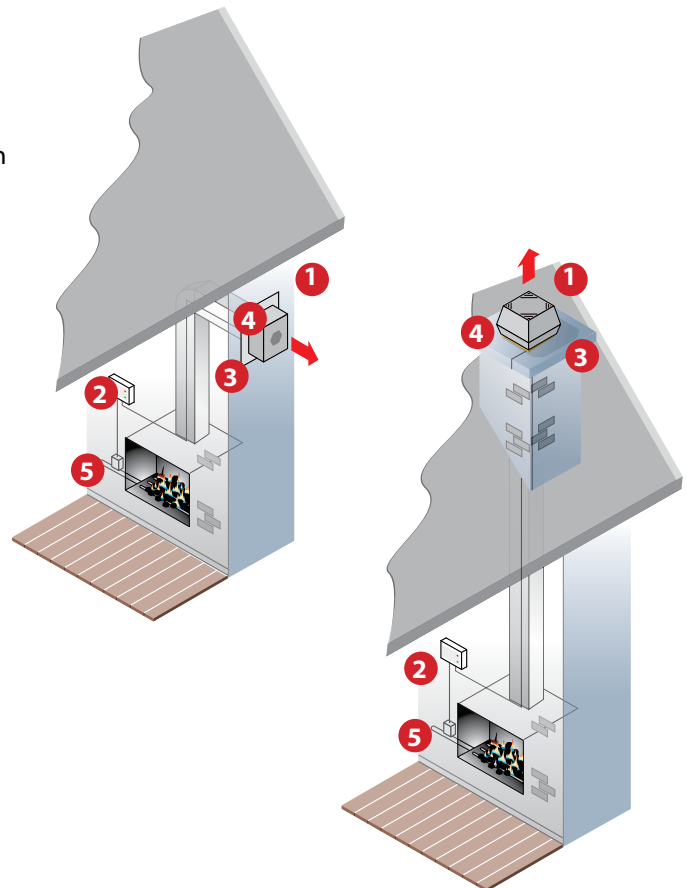
Four types of **exodraft** chimney fans are available for gas: RHG & RSHG with horizontal discharge, RSVG with vertical discharge and the wall mounted RSG. They are all fitted with a flow measurement system which – together with type EFC21 or EFC25 control systems – ensure that gas is not supplied to the fireplace unless there is sufficient draught in the chimney.

When switched on, a signal is sent to the chimney fan to create the optimal updraft in the chimney. Only when this is reached will the control system allow gas into the fireplace enabling the fire to be lit. Any reduction in updraft will result in the gas supply to the fire being cut and the fire being switched off.

This is the only system on the market that have the sought after EN298 GASTEC approval.

The design of the optimum system components for the individual system is calculated using design software developed by **exodraft** in accordance with BS EN 13384

All **exodraft** system designs come with two years warranty, extendable to three years warranty when utilising the **exodraft** trained engineers (see our website for details).



Find the components you need here:

	Components	Type	Page
1	Chimney fans	RHG	4
		RSHG	6
		RSVG	8
		RSG	10
2	Controls	EFC21	12
		EFC25	13
3	Isolation switch	REPSW2x16	14
4	Accessories for installation	Flange	14
5	Solenoid valve	SMG 12	14
		SMG 14	

Components for single non-modulating gas boilers

The **exodraft** chimney fan system for single non-modulating gas boiler installations offers great possibilities within flue and chimney design. The stepless adjustable fan motor and the electronic control ensure a constant draft that guarantees combustion and better heating economy. Large savings on flue systems and installation costs are available as downsizing of flue diameters and chimney heights becomes possible.

An **exodraft** chimney fan system for a single non-modulating gas boiler consists of a chimney fan with a flow measuring system, a GASTEC approved fan control and accessories. It is used where there is a need for design flexibility, enhanced energy performance of the appliances or guarantee against spillage of combustion materials or Carbon monoxide.

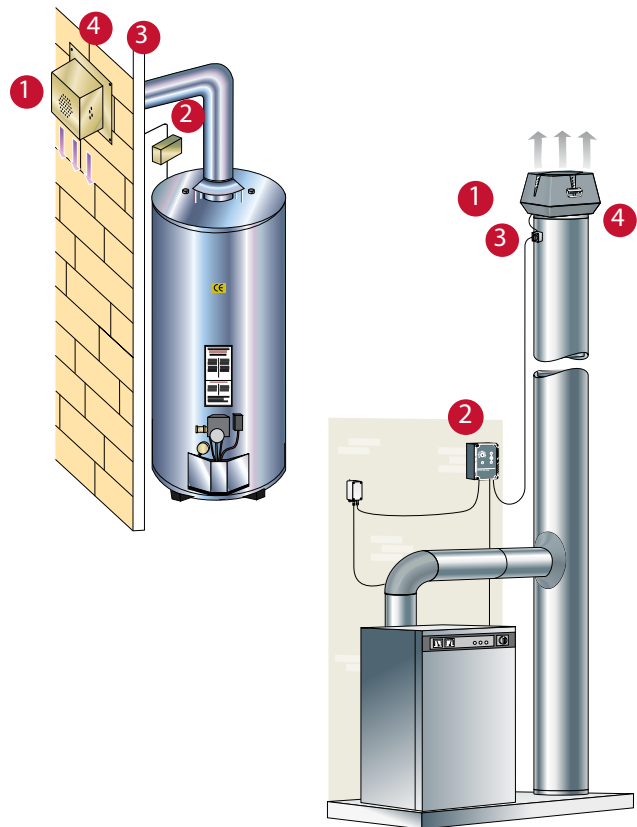
When switched on, a signal is sent to the chimney fan to create the optimal updraft in the chimney. Only when this is reached will the control system allow gas into the boiler enabling the burner to be lit. Any reduction in updraft will result in the gas supply to the fire being cut and the fire being switched off.

Four types of **exodraft** chimney fans are available for gas: RHG & RSHG with horizontal discharge, RSVG with vertical discharge and the wall mounted RSG. They are all fitted with a flow measurement system which – together with type EFC21 or EFC25 control systems – ensure that gas is not supplied to the boiler unless there is sufficient draught in the chimney.

This is the only system on the market that have the sought after EN298 GASTEC approval.

The design of the optimum system components for the individual system is calculated using design software developed by **exodraft** in accordance with BS EN 13384

All **exodraft** System Designs come with two years warranty, extendable to three years warranty when utilising the **exodraft** trained engineers (see our website for details).



Find the components you need here:

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		RSG	10
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		EFC25	13
3	Isolation switch	REPSW2x16	14
4	Accessories for installation	Flange	14

Chimney fan RHG160



Description

An **exodraft** chimney fan RHG160 is suitable for gas stoves and small gas fireplaces. 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 is mounted on top of the chimney and provides a controllable negative pressure in the flue and chimney. The fan has a horizontal discharge and can withstand temperatures up to 200 °C at the flue exit or chimney top.

The RHG160 fan guarantees optimum 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 for the failsafe system to work.

Construction

The **exodraft** chimney fan RHG160 is constructed of corrosion resistant cast aluminium and are designed to work reliably in a hot and corrosive environment year after year.

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

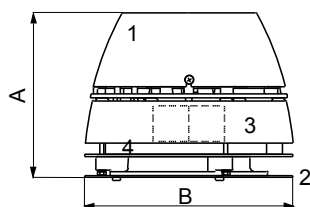
The fan is fitted with an entirely closed, asynchronous motor with ball bearings sealed for life. The motor is specifically constructed to provide reliable operation at a high temperature. It is made to international classifications IP54 (protection class) and F (insulation).

The motor is located inside the motor housing and thus separated from the flue gases. The electrical connection is provided by a heat resistant silicone cable withstanding 200 °C. The RHG160 is fitted with a centrifugal impeller.

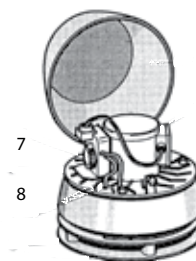
The fan is easily removable for service and maintenance. The built-in pressure switch in the chimney fan is wired to the appropriate **exodraft** control unit which supervises the fail-safe function. Only when the draught exceeds the preset and safe level can the gas appliance be used.

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 RHG160



1. Motor housing
2. Base plate
3. Motor
4. Ribbed cooling plate



Model	RPM	Motor specifications			Weight kg	Dimensions	
		V	Amp	kW*		A mm	B ø/mm
RHG160-4-1	1400	1x230	0,4	0,09	10	238	290

*Effect at the motor shaft at ambient temperature: 20 °C

RPM is infinitely adjustable for all 1x230 V motors

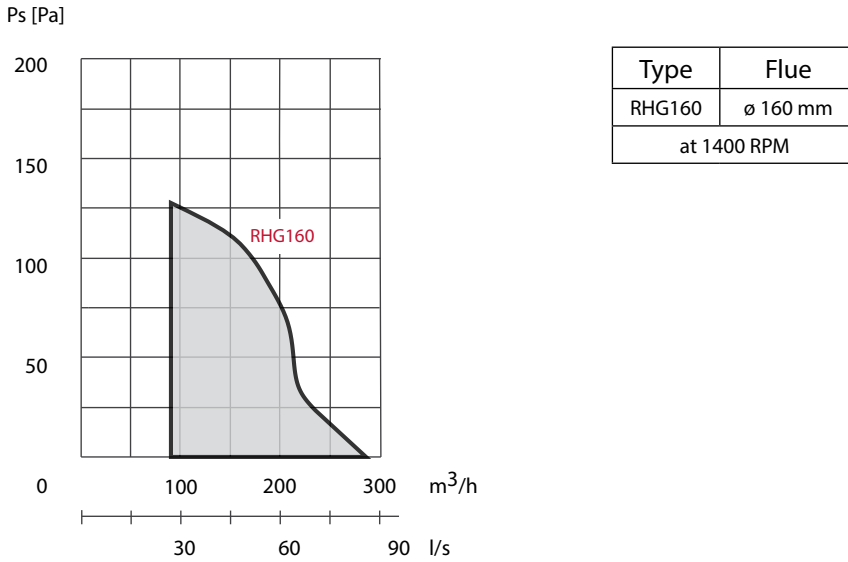
The motor is overload protected

Motor protection class IP 54, Insulation class F

Chimney fan selection RHG160

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 BS EN 13384



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:

$$Ps_{20} = Ps_t \times \left(\frac{273 + t \text{ (°C)}}{293} \right) \quad t = \text{temperature measured in } ^\circ\text{C}$$

Example

System need: 200 m³/h and 25 Pa at 180 °C
 Selection of fan: 200 m³/h and 39 Pa at 20 °C

Chimney fan RSHG



Description

An **exodraft** chimney fan RSHG 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 fan is mounted on top of the chimney and provides a controllable negative pressure in the flue and chimney. The fan has a horizontal discharge and can withstand temperatures up to 200 °C at the flue exit or chimney top.

The RSHG fans guarantee optimum 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 RSHG are constructed of corrosion resistant cast aluminium and are designed to work reliably in a hot and corrosive environment year after year.

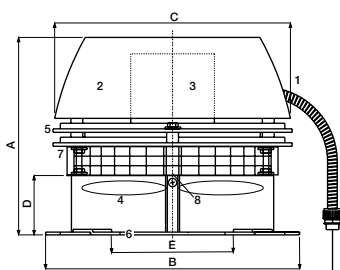
The fan has horizontal discharge and can withstand temperatures up to 200 °C at the flue exit or chimney top.

RSHG is supplied with an axial vane of stainless steel and a mesh safety guard covering the horizontal discharge. All fans are hinged, providing easy access for service and maintenance.

The fan is 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 separated from the flue gases. The electrical connection is provided by a heat resistant silicone cable withstanding 200 °C

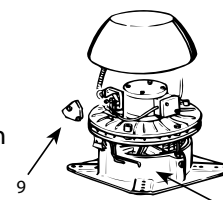
The built-in pressure switch in the chimney fan is wired to the appropriate **exodraft** control unit which supervises the fail-safe function. Only when the draught exceeds the preset and safe level can the gas appliance be used. The fail-safe system will prevent any spillage of combustion products from 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 RSHG



1. Motor cable
2. Motor housing
3. Motor
4. Vane
5. Ribbed cooling plate

6. Base plate
7. Hinges
8. Locking nut
9. Pressure Differential Switch
10. Flowmeasurer



Model	Motor specifications				Weight kg	Dimensions				
	RPM	V	Amp	kW*		A mm	BxB mm	C ø/mm	D mm	E ø/mm
RSHG012-4-1	1400	1x230	0,4	0,03	14	275	365	350	85	165
RSHG014-4-1	1400	1x230	0,4	0,04	18	330	420	395	100	188

*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

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	
RSHG012-4-1	64	60	55	52	48	42	34	30
RSHG014-4-1	75	69	65	62	57	51	44	41

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		
RSHG012-4-1	72	65	59	49	47	41	31	61	53
RSHG014-4-1	82	73	63	58	52	48	38	68	61

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.

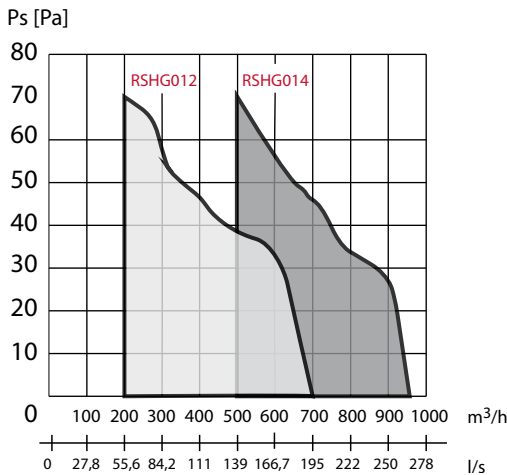
Lp = (5 metres) = Lp (10 metres) + 6dB

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

Chimney fan selection RSHG

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 BS EN 13384



Type	Flue
RSHG12	ø 200 mm
RSHG14	ø 250 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:

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

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

Chimney fan 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.

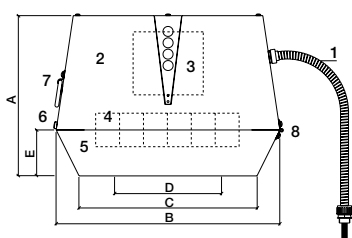
The fan has vertical discharge and is specially made to withstand continuous flue gas temperatures up to 200 °C.

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.

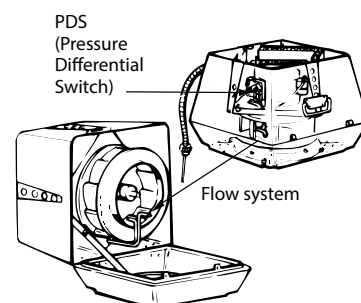
The fans are fitted with an entirely closed, asynchronous motor with ball bearings sealed for life. The motor is specifically constructed to provide reliable operation at a high temperature. It is made to international classifications IP54 (protection class) and F (insulation). The motor is located inside the motor housing and thus separated 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



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



Model	Motorspecification				Weight kg	Dimensions (in mm)				
	RPM	V	Amp	kW*		A	B x B	C x C	D Ø	E
RSVG200-4-1	1400	1x230	0,4	0,07	18	280	390	310	200	80
RSVG250-4-1	1400	1x230	0,8	0,16	27	335	485	385	250	100
RSVG315-4-1	1400	1x230	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 to ISO 3744

Model	Lw (dB)							Lp dB (A)
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
RSVG200-4-1	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 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

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

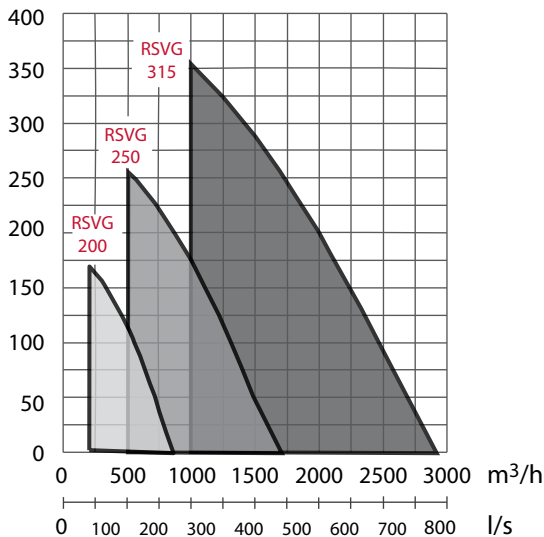
Lp = (20 metres) = Lp (10 metres) - 6dB

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

Ps [Pa]



Type	Flue
RSVG200	∅ 200 mm
RSVG250	∅ 250 mm
RSVG315	∅ 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:

$$Ps_{20} = Ps_t \times \left(\frac{273 + t}{293} \right) \quad t = \text{temperature measured in } ^\circ\text{C}$$

Example

System need: 500 m³/h and 90 Pa at 180 °C

Selection of fan: 500 m³/h and 139 Pa at 20 °C

Chimney fan RSG



Description

An **exodraft** chimney fan RSG provide a controllable negative pressure along the full length of the flue and chimney.

A fail-safe system is fitted in the fan which automatically measures the velocity of the flue gases. Only when the velocity exceeds the preset and safe level can the gas appliance be used. The fail-safe system prevents any spillage from the gas appliance as well as any leaks of CO and other poisonous gases.

Fan type RSG is installed on the external wall and thereby enables a gas appliance to be installed in a room with no chimney. The power of the fan will allow for long horizontal flues up to 15 meters.

A silencer type SLR is available as an accessory for the fan type RSG.

Construction

The fans are specially made to work in a hot and dirty environment and can withstand temperatures up to 180 °C at the flue exit.

The fans are made from galvanised sheet metal, fitted with a centrifugal impeller that is very resistant to dirt in the flue gases.

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 separated 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 the controller are commissioned correctly. In case of insufficient chimney draught, the heating appliance will be shut down.

Technical data RSG

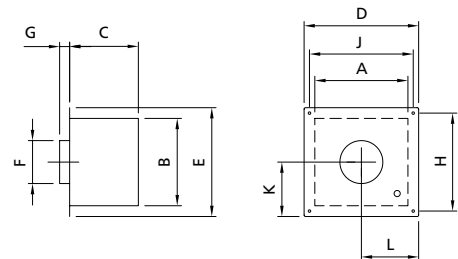
Model	Motorspecification				Weight kg	Dimensions in mm										
	RPM	V	Amp	kW*		A	B	C	D	E	F outside	G	H	J	K	L
RSG125-4-1	1400	1x230	0,3	0,04	11	265	250	220	336	320	∅121	35	280	296	153	157
RSG150-4-1	1400	1x230	0,2	0,05	14	325	310	240	400	380	∅146	35	340	360	181	186
RSG200-4-1	1400	1x230	0,4	0,11	20	405	380	275	478	453	∅196	35	413	438	215	221

*Effect at the motor shaft at ambient temperature: 20 °C

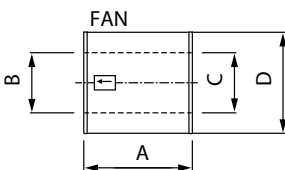
RPM is infinitely adjustable for all 1x230 V motors

The motor is overload protected

Motor protection class IP 54, Insulation class F



Install Accessory: Silencer SLR



Type	A	B INSIDE	C INSIDE	D
SLR125-280	280	∅125	∅128	∅240
SLR150-280	280	∅150	∅153	∅265
SLR200-280	280	∅203	∅206	∅318
SLR200-600	600	∅203	∅206	∅318

Sound levels RSG

Soundpower levels to flue pipe. Measured in accordance to ISO 5136

Model	Lw (dB)							Lp dB (A)
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
RSG125	60	59	56	50	49	42	34	49
RSG150	61	66	61	56	53	47	40	55
RSG200	69	72	68	62	59	55	49	61

Soundpower levels to external surroundings. Measured in accordance to 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		
RSG125-4-1	66	59	48	44	40	30	21	54	29
RSG150-4-1	75	67	52	50	44	36	29	61	35
RSG200-4-1	80	69	59	56	51	45	36	66	41

Sound absorbed using silencer SLR (Lw to flue pipe)

Model	Lw (dB)						
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
SLR125-280	4	6	11	21	18	12	12
SLR150-280	2	4	11	19	14	14	9
SLR200-280	1	2	10	16	12	12	7

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 (2 metres) = Lp (1 metre) - 6 dB.

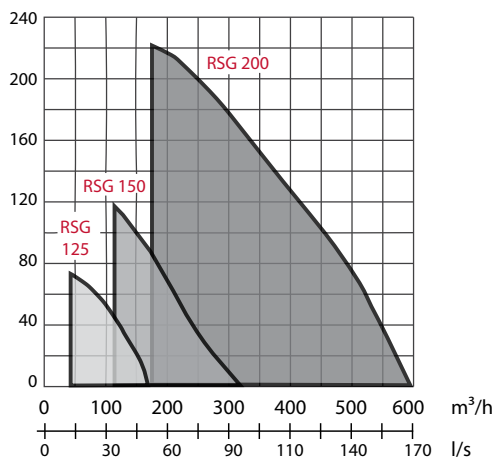
Chimney fan selection RSG

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

Ps [Pa]



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:

$$Ps_{20} = Ps_t \times \left(\frac{273 + t}{293} \right) \quad t = \text{temperature measured in } ^\circ\text{C}$$

Example

System need: 500 m³/h and 90 Pa at 180 °C

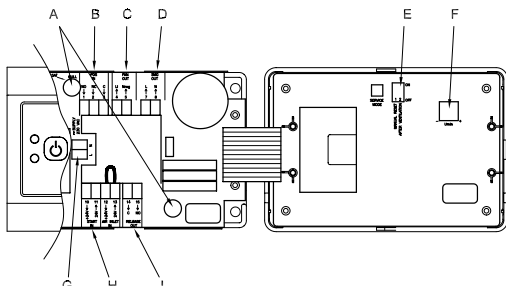
Selection of fan: 500 m³/h and 139 Pa at 20 °C

EFC21 control



EFC21

EFC21 technical data



Description	Data EFC21
Height (mm)	85
Width (mm)	126
Depth (mm)	32
Fuse rating (amps) (A)	3.15 A T
Fail safe (B) Pressure differential switch (PDS)	24 V DC (Closed circuit supply)
Output to chimney fan (C)	1.8 A/230 V (AC 3)
Output to solenoid valve (SMG) (D)	230 V AC max. 100 V A
Dipswitch options (E)	<ul style="list-style-type: none"> • Manual reset • Post-purge 3 min. period
Set-point running speed (F)	Potentiometer on PCB
Supply (G)	230 V +/- 10 %, 50 Hz
Input for external on/off switch (H)	24 V DC (Closed circuit supply)
Release out Relay (I)	Max. 3 A 230 V AC / 3A 30 V DC (Fused: 3.15AT)
Operating temperature	-10 °C to 40 °C
Degree of protection	IP 30
Material	ABS
Colour	White
CE-Approval No.	0063BN1144 based on EN298 (2003)
Usable with the following chimney fans in this brochure	RHG, RSHG, RSVG, RSG

Description

exodraft controller EFC21 has been developed for use with gas fireplaces where an **exodraft** chimney fan or wall fan is installed.

The control system supervises the fail-safe function. In case of insufficient chimney draught, the EFC21 will shut off the gas supply.

The control system is developed to meet BS 5440: Part 1 (2000), BS 6644 (1991), Gas Appliance Directive 90/396/EEC, EN298 (2003) and other relevant European standards.

The system consists of:

1. Chimney fan
2. Controller EFC21
3. Solenoid valve SMG (or order separately - see details below)

Function

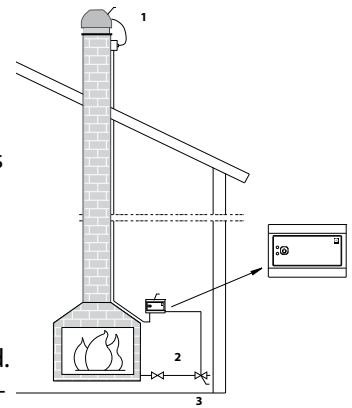
By activating EFC21 the chimney fan will immediately start up on full speed. When the fail-safe supervision confirms sufficient chimney draught, the fireplace can be lit and the fan speed will adjust to the pre-set value set during commissioning.

The controller has a step-up function and a 15-second built-in delay function to avoid nuisance cut-outs. When EFC21 is turned off, the chimney fan stops. It is possible to pre-set a post-purge period of 3 minutes.

The step-up function is part of the fail-safe system. Should the draught fail during normal operating conditions: the controller will increase the fan speed to compensate. This usually occurs on days that are windier than the commissioning day. If sufficient draught cannot be re-established, the EFC21 will shut off the gas supply.

Solenoid valve SMG

SMG12: Solenoid valve for EFC21 for 1/2" pipe
SMG14: Solenoid valve for EFC21 for 1/4" pipe.



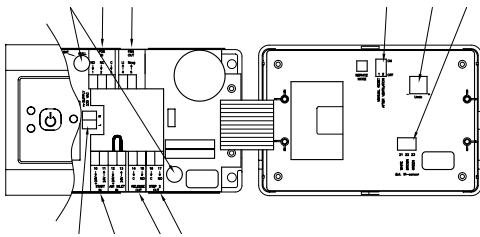
EFC25 control



Remote control

EFC25

EFC25 technical data



Description	Data EFC25
Height (mm)	85
Width (mm)	126
Depth (mm)	32
Fuse rating (amps) (A)	3.15 A T
Fail safe (B) Pressure differential switch (PDS)	24 V DC (Closed circuit supply)
Output to chimney fan (C)	1.8 A/230 V (AC 3)
Dipswitch options (E)	<ul style="list-style-type: none"> • Manual reset • 3 min. post-purge period
Set-point running speed (F)	Potentiometer on PCB
Supply (G)	230 V +/- 10 %, 50 Hz
Input for external on/off switch (H)	24 V DC (Closed circuit supply)
Release out Relay (I)	Max. 3 A 230 V AC / 3A 30 V DC (Fused: 3.15 AT)
Release step 2 Relay (J)	Max. 5A 230 V AC/5A 30 V DC
Operating temperature	-10 °C to 40 °C
Degree of protection	IP 30
Material	ABS
Colour	White
Socket for external IR-sensor (F)	Option: IR-sensor with 10 meter cable [p/n 0501014]
CE-Approval No.	0063BN1144 based on EN298 (2003)
Usable with the following chimney fans in this brochure	RSH, RSHG, RSVG, RSG

Description

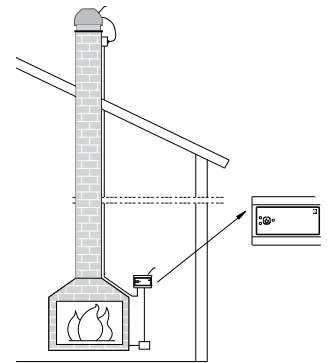
exodraft controller EFC25 with remote control has been developed for use with **exodraft** chimney fans or wall fans but only in connection with gas fireplaces with flame detection devices and automatic ignition. The control system supervises the fail-safe function and integrates with the fireplace control by means of two relays. There is no solenoid output from EFC25.

The control system supervises the fail-safe function. In case of insufficient chimney draught, the EFC25 will shut down the fireplace.

The control system is developed to meet BS 5440: Part 1 (2000), BS 6644 (2005), Gas Appliance Directive 90/396/EEC, EN298 ((2003)) and other relevant European standards.

The system consists of:

1. Chimney fan
2. Controller EFC25
3. Remote sensing eye (optional)



Function

By activating the remote control the chimney fan will immediately start up on full speed. When the fail-safe supervision confirms sufficient chimney draught, the fireplace will be lit and the fan speed will adjust to the preset value set during commissioning.

The remote control can also be used to switch between high and low flame where applicable and to adjust the fan speed, when the fan is used for ventilation purposes.

The controller has a step-up function and a 15-second built-in delay function to avoid nuisance cut-outs. When EFC25 is turned off, the chimney fan stops.

It is possible to preset a post-purge period of 3 minutes. The step-up function is part of the fail-safe system. Should the draught fail during normal operating conditions: the controller will increase the fan speed to compensate. This usually occurs on days that are windier than the commissioning day. If sufficient draught cannot be re-established, the EFC25 will shut down the fireplace.

Isolation switch



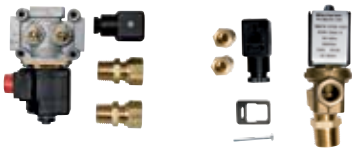
REPSW2x16

It is a legal requirement that an isolation switch is installed in the immediate vicinity of the chimney fan, so that, for example, chimney sweeps can disconnect the electrical current to the chimney fan. The type of isolation switch required depends on the chimney fan control system.

Type	Description	Used with controls
REPSW2x16	4-pole* isolation switch	EFC21, EFC25

* 3-pole with help switch

Solenoid valve



SMG12

SMG14

Solenoid gas valves used with EFC21 to open for gas supply when draught is registered and cut off gas supply in case of insufficient draught.

Type	Description
SMG12	Solenoid valve for 1/2" pipe
SMG14	Solenoid valve for 1/4" pipe

FR flange



FR



FR-02

FR flanges from **exodraft** are used to install **exodraft** chimney fans on steel chimneys.

The flanges are made of stainless steel and ensure that the chimney fans have a flat and level installation base. The flange is supplied with four vibration dampers that reduce vibrations and help create a stable base for the chimney fan.

The diameter of the flange spigot is 3 mm smaller than the diameter of the chimney. For example, the diameter of the spigot of an FR1-200 is Ø 197 mm, designed to fit into a chimney opening with a Ø 200 mm diameter.

The flange range caters for all types of chimney fans and chimneys. Flanges with diameters other than those shown in the table can be made to order.

Type	mm	Chimney diameter	Chimney fan
FR2	310 x 310	125 - 150 - 175 - 200 - 250	RSVG200,
FR3	395 x 395	150 - 175 - 200 - 250 - 300 - 350	RSVG250, RSHG12, RSHG14,
FR4	500 x 500	200 - 250 - 300 - 350 - 400 - 450	RSVG315,
FR2-02	310 x 310	150-160-200	RHG160

Spigot length 120 mm

Installing a chimney fan

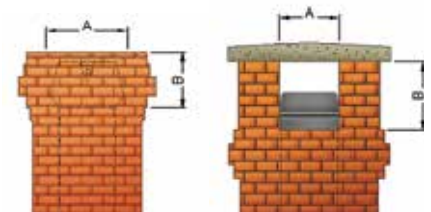
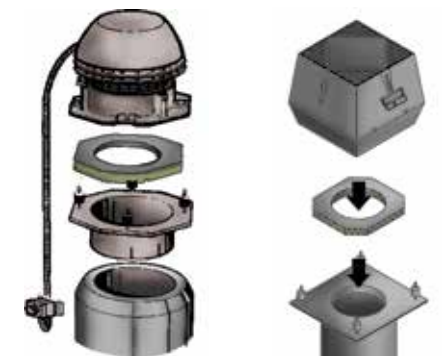
The chimney fan types RSVG, RSHG, RGH are installed on top of the chimney. The chimney fan is supplied as standard with adjustable location brackets, armoured power cable, a safety wire and a mineral wool mat, which ensures vibration-free operation.

When installing a fan onto a brick chimney the location brackets are fitted under the chimney fan.

If the chimney fan is to be fitted onto a steel chimney, then a flange and vibration dampers must be used instead of location brackets. The flange, which includes vibration dampers, must be ordered separately.

Chimney fan RSG is located on the external wall. The installation instructions give detailed information regarding adjustment of the length of the silencer to accommodate different site conditions. Installations below 2.7 m from the ground should have a suitable guard as the chimney fan can get hot. See installation manual for more details.

NB! If the chimney has been used previously to a fan being installed, then it should be cleaned before the chimney fan is switched on, thus reducing the risks of a chimney fire.



Commissioning of the system

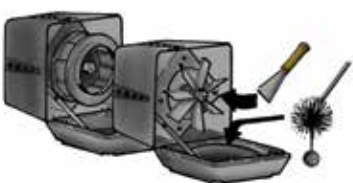
The chimney fan system must be commissioned to the exact site conditions before use for the fail-safe system to work. See installation manual for details.

'Hiding' the chimney fan

Installation of **exodraft** chimney fans on top of chimneys can sometimes be difficult due to special site conditions such as listed buildings or special architectural demands. For those installations it is possible to make the fans virtually "invisible".

Contact **exodraft** for assistance if such a solution is needed.

Service and maintenance



The chimney fan should be cleaned as often as needed (at least once a year) depending on the type of fire fuel.

When the fan is open, it is easy to clean it while the chimney is being swept.

The chimney fan must always be running when there is a fire in the fireplace, stove or boiler. **exodraft** provides a two-year manufacturer's warranty. The **exodraft** warranty does not include damage caused by fire.

exodraft's extensive product range is based on more than 50 years of experience and knowledge in the field of combustion and chimney draft technology. Our products are known for high safety and quality and we are helping to set the standards and requirements for draft technology.

exodraft products are all fully documented in accordance with current national and international standards and are sold in more than 40 countries – for small domestic fireplaces in private homes to larger commercial and industrial boiler installations.



Solid fuel and wood-burning stoves and fireplaces



Decentralized multiple fireplaces connected to same chimney



Solid fuel and bio-fuel boilers (pellets etc.)



Gas fireplaces



Oil and gas boilers



Decentralized multiple heating appliances connected to same chimney



Bakeries



Industry



Restaurants and pubs

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