

# Modulating Fan Control

## EBC 12

### Use

The EBC 12 is a Modulating Fan Control used with single appliances to monitor and maintain a constant draft or pressure in a chimney or duct. This is achieved by modulating the speed of a chimney fan or ventilator. The EBC 12 can be used with models IPVB, RSV, and RSIF. It can control the fan speed directly or via a Variable Frequency Drive (VFD).

The EBC 12 is typically used to control the draft in systems requiring a single boiler or water heater.

### Description

The control monitors the draft in a chimney system via connection to a pressure sensor (XTP2) attached to the chimney, and maintains it by modulating the fan speed. The control has an integrated safety system that assures the heating appliance is shut down in case of fan failure or control failure.

The use of the EBC 12 is not restricted to any type of fuel or type of heating appliance. When the appliance thermostat closes and calls for heat, the control will send maximum voltage to the chimney fan or VFD. When the necessary draft is achieved, the control will allow boiler firing and regulate the voltage to the fan or VFD so the required draft is maintained (the value can be viewed in the display). In case of insufficient draft, the control will shut down the boiler after 12 seconds. Once the appliance has satisfied the thermostat setting and shut down, the control will turn off the fan.

The control can be used in one of two ways:

- Interlocked with the appliance to post-purge the chimney for 3 minutes after boiler shut down.
- or
- Set to run the fan continuously.

### Material

The housing is made of plastic and has a clear cover. It has an IP 54/NEMA 12 rating.

### Standard Equipment

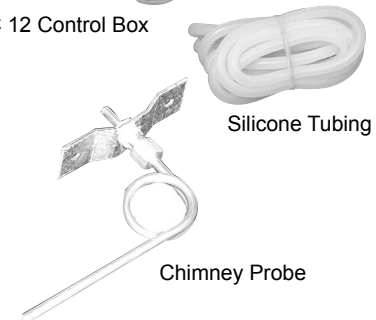
EBC 12 Control Box



EBC 12 Control Box



XTP2-Sensor



Silicone Tubing

Chimney Probe

XTP2 Sensor  
Stack Probe with 6' Silicone Tubing.

### Listings

ETL listed to  
UL508-Standard for Industrial Control Equipment  
CSA C22.2 No. 14-95 - Standard for Industrial Control Equipment

CE Compliant  
Manufactured at ISO9001 certified plant.

### Warranty

2-year factory warranty

## Specifications

<b>EBC 12 Control</b>		
Power supply	V	1x120VAC
Amperage	A	6.3
Operating temperature	°F/°C	-4 to 122 / -20 to 50
Range of operation	inWC/Pa	0-0.6 / 0-150
Tolerance	inWC/Pa	0.01 / 3 +/-10%
Control signal	mA	max. 10
Control relay		Max. 120 VAC / 8A
Output	VAC	10-120
	VDC	0-10
Dimensions	A in/mm	6.9 / 175
	B in/mm	8.1 / 205
	C in/mm	4.0 / 102
Weight	lbs/kg	3.0 / 1.5
EMC standard	Emission	EN50 081-1
	Immunity	EN50 082-2
<b>XTP2 Sensor</b>		
Power supply	VDC	12-36
Amperage	mA	<20
Output	VDC	0-10
Operating temperature	°F/°C	0 to 160 / -18 to 71
Accuracy		+/- 0.08%
Dimensions	D in/mm	3.70 / 94
	E in/mm	5.12 / 130
	F in/mm	6.18 / 157
	G in/mm	3.13 / 80
Weight	lbs/kg	.6 / .3
<b>Chimney Probe</b>		
Dimensions	H in/mm	4.25 / 108
	I in/mm	3.50 / 89

