

## Control Unit

# EFC21

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.



### 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.

### Accessories

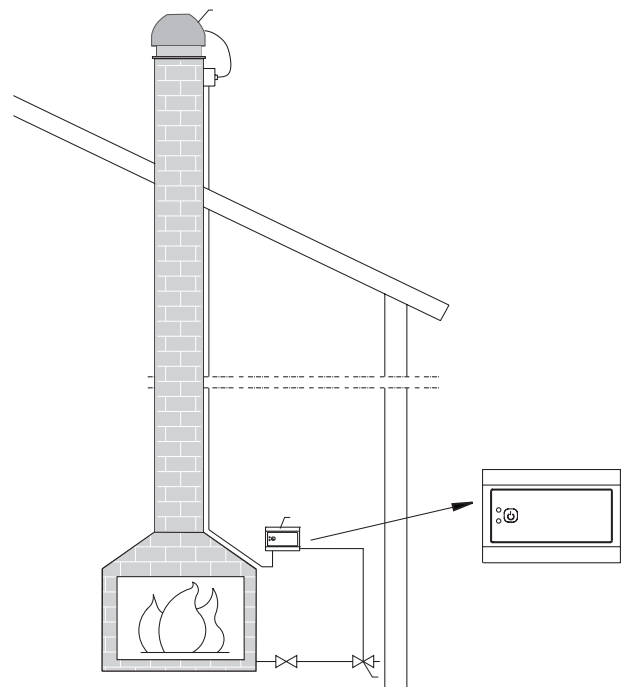
SMG12: Solenoid valve for EFC21 for 1/2" pipe

SMG14: Solenoid valve for EFC21 for 1/4" pipe

### Technical Data

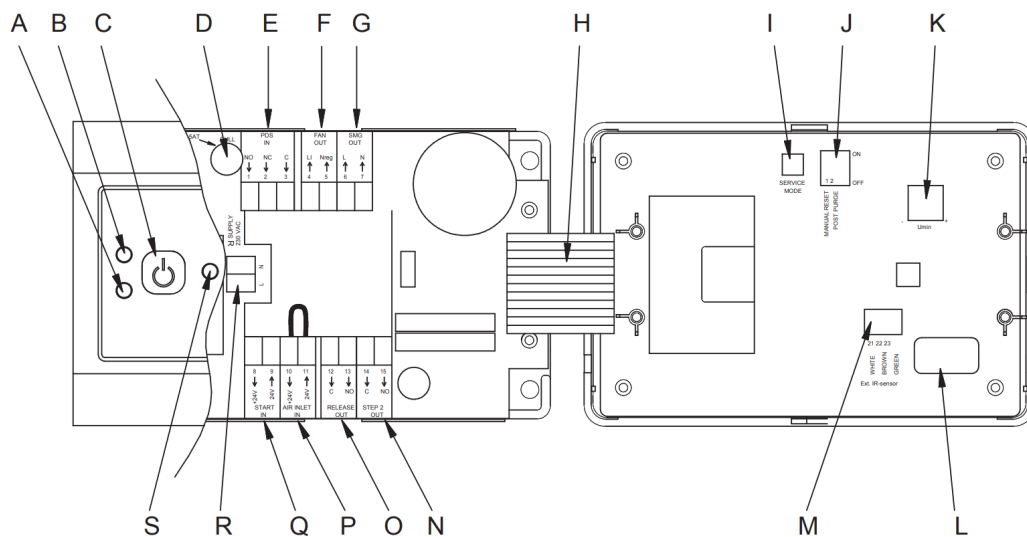
The system consists of:

1. Chimney fan
2. Controller EFC21
3. Solenoid valve SMG (order separately)



## Mounting adapters and flanges

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"> <li>• Manual reset</li> <li>• Post-purge 3 min. period</li> </ul>
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



Pos.	Description	Pos.	Description
A	Alarm LED	K	Potentiometer for adjusting the fan speed
B	Operating LED	L	Product ID
C	ON/OFF button	M	External IR-receiver socket (EFC25 only)
D	Fuse T 3,15 A 230 V (spare fuse is also included)	N	External IR-receiver socket (EFC25 only)
E	Pressure switch terminal	O	External IR-receiver socket (EFC25 only)
F	Fan terminal	P	Air inlet monitoring terminal
G	SMG solenoid valve (EFC21 only)	Q	Air inlet monitoring terminal
H	Connection cable	R	Power supply terminal
I	Service mode button	S	Internal IR-receiver (EFC25 only)
J	DIP switch		