GAS

Technical data

Chimney fans, controls and accessories

for gas fireplaces, stoves and single non-modulating gas boilers

exodraft

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 in conjunction with a wall-mounted chimney fan.

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

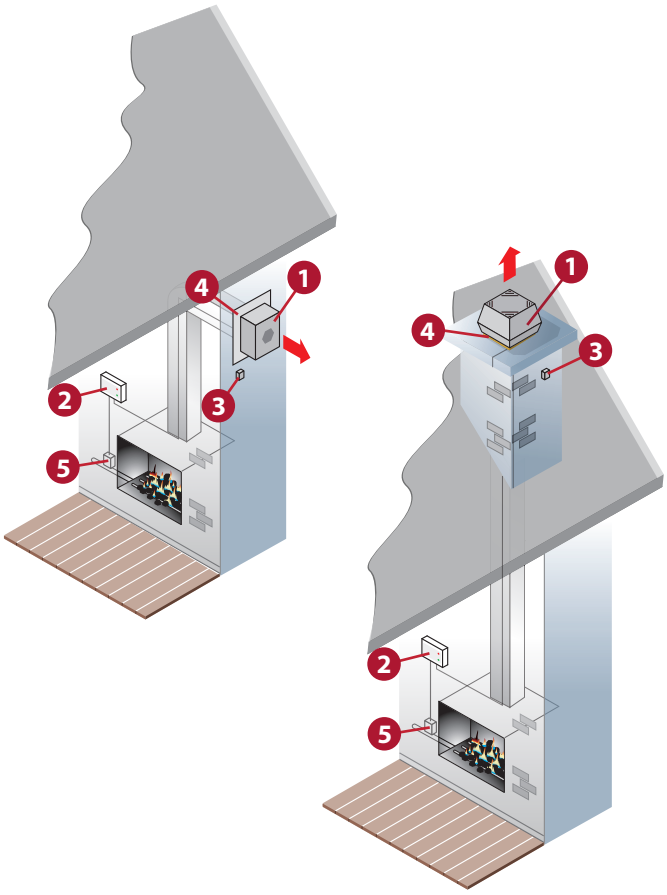
Four types of **exodraft** chimney fans are available for gas: RHG & RSHG with horizontal discharge, RSVG with vertical discharge and the wall-mounted RSG. They are all fitted with a flow measurement system which – together with type EFC21 control system – ensure that gas is not supplied to the fireplace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

When switched on, a signal is sent to the chimney fan to create the optimal updraught in the chimney. Once this is achieved, the control system opens the gas valve, allowing the fire to be lit. Any reduction in updraught 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 Kiwa 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 when utilising the **exodraft** trained engineers (see our website for details).



Find the components you need here:

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		RSHG	6
		RSVG	8
		RSG	10
2	Control	EFC21	12
		EBC22	13
3	Isolation switch	REPSW2x16	16
4	Accessories for installation	Flange	14
5	Solenoid valve	SMG 12 SMG 14	16

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 draught 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 boilers consists of a chimney fan with a flow measuring system, a Kiwa 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 updraught in the chimney. Once this is achieved, the control system opens the gas valve, allowing the burner to be lit. Any reduction in updraught 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 control system – ensure that gas is not supplied to the boiler unless there is sufficient draught in the chimney.

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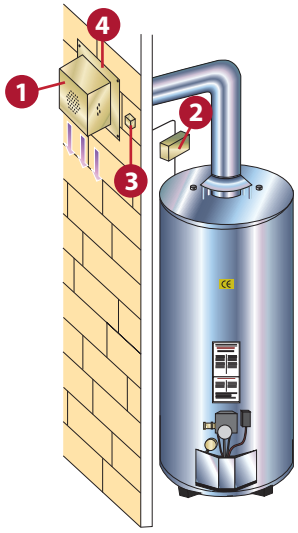

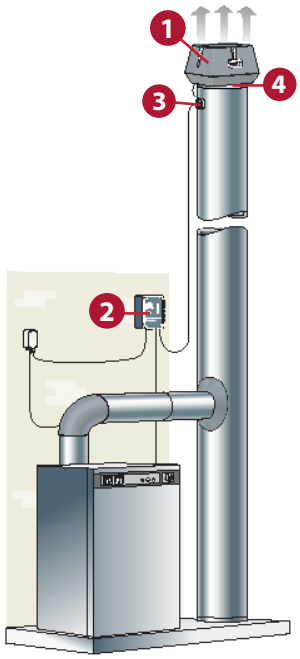

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		EBC22	13
3	Isolation switch	REPSW2x16	16
4	Accessories for installation	Flange	14

Chimney fan RHG160

RHG

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 for the fail-safe system to work.

Construction
The **exodraft** chimney fan RHG160 is constructed of corrosion resistant cast aluminium and 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.

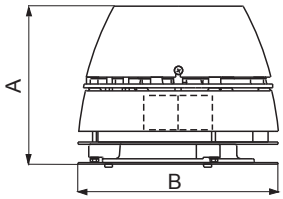
The fan is fitted with an entirely closed, asynchronous motor with ball bearings sealed for life. The motor is specifically constructed to provide reliable operation at a high temperature. It is made to international classifications IP54 (protection class) and F (insulation).

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

Technical data RHG160

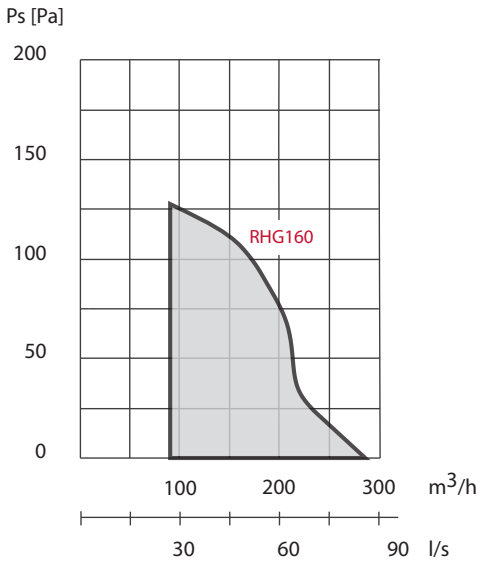


	Motor specifications				Weight	Dimensions	
Model	RPM	V	Amp	kW*	kg	A mm	B ø/mm
RHG160-4-1	1400	1x230	0.4	0.09	10	238	290

*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.



Type	Flue
RHG160	ø 160 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: 200 m³/h and 25 Pa at 180 °C
Selection of fan: 200 m³/h and 75 Pa at 20 °C

Chimney fan RSHG

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.

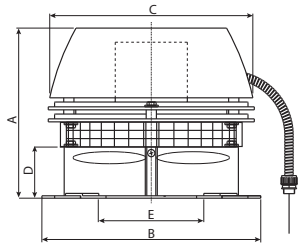
The fan has horizontal discharge and can withstand temperatures up to 200 °C at the flue exit or chimney top.

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 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 RSHG



Model	Motor specifications				Weight	Dimensions				
	RPM	V	Amp	kW*	kg	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 with ISO 3744.

Model	Lw (dB)							Lp
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	dB (A)
RSHG012-4-1	64	60	55	52	48	42	34	30
RSHG014-4-1	75	69	65	62	57	51	44	41

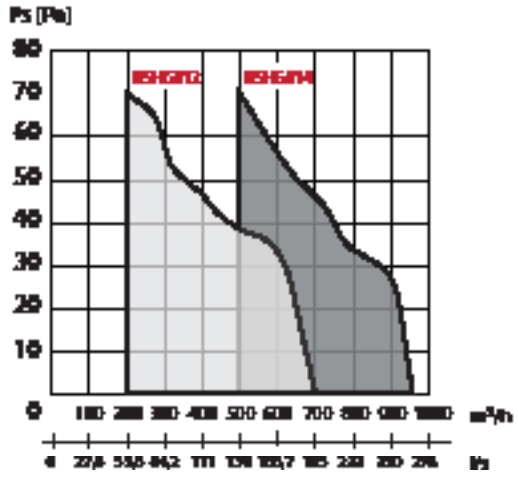
Sound levels to flue pipe. Measured in accordance with ISO 5136.

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

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

Ps = static pressure
t = temperature measured in °C

Example:
System need: 500 m³/h and 19 Pa at 180 °C
Selection of fan: 500 m³/h and 30 Pa at 20 °C

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.

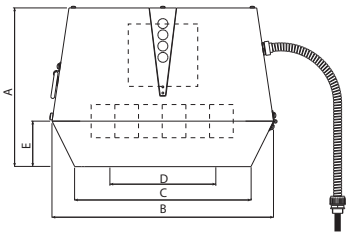
The fan has vertical discharge and is specially made to withstand continuous flue gas temperatures up to 200 °C.

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)							Lp
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	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

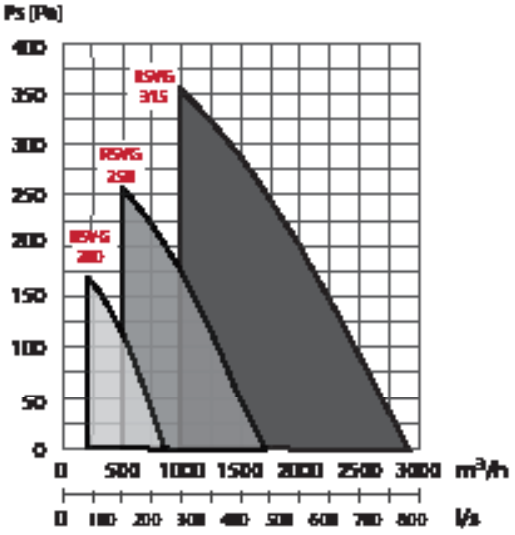
Sound levels to flue pipe. Measured in accordance with ISO 5136.

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

Chimney fan RSG

RSVG

Description
An **exodraft** chimney fan RSG provides 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.

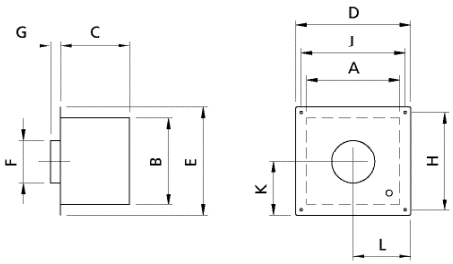
Construction
The fans are specially made to work in a hot and dirty environment and can withstand temperatures up to 180 °C at the flue exit.

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 able to withstand 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	Dimensions [mm]										
	RPM	V	Amp	kW*	kg	A	B	C	D	E	F out-side	G	H	J	K	L
RSG125-4-1	1400	1x230	0.3	0.04	11	265	250	220	336	320	ø121	35	280	296	153	157
RSG150-4-1	1400	1x230	0.1	0.05	14	325	310	240	400	380	ø146	35	340	360	181	186
RSG200-4-1	1400	1x230	0.4	0.11	20	405	380	275	478	453	ø196	35	413	438	215	221
RSG250-4-1	1400	1x230	0.8	0.14	31	522	482	338	600	560	ø247	60	516	556	271	279

* 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 RSG

Soundpower 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	Lp dB (A)
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
RSG250	78	71	62	57	52	50	51	63

Soundpower 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	Lw dB (A)	Lp dB (A)
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
RSG250-4-1	71	72	67	61	61	62	60	70	42

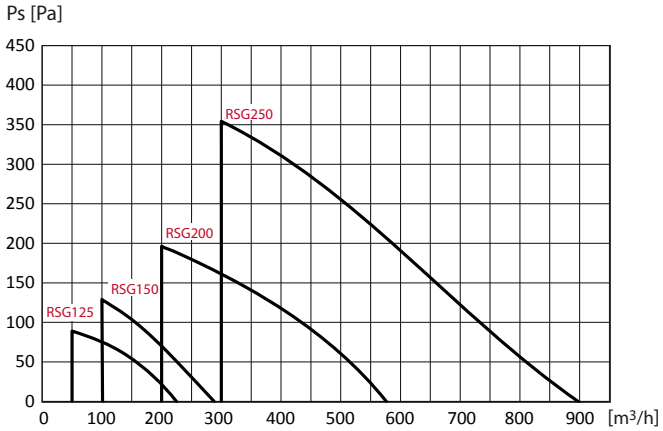
Sound absorbed using silencer SLR (Lw to flue pipe).

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
SLR250-280	0	0	6	14	5	5	4

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.

RSG capacity diagrams

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



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:

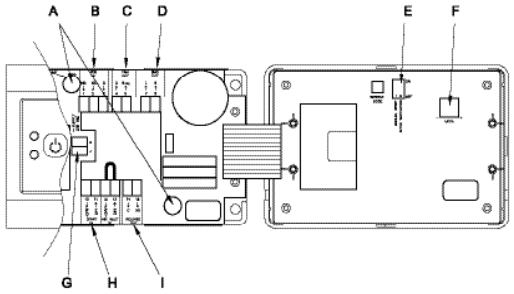
System need: 300 m³/h and 90 Pa at 180 °C

Selection of fan: 300 m³/h and 139 Pa at 20 °C

EFC21 control

EFC21

Technical data EFC21



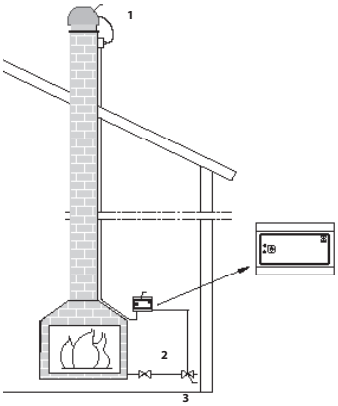
Description	Data EFC21
Height (mm)	85
Width (mm)	126
Depth (mm)	32
Fuse rating (amps) (A)	3.15 A T
Fail safe (B) Pressure differential switch (PDS)	24 V DC (Closed circuit supply)
Output to chimney fan (C)	1.8 A/230 V (AC 3)
Output to soleniod valve (SMG) (D)	230 V AC max. 100 V A
Dipswitch options (E)	• 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 1395
CE-Approval No.	0063BN1144 based on EN298 (2012)
Usable with the following chimney fans in this brochure	RHG, RSHG, RSVG, RSG

Description
exodraft control 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. Control EFC21
3. Solenoid valve SMG (order seperately - see details below)



Function
By activating EFC21, the chimney fan will immediately start up at 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 control 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 control 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.

EBC22 control

EBC22

XTP 150G sensor

Technical data EBC22

Description	Data
EBC22EU01/EBC22EU02	
Height x width x depth	204.3 x 239.5 x 77.2 mm
Weight	1.62 kg
IP-rating / material	IP54 / ABS PA758
Voltage	230 V AC ±10 %, 50 Hz ±1 %
Power consumption	475 W
Fuse	T4A
Temperature	-20 °C to 60 °C
Monitoring range	-500 Pa to +500 Pa
XTP sensor	**XTP 150 G**
Dimension (w x h x d)	115 x 90 x 55 mm
Operating temperature	0 °C to +70 °C
Monitoring range	0 Pa to +150 Pa
Max. distance between EBC22 and XTP sensor	100 m
IP-rating	IP54
EBC22EU01 Inputs	
Digital inputs (D11 & D12)	18 to 230 V AC/DC
Pressure sensor (XTP) input	0 to 10 V DC, 20 mA
Pressure switch (PDS) input	24 V DC, 20 mA
Temperature sensor	PT1000
EBC22EU01 Outputs	
Digital relay outputs (DO1 & DO2)	250 V AC, 5A
Motor regulator	Supply voltage -3 %, 3 A, AC3
Motor start/stop relay	250 V AC, 8A
Control signal 0–10 VDC	20 mA
24 VDC power supply	100 mA
Alarm output relay	250 V AC, 8A
CE-Approval No.	0063V1148 based on EN1364 (2007) (Kiwi Gastec approved)

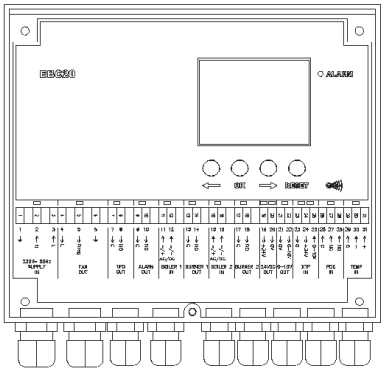
Description
The EBC22 is an automatic control system for single and multiple gas boiler installations and for other installations in which a single or multiple heat sources are connected to the same chimney.
The control may only be used with **exodraft** fans. The EBC22 system consists of an EBC22 control, which can be positioned anywhere, and a pressure transducer (XTP 150G sensor) which is positioned near the chimney.
The EBC22 control is approved according to the gas directive by Kiwa Gastec.

The EBC22 control monitors and maintains a specific draught by maintaining a constant pressure. The pressure in the chimney is measured by the XTP 150G sensor. If the draught falls outside the set point value the speed of the fan is modulated to achieve the target draught. If it is not possible to maintain the draught at or above the set point, then the control will automatically disconnect the boiler(s).

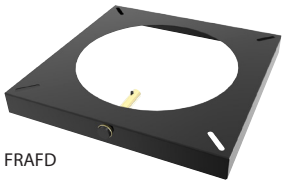
The correct chimney draught gives optimal operating conditions for the boiler(s), and in so doing provides the best possible financial return on the heating system.

When the boiler thermostat signals the need for heat, the chimney fan is set to full speed.
Once the control unit measures sufficient draught (via the XTP sensor), the boiler(s) are allowed to start up.
Should the draught drop below preset value, the boilers will be shut off, but only after a delay of 15 seconds in order to avoid unnecessary cut-outs in the system.

EBC22EU01 Control for indoor installation.
EBC22EU02 Control for outdoor installation.



Cover plate

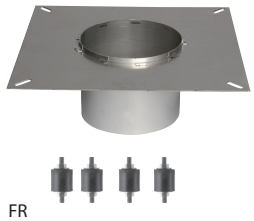


FRAFD

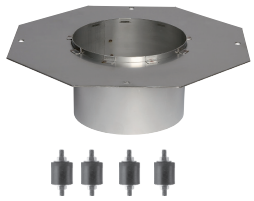
Description
Cover plate for brick chimneys (to cover anti-vibration mat and flange).

Type	Description	Fits chimney fan type
FR1AFD	Cover plate steel chimney	RSV009, RSV160
FR2AFD	Cover plate steel chimney	RSV012, RSV200, RSVG200, RS009, RS255, RSHT009
FR3AFD	Cover plate steel chimney	RSV014, RSV250, RSVG250, RS012, RS014, RS285, RSHG012, RSHG014, RSHT012, RSHT014
FR4AFD	Cover plate steel chimney	RSV016, RSV315, RSVG315, RS016, RSV400, RSV450, RSHT016
FR1AFD-001	Cover plate brick chimney	RSV009, RSV160
FR2AFD-001	Cover plate brick chimney	RSV012, RSV200, RSVG200, RS009, RS255, RSHT009
FR3AFD-001	Cover plate brick chimney	RSV014, RSV250, RSVG250, RS012, RS014, RS285, RSHG012, RSHG014, RSHT012, RSHT014
FR4AFD-001	Cover plate brick chimney	RSV016, RSV315, RSVG315, RS016, RSV400, RSV450, RSHT016

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 ø197 mm, designed to fit into a chimney opening with a ø200 mm diameter.

The flange range fits all types of chimney fans and chimneys. Flanges with other diameters can be supplied on request.

Type	mm	Chimney diameter	Chimney fan
FR1	272 x 272	125 -150-175-180-190-200	RSV009, RSV160
FR2	310 x 310	125-150-160-175-180-190-200-250	RSV012, RSV200, **RSVG200***, RS009, RS255, RSHT009
FR3	395 x 395	150-175-180-190-200-250-300-350	RSV014, RSV250, RSVG250, RS012, RS014, RS285, RSHG012, RSHG014, RSHT012, RSHT014
FR4	500 x 500	200 - 250 -300 - 350 - 400 - 450	RSV016, RSV315, RSVG315, RS016, RSV400, RSV450, RSHT016
FR2-02	310 x 310	150-160-180-190-200	RS009-02
FR3-02	395 x 395	150-180-190-200	RS012-02

Spigot length 120 mm
*RSVG200 is not compatible with FR2-125

Other fitting accessories

Levelling screws

RSD

Four levelling screws type RSD can be installed between the fan and the chimney to create dilution air in brick chimneys if the temperature in the chimney is too high. If dilution air is required, it is important to take the increased capacity need into consideration when sizing the fan system.

Rainshield

RSV Rainshield

RS Rainshield

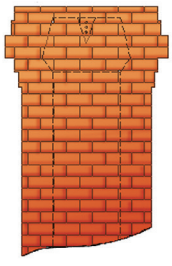
Rain protection against driving rain.

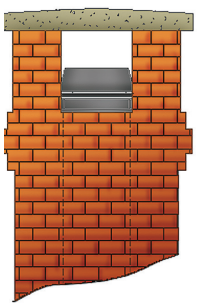
Type	Description	Fits chimney fan type
1105619	Rainshield	RS009, RSHT009
1105621	Rainshield	RS012, RSHG012, RSHT012
1105623	Rainshield	RS014, RSHG014, RSHT014
1100178	Rainshield	RSV009, RSV160
1100179	Rainshield	RSV012, RSV200, RSVG200
1100192	Rainshield	RSV014, RSV250, RSVG250

Concealing 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.





Isolation switch

REP-AFB

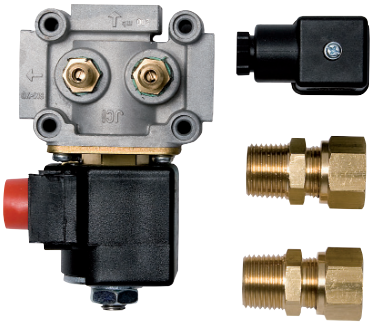
REPSW2x16

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
REP-AFB	2-pole isolation switch	EFC16, EFC35, EW41*, EBC10, EBC20
REPSW2x16	4-pole** isolation switch	EFC18

* EW41 has a built-in repair switch
** 3-pole with aux. contact

Solenoid valve



SMG12

SMG14

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

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

Installing a chimney fan

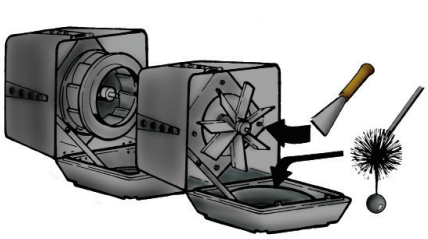
The chimney fan is installed on top of the chimney. The chimney fan is supplied as standard with adjustable location brackets, armoured power cable, a safety wire and a mineral wool mat, which ensures vibration-free operation.

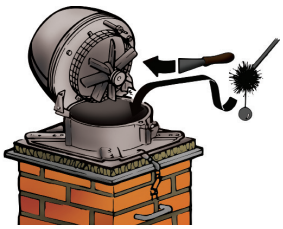
When installing a fan on a brick chimney, the location brackets are fitted under the chimney fan.

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

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.

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 operating when the fireplace, stove or boiler is in use. **exodraft** provides a two-year manufacturer's warranty. The **exodraft** warranty does not include damage caused by overheating.

Notes

Peter Hermansen, chairman of the board

Jørgen Andersen, CEO

Who is exodraft?

exodraft is a Danish company that manufactures and develops heat recovery & mechanical chimney draught systems for various industries and private users worldwide.

A clear mission:

We want to develop and sell heat recovery systems and mechanical exhaust systems of the highest quality possible. Our systems shall recover otherwise wasted energy effectively, thereby helping to protect the environment.

Comprehensive knowledge:

Our system solutions are built on 60 years of experience within chimney draught technology as well as extensive knowledge about the relationship between combustion and the draught in the chimney.

ISO certified quality:

At **exodraft**, we constantly optimise and develop our products further. Quality and documentation are two of the cornerstones in the production of our systems solutions. We are ISO9001 certified so we can document our high quality.

exodraft

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